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INVESTIGATION TO STUDY THE AERODYNAMIC SHIP WAKE TURBULENCE GEN--ETC(U)

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N62269-78-C-0097

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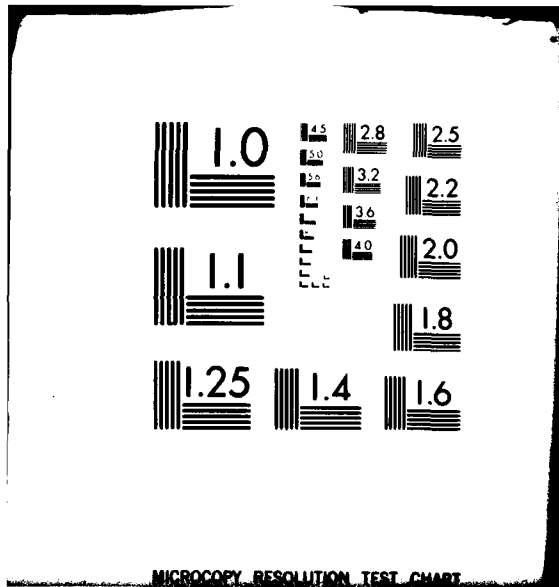
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4 April 1980
8-1162-6192

Naval Air Development Center
Warminster, Pennsylvania 18974

Attention: Code 6053

Subject: Contract N62269-78-C-0097, "Measurement of Velocity Components of the Air Wake of DD 963 Destroyer in Support of the Type (A) VSTOL" - Submittal of Final Report (Short Form)

Reference: (a) Naval Air Development Center Letter 84537 dated 18 January 1980, Same Subject

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C. P. Schildwachter

C. P. Schildwachter
Senior Contract Administrator

WJH:pb

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Contract No.
N62269-78-C-0097

Investigation to Study the Aerodynamic
Ship Wake Turbulence Generated
by a DD963 Destroyer

Final Report
for Period April 1978 through August 1979

NADC Report No. 77-214-30

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Prepared for the
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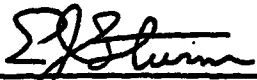
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|---|--|--|--|
| 19 REPORT DOCUMENTATION PAGE | | READ INSTRUCTIONS BEFORE COMPLETING FORM | |
| 1. REPORT NUMBER NADC 77214-38 | 2. GOVT ACCESSION NO. AD-A083663 | 3. RECIPIENT'S CATALOG NUMBER 9 | |
| 4. TITLE (and Subtitle) INVESTIGATION TO STUDY THE AERODYNAMIC SHIP WAKE TURBULENCE GENERATED BY A DD963 DESTROYER. | | 5. TYPE OF REPORT & PERIOD COVERED FINAL REPORT Apr 78-Aug 79 | |
| 6. AUTHOR(s) Theodore S. Garnett, Jr | | 7. PERFORMING ORG. REPORT NUMBER D216-11545-1 | |
| 8. PERFORMING ORGANIZATION NAME AND ADDRESS Boeing Vertol Company P.O. Box 16858 Philadelphia, Pa. 19142 | | 9. CONTRACT OR GRANT NUMBER(s) N62269-78-C-1097 | |
| 11. CONTROLLING OFFICE NAME AND ADDRESS Naval Air Development Center Warminster, PA 18974 | | 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS | |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) | | 12. REPORT DATE Oct 79 | |
| | | 13. NUMBER OF PAGES 425 | |
| | | 15. SECURITY CLASS. (of this report) Unclassified | |
| | | 16. DECLASSIFICATION/DOWNGRADING SCHEDULE | |
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| 17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) | | | |
| 18. SUPPLEMENTARY NOTES | | | |
| 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) DD 963 Destroyer Wind Tunnel Airwake Hot Wire Anemometer Probe Ship Model Helicopter/VSTOL Aerodynamic Turbulence Flow Visualization | | | |
| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A wind tunnel program was accomplished in the Boeing Vertol Low Speed VSTOL facility to evaluate airwake turbulence behind the hull and superstructure of a 1/80 scale DD 963 destroyer model. Early flow visualization work employing smoke and helium/soap bubble techniques identified (and photographed) areas of major turbulence in the lee of prominent superstructure elements. Grids of hot wire anemometer probes were then used to | | | |

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SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

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19. Key Words (Continued)

Landing Platform Bullseye
 Headwind/Crosswind
 Tailwind
 Steady Flow Velocity Components
 Ship Superstructure
 Flight Simulation Math Model

Strouhal Scaling
 Helium/Soap Bubbles
 Frequency Analysis
 Bound Vortex
 Velocity Time History

20. Abstract (Continued)

quantitatively map three component velocity levels at selected locations above, behind, and on either side of the ship; for remote wind speeds of 20, 35 and 45 knots with ship yaw angles varied from 0° to 180°, and hull roll angle set at 0° and 15° right and left. Digital listings of mean and standard deviation velocity components were prepared from recorded time history tapes of the actual airwake turbulence. The principal application of these test results is expected to include synthesis of a Strouhal Scaled DD 963 airwake math model for helicopter and VSTOL flight simulation work, and formation of a data base for design of shipboard equipment to interface the vessel with its aircraft.

PREFACE

This report presents a synopsis of testing accomplished in the Boeing Vertol VSTOL wind tunnel to map the turbulent aerodynamic wake behind a 1/80 scale U.S. Navy Spruance Class DD 963 Destroyer model. Grids of split-film/hot wire anemometer probes were used to measure turbulence levels at selected locations in the airwake, with the hull installed at various roll and yaw angles in the tunnel. Test results were computer processed to form three-component steady-state mean and dynamic velocity time history information for later application in the Navy VSTOL program.

The test was sponsored by the Naval Air Development Center, Warminster, Pa., and was performed by the Boeing Vertol Company, Philadelphia, Pa. under Contract N62269-78-C-0097. The U.S. Navy technical monitor for the program was Ronald Nave, Flight Dynamics Branch NADC - Code 6053. Boeing Vertol representatives included Theodore Garnett and Philip Sheridan of the Flying Qualities Staff, and Messers Franklin Devlin, David Hodder and Kenneth Farrance of the Wind Tunnel Staff. William Hackett, Dwayne Breger, James McLaughlin and Carl Robinson assisted in preparation of the Program Final Report.

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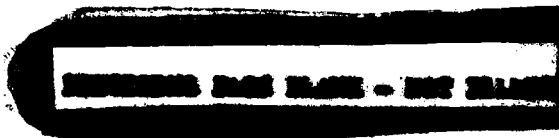
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TABLE OF CONTENTS

| <u>Section</u> | <u>Page</u> |
|---|-------------|
| 1.0 Summary | 9 |
| 1.1 Background and Objectives | 9 |
| 1.2 Test Equipment and Model | 10 |
| 1.3 Test Procedure | 15 |
| 1.4 Test Results | 18 |
| 1.5 Potential Application of Test Results | 28 |
| 2.0 Introduction | 29 |
| 3.0 Model Geometry | 31 |
| 4.0 Test Equipment and Instrumentation | 35 |
| 4.1 Wind Tunnel and Groundplane | 35 |
| 4.2 Hot Wire Anemometer Probes and Mounting Rake | 37 |
| 4.3 Flow Visualization Study Equipment | 40 |
| 5.0 Test Procedure and Conditions | 43 |
| 5.1 Anemometer Refurbishment, Recalibration, and Operation | 43 |
| 5.2 Boundary Layer Survey | 44 |
| 5.3 Flow Visualization Studies to Confirm Probe Array Configuration, and Overall Nature of Airwake Turbulence | 45 |
| 5.4 Ship Airwake Velocity Mapping | 47 |
| 5.5 Data Recording and Processing | 50 |
| 6.0 Discussion of Test Results | 53 |
| 6.1 Groundplane Boundary Layer Survey | 54 |
| 6.2 Flow Visualization Tests | 56 |
| 6.3 Results of Turbulent Airwake Velocity Mapping | 61 |
| 7.0 Conclusions | 113 |
| 8.0 References | 115 |
| Appendices | |
| A Run Log for Ship Aerodynamic Wake Turbulence Test - BVWT 242/243 | 117 |
| B Steady State Aerodynamic Velocity Distribution in the Wake of a DD 963 Spruance Class Destroyer - Calculated Mean and Standard Deviation Data | 140 |
| C Additional Horizontal Plane Mean Velocity Component Vector Maps | 391 |

LIST OF ILLUSTRATIONS

| <u>Figure</u> | | <u>Page</u> |
|---------------|--|-------------|
| 1 | Wind Tunnel Ship Model Geometry - 1/80 Scale DD 963 Showing Installation in Tunnel Section | 11 |
| 2 | DD 963 Destroyer Aerodynamic Wake Turbulence Test BWWT 242/243 | 12 |
| 3 | Model and Rake/Probe Configuration for Tailwind Test | 13 |
| 4 | Anemometer Rake Positioning | 14 |
| 5 | Ship Model Installation and Area Mapped for Airwake Turbulence | 16 |
| 6 | Typical Velocity Time History | 19 |
| 7 | Horizontal Plane Mean Velocity Components At 0° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 22 |
| 8 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 23 |
| 9 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Hangar Roof Height and 45 Knot Remote Wind Velocity | 24 |
| 10 | Mean Velocity Variation with Height in Horizontal Plane - 30° Left Yaw | 25 |
| 11 | Vertical Plane Steady Flow Components at + 30° Ship Yaw Angle and 20 Knot Remote Wind Velocity | 26 |
| 12 | Standard Deviation of Flow about Mean 30° Right Yaw at Hangar Roof Height. | 27 |
| 13 | Model Test Configuration | 32 |
| 14 | Groundplane Configuration and Rake Configured with Anemometer Probes | 36 |
| 15 | Total Vector Hot Wire Anemometer System | 38 |
| 16 | Vertical and Lateral Anemometer Probe Spacing on Rake Mount | 39 |
| 17 | Flow Visualization Equipment | 41 |
| 18 | Predicted Location of Major Vortices Shed by Ship Superstructure | 46 |
| 19 | Boundary Layer Survey Above Fixed BWWT Groundplane | 55 |
| 20 | Smoke Flow Patterns around Hull as Ship is Yawed Left and Right to Remote Flow | 57 |



LIST OF ILLUSTRATIONS (Continued)

| <u>Figure</u> | | <u>Page</u> |
|---------------|--|-------------|
| 21 | Effect of Hull Roll Angle on Flow around Vessel | 58 |
| 22 | Helium-Soap Bubble Filament Tracks Indicating Flow Field around Ship Superstructure at 0° Yaw | 59 |
| 23 | Helium-Soap Bubble Filament Tracks Indicating Turbulent Flow Field with Ship Yawed | 60 |
| 24 | Typical Data Set as Stored on Tape | 63 |
| 25 | Calculated Mean and 1σ Standard Deviation Velocity Components | 64 |
| 26 | Typical Velocity Time History for 0.8 Sec Run | 65 |
| 27 | Typical Velocity Time History for 10.4 Sec Run | 66 |
| 28 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity. . | 68 |
| 29 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Stack Uptake Height and 20 Knot Remote Wind Velocity | 69 |
| 30 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity | 70 |
| 31 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity | 71 |
| 32 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 72 |
| 33 | Horizontal Plane Steady Velocity Distribution at 30° Ship Yaw Angle and 20 Knots Wind Tunnel Velocity at Hangar Top Height - Comparative Plot from FF 1052 Report (Reference 1) | 73 |
| 34 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Stack Uptake Height and 20 Knot Remote Wind Velocity | 74 |
| 35 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity | 75 |
| 36 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 77 |
| 37 | Horizontal Plane Mean Velocity Components at + 90° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 78 |

LIST OF ILLUSTRATIONS (Continued)

| <u>Figure</u> | | <u>Page</u> |
|---------------|--|-------------|
| 38 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity and -15° Ship Roll | 79 |
| 39 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity and + 15° Ship Roll | 80 |
| 40 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity | 82 |
| 41 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Minimum Height and 45 Knot Remote Wind Velocity | 83 |
| 42 | Vertical Plane Steady Flow Components at 0° Ship Yaw Angle and 20 Knot Remote Wind Velocity | 84 |
| 43 | Vertical Plane Steady Flow Components at + 50° Ship Yaw Angle and 20 Knot Remote Wind Velocity | 85 |
| 44 | Vertical Plane Steady Flow Components at +30° Ship Yaw Angle and 20 Knot Remote Wind Velocity and + 15° Ship Roll | 86 |
| 45 | Horizontal Plane Mean Velocity Components for Tailwind Test at 180° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity | 87 |
| 46 | Horizontal Plane Mean Velocity Components for Tailwind Test at 180° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 88 |
| 47 | Horizontal Plane Mean Velocity Components for Tailwind Test at 180° Ship Yaw Angle at Stack Uptake Height and 20 Knot Remote Wind Velocity | 89 |
| 48 | Horizontal Plane Mean Velocity Components for Tailwind Test at 150° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity | 90 |
| 49 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 5 | 92 |
| 50 | Ship Wake Velocity Survey, Vy vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 5 | 93 |
| 51 | Ship Wake Velocity Survey, Vz vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 5 | 94 |
| 52 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 1 | 96 |
| 53 | Ship Wake Velocity Survey, Vy vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 1 | 97 |

LIST OF ILLUSTRATIONS (Continued)

| <u>Figure</u> | | <u>Page</u> |
|---------------|--|-------------|
| 54 | Ship Wake Velocity Survey, Vz vs Frequency; 128 Samples, Run 111, 0° Yaw, Probe 1 | 98 |
| 55 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 113, 0° Yaw, Probe 1 | 99 |
| 56 | Ship Wake Velocity Survey, Vy vs Frequency; 128 Samples, Run 113, 0° Yaw, Probe 1 | 100 |
| 57 | Ship Wake Velocity Survey, Vz vs Frequency; 128 Samples, Run 113, 0° Yaw, Probe 1 | 101 |
| 58 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 111, -30° Yaw, Probe 1 | 102 |
| 59 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 111, -50° Yaw, Probe 1 | 103 |
| 60 | Ship Wake Velocity Survey, Vx vs Frequency; 1024 Samples, Run 114, 0° Yaw, Probe 1 | 105 |
| 61 | Ship Wake Velocity Survey, Vx vs Frequency; 512 Samples, Run 114, 0° Yaw, Probe 1 | 106 |
| 62 | Ship Wake Velocity Survey, Vx vs Frequency; 128 Samples, Run 114, 0° Yaw, Probe 1 | 107 |
| 63 | Ship Wake Velocity Survey, Vy vs Frequency; 128 Samples, Run 114, 0° Yaw, Probe 1 | 108 |
| 64 | Ship Wake Velocity Survey, Vz vs Frequency; 128 Samples, Run 114, 0° Yaw, Probe 1 | 109 |
| 65 | Ship Wake Velocity Survey, Vx vs Frequency; 64 Samples, Run 114, 0° Yaw, Probe 1 | 110 |
| C1 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Stack Uptake Height and 20 Knot Remote Wind Velocity | 395 |
| C2 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity | 396 |
| C3 | Horizontal Plane Mean Velocity Components at + 90° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity | 397 |
| C4 | Horizontal Plane Mean Velocity Components at + 90° Ship Yaw Angle at Stack Uptake Height and 20 Knot Remote Wind Velocity | 398 |
| C5 | Horizontal Plane Mean Velocity Components at + 90° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity | 399 |

LIST OF ILLUSTRATIONS (Continued)

| <u>Figure</u> | | <u>Page</u> |
|---------------|--|-------------|
| C6 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity and +15° Ship Roll | 403 |
| C7 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 404 |
| C8 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Stack Uptake Wind Velocity + 15° Ship Roll | 405 |
| C9 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 406 |
| C10 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 407 |
| C11 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Stack Uptake Wind Velocity + 15° Ship Roll | 408 |
| C12 | Horizontal Plane Mean Velocity Components at + 30° Ship Yaw Angle at Radar Antenna Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 409 |
| C13 | Horizontal Plane Mean Velocity Components at + 50° Ship Yaw Angle at Minimum Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 410 |
| C14 | Horizontal Plane Mean Velocity Components at + 90° Ship Yaw Angle at Hangar Roof Height and 20 Knot Remote Wind Velocity + 15° Ship Roll | 411 |
| C15 | Horizontal Plane Mean Velocity Components at 0° Ship Yaw Angle at Stack Uptake Wind Velocity | 415 |

LIST OF TABLES

| <u>Table</u> | | <u>Page</u> |
|--------------|--|-------------|
| 1 | Test Matrix Summary DD 963 Ship/Air Wake Turbulence Test - BVWT 242/243 | 48 |
| 2 | Probe Configuration Array Combinations | 49 |
| 3 | Exceptions and Notes Relative to Test Conditions Listed in Table 1 | 144 |

SECTION 1.0 SUMMARY

1.1 BACKGROUND & OBJECTIVES

This report documents wind tunnel testing performed recently in the Boeing Vertol Low Speed Wind Tunnel, to map velocity components of the turbulent airwake behind a 1/80 scale DD 963 Spruance Class U.S. Navy Destroyer model. The report presents a synopsis of major test results, along with preliminary analysis of the more interesting flow phenomena observed as the test progressed.

During the period from 28 March through 6 April, 1979, a comprehensive flow visualization and air turbulence velocity component measurement program was conducted in the Vertol tunnel, to generate both quantitative and qualitative data for later application in Naval helicopter and VSTOL aircraft programs. The DD 963 test, sponsored by the Naval Air Development Center, Warminster, Pa., was similar in scope and technical content to one performed in 1976 by Boeing for the Naval Air Systems Command, with a 1/50 scale FF 1052 Frigate model (see Reference 1). Results of the earlier FF 1052 test have been used extensively in formulating math models of airwake turbulence created by the ship and its superstructure. It is expected that data from the DD 963 evaluation will be used in a similar manner, along with other wind tunnel results for the Spruance, acquired during Close-In airwake testing performed for the Naval Air Engineering Center, Lakehurst, N.J., described in Reference 12.

Broad interest in airwake models synthesized from test data produced by these two programs is anticipated, since the DD 963 is currently the smallest non-aviation type U.S. Navy ship planned for future VSTOL operations. The level of aerodynamic turbulence generated by the rather "bluff" shaped Spruance Class hull and superstructure will undoubtedly influence both the design of flight control systems for aircraft deployed aboard this vessel, and the overall configuration and function of specialized shipboard equipment installed for interfacing the 963 and its complement of helicopters and VSTOLS.

The principle objectives of the DD 963 test (BVWT 242/243) were to measure and record on magnetic tape three component (X,Y,Z) dynamic velocity time history data, at a sufficient number of locations above, beside, and behind the hull to identify areas of significant airflow disturbance (turbulence) which would influence VSTOL or helicopter operations aboard ship. To assist in this task, extensive flow visualization work was done at the start of the test (using smoke and helium/soap bubble techniques), to ensure proper positioning of hot wire anemometer equipment set up to measure the turbulence. Data reduction conducted at the end of the program produced digital listings of mean and standard deviation velocity information, along with digitized time history tapes.

Tunnel "remote-wind" velocities of 20, 35 and 45 knots were evaluated as the ship was yawed in 20° to 30° increments from 0° to 180° (in

both directions). Left and right yaw runs were necessitated because of an asymmetric superstructure configuration, resulting from placement of the forward and aft stacks on either side of the ship centerline. To complement data taken with the hull installed at 0° roll angle, testing was also accomplished with the ship rolled statically 15° right and left of vertical.

1.2 TEST EQUIPMENT & MODEL

Figure 1 illustrates the ship installation in the tunnel test section, elevated 14 inches above the tunnel floor (with its thick boundary layer) on a 20 by 20 foot square fixed "groundplane". As seen in the figure, the model was interfaced with the tunnel yaw drive system through a 2 inch thick solid wooden "adapter skirt", which provided the correct height relationship between the simulated "sea" surface (as represented by the groundplane with its own boundary layer) and the ship hull/superstructure combination. This adapter block, along with two others which permitted fixed 15° left or right roll angle mountings, ensured that elements of the ship above its waterline would extend above the groundplane boundary layer essentially the same scaled vertical distance as would similar elements on the full scale vessel at sea.

Selection of the vertical centerline of the main flight deck landing platform "bullseye" as the axis of yaw rotation for the model was made for several reasons. First, it was desirable to be able to place the anemometer probes as close to the landing pad as practical for efficient mapping of the airwake. Rotating the ship about the landing platform ζ permitted installation of a concentrated cluster of probes behind the hangar, and these in turn were able to measure turbulence surrounding the approach and landing "area of interest" without requiring lateral movement as the ship was yawed.

A second reason for selecting the platform bullseye as the ζ for yaw (instead of the ship center of gravity, for instance) was because this is the point on the ship from and to which the VSTOL aircraft or helicopter is always directed during launch and recovery operations. Flight simulation math models employing airwake data from tests of this type can take advantage of this fact, since at least some version of mathematical transformation is always required to compute spatial (and inertial) relationships between the aircraft and the landing/T.O. point on the ship. The airwake modeling task is facilitated somewhat by considering the landing bullseye as a point-source, about which the turbulence field generated by the ship is centered.

Accurate measurement of aerodynamic wake turbulence created by the hull and superstructure was accomplished with a grid of sensitive tri-axial "split-film" hot wire anemometer probes mounted on the movable rake shown in Figures 2, 3, and 4. Probe orientation on the rake was initially chosen to coincide with the predicted tracks of major shed vorticity behind various elements of ship superstructure. At the start of the test, "dummy" probes were placed on the rake in the

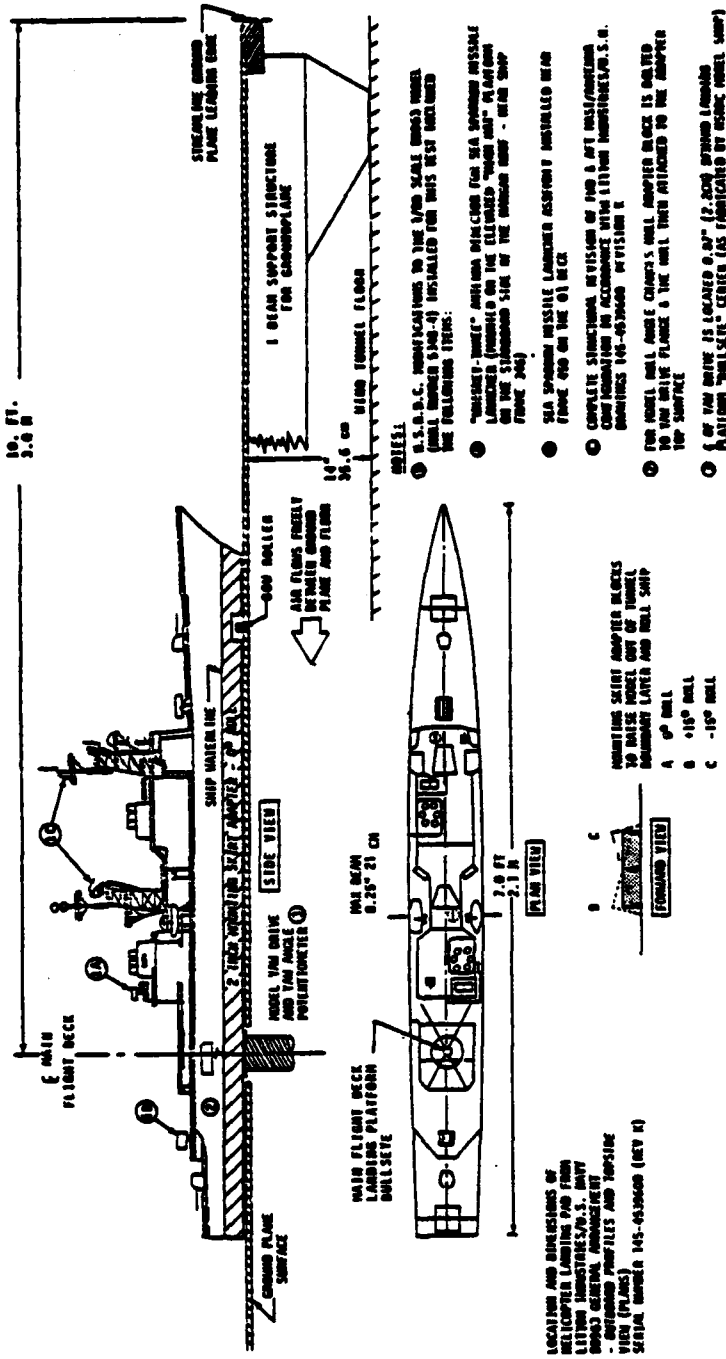
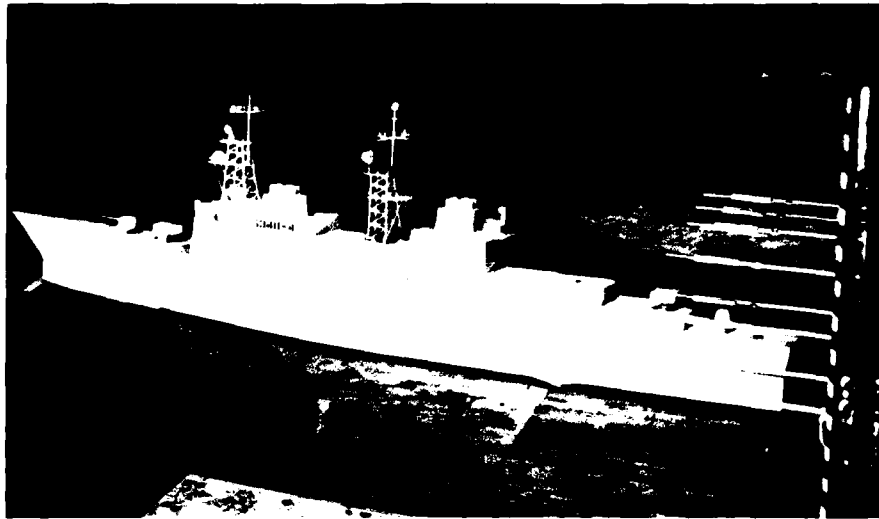


Figure 1. WIND TUNNEL SHIP GEOMETRY - 1/80 SCALE DD963
SHOWING INSTALLATION IN TUNNEL SECTION

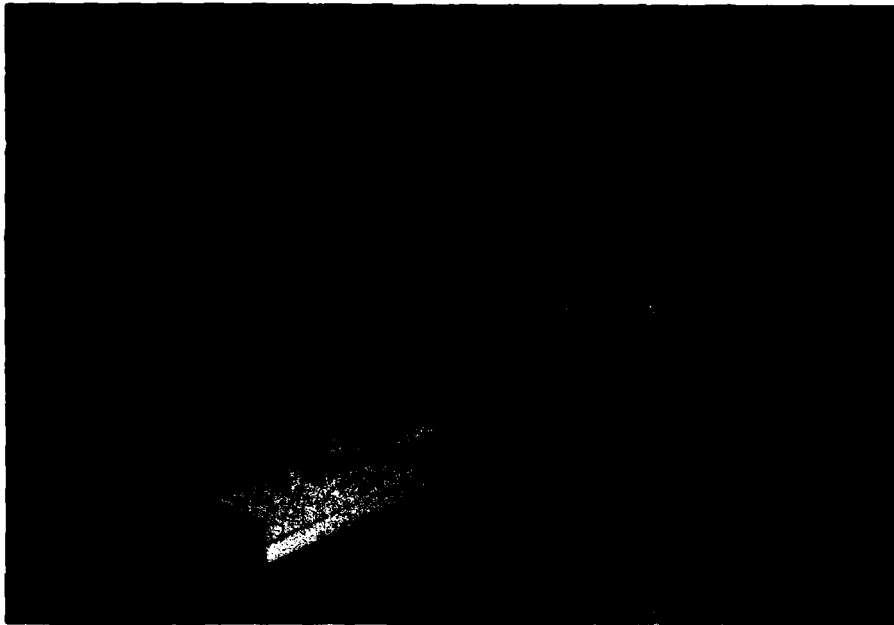


1/80 SCALE DD963 "WATERLINE" MODEL MOUNTED
ON 2" HIGH ADAPTER SKIRT WITH PROBES
INSTALLED ON RAKE BEHIND HULL



SHIP ROLLED 15° RIGHT - SHOWING RAKE WITH UPPER
& LOWER ANEMOMETER ROWS ARRAYED FOR HEADWIND/
CROSSWIND TESTING

Figure 2. DD963 DESTROYER AERODYNAMIC WAKE
TURBULENCE TEST BVWT 242/243



"STERN-INTO-WIND" HULL ORIENTATION
WITH PROBES MOUNTED VERTICALLY
FOR "TAILWIND" TESTING

Figure 3.

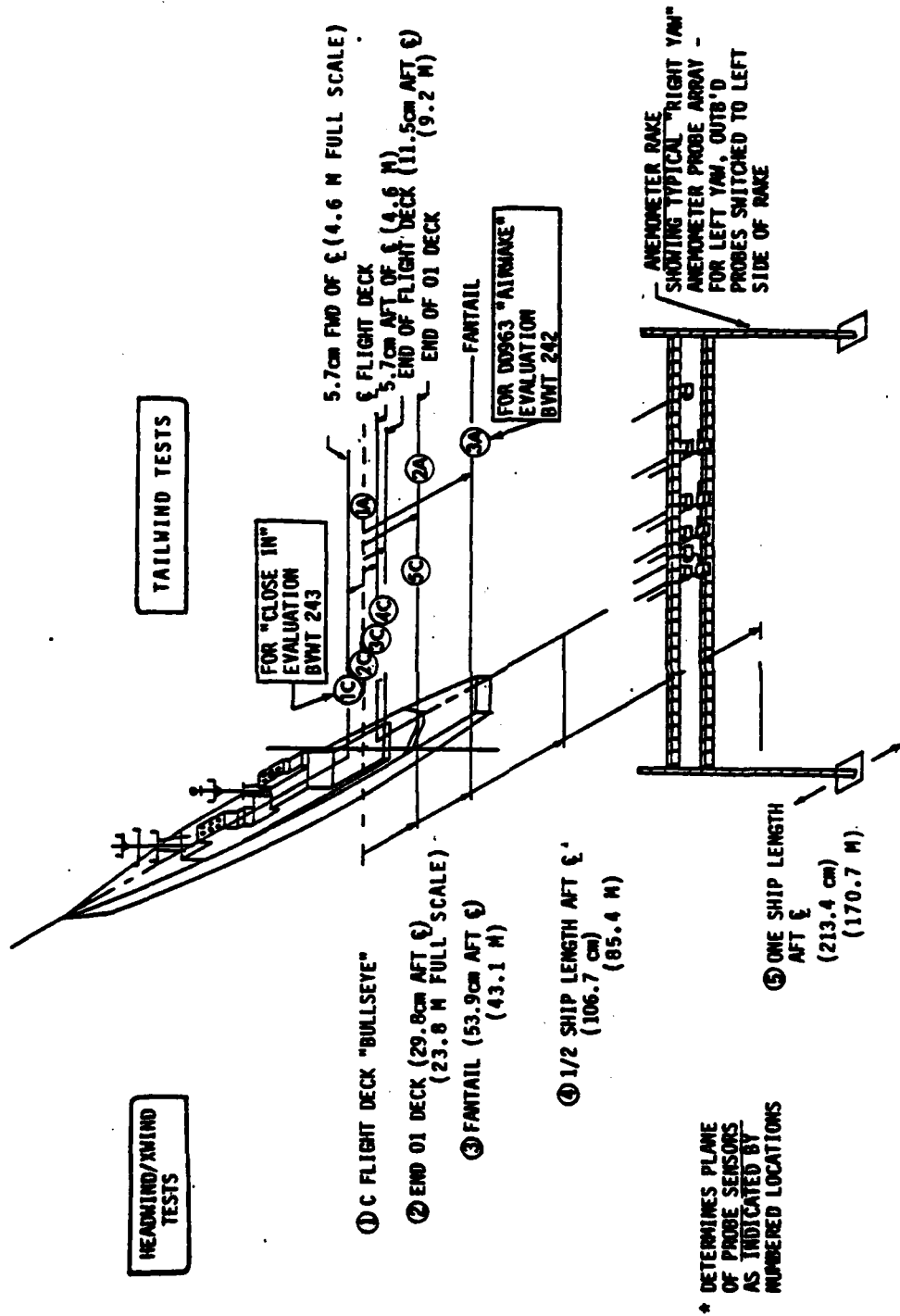


Figure 4. ANEMOMETER RAKE POSITIONING*

locations of greatest predicted turbulence. Smoke flow visualization runs were then conducted to identify where the flow actually went as the ship was yawed from 0° to 180°. Observations from the side and above the model established final placement of probe arrays on the rake, and at what locations downwind of the landing platform the rake would have to be positioned to sample the airwake properly.

1.3 TEST PROCEDURE

Figures 4 and 5 illustrate normal anemometer rake positioning behind the hull at each of five downstream locations. The plane of the rake is oriented perpendicular to the tunnel flow and both side posts are bolted to the groundplane to provide rigidity. Probes were mounted parallel to the flow for headwind/crosswind runs (Figures 2 and 4). Vertical orientation was utilized for tailwind runs as shown in Figure 3, to prevent the probes from interfering aerodynamically with the flow, and to permit yawing the ship without having the anemometers become entangled in the superstructure.

Ten probes were active on the rake at any one time, and these were organized into two arrays; each consisting of a six probe upper horizontal row, and a four probe lower row. The array located nearest the height of the landing platform was referred to throughout the test as the lower array, and the other as the upper array. Probe positioning in the lower array located the bottom row of anemometers in a plane 3.2 m (2.54 M full scale) above the deck. This was the lowest height possible without hitting portions of the ship with the aft end of the anemometer-rake spreader hardware. Above this lowest level was a row of probes 6.22 M above the deck in the plane of the hangar roof, which was expected to shed major vorticity onto the landing area. Planes selected for upper array probe mounting included the exhaust gas stack uptake level (12.45 M high), and a plane passing through the largest radar antennas on both masts (located 18.03 M, full scale, above the deck).

Headwind/crosswind testing consisted of yawing the ship sequentially from 0° to 30°, then to 50°, 70°, 90°, 120° and finally 150°. Maximum yaw angle at any rake location was dictated by how far the hull could be rotated before probe sensors hit the superstructure. After stabilizing tunnel speed at each yaw angle, one second of "quick-look" on-line data was taken for all probes simultaneously; and this information was then processed to form average V_x , V_y and V_z velocities for validating proper probe operation. This "low-speed" data was followed by an 0.8 second burst of 164 sample/second "high-speed" information, intended for off-line processing into mean and standard deviation velocity components. The 0.8 second data sample is equivalent to 64 seconds in real time, when scaled up for the full size ship airwake, using Strouhal scaling laws described in Reference 2.

In addition to the 0.8 second runs normally accomplished for mapping the airwake, a very limited number of duplicate runs lasting about 10.5 seconds were also made, for application in analysis and math modeling dynamic components of the airwake at the end of the program.

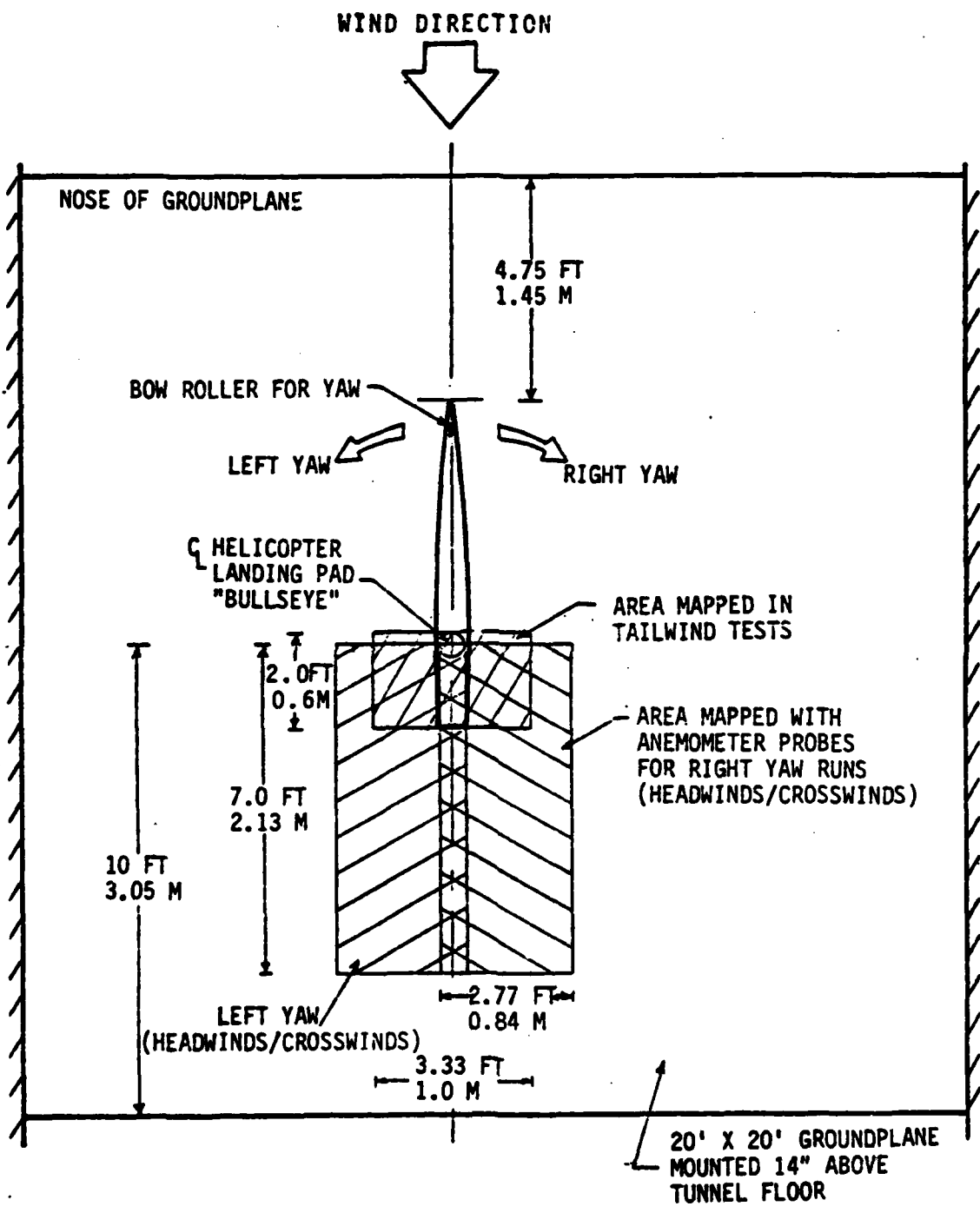


Figure 5. SHIP MODEL INSTALLATION AND AREA MAPPED FOR AIRWAKE TURBULENCE

Yaw sweeps were initially made to the right at 20 knots tunnel velocity, followed by runs at 35 and 45 knots. The 35 knot runs were eventually eliminated from the latter part of the test plan when it was confirmed (from plots of on-line data) that turbulence magnitudes were directly scalable with the free stream nominal wind speed. A similar result was found in the FF 1052 test data described in Reference 1. After finishing each data sweep at 45 knots, the rake was moved rearward to the next test location.

Initial velocity measurement runs were accomplished with probe sensors in the plane of the landing platform bullseye, and these were followed by repositioning the rake so as to locate sensors at the aft end of the "01" Deck. Upon completing data acquisition at all five downwind rake locations shown in Figure 4, the two row probe array was raised to the upper position and the data taking process repeated. Note that anemometer locations on the rake were bunched to the right of the ship centerline for the right yaw runs, and to the left when left yaw sweeps were made. With all right yaw test conditions completed, the 20/45 knot lower/upper probe array test variations were repeated in left yaw. Additional runs were accomplished with the hull rolled $\pm 15^\circ$ either side of vertical.

Headwind/crosswind testing was followed by a series of 40 "tailwind" runs (200 data points) with the ship fantail headed into the wind (see Figures 3 and 4). Maximum yaw angles permissible for this evaluation (as limited by probe/superstructure interference), ended up truncating the desired data acquisition area by as much as 30° for some test conditions. In addition to this reduced yaw angle scope for tailwind testing, only one row of probes could be installed on the rake at a time (see Figure 3). Because of a limited amount of tunnel test time available, only three horizontal planes above the deck (instead of four) were evaluated during the tailwind phase of the program. Radar level testing was eliminated from the tailwind runs.

Considering all testing accomplished throughout the program, a total of 163 runs (with about 5 to 7 test points each) were made to acquire velocity data. In addition, 9 other runs were performed to qualitatively evaluate air flow patterns around the ship. These flow visualization runs employed smoke and soap bubble techniques to identify areas of separation and vorticity produced by the hull and superstructure. Because of the time required to install and remove flow viz equipment from the tunnel, the better part of two days were consumed in this phase of the test.

Including these flow "viz" yaw sweeps, a total of over 750 test points were taken during the program. An additional 270 points were acquired while performing a "Close-In" airwake evaluation (around the landing platform) for the Naval Air Engineering Center (NAEC), Lakehurst, N.J. Since this test was piggy-backed on the NADC program, certain elements of the two wind tunnel tests were combined to save time in the tunnel. These included the flow visualization runs made at the beginning and end of the program, and the tailwind evaluation. Test results from the Close-In study are summarized in Reference 12.

1.4 TEST RESULTS

The principle results of the wake turbulence wind tunnel test include a series of three component velocity time histories recorded (in metric engineering units) on magnetic tape for every run, test point and probe. Also included is a computer printout listing with time history runs processed to derive steady-state Mean and 1σ Standard Deviation velocity components for all points (Appendix B includes this listing). Samples of the more interesting test results plotted from these two data sources are shown in Figures 6 through 12, which will be discussed later in the Summary.

Hot wire anemometer signal processing was accomplished throughout the test with a stand-alone electronic package supplied with each Thermo Systems Inc. probe, and signal conditioning network cards fabricated by the wind tunnel instrumentation staff to interface the processed signals with the wind tunnel IBM 1800 "WINDEE" data acquisition computer system. The anemometers generated six electronic signals (from three orthogonally oriented split-film sensors) which vary with wind velocity and direction. Using calibration constants derived by the probe manufacturer for individual probes, a proprietary computer program was used to convert raw sensor data to engineering units.

Further processing resolved the total measured velocity vector into X, Y, and Z components (with respect to the probe), and then corrected for probe mounting orientation to produce velocity information using the following wind-gust sign convention:

- Vx (+) in the downstream direction, parallel to the tunnel centerline
- Vy (+) to the left looking upwind in the tunnel, parallel to the groundplane
- and
- Vz (+) upward and perpendicular to the groundplane.

This velocity notation and sign convention was applied regardless of ship heading or probe orientation (for both the headwind/crosswind, and tailwind conditions). Using this axis system for velocity vector resolution (as opposed to some form of ship body axis, for instance), has the potential for simplifying flight simulation math modeling of the airwake if the wind turbulence is assumed to be aligned with the inertial earth axis, and is mapped with respect to the landing platform bullseye. Inertial location of the bullseye, of course, must consider ship motion when it is required in the flight simulation math model for launch and recovery operations.

TIME HISTORY SAMPLE

A typical time history representing the longitudinal Vx velocity component (for a single probe located to the side of the flight deck centerline) is depicted in the Figure 6 computer drawn plot. Data

VELOCITY TIME HISTORY
 X 15. TIME
 RUN 9 TP 2

LEGEND
 EM 4 PROBE 4

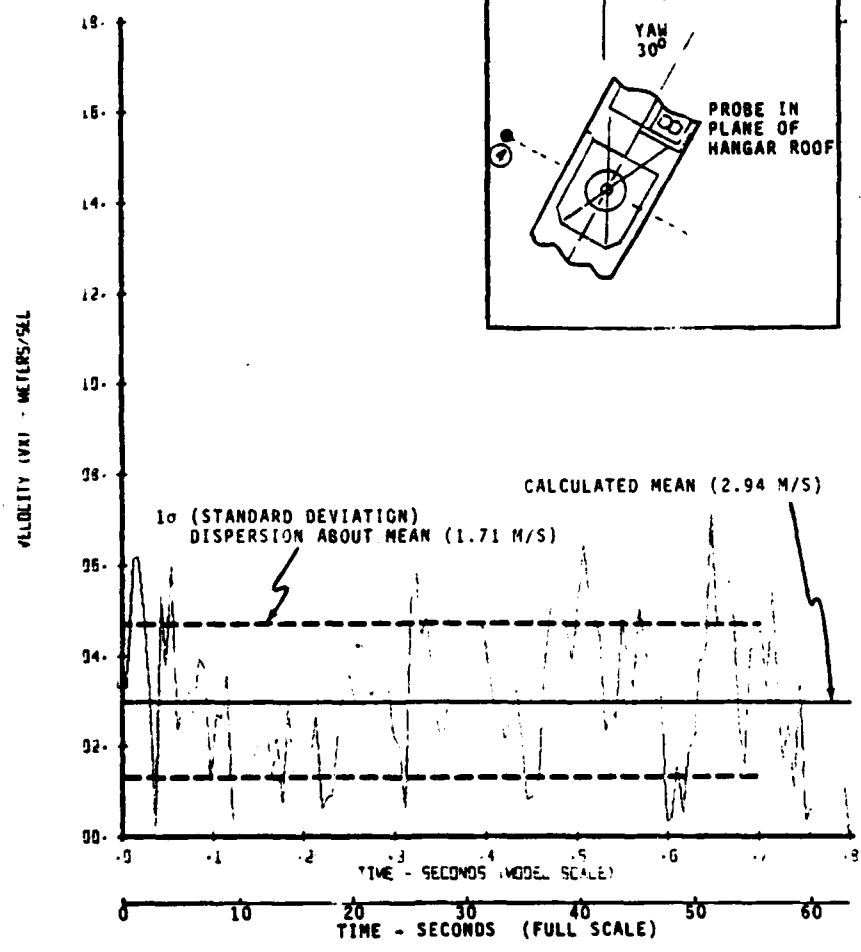
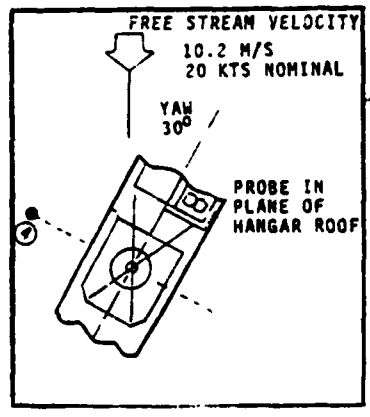


Figure 6. TYPICAL VELOCITY TIME HISTORY

used to generate this curve was sampled 131 times during the 0.8 second run (at a sample rate of 164 samples per second - the rate used for all data runs in the test). This sample rate was selected principally on the basis of scaling data results generated during the earlier FF 1052 testing. It represents a compromise between the data acquisition rate capability of the Wind Tunnel WINDEE System, and the amount of data thought to be practical and cost effective to analyze. Other factors influencing the sample rate chosen were the number of sensor signals to be processed and the desired frequency range of the scaled up results.

The test setup permitted accurate measurement of turbulence with a frequency content ranging between 1.25 Hz and 80 Hz model scale (assuming 2 samples per cycle are adequate to define the Fourier coefficients at the highest frequency desired). Sampling the signal at twice the expected maximum frequency present in the turbulence data was attempted, in order to prevent frequency-folding and data aliasing problems of the type described in Reference 3.

Based upon assumed Strouhal Number similarity between model and full scale data, where

$$S = \frac{fh}{v} ; \text{ with } S = \text{Strouhal number (usually constant for a given body shape)}$$

f = frequency of the shed vorticity
 h = characteristic body dimension (usually width)
 v = flow velocity,

frequencies can be converted to full scale by simply dividing by the (80:1) model scale factor. Full scale frequency range capability for the test results is therefore on the order of 0.016 Hz to 1.0 Hz, which is more than adequate for application in existing VSTOL and helicopter simulation math models. Scaling the recorded time history data requires only a simple expansion of the time between data samples from 0.006 seconds (the recorded Δt), to 0.49 seconds as shown at the bottom of Figure 6.

In addition to the time history trace shown in Figure 6, also illustrated are the calculated Mean and Standard Deviation values for the particular test point. It is interesting to note that the mean velocity for the run is less than 1/3 of the 20 knot (10.3 MPS) free stream flow, because of turbulent separation existing at the probe location (off to the side of the hangar roof corner). One sigma standard deviation about this mean is approximately 58 percent of the average steady-state velocity level, indicating a high level of roughness in the flow. This roughness was observed to grow significantly as the ship yaw angle was increased relative to the remote wind.

AIRWAKE VELOCITY MAPPING

Figures 7 through 12 present samples of the more interesting flow field characteristics measured in horizontal and vertical planes

behind the ship and its superstructure. Some of the information illustrated in these plots was observed qualitatively during flow visualization testing conducted before velocity measurement. One factor which stood out in the DD 963 flow "viz" work was that turbulence around the hull (at 0° yaw) was quite similar to that observed with the FF 1052.

Located behind the Spruance hangar is a powerful bound vortex which reduces local "q"* substantially, (just as it did on the 1052). Results of this flow separation in the lee of the hangar are clearly visible, especially for the center three probes depicted in the Figure 7 horizontal velocity vector map. As seen in this plot, very little flow recovery occurs over the landing platform; and not until the aft end of the 01 deck is reached, does the flow along the ship centerline begin its recovery to normal free stream levels. The adverse impact of this aerodynamic "q-hole" effect on flight operations in the vicinity of the landing deck is obvious.

As the ship is yawed left or right 30° or so (Figures 8 and 9), the hull and superstructure tend to function as if they were, in fact, a very low aspect ratio wing tip sticking vertically out of the ground-plane and shedding a large powerful vortex into the flow field (which then corkscrews around like the tip vortices of a jumbo jet with flaps deployed). When the hull is yawed more than about 15°, the landing deck bound vortex described above disappears completely.

Skewing of the flow field due to twisting of the vortex sheet is obvious in the Figure 8 and 9 velocity vector plots, which represent, respectively, 20 knot and 45 knot data runs. Note that magnitude and direction of the steady field can be scaled by the remote wind velocity as mentioned earlier. As will be shown later in the report, frequency content also changes with remote windspeed variation, in apparent agreement with expected Strouhal scaling law fundamentals.

Figure 10 shows how the horizontal flow field typically skews around in a clockwise direction, as altitude is increased above the deck for a series of duplicate 30° left yaw runs. When the ship is yawed right, skewing of the field with altitude switches to a counterclockwise orientation. Velocity vector changes with height above the deck are also quite pronounced in vertical planes above the ship, as is shown in Figure 11, which depicts a 30° right yaw hull orientation. Somewhere above 30° (and below 50°) yaw, the wing-like hull appears to "stall", and very deep levels of flow separation are seen in both the flow visualization runs and plotted velocity vector charts. This interesting aerodynamic characteristic is treated in some depth later in the report.

Figure 12 is presented to give an indication of horizontal flow roughness, as depicted by 1σ standard deviation velocity variation about the mean resultant vector (with the ship yawed 30° to the remote wind).

* $q = 1/2 \rho V^2 = \text{dynamic pressure}$
where $\rho = \text{air density}$; $V = \text{velocity}$

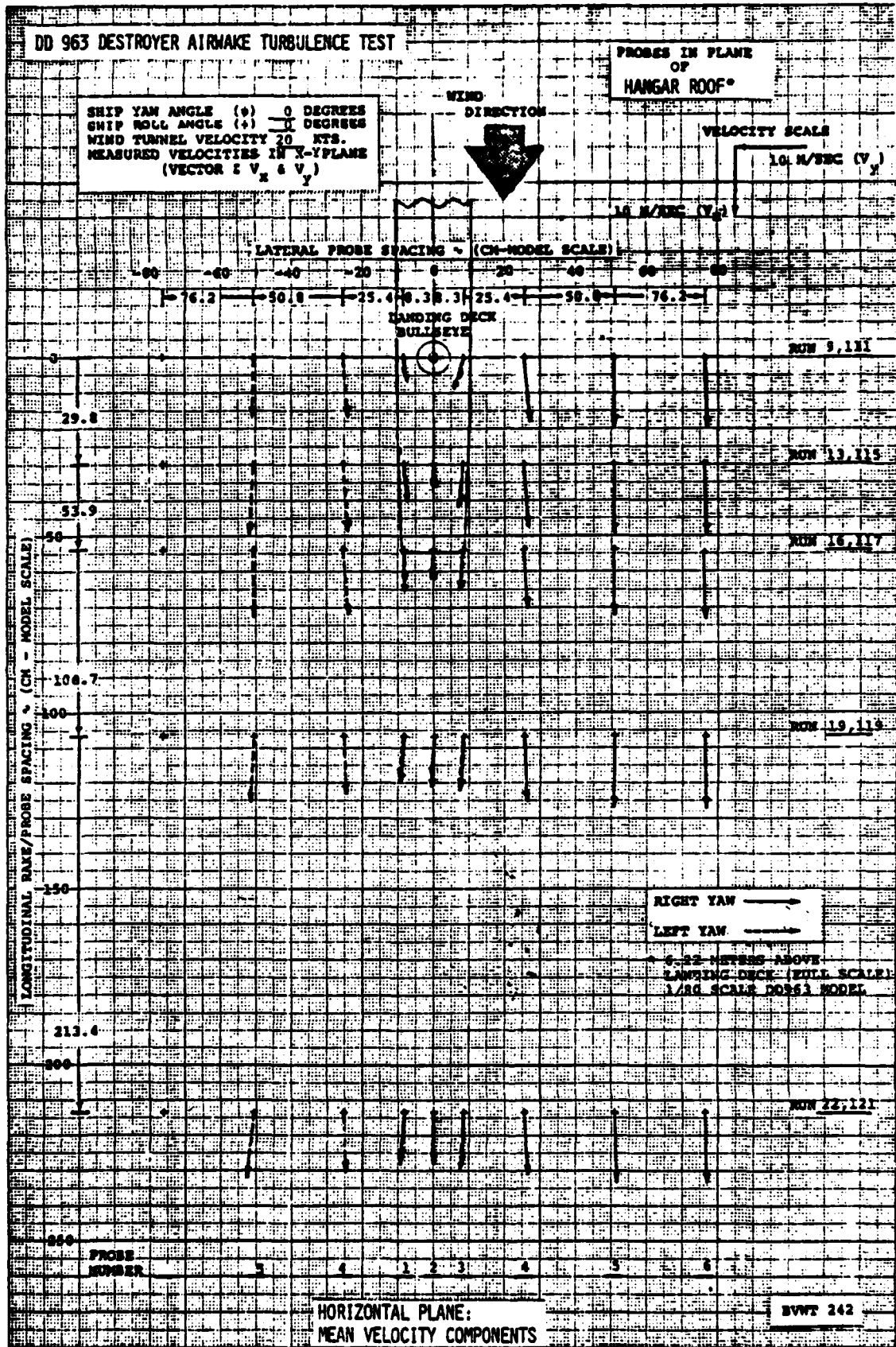


Figure 7.
 22

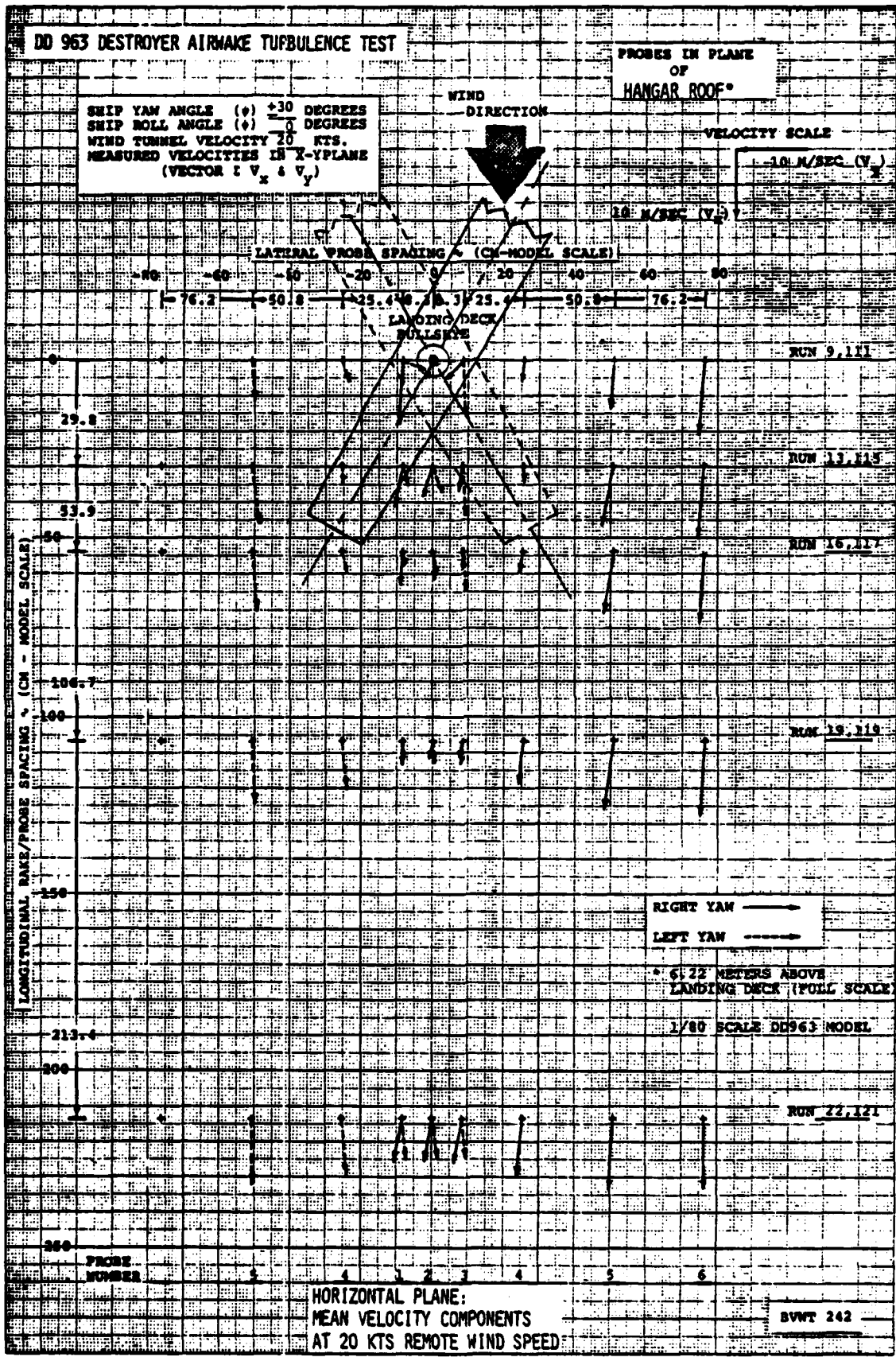


Figure 8.
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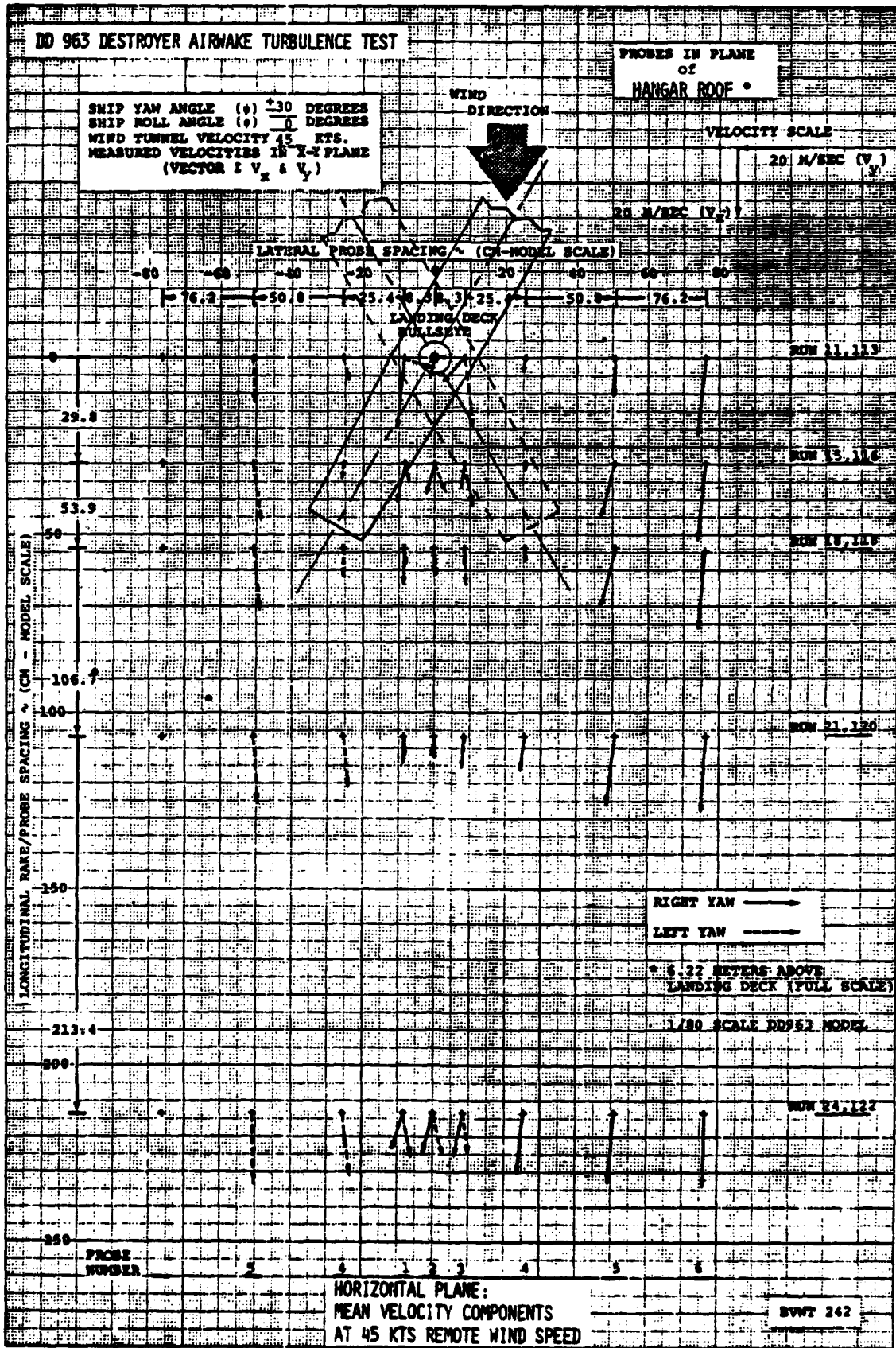


Figure 9.
24

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

SHIP YAW ANGLE (°) -30 DEGREES
 SHIP ROLL ANGLE (°) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR v_x & v_y)

WIND DIRECTION



PROBES IN PLANE
 2.54 M ABOVE DECK
 TO RADAR LEVEL

VELOCITY SCALE

10 M/SEC (v_x)

10 M/SEC (v_y)

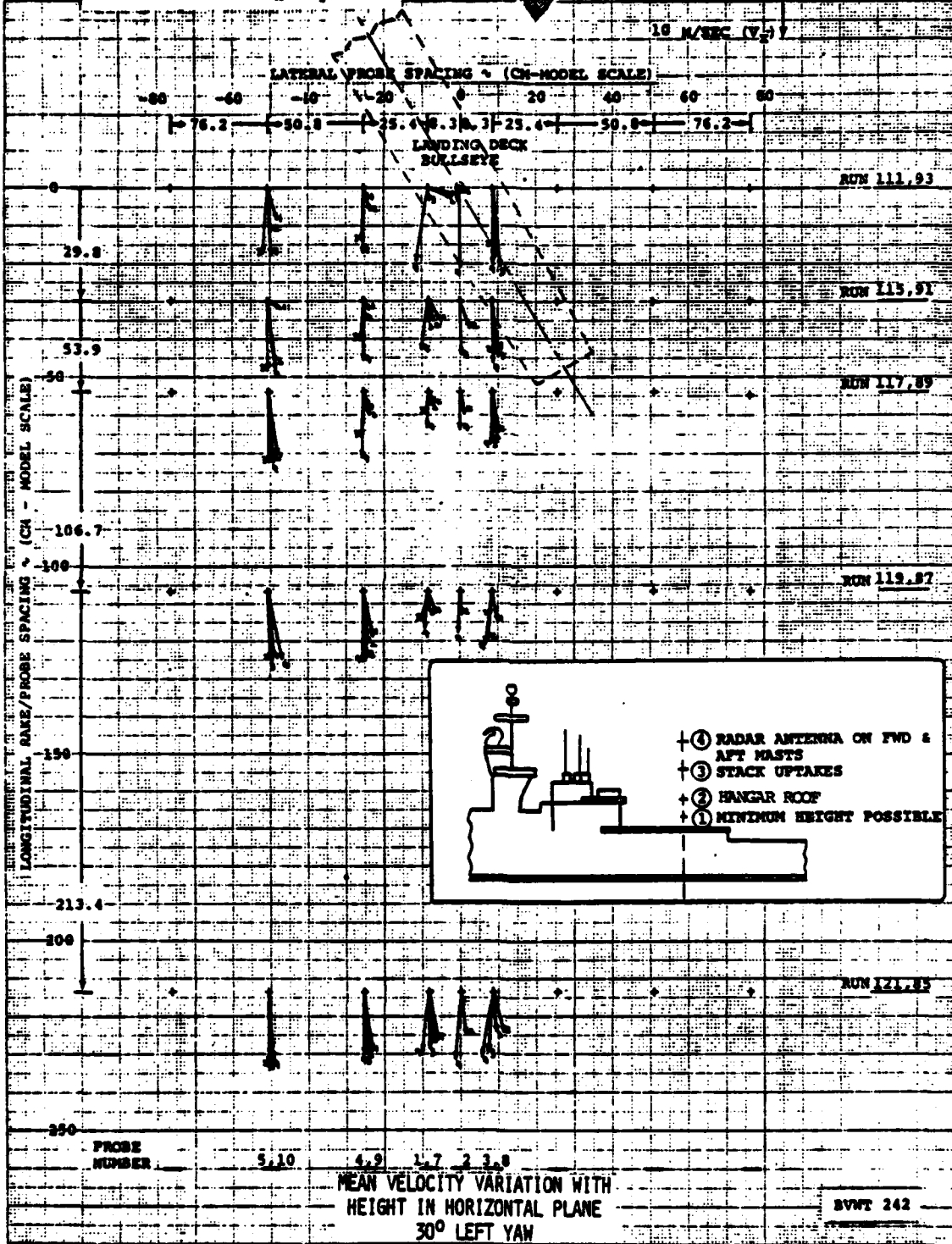


Figure 10.
 25

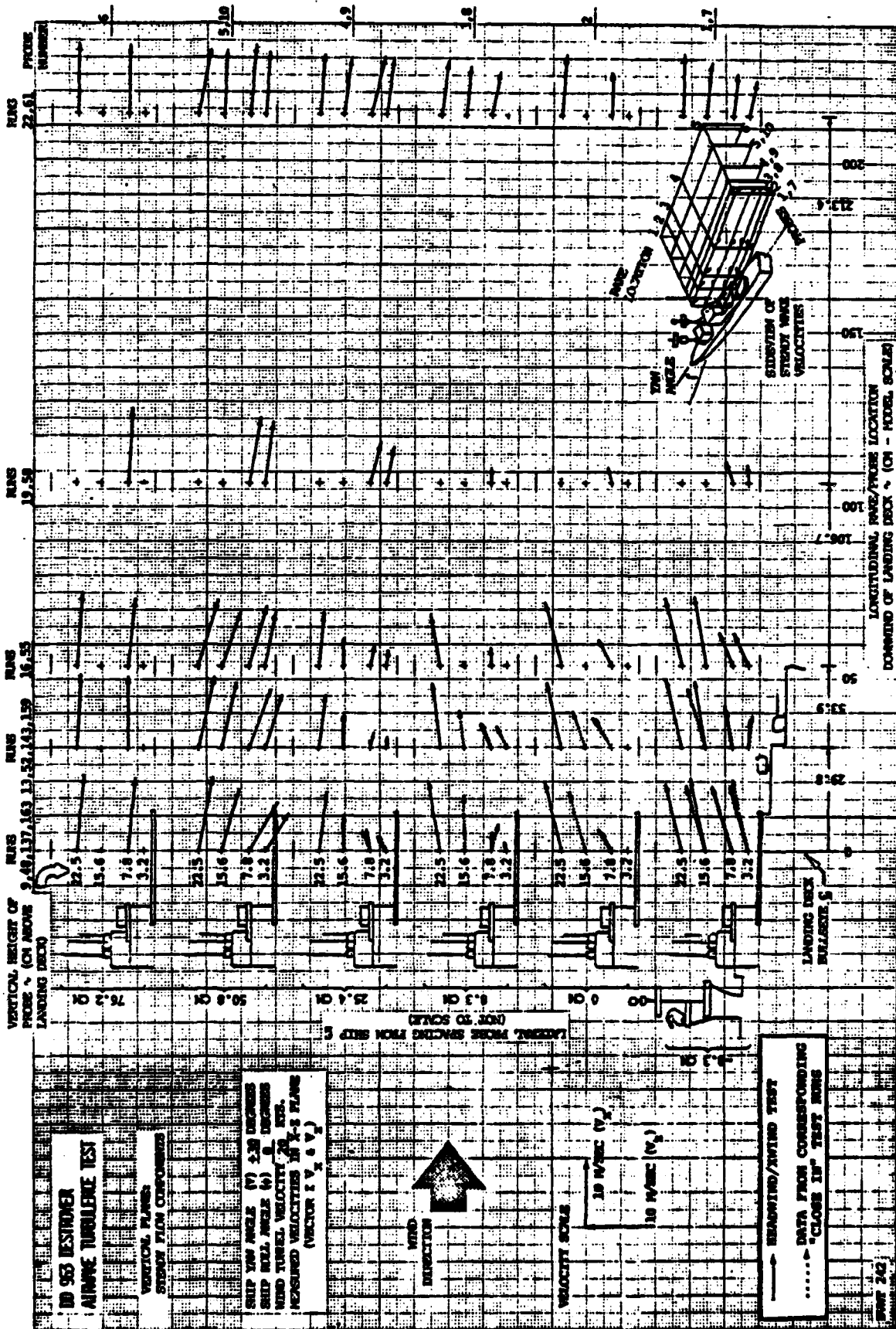


Figure 11.

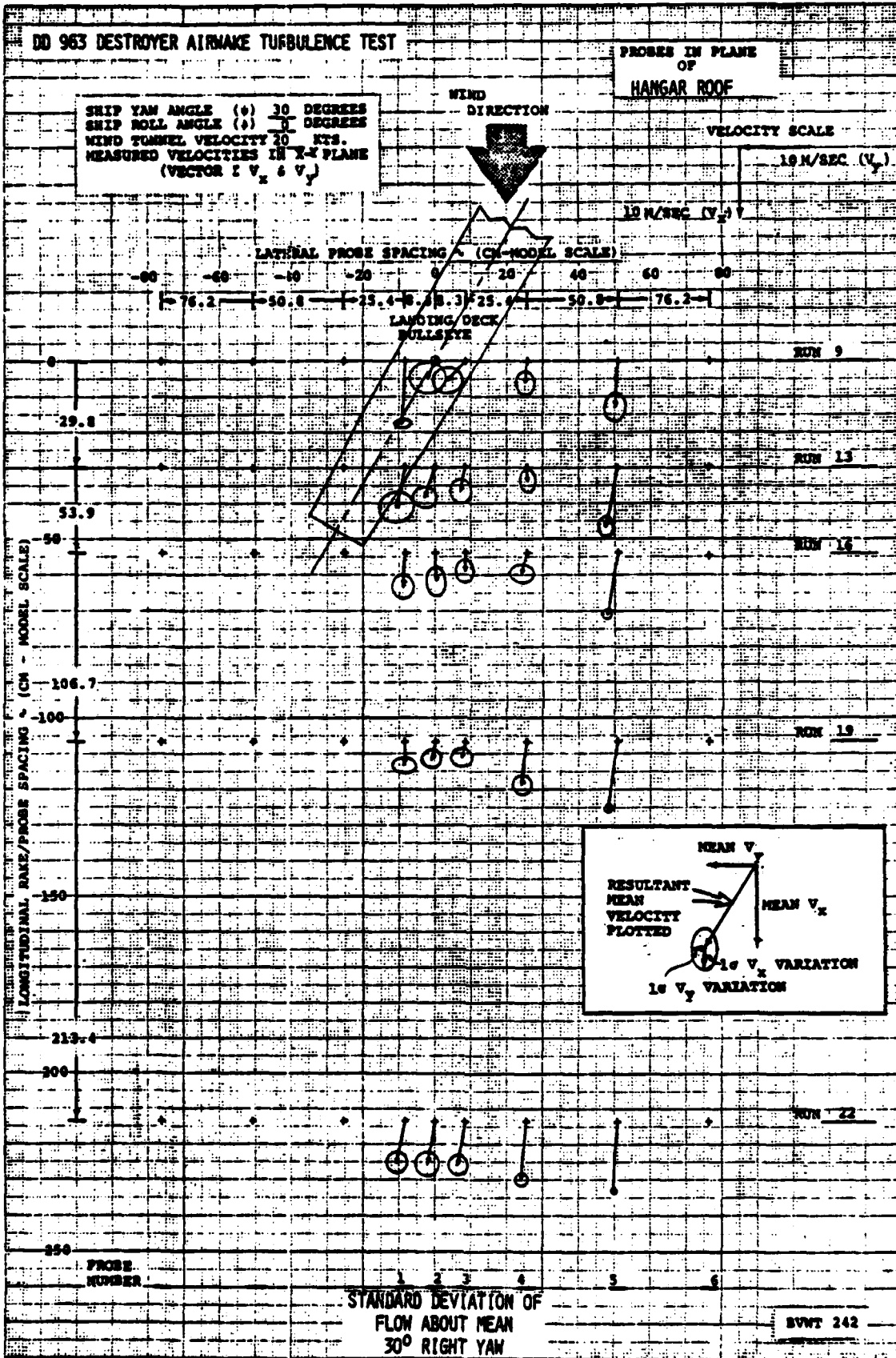


Figure 12.
27

Note how the l_0 ellipse increases in size as the probes are moved closer to the back of the hangar. Also interesting to observe is the very large distance behind the ship over which flow is disturbed. Along the deck centerline track, flow has recovered less than 50% of remote speed at one full hull length aft of the landing platform.

1.5 POTENTIAL APPLICATION OF TEST RESULTS

Currently, two approaches toward using the DD 963 wind tunnel turbulence data for future flight simulation math model and VSTOL or helicopter design work appear viable. The first involves application of the steady-state (mean) velocity information in concert with some type of computed random turbulence function related to measured RMS turbulence level (and is of the type described in Reference 4). It is expected that personnel in the NADC, Code 6053 Flight Dynamics Branch, will begin synthesis of an airwake math model along these lines, in the near future.

The second modeling approach would be to store the Strouhal scaled time history dynamic velocity data points directly in the computer, after first performing a time correlation of information from the various probes. This method appears to be somewhat tedious, but would be technically rigorous if pursued. Selection of the best data application methodology will depend upon the type of simulation undertaken, and how much storage capacity the simulation computers have available for modeling the turbulent and steady airwake flow fields.

SECTION 2.0 INTRODUCTION

During June 1976, a wind tunnel test sponsored by the Naval Air Systems Command was conducted in the Boeing Vertol Low Speed VSTOL Wind Tunnel, to evaluate "airwake" turbulence generated by the hull and superstructure of a 1/50 scale FF 1052 U.S. Navy Frigate. The principal purpose of this test was to map steady and dynamic aerodynamic wake turbulence components with a grid of hot wire anemometers, in order to generate information for synthesis of ship airwake math models for flight simulation. As originally planned the wind tunnel effort was part of a joint NASC/Boeing Vertol multi-phase program set up to investigate the use of flight simulation technology as an avenue for reducing costly "Dynamic Interface" testing performed at sea (with new helicopters and ships), in order to generate launch/recovery and start up/shutdown Wind Limitation Diagrams.

At the close of the wind tunnel phase of this FF 1052 effort, technical cognizance over the program was transferred from NASC to the Naval Air Development Center (NADC), Johnsville. At about the same time, the U.S. Navy (in addition to its LAMPS helicopter activity) was beginning serious VSTOL development with a view toward operating these aircraft aboard small, non-aviation type combat ships. As a result, emphasis on continuing the Dynamic-Interface simulation project was switched to the higher priority VSTOL program. Airwake math models for the FF 1052 were synthesized from the BWI wind tunnel data by both the Navy and private contractors (Reference 4 and 5), with the emerging VSTOL aircraft program in mind as an application goal.

In April 1977 a V/STOL Flying Qualities Workshop, jointly sponsored by the Navy (NADC) and NASA Ames was held in Monterey, California. One of the major conclusions of this conference was that wind tunnel airwake data for the DD 963 class destroyer was urgently needed for the Type A VSTOL program, to assist in design development of aircraft control systems and aerodynamics and ship interfacing hardware. The DD 963 had previously been designated as the smallest non-aviation type ship for VSTOL deployment.

During the summer of 1977 Boeing Vertol proposed to NADC, a three phase wind tunnel program to evaluate airwake turbulence generated by models of the DD 963 destroyer in the Boeing VSTOL tunnel. The initial phase of work suggested to the NADC Flight Dynamics Branch considered testing an existing 1/80 scale DTNSRDC "Stack Gas Investigation" type hull and superstructure model of the DD 963, with a program scope similar to that of the earlier FF 1052 effort. A proposed second and third phase add-on considered evaluating a larger 1/40 to 1/50 scale DD 963 model with motion capability; to answer questions about Reynolds Number, Strouhal Scaling Law, and motion effects which potentially exist when testing very small non-moving scale models of large ships.

In April 1978 a sole source contract (N62269-78-C-0097, Reference 6) was issued Boeing Vertol by NADC to perform a 1/80 scale DD 963 airwake test; essentially as proposed the previous year (in the suggested Phase I Program). This report documents results of testing accomplished to

fulfill the contract. A "waterline" type model was to be supplied by DTNSRDC, Carderock, Maryland, with appropriate modification of most superstructure and missile launcher equipment to ensure an up to date ship configuration for evaluation. U.S. Navy/Litton Industries drawings (plans) for the ship, serial number 145-4539600 (Revision K), were supplied by NADC to both Boeing Vertol and DTNSRDC for updating and validating model changes. In addition, DTNSRDC was charged with building adapter skirt blocks for interfacing the model with Boeing Vertol tunnel equipment.

Eighteen split-film hot wire anemometer probes utilized in the DD 963 test were the same set borrowed from the Federal Aviation Agency - National Aviation Facilities Experimental Center (NAFEC), Atlantic City, N.J., for the FF 1052 program. All 18 were sent to Thermo Systems, Inc. (the manufacturer) for refurbishment with new sensors, and recalibration. Seventeen units were finally rebuilt for the DD 963 program.

In mid 1978 when plans were well along for the NADC sponsored DD 963 test, the Naval Air Engineering Center (NAEC) in Lakehurst, N.J. joined the program, with a piggy-back effort to gather airwake data in the immediate area surrounding the flight platform of the vessel. This test, called the "Close-In" evaluation, was separately funded by NAEC under Contract N68335-79-C-1002 (Reference 7) and was planned initially to occur at the end of the NADC test. Its scope, in terms of runs to be conducted etc., was about half that of the Johnsville program.

Upon mutual agreement of both Navy agencies during the pre-test briefing (Reference 8) held at Boeing Vertol in March 1979, it was decided to integrate the two programs where possible to maximize the amount of test data acquired. Combining programs permitted all flow visualization work to be conducted as a single concurrent package. "Tailwind" tests were also integrated for both programs. Test results from the Close-In Program will be published in December 1979.

Since the principal contractor objective for both the NAEC and NADC "airwake" test programs was to generate and record on magnetic tape time histories of three component turbulence velocities, and to produce listings of mean and standard deviation velocity component information, no attempt has been made by the contractor to conduct a comprehensive in depth analysis of the test results for this report. Rather, the data have been meticulously reviewed for validity, and samples of the more interesting preliminary analysis results plotted for presentation herein.

At the present time, it is anticipated that Flight Dynamics Personnel at NADC (Code 6053) will develop an airwake math model for the DD 963 Destroyer, based upon information generated under this contract. Inquiries related to development of this math model should be directed to the Johnsville facility.

It is further expected that Close-In results documented in Reference 12 will be utilized by the NAEC R&D office (Code 91B1), for additional detailed modeling of the turbulence surrounding the DD 963 flight platform. Inquiries regarding Close-In results should be referred to the appropriate NAEC office.

SECTION 3.0 MODEL GEOMETRY

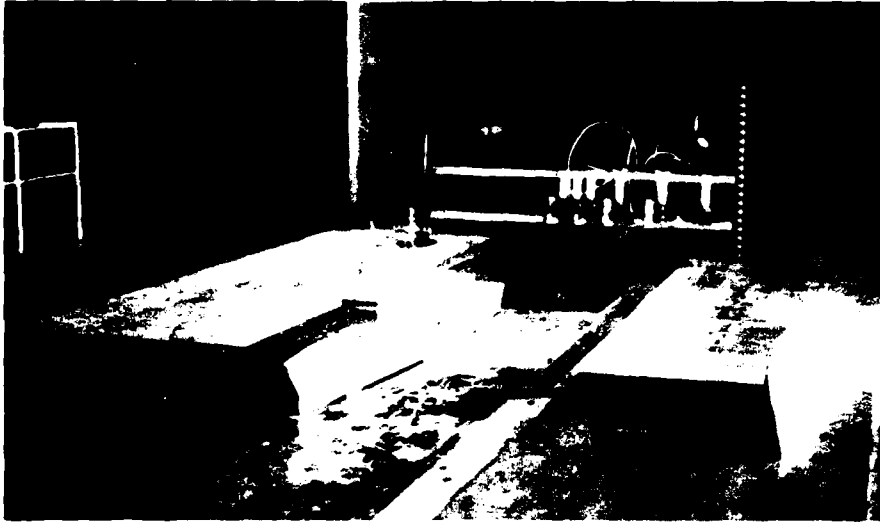
As discussed in the Introduction, the ship model provided for the wind tunnel test was built by the David Taylor Naval Ship Research and Development Center (DTNSRDC), located in Carderock, Maryland. The model had been used previously by DTNSRDC for underwater Stack Gas Plume ("Smoke") Investigations in the Circulating Water Channel Tunnel, to evaluate two classes of Destroyer - the DD 963 and DDG-47. Hull serial number 5348-4 represented an early version of the Spruance Class DD 963, but substantial changes in mast superstructure and missile equipment were required to update the configuration for the test described in this report.

Details of changes required for the 5348-4 model (which were given to DTNSRDC for its modification work) were taken from a series of drawings and photographs provided by the DD 963 Project Class Desk at the Naval Ship Engineering Center (NAVSEC) in Washington, D.C.. Inboard profile type Litton Industries drawings (plans) for the ship (see Introduction for Serial Numbers, etc.) were used to detail modifications required in the mast and radar antenna configuration. U.S. Navy photos delineated Sea Sparrow missile launcher/director configuration details, and these are listed in the Figure 1 notes. Boeing Vertol supplied dimensions for the required adapter skirt mounting blocks, utilized in installing the ship at 0° and +15° roll angle on the tunnel yaw turntable flange.

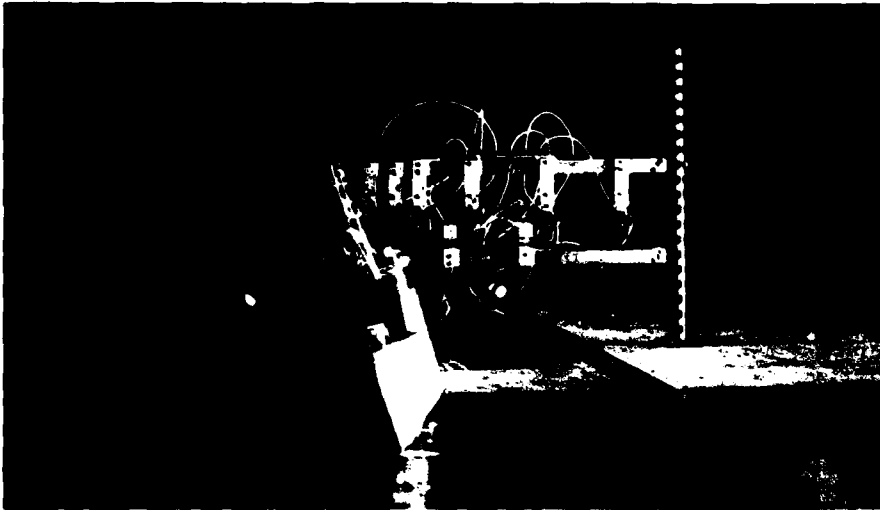
When the model arrived from DTNSRDC for the BWWT test, several minor errors in configuration were discovered. The most serious of these is pointed out in Figure 1, and was related to the fact that the yaw pivot center for the model was located 0.87 inches behind where it should have been (through the landing platform centerline). Because of the adapter block construction, it was determined that moving the yaw center to the desired location was virtually impossible. Thus the test was conducted with the pivot center located as supplied by the Navy. It should be noted that the earlier FF 1052 model (Reference 1) had a similar mismatch, but this was caused by a deck bullseye location change on the Knox Class Frigates.

Details of the model configuration tested in the BWWT 242/243 wind tunnel program are illustrated in Figure 13, and in drawings and photos presented earlier in Figures 1, 2, and 3. Figure 13 clearly shows what the two inch high adapter skirt blocks look like, both before and after installation. As shown at the bottom of the figure hull mold lines fair smoothly into the adapter block without steps or gaps - even for the 15° roll attitude configurations.

Installed under the bow on all three adapter blocks was a roller which permitted the skirt to just clear the groundplane as the hull was yawed. The hull was bolted to the adapter block fore and aft and the adapter bottom fastened to an extension of the tunnel yaw table flange (flush with the top of the groundplane) as shown in Figure 1. A "foam" aerodynamic seal was installed between the adapter and groundplane. With this arrangement, virtually no airflow passed beneath the ship, and any



DD963 MOUNTED ON 0° ROLL ADAPTER SKIRT - WITH 15°
RIGHT ROLL ADAPTER ABOUT TO BE INSTALLED
RAKE CONFIGURED WITH "LOWER" PROBE ARRAY TO MEASURE
NEAR-DECK & HANGAR ROOF HEIGHT TURBULENCE



HEAD ON VIEW OF HULL ROLLED 15°
PROBE ARRAY RAISED TO "UPPER" POSITION FOR MEASURING
FLOW IN PLANE OF STACK UPTAKES & MAST RADAR ANTENNAS

Figure 13. MODEL TEST CONFIGURATION

yaw angle from 0 to 180 degrees (in either direction) could be set up as desired.

SECTION 4.0 TEST EQUIPMENT AND INSTRUMENTATION

The major elements of test equipment and instrumentation used in the BVWT 242/243 DD 963 airwake turbulence program include the hull and adapter skirt blocks described earlier in Section 3.0; the wind tunnel test section and groundplane installation; and the anemometer probes with their mounting rake and associated electronic and pneumatic power supply packages. Additional test equipment consisted of several devices which produced smoke or helium filled soap bubble filaments for flow visualization studies. These flow visualization runs were photographed with a 70 MM Hasselblad still camera, and both conventional and strobe synchronized 35 MM motion picture cameras.

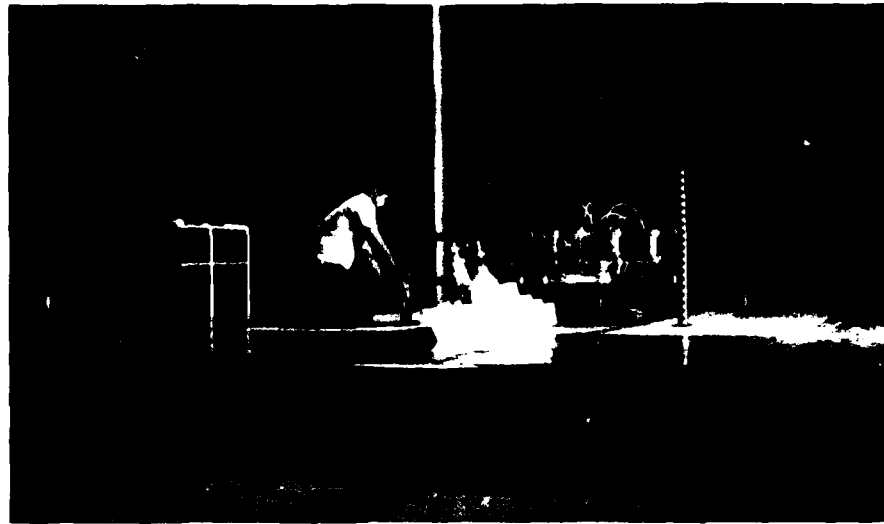
Except for the ship, other equipment used in BVWT 242/243 was essentially the same as utilized in the earlier FF 1052 Frigate program. The function of major pieces of equipment or instrumentation is described briefly in this section of the report.

4.1 WIND TUNNEL AND GROUNDPLANE

The Boeing Vertol Low Speed VSTOL wind tunnel 20 by 20-foot test section was set up in its "slotted wall" configuration for the test, with a fixed (non-moving) groundplane installed 14 inches above the tunnel floor. Groundplane details are illustrated in Figures 1, 5, and 14. As shown in the sketches, and in the photo at the top of Figure 14, the 20-foot square groundplane extends from wall to wall laterally, and is centered at WT Station 1000 (which is the center-line of the tunnel test section). Tunnel and groundplane configuration is identical to that used in the earlier (Reference 1) program.

The smooth surface groundplane is constructed of plywood sections approximately 1 inch thick, and is mounted on an aluminum I beam support system which facilitates its installation and removal from the tunnel and provides access to the area beneath the model when required. A streamline leading edge is attached along the forward lip (Figure 1) to prevent flow separation, and tunnel flow passes freely both above and below the groundplane surface.

The purpose of using a groundplane for the test was to eliminate undesirable effects of the wind tunnel floor boundary layer velocity gradient, which is relatively thick in the area where the model would be located for testing. Boundary layer growth along a "flat-plate" mounted parallel to the flow (which the groundplane essentially represents) is readily predictable, and varied from practically no thickness at all at the groundplane leading edge, to approximately 4 inches at its trailing edge (as measured in the FF 1052 program). Assessments of groundplane boundary layer thickness were made in the area where the ship was mounted and confirmed predictions quite well, as will be described later. The location of the DD 963 hull for the BVWT 242/243 test was very close to that used in the FF 1052 program and thus the groundplane boundary layer survey results from the earlier test apply equally well.



FIXED 20 FT X 20 FT GROUNDPLANE MOUNTED ABOVE
TUNNEL FLOOR - WITH DD963 HULL & ANEMOMETER
RAKE INSTALLED



PROBES & RAKE SPREADER ATTACHMENT HARDWARE WITH
PROTECTIVE SHIELDS RETRACTED IN PREPARATION FOR
TURBULENCE MEASUREMENT

Figure 14.

As indicated earlier in Figures 1 and 5, the model could be yawed + 180 degrees about its landing pad, through a remotely controlled extension of the test section yaw table. The tunnel operator was able to select desired yaw angle, and then set it through use of a yaw potentiometer readout on the operator's console. Yaw sweeps were made in both directions, to account for expected differences in flow produced by asymmetrical elements of superstructure (stacks), located on either side of the ship centerline.

4.2 HOT WIRE ANEMOMETER PROBES AND MOUNTING RAKE

Model 1296E (1080-System) split-film hot wire vector anemometer probes, manufactured by Thermo Systems Inc. in 1970, were used to measure three-component velocity information for the airwake turbulence test. The 1296 probe senses velocity magnitude and direction over the full 360 degree solid angle in any three dimensional flow field, with a DC response capability of up to 1 kHz as described in Reference 9. Figure 15 presents a sketch and photograph of a single probe unit, along with associated electronic and pneumatic system elements.

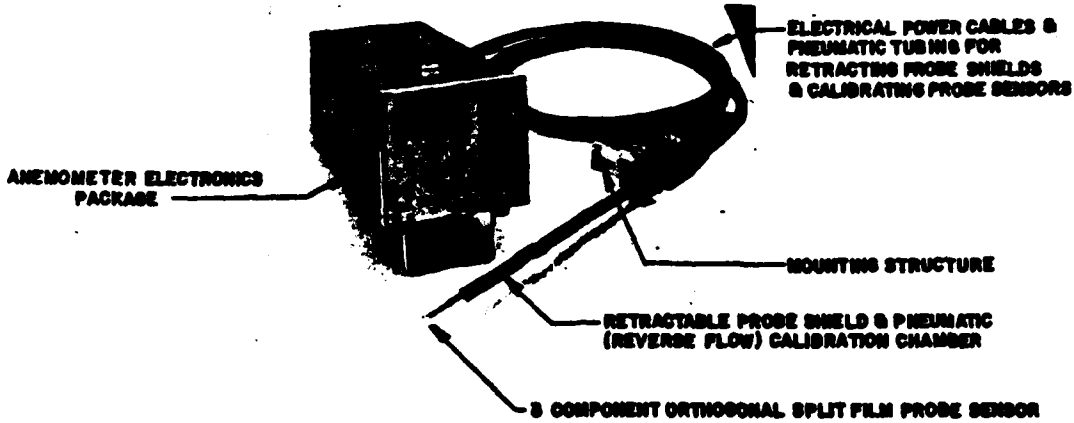
As seen at the bottom of the figure, the probe consists of three mutually perpendicular sensors oriented 120 degrees apart. Each cylindrical sensor is made up of two quartz covered platinum split-film elements operated at constant temperature, which produce a heat-flux differential when placed in a flow field. This differential is sensed as voltage signals generated by both sensor elements. These are combined with similar voltages from the other two sensors to form three component velocity information as described in the Reference 10 TSI data reduction document.

The data reduction program used to develop the velocity information from the sensor voltages is capable of outputting either V_x , V_y , and V_z components, or V_{TOT} with its angular orientation. The three component velocity alternative was selected for the DD 963 airwake turbulence test to ensure compatibility of results with existing flight simulation math models. Velocity computation from the sensor voltage signals was performed in the Wind Tunnel IBM 1800 computing system, on a non-real-time basis, both during and after the test.

In addition to the electronics package, each probe has a pneumatically retractable shield (shown clearly at the bottom of Figure 14) which was automatically extended over the probe sensors for protection when not in use. The shield also serves as a flow calibration nozzle for instantaneous in-place recalibration checks of probe performance.

Throughout the test program the anemometer probes were installed together on a portable mounting rake to form a grid as shown in Figures 4 and 16. Right yaw runs in the headwind/crosswind sequence had most of the probes located on the right hand side of the rake (as illustrated in Figure 16) to pick up major areas of turbulence behind the ship. Left yaw orientation was exactly the opposite.

PRINCIPAL SYSTEM COMPONENTS



**MODEL 1080 - THERMO SYSTEM INC. SPLIT FILM
HOT WIRE ANEMOMETER PROBE & ELECTRONICS
PACKAGE SKETCH**

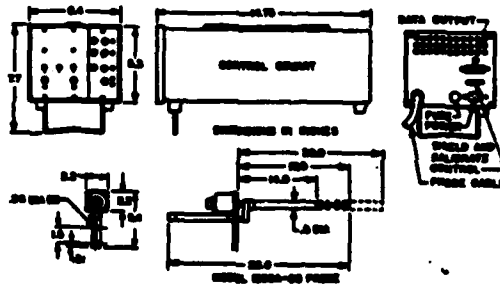


Figure 15. TOTAL HOT WIRE ANEMOMETER SYSTEM

DD963 DESTROYER AERODYNAMIC WAKE TURBULENCE TEST BVWT 242/243

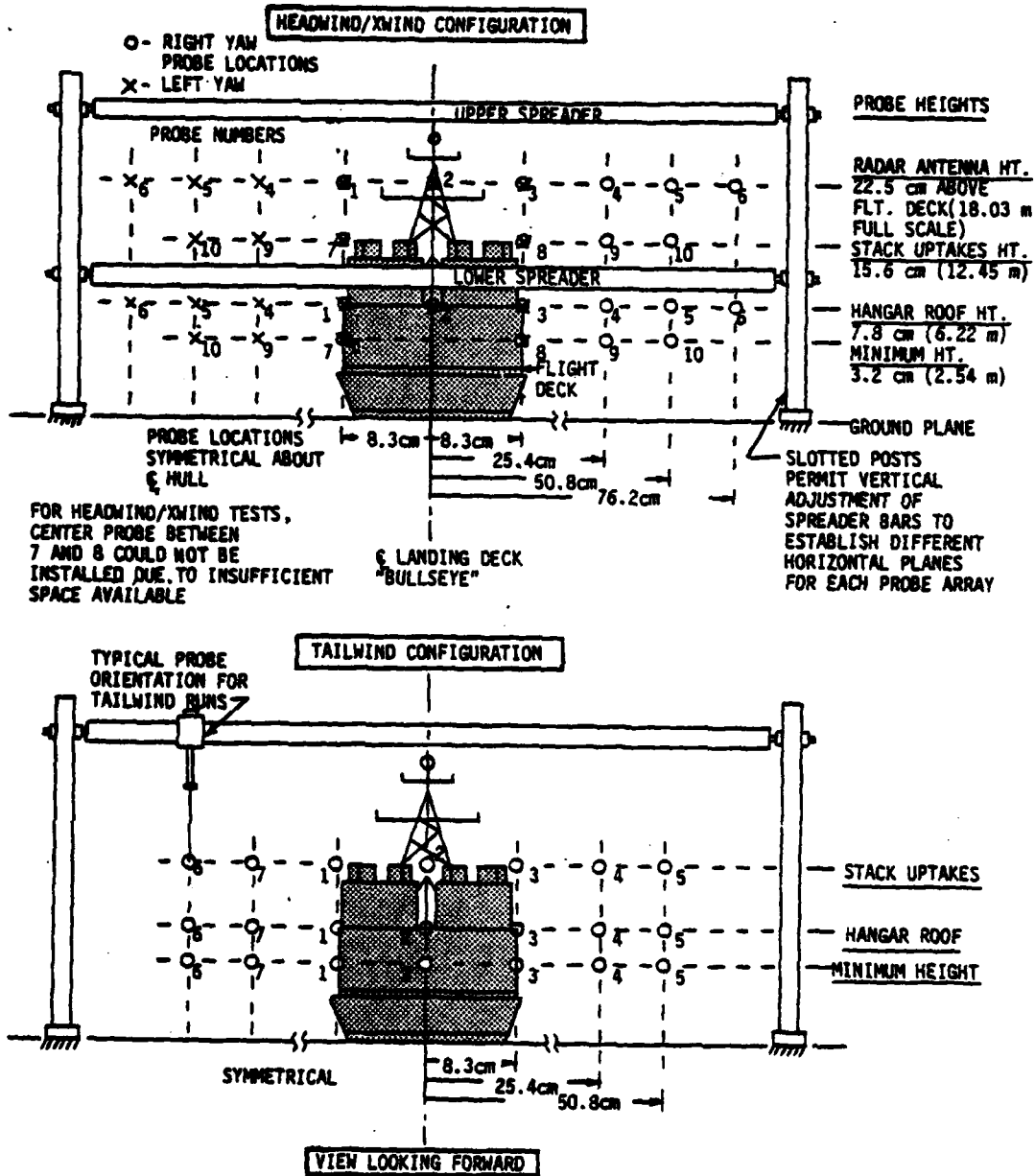


Figure 16. VERTICAL AND LATERAL ANEMOMETER PROBE SPACING ON RAKE MOUNT

Ten probes were operational on the rake at all times during the headwind/xwind evaluations; and these were arranged into two separate arrays of two horizontal rows each. The group nearest the deck was called the lower array. Probes were located 3.2 cm and 7.8 cm above the landing deck. The other probe grouping (called the upper array), positioned the probes behind the stack/mast area in planes 15.6 cm and 22.5 cm above the landing deck.

Tailwind testing, as shown in Figures 3 and 16, utilized a different probe orientation (with vertical mounting) as described earlier. Only one horizontal plane at a time could be mapped with this configuration of anemometers. Vertical installation was required to prevent probe/hull collisions, as the ship was yawed; and to ensure that the probes did not interfere with aerodynamic flow around the aft end of the ship (which would have occurred with horizontal mounting).

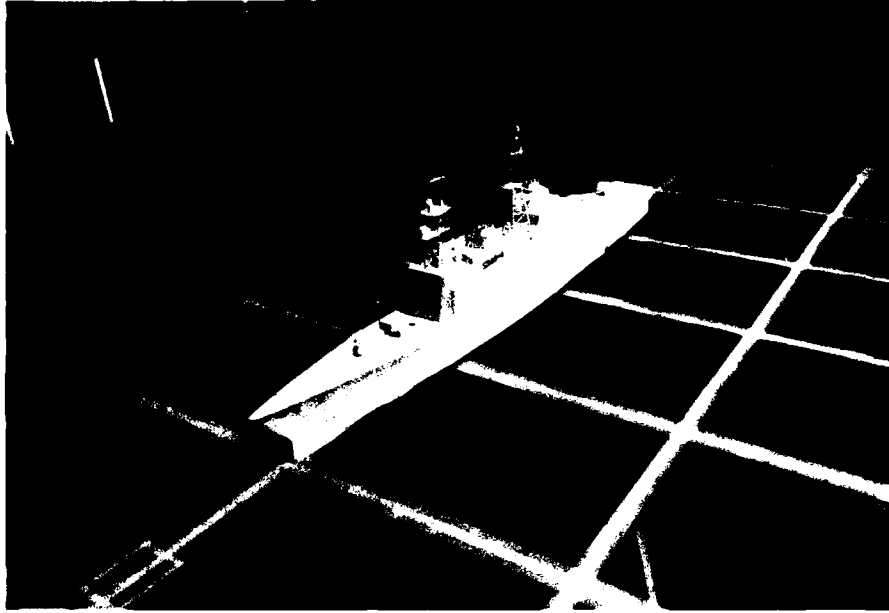
Both upper and lower rake "spreader" bars were adjustable vertically, to move the probe arrays up and down. The rake itself could be moved back and forth longitudinally behind the ship to map points in the wake, as shown earlier in Figures 4 and 5. For each headwind/xwind rake position, 1 through 5, the device was securely bolted down to the groundplane surface to prevent error inducing vibration of the probe sensor heads. "Tailwind" rake locations 1 through 5 are designated on the right hand side of Figure 4, with either an "A" or "C" nomenclature. Test locations annotated with an A were used in the NADC test, and the C designation applied to the "Close-In" Lakehurst NAEC test configurations.

4.3 FLOW VISUALIZATION STUDY EQUIPMENT

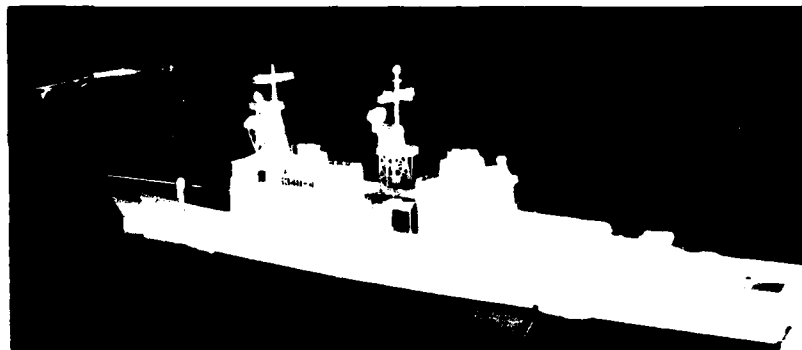
Smoke - Chemically generated smoke (produced by combining sulphur dioxide and anhydrous ammonia gasses) was injected into the airflow around the ship model through a movable 13 foot long two-tube "wand" and nozzle arrangement. This was done in order to identify areas of turbulence and separation behind the ship for later positioning of anemometer arrays. The nozzle was sufficiently small to prevent flow expansion until the smoke reached the lee side of superstructure elements. The wand was manually positioned in the tunnel by extending it through one of the wall slots out to the model in the center of the test section.

Still photography of the separated wake was accomplished with 70MM cameras mounted beside and above the model. A 35MM movie camera, with its shutter synchronized to a strobe light mounted in the tunnel ceiling was utilized to document (in color) flow visualization studies conducted on the first day of the test. A separate conventional 35MM camera photographed the flow from the-side of the tunnel.

To enhance photography during the smoke tests, a black and white grid pattern was attached to the groundplane (and tunnel wall) as shown at the top of Figure 17. Ship yaw angles established for the flow viz work were prominently displayed on the horizontal grid, so that movies taken from above require no subtitling to be understood.



HULL ON 2 FT SQUARE BLACK SMOKE FLOW VISUALIZATION GRID - NOTE MARKINGS FOR YAW HEADING ON FLOOR & TUNNEL WALL GRID FOR OBSERVING VERTICAL FLOW PATTERNS



HELIUM-SOAP BUBBLE GENERATING NOZZLE & WAND HELD ABOVE BOW WHILE DISPENSING FLOW



EQUIPMENT SETUP FOR PHOTOGRAPHING SOAP-BUBBLE TRACKS WITH XENON "SUPER TROOPER" THEATRICAL-TYPE HIGH INTENSITY COLLIMATED SPOTLIGHT IN FOREGROUND - AND MOVIE/STILL CAMERAS ON LEFT

Figure 17. FLOW VISUALIZATION EQUIPMENT

Helium Filled Soap Bubbles - Multiple helium filled soap bubble stream filaments were generated with a special hand-held "wand" resembling a keil tube, in order to visualize flow patterns around the ship. The soap bubbles are formed with helium, providing neutral buoyancy characteristics so that each bubble stream followed the local flow pattern. Bubble streams were illuminated with a bright Xenon theatrical type spotlight mounted behind, and to the side of the ship, with all other tunnel lighting turned off. The soap bubble "flow viz" testing was conducted after completion of the smoke evaluation on the first day of the test. Movies of this very interesting flow study were unsuccessful in highlighting the bubble tracks. On the last day of the program, soap bubble photography was again attempted, with the same results.

Despite the problem with the soap bubble movies, numerous Polaroid and Hasselblad still photos were taken successfully of the flow around the hull and superstructure.

SECTION 5.0 TEST PROCEDURE AND CONDITIONS

SYNOPSIS - As in the earlier FF 1052 evaluation, testing related to mapping DD 963 airwake turbulence began long before the ship model was mounted in the tunnel. Extensive refurbishment and calibration of the anemometer probes was accomplished by Thermo Systems Inc. (the probe manufacturer. When returned to Boeing Vertol each was rechecked in a "TSI Calibrator" unit to confirm factory cal constants.

After installation of the groundplane in the tunnel, the model was bolted to the yaw table extension flange and smoke flow visualization studies conducted. This testing was accomplished at the outset of the program to verify that locations selected for the anemometer arrays on the rake would, in fact, identify major areas of turbulence affecting V/STOL or helicopter operations aboard the full scale vessel. With probe array configuration requirements confirmed from the smoke tests, a number of helium/soap bubble flow viz runs were made to qualitatively assess and photograph details of the bound and shed vortex patterns in the lee of prominent superstructure elements. This testing was repeated at the end of the program in an unsuccessful attempt to take movies of the bubble tracks, as they passed through the turbulence.

Quantitative measurement of the airwake turbulence followed the flow visualization effort. Over 740 test points were taken with the hull installed upright, and rolled right or left 15 degrees. About three quarters of these velocity measurement runs represented headwind/crosswind conditions, and the remaining "tailwind" data points were taken with the ship's fantail pointing into the tunnel flow.

Information presented in the remainder of this section briefly reviews the various elements of the test program just outlined, with documentation of exactly what was done - and why.

5.1 ANEMOMETER REFURBISHMENT, RECALIBRATION, & OPERATION

At the start of the DD 963 program, eighteen anemometer probes (used in the earlier FF 1052 test) were made available to Boeing by the government. Because of the questionable or completely inoperative status of most of these devices at the end of the earlier test, all were returned to TSI for sensor replacement, refurbishment as necessary, and calibration. All three sensor units on each anemometer were replaced by the manufacturer, and the probe electronics cards rezeroed to match wind tunnel cabling, buffering interface electronics equipment etc. One of the probes shipped to TSI was considered to be so badly damaged that it could not be repaired for the DD 963 effort.

Of the seventeen refurbished probes sent back to Boeing, all but one repeated the factory calibration when installed in the calibrator unit. The probe not repeating the factory calibration was worked on by the wind tunnel instrumentation staff, but never achieved servicable status during the program.

At the start of testing, ten probes were installed on the rake. A number of these suffered "balance" problems when connected to the very long cables in the tunnel, running from the test section to the electronics processing units. Capacitance of cabling in the tunnel was apparently somewhat different from assumed values used by the factory in setting up the electronics cards for each probe.

Wind tunnel personnel were able to eliminate the problem (through a minor resistor change on the card) for all but three probes. An attempt to thermal "shock" these unusable probes with large applications of current to change internal resistance (so that they could be balanced), was not successful. As a result, only thirteen operative probes were available for velocity measurement at the start of testing (out of the original group of 18).

Shortly after testing started, one probe was struck by some small piece of debris in the flow during a run, and all three cantilever mounted sensors were destroyed. The probe was replaced with a spare. A similar sensor problem occurred during the first rake probe array change, and two more probes were rendered unservicable.

For virtually all headwind/crosswind testing, ten probe positions on the rake were being utilized as planned. From time to time, individual sensors failed through shorted or open circuits, and the probes were replaced with spare units when the failure was identified. Occasionally, failures were not found with on-line monitoring systems until several runs had been made following the onset of the problem. Because of the vast amount of data being acquired in the limited test time available, these runs were not repeated when only one probe in an array had failed. On several occasions, "low-speed" averaged velocity data taken on-line indicated satisfactory probe performance (when, in fact, failures in multiplexing data channel circuitry had occurred, thereby rendering the off-line "high-speed" information intended for post-test processing unusable).

A detailed annotation of all malfunctioning probes, and associated run and test point numbers is presented in the report Appendix B, preceding the data listings of mean and standard deviation velocity information.

5.2 BOUNDARY LAYER SURVEY

Although no survey of the groundplane boundary layer velocity gradient was made for the DD 963 (BVWT 242/243) test, information gathered during the earlier FF 1052 test is considered to be valid for the destroyer evaluation, and is therefore presented in this report to aid the reader in understanding the flow environment around the DD 963 hull.

In the Reference 1 (FF 1052) survey, velocity gradient above the groundplane was measured at the model yaw center, and at the ship bow with the vessel at 0° and 90° yaw. Since the FF 1052 model was

somewhat larger than the DD 963 (8 Ft.-10 In. vs 7 Ft. overall), the "bow" location for both ships was not in the same place on the groundplane. Luckily, the initial test was with the larger ship, and its bow was located three feet aft of the forward edge of the groundplane; whereas the bow of the smaller DD 963 was located 4.75 feet aft at zero yaw (see Figure 5). Simple interpolation of the measured boundary layer data from the three foot and ζ positions (using information on boundary layer growth discussed in Reference 2), will produce desired velocity ratios for any station along the DD 963 hull platform.

Boundary layer measurements were taken with tunnel speed set at 20, 35, and 50 knots during the FF 1052 test, which exceeds the range of speeds evaluated during the DD 963 program. Again, interpolative techniques can be applied to derive the desired DD 963 information as required.

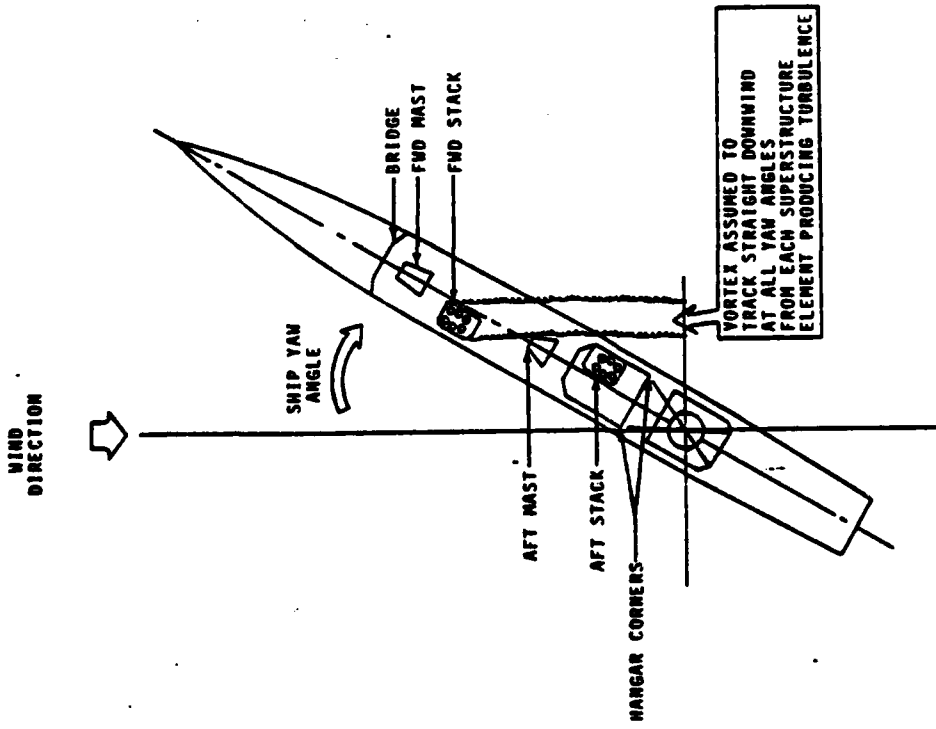
5.3 FLOW VISUALIZATION STUDIES TO CONFIRM PROBE ARRAY CONFIGURATION, AND OVERALL NATURE OF AIRWAKE TURBULENCE

Predictions - Before the test, an estimate was made to determine where major vortices shed by elements of the DD 963 superstructure would lie, as the ship was yawed from 0° to 90° in both directions. The principal vortex streets creating important areas of wake turbulence were expected to emanate from corners of bridge and hangar superstructure, and from both masts and exhaust gas stacks. Results of the pre-test predictions are illustrated in Figure 18.

In the earlier test of the FF 1052, yaw angles between 30° and 50° produced the greatest flow disturbance, in the range of wind-over-deck headings most likely to be used for VSTOL and helicopter launch and recovery operations. On the basis of this observation, 50° was selected as a ball-park start for probe positioning in the DD 963 test (as shown on the right hand side of Figure 18). Information presented later in the report (in Section 6), will confirm these positioning estimates to be reasonable for the Destroyer Airwake Program, despite swerving of the flow downwind of the vessel observed during smoke testing.

Smoke Studies - To verify assumptions just described, flow visualization studies with the smoke "wand" discussed in Section 4.3 were conducted with tunnel speed stabilized at 20 knots. The wand was positioned to eject smoke into the flow field in front of various elements of superstructure including the bridge, forward mast and stack, aft mast and stack, and the hangar. Flow around the landing platform was also extensively checked. Ship yaw angles from 0° to 180° in both directions were evaluated.

Behind the ship, the anemometer rake was set up with 10 "dummy" wooden probes mounted on it in the locations suggested in Figure 18. An observer was stationed above the tunnel test section to look down on the smoke flow field and ensure that the selected probe spacing



* FLOW VIZ TESTING WITH SMOKE (FROM 00 TO 1800 YAW) CONFIRMED THAT PRE-TEST PROBE ARRAY PATTERN SELECTION WAS ADEQUATE FOR MEASURING MAJOR AREAS OF AIRWAKE TURBULENCE OBSERVED IN FLOW

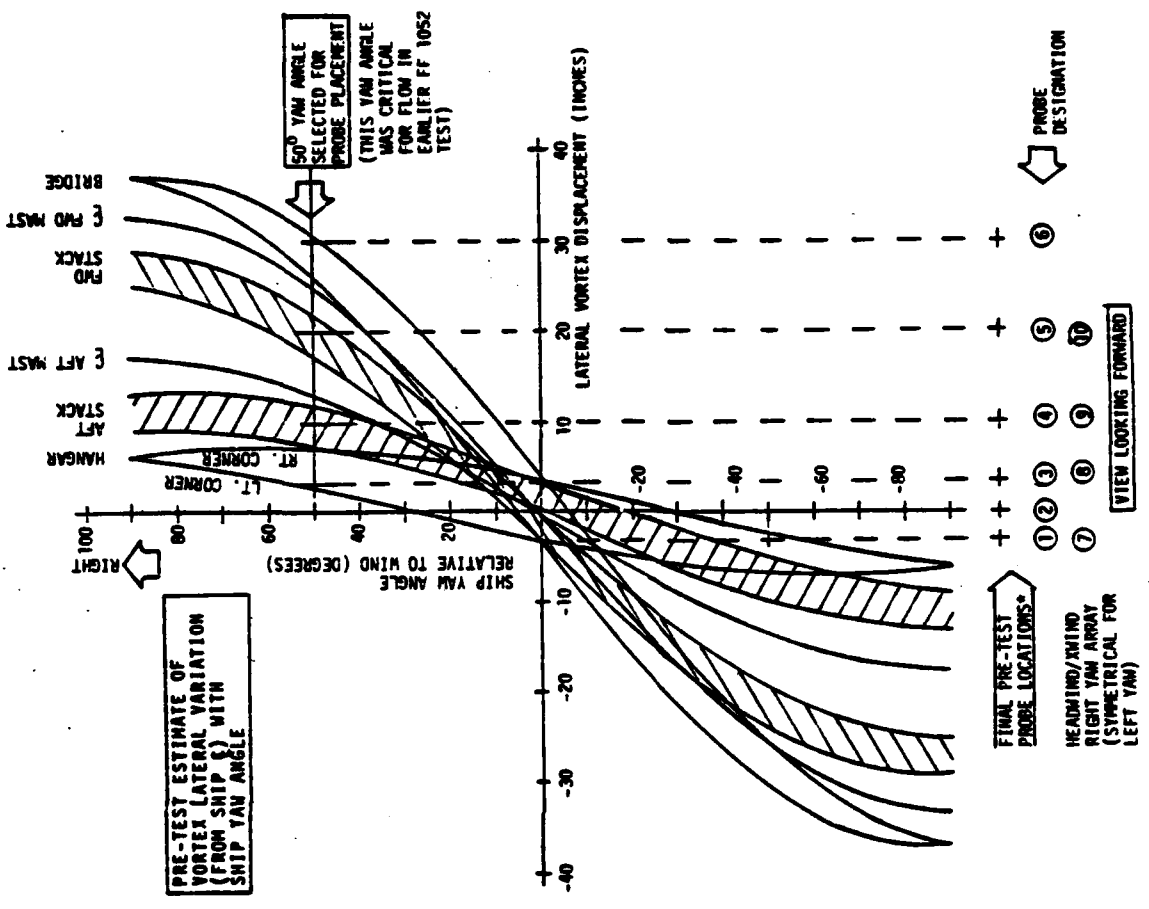


Figure 18.

would, in fact, cover the areas of heaviest turbulence. A second observer viewing the ship through the tunnel side wall window, estimated vortex vertical height at different distances downstream by comparing the flow with the tunnel wall mounted grid, to confirm the horizontal probe plane levels selected for testing.

Stroboscopically synchronized color movie film (at about 25 frames per second) was taken from above the tunnel roof and slightly aft of the ship for each test condition; and both conventional 35MM color movies and 70MM still photographs were made from the side of the test section. Attempts to "freeze" major elements of the turbulent flow with the strobe light, to identify frequency content, were not successful.

Helium - Soap Bubble Tests - Use of helium filled soap bubble tracks to delineate flow around the superstructure was also attempted during the flow visualization program (just as had been done experimentally in the earlier FF 1052 effort). For this type of test, the hull was illuminated from the rear by an extremely bright Xenon spotlight (with other tunnel lights turned off). This back lighting caused the soap bubble tracks following the local flow pattern to be visible. A polaroid camera was used to experimentally derive the best combination of (f) stop and shutter speed to photograph the bubble tracks. With these settings determined, a 70MM Hasselblad still camera was adjusted accordingly and then used to photograph testing conducted as the ship was yawed, as in the smoke tests (see Figure 17).

In addition to still photography, color movie film was also made of the bubble tracks. Negative results caused the bubble tests to be repeated on the last day of the program - but again the bubble tracks were not visible on film. Since the FF 1052 soap bubble color movies taken in 1976 were able to delineate the tracks fairly well, it is recommended that prior to any ship flow visualization work attempted in the future, pre-test photographic experiments be run to determine what film & shutter speeds, and (f) settings are necessary to produce satisfactory results.

5.4 SHIP AIRWAKE VELOCITY MAPPING

Headwind/Crosswind Testing - With probe locations on the anemometer rake confirmed by the flow visualization studies, a comprehensive program to quantitatively map the airwake turbulence flow field was undertaken. The ship was set up initially at zero roll angle, and yaw sweeps to the right were accomplished as outlined in the Table 1 summary. The first probe array utilized was the "lower" right yaw setup indicated at the top of Table 2. Initial yaw sweeps started with the rake positioned so as to place probe sensors in a vertical plane passing through the landing platform bullseye (as shown in Figure 4).

Yaw runs were repeated at 20, 35 and 45 knots, before moving the rake aft to the next position located above the aft end of the "01"

| RUN NO. | PROBE CONFIGURATION ① | RAKE LOCATION ② | SHIP ROLL ATTITUDE | SHIP YAW ANGLE ③ (DEGREES) | | | | | | | | | | | VELOCITY (KTS.) | COMMENTS | | |
|--|---|--|--------------------|----------------------------|---------|---------|----|-----|-----|-----|-----|-----|---|---|-----------------|----------|-------------|---|
| | | | | 0 | 30 | 50 | 90 | 120 | 150 | 180 | 210 | 240 | | | | | | |
| 9-11/48-50 13-15/52-54 16-18/55-57 19-21/58-60 22-24/61-63 | 1/2 | 1 2 3 4 5 | 0° | R | R | R | R | R | | | | | | | | | 20.35 45 | Headwind/Leeward Test Right Yaw 0° Roll |
| 111-113/93-95 115-116/91-92 117-118/89-90 119-120/87-88 121-122/85-86 | 3/4 | 1 2 3 4 5 | 0° | L | L | L | L | L | L | | | | | | | | 20.45 | Left Yaw 0° Roll |
| 34-35/75-76 32-33/77-78 30-31/79-80 28-29/81-82 26-27/83-84 | 1/2 | 1 2 3 4 5 | +15° | R | R | R | R | R | R | R | | | | | | | 20.45 | Right Yaw +15° Roll |
| 128/110 127/109 126/100 125/99 124/98 | 3/4 | 1 2 3 4 5 | +15° | L | L | L | L | L | L | L | L | | | | | | 20 | Left Yaw +15° Roll |
| 36-37/73-74 38-39/71-72 40-41/69-70 42-43/67-68 44-45/65-66 | 1/2 | 1 2 3 4 5 | -15° | R | R | R | R | R | R | R | R | | | | | | 20.45 | Right Yaw -15° Roll |
| 133/104 132/105 131/106 130/107 129/108 | 3/4 | 1 2 3 4 5 | -15° | L | L | L | L | L | L | L | L | L | | | | | 20 | Left Yaw -15° Roll |
| 168-169/188-189/ 170-171/186-187/ 202-203 172-173/184-185/ 174-175/182-183/ 176-177/178-179/ 204-205 /180-181/ 206-207 | 5/6/7 | 1C 2C,1A 3C 4C 5C,2A 3A | 0° | | | | | | | R | R | R | R | R | R | | 20.45 | Tailwind Test 0° Roll |
| 190/201 191/200 192/199 | 6/7 | 2C,1A 5C,2A 3A | +15° | | | | | | | R | R | R | R | R | R | | 20 | +15° ROLL |
| 195/196 194/197 193/198 | 6/7 | 2C,1A 5C,2A 3A | -15° | | | | | | | R | R | R | R | R | R | | 20 | -15° Roll |
| 12/51 25/64 114/96 123/97 | 1/2 3/4 | 1 5 1 5 | 0 0 | R | R | | | | | | | | | | | | 45 45 | 10 Sec Runs |
| 208 | 6 | 2C,1A | 0 | R | R, L | R, L | | | | | | | | | | | 20 | |
| 1-8, 209 46 47 101-103 134-167 | FLOW VISUALIZATION TEST MODEL OUT OF TUNNEL REPEAT OF RUN 9 REPEATED IN RUNS 109-110 DD963 "CLOSE-IN" AIRWAKE TURBULENCE TEST | | | | | | | | | | | | | | | | | |

NOTES

- ① ANEMOMETER PROBE ARRAY CONFIGURATION DESCRIBED SCHEMATICALLY IN TABLE 2
- ② AS DESCRIBED IN FIGURE 4 SKETCH
- ③ R - REFERS TO A YAW TO THE RIGHT; L - YAW TO THE LEFT

EXCEPTIONS TO CONDITIONS LISTED IN THIS TABLE ARE GIVEN IN TABLE 3 OF APPENDIX B WHICH LISTS MEAN AND STANDARD DEVIATION VELOCITY TEST RESULTS.

Table 1. TEST MATRIX SUMMARY
DD963 SHIP WAKE TURBULENCE TEST - BVWT 242/243

VIEW LOOKING FORWARD

| PROBE CONFIGURATION ARRAY | PROBE HEIGHT (ABOVE LANDING DECK)-METERS F.S. | USED FOR RUN CONDITIONS |
|---|---|--|
| PROBES MOUNTED HORIZONTALLY FOR HEADWIND/XWIND TEST | | |
| <u>CONFIGURATION 1</u> 1° 2° 3° 4° 5° 6° 7° 8° 9° 10° LANDING DECK | 6.22 HANGAR ROOF 2.54 MINIMUM HEIGHT | HEADWIND/XWIND TEST RIGHT YAW LOWER ARRAY |
| <u>CONFIGURATION 2</u> 1° 2° 3° 4° 5° 6° 7° 8° 9° 10° LANDING DECK | 18.03 RADAR ANTENNA 12.45 STACK UPTAKES | RIGHT YAW UPPER ARRAY |
| <u>CONFIGURATION 3</u> 6° 5° 4° 1° 2° 3° 10° 9° 7° 8° LANDING DECK | 6.22 HANGAR ROOF 2.54 MINIMUM HEIGHT | LEFT YAW LOWER ARRAY |
| <u>CONFIGURATION 4</u> 6° 5° 4° 1° 2° 3° 10° 9° 7° 8° LANDING DECK | 18.03 RADAR ANTENNA 12.45 STACK UPTAKES | LEFT YAW UPPER ARRAY |
| PROBES MOUNTED VERTICALLY FOR TAILWIND TEST | | |
| <u>CONFIGURATION 5</u> 6° 7° 1° 2° 3° 4° 5° LANDING DECK | 2.54 MINIMUM HEIGHT | TAILWIND TEST LOWER ARRAY |
| <u>CONFIGURATION 6</u> 6° 7° 1° 2° 3° 4° 5° LANDING DECK | 6.34 HANGAR ROOF | MIDDLE ARRAY |
| <u>CONFIGURATION 7</u> 6° 7° 1° 2° 3° 4° 5° LANDING DECK | 12.45 STACK UPTAKES | UPPER ARRAY |

Table 2. PROBE CONFIGURATION ARRAY COMBINATIONS

Deck; where the process was repeated. As the rake was moved further aft, greater and greater yaw angles could be reached before interference occurred between the ship and probe sensors (Table 1 reflects this expanded yaw coverage).

When the yaw sweep series was completed for the final rake location (one ship length downstream of the bullseye), the hull was rolled 15° to the right and the series repeated at 20 and 45 knots (see Table 1), as the rake was moved progressively in steps closer and closer to the ship landing deck. After completing the final run with probes over the landing deck G, the hull was rolled 15° left and the sequence was duplicated again. With all right yaw "lower" array (configuration 1) tests completed, rake spreader bars were raised to achieve the "upper" array, shown as configuration 2 in Table 2.

As illustrated in Table 1, runs with the "upper" right yaw array were then made, essentially duplicating those with the "lower" configuration, thereby completing the mapping task to the right. By switching probes from the right hand side of the rake to the left, configurations 3 and 4 (Table 2) were achieved, and the entire data gathering process was repeated for left yaw sweeps. On the basis of mean velocity comparisons made for 20 and 45 knot runs (which indicated that data could be scaled directly with remote wind speed), the 35 knot sweeps were not repeated in left yaw.

Tailwind Testing - Following completion of the headwind/crosswind evaluation, tailwind testing was accomplished (starting at run 168), utilizing the rake configured with vertically mounted probes as previously discussed and annotated in Table 2 and at the bottom of Figure 16. Only one horizontal row of probes at a time was active (see Tables 1 and 2), and the rake was moved fore and aft to completely map a single plane before being reconfigured for measuring data at the next higher horizontal level. Tailwind measurements were taken at 20 and 45 knots as indicated in the table.

Tailwind yaw sweeps were attempted for +60° on either side of the 180° yaw angle, but probe/hull interference often precluded reaching the desired maximum angle. A detail listing of all yaw angles set up for this testing is given in Table 1 and in Table 3 (which precedes the data listings). Table 3 also annotates which probes were inoperative, or malfunctioning during each run.

5.5 DATA RECORDING AND PROCESSING

Velocity information from the anemometer probes was recorded and processed on the BVWT "WINDEE" - IBM 1800 computing system mentioned earlier. Raw probe sensor data stored initially on tape was processed in the Reference 10 data reduction program, which converted the results to engineering units and resolved the resultant velocity information into Vx, Vy and Vz components. Further processing corrected for probe mounting orientation, so that Vx was always (+) in the downstream direction parallel with the tunnel centerline;

V_y (+) to the left looking upwind; and V_z (+) upward and perpendicular to the groundplane. This velocity convention was maintained regardless of ship heading, in order to simplify later application of the data in flight simulation work.

Dynamic velocity data were recorded after first establishing the desired hull yaw angle and stabilized tunnel speed. Each data recording burst consisted of three separate segments, two of which were utilized in the data reduction process. The first consisted of approximately one second of "low speed" data sampled at 124 samples per second per channel. These data were averaged to form mean V_x , V_y , and V_z velocity components for "on-line" checks of probe performance. The data were plotted in velocity map format while the test was in progress, to get an idea of what the total flow field behind the ship looked like. Because of a tunnel data system limitation, only nine of the ten probes installed on the rake could be monitored (on-line) at any one time - data from the tenth probe was stored on tape for post-test processing.

The second portion of the data segment consisted of an 0.8 second burst of "high speed" information sampled at 164 samples per second. This is the data which was post-test processed to form the mean and standard deviation velocity component listings presented in Appendix B of this report. It is also the data used in developing the time history tapes of the airwake measurements for each probe. The 0.8 second model data burst is equivalent to 64 seconds of full scale real-time turbulences, according to Strouhal scaling law similarities for the 1/80 scale ship.

In addition to the standard 0.8 second data samples, long data runs (of about 10.4 seconds each) were made periodically during the test for selected conditions, duplicating those already run. These runs were intended for use in developing the airwake math model, and were processed in a manner similar to that used with the shorter samples. Along with the mean and 1 σ standard deviation calculations, some of these long runs were also processed through the wind tunnel Fast Fourier Transform Frequency Analysis, for comparison with results of the shorter runs.

During the standard 0.8 second run, 131 data samples were recorded, or one every 0.006 seconds. This sample rate was primarily dictated by constraints of the "WINDEE" data system as influenced by the number of probe sensor signals being multiplexed, the desired range of frequency content in the final results, and the amount of data which could be reduced within the cost limitations of the contract. Assuming a minimum of 2 samples per cycle to define wave form, the data sample rate and run time used in the wake turbulence test permitted accurate measurement of frequencies between 1.25 Hz and 80 Hz (model scale).

To refer these frequencies to full scale values, Strouhal Number is assumed to be the same for the model and full size ship (since the

minimum Reynolds Number experienced in the model test exceeded 10^3 , which is the criteria for constancy established by Hoerner, in Reference 2). Strouhal frequency scaling laws state that:

$S = \frac{fh}{V}$ where: S is Strouhal Number (usually constant for a given body shape)
f is the frequency of the shed vorticity
h is a characteristic dimension of the body (normally width)
V is the flow velocity

Based on these relationships, the full scale range of frequencies possible from the test results can be derived from model frequency data by simply dividing by the (80:1) scale factor. This division results in full scale turbulence frequencies ranging from 0.0156 Hz to 1.0 Hz, which is more than adequate for application in existing flight simulation math models for most aircraft. Scaling the recorded model time history data for simulation work requires only that the 0.006 second time-between-data samples be increased to 0.488 seconds.

SECTION 6.0 DISCUSSION OF TEST RESULTS

As indicated in the Introduction to this report, the principal objective of the wind tunnel effort described herein was to record on magnetic tape a three component velocity time history data map of the turbulent airwake behind a DD 963 destroyer model, suitable for later application in VSTOL aircraft or helicopter design and flight simulation work. A second major program objective of the contractor was to process the time history data into computer listings of three component mean and standard deviation velocity information. These objectives were achieved successfully, along with meeting lower priority goals to develop a qualitative feel for the airwake through application of smoke and helium/soap bubble flow visualization techniques.

On the basis of having either met or exceeded the contractual objectives stated above, no attempt has been made by the contractor to exhaustively analyze the test data for math modeling purposes in this report. Rather, the data have been carefully scrutinized for validity from an aerodynamic and data analysis standpoint, and samples of the more interesting test results either plotted or presented photographically in this section. It is expected that a comprehensive evaluation leading to synthesis of an airwake math model for the DD 963 will be conducted by personnel of the NADC Flight Dynamics Branch sometime later this year.

In the review of test results presented in this section, previous ground-plane boundary layer survey information from the FF 1052 program (which applies equally well for the DD 963 test), and flow visualization studies conducted with the Spruance, are discussed first. Typical dynamic time history data presentations are covered next, followed by a description of the more interesting horizontal and vertical plane velocity vector maps plotted from the test results. Velocity maps compare the following:

- Effect of ship superstructure on variation in local flow with increasing height above the deck, in the horizontal plane
- Magnitude and directional variations in local horizontal flow caused by:
 - ship yaw angle for headwind/crosswind tests
 - ship roll angle
 - remote wind speed
- Effect of hull/superstructure shape on flow in vertical planes above and behind the flight platform
- Effect of tailwinds over the fantail
- Turbulence "roughness" as indicated by pictorial displays of longitudinal/lateral 1σ variations about the mean velocity vector.

Data samples from selected test runs (including several of the long 10.4 second data points) were also processed through the Wind Tunnel Frequency

Analysis Program, to determine the periodic frequency content of the airwake turbulence. These results, presented in model scale plots, are quite interesting because of their implications regarding eventual math modeling of dynamic components of the airwake.

6.1 GROUNDPLANE BOUNDARY LAYER SURVEY
(Data from Reference 1 test of FF 1052 Frigate)

Data presented in Figure 19 compare predicted and measured boundary layer velocity gradient characteristics, at the ξ of yaw rotation under the landing platform bullseye, and on the tunnel ξ slightly forward of the DD 963 model bow. Excellent agreement between predicted and measured boundary layer thickness is shown in the figure.

For the bow (of the FF 1052) which was three feet from the groundplane leading edge, boundary layer thickness was predicted to be about 0.75 inches in depth. Actual measurements at the point where local velocity was reaching 95% of free stream, indicated a thickness varying between 0.7 and 1.1 inches above the surface. For the location of the DD 963 bow (see Figure 5 in the report Summary), predicted thickness is approximately 1.2 inches.

Along the groundplane at the ξ of yaw rotation (which was the same for both models), boundary layer thickness was predicted to have grown to slightly over two inches. At 95% U , the actual groundplane

U_{∞}
measurement put the boundary layer height for 50 and 20 knots free stream tunnel velocity, at 1.7 and 2.5 inches respectively. Estimated boundary layer thickness at the location of the DD 963 fantail is just under three inches, and at the aft end of the groundplane behind the ship slightly less than 4.5 inches.

The thrust of these earlier test results indicates that the 2 inch adapter skirt used for mounting the DD 963 hull, placed the top of the boundary layer at about the level of the ship waterline amidships, and roughly 3/4 inch above the waterline at the fantail. For the full scale vessel, the free stream boundary layer at sea will probably be a bit higher along the hull than the thicknesses just described (Reference 11); but the at sea boundary thickness data is rather sparse and somewhat subjective in nature; and, of course, is heavily dependent on sea state (which is a function of wind and wave height).

Despite the likely difference in model and full scale boundary layer thicknesses over the length of the ship, turbulence levels measured behind and above the superstructure are probably unaffected by not exactly matching the boundary layer heights along the sides of the vessel. More importantly, aft of the ship where the groundplane boundary growth is substantial (unlike what happens at sea, where it tends to remain at a constant height for given wind and wave conditions), the match in model and full scale velocity gradient depth is somewhat closer. Boundary layer thickness aft of the ship becomes more significant than the portion adjacent to the hull, because the

DATA FROM FF1052 SHIP WAKE TURBULENCE TEST BVWT 183

NOTES:

- (1) MOUNTED 14 IN. ABOVE TUNNEL FLOOR
- (2) 20 FT. X 20 FT. GROUNDPLANE
- (3) HOERNER-SECT 2-3

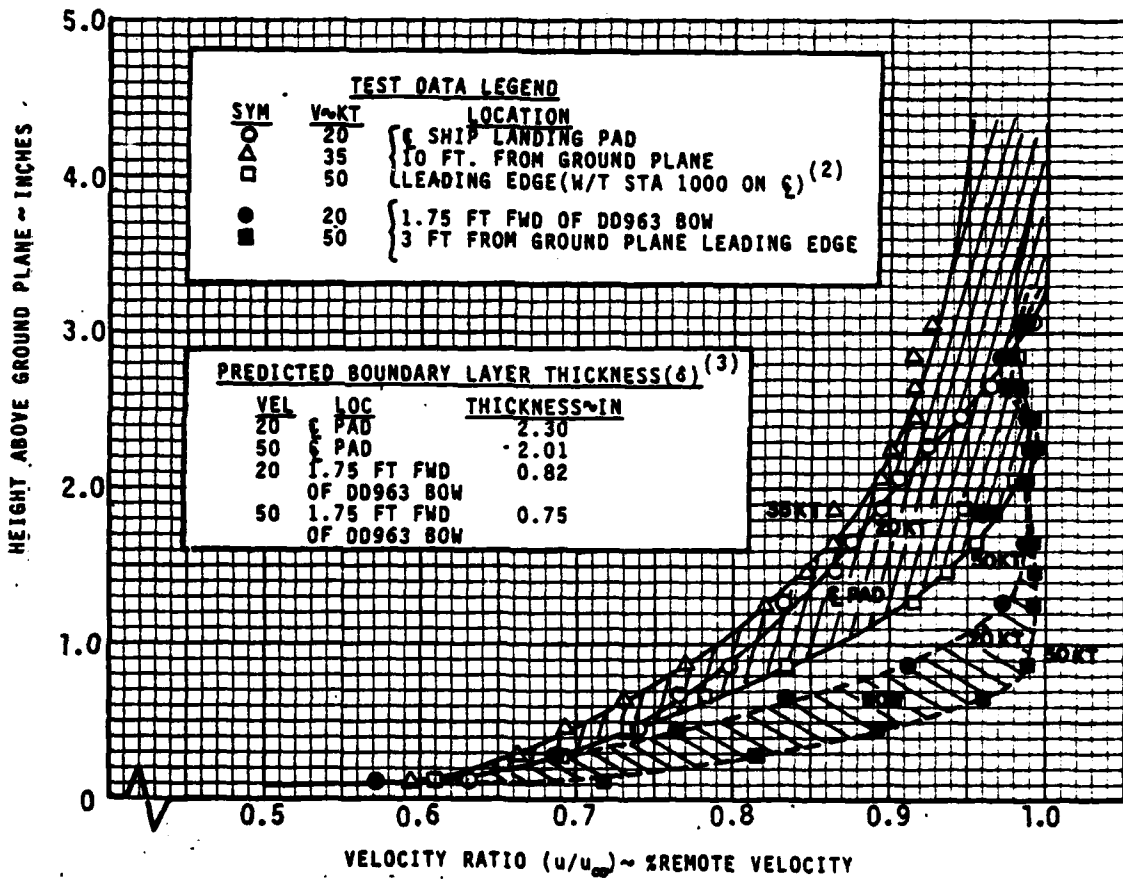


Figure 19. BOUNDARY LAYER SURVEY ABOVE FIXED BVWT GROUNDPLANE

character of the aerodynamic wake may be altered by its reflection from the simulated water surface.

Since the relationship between the waterline and boundary layer depth behind the ship was probably as close as it could have been during the test, it is concluded that the ship was mounted properly to simulate its aerodynamic wake.

6.2 FLOW VISUALIZATION TESTS

Highlights of the smoke and soap bubble flow visualization work described in Section 5.3 are summarized in the photographs presented in Figures 20 through 23. Graphically illustrated on these still photographs are major areas of turbulence and vorticity identified in the airwake surrounding the DD 963 hull and superstructure. As indicated earlier, the smoke tests verified probe positioning on the rake (both in the horizontal and vertical planes) from observations made in the tunnel.

From above, smoke trajectory indicated that as the ship yawed, flow tended to entrain itself behind the hull parallel to its centerline, and then straighten again as it approached the stern of the vessel. This observation confirmed earlier Boeing testing with the FF 1052, and results from smoke tests of a 1/200 scale DD 963 in the Princeton University Forrestal Research Center 3 x 4 foot tunnel, sponsored by NAEC last year.

The significant conclusion of all of this work is that the hull behaves almost exactly like a heavily loaded low aspect ratio wing (sticking up out of the water), which sheds a powerful vortex as shown clearly in the 30° and 50° right yaw photos in Figures 20 and 21. In the Princeton tunnel, the "tip" vortex was viewed from directly aft of the ship where the mechanization of the flow patterns becomes somewhat easier to understand, as opposed to being viewed from above, or to the side, as in the BVWT 182 and 242/243 tests.

As shown in Figure 20, the hull seems to "stall" somewhere between 30° and 50° of yaw (or α , if one considers the wing analogy), and downstream flow becomes disorganized and jumbled. At 90° yaw, reverse flow amidships is observed, while flow over bow and stern areas is still in a downstream direction. Color movies clearly show the dynamics of the various vortex and turbulent airflow patterns, for ship yaw angles from 0° to 180°.

Unlike the smoke studies which identified large scale "macroscopic" flow patterns around the hull, the helium-soap bubble tracks did the "micro" job in and around various elements of superstructure as shown in Figures 22 and 23. As expected, a strong bound vortex was discovered in the lee of the hangar over the landing platform. This recedes rather quickly into a jumbled, disorganized pattern when ship yaw angles exceed 10° to 15° in either direction. The expected "spoiler like" action of the asymmetrically placed aft stack on top of the

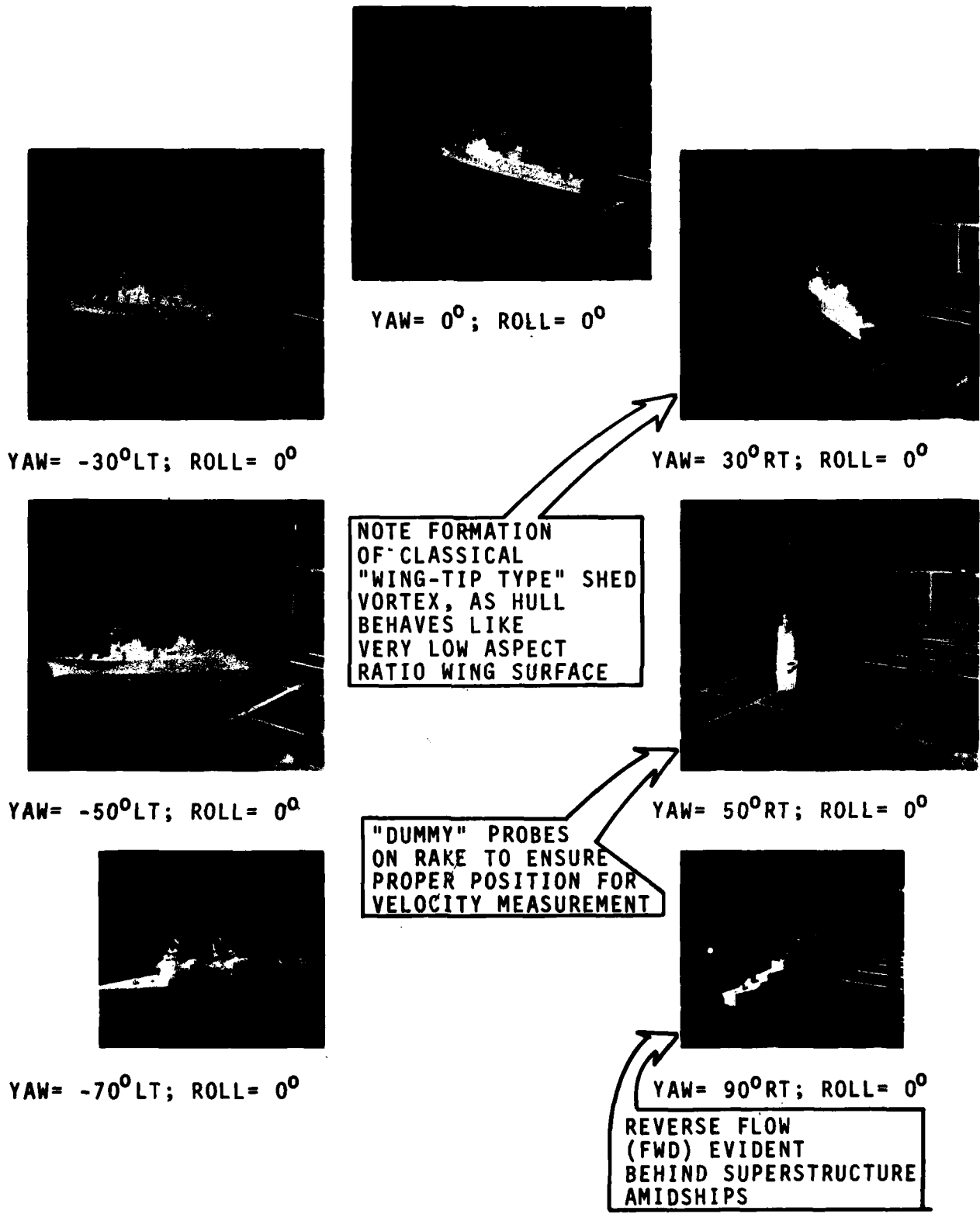


Figure 20. SMOKE FLOW PATTERNS AROUND HULL AS SHIP IS YAWED LEFT AND RIGHT TO REMOTE FLOW.

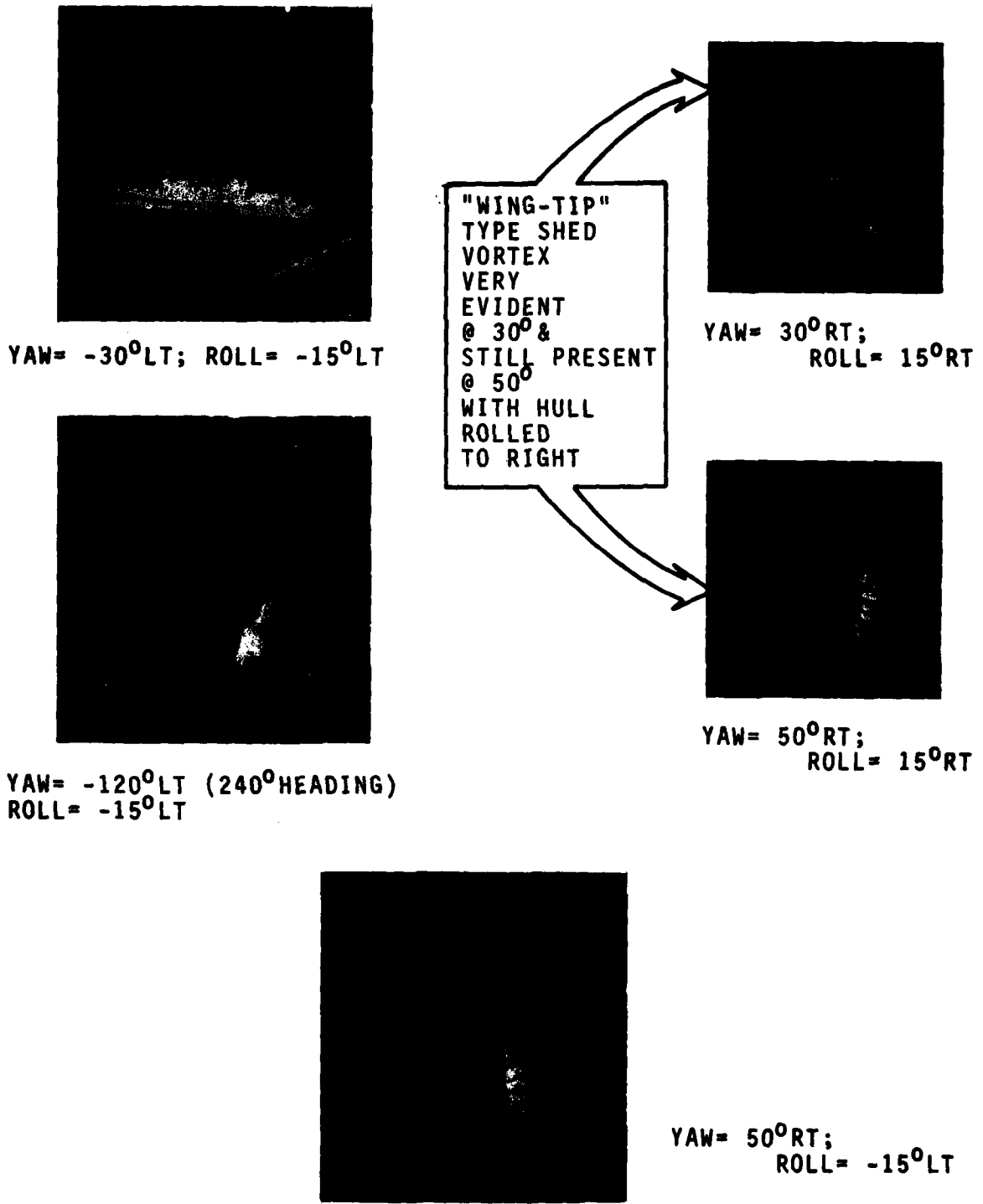
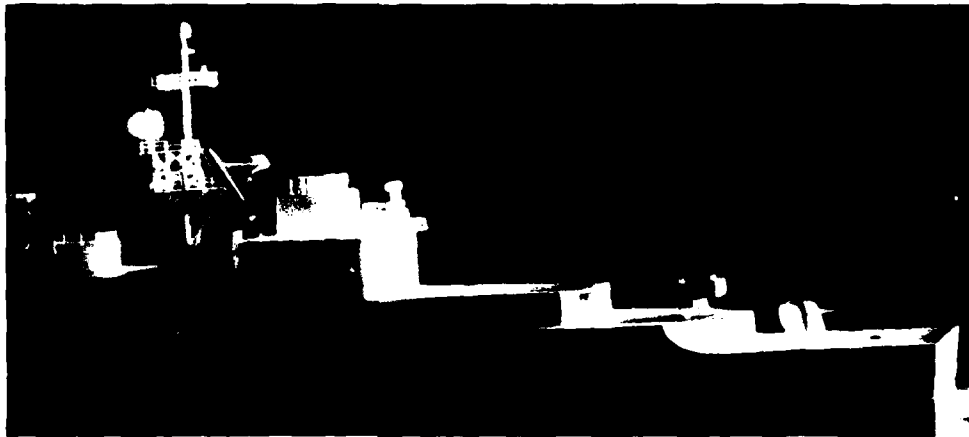
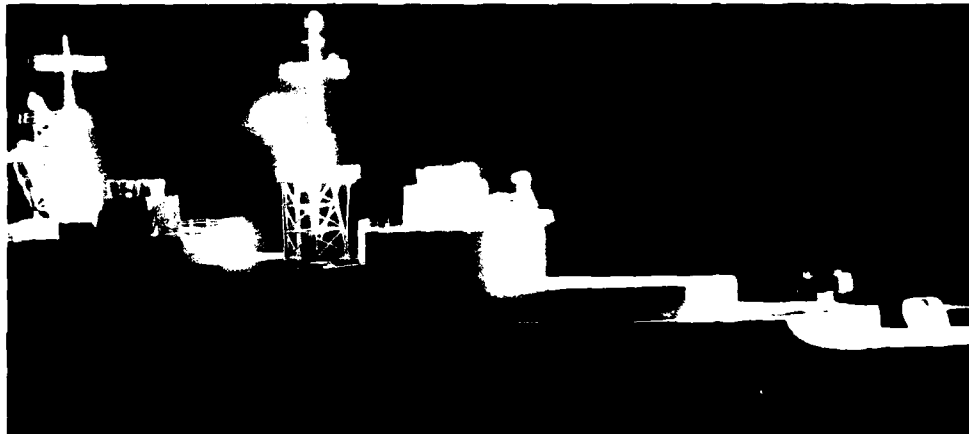


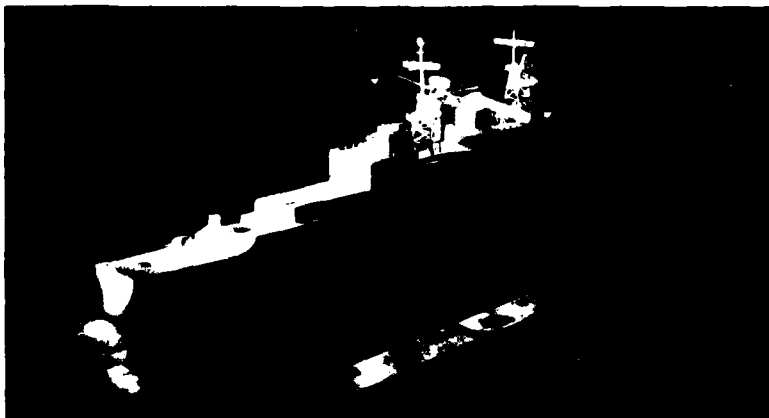
Figure 21. EFFECT OF HULL ROLL ANGLE ON FLOW AROUND VESSEL.



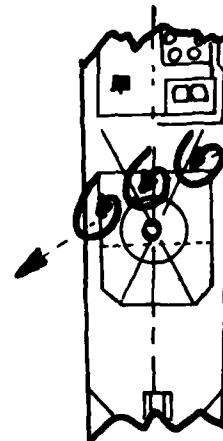
BOUND VORTEX BEHIND HANGAR OVER LANDING DECK,
HELD FORWARD AND TO THE CENTER OF HANGAR



NOZZLE HELD FWD OF BRIDGE - SHOWING FLOW AFT OF MAST
STRUCTURES & BOUND VORTEX BEHIND HANGAR AGAIN



SUCK DOWN OF HIGH LEVEL FLOW AFT OF
SUPERSTRUCTURE @ 0° YAW

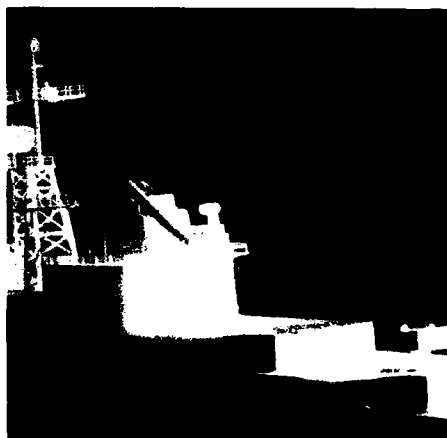


NOTE:
BOUND
VORTEX
SLIGHTLY
SKEWED
ACROSS
DECK @ 0°
YAW
BECAUSE
OF STACK
OFFSET
ON HANGAR
TOP

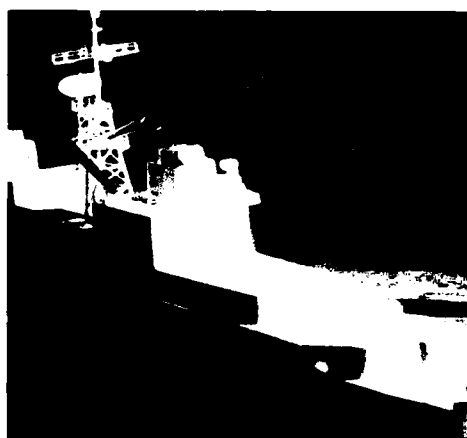
Figure 22. HELIUM-SOAP BUBBLE FILAMENT TRACKS INDICATING
FLOW FIELD AROUND SHIP SUPERSTRUCTURE @ 0° YAW



YAWING SHIP IN EITHER DIRECTION BREAKS UP BOUND VORTEX OVER LANDING DECK INTO ROUGH SOMEWHAT INCOHERENT FLOW PATTERNS (30° RT SHOWN)

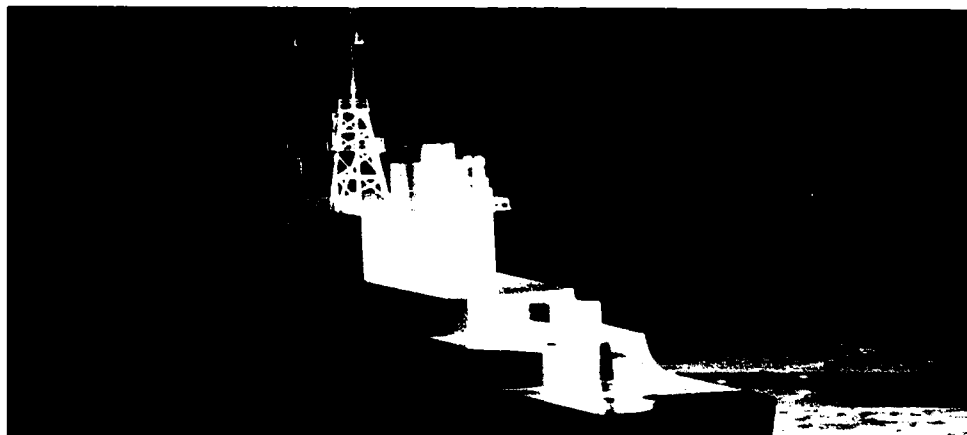


30°
RT



50°
RT

ROUGH FLOW BEHIND HANGAR WITH SHIP YAWED TO REMOTE WIND



EXCELLENT PHOTO OF EXTREME TURBULENCE IN LEE OF AFT STACK WITH SHIP @ 50° RT YAW - NOTE LARGE NUMBER OF MINI-VORTICES MAKING UP FLOW PATTERN

Figure 23. HELIUM - SOAP BUBBLE FILAMENT TRACKS INDICATING TURBULENT FLOW FIELD WITH SHIP YAWED

hangar, apparently contributed to breaking up the bound vortex as flow passed obliquely over the hangar roof.

Another observation from the bubble studies was that the mast structures (consisting of numerous cross braces, wires etc.) tend to act as large flow screens (similar to those found in wind tunnels), which break the flow into minute "mini-vortices", and thus contribute to the apparent incoherent flow behind the ship when yawed. Despite appearances to the contrary in the flow viz work, the overall flow field behind the ship has a very repeatable steady component at most yaw angles and locations throughout the wake, as will be shown later in the velocity vector maps.

6.3 RESULTS OF TURBULENT AIRWAKE VELOCITY MAPPING

6.3.1 Time History Data - As described in the Test Procedure and Conditions Section, computer processed time histories of three component velocity data were stored on magnetic tape for all test points taken during the wake turbulence program. Two data tapes were generated:

- The first tape includes all test points; with the run, test point and probe designations added for identification only. Full interpretation of this tape requires use of the Test Run Log (Appendix A), and Table 3 presented in Appendix B.
- A second edited tape has duplicate or repeat runs and yaw sweeps removed; but includes a complete description of the run, test point, probe, tunnel velocity, hull roll angle, and full scale location for each probe relative to the ship annotated. This is the tape utilized for data listings presented in Appendix B.

Vx, Vy and Vz time history data are expressed in meters per second on the tapes, and likewise all other processed data listings etc. utilize metric units throughout as required by the contract. The interval between data samples on the time history tapes recorded during the test is 0.006 seconds. Correction of the data to full scale requires only an expansion of the time between data samples to 0.488 seconds as discussed in Section 5.5. It should be noted that the test was conducted in the range of full scale wind velocities desired, and requires no Reynolds Number scaling corrections. The minimum test velocity produced Reynolds Numbers on the order of 1.2×10^6 for the hull in the area of the landing pad and 2.0×10^5 for major elements of superstructure; both of which are well above requirements for maintaining constant Strouhal Number, and adequate for ensuring supercritical flow over most of the ship.

Figure 6 in the report summary illustrates the type of time history data stored on tape for a typical 20 knot 0.8 second run. Also shown are results of processing the data to derive mean and 1σ Standard Deviation velocity component information for the listings in Appendix B. Information presented in the figure was

computer generated for a single V_x velocity component from information such as that listed in Figure 24, which is a digital printout of all 131 data points for each of the three velocity components for Run 9, test point 2, at 30° right yaw. Information presented in Figure 25 summarizes mean and 1σ processing results for the same run, with additional test points at 0° and 50° yaw. The data format of Figure 25 is followed in Appendix B.

Figures 26 and 27 compare time histories of 0.8 and 10.4 second runs; representing the same 45 knot test condition, and computer plotted on a compressed time scale when compared to Figure 6. Note that mean and standard deviation values computed for these two runs are virtually identical, indicating that the shorter data run does, in fact, represent average conditions existing in the wake at any one time. Also of interest is the size of the 1σ variation about the mean, which is about 50% of the steady value for the probe located just aft of the hangar corner in the vicinity of the landing area bound vortex.

It is interesting to observe that the 6.6 M/Sec steady mean velocity at this location is reduced substantially, when compared to the free stream 23 M/Sec (45 knot) value. This reduction in local "q" behind the hangar, and large value for standard deviation are both indicative of the levels of flow separation and turbulence present in the airwake field aft of the ship. Areas of disturbed and separated flow are graphically demarcated in the velocity maps presented next.

6.3.2 Steady State Velocity Maps - Mean (or average) velocity data of the type presented in the Figure 25 printout (and listed for the entire test program in Appendix B), were used to generate steady-state velocity vector maps for horizontal and vertical planes above the deck of the ship. Horizontal plane information has been developed for:

- Minimum height above the landing deck
- Hangar roof top height
- Stack uptake height
- Radar antenna height in the mast superstructure

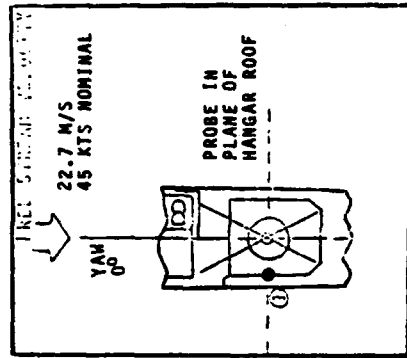
Additional maps have been plotted which depict flow in the six vertical planes (corresponding to the lateral probe locations) running behind and parallel to the ship; starting at the landing platform centerline, and working rearward to one ship length aft of the bullseye.

V_x and V_y data were summed vectorially (for map presentation) to produce the resultant horizontal velocity at each probe location in the desired plane. The same was true of V_x and V_z data, which were summed for the vertical flow presentations. All information plotted in these vectorial depictions of the airwake was developed from the 0.8 second "standard length" runs made during the test. Results of analyzing data from the longer runs are discussed later.

8WVT 242/243 SHIP WAKE TURBULENCE TEST

| WAVE VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 9.10.2 | 0.0 | 1 | 0.00 | 0.60 | 6.22 | 0.21932E 01 | 0.90000E 01 | 0.36440E 00 | 0.17144E 01 | 0.14972E 01 | 0.16998E 01 |
| | | 2 | 0.00 | 0.60 | 6.22 | 0.23492E 00 | 0.71670E 01 | 0.02720E 00 | 0.12476E 01 | 0.13590E 01 | 0.10710E 01 |
| | | 3 | 0.00 | 0.60 | 6.22 | 0.43775E 01 | 0.12805E 01 | 0.74765E 00 | 0.15176E 00 | 0.12153E 00 | 0.11187E 00 |
| | | 4 | 0.00 | 20.32 | 6.22 | 0.08729E 01 | 0.71950E 01 | 0.58152E 00 | 0.05237E 00 | 0.07525E 00 | 0.05802E 00 |
| | | 5 | 0.00 | 40.64 | 6.22 | 0.08440E 01 | 0.71409E 01 | 0.37220E 00 | 0.02737E 00 | 0.04656E 00 | 0.03384E 00 |
| | | 7 | 0.00 | 0.60 | 2.54 | 0.27657E 01 | 0.96802E 00 | 0.10240E 00 | 0.20433E 01 | 0.15272E 01 | 0.17629E 01 |
| | | 9 | 0.00 | 20.32 | 2.54 | 0.06680E 01 | 0.29080E 00 | 0.10910E 01 | 0.02500E 00 | 0.04642E 00 | 0.04240E 00 |
| | | 10 | 0.00 | 40.64 | 2.54 | 0.01331E 01 | 0.23399E 00 | 0.23613E 00 | 0.02365E 00 | 0.04482E 00 | 0.04209E 00 |
| | Z | 1 | 0.00 | -6.60 | 6.22 | 0.00127E 01 | 0.47053E 00 | 0.28361E 01 | 0.35787E 00 | 0.10490E 01 | 0.45747E 00 |
| | | 2 | 0.00 | 0.60 | 6.22 | 0.24317E 01 | 0.10751E 01 | 0.16205E 01 | 0.18875E 01 | 0.15820E 01 | 0.13810E 01 |
| | | 3 | 0.00 | 0.60 | 6.22 | 0.25621E 01 | 0.25910E 00 | 0.06704E 00 | 0.01982E 01 | 0.01959E 01 | 0.01790E 01 |
| | | 4 | 0.00 | 20.32 | 6.22 | 0.29393E 01 | 0.22370E 00 | 0.39360E 01 | 0.01708E 01 | 0.01409E 01 | 0.01308E 01 |
| | | 5 | 0.00 | 40.64 | 6.22 | 0.05265E 01 | 0.52310E 00 | 0.07336E 01 | 0.01933E 01 | 0.01409E 01 | 0.01308E 01 |
| | | 7 | 0.00 | 0.60 | 2.54 | 0.02197E 01 | 0.48210E 00 | 0.24404E 01 | 0.01933E 01 | 0.01409E 01 | 0.01308E 01 |
| | | 9 | 0.00 | 20.32 | 2.54 | 0.01920E 01 | 0.09210E 00 | 0.10347E 01 | 0.01933E 01 | 0.01409E 01 | 0.01308E 01 |
| | | 10 | 0.00 | 40.64 | 2.54 | 0.00483E 01 | 0.10090E 01 | 0.35797E 01 | 0.01939E 01 | 0.01969E 01 | 0.01860E 01 |
| | 3 | 1 | 0.00 | -6.60 | 6.22 | 0.09792E 01 | 0.15152E 01 | 0.30298E 01 | 0.73505E 00 | 0.12290E 01 | 0.69940E 00 |
| | | 2 | 0.00 | 0.60 | 6.22 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 3 | 0.00 | 0.60 | 6.22 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 4 | 0.00 | 20.32 | 6.22 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 5 | 0.00 | 40.64 | 6.22 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 7 | 0.00 | 0.60 | 2.54 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 9 | 0.00 | 20.32 | 2.54 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |
| | | 10 | 0.00 | 40.64 | 2.54 | 0.07192E 01 | 0.17472E 01 | 0.27352E 01 | 0.12290E 01 | 0.12290E 01 | 0.00200E 00 |

Figure 25. CALCULATED MEAN AND 1σ STANDARD DEVIATION VELOCITY COMPONENTS



LEGEND
LH 1 PROBE 1

VELOCITY TIME HISTORY
VX VS. TIME
RUN 113 TP 1

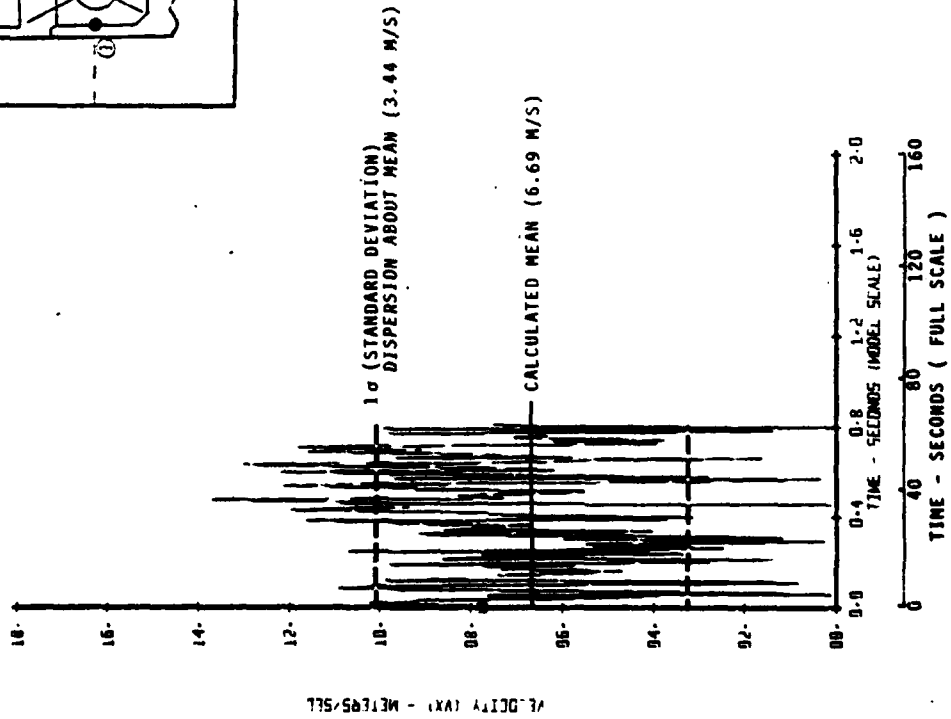


Figure 26. TYPICAL VELOCITY TIME HISTORY FOR 0.8 SECOND RUN

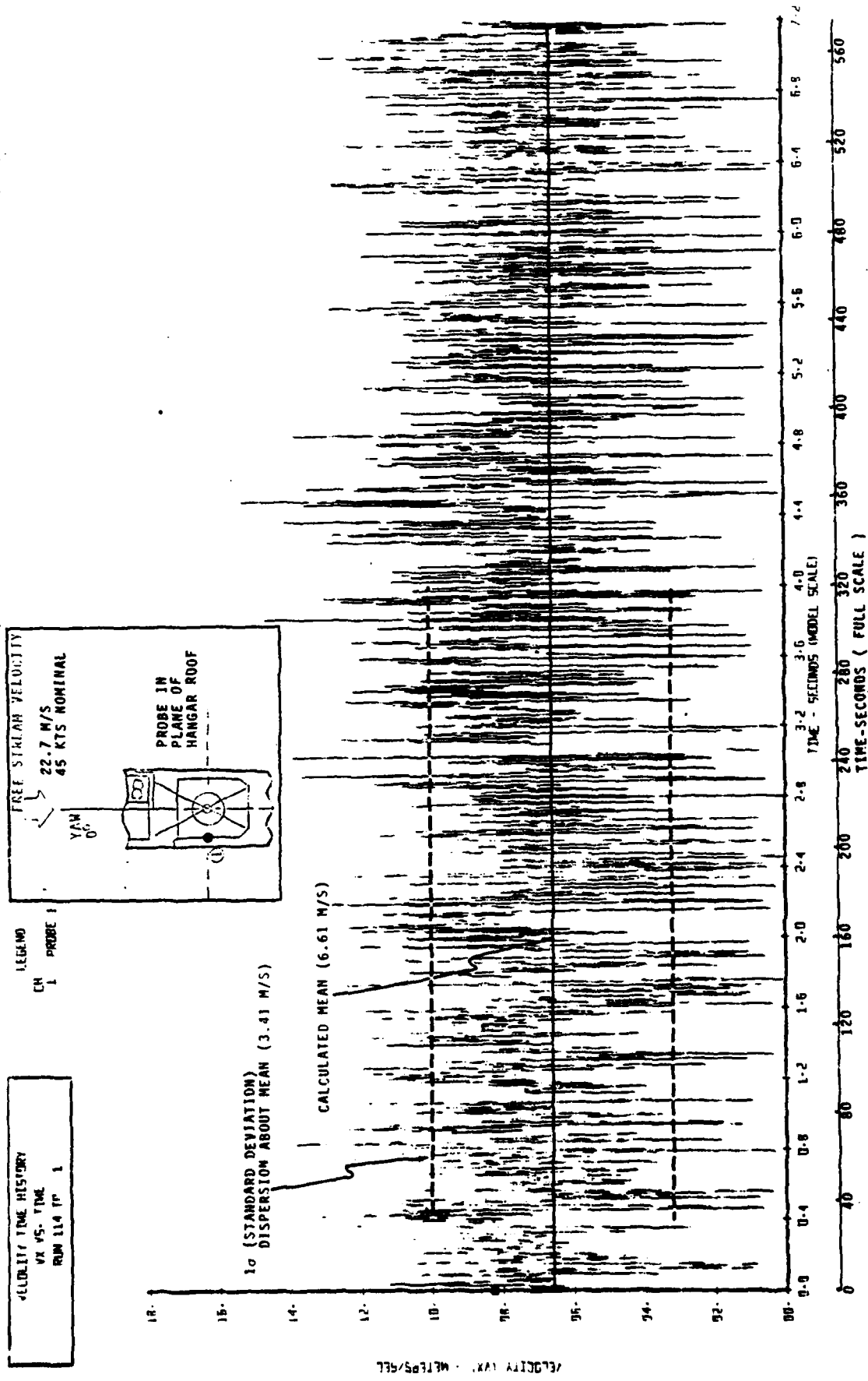


Figure 27. TYPICAL VELOCITY TIME HISTORY FOR 10.4 SECOND RUN

BASIC HORIZONTAL FLOW DEPICTION (with ship at 0° yaw)

Figures 28 through 30, and Figure 7 in the Summary depict steady flow field characteristics at various heights above the landing platform behind the ship superstructure. Test results at 20 knots (10.3 meters per second) remote wind (tunnel) speed, show somewhat more flow separation behind the hangar than was observed earlier with the FF 1052 frigate. Wind-over deck measurements just above the landing platform (at the 2.54 M level) indicate less than 1/3 remote velocity, and this "q" hole persists almost to the fantail. Similar characteristics are seen at hangar roof height, and not until the stack level is reached (Figure 29) does the flow begin to recover dynamic pressure.

It is interesting to note some aerodynamic effects resulting from the large aft stack structure on the right hand side of the hangar roof (as shown in the first three rows of probes in Figure 29). Reduced "q" is apparent along and behind the right hand corner of the hangar roof, until well aft of the fantail. Soap-bubble photos indicated that the rounded corner stack shape produced a very choppy Von-Karman vortex street directly behind this structure, and the slight observed reduction in dynamic pressure is apparently related to the downwind passage of the vortex cores.

Another significant observation of the 0° yaw flow field is more subtle than those just discussed; but important as will be seen later in the "tailwind" data. This is the very slight counterclockwise skewing of the outboard flow vectors throughout most of the flow field, as height is increased above the deck. Comparisons of Figures 28, 7, 29, and 30 show that the flow on either side of the ship is organized essentially parallel to a line drawn through the stack centerlines, which are on opposite sides of the hull.

When this slight amount of lateral skewing was first observed, a misalignment of flow in the tunnel test section was suspected. Run 46, made with the model removed from the tunnel, disproved this hypothesis. It would seem reasonable to attribute this cocked flow alignment with the hull at 0° yaw, therefore, to the stack asymmetry. In fact, the stacks probably act as flow directors warping the field at some distance from the hull.

EFFECT OF YAW ON FLOW (at low yaw angles)

Figures 31, 32, 34 and 35 compare 20 knot right and left yaw runs for various heights, with the ship oriented 30° to the remote flow. By placing the transparent overlay of the ship stored in the back of the report on the map (so that it is aligned with the hull sketch on the plot), some idea can be gained as to which piece of superstructure produces the observed changes in measured flow magnitude and direction. Dynamic pressure reduction behind the DD 963 hull and hangar is again somewhat greater than observed for the FF 1052. A comparison of Figure 32 with Figure 33 (which was taken from the FF 1052 report), shows this effect to be particularly noticeable at hangar roof height, which both figures represent.

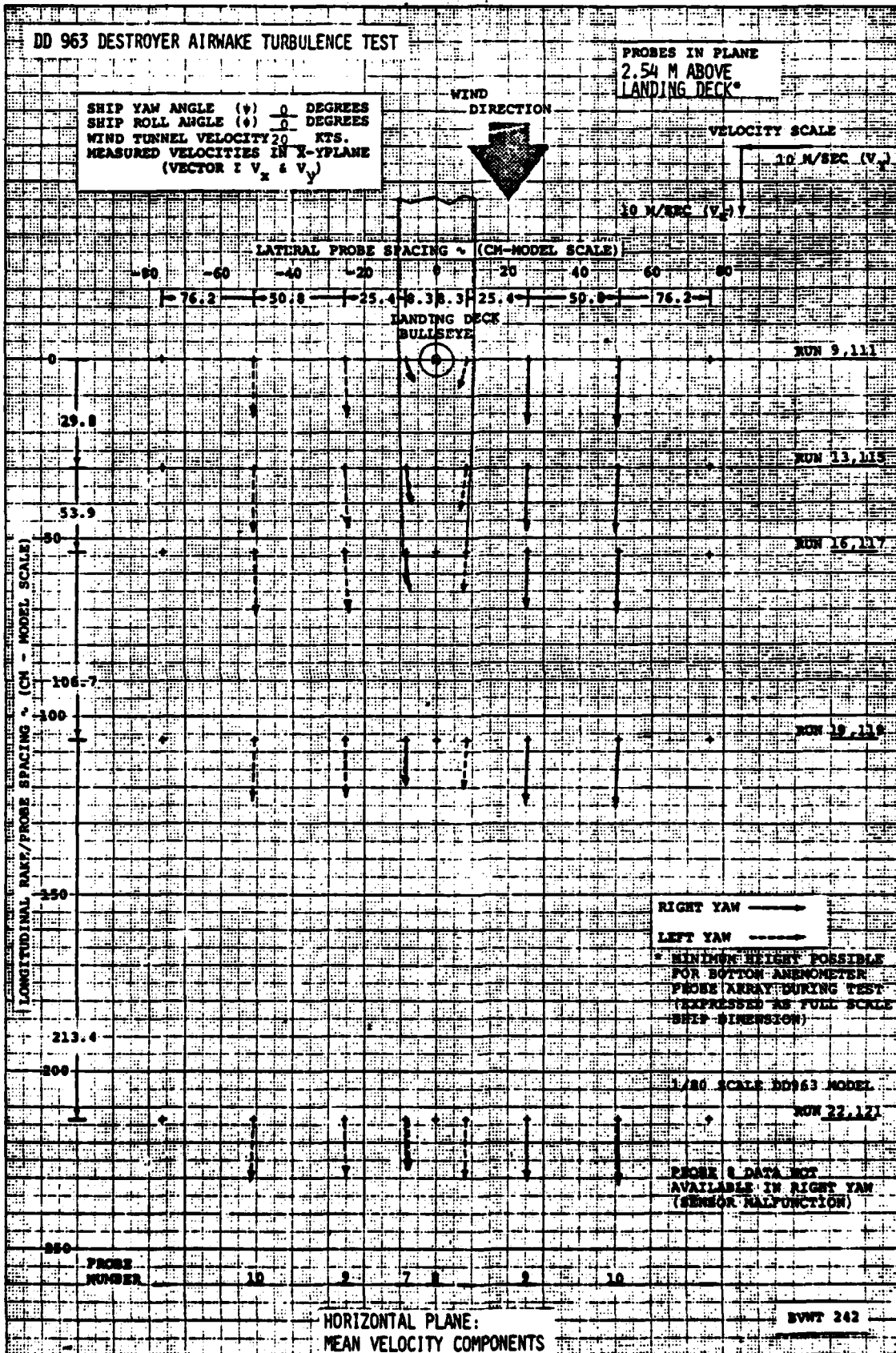


Figure 28.

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

SHIP YAW ANGLE (ψ) 0 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR $\pm v_x$ & v_y)

WIND DIRECTION



PROBES IN PLANE OF STACK UPTAKES*

VELOCITY SCALE

10 M/SEC (1%)

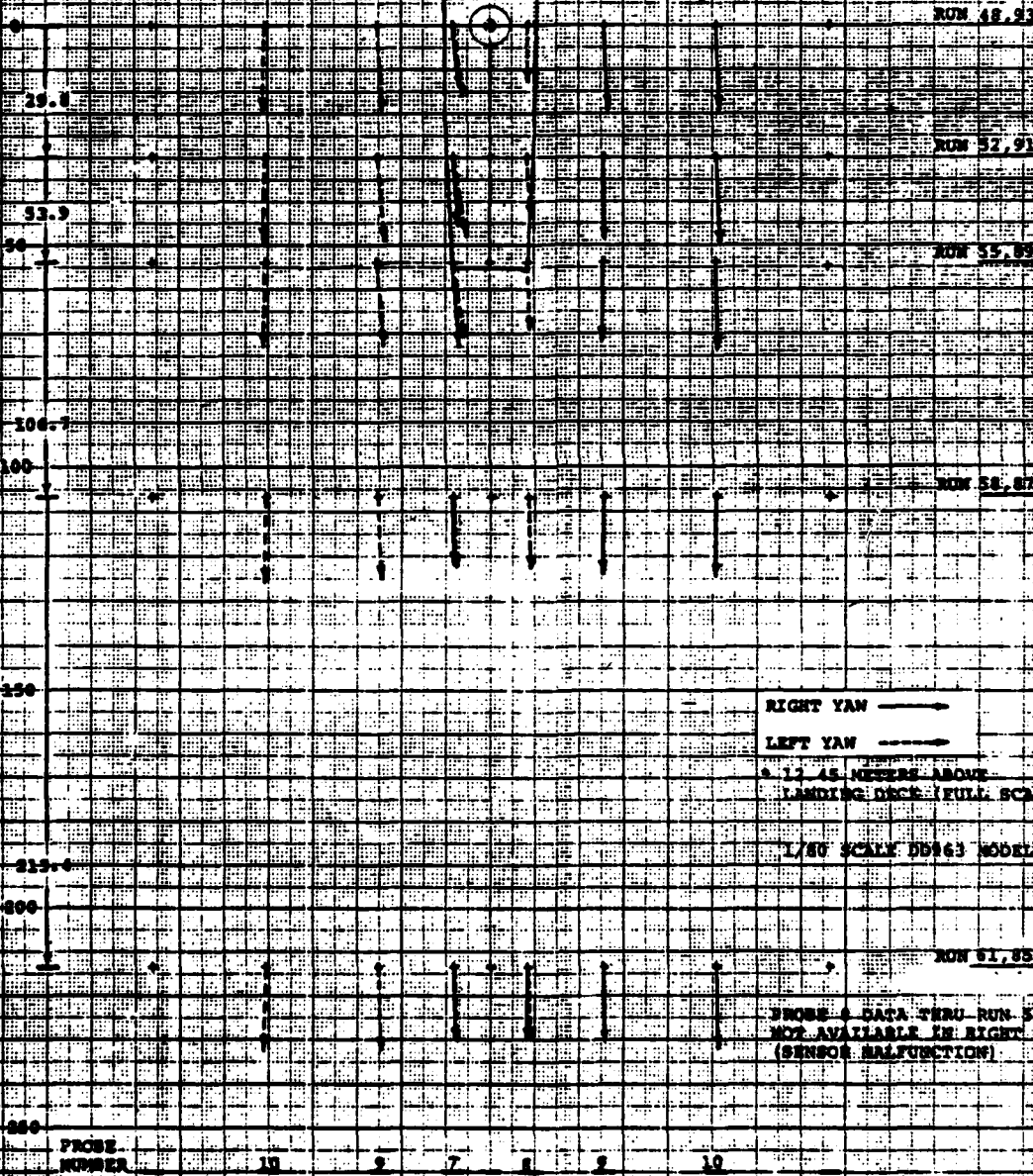
15 M/SEC (1.5%)

LATERAL PROBE SPACING ~ (CM - MODEL SCALE)

-60 -40 -20 0 20 40 60 80
 -76.2 -50.8 -25.4 0 25.4 50.8 76.2

LANDING DECK BULLSEYE

LONGITUDINAL BAKE/PROBE SPACING ~ (CM - MODEL SCALE)



RIGHT YAW \longrightarrow

LEFT YAW \longleftarrow

0.1245 METERS ABOVE LANDING DECK (FULL SCALE)

1/80 SCALE DD963 MODEL

PROBE 6 DATA ZERO RUN 58 NOT AVAILABLE IN RIGHT YAW (SENSOR MALFUNCTION)

PROBE NUMBER 10 9 7 6 5 10

HORIZONTAL PLANE: MEAN VELOCITY COMPONENTS

BVWT 242

Figure 29.

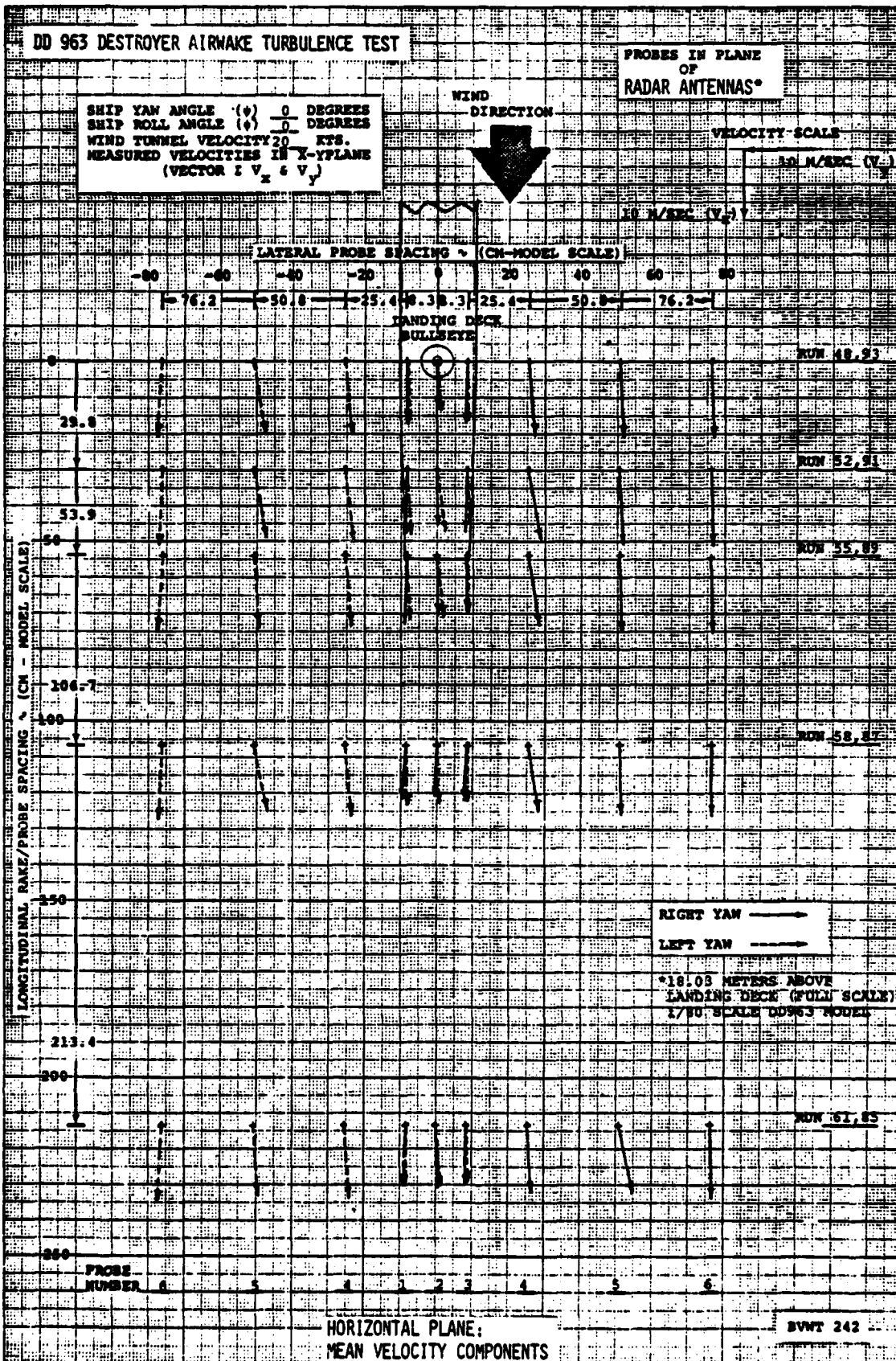


Figure 30.
70

DD 963 DESTROYER AIRRAKE TURBULENCE TEST

SHIP YAW ANGLE (ψ) ± 30 DEGREES
 SHIP ROLL ANGLE (ϕ) ± 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR $\Sigma V_x \& V_y$)

PROBES IN PLANE
 2.54 M ABOVE
 LANDING DECK *

WIND
 DIRECTION

VELOCITY SCALE

10 M/SEC (V₁)

10 M/SEC (V₂)

LATERAL PROBE SPACING (CM - MODEL SCALE)

-80 -60 -40 -20 0 20 40 60 80
 -76.2 -50.8 -25.4 0 25.4 50.8 76.2

LANDING DECK
 SURFACE

ROW 9, 111

ROW 13, 115

ROW 16, 117

ROW 19, 119

LONGITUDINAL RAKE/PROBE SPACING (CM - MODEL SCALE)

25.4
 53.9
 107.8
 161.7
 215.6

RIGHT YAW \longrightarrow
 LEFT YAW \longleftarrow

* DIMENSION BELIEF POSSIBLE
 FOR BOTTOM ANEMOMETER
 PROBE ARRAY DURING TEST
 (EXPRESSED AS FULL SCALE
 SIZE DIMENSION)

1/30 SCALE DD963 MODEL

ROW 22, 121

PROBE 8 DATA NOT
 AVAILABLE IN RIGHT YAW
 (SENSOR MALFUNCTION)

PROBE NUMBER 10 9 7 8 9 10

HORIZONTAL PLANE:
 MEAN VELOCITY COMPONENTS

BWNT 242

Figure 31.
 71

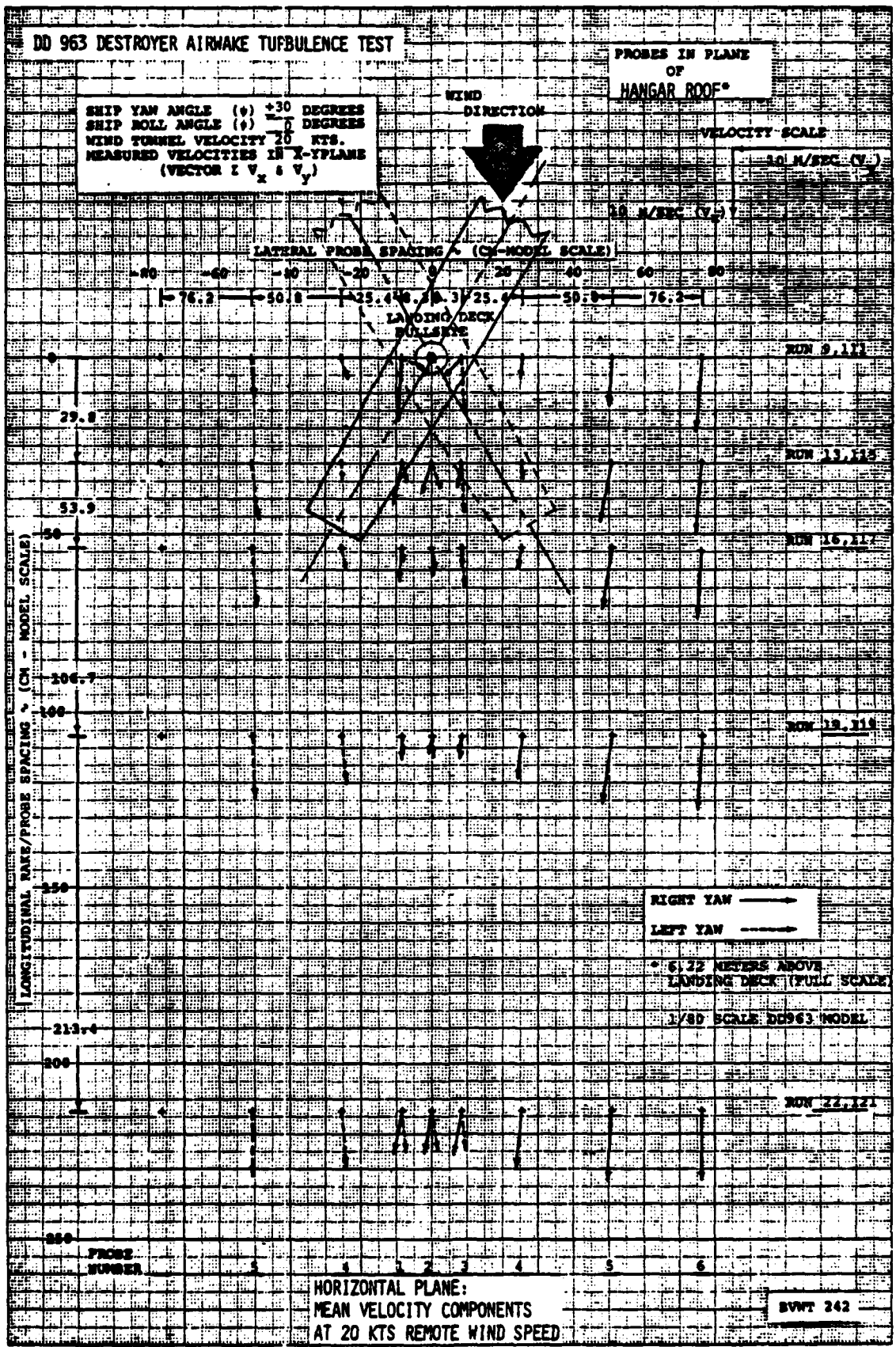
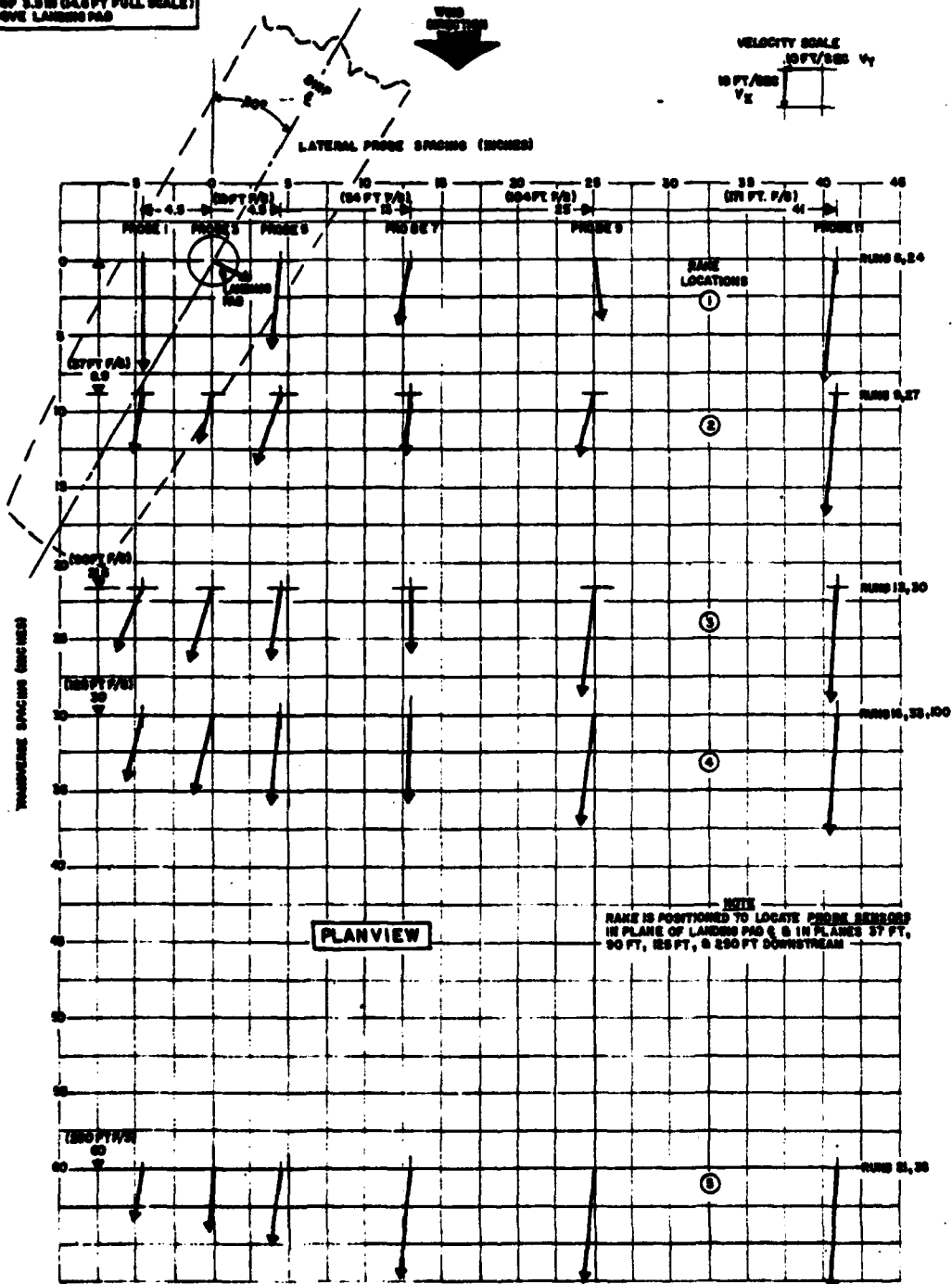


Figure 32.
72

DE 1052 SHIP WAKE TURBULENCE TEST - BVWT 103
HORIZONTAL PLANE STEADY VELOCITY DISTRIBUTION

SHIP YAW ANGLE (ψ) 30 DEG, ROLL 0 DEG
WIND TUNNEL VELOCITY 20 KT NOMINAL
MEASURED VELOCITIES IN X-Y PLANE
(VECTOR \vec{V}_x, \vec{V}_y)

PROBES IN PLANE OF HANGAR
ROOF 3.510 (64 FT FULL SCALE)
ABOVE LANDING PAD



Horizontal Plane Steady Velocity Distribution at 30 Degrees Ship Yaw Angle and 20 Knots Wind Tunnel Velocity at Hangar Top Height

Figure 33. COMPARATIVE PLOT FROM FF1052 REPORT (Reference 1)

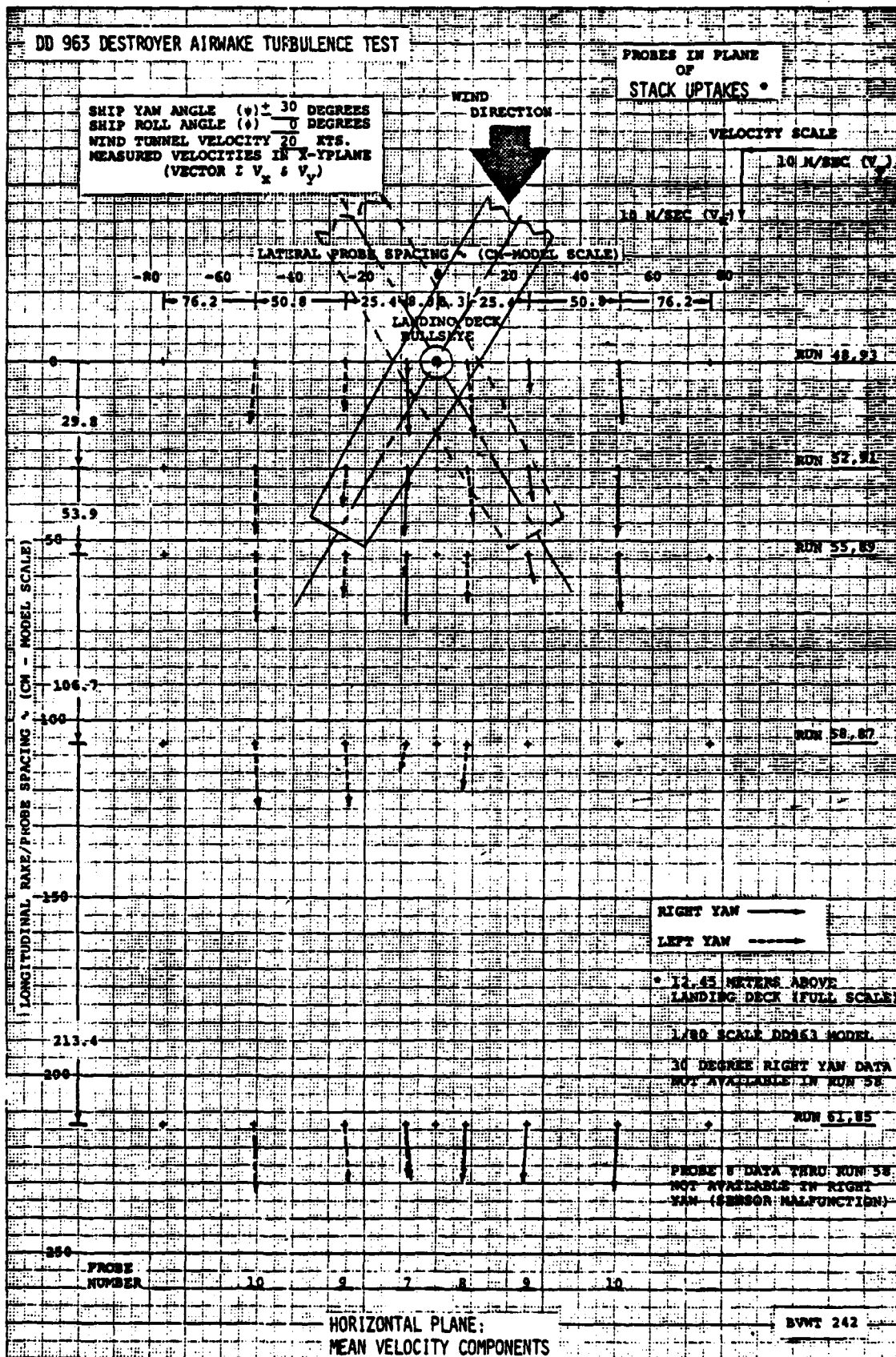


Figure 34.
74

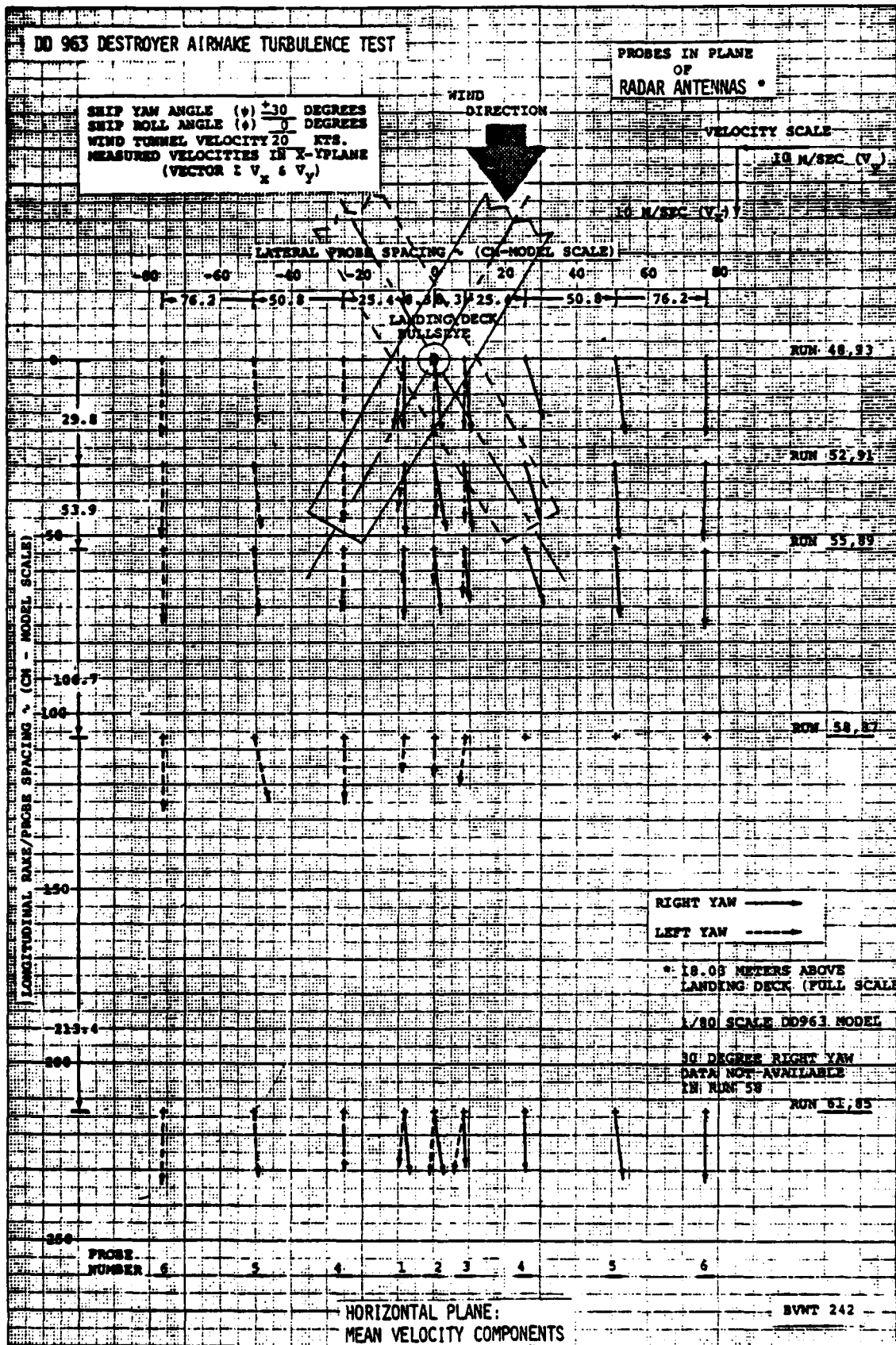


Figure 35.
75

Also seen in Figures 31 and 32 is a skewing of the low "q" separated flow across the landing platform, just as was observed in the Figure 22 sketch, and in the soap-bubble tests.

Both right and left yaw data are plotted on the same map to illustrate differences in flow created by the stack asymmetry. Except for the area directly behind the aft right hand stack, right and left yaw flow fields look about the same. To assist in picturing how the flow field changes with height, Figure 10 in the Summary compares all four levels for a 30° left yaw run. Most of the flow skewing observed on the plot is due to a corkscrewing of the shed vortex sheet above and behind the hull, which is clearly seen in the smoke flow visualization work illustrated in Figures 20 and 21.

Summary Figure 12 gives an indication of flow roughness with model yawed 30° right; as indicated by the l_0 variation ellipse plotted around the mean velocity vectors.

EFFECT OF HIGH YAW ANGLES

Figures 36 and 37 depict hangar roof level flow at +50° and +90°, respectively. Very deep flow separation at these yaw angles was observed during the flow vis study with smoke, and the measured velocity data shows the same thing. Hangar level 20 knot maps indicate many areas where flow has virtually stopped, or has reversed direction and is heading forward. Additional 50° velocity map data presented in Appendix C show that at radar antenna height, flow dynamic pressure has just about recovered to free stream value. Implications of this change in velocity with height above the landing platform are quite important, when one considers that any aircraft descending through this gradient will, in effect, experience a "suck-forward"; which can have a major impact on control requirements and aircraft aerodynamic response characteristics necessary to overcome the flow field changes.

EFFECT OF HULL ROLL ANGLE

Figures 38 and 39 compare data taken for 15° right and left roll angle runs, made at +30° yaw in the lowest plane (2.54M) for which velocities were measured. When compared with data taken at the same height and 0° roll, plotted in Figure 31, only small differences in the overall flow fields are evident. These small changes might be ignored for airwake math model purposes, but RMS/Standard Deviation variation about the mean velocity values should also be checked.

If it becomes necessary to model roll effects on flow (in any math model), it should be noted that the landing platform bullseye moves laterally about 1.3 inches (from its nominal 0° roll location), as the hull is rolled 15° in either direction. The principal effects of this bullseye movement can easily be compensated for by sliding the entire flow field left or right by the same 1.3 inch distance.

DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE OF HANGAR ROOF *

SHIP YAW ANGLE (ψ) + 50 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR V_x & V_y)

WIND DIRECTION

VELOCITY SCALE

10 M/SEC (V_x)

10 M/SEC (V_x)

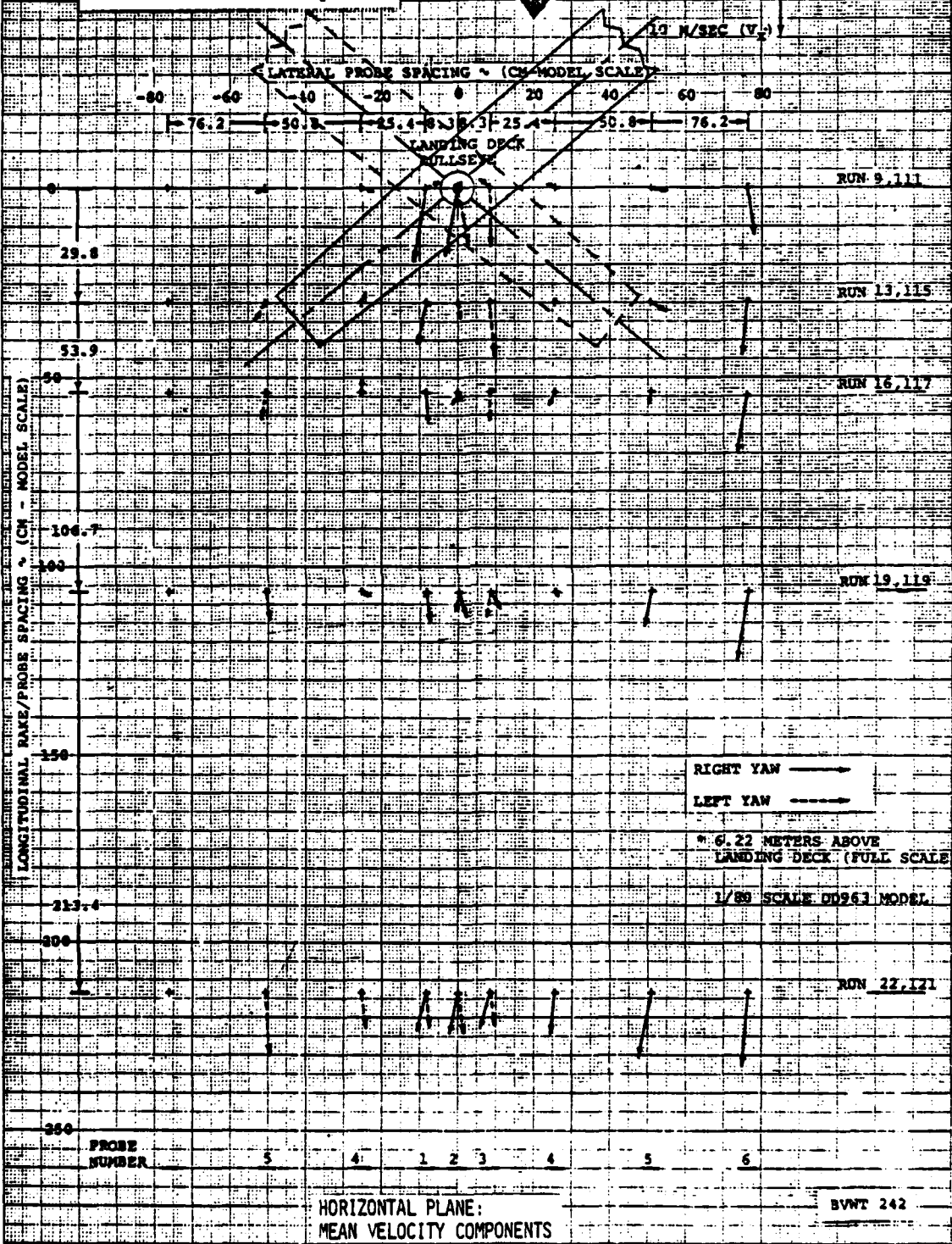


Figure 36.
77

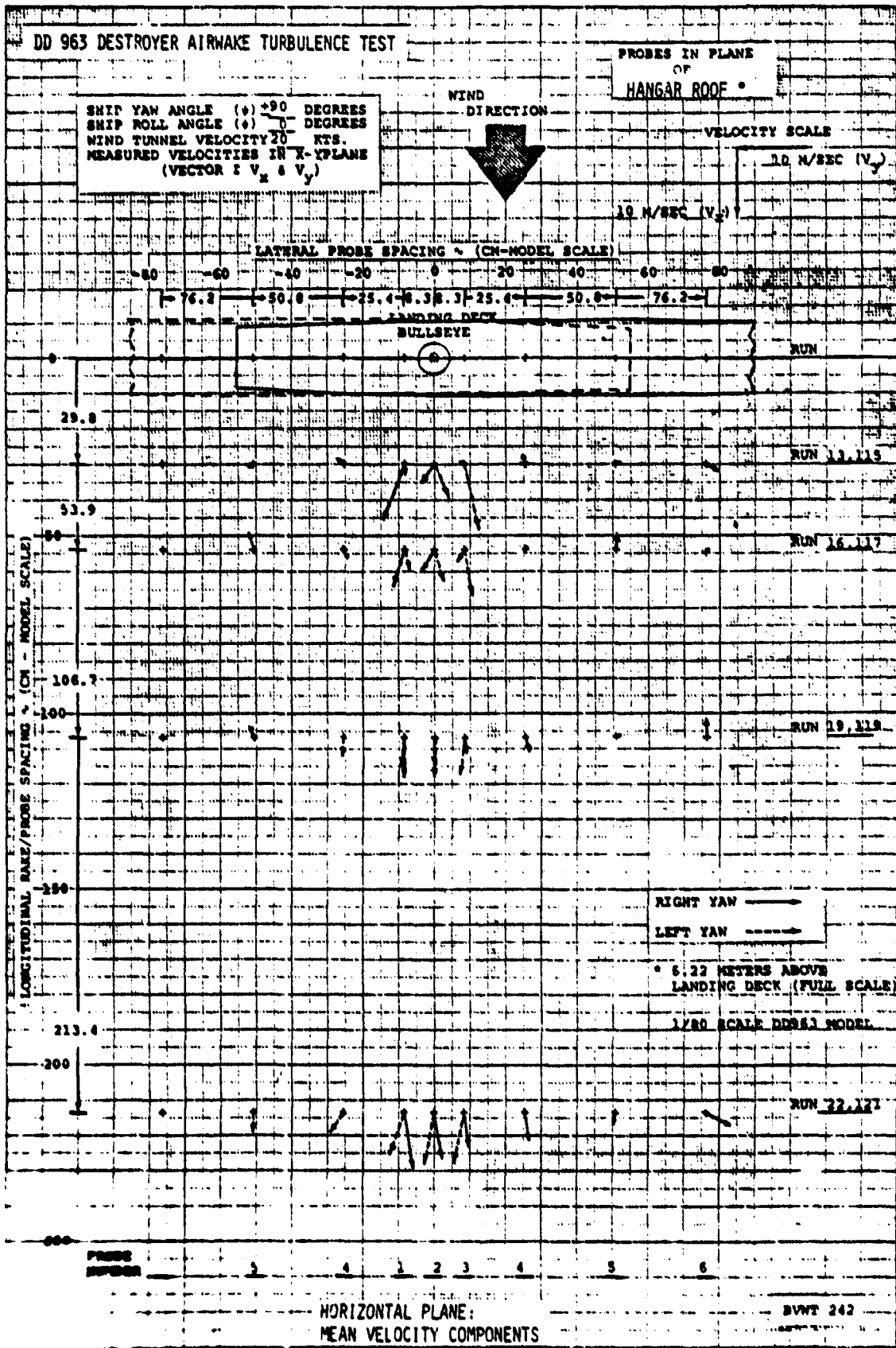


Figure 37.

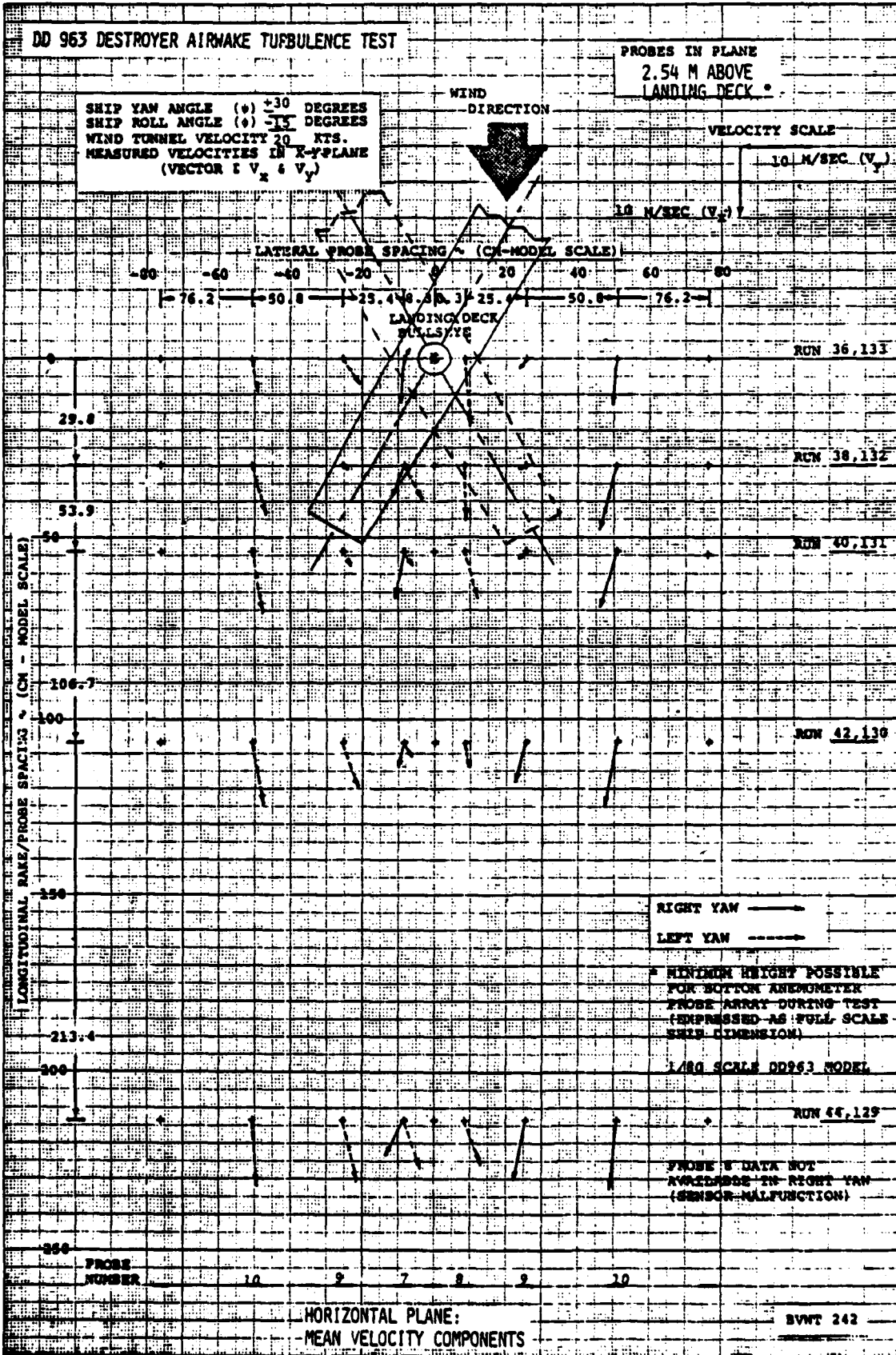


Figure 38.
79

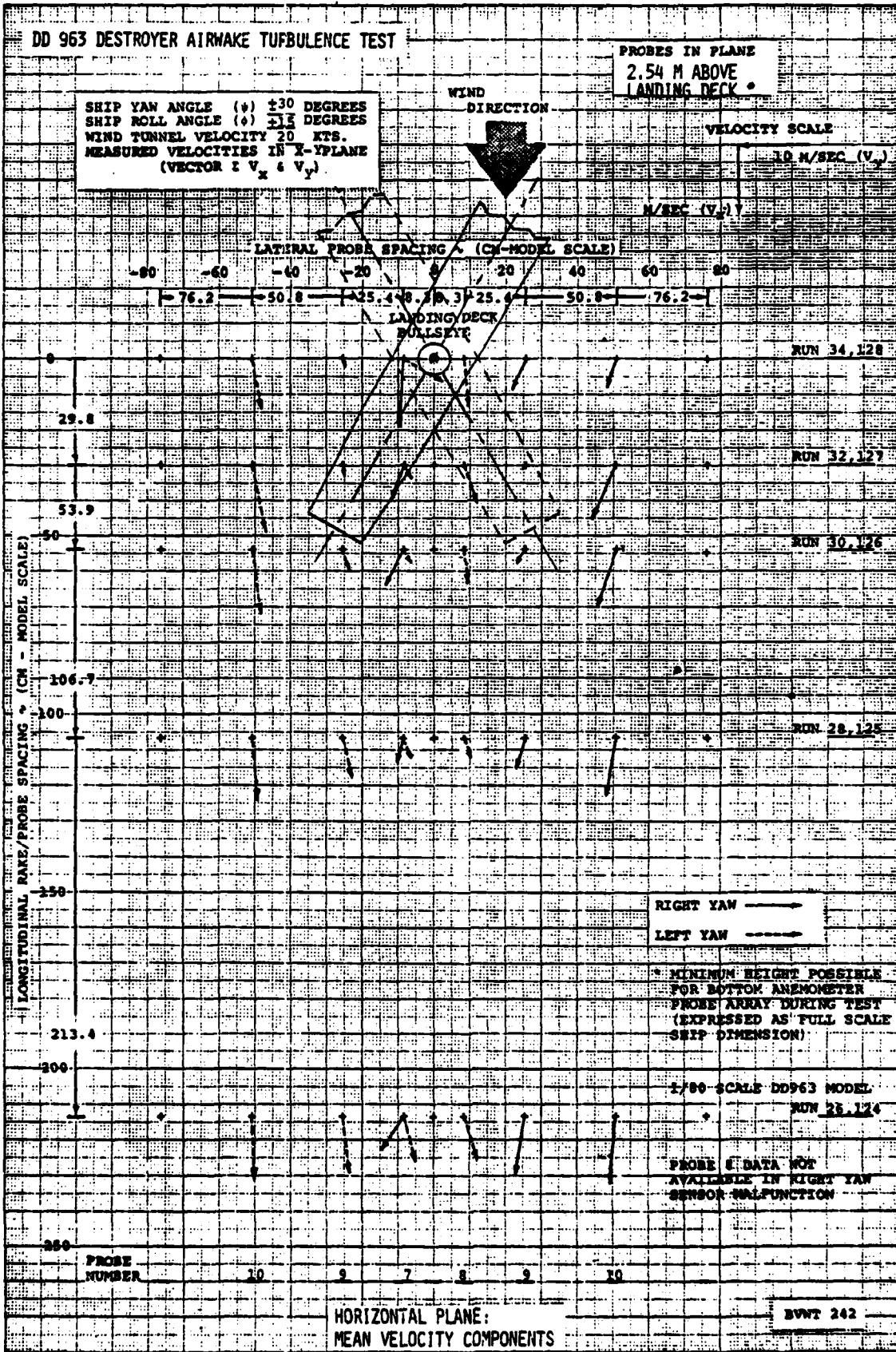


Figure 39.
80

EFFECT OF VARYING REMOTE WIND SPEED

Figures 40 and 41 compare 50° yaw (0° roll) runs made at 20 and 45 knots, respectively. Despite large amounts of separation which might be expected to cause a change in the steady flow component at times, the airwake does remain essentially constant from run to run, and it is apparent from the plots that the steady flow field can be scaled directly with the remote wind velocity ratio. Data taken at other yaw angles show similar results, when comparing magnitude and direction for various locations in the airwake. By multiplying data taken at any velocity by the ratio of its speed to any desired one, a new map can be generated. This is a significant fact in math modeling the wake for simulation.

It should be noted that the dynamic frequency content in the results does, however, change with variation in remote wind speed. What happens is a shifting of peak flow amplitude with frequency (as will be shown later); that moves the frequency spectra higher with increasing wind speed. This tendency to increase frequency is in accordance with Strouhal scaling laws discussed earlier.

FLOW IN VERTICAL PLANES

Figures 42 through 44, and Figure 11 in the Summary show how the 20 knot X-Z flow fields vary with yaw for each longitudinal row of probes, extending rearward from the landing platform to a point one ship length behind this deck. 0°, 30°, and 50° yaw sweeps are shown in Figures 42, 11, and 43 respectively, and Figure 44 illustrates conditions existing at 30° right yaw with the hull rolled 15° to the right.

A comparison of Figures 42 and 43 graphically illustrates how the flow over the landing deck changes with yaw; and how the large separated areas discussed before manifest themselves as small circulating vortices shown behind the outboard right hand set of probes in the 50° yaw plot.

Again, as illustrated in the horizontal flow maps, the effects of ship roll angle appear to be minimal when comparing Figures 44 and 11. Small changes are noted in the area directly over the deck, but elsewhere the airwake appears to be unaffected by rolling the ship.

In these plots, a few data points are shown with dashed lines. This information was taken from the NAEC "Close-In" test results, for probe locations where anemometers had malfunctioned during the NADC test. At other places in the plotted map data, one or two "high-speed" results were missing (as indicated in Table 3 in Appendix B), and selected low speed (on-line) information was used to fill out the plotted flow field maps shown in the report.

Since test reports from the NADC and NAEC BVWT 242/243 efforts are expected to be companion documents (and will be issued at virtually the same time), cross referencing of data between the two reports can be used to check repeatability for duplicate test conditions, and to fill in the few places where data is missing from one test and available in the other.

TAILWIND EVALUATION

Maps of the flow field with the ship fantail into the wind are presented in Figures 45 through 48. These figures describe the effects of

DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE
2.54 M ABOVE
LANDING DECK *

SHIP YAW ANGLE (+) ± 50 DEGREES
SHIP ROLL ANGLE (+) ± 0 DEGREES
WIND TUNNEL VELOCITY 20 KTS.
MEASURED VELOCITIES IN X-Y PLANE
(VECTOR $\pm V_x$ & V_y)

WIND
DIRECTION

VELOCITY SCALE

10 M/SEC (V₁)

10 M/SEC (V₁)

LATERAL PROBE SPACING ~ (CM MODEL SCALE)

-80 -60 -40 -20 0 20 40 60 80
-76.2 -50.8 -25.4 -0 0 25.4 50.8 76.2

LANDING DECK
ROLLSEW

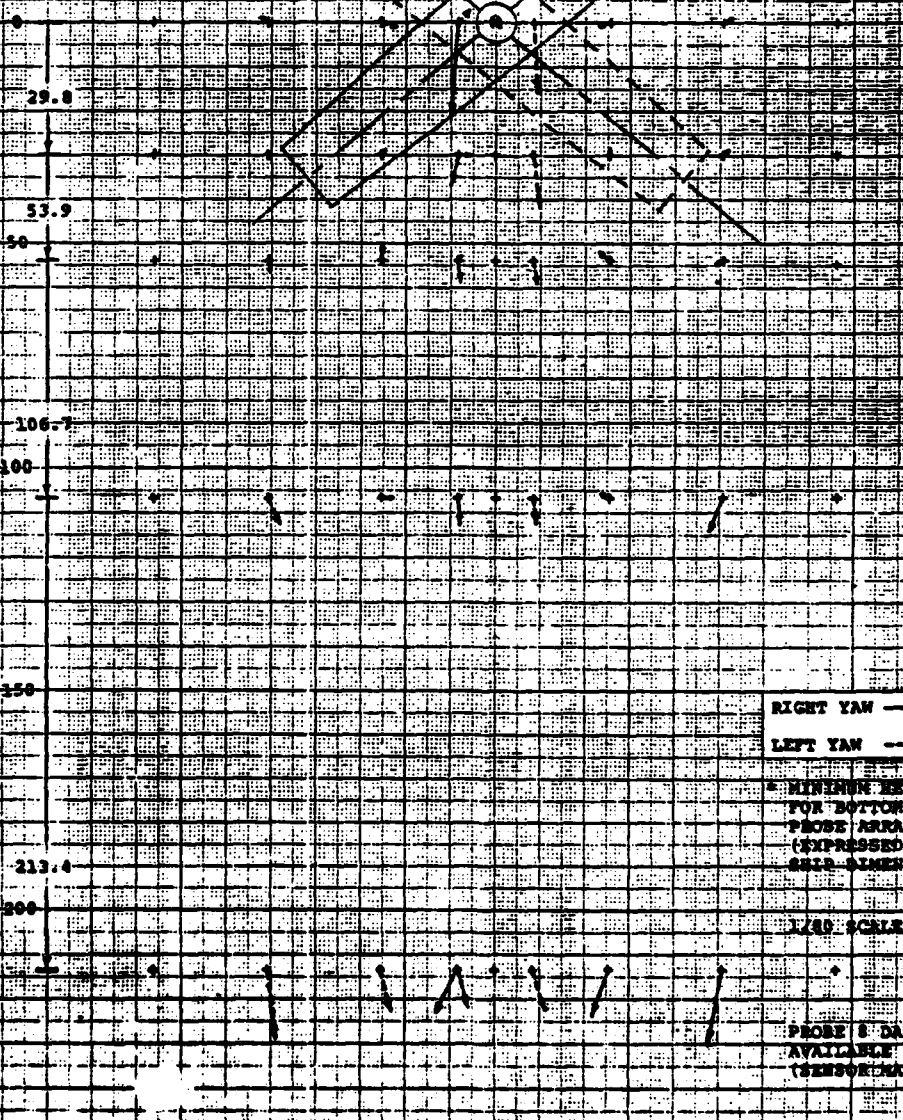
RUN 9, 111

RUN 13, 115

RUN 16, 117

RUN 19, 119

LONGITUDINAL RAKE/PROBE SPACING ~ (CM - MODEL SCALE)



RIGHT YAW ———
LEFT YAW - - - - -

* MINIMUM HEIGHT POSSIBLE
FOR BOTTOM ANEMOMETER
PROBE ARRAY DURING TEST
(EXPRESSED AS FULL SCALE
SHIP DIMENSION)

1/80 SCALE DD963 MODEL

RUN 22, 121

PROBE 8 DATA NOT
AVAILABLE IN RIGHT YAW
(SENSOR MALFUNCTION)

PROBE NUMBER 10 9 7 8 9 20

HORIZONTAL PLANE:
MEAN VELOCITY COMPONENTS

BVWT 242

Figure 40.
82

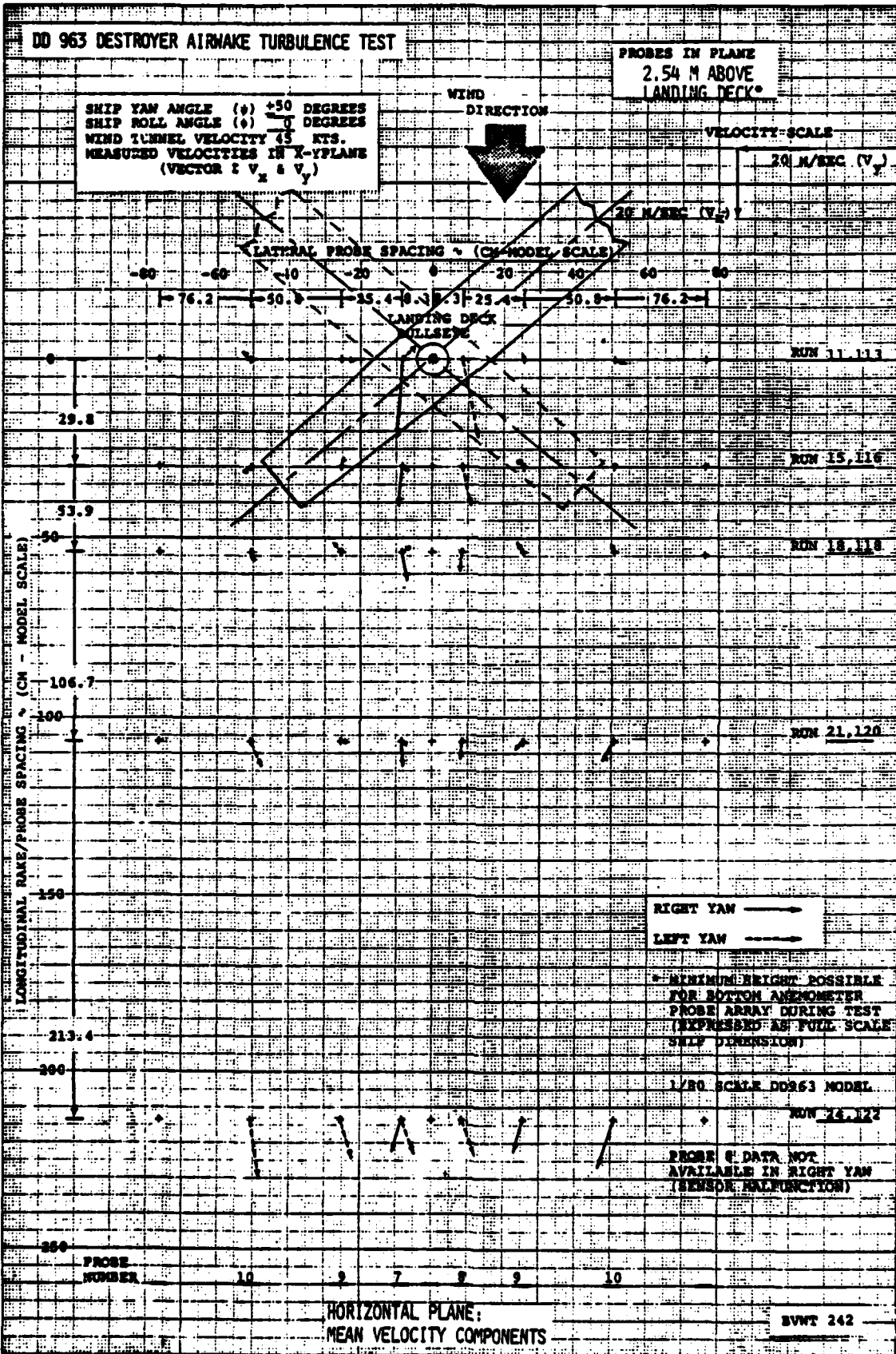


Figure 41.
83

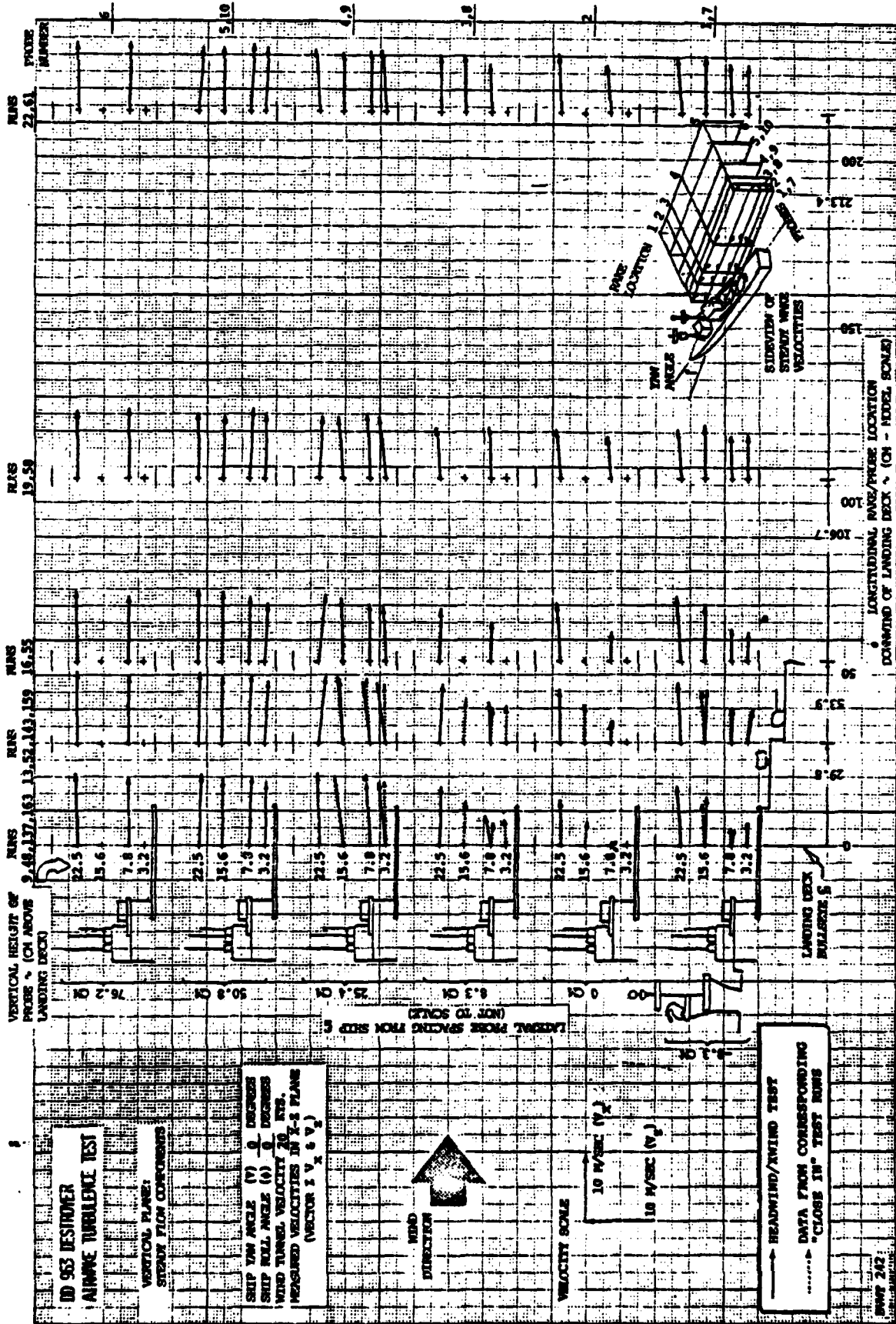


Figure 42.

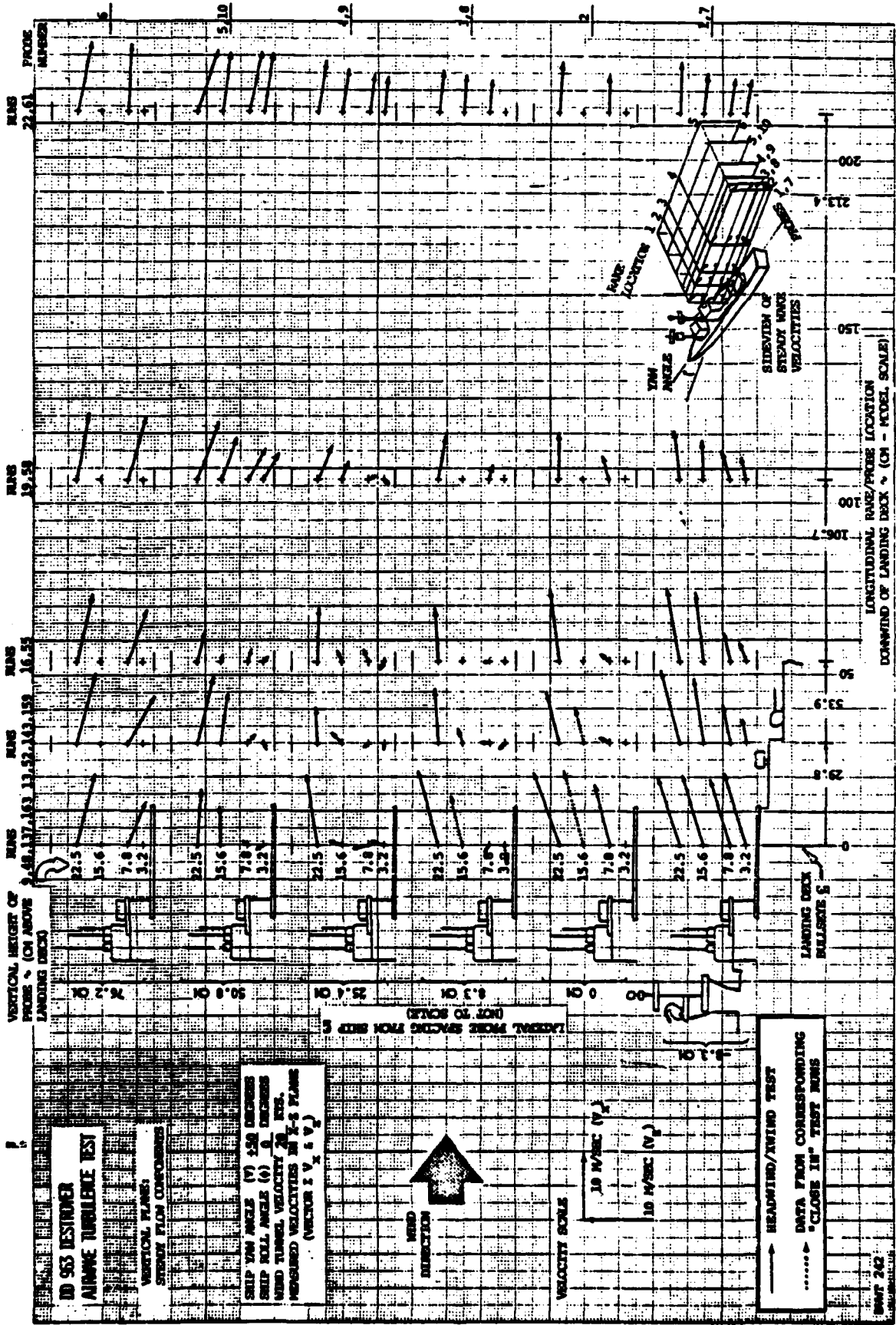


Figure 43.

DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE
2.54 M ABOVE
LANDING DECK*

SHIP YAW ANGLE (ψ) 180 DEGREES
SHIP ROLL ANGLE (ϕ) 0 DEGREES
WIND TUNNEL VELOCITY 20 KTS.
MEASURED VELOCITIES IN X-Y PLANE
(VECTOR $\Sigma V_x \text{ \& } V_y$)

WIND
DIRECTION

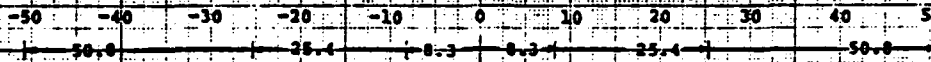


VELOCITY SCALE

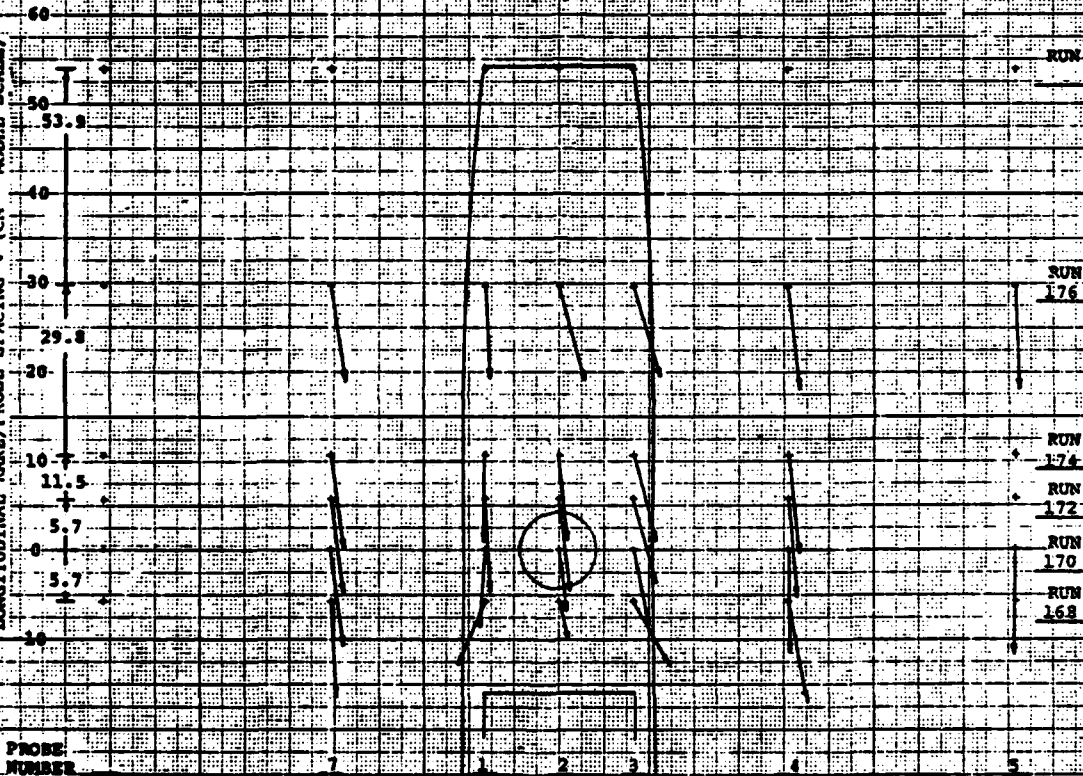
10 M/SEC (V_y)

10 M/SEC (V_x)

LATERAL PROBE SPACING ~ (CM-MODEL SCALE)



LONGITUDINAL RAKE/PROBE SPACING ~ (CM - MODEL SCALE)



PROBE
NUMBER

7 1 2 3 4 5

* MINIMUM HEIGHT POSSIBLE
FOR BOTTOM ANEMOMETER
PROBE ARRAY DURING TEST
(EXPRESSED AS FULL SCALE
SHIP DIMENSION)
1/80 SCALE DD 963 MODEL

PROBE 6 DATA NOT
AVAILABLE (DATA SYSTEM
MALFUNCTION)

HORIZONTAL PLANE:
MEAN VELOCITY COMPONENTS FOR
TAILWIND TEST

SWWT 242/243

Figure 45.

DD 963 DESTROYER AIRNAKE TURBULENCE TEST

PROBES IN PLANE OF HANGAR ROOF*

SHIP YAW ANGLE (ψ) 180 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE (VECTOR $\pm V_x$ & V_y)

WIND DIRECTION

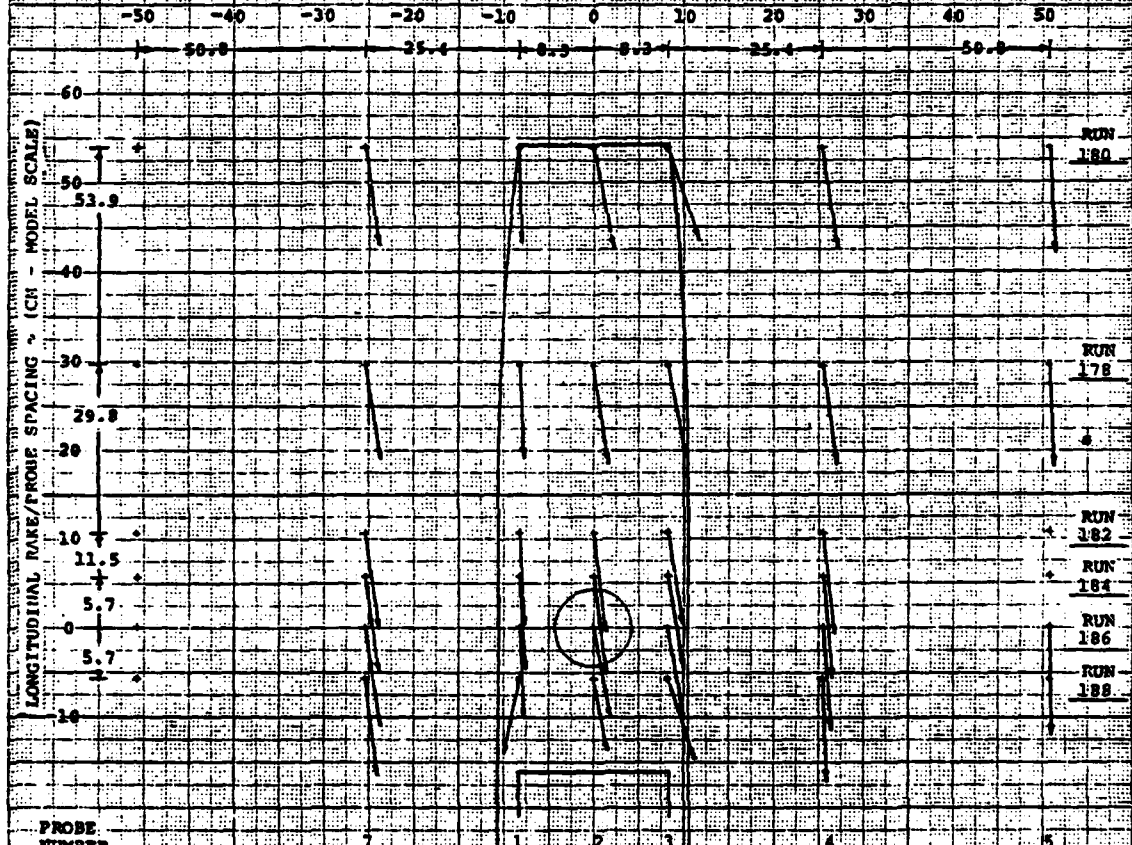


VELOCITY SCALE

10 M/SEC (V_y)

10 M/SEC (V_x)

LATERAL PROBE SPACING ~ (CM-MODEL SCALE)



LONGITUDINAL WAKE/PROBE SPACING ~ (CM - MODEL SCALE)

PROBE NUMBER

*6.22 METERS ABOVE LANDING DECK (FULL SCALE)

1/28 SCALE DD 963 MODEL

PROBE 5 DATA NOT AVAILABLE (DATA SYSTEM MALFUNCTION)

HORIZONTAL PLANE:
 MEAN VELOCITY COMPONENTS FOR
 TAILWIND TEST

SVWT 242/243

Figure 46.
 88

DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE OF STACK UPTAKES*

SHIP YAW ANGLE (ψ) 180 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR $\pm v_x$ & v_y)

WIND DIRECTION



VELOCITY SCALE

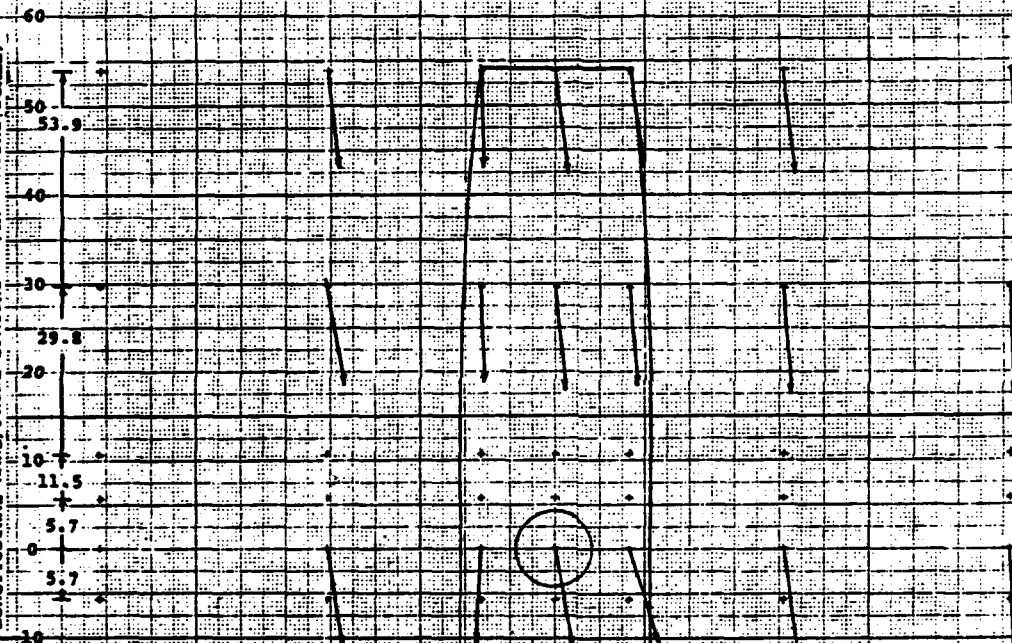
10 M/SEC (v_y)

10 M/SEC (v_x)

LATERAL PROBE SPACING ~ (CM-MODEL SCALE)

-50 -40 -30 -20 -10 0 10 20 30 40 50
 50.8 25.4 0.3 0.3 25.4 50.8

LONGITUDINAL RAKE/PROBE SPACING ~ (CM - MODEL SCALE)



PROBE NUMBER

1 2 3 4 5

*12.45 METERS ABOVE LANDING DECK (FULL SCALE)

1/80 SCALE DD 963 MODEL

PROBE 4 DATA NOT AVAILABLE (DATA SYSTEM MALFUNCTION)

HORIZONTAL PLANE:
 MEAN VELOCITY COMPONENTS FOR
 TAILWIND TEST

BVWT 242/243

Figure 47.

DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE OF HANGAR ROOF*

SHIP YAW ANGLE (°) 150 DEGREES
 SHIP ROLL ANGLE (°) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR V_x & V_y)

WIND DIRECTION

VELOCITY SCALE

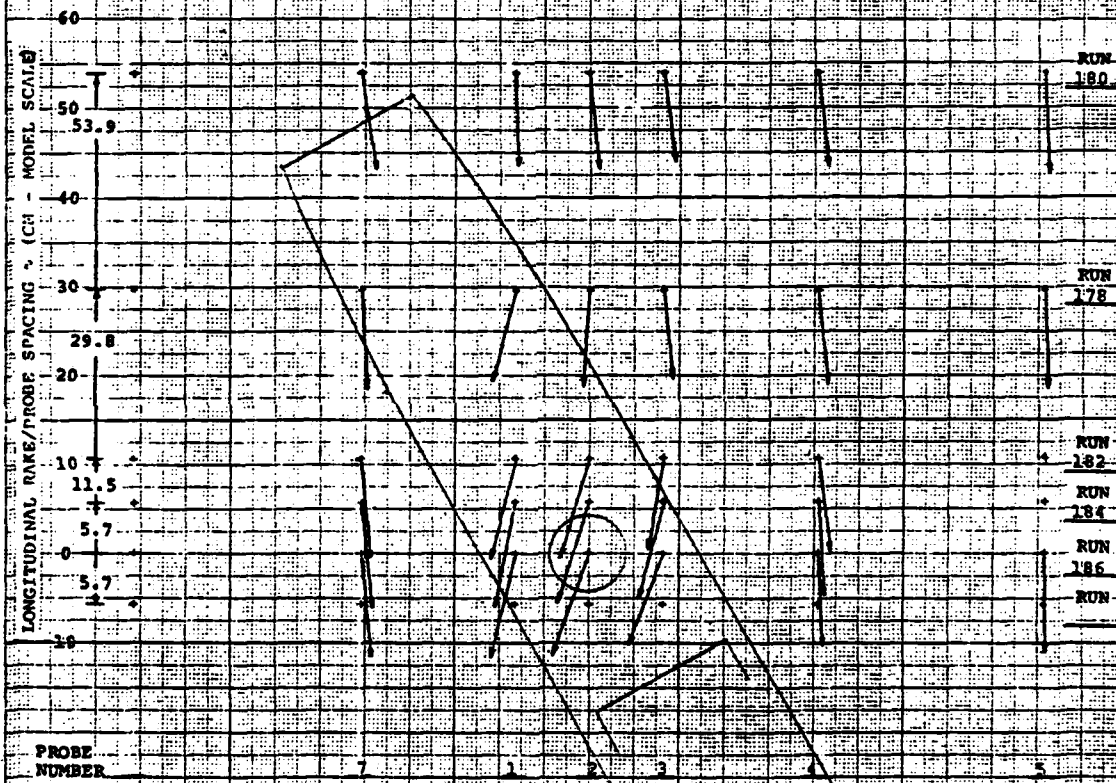
10 M/SEC (V_y)

10 M/SEC (V_x)



LATERAL PROBE SPACING ~ (CM-MODEL SCALE)

-50 -40 -30 -20 -10 0 10 20 30 40 50
 50.8 25.4 0.3 0.3 25.4 50.8



PROBE NUMBER

* 6.22 METERS ABOVE LANDING DECK (FULL SCALE)

1/80 SCALE DD 963 MODEL

PROBE 6 DATA NOT AVAILABLE (DATA SYSTEM MALFUNCTION)

HORIZONTAL PLANE:
 MEAN VELOCITY COMPONENTS FOR
 TAILWIND TEST

BVMT 242/243

Figure 48.
 90

horizontal flow in various planes above the deck, and what happens to the airwake when the ship is yawed + 30° (heading 150°) to the remote flow. As mentioned earlier, the counterclockwise flow skewing observed for the outboard probes is most likely due to effects of the stack offset asymmetry, which was seen in the headwind plots at 0° yaw (Figures 28 through 30).

In the case of the tailwind runs at 0° yaw (180° heading), exact setting of ship yaw angle may have been slightly off because of a very small amount of hysteresis in the yaw table around this 180° heading.

Possible misalignment of the hull at 180° might have affected the flow alignment slightly, but the amount that the hull was misaligned (2°-3° maximum) would not have accounted for the 15° fantail flow skewing seen in Figure 46. In its headwind orientation at 0°, hull heading was always set up at exactly this angle, and was repeatedly checked between runs (during model changes) to ensure proper alignment for the first test points of each new run series.

6.3.3 Frequency Analysis of Selected Runs

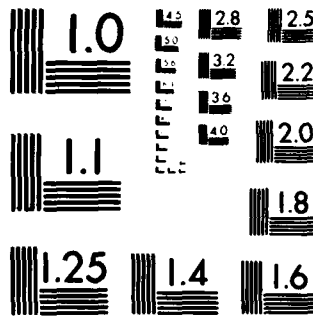
Selected data points were processed through the BWWT Fast Fourier Transform frequency analysis, to develop frequency spectra plots comparing alternating three component velocity amplitudes for frequencies varying from 0 to 82 Hz (model scale). Figures 49 through 65 present the results of these studies for several standard length 0.8 second runs, and for a single extended 10.4 second test point as well. Frequency analysis results (for the DD 963) differ somewhat from those seen in the earlier FF 1052 Frigate evaluation. These differences are attributed to the difference in shape of the vessels being evaluated, and to the variation in scale of the two models.

On the basis of observations made during the DD 963 soap-bubble flow visualization studies, the more or less wide bandwidth/constant amplitude frequency response spectra, calculated for the DD 963 flow (which is discussed next) seems to be quite reasonable. The mast "lattice-work" superstructure apparently broke up the flow adjacent to the ship into numerous "mini-vortices", which produced the results seen both visually, and in the frequency plots.

FREE STREAM FLOW

Figures 49, 50, and 51 summarize the frequency content of the longitudinal, lateral and vertical velocity components of flow, recorded by probe No. 5 located well away from the hull in free stream conditions. The test run was conducted at 20 knots tunnel speed, with the probe in question located a scale distance of 133 feet to the side of the ship. The results for all three axes show little or no activity, as expected, in the remote tunnel flow.

The very low amplitude response levels shown probably reflect noise in the data acquisition and recording systems, or in the tunnel flow itself. It should be noted, however, that the BWWT has one of the lowest

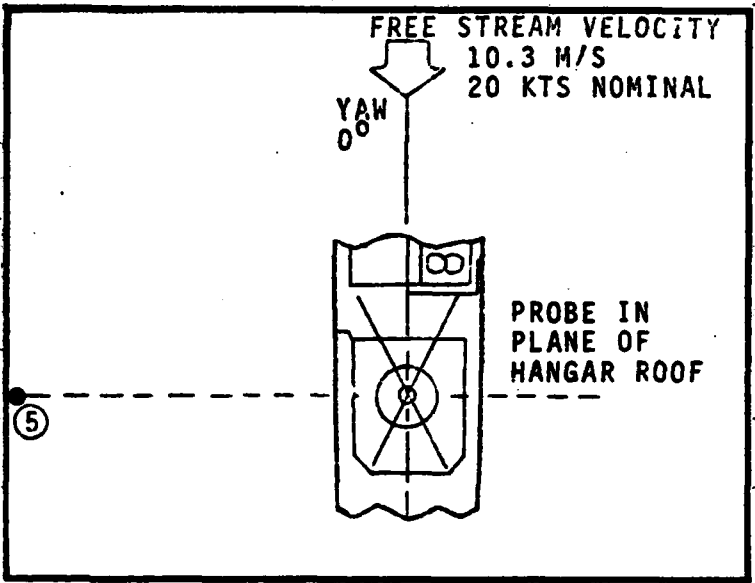
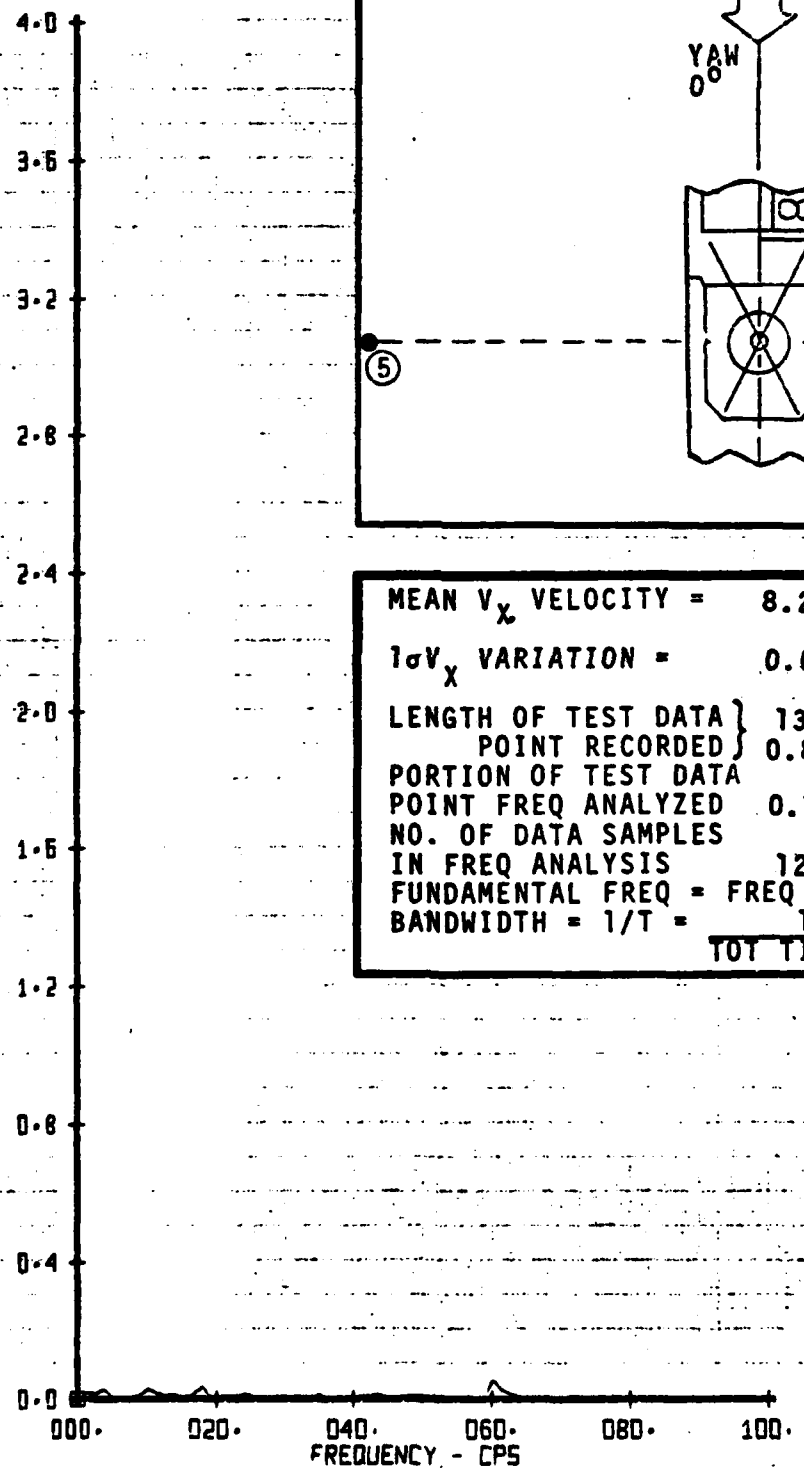


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

SHIP WAKE VELOCITY SURVEY
 128 Vx VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 5 PROBE 5

ALTERNATING Vx AMPLITUDE - METERS/SEC

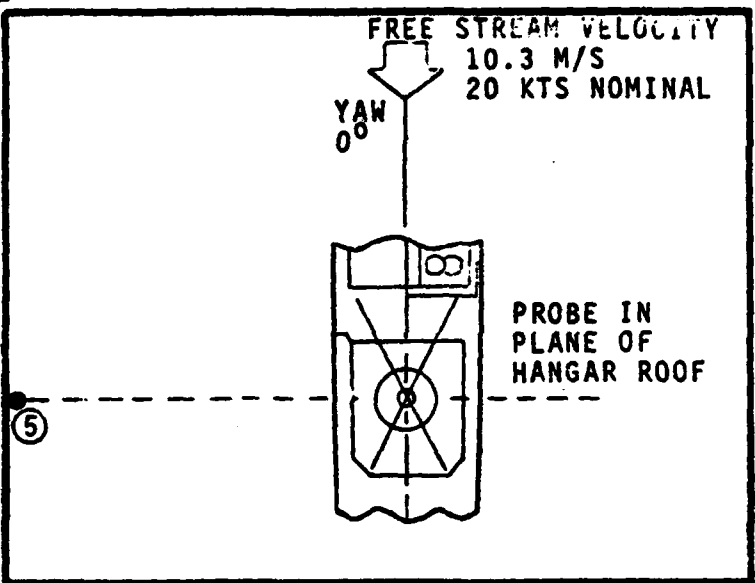
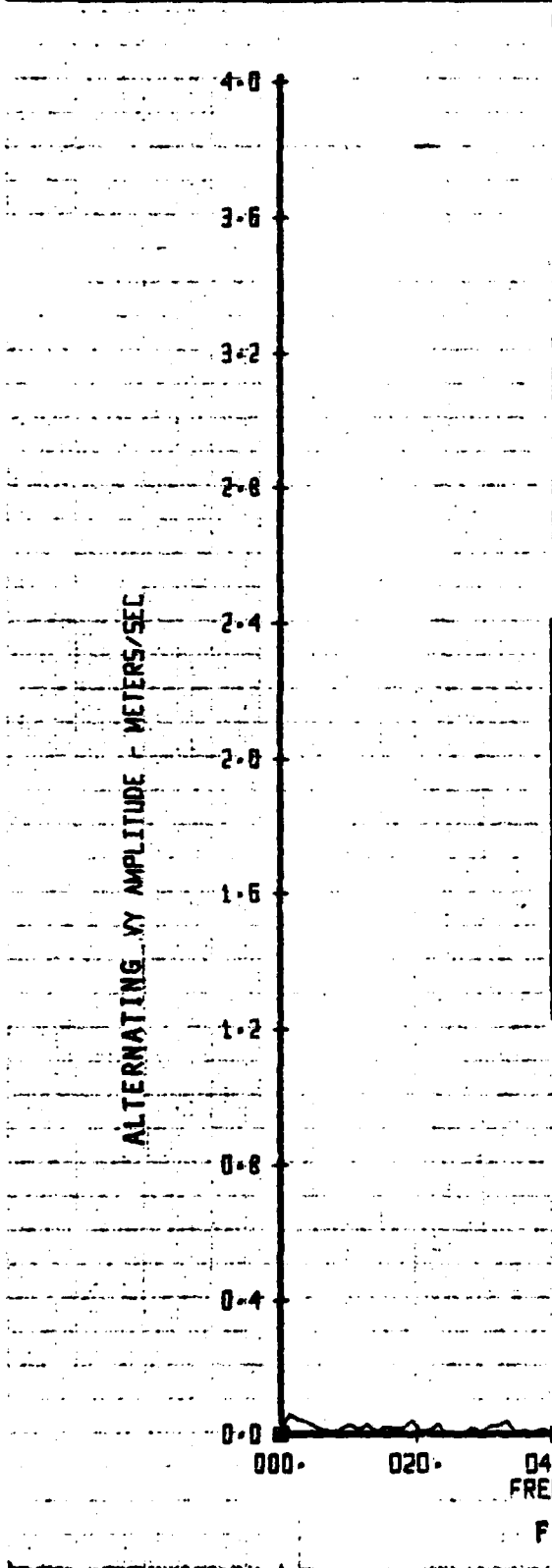


MEAN V_x VELOCITY = 8.26 M/S
 $1\sigma V_x$ VARIATION = 0.08 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = 1$
 TOT TIME ANAL = 1.28HZ

Figure 49.

SHIP WAKE VELOCITY SURVEY
 128 VY VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 5 PROBE 5

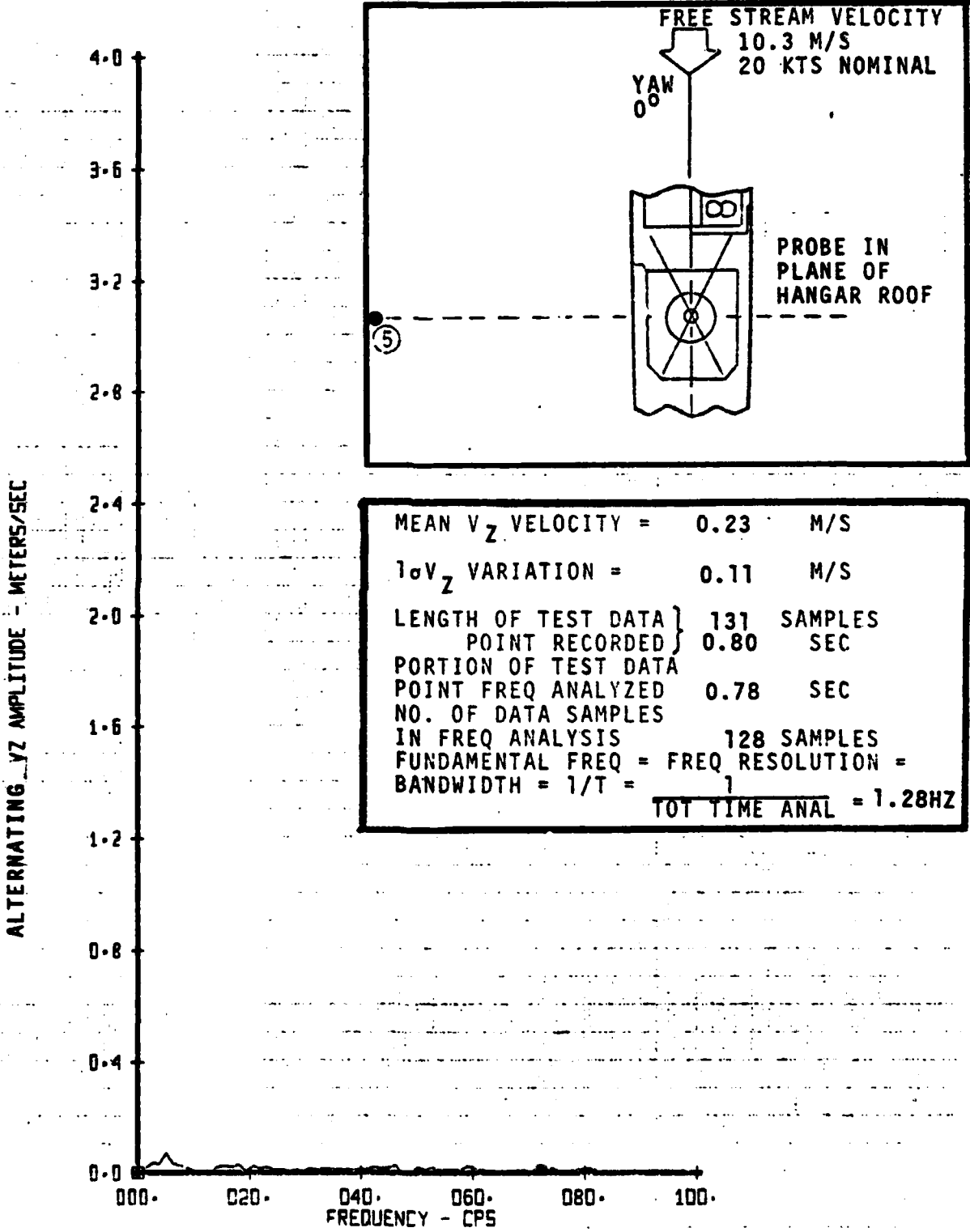


MEAN V_y VELOCITY = 0.06 M/S
 $1\sigma V_y$ VARIATION = 0.12 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES 128 SAMPLES
 IN FREQ ANALYSIS
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{1.28}$
 TOT TIME ANAL = 1.28HZ

Figure 50.

SHIP WAKE VELOCITY SURVEY
 128 VZ VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 5 PROBE 5



MEAN V_z VELOCITY = 0.23 M/S
 $1\sigma V_z$ VARIATION = 0.11 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{0.80} = 1.25$
 TOT TIME ANAL = 1.28HZ

Figure 51.

turbulence factors measured for any VSTOL tunnel in the world, and is therefore an excellent tool for evaluating turbulence such as that recorded in the ship airwake test.

FLOW BEHIND THE HANGAR

Figures 52, 53, and 54 indicate a low frequency amplitude increase when the probe location is moved to a point directly behind the corner of the hangar, with remote wind speed set at 20 knots. Low frequency Vx amplitudes on the order of 1/4 of the steady flow at this point are shown to exist in Figure 52. Vy and Vz, on the other hand, show some diminution in amplitude with increasing frequency, but less of this tendency than was observed with the FF 1052. It is also interesting to note that lateral flow (Vy) characteristically shows less low frequency content, than is shown for either Vx or Vz. In the FF 1052 test, all three components tended to be about the same in the low frequency range.

Strouhal Scaling - When the remote wind velocity is raised to 45 knots (23 M/Sec), alternating turbulence amplitude levels can be expected to increase, and the frequencies at which peak responses occur should shift to higher values in accordance with Strouhal Scaling Law similarities. Forty-five knot frequency response data for the same probe location as that just discussed is presented in Figures 55, 56, and 57. The trends expected (although somewhat difficult to discern because of the unfiltered/unsmoothed nature of the frequency spectral analysis) can be seen by comparing Vx 20 knot data in Figure 52, with similar results for 45 knots in Figure 55.

The 5 Hz and 8 Hz low frequency 20 knot response spikes shift to the right as speed approaches 45 knots, to form the peaks seen around 13 and 18 Hz in the 45 knot data. This doubling of frequency is approximately what would be expected (if Strouhal scaling holds for the complex ship superstructure tested) when going from the lower to the higher speed. It should be noted that no two repeat data points of the same condition exactly duplicate each other's frequency signature; but as will be seen later, they come fairly close for the points compared in this test. Accordingly, it is reasonable to expect only approximate correlation of the Strouhal laws when comparing high and low speed data.

EFFECT OF YAW

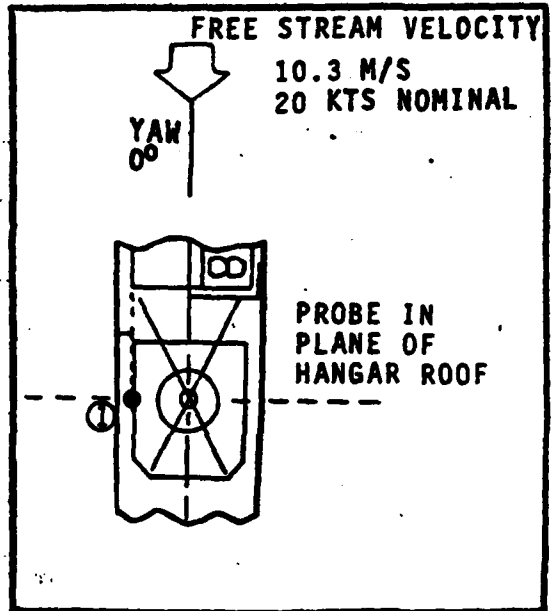
In Figures 58 and 59, alternating Vx data at 30° and 50° yaw are presented for comparison with 0° yaw results shown in Figure 55. Contrary to what was observed with the FF 1052, yawing the DD 963 seems to reduce alternating velocity amplitude in the airwake (even though the standard deviation/RMS variation increases to become a large percentage of the steady vector). This change is attributed to the screen-like effect of the mast superstructure which breaks down the flow as discussed earlier.

EXTENDED LENGTH DATA RUN

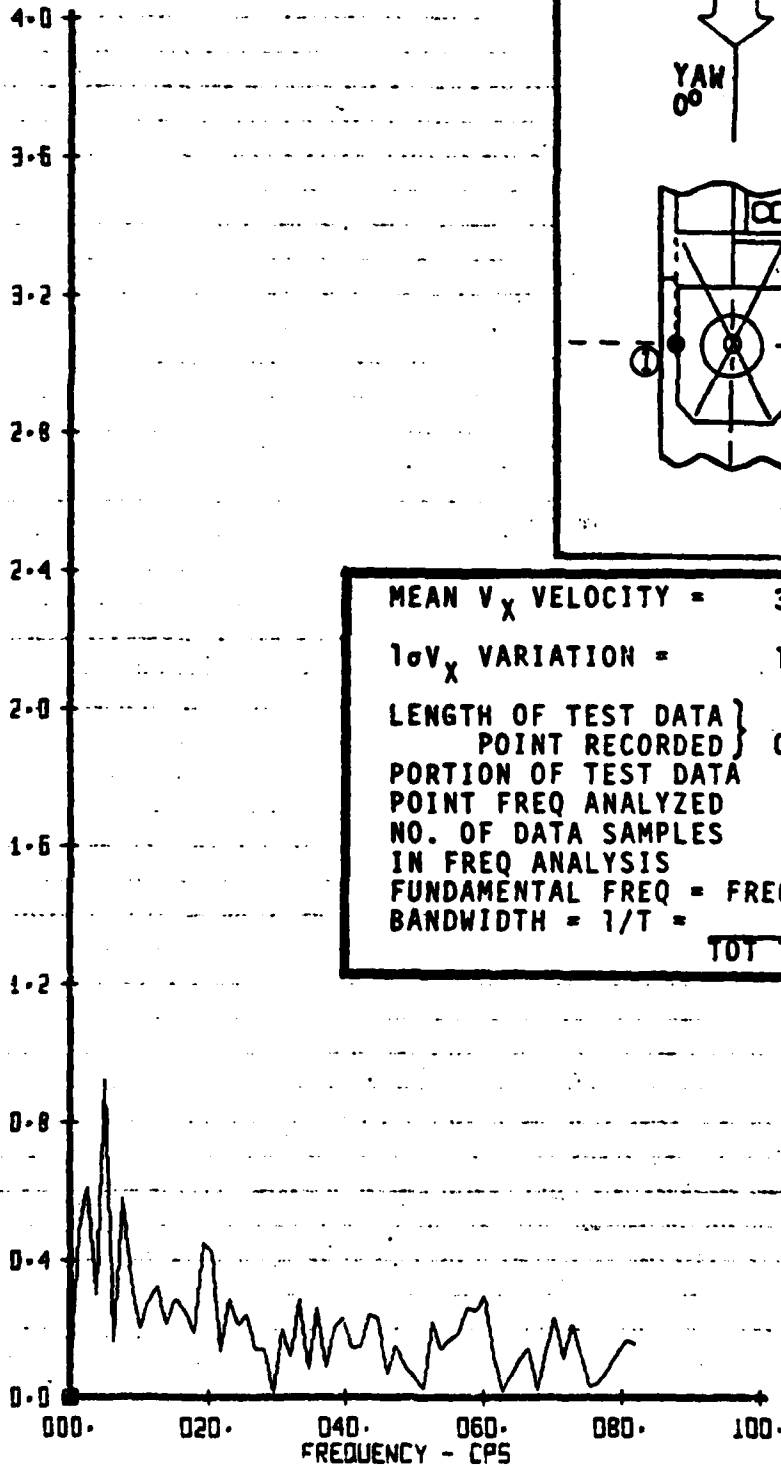
Figures 60 through 65 compare various frequency analyses of a 10.4 second 45 knot data point, for the same test conditions as shown in Figures 55-57.

SHIP WAKE VELOCITY SURVEY
 128 Vx VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 1 PROBE 1



ALTERNATING Vx AMPLITUDE - METERS/SEC

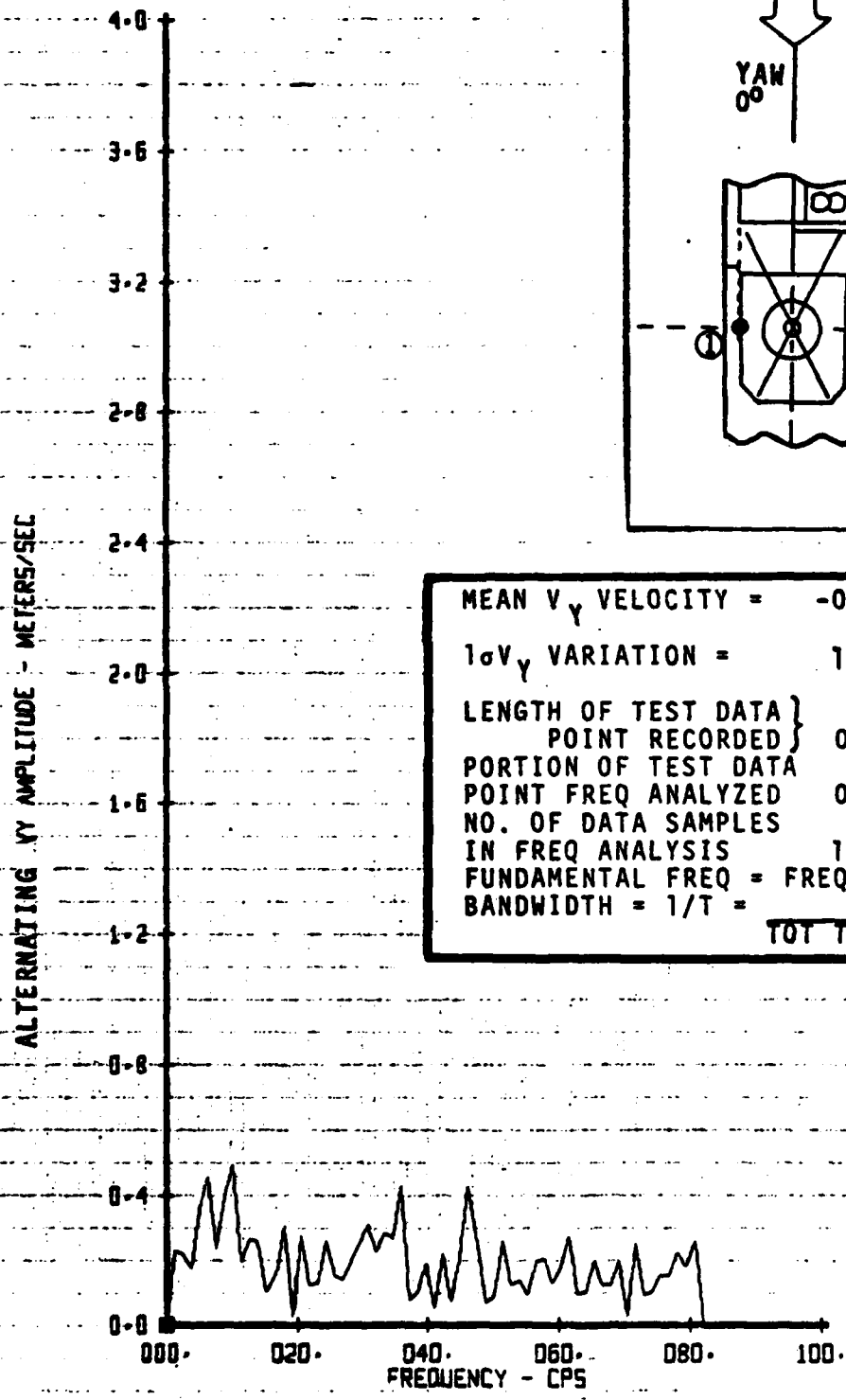
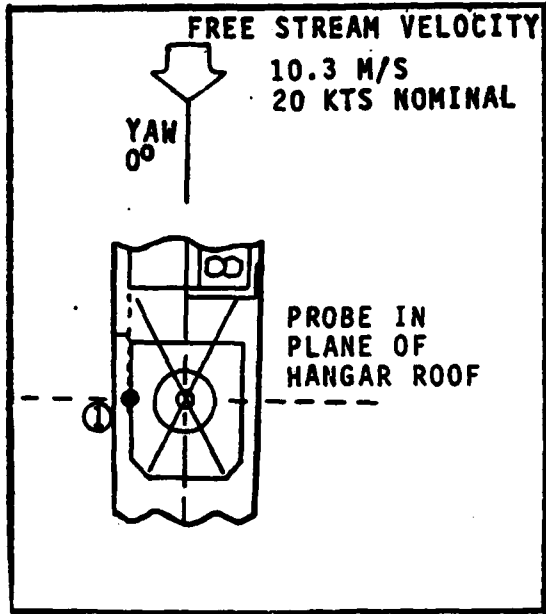


MEAN V_x VELOCITY = 3.27 M/S
 $1\sigma V_x$ VARIATION = 1.44 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = 1$
 TOT TIME ANAL = 1.28HZ

Figure 52.

SHIP WAKE VELOCITY SURVEY
 128 VY VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 1 PROBE 1

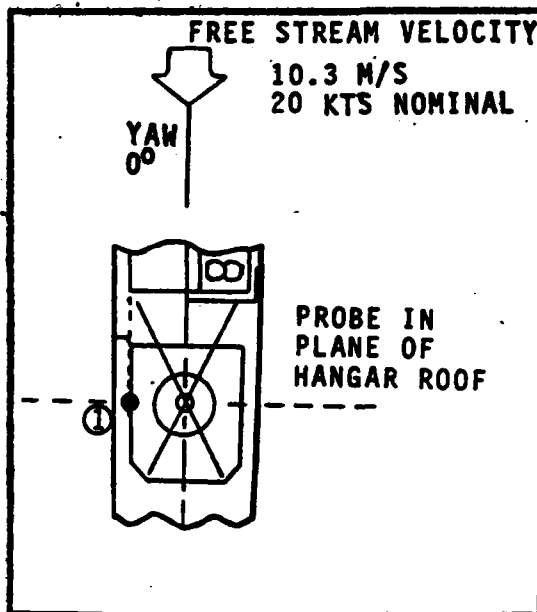


MEAN V_y VELOCITY = -0.52 M/S
 $1\sigma V_y$ VARIATION = 1.27 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{0.8} = 1.25$ HZ
 TOT TIME ANAL = 1.28 HZ

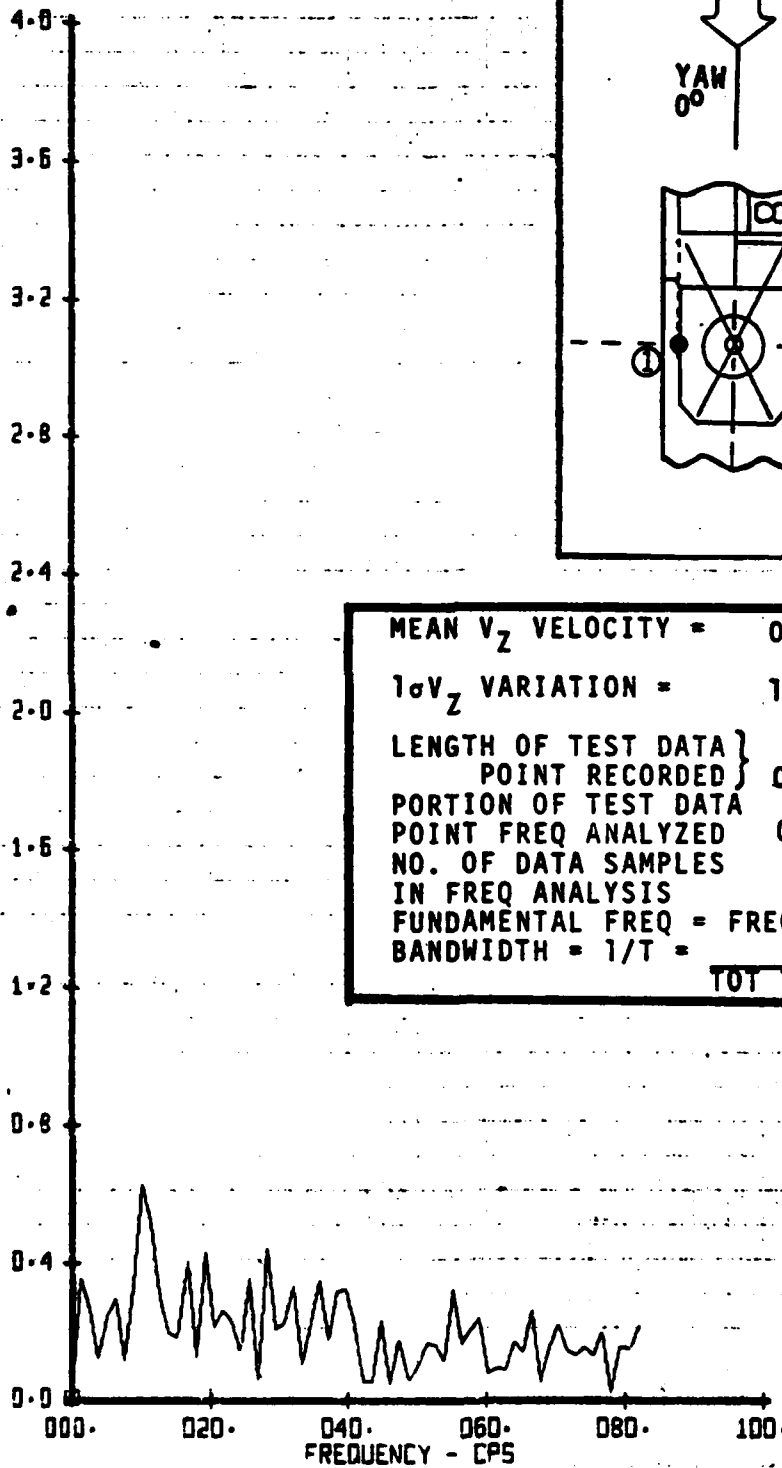
Figure 53.

SHIP WAKE VELOCITY SURVEY
 128 VZ VS. FREQUENCY
 SAMPLES RUN 111 TP 2

LEGEND
 CH 1 PROBE 1



ALTERNATING VZ AMPLITUDE - METERS/SEC

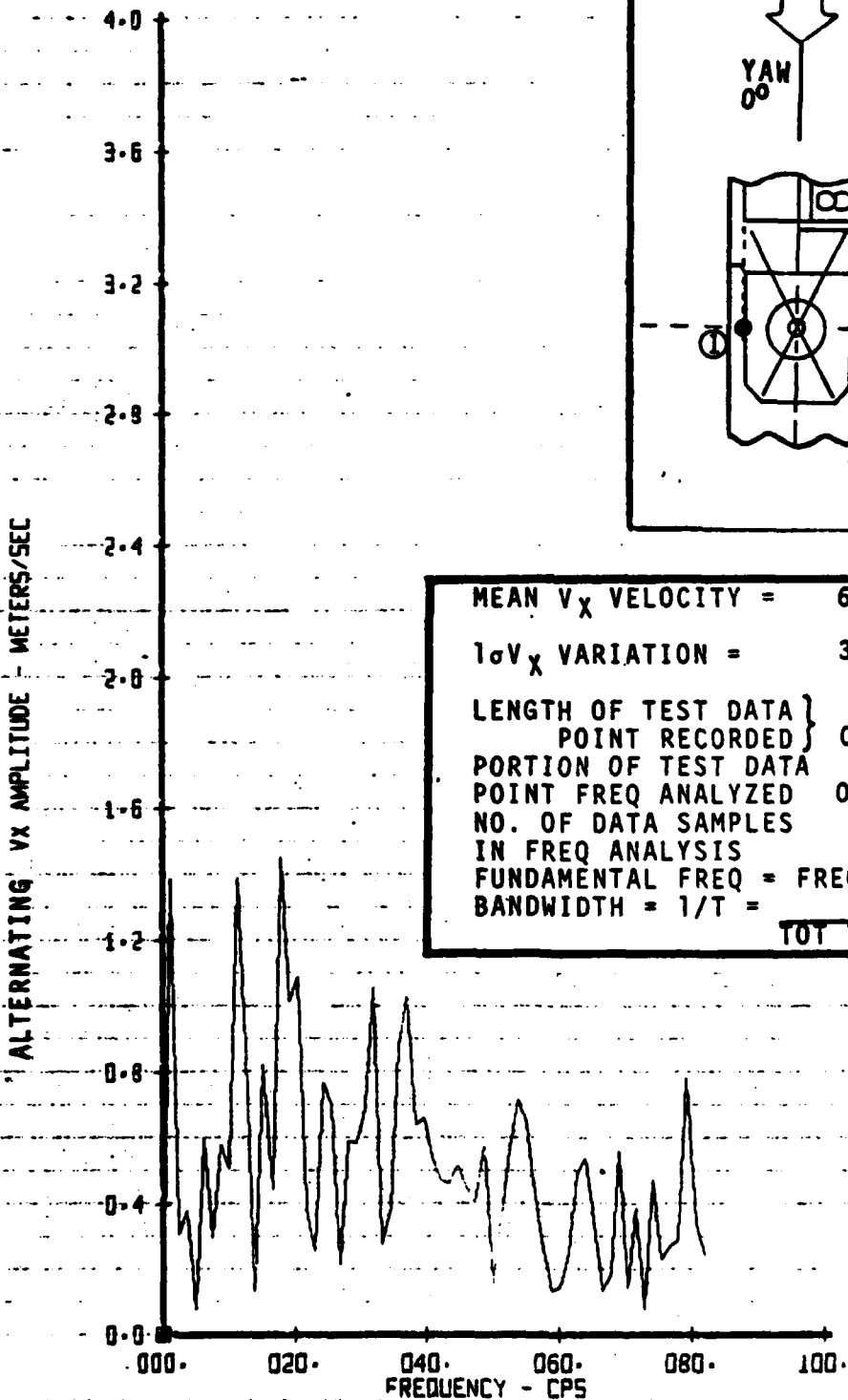
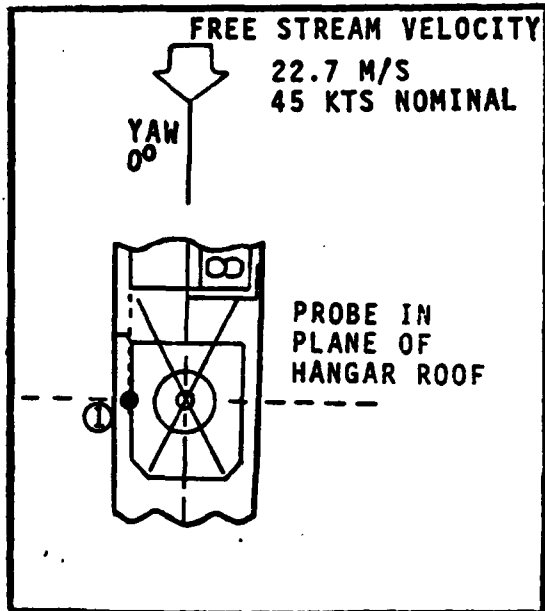


MEAN V_z VELOCITY = 0.19 M/S
 $1\sigma V_z$ VARIATION = 1.32 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = 1$
 TOT TIME ANAL = 1.28HZ

Figure 54.

SHIP WAKE VELOCITY SURVEY
 VX VS. FREQUENCY
 128 SAMPLES RUN 113 TP 1

LEGEND
 CH 1 PROBE 1

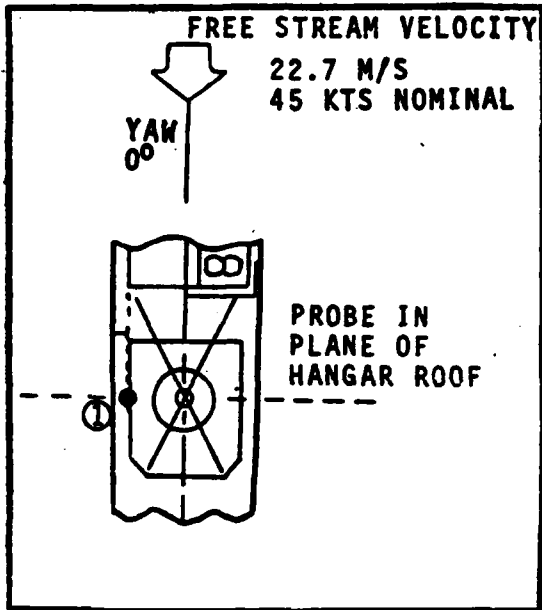


MEAN V_x VELOCITY = 6.69 M/S
 1σ V_x VARIATION = 3.44 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = 1/T = 1
 TOT TIME ANAL = 1.28HZ

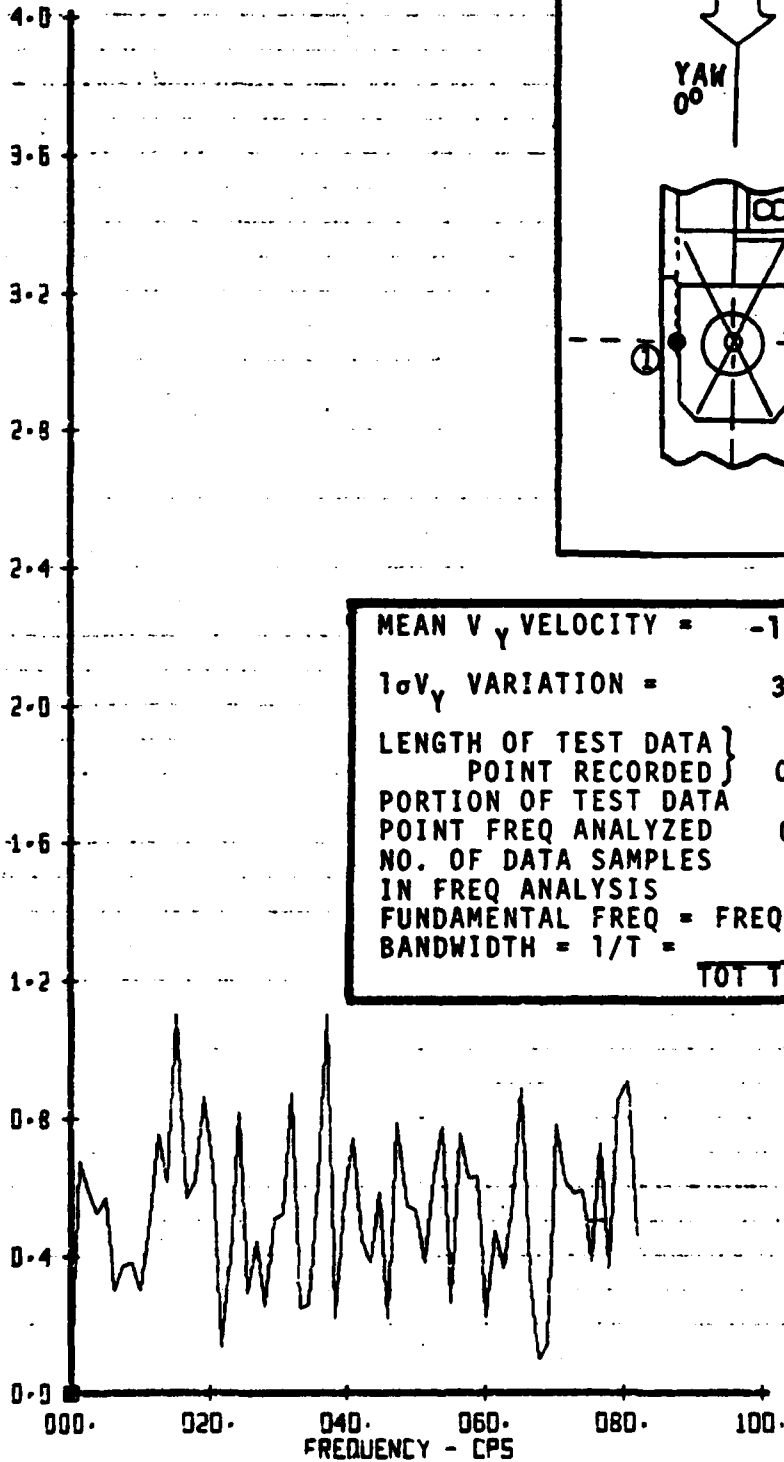
Figure 55.

SHIP WAKE VELOCITY SURVEY
 VY VS. FREQUENCY
 128 SAMPLES RUN 113 TP 1

LEGEND
 CH 1 PROBE 1



ALTERNATING VY AMPLITUDE - METERS/SEC

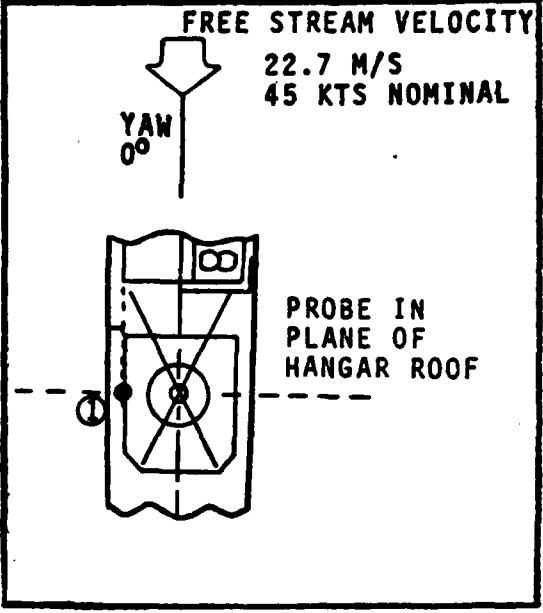


MEAN V_y VELOCITY = -1.25 M/S
 $1\sigma V_y$ VARIATION = 3.33 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{1.28}$
 TOT TIME ANAL = 1.28HZ

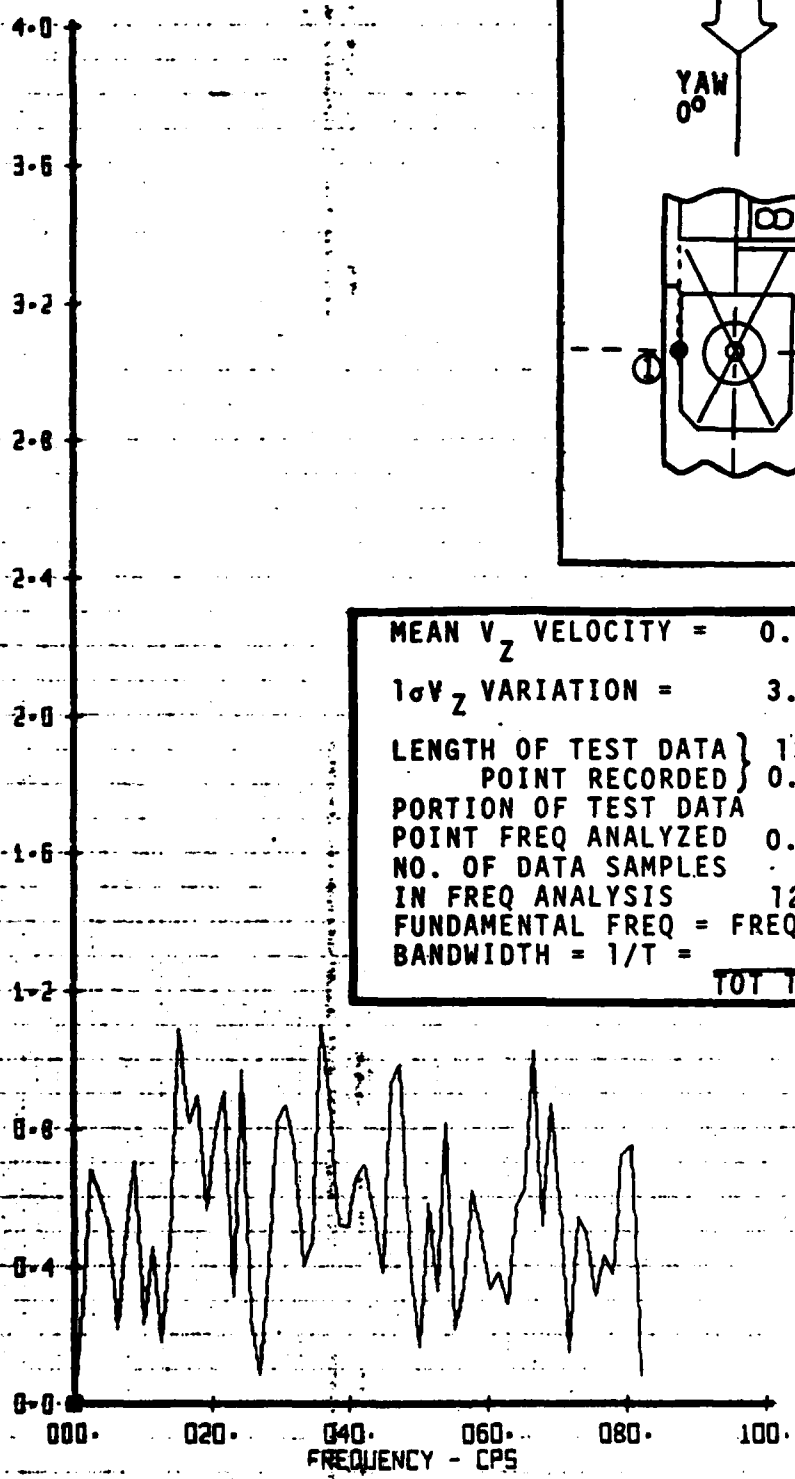
Figure 56.

SHIP WAKE VELOCITY SURVEY
 VZ VS. FREQUENCY
 128 SAMPLES RUN 113 TP 1

LEGEND
 CH 1 PROBE 1



ALTERNATING VZ AMPLITUDE - METERS/SEC

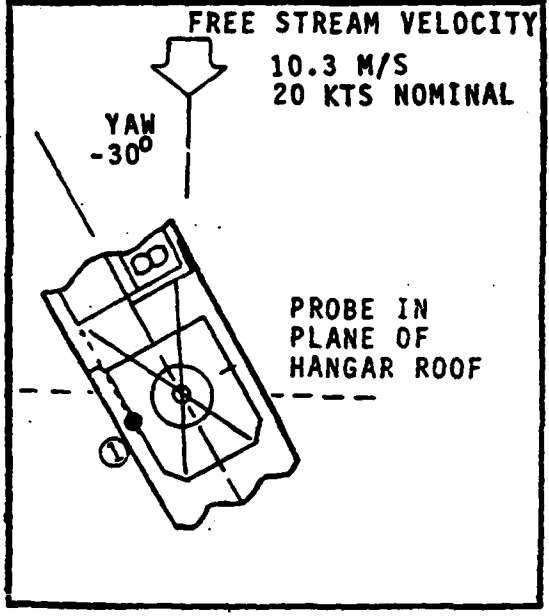


MEAN V_z VELOCITY = 0.50 M/S
 $1\sigma V_z$ VARIATION = 3.46 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{1.28}$
 TOT TIME ANAL = 1.28HZ

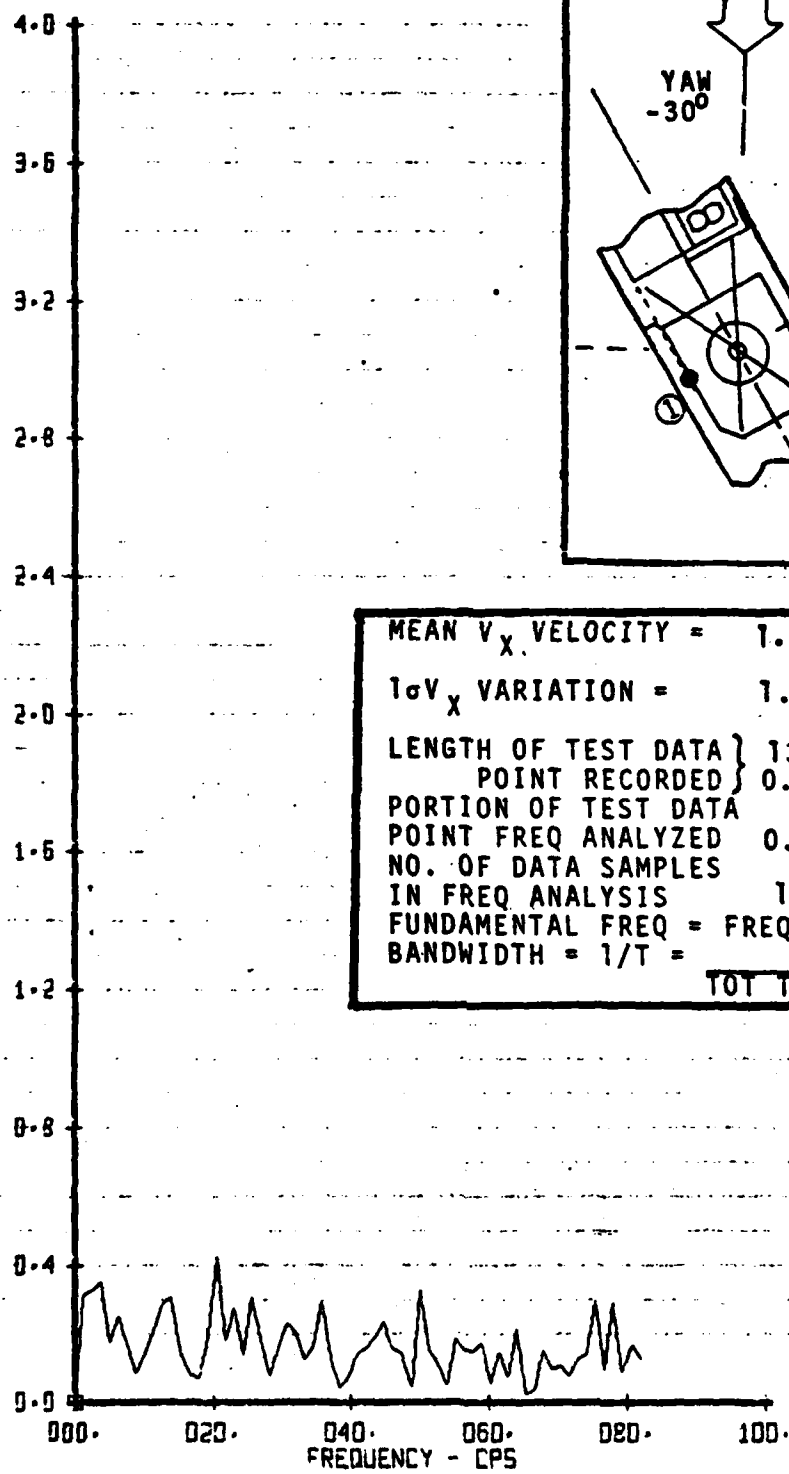
Figure 57.

SHIP WAKE VELOCITY SURVEY
 128 Vx VS. FREQUENCY
 SAMPLES RUN 111 TP 3

LEGEND
 CH 1 PROBE 1



ALTERNATING Vx AMPLITUDE - METERS/SEC

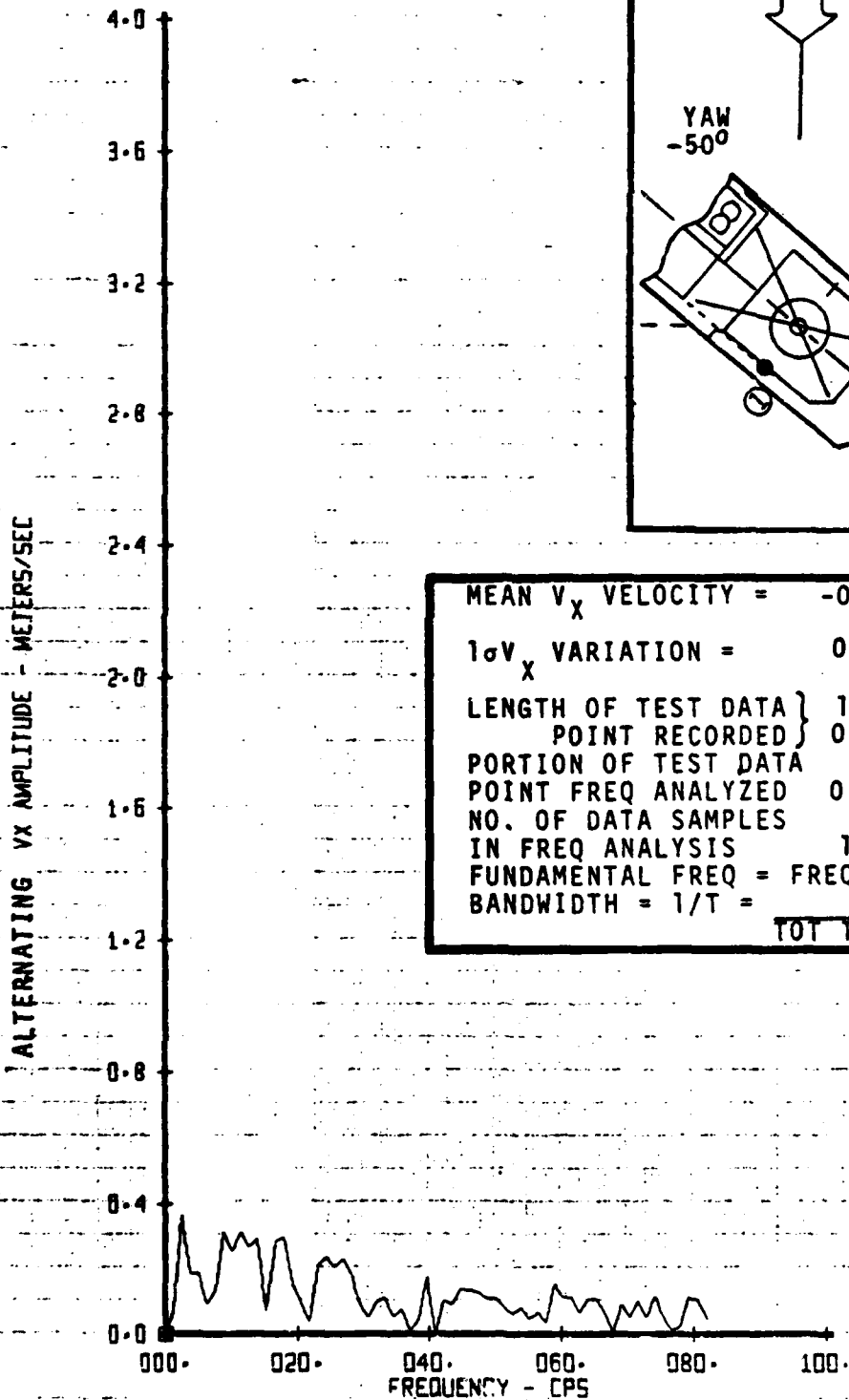
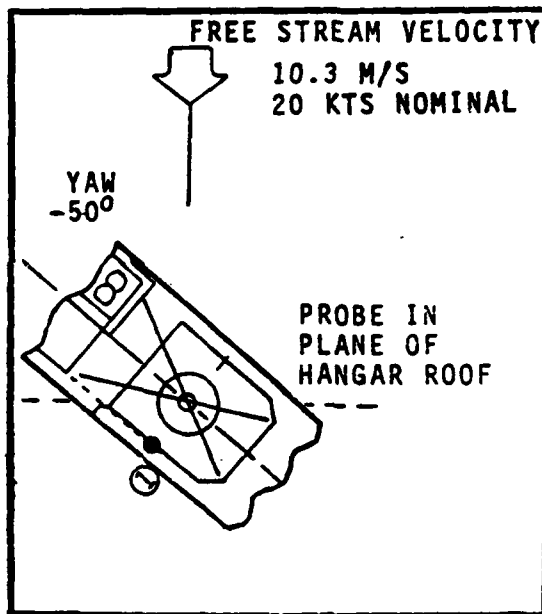


MEAN V_x VELOCITY = 1.23 M/S
 $1\sigma V_x$ VARIATION = 1.07 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{1.28} = 0.78$ HZ
 TOT TIME ANAL = 1.28HZ

Figure 58.

SHIP WAKE VELOCITY SURVEY
 128 Vx VS. FREQUENCY
 SAMPLES RUN 111 TP 4

LEGEND
 CH 1 PROBE 1



MEAN V_x VELOCITY = -0.74 M/S
 $1\sigma V_x$ VARIATION = 0.84 M/S
 LENGTH OF TEST DATA } 131 SAMPLES
 POINT RECORDED } 0.80 SEC
 PORTION OF TEST DATA
 POINT FREQ ANALYZED 0.78 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = 1$
 TOT TIME ANAL = 1.28HZ

Figure 59.

When the longitudinal velocity V_x data presented in Figure 60 was first compared with its 0.8 second counterpart (Figure 55), it was suspected that there might have been a problem with the FFT frequency analysis, or that the 0.8 second run was too short and thus unrepresentative of the flow state around the model. An in-depth analysis conducted with the Run 114, Test Point 1 results showed neither of these two suspicions to have been correct. In fact, both sets of data are most likely valid, and the differences are attributed to increased spectral resolution possible with the longer run. Note that the mean and 1σ values for both runs are similar in magnitude.

After careful study of information presented in the Reference 3 document, and lengthy discussions with data processing experts familiar in the field of discrete FFT analysis of digitally sampled data, the cause of the roughly 50% reduction in amplitude of the 10+ second run became apparent. When higher resolution is possible due to a longer sample length, more spectral lines occur in the original bandwidth under consideration. In this case, the 0.8 second fundamental frequency-bandwidth is about 1.28 Hz, whereas the frequency resolution of the longer data point is 0.16 Hz. As greater and greater resolution is used in an analysis, frequency spectral lines (which are only approximated as straight lines, but really are of the form $\sin x/x$) tend to be resolved into more lines of a different amplitude. Characteristically, wide bandwidth responses of the type seen in the DD 963 data tend to show reduced amplitudes when greater resolution is used.

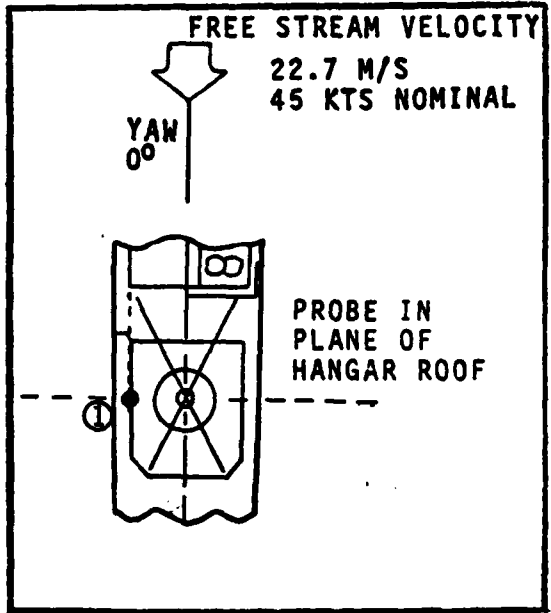
Figures 61 through 65 represent separate reanalysis of the Run 114 data, taking progressively shorter samples of the run (starting at its beginning each time), for analysis in the FFT program. Figure 60 uses about 6 1/4 seconds of the run (1024 samples analyzed); Figure 61, 512 samples; Figures 62-64, 128 samples or 0.8 seconds as in Figures 55-57; and finally Figure 65 represents analysis of only 0.4 seconds of the run containing 64 data samples. Amplitude growth with decreasing resolution is obvious.

Also apparent in the Figure 65 plot (in the 65-80 Hz range), is an FFT data anomaly called "picket fencing" (see Reference 3) which is due to having too low a resolution in the analysis. Increasing resolution, or adding zeroes to the end of a run under analysis helps remove this problem. The longer 128 sample run (Figure 62) appears to have removed picketing, but could undoubtedly be improved by using various types of "window" filter functions for smoothing.

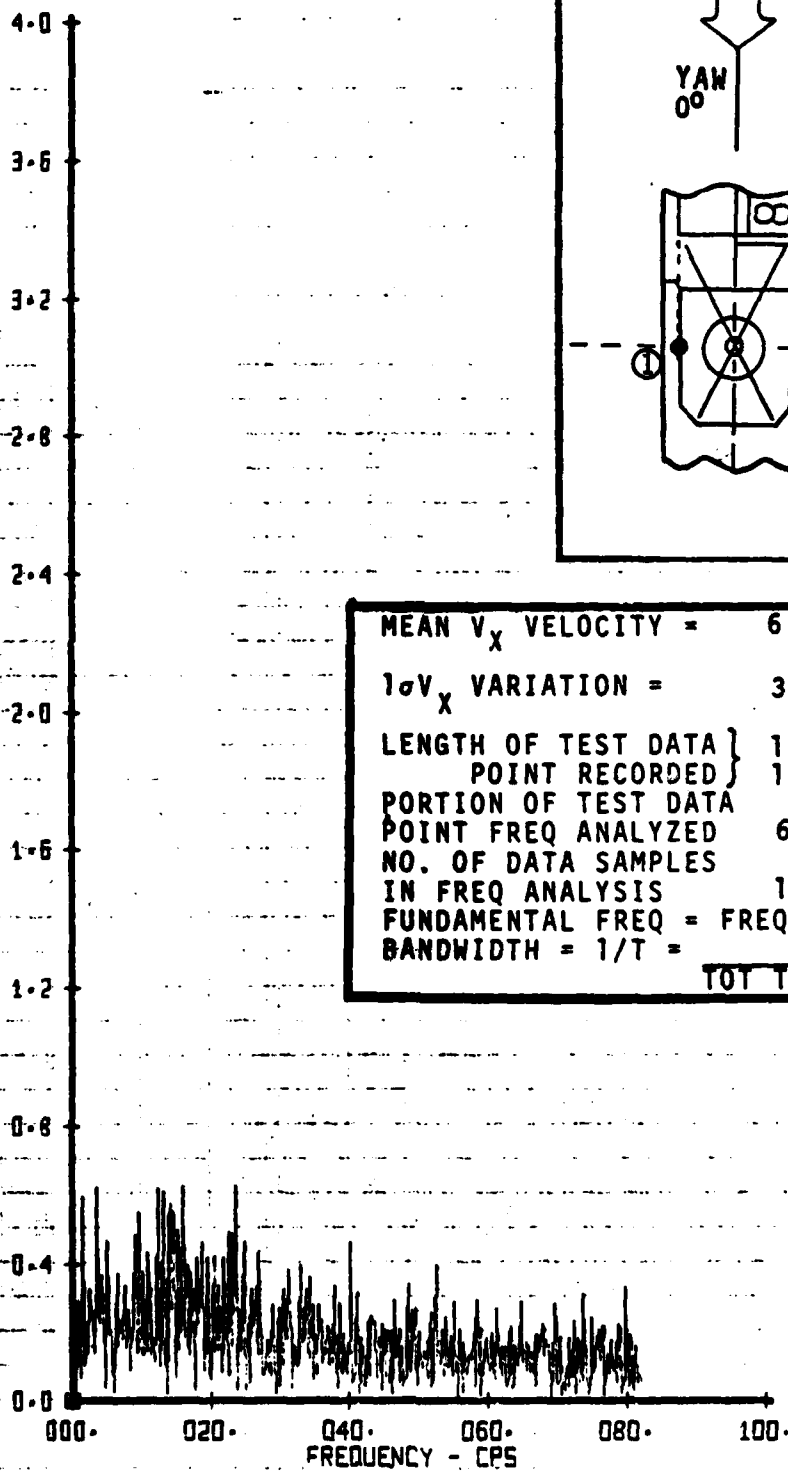
A third FFT data problem associated with frequency folding or aliasing, is prevented by sampling the data at twice the highest frequency present in the results. An attempt to do this was made in the DD 963 test, by providing 2 samples/cycle @ 80 Hz model scale (1 Hz full scale) which was expected to be much in excess of requirements. Scrutiny of 1/50 scale FF 1052 results showed little or no amplitude content above 50 Hz, so it was expected that the same condition would exist for the 1/80 scale DD 963 above 80 Hz.

SHIP WAKE VELOCITY SURVEY
 VX VS. FREQUENCY
 1024 SAMPLES RUN 114 TP 1

LEGEND
 CH 1 PROBE 1



ALTERNATING V_x AMPLITUDE - METERS/SEC

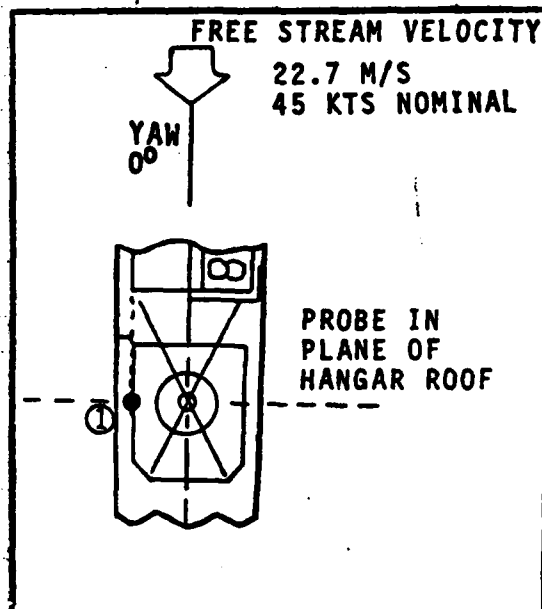


MEAN V_x VELOCITY = 6.61 M/S
 $1\sigma V_x$ VARIATION = 3.41 M/S
 LENGTH OF TEST DATA } 1705 SAMPLES
 POINT RECORDED } 10.4 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED 6.25 SEC
 NO. OF DATA SAMPLES
 IN FREQ ANALYSIS 1024 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{10.4} = 0.096$
 TOT TIME ANAL = 0.16HZ

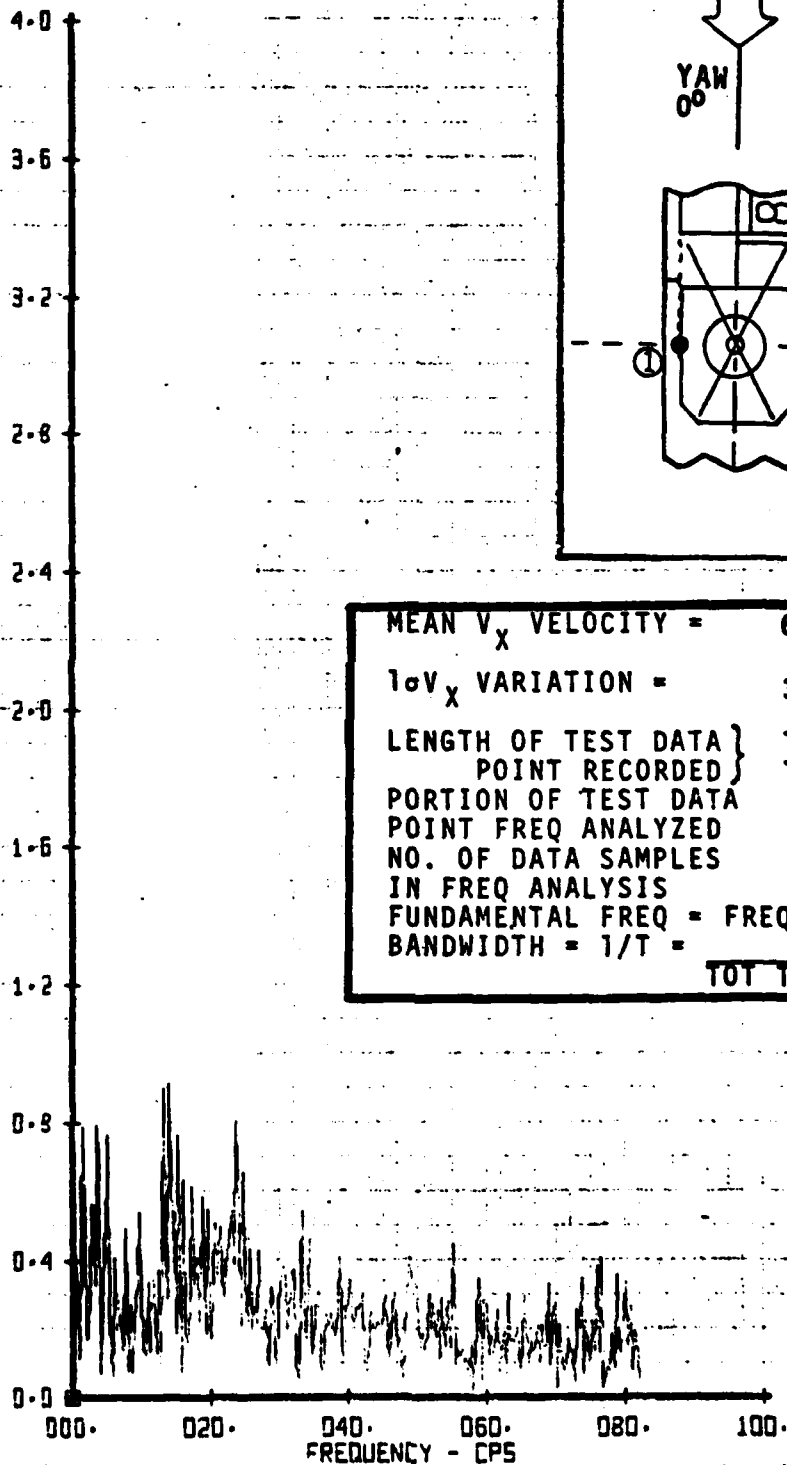
Figure 60.

SHIP WAKE VELOCITY SURVEY
 512 SAMPLES - V_X VS. FREQUENCY
 RUN 114 TP 1

LEGEND
 CH 1 PROBE 1



ALTERNATING V_X AMPLITUDE - METERS/SEC

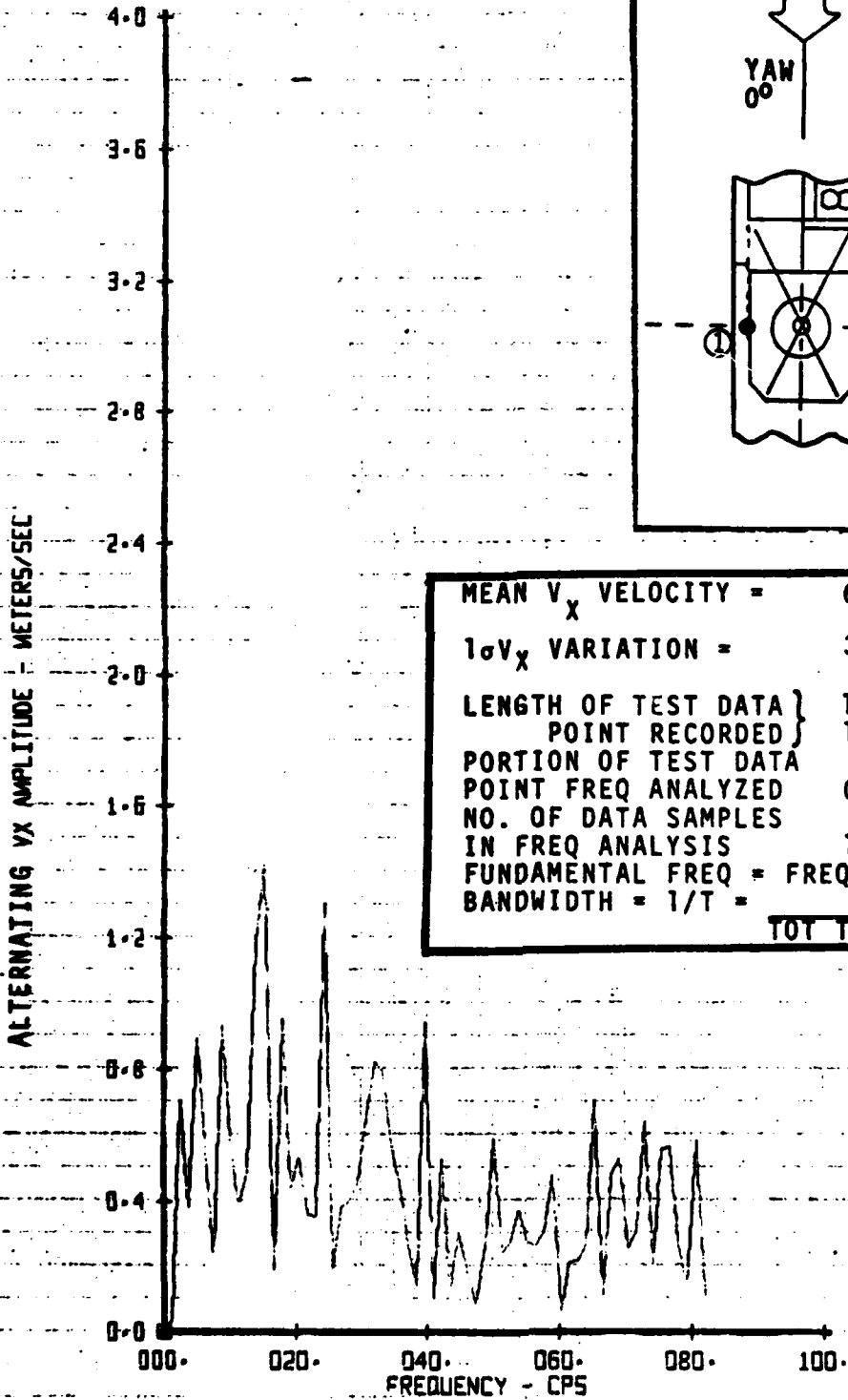
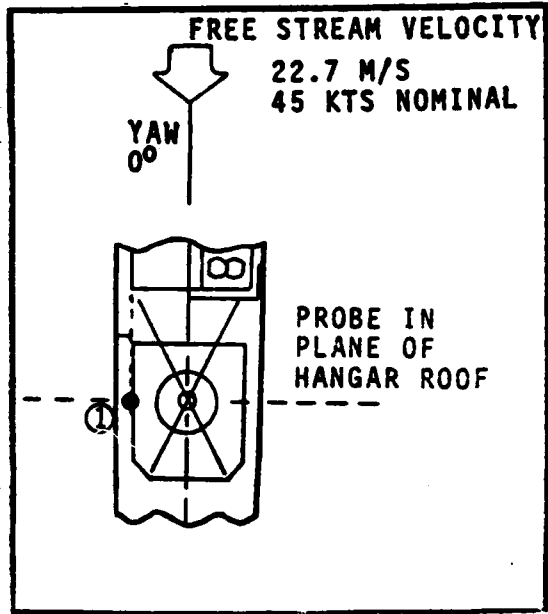


MEAN V_X VELOCITY = 6.61 M/S
 1σ V_X VARIATION = 3.41 M/S
 LENGTH OF TEST DATA } 1705 SAMPLES
 POINT RECORDED } 10.4 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED } 3.12 SEC
 NO. OF DATA SAMPLES }
 IN FREQ ANALYSIS } 512 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = 1/T = 1
 TOT TIME ANAL = 0.32HZ

Figure 61.

SHIP WAKE VELOCITY SURVEY
 128 SAMPLES - V_X VS. FREQUENCY
 RUN 114 TP 1

LEGEND
 CH 1 PROBE 1

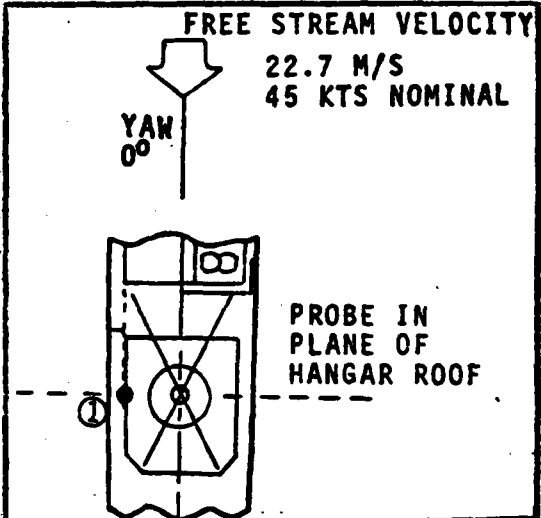
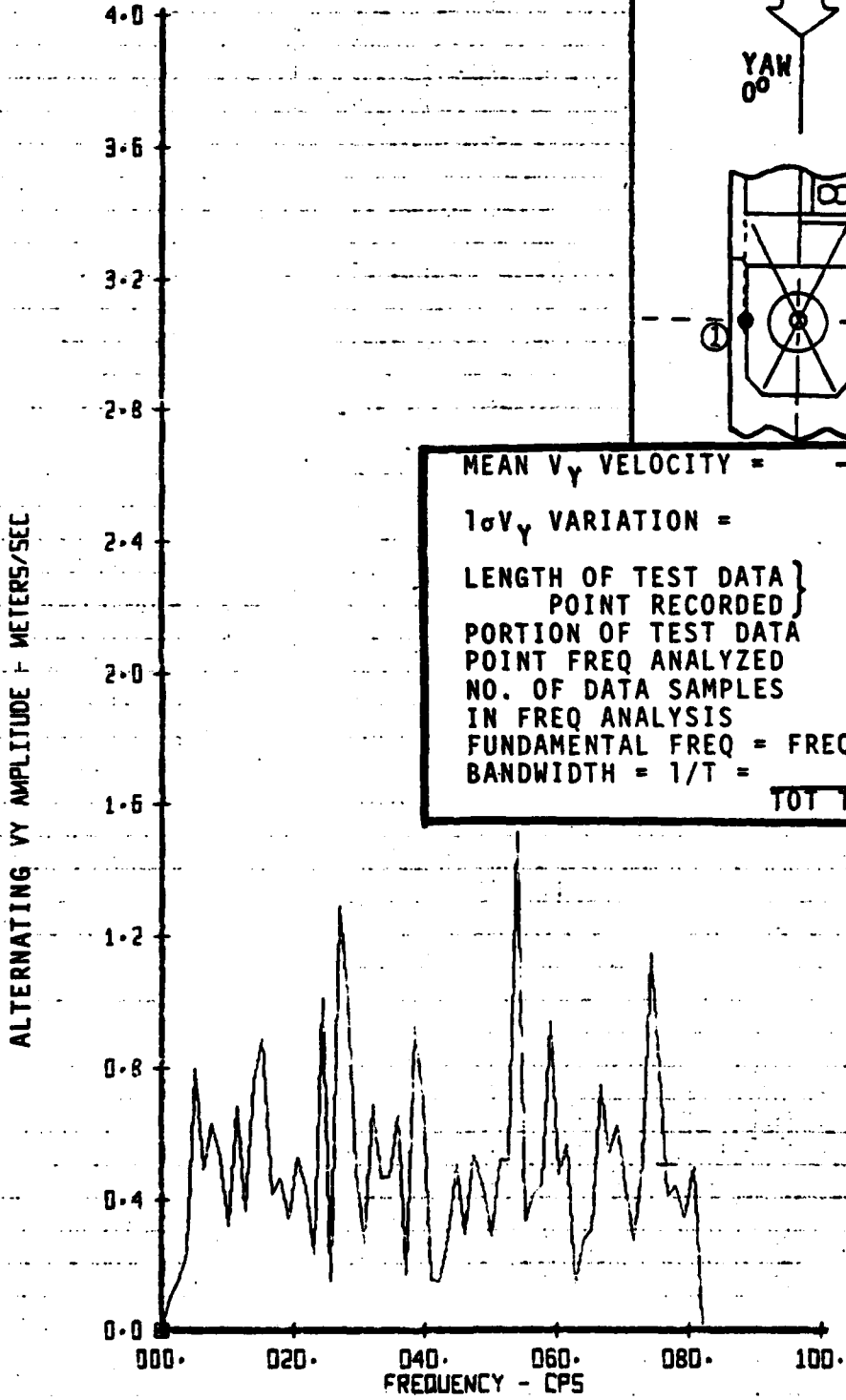


MEAN V_X VELOCITY = 6.61 M/S
 1σ V_X VARIATION = 3.41 M/S
 LENGTH OF TEST DATA } 1705 SAMPLES
 POINT RECORDED } 10.4 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED } 0.78 SEC
 NO. OF DATA SAMPLES }
 IN FREQ ANALYSIS } 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = 1/T = 1
 TOT TIME ANAL = 1.28HZ

Figure 62.

SHIP WAKE VELOCITY SURVEY
 128 SAMPLES - VY VS. FREQUENCY
 RUN 114 TP 1

LEGEND
 CH 1 PROBE 1

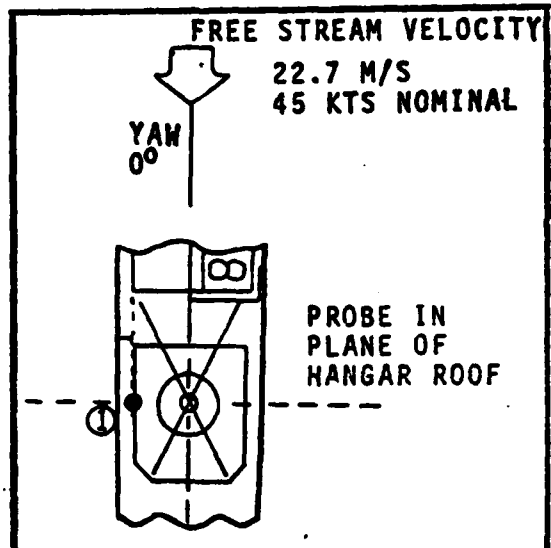
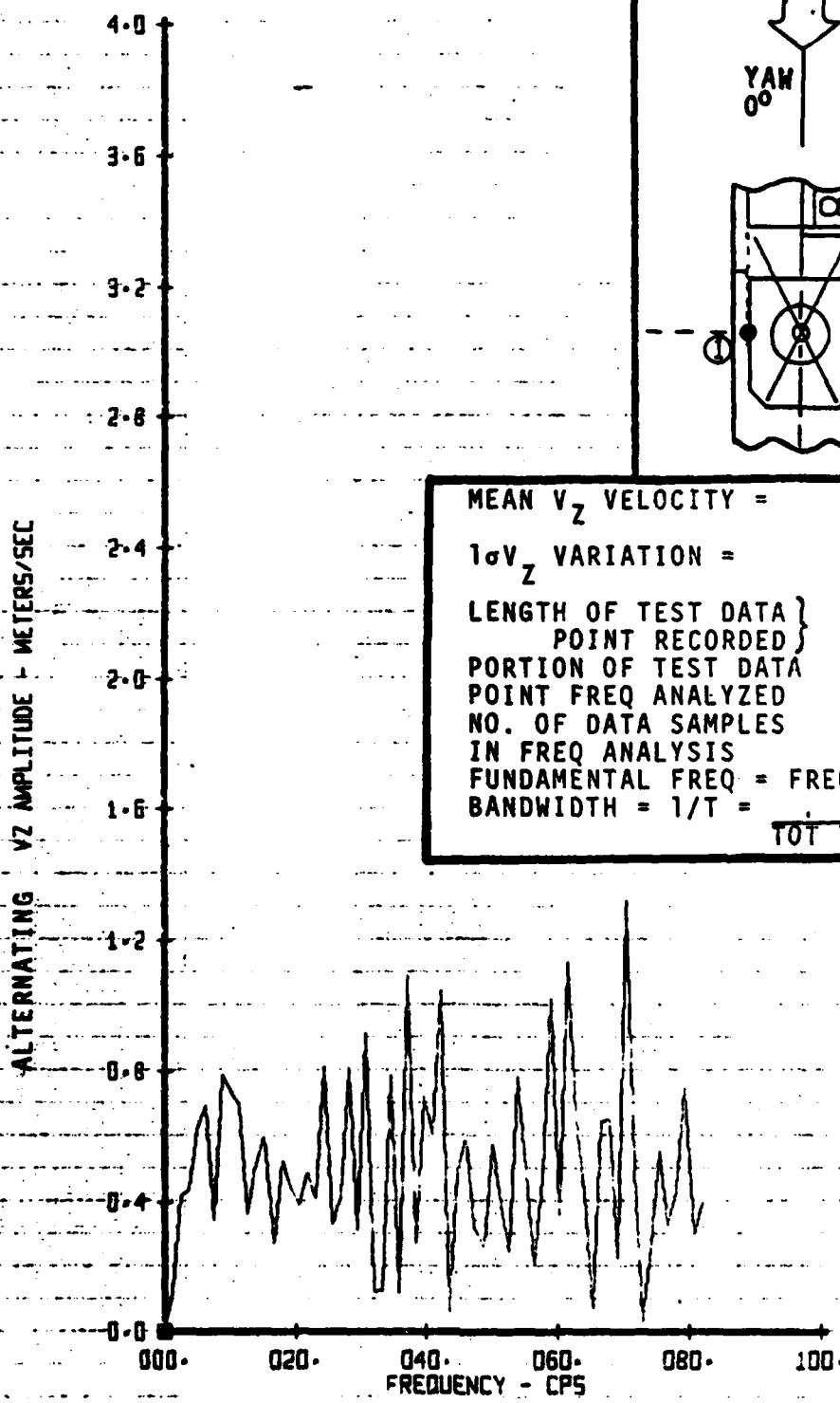


MEAN V_y VELOCITY = -1.37 M/S
 $1\sigma V_y$ VARIATION = 3.17 M/S
 LENGTH OF TEST DATA } 1705 SAMPLES
 POINT RECORDED } 10.4 SEC
 PORTION OF TEST DATA }
 POINT FREQ ANALYZED } 0.78 SEC
 NO. OF DATA SAMPLES }
 IN FREQ ANALYSIS } 128 SAMPLES
 FUNDAMENTAL FREQ = FREQ RESOLUTION =
 BANDWIDTH = $1/T = \frac{1}{10.4} = 0.096$
 TOT TIME ANAL = 1.28HZ

Figure 63.

SHIP WAKE VELOCITY SURVEY
 128 SAMPLES - V_Z VS. FREQUENCY
 RUN 114 TP 1

LEGEND
 CH 1 PROBE 1

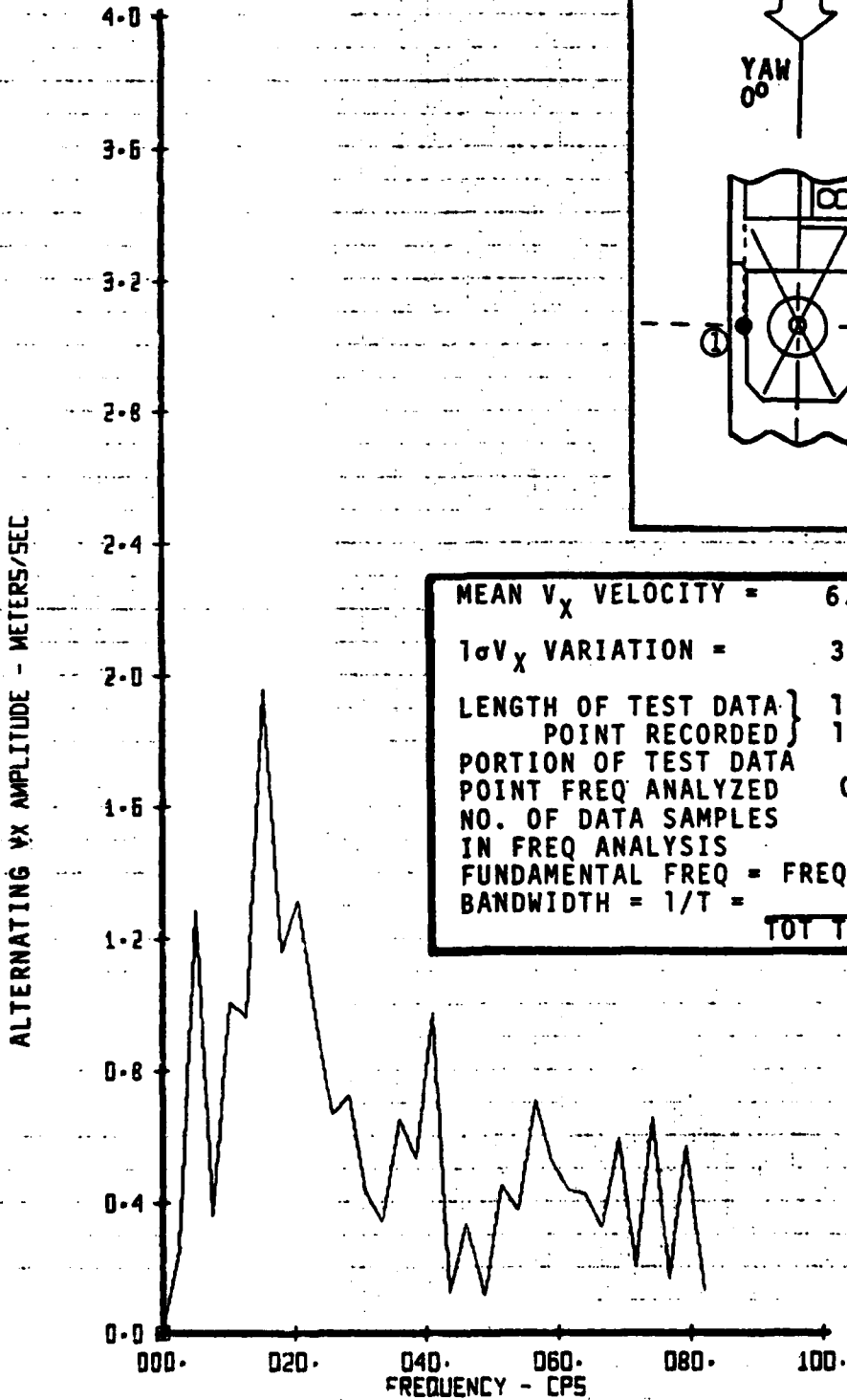
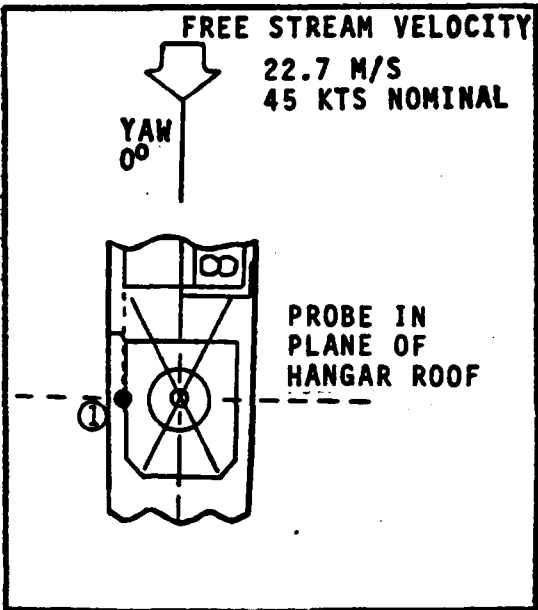


| | | |
|--|-------------------|---------|
| MEAN V _Z VELOCITY = | 0.34 | M/S |
| 1σ V _Z VARIATION = | 3.40 | M/S |
| LENGTH OF TEST DATA } POINT RECORDED | 1705 | SAMPLES |
| | 10.4 | SEC |
| PORTION OF TEST DATA } POINT FREQ ANALYZED | 0.78 | SEC |
| | | |
| NO. OF DATA SAMPLES IN FREQ ANALYSIS | 128 | SAMPLES |
| FUNDAMENTAL FREQ = | FREQ RESOLUTION = | |
| BANDWIDTH = 1/T = | 1 | |
| TOT TIME ANAL = 1.28HZ | | |

Figure 64.

SHIP WAKE VELOCITY SURVEY
 64 SAMPLES - V_X VS. FREQUENCY
 RUN 114 TP 1

LEGEND
 CH 1 PROBE 1



MEAN V_X VELOCITY = 6.61 M/S
 1σ V_X VARIATION = 3.41 M/S

| | |
|------------------------|-------------------|
| LENGTH OF TEST DATA | 1705 SAMPLES |
| POINT RECORDED | 10.4 SEC |
| PORTION OF TEST DATA | |
| POINT FREQ ANALYZED | 0.39 SEC |
| NO. OF DATA SAMPLES | |
| IN FREQ ANALYSIS | 64 SAMPLES |
| FUNDAMENTAL FREQ = | FREQ RESOLUTION = |
| BANDWIDTH = 1/T = | 1 |
| TOT TIME ANAL = 2.56HZ | |

Figure 65.

For most cases, this was true - but for a few, significant amplitude content was observed at frequencies as high as 80 Hz; and the suspicion exists that some response was present beyond this point. If so, such data could be folded back (in a mirror image) on top of data on the lower side of 80 Hz; thereby adding to amplitudes around and below this frequency. If aliasing is, in fact, occasionally present in the data, its effects are probably not too serious since the alternating amplitudes in question (in the frequency range most likely for the phenomenon to occur) are not very large.

The potential for aliasing in future testing can be eliminated by low pass filtering the analog anemometer signals above the folding (or maximum desired) frequency (80 Hz in this case) or by increasing the sampling rate. The 164 sample/second/channel rate used for the DD 963 test, was for all practical purposes, the maximum which could have been selected based on computer data storage and total quantity of data desirable for analysis.

Before ending this frequency analysis discussion of DD 963 results, it is appropriate to point out that evaluating data shown in Figures 60-65 through use of a computed power spectral density parameter (which is normalized by dividing by the fundamental frequency- ω_0), would probably have produced similar PSD plots for all the different sample lengths that showed approximately the same characteristics. This point is worth noting, since power density has been used in analyzing (and synthesizing) several of the airwake models developed in the past (Reference 4).

SECTION 7.0 CONCLUSIONS

1. Three component dynamic velocity data time histories were successfully recorded on magnetic tape, to map the airwake turbulence flow field behind a 1/80 scale DD 963 Spruance Class Destroyer model at wind speeds of 20, 35, and 45 knots. Headwind, crosswind and tailwind conditions were evaluated for ship roll angles of 0 and + 15 degrees. Recorded time histories may be scaled to simulate full size ship airwake characteristics by applying Strouhal scaling laws which require only a simple (80:1) expansion of the time between recorded data samples.
2. Computed Mean velocity and 1 σ Standard Deviation information was developed for all test points. These data indicate that the steady-state flow field behind the vessel is relatively stable and repeatable up to very high angles of yaw. Sample velocity vector maps were developed to graphically display the wake steady flow characteristics, in horizontal and vertical planes above, behind, and to either side of the ship.
3. A comparison of steady airwake components measured in both the DD 963 and FF 1052 wind tunnel programs indicates substantially larger areas of separated flow and turbulence behind the Destroyer. Frequency analysis of the DD 963 test data indicates a more constant level of periodic flow throughout the frequency band (without large increases at low frequency as expected) when compared to FF 1052 results. Both of these quantitative results were suggested by observations of the flow field made during the DD 963 flow visualization studies.
4. Steady-state velocity data recorded at 20, 35 and 45 knots showed similar trends in flow direction, and the magnitudes were found to be directly scalable with the remote wind speed. Accordingly, it should be possible to interpolate freely between results at any of these velocities to develop required data at speeds not measured.
5. Application of either (a) Strouhal scaled dynamic velocity time history data directly, or (b) steady-state results with some type of computed random turbulence function appears to be a feasible approach for developing an airwake math model suitable for helicopter/VSTOL aircraft development, or for piloted flight simulation work. Further in-depth analysis of the test results is required to produce math models of the turbulence, suitable for the intended tasks.

REPRODUCTION PROHIBITED - NOT RELEASED

SECTION 8.0 REFERENCES

1. Garnett Jr., Theodore S., "Investigation to Study the Aerodynamic Ship Wake Turbulence Generated by an FF 1052 Frigate," Boeing Vertol Company of Philadelphia, Pennsylvania, December 1976.
2. Hoerner, S. F., "Fluid Dynamic Drag," Page 3-6 and 2-3, published by author, 1958. ..
3. Bergland, G. D., "A Guided Tour of the Fast Fourier Transform," IEEE Spectrum, July 1969.
4. Nave, Ronald L., "Development and Analysis of a CVA and a 1052 Class Fast Frigate Air Wake Model," Naval Air Development Center, Warminster, Pa., report number NADC-78182-60, September 30, 1978.
5. Fortenbaugh, R. L., "Mathematical Models for the Aircraft Operational Environment of DD 963 Class Ships," Vought Corporation, Dallas, Texas, report number 2-55800/BR-3500, September 26, 1978.
6. Contract Number N62269-78-C-0097, "Measurement of Velocity Components of DD 963 Destroyer in Support of Type A VSTOL," issued by Naval Air Development Center, Warminster, Pa., May 19, 1978.
7. Contract Number N68335-79-C-1002, "Wind Tunnel Survey of the Close-in Airwake Turbulence Behind a DD 963 Destroyer Model," issued by Naval Air Engineering Center, Lakehurst, N.J., January 25, 1979.
8. "Pre-Test Briefing for DD 963 Airwake (NADC) and Close-in (NAEC) Wake Turbulence Test," report from Boeing Vertol Company, Philadelphia, Pa., 1979.
9. Anonymous, "Specification Sheet for the TSI System 1080 Total Vector Anemometer," Thermo Systems Inc. of St. Paul, Minnesota, revised June 1972.
10. Anonymous, "Data Reduction Procedure for the 1080 Total Vector Anemometer," Thermo Systems Inc. Technical Bulletin No. 7, May 1, 1970.
11. Sarchin, T. H. and Goldberg, L. L., "Stability and Buoyancy Criteria for U.S. Naval Surface Ships," The Society of Naval Architects and Marine Engineers, N.Y., N.Y., November 1962.
12. Garnett Jr., Theodore S., "Wind Tunnel Survey of the Close-In Airwake Turbulence Behind a DD 963 Destroyer Model," Boeing Vertol Company of Philadelphia, Pennsylvania, December 1979.

APPENDIX A
RUN LOG FOR DD 963 AIRWAKE TURBULENCE TEST
BVWT 242/243

REPRODUCTION OF ORIGINAL DOCUMENT

| PREP | CHK. | APPR | REVISED | DATE | DATE / TIME |
|------|------|------|---------|------|--------------|
| | | | | | 4-18-79 1845 |
| | | | | | 1918 |
| | | | | | 1949 |
| | | | | | 2002 |
| | | | | | 2113 |
| | | | | | 2201 |
| | | | | | 2233 |
| | | | | | 2304 |
| | | | | | 2337 |
| | | | | | 0029 |
| | | | | | 1310 |
| | | | | | 1552 |
| | | | | | 1000 |
| | | | | | 1025 |

| RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | PROG. ARMY | ϕ° | ψ° | SPND KTS | 9 | TP'S | RAKE CODE |
|---------|-----------------------------|----------------|--------------|------------|--------------|--------------|----------|------|------|-----------|
| 1 | DD963 DESTROYER + SPND RAKE | Flow VIZ | - | - | 0 | 1 | 20 | 1.36 | - | - |
| 2 | ✓ | ✓ | - | - | ✓ | 2 | ✓ | ✓ | - | - |
| 3 | ✓ | ✓ | - | - | +15 | 1 | ✓ | ✓ | - | - |
| 4 | ✓ | ✓ | - | - | ✓ | 2 | ✓ | ✓ | - | - |
| 5 | ✓ | ✓ | - | - | -15 | 1 | ✓ | ✓ | - | - |
| 6 | ✓ | ✓ | - | - | ✓ | 2 | ✓ | ✓ | - | - |
| 7 | ✓ + BUBBLE GENERATOR | ✓ BUBBLES | - | - | 0 | 3 | ✓ | ✓ | - | - |
| 8 | ✓ | ✓ AIRWAY CHECK | - | 1 | ✓ | 0 | - | - | - | - |
| 9 | ✓ | ✓ | - | ✓ | ✓ | 4 | 20 | 1.36 | 1 | - |
| 10 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 30 | 0.05 | - | - |

1. NAME STATUS, STAGE PICTURES WHITE PROBE AT VARIOUS LAKEE L MUDRI STATUS

2. ROLLED MULL CONEG. 15° TO 1815

3. FLOW VIZ $\psi = 30^\circ$ ONLY

4. BUBBLE GENERATOR PIX $\psi = 0, 15, 30, 45, 60, 70, 80, 90, 100, 110, 120$

5. BUBBLE GENERATOR PIX $\psi = 0, 15, 30, 45, 60, 70, 80, 90, 100, 110, 120$

6. RUN 10 $\psi = 9^\circ, 35^\circ, 50^\circ$

| NO. | S/N | 116 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 |
|-----|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | B/N | 116 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 |
| 2 | H/S/P/K | 0-5 | 0-11 | 0-7 | 0-23 | 0-19 | 0-19 | 0-19 | 0-19 | 0-19 |
| 3 | S/N | 112 | 116 | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| 4 | H/S/P/K | 26-51 | 28-57 | 28-57 | 28-57 | 28-57 | 28-57 | 28-57 | 28-57 | 28-57 |

SHIPWAKE TEST
DD963 DESTROYER

BVWT
242

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| PREP | CHG. | APPR | REVISED | DATE | DATE / TIME |
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| | | | | | 3-30-79 |
| | | | | | 1638 |
| | | | | | 1705 |
| | | | | | 1716 |
| | | | | | 1924 |
| | | | | | 1946 |
| | | | | | 1956 |
| | | | | | 2017 |
| 31 | | | | | |
| 32 | | | | | |
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| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | | | | | |
| 40 | | | | | |
| 31. WATER DECK GUN REMOVED 32. PROBE AT LOCATION A PROBABLY GWT DURING THIS RUN 33. REPLACED PROBE AT LEG. 46. 34. WATER DECK GUN INSTALLED 35. STARTING WITH RUN 36 | | | | | |
| 36. STARTING WITH RUN 36 37. STARTING WITH RUN 36 38. STARTING WITH RUN 36 39. STARTING WITH RUN 36 40. STARTING WITH RUN 36 | | | | | |
| 41. STARTING WITH RUN 36 42. STARTING WITH RUN 36 43. STARTING WITH RUN 36 44. STARTING WITH RUN 36 45. STARTING WITH RUN 36 46. STARTING WITH RUN 36 47. STARTING WITH RUN 36 48. STARTING WITH RUN 36 49. STARTING WITH RUN 36 50. STARTING WITH RUN 36 | | | | | |
| 51. STARTING WITH RUN 36 52. STARTING WITH RUN 36 53. STARTING WITH RUN 36 54. STARTING WITH RUN 36 55. STARTING WITH RUN 36 56. STARTING WITH RUN 36 57. STARTING WITH RUN 36 58. STARTING WITH RUN 36 59. STARTING WITH RUN 36 60. STARTING WITH RUN 36 | | | | | |
| 61. STARTING WITH RUN 36 62. STARTING WITH RUN 36 63. STARTING WITH RUN 36 64. STARTING WITH RUN 36 65. STARTING WITH RUN 36 66. STARTING WITH RUN 36 67. STARTING WITH RUN 36 68. STARTING WITH RUN 36 69. STARTING WITH RUN 36 70. STARTING WITH RUN 36 | | | | | |
| 71. STARTING WITH RUN 36 72. STARTING WITH RUN 36 73. STARTING WITH RUN 36 74. STARTING WITH RUN 36 75. STARTING WITH RUN 36 76. STARTING WITH RUN 36 77. STARTING WITH RUN 36 78. STARTING WITH RUN 36 79. STARTING WITH RUN 36 80. STARTING WITH RUN 36 | | | | | |
| 81. STARTING WITH RUN 36 82. STARTING WITH RUN 36 83. STARTING WITH RUN 36 84. STARTING WITH RUN 36 85. STARTING WITH RUN 36 86. STARTING WITH RUN 36 87. STARTING WITH RUN 36 88. STARTING WITH RUN 36 89. STARTING WITH RUN 36 90. STARTING WITH RUN 36 | | | | | |
| 91. STARTING WITH RUN 36 92. STARTING WITH RUN 36 93. STARTING WITH RUN 36 94. STARTING WITH RUN 36 95. STARTING WITH RUN 36 96. STARTING WITH RUN 36 97. STARTING WITH RUN 36 98. STARTING WITH RUN 36 99. STARTING WITH RUN 36 100. STARTING WITH RUN 36 | | | | | |

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242

| PREP | CHK. | APP | REVIS | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | PROBE ARRAY | Φ° | ψ° | SPEED K15 | TR | PAKE LOCH | CAL RUMT | DATE / TIME |
|------|------|-----|-------|------|---------|----------------------|-------------|--------------|-------------|-----|----|-----------|----------|-----------|----------|-------------|
| | | | | | 41 | DD963 | ✓ | - | 1 | -15 | 3 | 4-5 | 6.76 REG | 3 | - | 3.30.77 |
| | | | | | 42 | ✓ | ✓ | - | - | - | 3 | 20 | 1.36 | 4 | Yes | 2.11A |
| | | | | | 43 | ✓ | ✓ | - | - | - | 3 | 4-5 | 6.86 | - | - | 2.137 |
| | | | | | 44 | ✓ | ✓ | - | - | - | 3 | 20 | 1.36 | 5 | Yes | 2.144 |
| | | | | | 45 | ✓ | ✓ | - | - | - | 3 | 4-5 | 6.86 | - | - | 2.110 |
| | | | | | 46 | MODEL OUT OF TUNNEL | ✓ | - | - | - | 0 | 20 | 1.36 | 1 | Yes | |
| | | | | | 47 | DD963 | ✓ | - | - | 0 | 3 | - | 1.36 | - | - | 2237 |
| | | | | | 48 | ✓ | ✓ | - | 2 | - | 3 | 20 | 1.36 | - | Yes | |
| | | | | | 49 | ✓ | ✓ | - | - | - | 3 | 35 | 4.4 | - | - | |
| | | | | | 50 | ✓ | ✓ | - | - | - | 3 | 4-5 | 6.86 | - | - | |
| | | | | | 47 | REPEAT OF RUN 7 | | | | | | | | | | |
| | | | | | 48 | REMOVED PAT BECK GUN | | | | | | | | | | |

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BWWT
242

| PREP | CHK. | APPR | REVISED | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | TRUCK | ψ | ϕ | WT. TARE RUN | TRUCK | TP | DATE LOC. | CAL PT. | DATE / TIME |
|------|------|------|---------|------|---------|---------------|-------------|--------------|-------|--------|--------|--------------|-------|------|-----------|---------|--------------------|
| | | | | | 61 | DD 963 | ✓ | - | 2 | 0 | 0 | 20 | 1:36 | REG. | 5 | YES | 4-2-77 |
| | | | | | 62 | ✓ | ✓ | | ✓ | ✓ | ✓ | 35 | 4:16 | ✓ | | - | 1182 |
| | | | | | 63 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6:16 | ✓ | | - | 138 |
| | | | | | 64 | ✓ | ✓ | | ✓ | ✓ | ✓ | | | MGC | ✓ | - | 148 150 1846 |
| | | | | | 65 | ✓ | ✓ | | ✓ | -15 | ✓ | 20 | 1:36 | REG. | ✓ | YES | |
| | | | | | 66 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6:06 | ✓ | | - | 1301 |
| | | | | | 67 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1:36 | ✓ | 4 | YES | 137 |
| | | | | | 68 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6:16 | ✓ | | - | 1382 |
| | | | | | 69 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1:36 | ✓ | 3 | YES | 1324 |
| | | | | | 70 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6:16 | ✓ | | - | 1340 |

8 1/2 IN. DI. DE. TANK 1500
 100 GPM 55' Hts. Tank 140'

| PREP. | CHK. | APPR. | REVIS | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | PODE ARRAY | ϕ | ψ | V | θ | TP | RUNE LOC. | CAL. PT. | DATE / TIME |
|-------|------|-------|-------|------|---------|---------------|-------------|--------------|------------|--------|----------|----|----------|------|-----------|----------|-----------------|
| | | | | | 71 | DD963 | ARE WORK | | 2 | -15 | ψ 5 | 20 | 1.36 | REG. | 2 | YES | 4-27-79 1348 |
| | | | | | 72 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | ✓ | - | 1357 1404 |
| | | | | | 73 | ✓ | ✓ | | ✓ | ✓ | ψ 3 | 20 | 1.36 | ✓ | 1 | YES | 1408 |
| | | | | | 74 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | ✓ | - | 1415 1430 |
| | | | | | 75 | ✓ | ✓ | | ✓ | +15 | ✓ | 20 | 1.36 | ✓ | ✓ | YES | 1450 |
| | | | | | 76 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | ✓ | - | 1456 |
| | | | | | 77 | ✓ | ✓ | | ✓ | ✓ | ψ 5 | 20 | 1.36 | ✓ | 2 | YES | 1500 |
| | | | | | 78 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | ✓ | - | 1507 1512 |
| | | | | | 79 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1.36 | ✓ | 3 | YES | 1516 |
| | | | | | 80 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | ✓ | - | 1523 1530 |

8 RUN 711 15 MAY 79

| PREP | CHK. | APP'R | REVISED | DATE | WT. TARE RUN | WT. PAGE AGENT | THICK LOC | ϕ | ψ | V | TP | OK. PT. | DATE / TIME |
|---|--------|-------|---------|------|--------------|----------------|-----------|--------|----------|----|------|---------|-------------|
| | | | | | | | | | | | | | 4-3-79 |
| 121 | 3D 963 | | | | | 3 | 5 | 0 | Δ | 20 | REC | YES | 1543 |
| 122 | | | | | | | | | | 45 | | | 1550 |
| 123 | | | | | | | | | Δ | | 1082 | | 1607 |
| | | | | | | B/W T - 243 | | | | | | | |
| | | | | | | | | | | | | | 4/21/79 |
| 124 | | | | | AIR WASH | 3 | 5 | +15 | Δ | 20 | REC | YES | 1639 |
| 125 | | | | | | | 4 | | Δ | | | | 1657 |
| 126 | | | | | | | 3 | | Δ | | | | 1703 |
| 127 | | | | | | | 2 | | Δ | | | | 1718 |
| | | | | | | | | | | | | | 1732 |
| | | | | | | | | | | | | | 1758 |
| | | | | | | | | | | | | | 1750 |
| <p>125 Δ: $\psi = 0-90-90 = 90, -120$.</p> | | | | | | | | | | | | | |

BW T
242,
243.

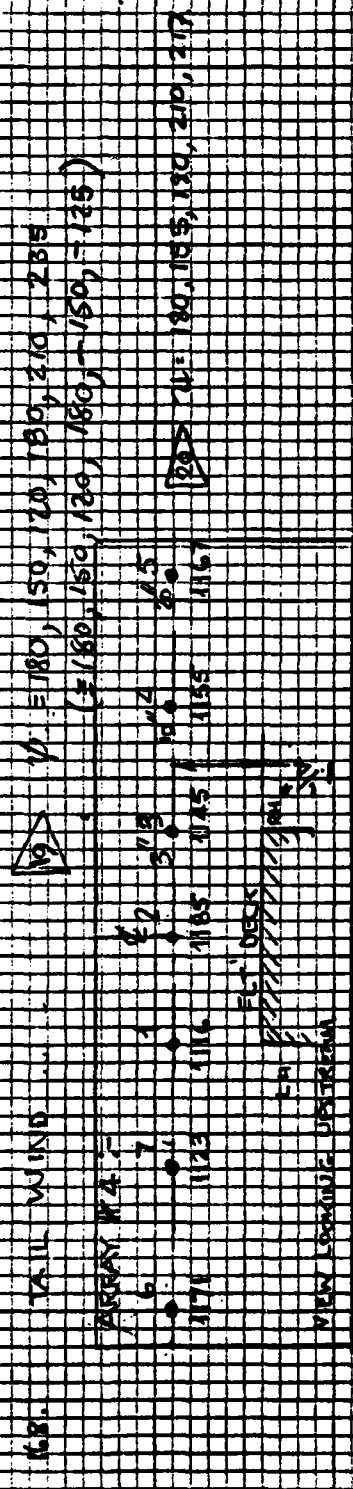
| PREP | CHK. | APPR | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | Press APPR LOGN | ϕ° | ψ° | V KGS | η REF | TP | CM. PT. | DATE / TIME |
|------|------|------|---------|---------------|-------------|--------------|-----------------|--------------|--------------|-------|------------|-----|---------|----------------------|
| | | | 134 | DD 963 | CLOSE IN | | 1 | 0 | 15 | 20 | 1.36 | REG | YES | 4/3/79 2207 |
| | | | 135 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 2220 |
| | | | 136 | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | 10800 | ✓ | - | 2233 2236 |
| | | | 137 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1.36 | REG | YES | 2300 |
| | | | 138 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 2334 |
| | | | 139 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1.36 | ✓ | YES | 2345 |
| | | | 140 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 0002 |
| | | | 141 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1.36 | ✓ | YES | 0014 |
| | | | 142 | ✓ | ✓ | | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 0622 |
| | | | 143 | ✓ | ✓ | | ✓ | ✓ | ✓ | 20 | 1.36 | ✓ | - | 0817 0805 0811 |

| REVISION | DATE | DESCRIPTION |
|----------|------|--|
| 1 | | BEGIN CLOSE-IN TEST PHASE |
| 2 | | AS FOLLOWS |
| 3 | | 5M 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 |

| PREP | CHK. | APP'D | REVISED | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | MOORE AWAY LAC. | Φ | ψ | V RTD | g MF | TP | CAL PT. | DATE / TIME |
|------|------|-------|---------|------|---------|---------------|-------------|--------------|-----------------|---|-----|-------|------|-----|---------|-------------|
| | | | | | 154 | DD 963 | CLOSE IN | - | 2 | 3 | +15 | 45 | 6.78 | RFC | - | 4.4.77 |
| | | | | | 155 | ✓ | ✓ | - | ✓ | 4 | ✓ | 20 | 1.36 | ✓ | YES | 1124 |
| | | | | | 156 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 1137 |
| | | | | | 157 | ✓ | ✓ | - | ✓ | 0 | ✓ | 20 | 1.36 | ✓ | YES | 1159 |
| | | | | | 158 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 1146 |
| | | | | | 159 | ✓ | ✓ | - | ✓ | 5 | ✓ | 20 | 1.36 | ✓ | YES | 1154 |
| | | | | | 160 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 1209 |
| | | | | | 161 | ✓ | ✓ | - | ✓ | 3 | ✓ | 20 | 1.36 | ✓ | YES | 1310 |
| | | | | | 162 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.86 | ✓ | - | 1323 |
| | | | | | 163 | ✓ | ✓ | - | ✓ | 2 | ✓ | 20 | 1.36 | ✓ | - | 1354 |
| | | | | | | | | | | | | | | | | 1357 |
| | | | | | | | | | | | | | | | | MID |
| | | | | | | | | | | | | | | | | 1421 |
| | | | | | | | | | | | | | | | | 1425 |

161 - 163 HI - STARD DATA - STATED
 IS RAIL - WAS ACTUALLY
 P. LOW AS ABOVE.

| PREP | CHK. | DATE | REVISED | DATE | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | TRABE AWAY | TRABE LOC. | ϕ° | ψ° | V KTS | q PIF | TP | CMAL Pt. | DATE / TIME |
|------|------|------|---------|------|---------------|-------------|--------------|------------|------------|--------------|--------------|-------|-------|-----|----------|-------------|
| | | | | | | CLOSE IN | - | 2 | 2 | 0 | 17 | 45 | 6.86 | REG | - | 4-4-79 |
| | | | | | 3D 963 | | | | | | | | | | | 1439 |
| | | | | | | | | | | | | | | | | 1441 |
| | | | | | | | | | | | | | | | | 1453 |
| | | | | | | | | | | | | | | | | 1503 |
| | | | | | | | | | | | | | | | | 1504 |
| | | | | | | | | | | | | | | | | 1511 |
| | | | | | | | | | | | | | | | | 4-5-79 |
| | | | | | | TAIL WIND | - | 4 | 1C | 0 | 19 | 20 | 1.36 | REG | YES | 0857 |
| | | | | | | | | | | | | | | | | 0909 |
| | | | | | | | | | | | | | | | | 0933 |
| | | | | | | | | | | | | | | | | 0945 |
| | | | | | | | | | | | | | | | | 0953 |
| 164 | | | | | | | | | | | | | | | | |
| 165 | | | | | | | | | | | | | | | | |
| 166 | | | | | | | | | | | | | | | | |
| 167 | | | | | | | | | | | | | | | | |
| 168 | | | | | | | | | | | | | | | | |
| 169 | | | | | | | | | | | | | | | | |
| 170 | | | | | | | | | | | | | | | | |
| 171 | | | | | | | | | | | | | | | | |
| 172 | | | | | | | | | | | | | | | | |



REFERS TO MS TUBE CONCENTRATION IN S
IN TABLE I AND II

| PREP. | CHK. | APPR | REVISED | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | PROBE AGGY LOC. | ϕ° | ψ | V KIS | q P&F | TP | CAL PT | DATE / TIME |
|-------|------|------|---------|------|---------|---------------|-------------|--------------|-----------------|--------------|-------------|-------|-------|-----|--------|----------------------|
| | | | | | 173 | DD 963 | TAIL WIND | - | 4 3C | 0' | \triangle | 45 | 6.86 | REG | - | 4-S-79 1002 |
| | | | | | 174 | ✓ | ✓ | - | ✓ 4C | ✓ | ✓ | 20 | 1.36 | ✓ | - | 1009 |
| | | | | | 175 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.16 | ✓ | - | 1017 1022 1017 |
| | | | | | 176 | ✓ | ✓ | - | ✓ 5C | ✓ | ✓ | 20 | 1.36 | ✓ | - | 1032 |
| | | | | | 177 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.16 | ✓ | YES | 1040 |
| | | | | | 178 | ✓ | ✓ | - | ✓ 3.5 2A, 5C | ✓ | ✓ | 20 | 1.36 | ✓ | YES | 1100 |
| | | | | | 179 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.16 | ✓ | - | 1112 |
| | | | | | 180 | ✓ | ✓ | - | ✓ 3A | ✓ | ✓ | 20 | 1.36 | ✓ | - | 1123 |
| | | | | | 181 | ✓ | ✓ | - | ✓ | ✓ | ✓ | 45 | 6.36 | ✓ | - | 1129 1133 |
| | | | | | 182 | ✓ | ✓ | - | ✓ 4C | ✓ | ✓ | 20 | 1.36 | ✓ | - | 1137 |

RUN 178 APPRAY 3, 5 AS APPRAY 4 @ HANGAR DECK HEIGHT (1.875 METER TRAIL 4)
 - 3.5' ABOVE LANDING DECK

* REFERRED TO AS PERM CONVEYATION 2
 IN TABLES 1 AND 2

| PREP | CHK. | APPR | REVIS | DATE | RUN NO. | CONFIGURATION | TYPE OF RUN | WT. TARE RUN | PROBE AGENT | ROBE LOC. | Φ° | ψ | V KIS | q PSF | TP | CAL. PT. | DATE / TIME |
|------|------|------|-------|------|---------|---------------|-------------|--------------|-------------|-----------|-----|----|-------|-------|-----|----------|-------------|
| | | | | | 193 | DD 963 | TAIL WIND | - | 3,5 | 3A | -15 | 20 | 1.36 | REG | Yes | 4/5/79 | 1710 |
| | | | | | 194 | ✓ | ✓ | - | ✓ | 2A | ✓ | ✓ | ✓ | ✓ | - | | 1721 |
| | | | | | 195 | ✓ | ✓ | - | ✓ | 1A | ✓ | ✓ | ✓ | ✓ | - | | 1735 |
| | | | | | 196 | ✓ | ✓ | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | | 1748 |
| | | | | | 197 | ✓ | ✓ | - | ✓ | 2A | ✓ | ✓ | ✓ | ✓ | - | | 1759 |
| | | | | | 198 | ✓ | ✓ | - | ✓ | 3A | ✓ | ✓ | ✓ | ✓ | - | | 1811 |
| | | | | | 199 | ✓ | ✓ | - | ✓ | 3A +15 | ✓ | ✓ | ✓ | ✓ | Yes | | 1820 |
| | | | | | 200 | ✓ | ✓ | - | ✓ | 2A | ✓ | ✓ | ✓ | ✓ | - | | 1846 |
| | | | | | 201 | ✓ | ✓ | - | ✓ | 1A | ✓ | ✓ | ✓ | ✓ | - | | 1856 |
| | | | | | 202 | ✓ | ✓ | - | ✓ | ✓ | 0 | ✓ | 20 | ✓ | Yes | | 1904 |
| | | | | | | | | | | | | | | | | | 1917 |
| | | | | | | | | | | | | | | | | | 1921 |
| | | | | | | | | | | | | | | | | | 1943 |
| | | | | | | | | | | | | | | | | | 1950 |
| | | | | | | | | | | | | | | | | | 2003 |
| | | | | | | | | | | | | | | | | | 2010 |
| | | | | | | | | | | | | | | | | | 2019 |
| | | | | | | | | | | | | | | | | | 2127 |

196. ARRAY AS ARRAY 4 (RUN 191) BUT AT 6.1 P ABOVE LANDING SECT

REFER TO AS HIGH COLLECTION IN TABLES 1 AND 2

BVWT
243

APPENDIX B

STEADY STATE AERODYNAMIC VELOCITY
DISTRIBUTION IN THE WAKE OF A DD 963
SPRUANCE CLASS DESTROYER -
CALCULATED MEAN AND STANDARD DEVIATION DATA

Time history data recorded during the DD 963 Aerodynamic Airwake Test was processed to derive steady-state Mean X, Y, and Z velocity components for each test point, and the Standard Deviation about the Mean. Standard Deviation was computed after first calculating Mean and Root Mean Square values for each 0.8 or 10.4 second segment of data, and then applying the formula

$$\sigma = \sqrt{\sum \frac{X^2}{N} - \left(\frac{\sum X}{N}\right)^2}$$

or

$$\text{Standard Deviation} = \sqrt{(\text{RMS})^2 - (\text{Mean})^2}$$

In the tabular data listings presented in this appendix, run number is given first (corresponding to the left hand column in the Appendix A Run Log), followed by nominal free stream tunnel velocity (expressed in meters per second), and ship roll angle. Following these parameters are the test point designation, ship yaw angle, and probe number.

Probe locations corresponding to the probe number are defined in the next three columns, using full scale dimensions (meters) relative to the centerline of the helicopter flight platform bullseye. Plus "X" values are aft of the pad ζ with plus "Y" to the left, and plus "Z" above the landing pad deck. Probe array locations are also described in the Appendix A Run Log, and in Section 5.0.

Mean Vx, Vy and Vz data columns represent the average longitudinal, lateral, and vertical velocity components (expressed in meters per second) at each probe location for all test points. Sign convention is as follows:

- Positive (+) Vx rearward
- Positive (+) Vy to the left looking forward
- Positive (+) Vz upward

Data listed in the last three columns represent the Standard Deviation about each of the mean velocity components.

The tabulated test results presented in this appendix have been edited to remove duplicate runs and repeat test points (such as the last test point in each data sweep where the ship was returned to zero degrees yaw angle to check data repeatability).

In addition to this editing process, Table 3 is presented before the listings to indicate cases where probes were inoperative (but may still appear in the listings - note that probes 4 and 6 occasionally fall into this category). The table also points out cases where test conditions did not agree with those outlined in Table 1 in Section 5.

REMOVED FROM FILE - NOT RECORDED

TABLE 3
EXCEPTIONS OR NOTES RELATIVE TO
TEST CONDITIONS LISTED IN TABLE 1
AND APPENDIX B DATA LISTING

| <u>RUN(S)</u> | |
|---------------|---|
| 9 - 58 | No data for Probe 8 due to sensor malfunction |
| 10 | Yaw angles are 9° and 35° instead of 0° and 30° |
| 12 | Not a 10 sec run |
| 34 | Probe 4 malfunction at yaw angle 50° |
| 35 & 58 | Probe 4 not available in "hi-speed" off-line data listing in appendix ("on-line" average data used in some report plots) |
| 58 | Yaw angle 44° used instead of 30° |
| 61 | No data at yaw angle 150° |
| 65 | Yaw angle 140° also used |
| 72 | No data at yaw angle 90° |
| 94 | This was a 35 kts run |
| 99 | Yaw angle - 150° also used |
| 101 | Run aborted - no "hi-speed" off-line data available |
| 103 & 104 | No "hi-speed" off-line data available |
| 107 | Yaw angle -150° also used |
| 110 | Yaw angle -40° used instead of -50° |
| 112 | This was a 35 kts run |
| 133 | No data at yaw angle -50° |
| 135 | "Hi-speed" data shows two sets of data for probe 1 and 2 - ignore first set. |
| 142 | Yaw angle +35° used instead of +30° |
| 143 & 144 | Yaw angles + 20° also used |
| 148 - 167 | Probe 10 malfunction; no data available |
| 150 | "Hi-speed" data tacked on to Run 149 data (see Appendix data listing) |
| 153 | No negative yaw angles used |
| 160 | No negative yaw angles used |
| 161 - 163 | "Hi-speed" data states + 15° roll - roll was actually 0° |
| 168 - 208 | Probe 6 malfunction; no data available |
| 168 & 169 | Yaw angle 155° used instead of 150° Yaw angle 217° also used ("hi-speed" off-line data states 220°) |
| 170 & 171 | Yaw angle 235° used instead of 240° |
| 177 | "Hi-speed" data tacked on to Run 176 data (see Appendix data listing) |
| 186 & 187 | Yaw angle 125° used instead of 120° Yaw angle 230° used instead of 240° (Run 186 - "hi-speed" data states 240°) |
| 188 - 189 | Yaw angle 155° used instead of 150° |
| 190 | Yaw angle 220° used instead of 240° |

Runs 1 - 8 Flow visualization (no computer data)

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|------|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 9 | 10.2 | 0.0 | 1 | 0.0 | 1 | 0.00 | 0.60 | 6.22 | 0.21932E 01 | 0.90000E 01 | 0.36440E 00 | 0.17146E 00 | 0.14972E 01 | 0.16998E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.23295E 01 | 0.71627E 00 | 0.32228E 00 | 0.12781E 00 | 0.11311E 00 | 0.10717E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.23729E 01 | 0.71801E 00 | 0.31528E 00 | 0.12330E 00 | 0.11311E 00 | 0.11787E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.29844E 01 | 0.71495E 00 | 0.31228E 00 | 0.12330E 00 | 0.11311E 00 | 0.03380E 01 |
| | | | | | | 0.00 | 20.62 | 2.54 | 0.29657E 01 | 0.92805E 00 | 0.31081E 00 | 0.12330E 00 | 0.11311E 00 | 0.03380E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.26688E 01 | 0.29000E 00 | 0.31081E 00 | 0.12330E 00 | 0.11311E 00 | 0.03380E 01 |
| | | | | | | 0.00 | 20.64 | 2.54 | 0.21331E 01 | 0.23399E 00 | 0.32613E 00 | 0.12330E 00 | 0.11311E 00 | 0.04209E 01 |
| 2 | 30.0 | | | | | 0.00 | 0.60 | 6.22 | 0.48127E 01 | 0.47031E 00 | 0.28369E 00 | 0.15787E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.48317E 01 | 0.47511E 00 | 0.26704E 00 | 0.15787E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.48293E 01 | 0.47511E 00 | 0.26704E 00 | 0.15787E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.52323E 01 | 0.23593E 00 | 0.33693E 00 | 0.17088E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 20.62 | 2.54 | 0.52323E 01 | 0.23593E 00 | 0.33693E 00 | 0.17088E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.48210E 01 | 0.48210E 00 | 0.28797E 00 | 0.15787E 00 | 0.14930E 01 | 0.45747E 01 |
| | | | | | | 0.00 | 20.64 | 2.54 | 0.40483E 01 | 0.10483E 00 | 0.28797E 00 | 0.15787E 00 | 0.14930E 01 | 0.45747E 01 |
| 3 | 50.0 | | | | | 0.00 | 0.60 | 6.22 | 0.92925E 01 | 0.17137E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.92925E 01 | 0.17137E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 0.60 | 6.22 | 0.92925E 01 | 0.17137E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.33365E 01 | 0.19220E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 20.64 | 2.54 | 0.33365E 01 | 0.19220E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 20.32 | 2.54 | 0.33365E 01 | 0.19220E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |
| | | | | | | 0.00 | 20.64 | 2.54 | 0.33365E 01 | 0.19220E 00 | 0.32982E 00 | 0.23522E 00 | 0.28797E 00 | 0.49285E 01 |

0VMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-----|-------|------|-------|------|-------|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| 10 | 15.7 | 0.0 | 1 | 9.0 | 1 | 0.00 | -6.60 | 6.22 | 0.398 | 1E | 0.592 | 46E | 0.228 | 3E | 0.250 | 21E | 0.211 | 11E | 0.266 | 81E |
| | | | | | | 0.00 | 0.00 | 6.22 | 0.320 | 1E | 0.505 | 6E | 0.454 | 02E | 0.146 | 41E | 0.194 | 0E | 0.346 | 85E |
| | | | | | | 0.00 | 6.62 | 6.66 | 0.273 | 5E | 0.172 | 0E | 0.490 | 1E | 0.455 | 0E | 0.592 | 3E | 0.817 | 33E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.309 | 0E | 0.847 | 3E | 0.995 | 1E | 0.450 | 7E | 0.507 | 6E | 0.263 | 77E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.319 | 3E | 0.970 | 4E | 0.882 | 1E | 0.309 | 23E | 0.393 | 9E | 0.185 | 36E |
| | | | | | | 0.00 | 0.00 | 2.54 | 0.126 | 6E | 0.224 | 7E | 0.316 | 1E | 0.518 | 03E | 0.518 | 03E | 0.185 | 36E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.115 | 0E | 0.196 | 0E | 0.982 | 01E | 0.982 | 01E | 0.774 | 37E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.273 | 5E | 0.127 | 1E | 0.262 | 2E | 0.321 | 45E | 0.321 | 45E | 0.229 | 21E |
| | | | | | | 0.00 | 40.62 | 6.66 | 0.309 | 0E | 0.159 | 1E | 0.447 | 1E | 0.400 | 00E | 0.400 | 00E | 0.255 | 25E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.744 | 3E | 0.725 | 2E | 0.285 | 10E | 0.285 | 10E | 0.147 | 14E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.309 | 0E | 0.112 | 0E | 0.338 | 1E | 0.323 | 57E | 0.323 | 57E | 0.147 | 14E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.126 | 6E | 0.132 | 9E | 0.338 | 1E | 0.245 | 70E | 0.245 | 70E | 0.147 | 14E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.192 | 5E | 0.188 | 7E | 0.124 | 71E | 0.124 | 71E | 0.132 | 32E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.273 | 5E | 0.135 | 0E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.126 | 6E | 0.132 | 9E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.192 | 5E | 0.188 | 7E | 0.124 | 71E | 0.124 | 71E | 0.132 | 32E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.273 | 5E | 0.135 | 0E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.126 | 6E | 0.132 | 9E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.192 | 5E | 0.188 | 7E | 0.124 | 71E | 0.124 | 71E | 0.132 | 32E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.273 | 5E | 0.135 | 0E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.126 | 6E | 0.132 | 9E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.192 | 5E | 0.188 | 7E | 0.124 | 71E | 0.124 | 71E | 0.132 | 32E |
| | | | | | | 0.00 | 20.62 | 6.66 | 0.273 | 5E | 0.135 | 0E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 40.62 | 2.54 | 0.126 | 6E | 0.132 | 9E | 0.197 | 7E | 0.247 | 73E | 0.247 | 73E | 0.132 | 32E |
| | | | | | | 0.00 | 0.00 | 6.66 | 0.233 | 0E | 0.192 | 5E | 0.188 | 7E | 0.124 | 71E | 0.124 | 71E | 0.132 | 32E |

BVMT 242/243 SHIP MAKE TURBULENCE TEST

| DIRN VEL | ROLL | FP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.O. VX | S.O. VY | S.O. VZ |
|----------|------|----|-----|-------|-----|-----|-----|---------|---------|---------|---------|---------|---------|
| 12 22.9 | 0.0 | 1 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 0.085 | 0.252 | 0.069 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.070 | 0.232 | 0.130 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.100 | 0.242 | 0.093 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.200 | 0.197 | 0.093 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.093 | 0.196 | 0.093 | 0.000 | 0.000 | 0.000 |
| | | | | 10 | 0.0 | 0.0 | 0.0 | 0.187 | 0.196 | 0.113 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.157 | 0.239 | 0.070 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.070 | 0.215 | 0.088 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.070 | 0.215 | 0.088 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.120 | 0.230 | 0.105 | 0.000 | 0.000 | 0.000 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.120 | 0.230 | 0.105 | 0.000 | 0.000 | 0.000 |
| | | | | 10 | 0.0 | 0.0 | 0.0 | 0.187 | 0.239 | 0.070 | 0.000 | 0.000 | 0.000 |

BVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-------|------|------|---------|---------|---------|---------|---------|---------|
| 14 15.6 | 0.0 | 1 | 23.88 | 6.60 | 6.22 | 0.6807 | 0.1308 | 0.5559 | 0.2117 | 0.1970 | 0.2126 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 2 | 30.0 | 1 | 23.88 | 6.60 | 6.22 | 0.2287 | 0.1970 | 0.3624 | 0.2790 | 0.1970 | 0.2589 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 3 | 30.0 | 1 | 23.88 | 6.60 | 6.22 | 0.3210 | 0.1564 | 0.7249 | 0.3632 | 0.3589 | 0.2749 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| 4 | 90.0 | 1 | 23.88 | 6.60 | 6.22 | 0.1926 | 0.0894 | 0.7038 | 0.3050 | 0.1970 | 0.2709 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| 2UN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|-------|------|---------|---------|---------|---------|---------|---------|
| 16 | 10.3 | 0.0 | 3 | 0.0 | 1 | 43.16 | 0.00 | 6.23 | 0.4564E | 0.1046E | 0.8674E | 0.4049E | 0.1175E | 0.1561E |
| | | | | | 2 | 43.16 | 0.00 | 6.23 | 0.4023E | 0.0749E | 0.5910E | 0.3269E | 0.1194E | 0.1527E |
| | | | | | 3 | 43.16 | 0.00 | 6.23 | 0.4023E | 0.0749E | 0.5910E | 0.3269E | 0.1194E | 0.1527E |
| | | | | | 4 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 5 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 6 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 7 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 8 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 9 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 10 | 43.16 | 20.32 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 1 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 2 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 3 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 4 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 5 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 6 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 7 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 8 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 9 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 10 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 1 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 2 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 3 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 4 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 5 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 6 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 7 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 8 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 9 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |
| | | | | | 10 | 43.16 | 0.00 | 6.23 | 0.4101E | 0.0770E | 0.5920E | 0.3355E | 0.1244E | 0.1549E |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| PIN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-----|------|-----|---------|---------|---------|---------|---------|---------|
| 17 | 15.9 | 0.0 | 1 | 0.0 | 1 | 3.1 | 6.00 | 2.2 | 1.73 | 3.63 | 2.33 | 1.55 | 1.70 | 1.44 |
| | | | | | | 4.3 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| 2 | 30.0 | 2 | 3 | 0.0 | 2 | 3.1 | 6.00 | 6.6 | 1.73 | 3.63 | 2.33 | 1.55 | 1.70 | 1.44 |
| | | | | | | 4.3 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| 3 | 50.0 | 3 | 1 | 0.0 | 2 | 3.1 | 6.00 | 6.6 | 1.73 | 3.63 | 2.33 | 1.55 | 1.70 | 1.44 |
| | | | | | | 4.3 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| 4 | 90.0 | 4 | 1 | 0.0 | 2 | 3.1 | 6.00 | 6.6 | 1.73 | 3.63 | 2.33 | 1.55 | 1.70 | 1.44 |
| | | | | | | 4.3 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |
| | | | | | | 4.4 | 6.00 | 6.6 | 1.90 | 3.20 | 2.33 | 1.20 | 1.43 | 1.43 |

BWMT 242/243 SHIP WAKE TURBULENCE TEST

| 3UN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|----|---|--------|---------|---------|---------|---------|---------|---------|
| 19 | 10.5 | 0.0 | 2 | 0.0 | 1 | 3 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 |
| 20 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 21 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 22 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 23 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 24 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 25 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 26 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 27 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 28 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 29 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 30 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 31 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 32 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 33 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 34 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 35 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 36 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 37 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 38 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 39 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 40 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 41 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 42 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 43 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 44 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 45 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 46 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 47 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 48 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 49 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 50 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 51 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 52 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 53 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 54 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 55 | 10.5 | 0.0 | 2 | 0.0 | 1 | 6 | 0.3593 | 0.3613 | 0.3237 | 0.1126 | 0.0922 | 0.0662 | |
| 56 | 10.5 | 0.0 | 2 | 0.0 | 3 | 6 | 0.3543 | 0.3663 | 0.2015 | 0.1146 | 0.0944 | 0.0747 | |
| 57 | 10.5 | 0.0 | 2 | 0.0 | 5 | 6 | 0.3795 | 0.4863 | 0.4492 | 0.1034 | 0.1102 | 0.1333 | |
| 58 | 10.5 | 0.0 | 2 | 0.0 | 7 | 6 | 0.4282 | 0.4831 | 0.4192 | 0.0970 | 0.1058 | 0.1355 | |
| 59 | 10.5 | 0.0 | 2 | 0.0 | 9 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |
| 60 | 10.5 | 0.0 | 2 | 0.0 | 10 | 6 | 0.4703 | 0.3330 | 0.4163 | 0.0963 | 0.1051 | 0.1350 | |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | |
|---------|-------|-----|-----------|-----|--|--|--|--|--|--|--|--|--|
| 21 | 22.7 | 0.0 | 1 | 0.0 | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 |
| 2 | 30.0 | | | | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 |
| 3 | 50.0 | | | | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 |
| 4 | 90.0 | | | | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 |
| 5 | 120.0 | | | | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | 0.000N+0.0N+ 0.000N+0.0N+ 24.000N+0.0N+ 24.000N+0.0N+ | NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 NNNNN+4+4 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 | 0.00000000 0.00000000 0.00000000 0.00000000 |

0VHT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|------|----|-----|-------|-------|-------|------|---------|---------|---------|---------|---------|---------|
| 22 | 10-Z | 0-0 | Z | 0-0 | Z | 70-69 | -0-60 | 6-00 | 0-7210 | 0-5220 | 0-4323 | 0-7992 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 0-00 | 6-00 | 0-6140 | 0-3060 | 0-0131 | 0-8176 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-7150 | 0-3170 | 0-0131 | 0-9060 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-8300 | 0-3320 | 0-0131 | 0-9950 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-9100 | 0-3470 | 0-0131 | 0-9950 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9700 | 0-3620 | 0-0131 | 0-9950 | 0-7930 | 0-5918 |
| 3 | 30-0 | | | | | 70-69 | 0-00 | 6-00 | 0-5700 | 0-2700 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-5970 | 0-2850 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-6120 | 0-3000 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-4940 | 0-2150 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-8150 | 0-3300 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| 4 | 50-0 | | | | | 70-69 | 0-00 | 6-00 | 0-5500 | 0-2500 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-5650 | 0-2650 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-5800 | 0-2800 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-4600 | 0-1600 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-8210 | 0-3200 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| 5 | 90-0 | | | | | 70-69 | 0-00 | 6-00 | 0-6900 | 0-2900 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-7050 | 0-3050 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-7200 | 0-3200 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-6000 | 0-2000 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9470 | 0-3400 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| 6 | 120-0 | | | | | 70-69 | 0-00 | 6-00 | 0-7800 | 0-3000 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-7950 | 0-3150 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-8100 | 0-3300 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-6900 | 0-2300 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9470 | 0-3400 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| 7 | 150-0 | | | | | 70-69 | 0-00 | 6-00 | 0-8700 | 0-3200 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-8850 | 0-3350 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9000 | 0-3500 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-7800 | 0-2800 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9470 | 0-3400 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| 8 | 180-0 | | | | | 70-69 | 0-00 | 6-00 | 0-9600 | 0-3400 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-9750 | 0-3550 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9900 | 0-3700 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 20-62 | 6-00 | 0-8700 | 0-2700 | 0-0131 | 0-7100 | 0-7930 | 0-5918 |
| | | | | | | 70-69 | 40-64 | 6-00 | 0-9470 | 0-3400 | 0-0131 | 0-8640 | 0-7930 | 0-5918 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| 91M VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-------|-----|-------|-------|-------|-----|----------|----------|----------|----------|----------|----------|
| 24 22.3 | 0.0 | 1 | 0.0 | 1 | 70.69 | 0.00 | 6.6 | 0.12374E | 0.15481E | 0.12404E | 0.16973E | 0.23001E | 0.18396E |
| | | 3 | | | 70.69 | 0.00 | 6.6 | 0.14420E | 0.18477E | 0.13074E | 0.15650E | 0.23072E | 0.14978E |
| | | 4 | | | 70.69 | 20.00 | 6.6 | 0.14665E | 0.08491E | 0.37076E | 0.16681E | 0.26052E | 0.16904E |
| | | 5 | | | 70.69 | 40.00 | 6.6 | 0.20144E | 0.05277E | 0.51088E | 0.20160E | 0.54462E | 0.27733E |
| | | 9 | | | 70.69 | 60.00 | 6.6 | 0.10151E | 0.10157E | 0.37308E | 0.15699E | 0.21251E | 0.17677E |
| | | 10 | | | 70.69 | 80.00 | 6.6 | 0.11955E | 0.11955E | 0.43376E | 0.62229E | 0.62229E | 0.79024E |
| | 2 | 30.0 | | | 70.69 | 0.00 | 6.6 | 0.29816E | 0.29816E | 0.14133E | 0.29816E | 0.29816E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.29727E | 0.29727E | 0.14133E | 0.29727E | 0.29727E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.29727E | 0.29727E | 0.14133E | 0.29727E | 0.29727E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.29727E | 0.29727E | 0.14133E | 0.29727E | 0.29727E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.29727E | 0.29727E | 0.14133E | 0.29727E | 0.29727E | 0.14133E |
| | 3 | 50.0 | | | 70.69 | 0.00 | 6.6 | 0.42969E | 0.42969E | 0.14133E | 0.42969E | 0.42969E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | 4 | 50.0 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | 5 | 90.0 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | 6 | 120.0 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | 7 | 150.0 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | 8 | 180.0 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 2 | | | 70.69 | 20.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 3 | | | 70.69 | 40.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 4 | | | 70.69 | 60.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 5 | | | 70.69 | 80.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |
| | | 10 | | | 70.69 | 0.00 | 6.6 | 0.33270E | 0.33270E | 0.14133E | 0.33270E | 0.33270E | 0.14133E |

8VHT 242/243 SHIP MAKE TURBULENCE TEST

| 3UM VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|--------|------|------|---------|---------|---------|---------|---------|---------|
| 25 | 22.4 | 0.0 | 1 | 0.0 | 170.69 | 0.60 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |
| | | | | | 170.69 | 0.00 | 6.23 | 0.1738 | 0.1963 | 0.1300 | 0.2503 | 0.2503 | 0.1897 |

8VNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----|-------|---|--------|------|----------|---------|----------|---------|----------|----------|
| 26 | 10.6 | 15.0 | 2 | 0.0 | 1 | 170.69 | 6.22 | 0.8291E | 0.3022E | 0.39875E | 0.7230E | 0.69504E | 0.70715E |
| | | | | | | 170.69 | 6.22 | 0.7230E | 0.3151E | 0.3528E | 0.8528E | 0.81392E | 0.66364E |
| | | | | | | 170.69 | 6.22 | 0.69504E | 0.3022E | 0.3528E | 0.8528E | 0.81392E | 0.66364E |
| | | | | | | 170.69 | 6.22 | 0.66364E | 0.3151E | 0.3528E | 0.8528E | 0.81392E | 0.66364E |
| | | | | | | 170.69 | 6.22 | 0.63224E | 0.3280E | 0.3528E | 0.8528E | 0.81392E | 0.63224E |
| | | | | | | 170.69 | 6.22 | 0.60084E | 0.3409E | 0.3528E | 0.8528E | 0.81392E | 0.60084E |
| | | | | | | 170.69 | 6.22 | 0.56944E | 0.3538E | 0.3528E | 0.8528E | 0.81392E | 0.56944E |
| | | | | | | 170.69 | 6.22 | 0.53804E | 0.3667E | 0.3528E | 0.8528E | 0.81392E | 0.53804E |
| | | | | | | 170.69 | 6.22 | 0.50664E | 0.3796E | 0.3528E | 0.8528E | 0.81392E | 0.50664E |
| | | | | | | 170.69 | 6.22 | 0.47524E | 0.3925E | 0.3528E | 0.8528E | 0.81392E | 0.47524E |
| | | | | | | 170.69 | 6.22 | 0.44384E | 0.4054E | 0.3528E | 0.8528E | 0.81392E | 0.44384E |
| | | | | | | 170.69 | 6.22 | 0.41244E | 0.4183E | 0.3528E | 0.8528E | 0.81392E | 0.41244E |
| | | | | | | 170.69 | 6.22 | 0.38104E | 0.4312E | 0.3528E | 0.8528E | 0.81392E | 0.38104E |
| | | | | | | 170.69 | 6.22 | 0.34964E | 0.4441E | 0.3528E | 0.8528E | 0.81392E | 0.34964E |
| | | | | | | 170.69 | 6.22 | 0.31824E | 0.4570E | 0.3528E | 0.8528E | 0.81392E | 0.31824E |
| | | | | | | 170.69 | 6.22 | 0.28684E | 0.4699E | 0.3528E | 0.8528E | 0.81392E | 0.28684E |
| | | | | | | 170.69 | 6.22 | 0.25544E | 0.4828E | 0.3528E | 0.8528E | 0.81392E | 0.25544E |
| | | | | | | 170.69 | 6.22 | 0.22404E | 0.4957E | 0.3528E | 0.8528E | 0.81392E | 0.22404E |
| | | | | | | 170.69 | 6.22 | 0.19264E | 0.5086E | 0.3528E | 0.8528E | 0.81392E | 0.19264E |
| | | | | | | 170.69 | 6.22 | 0.16124E | 0.5215E | 0.3528E | 0.8528E | 0.81392E | 0.16124E |
| | | | | | | 170.69 | 6.22 | 0.12984E | 0.5344E | 0.3528E | 0.8528E | 0.81392E | 0.12984E |
| | | | | | | 170.69 | 6.22 | 0.09844E | 0.5473E | 0.3528E | 0.8528E | 0.81392E | 0.09844E |
| | | | | | | 170.69 | 6.22 | 0.06704E | 0.5602E | 0.3528E | 0.8528E | 0.81392E | 0.06704E |
| | | | | | | 170.69 | 6.22 | 0.03564E | 0.5731E | 0.3528E | 0.8528E | 0.81392E | 0.03564E |
| | | | | | | 170.69 | 6.22 | 0.00424E | 0.5860E | 0.3528E | 0.8528E | 0.81392E | 0.00424E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.5989E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6118E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6247E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6376E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6505E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6634E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6763E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.6892E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7021E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7150E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7279E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7408E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7537E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7666E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7795E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.7924E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8053E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8182E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8311E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8440E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8569E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8698E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8827E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.8956E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9085E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9214E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9343E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9472E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9601E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9730E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9859E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 0.9988E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0117E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0246E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0375E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0504E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0633E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0762E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.0891E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1020E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1149E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1278E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1407E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1536E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1665E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1794E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.1923E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2052E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2181E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2310E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2439E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2568E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2697E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2826E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.2955E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3084E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3213E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3342E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3471E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3600E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3729E | 0.3528E | 0.8528E | 0.81392E | 0.00000E |
| | | | | | | 170.69 | 6.22 | 0.00000E | 1.3858E | 0.3528E | | | |

SVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|-------|------|-----|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 27 | 22.5 | 15.0 | 1 | 0.0 | 170.69 | -6.00 | 6.00 | 0.5176E | 0.0000E | 0.0000E | 0.1771E | 0.0000E | 0.1653E |
| | | | | | 170.69 | 0.60 | 6.00 | 0.1833E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 20.62 | 6.00 | 0.1949E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 40.62 | 6.00 | 0.2065E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 60.62 | 6.00 | 0.2181E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 80.62 | 6.00 | 0.2297E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 100.62 | 6.00 | 0.2413E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 120.62 | 6.00 | 0.2529E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 140.62 | 6.00 | 0.2645E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| | | | | | 170.69 | 160.62 | 6.00 | 0.2761E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E |
| 3 | 30.0 | 2 | 0.0 | 170.69 | 0.00 | 6.00 | 0.2877E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 20.62 | 6.00 | 0.2993E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 40.62 | 6.00 | 0.3109E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 60.62 | 6.00 | 0.3225E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 80.62 | 6.00 | 0.3341E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 100.62 | 6.00 | 0.3457E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 120.62 | 6.00 | 0.3573E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 140.62 | 6.00 | 0.3689E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 160.62 | 6.00 | 0.3805E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 180.62 | 6.00 | 0.3921E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| 4 | 90.0 | 3 | 0.0 | 170.69 | 0.00 | 6.00 | 0.4037E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 20.62 | 6.00 | 0.4153E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 40.62 | 6.00 | 0.4269E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 60.62 | 6.00 | 0.4385E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 80.62 | 6.00 | 0.4501E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 100.62 | 6.00 | 0.4617E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 120.62 | 6.00 | 0.4733E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 140.62 | 6.00 | 0.4849E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 160.62 | 6.00 | 0.4965E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 180.62 | 6.00 | 0.5081E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| 5 | 120.0 | 4 | 0.0 | 170.69 | 0.00 | 6.00 | 0.5197E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 20.62 | 6.00 | 0.5313E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 40.62 | 6.00 | 0.5429E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 60.62 | 6.00 | 0.5545E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 80.62 | 6.00 | 0.5661E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 100.62 | 6.00 | 0.5777E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 120.62 | 6.00 | 0.5893E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 140.62 | 6.00 | 0.6009E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 160.62 | 6.00 | 0.6125E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 180.62 | 6.00 | 0.6241E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| 6 | 150.0 | 5 | 0.0 | 170.69 | 0.00 | 6.00 | 0.6357E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 20.62 | 6.00 | 0.6473E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 40.62 | 6.00 | 0.6589E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 60.62 | 6.00 | 0.6705E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 80.62 | 6.00 | 0.6821E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 100.62 | 6.00 | 0.6937E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 120.62 | 6.00 | 0.7053E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 140.62 | 6.00 | 0.7169E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 160.62 | 6.00 | 0.7285E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 180.62 | 6.00 | 0.7401E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| 7 | 180.0 | 6 | 0.0 | 170.69 | 0.00 | 6.00 | 0.7517E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 20.62 | 6.00 | 0.7633E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 40.62 | 6.00 | 0.7749E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 60.62 | 6.00 | 0.7865E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 80.62 | 6.00 | 0.7981E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 100.62 | 6.00 | 0.8097E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 120.62 | 6.00 | 0.8213E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 140.62 | 6.00 | 0.8329E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 160.62 | 6.00 | 0.8445E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |
| | | | | 170.69 | 180.62 | 6.00 | 0.8561E | 0.0000E | 0.0000E | 0.1523E | 0.0000E | 0.1523E | |

BVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-------|------|---|---------|---------|---------|---------|---------|---------|
| 29 10.5 | 15.0 | 1 | 0.0 | 0.00 | 2 | 0.7091E | 0.1911E | 0.3647E | 0.9655E | 0.5930E | 0.6543E |
| | | 2 | 0.00 | 0.00 | 2 | 0.5924E | 0.1616E | 0.3038E | 0.9242E | 0.4773E | 0.4262E |
| | | 3 | 0.00 | 0.00 | 2 | 0.8153E | 0.1601E | 0.2788E | 0.9379E | 0.4847E | 0.4554E |
| | | 5 | 0.00 | 0.00 | 2 | 0.9153E | 0.1699E | 0.2750E | 0.9364E | 0.5477E | 0.4907E |
| | | 7 | 0.00 | 0.00 | 2 | 0.6002E | 0.1170E | 0.1798E | 0.9191E | 0.3758E | 0.3997E |
| | | 10 | 0.00 | 0.00 | 2 | 0.8616E | 0.1299E | 0.3748E | 0.9320E | 0.4699E | 0.5624E |
| | | 1 | 30.0 | 0.00 | 2 | 0.3071E | 0.0924E | 0.7847E | 0.9144E | 0.1282E | 0.1073E |
| | | 2 | 30.0 | 0.00 | 2 | 0.2744E | 0.0924E | 0.7272E | 0.9144E | 0.1282E | 0.1073E |
| | | 3 | 30.0 | 0.00 | 2 | 0.2233E | 0.0924E | 0.7192E | 0.9144E | 0.1282E | 0.1073E |
| | | 4 | 30.0 | 0.00 | 2 | 0.3380E | 0.0924E | 0.7192E | 0.9144E | 0.1282E | 0.1073E |
| | | 7 | 30.0 | 0.00 | 2 | 0.3380E | 0.0924E | 0.7192E | 0.9144E | 0.1282E | 0.1073E |
| | | 9 | 30.0 | 0.00 | 2 | 0.4220E | 0.0924E | 0.7098E | 0.9144E | 0.1282E | 0.1073E |
| | | 10 | 30.0 | 0.00 | 2 | 0.8189E | 0.1356E | 0.1348E | 0.9165E | 0.3837E | 0.3971E |
| | | 1 | 50.0 | 0.00 | 2 | 0.2595E | 0.1010E | 0.7277E | 0.9308E | 0.2231E | 0.1873E |
| | | 2 | 50.0 | 0.00 | 2 | 0.2565E | 0.1010E | 0.6814E | 0.9308E | 0.2231E | 0.1873E |
| | | 3 | 50.0 | 0.00 | 2 | 0.1099E | 0.0246E | 0.6452E | 0.9308E | 0.2231E | 0.1873E |
| | | 4 | 50.0 | 0.00 | 2 | 0.1732E | 0.0246E | 0.6220E | 0.9308E | 0.2231E | 0.1873E |
| | | 5 | 50.0 | 0.00 | 2 | 0.2035E | 0.0246E | 0.6290E | 0.9308E | 0.2231E | 0.1873E |
| | | 7 | 50.0 | 0.00 | 2 | 0.2035E | 0.0246E | 0.6290E | 0.9308E | 0.2231E | 0.1873E |
| | | 9 | 50.0 | 0.00 | 2 | 0.2035E | 0.0246E | 0.6290E | 0.9308E | 0.2231E | 0.1873E |
| | | 10 | 50.0 | 0.00 | 2 | 0.2352E | 0.0246E | 0.6577E | 0.9308E | 0.2231E | 0.1873E |
| | | 1 | 90.0 | 0.00 | 2 | 0.3245E | 0.0489E | 0.9379E | 0.9308E | 0.2231E | 0.1873E |
| | | 2 | 90.0 | 0.00 | 2 | 0.1850E | 0.0489E | 0.8155E | 0.9308E | 0.2231E | 0.1873E |
| | | 3 | 90.0 | 0.00 | 2 | 0.1503E | 0.0489E | 0.7544E | 0.9308E | 0.2231E | 0.1873E |
| | | 4 | 90.0 | 0.00 | 2 | 0.1310E | 0.0489E | 0.7355E | 0.9308E | 0.2231E | 0.1873E |
| | | 5 | 90.0 | 0.00 | 2 | 0.1310E | 0.0489E | 0.7355E | 0.9308E | 0.2231E | 0.1873E |
| | | 7 | 90.0 | 0.00 | 2 | 0.1310E | 0.0489E | 0.7355E | 0.9308E | 0.2231E | 0.1873E |
| | | 9 | 90.0 | 0.00 | 2 | 0.1310E | 0.0489E | 0.7355E | 0.9308E | 0.2231E | 0.1873E |
| | | 10 | 90.0 | 0.00 | 2 | 0.1310E | 0.0489E | 0.7355E | 0.9308E | 0.2231E | 0.1873E |
| | | 1 | 120.0 | 0.00 | 2 | 0.8720E | 0.1425E | 0.9527E | 0.9308E | 0.2231E | 0.1873E |
| | | 2 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |
| | | 3 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |
| | | 4 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |
| | | 7 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |
| | | 9 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |
| | | 10 | 120.0 | 0.00 | 2 | 0.7200E | 0.1425E | 0.8200E | 0.9308E | 0.2231E | 0.1873E |

8VWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|------|-------|-------|-------|------|---------|----|---------|----|---------|----|---------|----|---------|----|---------|----|
| 29 | 23.1 | 15.0 | 1 | 0.0 | 1 | 55.33 | 6.00 | 6.22 | 0.1608E | 02 | 0.4974E | 00 | 0.6043E | 00 | 0.1735E | 01 | 0.1909E | 01 | 0.1715E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1740E | 02 | 0.1337E | 00 | 0.7239E | 00 | 0.1335E | 01 | 0.2304E | 01 | 0.2658E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1749E | 02 | 0.4467E | 00 | 0.1015E | 00 | 0.1692E | 01 | 0.1698E | 01 | 0.1308E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1759E | 02 | 0.1131E | 00 | 0.9377E | 00 | 0.1698E | 01 | 0.1698E | 01 | 0.1185E | 01 |
| | | | | | | 55.33 | 20.00 | 2.54 | 0.1785E | 02 | 0.1429E | 00 | 0.5089E | 00 | 0.2727E | 01 | 0.1818E | 01 | 0.2745E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1803E | 02 | 0.5878E | 00 | 0.1565E | 00 | 0.9104E | 00 | 0.1918E | 01 | 0.1973E | 01 |
| | | | 2 | 30.0 | 1 | 55.33 | 0.00 | 6.22 | 0.1804E | 01 | 0.141E | 00 | 0.2196E | 01 | 0.262E | 01 | 0.3565E | 01 | 0.2743E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1836E | 01 | 0.1438E | 00 | 0.1776E | 00 | 0.2886E | 01 | 0.3214E | 01 | 0.3013E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1836E | 01 | 0.7036E | 00 | 0.1776E | 00 | 0.2240E | 01 | 0.2240E | 01 | 0.2760E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1847E | 01 | 0.3715E | 01 | 0.4236E | 01 | 0.1170E | 01 | 0.1370E | 01 | 0.1534E | 01 |
| | | | | | | 55.33 | 20.00 | 2.54 | 0.1847E | 01 | 0.2158E | 01 | 0.4236E | 01 | 0.1373E | 01 | 0.1373E | 01 | 0.3710E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1879E | 01 | 0.2877E | 01 | 0.1392E | 01 | 0.2309E | 01 | 0.2309E | 01 | 0.3870E | 01 |
| | | | | | | 55.33 | 20.00 | 2.54 | 0.1879E | 01 | 0.4322E | 01 | 0.2139E | 01 | 0.1487E | 01 | 0.1487E | 01 | 0.2870E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1894E | 01 | 0.5183E | 00 | 0.1561E | 01 | 0.4880E | 01 | 0.5202E | 01 | 0.4891E | 01 |
| | | | 3 | 50.0 | 1 | 55.33 | 0.00 | 6.22 | 0.1894E | 01 | 0.4496E | 00 | 0.1242E | 01 | 0.3915E | 01 | 0.4891E | 01 | 0.4154E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1894E | 01 | 0.7150E | 00 | 0.1242E | 01 | 0.4533E | 01 | 0.4533E | 01 | 0.4051E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1894E | 01 | 0.3517E | 00 | 0.5059E | 00 | 0.2922E | 01 | 0.2922E | 01 | 0.3902E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1894E | 01 | 0.2707E | 01 | 0.2934E | 01 | 0.4606E | 01 | 0.4606E | 01 | 0.5248E | 01 |
| | | | | | | 55.33 | 20.00 | 2.54 | 0.1894E | 01 | 0.1707E | 01 | 0.1323E | 01 | 0.3331E | 01 | 0.3331E | 01 | 0.5732E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1894E | 01 | 0.3905E | 01 | 0.2198E | 01 | 0.4471E | 01 | 0.4471E | 01 | 0.4667E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1913E | 01 | 0.3607E | 00 | 0.3298E | 01 | 0.4621E | 01 | 0.4260E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1913E | 01 | 0.7994E | 00 | 0.3030E | 01 | 0.5218E | 01 | 0.4260E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1913E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1913E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 2.54 | 0.1913E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1913E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | 4 | 90.0 | 1 | 55.33 | 0.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1955E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.1978E | 01 | 0.2278E | 00 | 0.3044E | 01 | 0.5509E | 01 | 0.4315E | 01 | 0.4315E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.2258E | 01 | 0.2258E | 00 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 |
| | | | | | | 55.33 | 0.00 | 6.22 | 0.2258E | 01 | 0.2258E | 00 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 |
| | | | | | | 55.33 | 20.00 | 6.22 | 0.2258E | 01 | 0.2258E | 00 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 |
| | | | | | | 55.33 | 40.00 | 2.54 | 0.2258E | 01 | 0.2258E | 00 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 | 0.2258E | 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-----|------|---|---------|----------|---------|------------|------------|------------|
| 31.22.8 | 15.0 | 1 | 0.0 | 0.60 | 2 | 0.1692 | 0.10717E | 0.1073E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 3 | 0.60 | 6 | 0.1094 | 0.083305 | 0.1052E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 4 | 0.60 | 6 | 0.1642 | 0.110830 | 0.1326E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 5 | 0.60 | 6 | 0.2061 | 0.176974 | 0.1422E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 9 | 0.60 | 6 | 0.1932 | 0.169148 | 0.1422E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 10 | 0.60 | 6 | 0.1932 | 0.169148 | 0.1422E | 0.00000000 | 0.00000000 | 0.00000000 |
| | 30.0 | 2 | 0.0 | 0.60 | 6 | 0.1944 | 0.150471 | 0.1146E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 3 | 0.60 | 6 | 0.4840 | 0.311347 | 0.1773E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 4 | 0.60 | 6 | 0.4892 | 0.311347 | 0.1773E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 7 | 0.60 | 6 | 0.4892 | 0.311347 | 0.1773E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 9 | 0.60 | 6 | 0.4892 | 0.311347 | 0.1773E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 10 | 0.60 | 6 | 0.4892 | 0.311347 | 0.1773E | 0.00000000 | 0.00000000 | 0.00000000 |
| | 50.0 | 3 | 0.0 | 0.60 | 6 | 0.5928 | 0.170974 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 2 | 0.60 | 6 | 0.1249 | 0.109939 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 3 | 0.60 | 6 | 0.2099 | 0.123188 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 5 | 0.60 | 6 | 0.3052 | 0.170974 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 7 | 0.60 | 6 | 0.3052 | 0.170974 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 9 | 0.60 | 6 | 0.3052 | 0.170974 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 10 | 0.60 | 6 | 0.3052 | 0.170974 | 0.1230E | 0.00000000 | 0.00000000 | 0.00000000 |
| | 90.0 | 4 | 0.0 | 0.60 | 6 | 0.9027 | 0.526058 | 0.1060E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 2 | 0.60 | 6 | 0.3889 | 0.285839 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 3 | 0.60 | 6 | 0.4407 | 0.443190 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 4 | 0.60 | 6 | 0.4407 | 0.443190 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 5 | 0.60 | 6 | 0.3353 | 0.335350 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 7 | 0.60 | 6 | 0.3353 | 0.335350 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 9 | 0.60 | 6 | 0.3353 | 0.335350 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | 10 | 0.60 | 6 | 0.3353 | 0.335350 | 0.1225E | 0.00000000 | 0.00000000 | 0.00000000 |

BVNT 242/243 SHIP MAKE TURBULENCE TEST

| QJM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-----|------|------|---------|---------|---------|---------|---------|---------|
| 32.10.6 | 15.0 | 2 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| DIR VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-------|---|---------|---------|---------|---------|---------|---------|
| 35 | 23.3 | 15.0 | 1 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 0.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 20.32 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | 30.0 | 2 | 0.00 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 0.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 20.32 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | 50.0 | 3 | 0.00 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 0.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 20.32 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 40.64 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

6VNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-----|-------|------|------|------|---------|---------|---------|---------|---------|---------|
| 36 | 10.7 | -15.0 | 5 | 0.0 | 1 | 0.00 | 0.00 | 2.25 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6 | 30.0 | 6 | 7 | 10 | 0.00 | 0.00 | 2.25 | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| 7 | 50.0 | 7 | 4 | 10 | 0.00 | 0.00 | 2.25 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | |

SVHT 2427243 SHIP WAKE TURBULENCE TEST

| °UN VEL | ROLL TP | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-----|-------|------|----------|----------|----------|----------|----------|----------|
| 37.23.0 | -15.0 | 1 | 0.0 | 0.00 | 0.00 | 0.19150E | 0.19304E | 0.13755E | 0.00000E | 0.00000E | 0.00000E |
| | | 2 | 0.0 | 0.00 | 0.00 | 0.16133E | 0.16780E | 0.13551E | 0.00000E | 0.00000E | 0.00000E |
| | | 3 | 0.0 | 0.00 | 0.00 | 0.20000E | 0.20511E | 0.12751E | 0.00000E | 0.00000E | 0.00000E |
| | | 4 | 0.0 | 0.00 | 0.00 | 0.19500E | 0.20938E | 0.12511E | 0.00000E | 0.00000E | 0.00000E |
| | | 10 | 0.0 | 20.64 | 0.00 | 0.18468E | 0.12318E | 0.12511E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.12799E | 0.10635E | 0.11000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.27962E | 0.17888E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.70663E | 0.24020E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.13295E | 0.14020E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.13835E | 0.14179E | 0.10520E | 0.00000E | 0.00000E | 0.00000E |
| | | 10 | 0.0 | 20.64 | 0.00 | 0.20879E | 0.10348E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.20448E | 0.10971E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.44444E | 0.24989E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.44444E | 0.24989E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | | 0.0 | 0.00 | 0.00 | 0.26377E | 0.17807E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |
| | | 10 | 0.0 | 20.64 | 0.00 | 0.26377E | 0.17807E | 0.10000E | 0.00000E | 0.00000E | 0.00000E |

BYWT 242/243 SHIP WAKE TURBULENCE TEST

| PWM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | |
|----------|---------|-----------|------|---|---|--|--|--|--|--|--|--|
| 38. 10.2 | -15.0 | 2 | 0.0 | 1 | 2 | 0.9221 0.9338 0.9338 0.9338 0.91026 | 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 | |
| | | | 30.0 | 3 | 3 | 0.5080 0.5491 0.5491 0.5491 0.5491 0.4453 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 |
| | | | 50.0 | 4 | 4 | 0.5652 0.5652 0.5652 0.5652 0.5652 0.5652 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 |
| | | | 90.0 | 5 | 5 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 | 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 |

BVHT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|---|---------|---------|---------|---------|---------|---------|
| 39 | 22.8 | -15.0 | 1 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 2 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 3 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 4 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 5 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 6 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 7 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 8 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 9 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 10 | 0.0 | 6 | 0.7139 | 0.3102 | 0.9249 | 0.0000 | 0.0000 | 0.0000 |
| | | | 1 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 2 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 3 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 4 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 5 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 6 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 7 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 8 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 9 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 10 | 30.0 | 6 | 0.9152 | 0.2058 | 0.6632 | 0.0000 | 0.0000 | 0.0000 |
| | | | 1 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 2 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 3 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 4 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 5 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 6 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 7 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 8 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 9 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 10 | 50.0 | 6 | 1.2487 | 0.4454 | 0.3867 | 0.0000 | 0.0000 | 0.0000 |
| | | | 1 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 2 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 3 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 4 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 5 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 6 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 7 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 8 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 9 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |
| | | | 10 | 90.0 | 6 | 2.0537 | 0.3790 | 0.4790 | 0.0000 | 0.0000 | 0.0000 |

BVNT 242743 SHIP WAKE TURBULENCE TEST

| °UN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|---|---------|---------|---------|---------|---------|---------|
| 41 | 22.9 | -15.0 | 1 | 0.0 | 1 | 0.1107E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 2 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 3 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 7 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 8 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 9 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 1 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 2 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 3 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 7 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 8 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 9 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | 0.00 | 6 | 0.1077E | 0.2823E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| °UN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-----|-------|--------|-------|------|------------|------------|------------|------------|------------|------------|
| | | | | | | | | | | | | | | |
| 44 | 10.5 | -15.0 | 2 | 0.0 | 1 | 170.69 | -6.60 | 6.22 | 0.8048E 00 | 0.3730E 00 | 0.5243E 00 | 0.1214E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 2 | 170.69 | 0.60 | 6.22 | 0.7192E 00 | 0.1507E 00 | 0.2643E 00 | 0.0843E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 3 | 170.69 | 6.32 | 6.22 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 4 | 170.69 | 20.60 | 6.22 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 5 | 170.69 | 60.64 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 6 | 170.69 | 0.60 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 7 | 170.69 | 6.32 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 8 | 170.69 | 20.60 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 9 | 170.69 | 60.64 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 10 | 170.69 | 0.60 | 2.54 | 0.9665E 00 | 0.1993E 00 | 0.2638E 00 | 0.0749E 00 | 0.9042E 00 | 0.6739E 00 |
| | | | | | 1 | 170.69 | 6.60 | 2.54 | 0.8344E 00 | 0.1505E 00 | 0.1045E 00 | 0.0334E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 2 | 170.69 | 0.60 | 2.54 | 0.6869E 00 | 0.0837E 00 | 0.0498E 00 | 0.0149E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 3 | 170.69 | 6.32 | 2.54 | 0.7999E 00 | 0.1377E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 4 | 170.69 | 20.60 | 2.54 | 0.8163E 00 | 0.1577E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 5 | 170.69 | 60.64 | 2.54 | 0.8293E 00 | 0.1681E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 6 | 170.69 | 0.60 | 2.54 | 0.6900E 00 | 0.1527E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 7 | 170.69 | 6.32 | 2.54 | 0.9024E 00 | 0.1740E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 8 | 170.69 | 20.60 | 2.54 | 0.9254E 00 | 0.1950E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 9 | 170.69 | 60.64 | 2.54 | 0.9384E 00 | 0.2160E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 10 | 170.69 | 0.60 | 2.54 | 0.9514E 00 | 0.2370E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 1 | 170.69 | 6.60 | 2.54 | 0.7999E 00 | 0.1377E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 2 | 170.69 | 0.60 | 2.54 | 0.6869E 00 | 0.0837E 00 | 0.0498E 00 | 0.0149E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 3 | 170.69 | 6.32 | 2.54 | 0.7999E 00 | 0.1377E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 4 | 170.69 | 20.60 | 2.54 | 0.8163E 00 | 0.1577E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 5 | 170.69 | 60.64 | 2.54 | 0.8293E 00 | 0.1681E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 6 | 170.69 | 0.60 | 2.54 | 0.6900E 00 | 0.1527E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 7 | 170.69 | 6.32 | 2.54 | 0.9024E 00 | 0.1740E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 8 | 170.69 | 20.60 | 2.54 | 0.9254E 00 | 0.1950E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 9 | 170.69 | 60.64 | 2.54 | 0.9384E 00 | 0.2160E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |
| | | | | | 10 | 170.69 | 0.60 | 2.54 | 0.9514E 00 | 0.2370E 00 | 0.0589E 00 | 0.0203E 00 | 0.1430E 01 | 0.1341E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-------|-------|--------|-------|-----|---------|---------|---------|---------|---------|---------|
| 45 | 22.7 | -15.0 | 1 | 0.0 | 1 | 170.69 | -6.60 | 6.6 | 0.14158 | 0.17744 | 0.98388 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.14023 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 2 | 30.0 | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 3 | 50.0 | | 170.69 | -6.60 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 4 | 90.0 | | 170.69 | -6.60 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 5 | 120.0 | | 170.69 | -6.60 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 6 | 150.0 | | 170.69 | -6.60 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 7 | 180.0 | | 170.69 | -6.60 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 0.00 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |
| | | | 10 | | | 170.69 | 20.62 | 6.6 | 0.13762 | 0.17520 | 0.93774 | 0.17325 | 0.35201 | 1.47120 |

BWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|------|------|---------|---------|---------|---------|---------|---------|
| 46 | 10.6 | -15.0 | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | 0.00 | 0.00 | 0.9886 | 0.1120 | 0.1093 | 0.3273 | 0.5183 | 0.6674 |
| | | | | 0.00 | 0.00 | 0.9330 | 0.1350 | 0.1857 | 0.3323 | 0.5768 | 0.7459 |
| | | | | 0.00 | 0.00 | 0.9707 | 0.1350 | 0.1503 | 0.3622 | 0.5400 | 0.7223 |
| | | | | 0.00 | 0.00 | 0.4103 | 0.0397 | 0.0331 | 0.0000 | 0.0000 | 0.0000 |
| | | | | 0.00 | 0.00 | 0.9151 | 0.1746 | 0.4077 | 0.3198 | 0.5155 | 0.7207 |
| | | | | 0.00 | 0.00 | 0.9425 | 0.1201 | 0.3779 | 0.3748 | 0.5664 | 0.7404 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-----|-----|-----|---------|---------|---------|---------|---------|---------|
| 50 | 23.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 8.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 10.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

0VMT 2427243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-----|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 51 | 22.7 | 0.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

BYWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|------|------|------|---------|---------|---------|---------|---------|---------|
| 52 | 10.0 | 0.0 | 2 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 3 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 4 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 7 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 9 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 10 | 0.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 3 | 30.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 4 | 30.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 7 | 30.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 9 | 30.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 10 | 30.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 2 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 3 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 4 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 7 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 9 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 10 | 50.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 2 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 3 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 4 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 7 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 9 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |
| | | | 10 | 90.0 | 0.00 | 0.03 | 0.7520 | 0.1323 | 0.3163 | 0.5464 | 0.9880 | 0.2520 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|----|------|-------|------|-------|------|----------|----------|----------|----------|----------|----------|
| 53.18.2 | 0.0 | 1 | 0.0 | 3 | 4.00 | 6.00 | 0.03 | 0.13719E | 0.40750E | 0.1071E | 0.15883E | 0.1708E | 0.1727E |
| | | | | | 4.00 | 6.00 | 0.03 | 0.12479E | 0.65932E | 0.14063E | 0.15913E | 0.17436E | 0.20386E |
| | | | | | 4.00 | 6.00 | 0.03 | 0.15472E | 0.62599E | 0.10357E | 0.13372E | 0.15356E | 0.17480E |
| | | | | | 4.00 | 6.00 | 0.03 | 0.14612E | 0.62866E | 0.12289E | 0.13981E | 0.15346E | 0.17477E |
| | | | | 10 | 4.00 | 6.00 | 0.03 | 0.17448E | 0.43733E | 0.41130E | 0.13177E | 0.19117E | 0.2139E |
| | | 2 | 30.0 | 3 | 0.00 | 6.00 | 0.03 | 0.17448E | 0.35720E | 0.21616E | 0.14663E | 0.20819E | 0.26781E |
| | | | | | 0.00 | 6.00 | 0.03 | 0.17448E | 0.37701E | 0.26997E | 0.15506E | 0.21514E | 0.26781E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.17448E | 0.37701E | 0.26997E | 0.15506E | 0.21514E | 0.26781E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.17448E | 0.37701E | 0.26997E | 0.15506E | 0.21514E | 0.26781E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.17448E | 0.37701E | 0.26997E | 0.15506E | 0.21514E | 0.26781E |
| | | | | 10 | 0.00 | 20.00 | 0.03 | 0.17448E | 0.37701E | 0.26997E | 0.15506E | 0.21514E | 0.26781E |
| | | 3 | 50.0 | 3 | 0.00 | 6.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | | | | 0.00 | 6.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | | | 10 | 0.00 | 20.00 | 0.03 | 0.19979E | 0.52229E | 0.37372E | 0.22660E | 0.2758E | 0.2801E |
| | | 4 | 90.0 | 3 | 0.00 | 6.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 6.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | 10 | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | 4 | 90.0 | 3 | 0.00 | 6.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 6.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |
| | | | | 10 | 0.00 | 20.00 | 0.03 | 0.14875E | 0.30140E | 0.35791E | 0.21927E | 0.24539E | 0.2524E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|-------|-------|------------|------------|------------|------------|------------|------------|
| 54 | 72.7 | 0.0 | 1 | 0.0 | 1 | 22.88 | 0.60 | 18.03 | 0.1333E 00 | 0.4455E 00 | 0.6717E 00 | 0.1408E 01 | 0.1582E 01 | 0.1666E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1351E 00 | 0.3333E 00 | 0.2442E 00 | 0.2174E 00 | 0.1582E 01 | 0.2979E 01 |
| | | | | | | 22.88 | 20.32 | 18.03 | 0.1762E 00 | 0.3188E 00 | 0.2979E 00 | 0.4742E 00 | 0.1592E 01 | 0.3220E 01 |
| | | | | | | 22.88 | 20.60 | 18.03 | 0.2045E 00 | 0.3505E 00 | 0.1737E 00 | 0.4619E 00 | 0.1689E 01 | 0.5221E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.2099E 00 | 0.3971E 00 | 0.1315E 00 | 0.4097E 00 | 0.1560E 01 | 0.2785E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.1906E 00 | 0.2976E 01 | 0.8045E 00 | 0.2995E 00 | 0.3035E 01 | 0.1123E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.2113E 00 | 0.1105E 01 | 0.8045E 00 | 0.6122E 00 | 0.7194E 00 | 0.8233E 00 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1819E 00 | 0.4521E 00 | 0.4386E 01 | 0.1082E 01 | 0.1374E 01 | 0.1423E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1107E 00 | 0.3290E 00 | 0.4604E 01 | 0.3337E 01 | 0.3359E 01 | 0.3968E 01 |
| | | | | | | 22.88 | 20.32 | 18.03 | 0.1021E 00 | 0.4939E 00 | 0.2685E 01 | 0.2974E 00 | 0.3192E 00 | 0.2710E 01 |
| | | | | | | 22.88 | 20.60 | 18.03 | 0.1524E 00 | 0.3108E 00 | 0.5180E 01 | 0.2076E 00 | 0.3191E 00 | 0.3271E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.1855E 00 | 0.1897E 00 | 0.5759E 01 | 0.3766E 00 | 0.4804E 00 | 0.3284E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.1625E 00 | 0.2227E 00 | 0.3004E 01 | 0.3027E 01 | 0.3578E 01 | 0.3144E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1191E 00 | 0.4633E 00 | 0.4752E 01 | 0.1671E 01 | 0.2429E 01 | 0.1916E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.2185E 00 | 0.3270E 00 | 0.4752E 01 | 0.4143E 01 | 0.2627E 01 | 0.4647E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1721E 00 | 0.4273E 00 | 0.2627E 01 | 0.4535E 01 | 0.2780E 01 | 0.4907E 01 |
| | | | | | | 22.88 | 20.32 | 18.03 | 0.1191E 00 | 0.3270E 00 | 0.4752E 01 | 0.4143E 01 | 0.2627E 01 | 0.4647E 01 |
| | | | | | | 22.88 | 20.60 | 18.03 | 0.1721E 00 | 0.4273E 00 | 0.2627E 01 | 0.4535E 01 | 0.2780E 01 | 0.4907E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.2101E 00 | 0.3623E 00 | 0.4752E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.1785E 00 | 0.6623E 00 | 0.3490E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.2101E 00 | 0.3623E 00 | 0.4752E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.1785E 00 | 0.6623E 00 | 0.3490E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.1919E 00 | 0.4633E 00 | 0.4752E 01 | 0.1671E 01 | 0.2429E 01 | 0.1916E 01 |
| | | | | | | 22.88 | 0.00 | 18.03 | 0.2185E 00 | 0.3270E 00 | 0.4752E 01 | 0.4143E 01 | 0.2627E 01 | 0.4647E 01 |
| | | | | | | 22.88 | 20.32 | 18.03 | 0.1721E 00 | 0.4273E 00 | 0.2627E 01 | 0.4535E 01 | 0.2780E 01 | 0.4907E 01 |
| | | | | | | 22.88 | 20.60 | 18.03 | 0.1191E 00 | 0.3270E 00 | 0.4752E 01 | 0.4143E 01 | 0.2627E 01 | 0.4647E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.2101E 00 | 0.3623E 00 | 0.4752E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.1785E 00 | 0.6623E 00 | 0.3490E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.32 | 12.45 | 0.2101E 00 | 0.3623E 00 | 0.4752E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |
| | | | | | | 22.88 | 20.60 | 12.45 | 0.1785E 00 | 0.6623E 00 | 0.3490E 01 | 0.3866E 01 | 0.3521E 01 | 0.3203E 01 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| PWM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-------|------|----|----------|----------|----------|----------|----------|----------|
| 56 18.2 | 0.0 | 1 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 2 | 43.16 | 6.60 | 18 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 3 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 4 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 5 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 6 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 10 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | 2 | 30.0 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 3 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 4 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 5 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 6 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 10 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | 3 | 50.0 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 4 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 5 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 6 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 10 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | 4 | 90.0 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 3 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 4 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 5 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 6 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |
| | | 10 | 43.16 | 6.60 | 03 | 0.13319E | 0.33902E | 0.91171E | 0.42287E | 0.81018E | 0.83444E |

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INVESTIGATION TO STUDY THE AERODYNAMIC SHIP WAKE TURBULENCE GEN--ETC(U)
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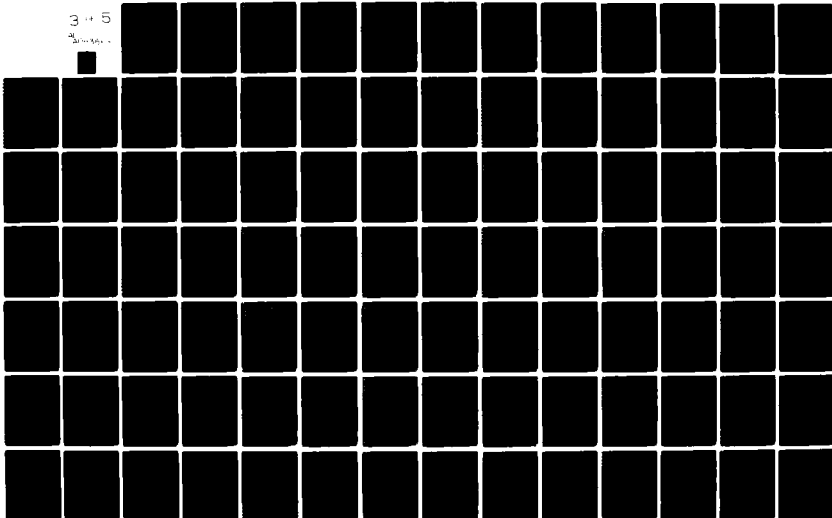
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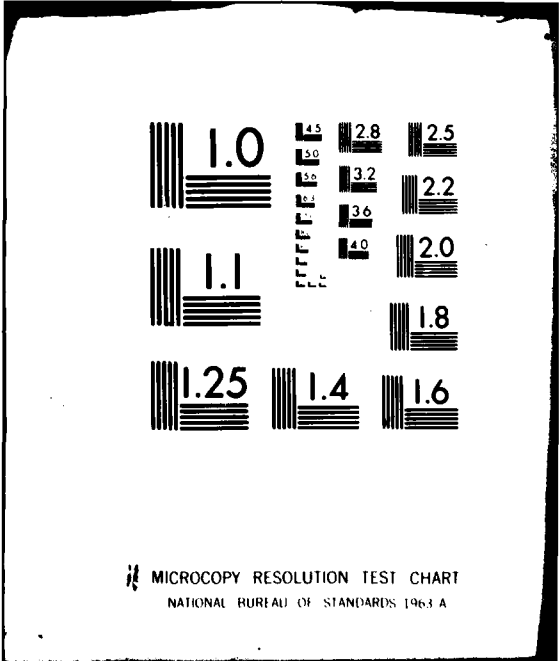
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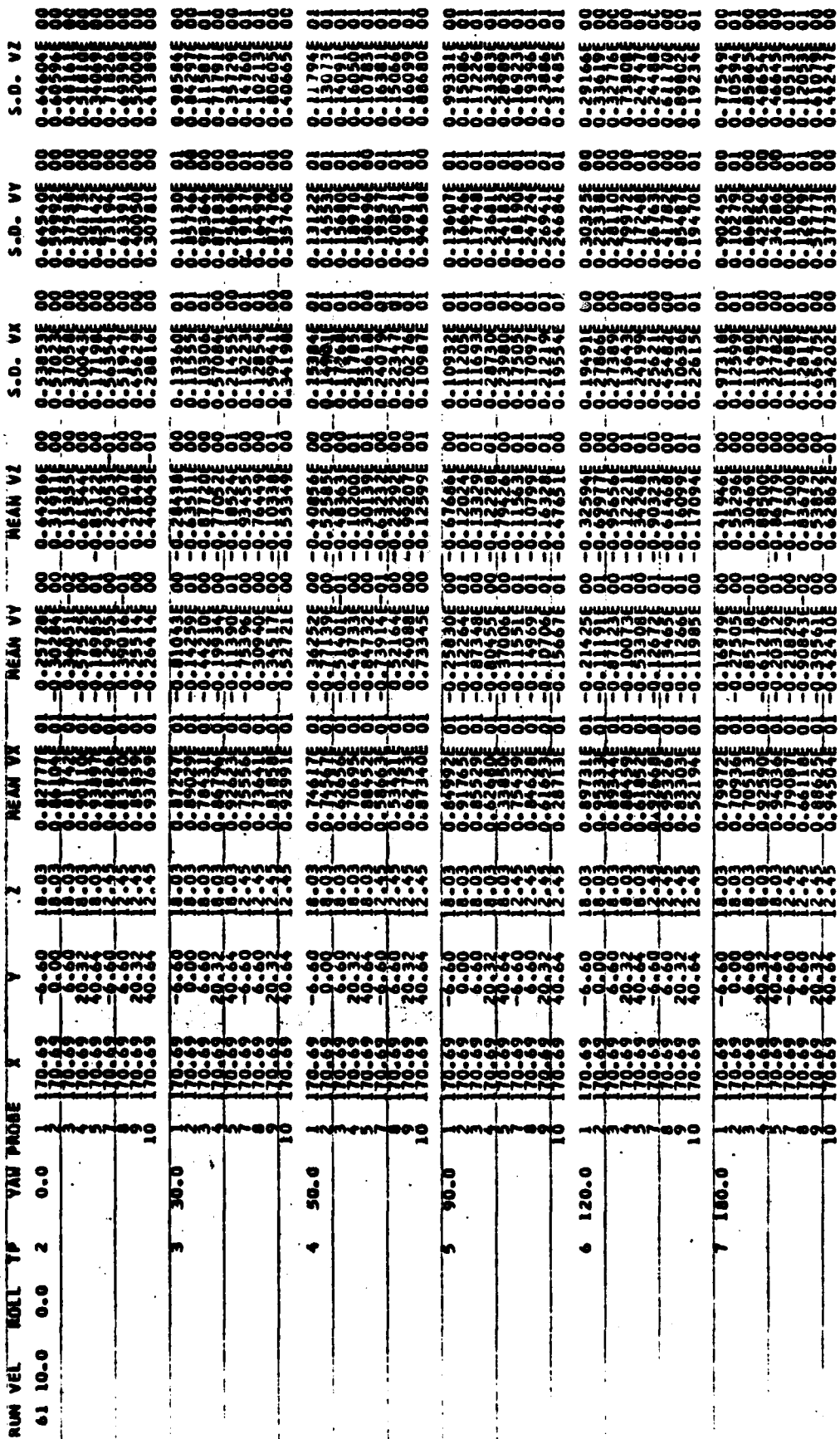
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 MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

SVMT 242/243 SHIP WAKE TURBULENCE TEST



BYWT 242/243 SHIP WAKE TURBULENCE TEST

| ROW VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-----|---|---------|---------|---------|---------|---------|---------|
| 63 | 22.6 | 0.0 | 1 | 0.0 | 2 | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 64 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 65 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 66 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 67 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 68 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 69 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 70 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 71 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 72 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 73 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 74 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 75 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 76 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 77 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 78 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 79 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 80 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 81 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 82 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 83 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 84 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 85 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 86 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 87 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 88 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 89 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 90 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 91 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 92 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 93 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 94 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 95 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 96 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 97 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 98 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 99 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| 100 | | | | 0.0 | | 10.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |

BVNT 252/243 SHIP MAKE TURBULENCE TEST

| | | | | | | | | | | | | | |
|------------|---------|-----------|-------|----|--------|---------|---------|-------------|-------------|-------------|-------------|-------------|-------------|
| 20 RUN VEL | ROLL TP | YAN PROBE | X | Y | Z | HEAN VX | HEAN VY | HEAN VZ | S.D. VX | S.D. VY | S.D. VZ | | |
| 01 63 22.6 | 0.0 | 7 | 100.0 | 10 | 170.69 | 40.04 | 12.45 | 0.10677E 02 | 0.82465E-01 | 0.70245E 00 | 0.49665E 00 | 0.62309E 00 | 0.77499E 00 |

BVHT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|----|------|---|------------|------------|------------|------------|------------|------------|
| 64 | 22.7 | 0.0 | 1 | 0.0 | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | | | | | 10 | 20.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |

SVWT 242243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|-------|-------|----|-----|-------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 65 | 10.0 | -15.0 | 2 | 0.0 | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 3 | 30.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 4 | 50.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 5 | 90.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 6 | 120.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 7 | 150.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| 8 | 150.0 | | | | 10 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

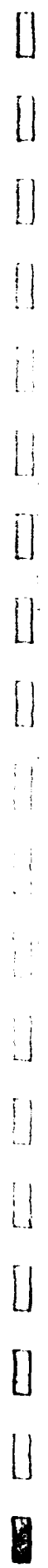
| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|-------|----|-------|-------|--------|-------|-------|-------------|--------------|--------------|-------------|-------------|-------------|
| 65 | 10.0 | -15.0 | 8 | 150.0 | 10 | 170.69 | 20.32 | 12.45 | 0.80895E 01 | -0.14262E 00 | -0.17930E 01 | 0.81375E 00 | 0.11206E 01 | 0.87888E 00 |
| | | | | | | 170.69 | 40.64 | 12.45 | 0.66487E 01 | 0.70989E 00 | -0.10030E 01 | 0.17192E 01 | 0.16799E 01 | 0.14058E 01 |
| 9 | 100.0 | | | | | 170.69 | -6.60 | 18.03 | 0.60892E 01 | 0.51405E 00 | 0.8010E 00 | 0.91810E 00 | 0.10153E 01 | 0.74506E 00 |
| | | | | | | 170.69 | 0.00 | 18.03 | 0.78696E 01 | -0.19449E 00 | 0.25558E 00 | 0.12106E 00 | 0.49499E 00 | 0.91988E 00 |
| | | | | | | 170.69 | 6.60 | 18.03 | 0.67298E 01 | 0.56061E 00 | 0.44242E 00 | 0.13088E 00 | 0.55099E 00 | 0.92499E 00 |
| | | | | | | 170.69 | 20.32 | 18.03 | 0.67073E 01 | -0.34033E 00 | 0.59261E 00 | 0.17758E 00 | 0.70043E 00 | 0.92499E 00 |
| | | | | | | 170.69 | 40.64 | 18.03 | 0.96733E 01 | -0.17466E 00 | 0.50159E 00 | 0.13408E 00 | 0.70654E 00 | 0.92499E 00 |
| | | | | | | 170.69 | -6.60 | 18.03 | 0.98769E 01 | -0.55859E 00 | 0.47829E 00 | 0.10231E 00 | 0.56148E 00 | 0.92499E 00 |
| | | | | | | 170.69 | 0.00 | 18.03 | 0.98589E 01 | -0.48977E 00 | 0.47829E 00 | 0.10231E 00 | 0.56148E 00 | 0.92499E 00 |
| | | | | | | 170.69 | 20.32 | 18.03 | 0.91381E 01 | -0.71633E 00 | 0.36320E 00 | 0.13231E 00 | 0.51385E 00 | 0.92499E 00 |
| | | | | | | 170.69 | 40.64 | 18.03 | 0.66261E 01 | -0.46333E 00 | 0.36320E 00 | 0.27111E 00 | 0.51385E 00 | 0.92499E 00 |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| TRUB VEL | ROLL | YF | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|-------|----|-----------|-----|-----|-----|---------|---------|---------|---------|---------|---------|
| 66 22.4 | -15.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 2 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 3 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 4 | 90.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 5 | 120.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 6 | 150.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 7 | 180.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| NO | RUN | VEL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|------|-------|------|-------|-----|--------|-------|-------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|
| 66 | 22.4 | -15.0 | 7 | 180.0 | 9 | 170.69 | 20.32 | 13.43 | 0.17278E 02 | -0.24259E 00 | 0.12094E 01 | 0.15028E 01 | 0.25259E 00 | 0.13047E 01 | 0.12877E 01 |
| 6 | | | | | 10 | 170.69 | 30.84 | 13.43 | 0.15254E 02 | -0.11827E 01 | 0.31820E 00 | 0.35259E 00 | 0.25259E 00 | 0.13047E 01 | 0.12877E 01 |



SVMT 242/243 SHIP MAKE TURBULENCE TEST

| ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|-----------|-----|-------|-----|------------|------------|------------|------------|------------|------------|
| 67 10.4 | 2 | 0.0 | 0.0 | 0.0 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | 1 | 0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | 3 | 30.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | 4 | 50.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | 5 | 90.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |
| | | 6 | 120.0 | | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 | 0.00000000 |

BVHT 242743 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-------|-------|------------|------------|------------|------------|------------|------------|
| 68 | 22.8 | -15.0 | 1 | 0.0 | | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 0.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 20.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 40.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 60.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 80.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | 100.0 | 0.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 20.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 40.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 60.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 80.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 100.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 20.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 40.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 60.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 80.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 100.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 20.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 40.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 60.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 80.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |
| | | | | | 100.0 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |

SVMT 242/243 SHIP WAKE TURBULENCE TEST

| TUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | S.C. VZ |
|---------|------------|-----------|------|-----|-----|---------|---------|---------|---------|---------|---------|---------|
| 69 | 6.1 - 15.0 | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 4 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | 5 | 30.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

BYMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN VR | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-------|-----|-------|------|------|------|----------|----------|----------|----------|----------|----------|
| 74 | 22.8 | -15.0 | 1 | 0.0 | 0.00 | 6.60 | 0.03 | 0.10098E | 0.22498E | 0.14233E | 0.25458E | 0.27047E | 0.29438E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12555E | 0.49272E | 0.44723E | 0.11997E | 0.20206E | 0.28350E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12328E | 0.35438E | 0.35359E | 0.03980E | 0.30773E | 0.37271E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12032E | 0.36877E | 0.32703E | 0.03557E | 0.30977E | 0.37343E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12011E | 0.35810E | 0.32033E | 0.03330E | 0.30983E | 0.37354E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.18944E | 0.34810E | 0.29253E | 0.03633E | 0.29408E | 0.37088E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.18913E | 0.35625E | 0.31278E | 0.03999E | 0.29452E | 0.37290E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.19748E | 0.39748E | 0.44218E | 0.05738E | 0.76178E | 0.94058E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.22259E | 0.30980E | 0.36822E | 0.05977E | 0.69900E | 0.86531E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12752E | 0.36133E | 0.33305E | 0.02064E | 0.32060E | 0.35340E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.20374E | 0.38021E | 0.42296E | 0.03692E | 0.19233E | 0.23393E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.81821E | 0.91146E | 0.94296E | 0.42546E | 0.89233E | 1.17986E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.16401E | 0.51495E | 0.54098E | 0.19426E | 0.49053E | 0.64496E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.12748E | 0.46812E | 0.51066E | 0.36793E | 0.61069E | 0.86674E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.22693E | 0.37228E | 0.32266E | 0.69288E | 0.86331E | 1.12036E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.17030E | 0.37048E | 0.35730E | 0.46754E | 0.32160E | 0.49300E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.24693E | 0.39148E | 0.47477E | 0.47672E | 0.32160E | 0.49300E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.11438E | 0.37104E | 0.44508E | 0.40620E | 0.42893E | 0.54248E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.11438E | 0.37104E | 0.44508E | 0.40620E | 0.42893E | 0.54248E |
| | | | | | 0.00 | 0.00 | 0.03 | 0.11438E | 0.37104E | 0.44508E | 0.40620E | 0.42893E | 0.54248E |

BVMT 242/243 SHIP MAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | MEAN | MEAN | S.D. | S.D. | S.D. | S.D. | S.D. | S.D. |
|-----|------|------|----|-----|-------|------|-------|-------|------|------|------|------|------|------|------|------|------|
| 75 | 10.5 | 15.0 | 2 | 0.0 | 1 | 0.00 | -6.60 | 18.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 3 | 30.0 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 4 | 50.0 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

BWMT 242/243 SHIP WAKE TURBULENCE TEST

| ROW VEL | ROLL | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-------|----|------|------|---------|---------|---------|---------|---------|---------|
| 76 23.2 | 15.0 | 1 | 0.0 | 1 | 0.00 | 0.03 | 0.1885E | 0.1051E | 0.1067E | 0.7746E | 0.9927E | 0.1726E |
| | | | | 2 | 0.00 | 0.03 | 0.1825E | 0.0527E | 0.1718E | 0.7023E | 0.2270E | 0.1734E |
| | | | | 3 | 0.00 | 0.03 | 0.1902E | 0.0627E | 0.1687E | 0.7239E | 0.2277E | 0.1749E |
| | | | | 5 | 0.00 | 0.03 | 0.1902E | 0.0627E | 0.1687E | 0.7239E | 0.2277E | 0.1749E |
| | | | | 7 | 0.00 | 0.03 | 0.1922E | 0.0718E | 0.1732E | 0.7301E | 0.2320E | 0.1772E |
| | | | | 8 | 0.00 | 0.03 | 0.1880E | 0.0718E | 0.1732E | 0.7301E | 0.2320E | 0.1772E |
| | | | | 10 | 0.00 | 0.03 | 0.1880E | 0.0718E | 0.1732E | 0.7301E | 0.2320E | 0.1772E |
| | | | | 1 | 0.00 | 0.03 | 0.1912E | 0.0515E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 2 | 0.00 | 0.03 | 0.2023E | 0.0627E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 3 | 0.00 | 0.03 | 0.1923E | 0.0718E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 5 | 0.00 | 0.03 | 0.1923E | 0.0718E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 7 | 0.00 | 0.03 | 0.1911E | 0.0718E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 8 | 0.00 | 0.03 | 0.1911E | 0.0718E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 10 | 0.00 | 0.03 | 0.1963E | 0.0627E | 0.1990E | 0.2842E | 0.4786E | 0.2024E |
| | | | | 1 | 0.00 | 0.03 | 0.2144E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 2 | 0.00 | 0.03 | 0.2023E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 3 | 0.00 | 0.03 | 0.2023E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 5 | 0.00 | 0.03 | 0.2023E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 7 | 0.00 | 0.03 | 0.2023E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 8 | 0.00 | 0.03 | 0.2023E | 0.0865E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |
| | | | | 10 | 0.00 | 0.03 | 0.2110E | 0.0718E | 0.5081E | 0.2366E | 0.4948E | 0.2521E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|-------|-------|----------|----------|----------|----------|---------|----------|
| 77 | 10.3 | 15.0 | 2 | 0.0 | 1 | 23.88 | -6.60 | 18.03 | 0.84035E | 0.49155E | 0.19291E | 0.85491E | 0.413E | 0.7173E |
| | | | | | 2 | 23.88 | 0.60 | 18.03 | 0.79980E | 0.39350E | 0.18371E | 0.13972E | 0.13E | 0.1020E |
| | | | | | 3 | 23.88 | 0.60 | 18.03 | 0.74319E | 0.3549E | 0.17933E | 0.13726E | 0.0966E | 0.1020E |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | 0.54148E | 0.1601E | 0.11908E | 0.2723E | 0.0000E | 0.38176E |
| | | | | | 5 | 23.88 | 0.60 | 12.45 | 0.79890E | 0.4226E | 0.10657E | 0.1224E | 0.0000E | 0.1620E |
| | | | | | 6 | 23.88 | -6.60 | 12.45 | 0.67809E | 0.4667E | 0.10657E | 0.1224E | 0.0000E | 0.1620E |
| | | | | | 10 | 23.88 | 20.32 | 12.45 | 0.92555E | 0.7381E | 0.10657E | 0.1224E | 0.0000E | 0.1620E |
| | | | | | 1 | 23.88 | 0.60 | 18.03 | 0.95011E | 0.5513E | 0.21667E | 0.4237E | 0.0000E | 0.4376E |
| | | | | | 2 | 23.88 | 0.60 | 18.03 | 0.10471E | 0.1064E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 3 | 23.88 | 0.60 | 18.03 | 0.89631E | 0.1084E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | 0.97466E | 0.1754E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 5 | 23.88 | 0.60 | 12.45 | 0.81088E | 0.1708E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 6 | 23.88 | -6.60 | 12.45 | 0.10088E | 0.1708E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 9 | 23.88 | 0.60 | 12.45 | 0.56507E | 0.1937E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 10 | 23.88 | 20.32 | 12.45 | 0.73678E | 0.1937E | 0.21667E | 0.1489E | 0.0000E | 0.1584E |
| | | | | | 1 | 23.88 | 0.60 | 18.03 | 0.99448E | 0.7205E | 0.38311E | 0.7117E | 0.0000E | 0.6017E |
| | | | | | 2 | 23.88 | 0.60 | 18.03 | 0.08685E | 0.1818E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 3 | 23.88 | 0.60 | 18.03 | 0.29975E | 0.1803E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | 0.37005E | 0.1412E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 5 | 23.88 | 0.60 | 12.45 | 0.19189E | 0.10620E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 9 | 23.88 | 0.60 | 12.45 | 0.19189E | 0.10620E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 10 | 23.88 | 20.32 | 12.45 | 0.15931E | 0.18209E | 0.38311E | 0.1197E | 0.0000E | 0.1298E |
| | | | | | 1 | 23.88 | -6.60 | 18.03 | 0.10647E | 0.21801E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 2 | 23.88 | 0.60 | 18.03 | 0.19060E | 0.20909E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 3 | 23.88 | 0.60 | 18.03 | 0.19060E | 0.20909E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | 0.68732E | 0.11674E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 5 | 23.88 | 0.60 | 12.45 | 0.39019E | 0.11820E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 6 | 23.88 | -6.60 | 12.45 | 0.39019E | 0.11820E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |
| | | | | | 10 | 23.88 | 20.32 | 12.45 | 0.28219E | 0.11820E | 0.52863E | 0.4437E | 0.0000E | 0.5621E |

08VMT 242/243 SHIP WAKE TURBULENCE TEST

| SUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|-------|---------|----------|---------|----------|---------|----------|
| 78 | 23.1 | 15.0 | 1 | 0.0 | 18.03 | 0.1713E | 0.13730E | 0.8330E | 0.15418E | 0.1623E | 0.16162E |
| | | | 2 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 3 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 4 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 5 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 6 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 7 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 8 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 9 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 10 | 0.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 1 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 2 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 3 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 4 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 5 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 6 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 7 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 8 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 9 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 10 | 30.0 | 18.03 | 0.1925E | 0.12859E | 0.3280E | 0.12747E | 0.2534E | 0.2534E |
| | | | 1 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 2 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 3 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 4 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 5 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 6 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 7 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 8 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 9 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 10 | 50.0 | 18.03 | 0.2081E | 0.1591E | 0.4228E | 0.8283E | 0.1693E | 0.1693E |
| | | | 1 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 2 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 3 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 4 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 5 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 6 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 7 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 8 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 9 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |
| | | | 10 | 90.0 | 18.03 | 0.2123E | 0.1578E | 0.5170E | 0.7686E | 0.1323E | 0.1323E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| DIR | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|--------|-------|---------|---------|---------|----------|---------|---------|
| 80 | 23.1 | 15.0 | 1 | 0.0 | 1 | 43.16 | 6.00 | 18.03 | 0.1856E | 0.1056E | 0.6604E | 0.99820E | 0.9754E | 0.8664E |
| | | | | | 2 | 43.16 | 0.00 | 18.03 | 0.1971E | 0.5797E | 0.7171E | 0.7675E | 0.7425E | 0.8211E |
| | | | | | 3 | 43.16 | 20.32 | 18.03 | 0.1902E | 0.4741E | 0.1202E | 0.7086E | 0.7113E | 0.7357E |
| | | | | | 4 | 43.16 | 40.64 | 18.03 | 0.1870E | 0.3644E | 0.1019E | 0.5194E | 0.7113E | 0.7357E |
| | | | | | 5 | 43.16 | 60.96 | 18.03 | 0.1749E | 0.1149E | 0.4481E | 0.1966E | 0.7113E | 0.7357E |
| | | | | | 6 | 43.16 | 80.32 | 18.03 | 0.1704E | 0.3323E | 0.3766E | 0.1654E | 0.7113E | 0.7357E |
| | | | | | 7 | 43.16 | 100.64 | 18.03 | 0.1901E | 0.3834E | 0.7368E | 0.4813E | 0.7113E | 0.7357E |
| | | | | | 8 | 43.16 | 120.96 | 18.03 | 0.1920E | 0.3473E | 0.4233E | 0.1506E | 0.7113E | 0.7357E |
| | | | | | 9 | 43.16 | 140.32 | 18.03 | 0.1925E | 0.2568E | 0.4022E | 0.1267E | 0.7113E | 0.7357E |
| | | | | | 10 | 43.16 | 160.64 | 18.03 | 0.1722E | 0.2597E | 0.5139E | 0.2942E | 0.7113E | 0.7357E |
| | | | | | 11 | 43.16 | 180.96 | 18.03 | 0.1666E | 0.8262E | 0.3235E | 0.3198E | 0.7113E | 0.7357E |
| | | | | | 12 | 43.16 | 200.32 | 18.03 | 0.1670E | 0.1747E | 0.1678E | 0.3208E | 0.7113E | 0.7357E |
| | | | | | 13 | 43.16 | 220.64 | 18.03 | 0.1931E | 0.2619E | 0.3091E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 14 | 43.16 | 240.96 | 18.03 | 0.1937E | 0.4468E | 0.4739E | 0.6811E | 0.7113E | 0.7357E |
| | | | | | 15 | 43.16 | 260.32 | 18.03 | 0.1937E | 0.3098E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 16 | 43.16 | 280.64 | 18.03 | 0.1937E | 0.3777E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 17 | 43.16 | 300.96 | 18.03 | 0.2055E | 0.3777E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 18 | 43.16 | 320.32 | 18.03 | 0.2055E | 0.1919E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 19 | 43.16 | 340.64 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 20 | 43.16 | 360.96 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 21 | 43.16 | 380.32 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 22 | 43.16 | 400.64 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 23 | 43.16 | 420.96 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 24 | 43.16 | 440.32 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 25 | 43.16 | 460.64 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 26 | 43.16 | 480.96 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 27 | 43.16 | 500.32 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 28 | 43.16 | 520.64 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 29 | 43.16 | 540.96 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |
| | | | | | 30 | 43.16 | 560.32 | 18.03 | 0.2055E | 0.2055E | 0.4739E | 0.2671E | 0.7113E | 0.7357E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | KOLL TP | VAR PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-------|------|----------|----------|----------|----------|----------|----------|
| 81 | 10.3 | 15.0 | 2 | 0.0 | 0.03 | 0.84956E | 0.39732E | 0.51112E | 0.72155E | 0.62194E | 0.59270E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 0.60 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| | | | | 20.64 | 0.00 | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |

BVMT 242/243 SHIP MAKE TURBULENCE TEST

| RUN | VEL | WLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|-------|-------|---------|----------|----------|---------|---------|---------|
| 82 | 22.7 | 15.0 | 1 | 0.0 | 1 | 85.33 | 6.60 | 18.03 | 0.1742E | 0.10231E | 0.88270E | 0.1056E | 0.1284E | 0.1467E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1707E | 0.10274E | 0.91210E | 0.1107E | 0.1279E | 0.1459E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1849E | 0.09750E | 0.91850E | 0.1055E | 0.1175E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1889E | 0.09702E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.1730E | 0.09361E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.1733E | 0.09345E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1735E | 0.09301E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.1867E | 0.11452E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1469E | 0.0955E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1433E | 0.0914E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1502E | 0.0910E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1821E | 0.0923E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.1940E | 0.0911E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1854E | 0.0913E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1478E | 0.0954E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1378E | 0.0911E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1481E | 0.0911E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1874E | 0.0968E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.1974E | 0.0969E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2276E | 0.0920E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.2170E | 0.0919E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1878E | 0.0947E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1571E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1571E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1936E | 0.0961E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.2195E | 0.091E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1467E | 0.0947E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1571E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1936E | 0.0961E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.2195E | 0.091E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1467E | 0.0947E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1571E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1936E | 0.0961E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.2195E | 0.091E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1467E | 0.0947E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 18.03 | 0.1571E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.1936E | 0.0961E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 0.00 | 12.33 | 0.2089E | 0.0925E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |
| | | | | | | 85.33 | 20.64 | 12.33 | 0.2195E | 0.091E | 0.9150E | 0.1057E | 0.1177E | 0.1450E |

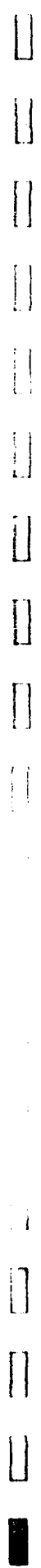
BVMT 242/243 SHIP WAKE TURBULENCE TEST

| TRUN | VEL | ROLL | TP | VAV | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|------|-----|------|------|-----|-------|----|--------|-------|----------|----|-----------|----|----------|----|----------|----|----------|----|----------|----|
| 224 | 83 | 10.3 | 15.0 | 9 | 180.0 | 9 | 170.69 | 20.32 | 0.90709E | 01 | -0.23994E | 00 | 0.51481E | 00 | 0.39460E | 00 | 0.46402E | 00 | 0.59142E | 00 |
| | | | | | | 10 | 170.69 | 40.64 | 0.58365E | 01 | 0.85830E | 01 | 0.23578E | 01 | 0.32240E | 00 | 0.48373E | 00 | 0.47073E | 00 |



RVNT 242/243 SHIP WAKE TURBULENCE TEST

| 2 | 3 | ROLL | VEL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|----|------|------|----|-------|-------|--------|-------|-------|-------------|--------------|-------------|-------------|-------------|-------------|
| 02 | 04 | 22.6 | 15.0 | 7 | 100.0 | 9 | 170.69 | 20.32 | 12.45 | 0.18569E 02 | -0.52691E 00 | 0.71573E 00 | 0.35681E 00 | 0.44420E 00 | 0.52468E 00 |
| 03 | 04 | 22.6 | 15.0 | 7 | 100.0 | 10 | 170.69 | 20.68 | 12.45 | 0.18658E 02 | -0.18795E 00 | 0.68675E 00 | 0.34979E 00 | 0.74208E 00 | 0.67049E 00 |



BVMT 242/243 SHIP WAKE TURBULENCE TEST

| 22 | RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | | | |
|----|---------|---------|-----------|---|-------|----|---------|---------|---------|-------------|--------------|-------------|-------------|-------------|-------------|
| 08 | 85 | 10.8 | 0.0 | 8 | 100.0 | 9 | 170.69 | -20.32 | 12.42 | 0.88398E 01 | -0.31290E 00 | 0.57566E 00 | 0.24574E 00 | 0.39412E 00 | 0.32873E 00 |
| | | | | | | 10 | 170.63 | -30.83 | 12.43 | 0.90306E 01 | 0.37498E 00 | 0.14990E 00 | 0.32417E 00 | 0.45314E 00 | 0.43009E 00 |



8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAM | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|--------|-------|-------|---------|---------|---------|---------|---------|---------|
| 86 | 22.5 | 0.0 | 1 | 0.0 | 1 | 170.69 | -6.60 | 18.03 | 95.82 | 0.20 | 18.42 | 127.40 | 4.47 | 11.75 |
| | | | | | 2 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 3 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 4 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 5 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 6 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 7 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 8 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 9 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 10 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 1 | 170.69 | -6.60 | 18.03 | 95.82 | 0.20 | 18.42 | 127.40 | 4.47 | 11.75 |
| | | | | | 2 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 3 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 4 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 5 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 6 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 7 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 8 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 9 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |
| | | | | | 10 | 170.69 | -6.60 | 18.03 | 165.28 | 0.17 | 19.26 | 127.40 | 4.47 | 11.75 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| | ROLL | YR | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|------|------|-----|-------|--------|--------|--------|-------------|-------------|-------------|--------------|-------------|-------------|
| 03 | 86 | 22.5 | 0.0 | 7 | -180.0 | 9 | 170.69 | -20.32 | 12.45 | 0.18572E 02 | -0.30413E 00 | 0.89456E 00 | 0.41490E 00 |
| | | | | | 10 | 170.69 | -40.69 | 0.18861E 02 | 0.12070E 01 | 0.48776E 00 | 0.50613E 00 | 0.54348E 00 | 0.54685E 00 |
| | | | | | | | | | | | | | 0.74583E 00 |



BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | RDLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | | | | | |
|----------|--------|-------|-------------|----------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|
| 88 22.8 | 0.0 | 1 | 0.0 | 85.33 | -6.60 | 18.03 | 0.15935E 02 | 0.17899E 00 | 0.12109E 01 | 0.17145E 01 | 0.11490E 01 | 0.14833E 01 | | | | | |
| | | | | 85.33 | 0.00 | 18.03 | 0.15467E 02 | 0.19296E 00 | 0.11844E 00 | 0.14705E 01 | 0.12206E 00 | 0.17200E 01 | 0.18200E 01 | | | | |
| | | | | 85.33 | 6.60 | 18.03 | 0.15583E 02 | 0.19250E 00 | 0.11844E 00 | 0.14705E 01 | 0.12206E 00 | 0.17200E 01 | 0.18200E 01 | | | | |
| | | | | 85.33 | -20.64 | 18.03 | 0.15990E 02 | 0.19337E 00 | 0.11947E 00 | 0.14643E 01 | 0.12109E 01 | 0.17145E 01 | 0.18200E 01 | | | | |
| | | | | 85.33 | 6.60 | 12.45 | 0.14779E 02 | 0.16170E 00 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| | | | | 85.33 | -20.64 | 12.45 | 0.18414E 02 | 0.19140E 00 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| | | | | 85.33 | 6.60 | 18.03 | 0.18870E 02 | 0.12034E 01 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| | | | | 85.33 | 6.60 | 18.03 | 0.19109E 02 | 0.1815E 01 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| | | | | 85.33 | 20.64 | 18.03 | 0.19725E 02 | 0.23075E 01 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| | | | | 85.33 | 40.64 | 18.03 | 0.18752E 02 | 0.19475E 01 | 0.11691E 00 | 0.13991E 01 | 0.10698E 01 | 0.14933E 01 | 0.17145E 01 | 0.18200E 01 | | | |
| 3 -50.0 | | 1 | | 85.33 | -6.60 | 18.03 | 0.09073E 01 | 0.3305E 01 | 0.51870E 01 | 0.42809E 01 | 0.31441E 01 | 0.42655E 01 | | | | | |
| | | | | 85.33 | 6.60 | 18.03 | 0.11279E 02 | 0.3507E 01 | 0.5588E 01 | 0.44425E 01 | 0.3305E 01 | 0.42809E 01 | 0.53945E 01 | | | | |
| | | | | 85.33 | -20.64 | 18.03 | 0.10710E 02 | 0.11279E 01 | 0.48464E 01 | 0.3838E 01 | 0.2787E 01 | 0.44425E 01 | 0.53945E 01 | | | | |
| | | | | 85.33 | 6.60 | 18.03 | 0.16138E 01 | 0.19133E 00 | 0.48464E 01 | 0.3838E 01 | 0.2787E 01 | 0.44425E 01 | 0.53945E 01 | | | | |
| | | | | 85.33 | -6.60 | 12.45 | 0.06668E 01 | 0.32309E 01 | 0.43427E 01 | 0.34503E 01 | 0.2507E 01 | 0.50920E 01 | 0.49750E 01 | | | | |
| | | | | 85.33 | 20.64 | 12.45 | 0.11237E 02 | 0.37632E 01 | 0.47479E 01 | 0.39435E 01 | 0.29430E 01 | 0.53945E 01 | 0.49750E 01 | | | | |
| | | | | 4 -90.0 | | 1 | | 85.33 | -6.60 | 18.03 | 0.13570E 02 | 0.99033E 00 | 0.42489E 01 | 0.49118E 01 | 0.2144E 01 | 0.42144E 01 | 0.46718E 01 |
| | | | | | | | | 85.33 | 6.60 | 18.03 | 0.18929E 02 | 0.41779E 00 | 0.44255E 01 | 0.3292E 01 | 0.2144E 01 | 0.42144E 01 | 0.46718E 01 |
| | | | | | | | | 85.33 | -20.64 | 18.03 | 0.17231E 02 | 0.18029E 00 | 0.26627E 01 | 0.19233E 01 | 0.1209E 01 | 0.42144E 01 | 0.46718E 01 |
| | | | | | | | | 85.33 | 6.60 | 18.03 | 0.15879E 02 | 0.10730E 00 | 0.45545E 01 | 0.3292E 01 | 0.1209E 01 | 0.42144E 01 | 0.46718E 01 |
| 85.33 | -6.60 | 12.45 | 0.09045E 00 | | | | | 0.18147E 01 | 0.32308E 01 | 0.2507E 01 | 0.1209E 01 | 0.42144E 01 | 0.46718E 01 | | | | |
| 85.33 | 20.64 | 12.45 | 0.20645E 00 | | | | | 0.3633E 01 | 0.39553E 01 | 0.2892E 01 | 0.1209E 01 | 0.42144E 01 | 0.46718E 01 | | | | |
| 5 -120.0 | | 1 | | | | | | 85.33 | -6.60 | 18.03 | 0.18955E 02 | 0.1258E 01 | 0.49557E 01 | 0.1742E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 |
| | | | | | | | | 85.33 | 6.60 | 18.03 | 0.1859E 02 | 0.2875E 01 | 0.3534E 01 | 0.3118E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 |
| | | | | | | | | 85.33 | -20.64 | 18.03 | 0.17277E 02 | 0.2937E 01 | 0.9096E 01 | 0.3510E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 |
| | | | | | | | | 85.33 | 6.60 | 12.45 | 0.16975E 02 | 0.5061E 01 | 0.89316E 01 | 0.3203E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 |
| | | | | 85.33 | -6.60 | 12.45 | 0.1355E 02 | 0.2651E 01 | 0.29510E 01 | 0.2443E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 | | | | |
| | | | | 85.33 | 20.64 | 12.45 | 0.17662E 02 | 0.2644E 01 | 0.11743E 01 | 0.3527E 01 | 0.1972E 01 | 0.2322E 01 | 0.3322E 01 | | | | |
| | | | | 6 -150.0 | | 1 | | 85.33 | -6.60 | 18.03 | 0.16702E 02 | 0.10215E 01 | 0.47147E 01 | 0.1922E 01 | 0.1922E 01 | 0.2476E 01 | 0.2848E 01 |
| | | | | | | | | 85.33 | 6.60 | 18.03 | 0.19678E 02 | 0.3954E 01 | 0.2182E 01 | 0.3177E 01 | 0.1922E 01 | 0.2476E 01 | 0.2848E 01 |
| | | | | | | | | 85.33 | -20.64 | 18.03 | 0.13270E 02 | 0.8674E 01 | 0.40255E 01 | 0.3708E 01 | 0.1922E 01 | 0.2476E 01 | 0.2848E 01 |
| | | | | | | | | 85.33 | 6.60 | 12.45 | 0.16026E 02 | 0.11254E 01 | 0.26112E 01 | 0.2237E 01 | 0.1922E 01 | 0.2476E 01 | 0.2848E 01 |
| 85.33 | -20.64 | 12.45 | 0.15665E 02 | | | | | 0.2422E 01 | 0.1597E 01 | 0.2644E 01 | 0.1922E 01 | 0.2476E 01 | 0.2848E 01 | | | | |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-----|-------|-------|--------|-------|----------|----|----------|----|----------|----|---------|----|----------|----|----------|----|
| 89 | 10.7 | 0.0 | 2 | 0.0 | 1 | 43.16 | -6.60 | 18.03 | 0.24570E | 00 | 0.45361E | 00 | 0.58725E | 00 | 0.5112E | 00 | 0.50186E | 00 | 0.50186E | 00 |
| | | | | | 2 | 43.16 | 0.60 | 18.03 | 0.1488E | 00 | 0.38091E | 00 | 0.73654E | 00 | 0.3399E | 00 | 0.73399E | 00 | 0.73399E | 00 |
| | | | | | 3 | 43.16 | -20.64 | 18.03 | 0.16346E | 00 | 0.49922E | 00 | 0.25049E | 00 | 0.4722E | 00 | 0.25122E | 00 | 0.4722E | 00 |
| | | | | | 4 | 43.16 | 6.60 | 18.03 | 0.10151E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 5 | 43.16 | -6.60 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 6 | 43.16 | 20.64 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 7 | 43.16 | -20.64 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 8 | 43.16 | 6.60 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 9 | 43.16 | -20.64 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 10 | 43.16 | 6.60 | 18.03 | 0.15320E | 00 | 0.15891E | 00 | 0.10521E | 00 | 0.2919E | 00 | 0.10521E | 00 | 0.2919E | 00 |
| | | | | | 3 | 43.16 | -6.60 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 4 | 43.16 | 6.60 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 5 | 43.16 | -20.64 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 6 | 43.16 | 6.60 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 7 | 43.16 | -20.64 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 8 | 43.16 | 6.60 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 9 | 43.16 | -20.64 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 10 | 43.16 | 6.60 | 18.03 | 0.45950E | 00 | 0.7574E | 00 | 0.21147E | 00 | 0.1795E | 00 | 0.4644E | 00 | 0.1795E | 00 |
| | | | | | 4 | 43.16 | -6.60 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 5 | 43.16 | 6.60 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 6 | 43.16 | -20.64 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 7 | 43.16 | 6.60 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 8 | 43.16 | -20.64 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 9 | 43.16 | 6.60 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 10 | 43.16 | -20.64 | 18.03 | 0.8432E | 00 | 0.10191E | 00 | 0.20599E | 00 | 0.1742E | 00 | 0.8432E | 00 | 0.1742E | 00 |
| | | | | | 5 | 43.16 | -6.60 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |
| | | | | | 6 | 43.16 | 6.60 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |
| | | | | | 7 | 43.16 | -20.64 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |
| | | | | | 8 | 43.16 | 6.60 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |
| | | | | | 9 | 43.16 | -20.64 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |
| | | | | | 10 | 43.16 | 6.60 | 18.03 | 0.82342E | 00 | 0.75128E | 00 | 0.18791E | 00 | 0.2208E | 00 | 0.82342E | 00 | 0.2208E | 00 |

BVHT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-------|------|------|----|-----|-------|-------|--------|-------|------------|------------|------------|------------|------------|------------|
| 90 | 22.8 | 0.0 | 1 | 0.0 | 1 | 43.16 | -6.60 | 18.03 | 0.1428E 02 | 0.2267E 00 | 0.8403E 00 | 0.1489E 01 | 0.1937E 01 | 0.1330E 01 |
| | | | | | 2 | 43.16 | 0.60 | 18.03 | 0.1486E 02 | 0.1327E 01 | 0.5883E 00 | 0.2003E 01 | 0.1224E 01 | 0.1369E 01 |
| | | | | | 3 | 43.16 | 0.60 | 18.03 | 0.1522E 02 | 0.1817E 01 | 0.7901E 00 | 0.1747E 01 | 0.1623E 01 | 0.1209E 01 |
| | | | | | 4 | 43.16 | -20.32 | 18.03 | 0.1928E 02 | 0.2574E 01 | 0.3808E 00 | 0.1681E 01 | 0.1936E 01 | 0.1209E 01 |
| | | | | | 5 | 43.16 | -40.64 | 18.03 | 0.1488E 02 | 0.1947E 01 | 0.3808E 00 | 0.2071E 01 | 0.1936E 01 | 0.1209E 01 |
| | | | | | 7 | 43.16 | -6.60 | 12.45 | 0.1488E 02 | 0.1862E 01 | 0.3457E 00 | 0.2171E 01 | 0.2067E 01 | 0.1209E 01 |
| | | | | | 8 | 43.16 | 6.60 | 12.45 | 0.1488E 02 | 0.1608E 01 | 0.3457E 00 | 0.2171E 01 | 0.2067E 01 | 0.1209E 01 |
| | | | | | 9 | 43.16 | -20.32 | 12.45 | 0.1852E 02 | 0.1883E 01 | 0.9352E 00 | 0.5006E 01 | 0.7138E 01 | 0.4797E 01 |
| | | | | | 10 | 43.16 | -40.64 | 12.45 | 0.1902E 02 | 0.1213E 01 | 0.1903E 00 | 0.5006E 01 | 0.7138E 01 | 0.4797E 01 |
| -30.0 | | 2 | | | 1 | 43.16 | -6.60 | 18.03 | 0.9592E 01 | 0.1796E 01 | 0.1820E 01 | 0.3903E 01 | 0.3945E 01 | 0.3476E 01 |
| | | | | | 2 | 43.16 | 0.60 | 18.03 | 0.1097E 02 | 0.1183E 01 | 0.2064E 01 | 0.3103E 01 | 0.3475E 01 | 0.4768E 01 |
| | | | | | 3 | 43.16 | 6.60 | 18.03 | 0.1329E 02 | 0.1002E 01 | 0.3594E 01 | 0.3091E 01 | 0.3675E 01 | 0.4768E 01 |
| | | | | | 4 | 43.16 | -20.32 | 18.03 | 0.1481E 02 | 0.1368E 01 | 0.4095E 01 | 0.2517E 01 | 0.2923E 01 | 0.3922E 01 |
| | | | | | 5 | 43.16 | -40.64 | 18.03 | 0.1835E 02 | 0.1123E 01 | 0.4095E 01 | 0.2517E 01 | 0.2923E 01 | 0.3922E 01 |
| | | | | | 7 | 43.16 | -6.60 | 12.45 | 0.5919E 02 | 0.1089E 01 | 0.3138E 01 | 0.3004E 01 | 0.3472E 01 | 0.3922E 01 |
| | | | | | 8 | 43.16 | 6.60 | 12.45 | 0.1101E 02 | 0.1593E 01 | 0.4581E 01 | 0.3071E 01 | 0.4135E 01 | 0.3922E 01 |
| | | | | | 9 | 43.16 | -20.32 | 12.45 | 0.1837E 02 | 0.1521E 01 | 0.2339E 01 | 0.3267E 01 | 0.3220E 01 | 0.2684E 01 |
| | | | | | 10 | 43.16 | -40.64 | 12.45 | 0.1837E 02 | 0.1521E 01 | 0.2339E 01 | 0.3267E 01 | 0.3220E 01 | 0.2684E 01 |
| -50.0 | | 3 | | | 1 | 43.16 | -6.60 | 18.03 | 0.6984E 01 | 0.2439E 01 | 0.7041E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 2 | 43.16 | 0.60 | 18.03 | 0.1147E 02 | 0.2527E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 3 | 43.16 | 6.60 | 18.03 | 0.1147E 02 | 0.2527E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 4 | 43.16 | -20.32 | 18.03 | 0.2963E 02 | 0.1907E 01 | 0.2580E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 5 | 43.16 | -40.64 | 18.03 | 0.1303E 02 | 0.2063E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 7 | 43.16 | -6.60 | 12.45 | 0.1101E 02 | 0.3016E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 8 | 43.16 | 6.60 | 12.45 | 0.1101E 02 | 0.3016E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 9 | 43.16 | -20.32 | 12.45 | 0.1101E 02 | 0.3016E 01 | 0.1952E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| | | | | | 10 | 43.16 | -40.64 | 12.45 | 0.1104E 02 | 0.2749E 01 | 0.3167E 01 | 0.4392E 01 | 0.4577E 01 | 0.4565E 01 |
| -90.0 | | 4 | | | 1 | 43.16 | -6.60 | 18.03 | 0.1784E 02 | 0.2064E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 2 | 43.16 | 0.60 | 18.03 | 0.2230E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 3 | 43.16 | 6.60 | 18.03 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 4 | 43.16 | -20.32 | 18.03 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 5 | 43.16 | -40.64 | 18.03 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 7 | 43.16 | -6.60 | 12.45 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 8 | 43.16 | 6.60 | 12.45 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 9 | 43.16 | -20.32 | 12.45 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |
| | | | | | 10 | 43.16 | -40.64 | 12.45 | 0.1104E 02 | 0.1696E 01 | 0.1210E 01 | 0.4676E 01 | 0.5006E 01 | 0.4270E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | | | |
|----------|------|----|-------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| '91 10.7 | 0.0 | 2 | 0.0 | 1 | 23.88 | 6.00 | 18.03 | 0.9193E | 0.5493E | 0.3597E | 0.5198E | 0.5753E | 0.1098E | | | |
| | | | | | 23.88 | 0.00 | 18.03 | 0.7781E | 0.7742E | 0.3144E | 0.4027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9468E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8409E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| | | | | | 23.88 | 20.24 | 18.03 | 0.9436E | 0.7440E | 0.1140E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E | 0.4027E |
| '91 10.7 | 0.0 | 3 | -30.0 | 1 | 23.88 | 6.00 | 18.03 | 0.7109E | 0.9835E | 0.6542E | 0.4449E | 0.1926E | 0.0000E | | | |
| | | | | | 23.88 | 0.00 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.8123E | 0.7499E | 0.1298E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | 0.4449E | |
| '91 10.7 | 0.0 | 4 | -50.0 | 1 | 23.88 | 6.00 | 18.03 | 0.3013E | 0.4580E | 0.1089E | 0.3544E | 0.2894E | 0.0000E | | | |
| | | | | | 23.88 | 0.00 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1053E | 0.3277E | 0.2770E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | 0.3544E | |
| '91 10.7 | 0.0 | 5 | -90.0 | 1 | 23.88 | 6.00 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.0000E | | | |
| | | | | | 23.88 | 0.00 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |
| | | | | | 23.88 | 20.24 | 18.03 | 0.1027E | 0.3749E | 0.3449E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | 0.1027E | |

RVMT 242/243 SHIP WAKE TURBULENCE TEST

| TIME | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|------|------|------|-------|-----|-------|-------|--------|-------|-------------|--------------|-------------|-------------|-------------|-------------|
| 1 | 22.7 | 0.0 | 1 | 0.0 | 1 | 23.88 | -6.60 | 18.03 | 0.17301E 02 | -0.13726E 00 | 0.35868E 00 | 0.15106E 01 | 0.21426E 01 | 0.17271E 01 |
| 2 | | | | | 2 | 23.88 | 0.00 | 18.03 | 0.14114E 02 | -0.12765E 00 | 0.37560E 00 | 0.17699E 01 | 0.21408E 01 | 0.17271E 01 |
| 3 | | | | | 3 | 23.88 | 0.00 | 18.03 | 0.12910E 02 | -0.13549E 01 | 0.31919E 01 | 0.19310E 01 | 0.21395E 01 | 0.17271E 01 |
| 4 | | | | | 4 | 23.88 | -20.32 | 18.03 | 0.19641E 02 | -0.12508E 01 | 0.30282E 01 | 0.18461E 01 | 0.21366E 01 | 0.17271E 01 |
| 5 | | | | | 5 | 23.88 | -40.64 | 18.03 | 0.13312E 02 | -0.11992E 01 | 0.28211E 01 | 0.17271E 01 | 0.21366E 01 | 0.17271E 01 |
| 7 | | | | | 7 | 23.88 | -6.60 | 12.45 | 0.14780E 02 | -0.11992E 01 | 0.28211E 01 | 0.18461E 01 | 0.21366E 01 | 0.17271E 01 |
| 8 | | | | | 8 | 23.88 | -6.60 | 12.45 | 0.14091E 02 | -0.11992E 01 | 0.28211E 01 | 0.18461E 01 | 0.21366E 01 | 0.17271E 01 |
| 9 | | | | | 9 | 23.88 | -20.32 | 12.45 | 0.18796E 02 | -0.11992E 01 | 0.28211E 01 | 0.18461E 01 | 0.21366E 01 | 0.17271E 01 |
| 10 | | | | | 10 | 23.88 | -40.64 | 12.45 | 0.19089E 02 | -0.11992E 01 | 0.28211E 01 | 0.18461E 01 | 0.21366E 01 | 0.17271E 01 |
| 1 | | 2 | -30.0 | | 1 | 23.88 | -6.60 | 18.03 | 0.14198E 02 | 0.35286E 01 | 0.21505E 01 | 0.36111E 01 | 0.43621E 01 | 0.33170E 01 |
| 2 | | | | | 2 | 23.88 | 0.00 | 18.03 | 0.16136E 02 | -0.21039E 00 | 0.31919E 01 | 0.27860E 01 | 0.43621E 01 | 0.33170E 01 |
| 3 | | | | | 3 | 23.88 | 0.00 | 18.03 | 0.17464E 02 | -0.21039E 00 | 0.31919E 01 | 0.27860E 01 | 0.43621E 01 | 0.33170E 01 |
| 4 | | | | | 4 | 23.88 | 20.32 | 18.03 | 0.15071E 02 | -0.18239E 01 | 0.29661E 01 | 0.24461E 01 | 0.43621E 01 | 0.33170E 01 |
| 5 | | | | | 5 | 23.88 | -40.64 | 18.03 | 0.19961E 02 | -0.18239E 01 | 0.29661E 01 | 0.24461E 01 | 0.43621E 01 | 0.33170E 01 |
| 7 | | | | | 7 | 23.88 | -6.60 | 12.45 | 0.16205E 02 | -0.13147E 01 | 0.28395E 01 | 0.32221E 01 | 0.43621E 01 | 0.33170E 01 |
| 8 | | | | | 8 | 23.88 | -6.60 | 12.45 | 0.12334E 02 | -0.11992E 01 | 0.28395E 01 | 0.32221E 01 | 0.43621E 01 | 0.33170E 01 |
| 9 | | | | | 9 | 23.88 | -20.32 | 12.45 | 0.16911E 02 | -0.11992E 01 | 0.28395E 01 | 0.32221E 01 | 0.43621E 01 | 0.33170E 01 |
| 10 | | | | | 10 | 23.88 | -40.64 | 12.45 | 0.17716E 02 | -0.11992E 01 | 0.28395E 01 | 0.32221E 01 | 0.43621E 01 | 0.33170E 01 |
| 1 | | 3 | -50.0 | | 1 | 23.88 | -6.60 | 18.03 | 0.09219E 02 | 0.16288E 01 | 0.20472E 01 | 0.41979E 01 | 0.52358E 01 | 0.46271E 01 |
| 2 | | | | | 2 | 23.88 | 0.00 | 18.03 | 0.17277E 02 | -0.40289E 00 | 0.32312E 01 | 0.51979E 01 | 0.52358E 01 | 0.46271E 01 |
| 3 | | | | | 3 | 23.88 | 0.00 | 18.03 | 0.18004E 02 | -0.40289E 00 | 0.32312E 01 | 0.51979E 01 | 0.52358E 01 | 0.46271E 01 |
| 4 | | | | | 4 | 23.88 | -20.32 | 18.03 | 0.15001E 02 | -0.27183E 01 | 0.26502E 01 | 0.47424E 01 | 0.52358E 01 | 0.46271E 01 |
| 5 | | | | | 5 | 23.88 | -40.64 | 18.03 | 0.19231E 02 | -0.27183E 01 | 0.26502E 01 | 0.47424E 01 | 0.52358E 01 | 0.46271E 01 |
| 7 | | | | | 7 | 23.88 | -6.60 | 12.45 | 0.19027E 02 | -0.12888E 01 | 0.29466E 01 | 0.42153E 01 | 0.52358E 01 | 0.46271E 01 |
| 8 | | | | | 8 | 23.88 | -6.60 | 12.45 | 0.19027E 02 | -0.12888E 01 | 0.29466E 01 | 0.42153E 01 | 0.52358E 01 | 0.46271E 01 |
| 9 | | | | | 9 | 23.88 | -20.32 | 12.45 | 0.17180E 02 | -0.12888E 01 | 0.29466E 01 | 0.42153E 01 | 0.52358E 01 | 0.46271E 01 |
| 10 | | | | | 10 | 23.88 | -40.64 | 12.45 | 0.12312E 02 | -0.12888E 01 | 0.29466E 01 | 0.42153E 01 | 0.52358E 01 | 0.46271E 01 |
| 1 | | 4 | -90.0 | | 1 | 23.88 | -6.60 | 18.03 | 0.22172E 02 | -0.20171E 01 | 0.20199E 01 | 0.25912E 01 | 0.30322E 01 | 0.22594E 01 |
| 2 | | | | | 2 | 23.88 | 0.00 | 18.03 | 0.22651E 02 | -0.27372E 01 | 0.17230E 01 | 0.10642E 01 | 0.30322E 01 | 0.22594E 01 |
| 3 | | | | | 3 | 23.88 | 0.00 | 18.03 | 0.21370E 02 | -0.27372E 01 | 0.17230E 01 | 0.10642E 01 | 0.30322E 01 | 0.22594E 01 |
| 4 | | | | | 4 | 23.88 | -20.32 | 18.03 | 0.15535E 02 | -0.16261E 01 | 0.14049E 01 | 0.13755E 01 | 0.30322E 01 | 0.22594E 01 |
| 5 | | | | | 5 | 23.88 | -40.64 | 18.03 | 0.15535E 02 | -0.16261E 01 | 0.14049E 01 | 0.13755E 01 | 0.30322E 01 | 0.22594E 01 |
| 7 | | | | | 7 | 23.88 | -6.60 | 12.45 | 0.16208E 02 | -0.40112E 01 | 0.49876E 01 | 0.51493E 01 | 0.59654E 01 | 0.59654E 01 |
| 8 | | | | | 8 | 23.88 | -6.60 | 12.45 | 0.16208E 02 | -0.40112E 01 | 0.49876E 01 | 0.51493E 01 | 0.59654E 01 | 0.59654E 01 |
| 9 | | | | | 9 | 23.88 | -20.32 | 12.45 | 0.12588E 02 | -0.60808E 01 | 0.51107E 01 | 0.16355E 01 | 0.59654E 01 | 0.59654E 01 |
| 10 | | | | | 10 | 23.88 | -40.64 | 12.45 | 0.13291E 02 | -0.60808E 01 | 0.51107E 01 | 0.16355E 01 | 0.59654E 01 | 0.59654E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|-------|-----|-------|------|--------|------|----------|----------|----------|----------|----------|----------|
| 93 | 10.5 | 0.0 | 2 | 0.0 | 1 | 0.00 | -6.60 | 0.03 | 0.86745E | 0.2179E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 2 | 0.00 | 0.00 | 0.03 | 0.7189E | 0.2180E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 3 | 0.00 | 0.00 | 0.03 | 0.7189E | 0.2180E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 4 | 0.00 | 0.00 | 0.03 | 0.7189E | 0.2180E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 5 | 0.00 | 0.00 | 0.03 | 0.7189E | 0.2180E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 6 | 0.00 | 0.00 | 0.03 | 0.7189E | 0.2180E | 0.45329E | 0.6623E | 0.0169E | 0.01894E |
| | | | | | 10 | 0.00 | -20.64 | 0.03 | 0.59683E | 0.18150E | 0.38797E | 0.01317E | 0.00331E | 0.00417E |
| | | 3 | -30.0 | | 1 | 0.00 | -6.60 | 0.03 | 0.9772E | 0.1610E | 0.6048E | 0.0146E | 0.0020E | 0.0025E |
| | | | | | 2 | 0.00 | 0.00 | 0.03 | 0.98074E | 0.1611E | 0.6048E | 0.0146E | 0.0020E | 0.0025E |
| | | | | | 3 | 0.00 | 0.00 | 0.03 | 0.84190E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 4 | 0.00 | 0.00 | 0.03 | 0.86745E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 5 | 0.00 | 0.00 | 0.03 | 0.1547E | 0.20040E | 0.34214E | 0.00170E | 0.00337E | 0.00417E |
| | | | | | 6 | 0.00 | 0.00 | 0.03 | 0.1547E | 0.20040E | 0.34214E | 0.00170E | 0.00337E | 0.00417E |
| | | | | | 10 | 0.00 | -20.64 | 0.03 | 0.8317E | 0.32825E | 0.55156E | 0.01822E | 0.00512E | 0.00612E |
| | | 4 | -50.0 | | 1 | 0.00 | -6.60 | 0.03 | 1.090E | 0.1610E | 0.773E | 0.0146E | 0.0020E | 0.0025E |
| | | | | | 2 | 0.00 | 0.00 | 0.03 | 1.090E | 0.1610E | 0.773E | 0.0146E | 0.0020E | 0.0025E |
| | | | | | 3 | 0.00 | 0.00 | 0.03 | 0.98074E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 4 | 0.00 | 0.00 | 0.03 | 0.98074E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 5 | 0.00 | 0.00 | 0.03 | 0.98074E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 6 | 0.00 | 0.00 | 0.03 | 0.98074E | 0.17825E | 0.41823E | 0.01022E | 0.00231E | 0.00282E |
| | | | | | 10 | 0.00 | -20.64 | 0.03 | 1.1357E | 0.15354E | 0.61023E | 0.01388E | 0.00370E | 0.00451E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 94 | 18.0 | 0.0 | 1 | 0.0 | 1 | 0.00 | -6.60 | 18.03 | 0.11600E 02 | -0.2432E 00 | 0.7104E 00 | 0.17512E 01 | 0.18660E 01 | 0.20599E 01 |
| | | | | | | 0.00 | 0.00 | 18.03 | 0.12041E 02 | -0.3152E 00 | 0.3298E 00 | 0.17297E 01 | 0.25975E 01 | 0.22799E 01 |
| | | | | | | 0.00 | 0.00 | 18.03 | 0.12563E 02 | -0.3409E 01 | 0.3508E 00 | 0.17889E 01 | 0.3202E 00 | 0.25718E 01 |
| | | | | | | 0.00 | -20.32 | 18.03 | 0.14210E 02 | -0.1009E 01 | 0.15072E 00 | 0.17535E 01 | 0.2202E 00 | 0.23743E 01 |
| | | | | | | 0.00 | -40.64 | 12.45 | 0.19695E 01 | -0.2691E 01 | 0.13802E 00 | 0.17535E 01 | 0.20174E 01 | 0.22063E 01 |
| | | | | | | 0.00 | -6.60 | 12.45 | 0.26416E 01 | -0.5828E 01 | 0.3482E 01 | 0.18660E 01 | 0.2269E 01 | 0.2567E 01 |
| | | | | | | 0.00 | -20.32 | 12.45 | 0.4581E 01 | -0.6558E 01 | 0.1154E 01 | 0.18660E 01 | 0.2269E 01 | 0.2567E 01 |
| | | | | | | 0.00 | -40.64 | 12.45 | 0.14861E 02 | 0.5637E 00 | 0.31482E 00 | 0.40926E 00 | 0.42388E 00 | 0.59456E 00 |
| | | | | | | 0.00 | -6.60 | 18.03 | 0.15145E 02 | 0.2798E 01 | 0.2225E 01 | 0.11230E 01 | 0.1181E 01 | 0.11567E 01 |
| | | | | | | 0.00 | 0.00 | 18.03 | 0.16262E 02 | 0.6528E 00 | 0.3337E 01 | 0.5152E 01 | 0.61962E 00 | 0.69428E 00 |
| | | | | | | 0.00 | 6.60 | 18.03 | 0.14919E 02 | 0.13119E 01 | 0.3308E 01 | 0.41905E 01 | 0.5615E 01 | 0.60485E 01 |
| | | | | | | 0.00 | 20.32 | 18.03 | 0.14731E 02 | 0.14731E 01 | 0.7768E 00 | 0.17479E 01 | 0.21149E 01 | 0.22591E 01 |
| | | | | | | 0.00 | -40.64 | 12.45 | 0.12763E 02 | -0.1105E 00 | 0.7302E 00 | 0.8968E 01 | 0.81570E 01 | 0.35647E 01 |
| | | | | | | 0.00 | -6.60 | 12.45 | 0.16213E 02 | 0.2908E 00 | 0.2908E 00 | 0.3498E 01 | 0.41624E 01 | 0.13369E 01 |
| | | | | | | 0.00 | 20.32 | 12.45 | 0.15613E 02 | 0.9828E 00 | 0.5669E 00 | 0.10799E 01 | 0.1247E 01 | 0.13369E 01 |
| | | | | | | 0.00 | -20.32 | 12.45 | 0.19100E 02 | -0.2748E 01 | 0.5169E 01 | 0.1665E 01 | 0.23539E 01 | 0.23801E 01 |
| | | | | | | 0.00 | -40.64 | 12.45 | 0.11492E 02 | 0.1581E 01 | 0.31146E 01 | 0.18586E 01 | 0.32155E 01 | 0.23801E 01 |
| | | | | | | 0.00 | -6.60 | 18.03 | 0.15787E 02 | 0.3821E 01 | 0.49194E 01 | 0.11347E 01 | 0.21965E 01 | 0.12345E 01 |
| | | | | | | 0.00 | 0.00 | 18.03 | 0.15371E 02 | 0.12178E 01 | 0.49194E 01 | 0.6737E 01 | 0.66347E 00 | 0.64933E 00 |
| | | | | | | 0.00 | 6.60 | 18.03 | 0.15299E 02 | 0.9770E 00 | 0.49194E 01 | 0.4577E 01 | 0.64777E 00 | 0.4436E 01 |
| | | | | | | 0.00 | -20.32 | 18.03 | 0.13224E 02 | 0.7370E 00 | 0.49194E 01 | 0.4577E 01 | 0.64777E 00 | 0.4436E 01 |
| | | | | | | 0.00 | -40.64 | 12.45 | 0.13937E 02 | 0.2697E 01 | 0.3233E 01 | 0.2588E 01 | 0.3197E 01 | 0.2098E 01 |
| | | | | | | 0.00 | 0.00 | 12.45 | 0.13937E 02 | 0.2697E 01 | 0.3233E 01 | 0.2588E 01 | 0.3197E 01 | 0.2098E 01 |
| | | | | | | 0.00 | -6.60 | 12.45 | 0.14675E 02 | 0.3097E 01 | 0.3233E 01 | 0.2588E 01 | 0.3197E 01 | 0.2098E 01 |
| | | | | | | 0.00 | -20.64 | 12.45 | 0.14675E 02 | 0.3097E 01 | 0.3233E 01 | 0.2588E 01 | 0.3197E 01 | 0.2098E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|-----|-------|--------|---------|---------|---------|---------|---------|---------|
| 95 | 22.6 | 0.0 | 1 | 0.0 | 0.00 | 18.003 | 0.1266E | 0.6451E | 0.3813E | 0.2368E | 0.1786E | 0.2392E |
| | | | | | 0.00 | 18.003 | 0.1211E | 0.1193E | 0.1000E | 0.1663E | 0.2459E | 0.2081E |
| | | | | | 20.64 | 18.003 | 0.1987E | 0.1293E | 0.1997E | 0.3102E | 0.1505E | 0.2908E |
| | | | | | 0.00 | 18.003 | 0.1601E | 0.1976E | 0.2214E | 0.1662E | 0.1790E | 0.2908E |
| | | | | | 0.00 | 18.003 | 0.1171E | 0.1473E | 0.1469E | 0.2383E | 0.1559E | 0.2908E |
| | | | | | 20.64 | 18.003 | 0.1913E | 0.1732E | 0.1392E | 0.3493E | 0.1732E | 0.2908E |
| | | | 10 | | 0.00 | 18.003 | 0.1960E | 0.1712E | 0.2390E | 0.1659E | 0.2170E | 0.1519E |
| | | | | | 0.00 | 18.003 | 0.1790E | 0.2122E | 0.2381E | 0.2527E | 0.2472E | 0.1997E |
| | | | | | 20.64 | 18.003 | 0.1771E | 0.2103E | 0.2089E | 0.2627E | 0.1987E | 0.2908E |
| | | | | | 0.00 | 18.003 | 0.1771E | 0.2032E | 0.2293E | 0.1932E | 0.2333E | 0.2908E |
| | | | | | 0.00 | 18.003 | 0.1990E | 0.1791E | 0.2293E | 0.2222E | 0.2333E | 0.2908E |
| | | | | | 20.64 | 18.003 | 0.1576E | 0.1791E | 0.2116E | 0.2404E | 0.2333E | 0.2908E |
| | | | 10 | | 0.00 | 18.003 | 0.2024E | 0.1957E | 0.1833E | 0.1655E | 0.1786E | 0.1519E |
| | | | | | 0.00 | 18.003 | 0.2195E | 0.1699E | 0.2355E | 0.1555E | 0.1786E | 0.1519E |
| | | | | | 20.64 | 18.003 | 0.1501E | 0.1662E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | | | 0.00 | 18.003 | 0.2011E | 0.1662E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | | | 20.64 | 18.003 | 0.1944E | 0.1670E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | 10 | | 0.00 | 18.003 | 0.2011E | 0.1662E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | | | 0.00 | 18.003 | 0.2195E | 0.1699E | 0.2355E | 0.1555E | 0.1786E | 0.1519E |
| | | | | | 20.64 | 18.003 | 0.1501E | 0.1662E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | | | 0.00 | 18.003 | 0.2011E | 0.1662E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |
| | | | | | 20.64 | 18.003 | 0.1944E | 0.1670E | 0.1997E | 0.1607E | 0.1786E | 0.1519E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|----------|------|--------|-------|-------------|--------------|--------------|-------------|-------------|-------------|
| 96 23.1 | 0.0 | 1 | 0.00 | -6.60 | 18.03 | 0.16336E 02 | -0.62862E 01 | 0.87950E 00 | 0.22985E 01 | 0.23897E 01 | 0.21649E 01 |
| | | 2 | 0.00 | 0.00 | 18.03 | 0.11229E 02 | -0.15780E 01 | 0.76846E 00 | 0.21179E 01 | 0.31334E 01 | 0.22641E 01 |
| | | 3 | 0.00 | 6.60 | 18.03 | 0.19781E 02 | -0.15675E 01 | -0.98268E 00 | 0.24772E 01 | 0.21642E 01 | 0.28525E 01 |
| | | 4 | 0.00 | -20.32 | 18.03 | 0.16033E 02 | -0.11561E 01 | -0.94315E 00 | 0.21848E 01 | 0.41866E 01 | 0.44426E 01 |
| | | 5 | 0.00 | -40.64 | 12.45 | 0.13642E 02 | -0.11446E 01 | -0.30079E 00 | 0.21500E 01 | 0.63867E 01 | 0.77605E 01 |
| | | 6 | 0.00 | -6.60 | 12.45 | 0.13642E 02 | -0.22925E 01 | -0.53229E 00 | 0.26007E 01 | 0.25554E 01 | 0.33619E 01 |
| | | 7 | 0.00 | 6.60 | 12.45 | 0.18291E 02 | -0.20549E 01 | -0.41623E 00 | 0.27367E 01 | 0.34784E 01 | 0.35111E 01 |
| | | 8 | 0.00 | -20.32 | 12.45 | 0.19209E 02 | -0.87400E 01 | -0.18942E 00 | 0.20994E 01 | 0.47869E 01 | 0.55111E 01 |
| | | 9 | 0.00 | -40.64 | 12.45 | 0.16471E 02 | 0.20985E 01 | 0.33371E 00 | 0.25247E 01 | 0.28072E 01 | 0.21252E 01 |
| | | 10 | 0.00 | 0.00 | 18.03 | 0.20985E 02 | 0.21229E 01 | 0.41588E 00 | 0.22866E 01 | 0.28168E 01 | 0.21615E 01 |
| | | 1 | 0.00 | 0.00 | 18.03 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 2 | 0.00 | 0.00 | 18.03 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 3 | 0.00 | 0.00 | 18.03 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 4 | 0.00 | 0.00 | 18.03 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 5 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 6 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 7 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 8 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 9 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |
| | | 10 | 0.00 | 0.00 | 12.45 | 0.17171E 02 | 0.20797E 01 | 0.41588E 00 | 0.20503E 01 | 0.32555E 01 | 0.36421E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | MDLE | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|-------|-----------|--------|--------|-------|----------|----------|---------|---------|----------|---------|
| | | | | | | | | | | | |
| 1 | 0.0 | 0.0 | 170.69 | -6.60 | 18.03 | 0.1983E | 0.11628E | 0.08E | 0.2975E | 0.13418E | 0.1794E |
| 2 | 0.0 | 0.0 | 170.69 | 0.00 | 18.03 | 0.1973E | 0.11537E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 3 | 0.0 | 0.0 | 170.69 | 20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 4 | 0.0 | 0.0 | 170.69 | -20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 5 | 0.0 | 0.0 | 170.69 | 6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 6 | 0.0 | 0.0 | 170.69 | -6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 7 | 0.0 | 0.0 | 170.69 | 20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 8 | 0.0 | 0.0 | 170.69 | -20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 9 | 0.0 | 0.0 | 170.69 | 6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 10 | 0.0 | 0.0 | 170.69 | -6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 1 | -30.0 | 0.0 | 170.69 | 6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 2 | -30.0 | 0.0 | 170.69 | 0.00 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 3 | -30.0 | 0.0 | 170.69 | 20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 4 | -30.0 | 0.0 | 170.69 | -20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 5 | -30.0 | 0.0 | 170.69 | 6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 6 | -30.0 | 0.0 | 170.69 | -6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 7 | -30.0 | 0.0 | 170.69 | 20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 8 | -30.0 | 0.0 | 170.69 | -20.32 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 9 | -30.0 | 0.0 | 170.69 | 6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |
| 10 | -30.0 | 0.0 | 170.69 | -6.60 | 18.03 | 0.19557E | 0.11336E | 0.00 | 0.2975E | 0.13418E | 0.1794E |

GVMT 242/243 SHIP WAKE TURBULENCE TEST

| 2 | ROLL | YP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|------|------|-----------|--------|----|--------|-------------|--------------|-------------|-------------|-------------|-------------|
| 98 | 10.4 | 15.0 | 8 | -180.0 | 8 | 170.69 | 0.91445E 01 | -0.19496E 00 | 0.46756E 00 | 0.60292E 00 | 0.57144E 00 | 0.62209E 00 |
| 43 | | | 10 | 170.69 | 10 | 170.69 | 0.34708E 01 | 0.37693E 00 | 0.21064E 00 | 0.30420E 00 | 0.40195E 00 | 0.10424E 01 |

RVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | FP | VAV | PPDBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|--------|-------|---|---|-------|-------------|--------------|-------------|-------------|-------------|-------------|
| 99 | 10.1 | 15.0 | 2 | 0.0 | 1 | 1 | 18.03 | 0.89407E 01 | -0.80268E 01 | 0.74837E 00 | 0.50535E 00 | 0.54476E 00 | 0.44183E 00 |
| | | | 2 | 0.00 | | | 18.03 | 0.87912E 01 | -0.77986E 00 | 0.51366E 00 | 0.49185E 00 | 0.45476E 00 | 0.47179E 00 |
| | | | 3 | 6.60 | | | 18.03 | 0.93934E 01 | -0.47133E 00 | 0.46245E 00 | 0.91865E 00 | 0.47210E 00 | 0.37747E 00 |
| | | | 4 | 6.60 | | | 18.03 | 0.93180E 01 | -0.77506E 00 | 0.46245E 00 | 0.15062E 00 | 0.47976E 00 | 0.37747E 00 |
| | | | 5 | 6.60 | | | 12.45 | 0.89339E 01 | -0.17908E 00 | 0.42554E 00 | 0.64579E 00 | 0.27840E 00 | 0.37747E 00 |
| | | | 6 | 6.60 | | | 12.45 | 0.94182E 01 | -0.40019E 00 | 0.26811E 00 | 0.84190E 00 | 0.10253E 00 | 0.90733E 00 |
| | | | 10 | 40.64 | | | 12.45 | 0.97535E 01 | -0.60499E 00 | 0.39081E 00 | 0.29777E 00 | 0.35643E 00 | 0.93340E 00 |
| | | 3 | -30.0 | 6.60 | | | 18.03 | 0.60396E 01 | 0.84174E 00 | 0.11668E 00 | 0.18229E 01 | 0.13772E 01 | 0.14688E 01 |
| | | 2 | 0.00 | 6.60 | | | 18.03 | 0.69167E 01 | -0.55175E 00 | 0.36784E 00 | 0.14299E 01 | 0.14771E 01 | 0.15489E 01 |
| | | 2 | 6.60 | 6.60 | | | 18.03 | 0.91191E 01 | 0.10364E 00 | 0.26915E 00 | 0.14299E 01 | 0.14771E 01 | 0.15489E 01 |
| | | 2 | 20.32 | 20.32 | | | 18.03 | 0.75125E 01 | -0.32956E 01 | 0.26915E 00 | 0.27571E 01 | 0.27571E 01 | 0.69275E 01 |
| | | 2 | 6.60 | 6.60 | | | 12.45 | 0.89565E 01 | -0.42678E 00 | 0.49362E 00 | 0.16239E 01 | 0.15394E 01 | 0.15394E 01 |
| | | 6 | 6.60 | 6.60 | | | 12.45 | 0.86914E 01 | -0.94350E 00 | 0.94350E 00 | 0.16239E 01 | 0.15394E 01 | 0.15394E 01 |
| | | 9 | 20.32 | 20.32 | | | 12.45 | 0.82738E 01 | -0.17371E 01 | 0.17371E 01 | 0.41890E 00 | 0.10742E 00 | 0.14343E 00 |
| | | 10 | 40.64 | 40.64 | | | 12.45 | 0.96378E 01 | -0.12707E 00 | 0.10426E 01 | 0.41890E 00 | 0.10742E 00 | 0.14343E 00 |
| | | 4 | -50.0 | 6.60 | | | 18.03 | 0.51269E 01 | 0.22337E 01 | 0.31266E 01 | 0.18723E 01 | 0.19141E 01 | 0.16208E 01 |
| | | 2 | 0.00 | 6.60 | | | 18.03 | 0.96858E 01 | -0.22494E 00 | 0.10680E 00 | 0.25736E 01 | 0.20919E 01 | 0.21478E 01 |
| | | 3 | 6.60 | 6.60 | | | 18.03 | 0.41570E 00 | -0.22464E 00 | 0.10782E 01 | 0.23244E 01 | 0.17150E 01 | 0.19920E 01 |
| | | 4 | 20.32 | 20.32 | | | 18.03 | 0.77629E 00 | -0.10159E 00 | 0.17528E 01 | 0.18866E 01 | 0.16177E 01 | 0.15394E 01 |
| | | 5 | 6.60 | 6.60 | | | 12.45 | 0.30527E 00 | -0.21833E 01 | 0.15785E 00 | 0.15713E 01 | 0.21902E 01 | 0.19909E 01 |
| | | 8 | 6.60 | 6.60 | | | 12.45 | 0.59108E 00 | -0.26336E 01 | 0.14985E 00 | 0.17536E 01 | 0.26908E 01 | 0.19909E 01 |
| | | 9 | 20.32 | 20.32 | | | 12.45 | 0.21147E 00 | -0.39641E 01 | 0.19505E 01 | 0.27242E 01 | 0.26908E 01 | 0.15506E 01 |
| | | 10 | 40.64 | 40.64 | | | 12.45 | 0.66657E 00 | -0.24264E 01 | 0.19505E 01 | 0.27242E 01 | 0.26908E 01 | 0.15506E 01 |
| | | 5 | -90.0 | 6.60 | | | 18.03 | 0.10050E 02 | -0.33588E 00 | 0.17007E 01 | 0.95055E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 2 | 0.00 | 6.60 | | | 18.03 | 0.10836E 02 | -0.35020E 00 | 0.14531E 01 | 0.81776E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 2 | 6.60 | 6.60 | | | 18.03 | 0.10032E 02 | -0.31477E 00 | 0.10503E 01 | 0.10503E 01 | 0.11077E 01 | 0.12135E 01 |
| | | 4 | 20.32 | 20.32 | | | 18.03 | 0.47550E 01 | -0.14497E 00 | 0.23264E 01 | 0.10255E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 4 | 6.60 | 6.60 | | | 12.45 | 0.80227E 01 | -0.16274E 00 | 0.33123E 01 | 0.18262E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 7 | 6.60 | 6.60 | | | 12.45 | 0.90217E 01 | -0.32898E 00 | 0.32898E 00 | 0.17998E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 8 | 20.32 | 20.32 | | | 12.45 | 0.60737E 01 | -0.16274E 00 | 0.18262E 00 | 0.17998E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 10 | 40.64 | 40.64 | | | 12.45 | 0.20758E 01 | -0.93104E 00 | 0.17170E 00 | 0.31447E 00 | 0.11077E 01 | 0.12135E 01 |
| | | 6 | -120.0 | 6.60 | | | 18.03 | 0.99593E 01 | 0.56322E 00 | 0.16081E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 2 | 0.00 | 6.60 | | | 18.03 | 0.98015E 01 | -0.12015E 00 | 0.10601E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 3 | 6.60 | 6.60 | | | 18.03 | 0.10459E 02 | -0.12015E 00 | 0.10601E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 4 | 20.32 | 20.32 | | | 18.03 | 0.50767E 01 | -0.22488E 00 | 0.17843E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 5 | 6.60 | 6.60 | | | 12.45 | 0.10257E 01 | -0.57066E 00 | 0.86440E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 8 | 6.60 | 6.60 | | | 12.45 | 0.10674E 01 | -0.67072E 00 | 0.10149E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 9 | 20.32 | 20.32 | | | 12.45 | 0.92502E 01 | -0.14713E 01 | 0.15409E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 10 | 40.64 | 40.64 | | | 12.45 | 0.21890E 01 | -0.14713E 01 | 0.15409E 01 | 0.28386E 00 | 0.42566E 00 | 0.42431E 00 |
| | | 7 | -150.0 | 6.60 | | | 18.03 | 0.99333E 02 | -0.34522E 00 | 0.16069E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 2 | 0.00 | 6.60 | | | 18.03 | 0.98238E 02 | -0.18226E 00 | 0.16069E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 3 | 6.60 | 6.60 | | | 18.03 | 0.97441E 02 | -0.18226E 00 | 0.16069E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 4 | 20.32 | 20.32 | | | 18.03 | 0.56265E 02 | -0.18226E 00 | 0.16069E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 5 | 6.60 | 6.60 | | | 12.45 | 0.10614E 01 | -0.75555E 00 | 0.20709E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 7 | 6.60 | 6.60 | | | 12.45 | 0.10614E 01 | -0.75555E 00 | 0.20709E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 8 | 20.32 | 20.32 | | | 12.45 | 0.10614E 01 | -0.75555E 00 | 0.20709E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 9 | 40.64 | 40.64 | | | 12.45 | 0.10614E 01 | -0.75555E 00 | 0.20709E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |
| | | 10 | 40.64 | 40.64 | | | 12.45 | 0.10614E 01 | -0.75555E 00 | 0.20709E 01 | 0.37889E 00 | 0.46133E 00 | 0.49440E 00 |

BVWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|------|---------|---------|---------|---------|---------|---------|
| 100 | 10.8 | 15.0 | 2 | 0.0 | | 0.8567E | 0.7253E | 0.3810E | 0.3303E | 0.7242E | 0.5457E |
| | | | 1 | 0.00 | 0.03 | 0.8147E | 0.7507E | 0.4474E | 0.3090E | 0.7242E | 0.5457E |
| | | | 2 | 0.00 | 0.03 | 0.9474E | 0.7270E | 0.4474E | 0.3090E | 0.7242E | 0.5457E |
| | | | 3 | 0.00 | 0.03 | 0.8307E | 0.7332E | 0.4474E | 0.3090E | 0.7242E | 0.5457E |
| | | | 4 | 0.00 | 0.03 | 0.6798E | 0.5682E | 0.3500E | 0.2312E | 0.7242E | 0.5457E |
| | | | 5 | 0.00 | 0.03 | 0.9780E | 0.4079E | 0.3122E | 0.3122E | 0.7242E | 0.5457E |
| | | | 6 | 0.00 | 0.03 | 0.5356E | 0.0318E | 0.4343E | 0.0303E | 0.7242E | 0.5457E |
| | | | 7 | 0.00 | 0.03 | 0.8160E | 0.0104E | 0.1983E | 0.0104E | 0.7242E | 0.5457E |
| | | | 8 | 0.00 | 0.03 | 0.8502E | 0.0954E | 0.3242E | 0.0689E | 0.7242E | 0.5457E |
| | | | 9 | 0.00 | 0.03 | 0.2811E | 0.0101E | 0.8063E | 0.0101E | 0.7242E | 0.5457E |
| | | | 10 | 0.00 | 0.03 | 0.6289E | 0.0076E | 0.1643E | 0.0169E | 0.7242E | 0.5457E |
| | | | 1 | 0.00 | 0.03 | 0.3630E | 0.1558E | 0.1720E | 0.0327E | 0.7242E | 0.5457E |
| | | | 2 | 0.00 | 0.03 | 0.6127E | 0.2023E | 0.1464E | 0.0257E | 0.7242E | 0.5457E |
| | | | 3 | 0.00 | 0.03 | 0.7207E | 0.2023E | 0.1464E | 0.0257E | 0.7242E | 0.5457E |
| | | | 4 | 0.00 | 0.03 | 0.7303E | 0.2023E | 0.1464E | 0.0257E | 0.7242E | 0.5457E |
| | | | 5 | 0.00 | 0.03 | 0.5203E | 0.0923E | 0.1197E | 0.0240E | 0.7242E | 0.5457E |
| | | | 6 | 0.00 | 0.03 | 0.1229E | 0.0460E | 0.3201E | 0.0209E | 0.7242E | 0.5457E |
| | | | 7 | 0.00 | 0.03 | 0.1070E | 0.0300E | 0.1093E | 0.0209E | 0.7242E | 0.5457E |
| | | | 8 | 0.00 | 0.03 | 0.1070E | 0.0300E | 0.1093E | 0.0209E | 0.7242E | 0.5457E |
| | | | 9 | 0.00 | 0.03 | 0.1070E | 0.0300E | 0.1093E | 0.0209E | 0.7242E | 0.5457E |
| | | | 10 | 0.00 | 0.03 | 0.1070E | 0.0300E | 0.1093E | 0.0209E | 0.7242E | 0.5457E |

Run 101 Run aborted - no "hi-speed" off-line data available

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| TRUN | VOL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|------|-----|------|----|-----|-------|-------|-------|-------|--------------|--------------|--------------|-------------|-------------|-------------|
| 102 | 9.7 | 15.0 | 6 | 0.0 | 1 | 23.88 | 6.60 | 18.03 | -0.12629E+00 | -0.30234E-01 | -0.42956E-01 | 0.18606E-01 | 0.47903E-01 | 0.25892E-01 |
| | | | | | 2 | 23.88 | 0.00 | 18.03 | -0.15544E-01 | -0.69045E-01 | -0.53327E-01 | 0.25275E-01 | 0.47903E-01 | 0.25892E-01 |
| | | | | | 3 | 23.88 | 6.60 | 18.03 | -0.15544E-01 | -0.53327E-01 | -0.53327E-01 | 0.25275E-01 | 0.47903E-01 | 0.25892E-01 |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | -0.97755E-01 | -0.11608E+00 | -0.56764E-01 | 0.27698E-01 | 0.51084E-01 | 0.30652E-01 |
| | | | | | 7 | 23.88 | 6.60 | 12.45 | -0.12508E-01 | -0.62079E-01 | -0.30390E-01 | 0.22411E-01 | 0.31370E-01 | 0.23863E-01 |
| | | | | | 8 | 23.88 | 6.60 | 12.45 | -0.12364E+00 | -0.37783E-01 | -0.73380E-01 | 0.24527E-01 | 0.18704E-01 | 0.10954E-01 |
| | | | | | 9 | 23.88 | 20.32 | 12.45 | -0.13365E-01 | -0.57502E-02 | -0.73398E-01 | 0.80064E-01 | 0.14070E-01 | 0.20421E-01 |
| | | | | | 10 | 23.88 | 40.64 | 12.45 | -0.43889E-01 | -0.57793E-01 | -0.10041E+00 | 0.62844E-02 | 0.59182E-02 | 0.24791E-01 |
| | | | | | 1 | 23.88 | 6.60 | 18.03 | -0.12574E+00 | -0.57963E-01 | -0.46969E-01 | 0.21256E-01 | 0.43829E-01 | 0.50165E-01 |
| | | | | | 2 | 23.88 | 0.00 | 18.03 | -0.12574E+00 | -0.57963E-01 | -0.46969E-01 | 0.21256E-01 | 0.43829E-01 | 0.50165E-01 |
| | | | | | 3 | 23.88 | 6.60 | 18.03 | -0.93238E-01 | -0.51071E-01 | -0.67713E-01 | 0.17179E-01 | 0.30829E-01 | 0.73432E-01 |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | -0.36232E-01 | -0.46422E-01 | -0.30816E-01 | 0.26888E-01 | 0.23524E-01 | 0.29500E-01 |
| | | | | | 7 | 23.88 | 6.60 | 12.45 | -0.90840E-01 | -0.47809E-02 | -0.49309E-01 | 0.23988E-01 | 0.17007E-01 | 0.23833E-01 |
| | | | | | 8 | 23.88 | 6.60 | 12.45 | -0.67098E-01 | -0.46398E-01 | -0.24285E-01 | 0.44144E-01 | 0.30937E-01 | 0.50111E-01 |
| | | | | | 9 | 23.88 | 20.32 | 12.45 | -0.12906E+00 | -0.87588E-01 | -0.11303E-01 | 0.41943E-01 | 0.20183E-01 | 0.27689E-01 |
| | | | | | 10 | 23.88 | 40.64 | 12.45 | -0.31795E-01 | -0.64183E-01 | -0.76749E-01 | 0.23848E-01 | 0.15442E-01 | 0.20504E-01 |
| | | | | | 1 | 23.88 | 6.60 | 18.03 | -0.11976E+00 | -0.32454E-01 | -0.83377E-02 | 0.29503E-01 | 0.56360E-01 | 0.26778E-01 |
| | | | | | 2 | 23.88 | 0.00 | 18.03 | -0.11976E+00 | -0.32454E-01 | -0.83377E-02 | 0.29503E-01 | 0.56360E-01 | 0.26778E-01 |
| | | | | | 3 | 23.88 | 6.60 | 18.03 | -0.39494E-01 | -0.36871E-01 | -0.13443E-01 | 0.44388E-01 | 0.31658E-01 | 0.29962E-01 |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | -0.34498E-01 | -0.79498E-01 | -0.22765E-01 | 0.87487E-01 | 0.11205E+00 | 0.44244E-01 |
| | | | | | 7 | 23.88 | 6.60 | 12.45 | -0.12462E+00 | -0.45003E-01 | -0.20309E-01 | 0.63810E-01 | 0.94789E-01 | 0.28568E-01 |
| | | | | | 8 | 23.88 | 6.60 | 12.45 | -0.43078E-01 | -0.24171E-01 | -0.80209E-02 | 0.25305E-01 | 0.32765E-01 | 0.16487E-01 |
| | | | | | 9 | 23.88 | 20.32 | 12.45 | -0.86162E-01 | -0.10919E-01 | -0.52800E-01 | 0.28818E-01 | 0.38053E-01 | 0.10082E-01 |
| | | | | | 10 | 23.88 | 40.64 | 12.45 | -0.38894E-01 | -0.47121E-01 | -0.39699E-01 | 0.23373E-01 | 0.47133E-01 | 0.29122E-01 |
| | | | | | 1 | 23.88 | 6.60 | 18.03 | -0.17359E+00 | -0.63440E-01 | -0.41368E-01 | 0.11638E-01 | 0.47243E-01 | 0.27584E-01 |
| | | | | | 2 | 23.88 | 0.00 | 18.03 | -0.17359E+00 | -0.63440E-01 | -0.41368E-01 | 0.11638E-01 | 0.47243E-01 | 0.27584E-01 |
| | | | | | 3 | 23.88 | 6.60 | 18.03 | -0.67034E-01 | -0.19529E-01 | -0.34568E-01 | 0.31199E-01 | 0.70432E-01 | 0.50655E-01 |
| | | | | | 4 | 23.88 | 20.32 | 18.03 | -0.19347E+00 | -0.10999E-01 | -0.91479E-01 | 0.68391E-01 | 0.55992E-01 | 0.24072E-01 |
| | | | | | 7 | 23.88 | 6.60 | 12.45 | -0.19347E+00 | -0.10999E-01 | -0.91479E-01 | 0.68391E-01 | 0.55992E-01 | 0.24072E-01 |
| | | | | | 8 | 23.88 | 6.60 | 12.45 | -0.54385E-01 | -0.12455E-01 | -0.61590E-01 | 0.58286E-01 | 0.64005E-01 | 0.21544E-01 |
| | | | | | 9 | 23.88 | 20.32 | 12.45 | -0.74482E-01 | -0.10929E-01 | -0.15620E-01 | 0.47910E-01 | 0.64005E-01 | 0.21544E-01 |
| | | | | | 10 | 23.88 | 40.64 | 12.45 | -0.2662E-01 | -0.69614E-02 | -0.23310E+00 | 0.47910E-01 | 0.44370E-01 | 0.26463E-01 |

Runs 103 & 104 No "hi-speed" off-line data available

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| PUM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|-------|-------------|-------------|--------------|-------------|-------------|-------------|
| 105 | 10.1 | -15.0 | 2 | 0.0 | 18.03 | 0.5701E 01 | 0.2962E 00 | -0.3418E 00 | 0.10170E 01 | 0.10384E 01 | 0.98729E 00 |
| | | | 1 | 0.00 | 18.03 | 0.73394E 01 | 0.75060E 01 | 0.62327E 00 | 0.46497E 00 | 0.77552E 00 | 0.10001E 00 |
| | | | 2 | 0.00 | 18.03 | 0.82916E 01 | 0.35664E 00 | 0.40249E 00 | 0.57442E 00 | 0.73440E 00 | 0.76295E 00 |
| | | | 3 | 0.00 | 18.03 | 0.94321E 01 | 0.51629E 00 | 0.69330E 00 | 0.10747E 01 | 0.78257E 00 | 0.64395E 00 |
| | | | 4 | 0.00 | 18.03 | 0.19063E 01 | 0.56013E 01 | 0.53769E 01 | 0.10455E 01 | 0.11327E 00 | 0.64395E 00 |
| | | | 5 | 0.00 | 12.45 | 0.52036E 01 | 0.63790E 01 | 0.60180E 00 | 0.77114E 00 | 0.11308E 00 | 0.64395E 00 |
| | | | 6 | 0.00 | 12.45 | 0.81243E 01 | 0.21633E 00 | 0.11375E 00 | 0.77114E 00 | 0.11308E 00 | 0.64395E 00 |
| | | | 7 | 0.00 | 12.45 | 0.81321E 01 | 0.44197E 00 | 0.73331E 00 | 0.48491E 00 | 0.58415E 00 | 0.64395E 00 |
| | | | 8 | 0.00 | 12.45 | 0.91321E 01 | 0.33188E 00 | 0.32331E 00 | 0.39952E 00 | 0.58415E 00 | 0.64395E 00 |
| | | | 9 | 0.00 | 12.45 | 0.91321E 01 | 0.33188E 00 | 0.32331E 00 | 0.39952E 00 | 0.58415E 00 | 0.64395E 00 |
| | | | 10 | 0.00 | 12.45 | 0.91321E 01 | 0.33188E 00 | 0.32331E 00 | 0.39952E 00 | 0.58415E 00 | 0.64395E 00 |
| | | | 1 | 30.0 | 18.03 | 0.54554E 01 | 0.83469E 00 | 0.14697E 01 | 0.19071E 01 | 0.19230E 01 | 0.17250E 01 |
| | | | 2 | 0.00 | 18.03 | 0.78903E 01 | 0.32429E 00 | 0.20864E 01 | 0.18730E 00 | 0.21268E 00 | 0.17832E 00 |
| | | | 3 | 0.00 | 18.03 | 0.90075E 01 | 0.34612E 00 | 0.20864E 01 | 0.64030E 00 | 0.21268E 00 | 0.17832E 00 |
| | | | 4 | 0.00 | 18.03 | 0.90760E 01 | 0.70372E 01 | 0.23374E 01 | 0.17840E 00 | 0.21268E 00 | 0.17832E 00 |
| | | | 5 | 0.00 | 12.45 | 0.20764E 01 | 0.32922E 01 | 0.60875E 01 | 0.10407E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 6 | 0.00 | 12.45 | 0.40795E 01 | 0.37175E 00 | 0.17335E 01 | 0.14499E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 7 | 0.00 | 12.45 | 0.40795E 01 | 0.37175E 00 | 0.17335E 01 | 0.14499E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 8 | 0.00 | 12.45 | 0.40795E 01 | 0.37175E 00 | 0.17335E 01 | 0.14499E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 9 | 0.00 | 12.45 | 0.40795E 01 | 0.37175E 00 | 0.17335E 01 | 0.14499E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 10 | 0.00 | 12.45 | 0.40795E 01 | 0.37175E 00 | 0.17335E 01 | 0.14499E 01 | 0.21268E 00 | 0.17832E 00 |
| | | | 1 | 50.0 | 18.03 | 0.81354E 01 | 0.42171E 00 | 0.16188E 01 | 0.27325E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 2 | 0.00 | 18.03 | 0.5804E 01 | 0.7732E 00 | 0.1130E 01 | 0.15377E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 3 | 0.00 | 18.03 | 0.96497E 01 | 0.2909E 00 | 0.1630E 01 | 0.15377E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 4 | 0.00 | 18.03 | 0.26937E 01 | 0.11812E 01 | 0.42708E 00 | 0.66274E 00 | 0.24550E 01 | 0.22652E 01 |
| | | | 5 | 0.00 | 18.03 | 0.44641E 01 | 0.6406E 00 | 0.86305E 01 | 0.23390E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 6 | 0.00 | 12.45 | 0.22012E 01 | 0.4208E 00 | 0.197841E 01 | 0.12163E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 7 | 0.00 | 12.45 | 0.10303E 01 | 0.91419E 00 | 0.29443E 00 | 0.24033E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 8 | 0.00 | 12.45 | 0.11103E 01 | 0.37607E 00 | 0.78476E 00 | 0.11315E 01 | 0.24550E 01 | 0.22652E 01 |
| | | | 9 | 0.00 | 12.45 | 0.61978E 01 | 0.22097E 01 | 0.13390E 01 | 0.20423E 00 | 0.24550E 01 | 0.22652E 01 |
| | | | 10 | 0.00 | 12.45 | 0.61978E 01 | 0.22097E 01 | 0.13390E 01 | 0.20423E 00 | 0.24550E 01 | 0.22652E 01 |
| | | | 1 | 90.0 | 18.03 | 0.84591E 01 | 0.15871E 01 | 0.47390E 00 | 0.22428E 01 | 0.24276E 01 | 0.23347E 01 |
| | | | 2 | 0.00 | 18.03 | 0.11213E 01 | 0.24624E 00 | 0.10302E 01 | 0.45563E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 3 | 0.00 | 18.03 | 0.10237E 01 | 0.12511E 00 | 0.11022E 01 | 0.64763E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 4 | 0.00 | 18.03 | 0.20263E 01 | 0.50291E 01 | 0.19767E 00 | 0.18017E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 5 | 0.00 | 12.45 | 0.34445E 01 | 0.19291E 01 | 0.42867E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 6 | 0.00 | 12.45 | 0.11331E 01 | 0.16305E 00 | 0.16305E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 7 | 0.00 | 12.45 | 0.11331E 01 | 0.16305E 00 | 0.16305E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 8 | 0.00 | 12.45 | 0.11331E 01 | 0.16305E 00 | 0.16305E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 9 | 0.00 | 12.45 | 0.11331E 01 | 0.16305E 00 | 0.16305E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |
| | | | 10 | 0.00 | 12.45 | 0.11331E 01 | 0.16305E 00 | 0.16305E 00 | 0.22187E 00 | 0.24276E 01 | 0.23347E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| WIN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-------|-------|-------|-------|--------|-------|-------------|-------------|--------------|-------------|-------------|-------------|
| 106 | 10.2 | -15.0 | 2 | 0.0 | 43.16 | -6.60 | 18.03 | 0.70072E 01 | 0.24131E 00 | -0.27520E 00 | 0.85772E 00 | 0.86974E 00 | 0.77152E 00 |
| | | | | | 43.16 | 0.00 | 18.03 | 0.81601E 01 | 0.26402E 00 | -0.47375E 00 | 0.98932E 00 | 0.69288E 00 | 0.81398E 00 |
| | | | | | 43.16 | 6.60 | 18.03 | 0.82545E 01 | 0.22427E 01 | -0.11428E 00 | 0.95133E 00 | 0.74153E 00 | 0.81391E 00 |
| | | | | | 43.16 | -20.32 | 18.03 | 0.94806E 01 | 0.54876E 01 | -0.11043E 01 | 0.48001E 00 | 0.63238E 00 | 0.48666E 00 |
| | | | | | 43.16 | 20.32 | 18.03 | 0.17918E 01 | 0.54876E 01 | -0.85033E 01 | 0.79271E 00 | 0.92700E 00 | 0.61130E 00 |
| | | | | | 43.16 | -6.60 | 12.45 | 0.66448E 01 | 0.24093E 00 | -0.64423E 00 | 0.89215E 00 | 0.68079E 00 | 0.71307E 00 |
| | | | | | 43.16 | 6.60 | 12.45 | 0.88848E 01 | 0.20988E 00 | -0.49475E 00 | 0.81530E 00 | 0.68079E 00 | 0.92357E 00 |
| | | | | | 43.16 | -20.32 | 12.45 | 0.87185E 01 | 0.41395E 00 | -0.35071E 00 | 0.81530E 00 | 0.41932E 00 | 0.92357E 00 |
| | | | | | 43.16 | 20.32 | 12.45 | 0.90898E 01 | 0.46209E 00 | -0.38838E 00 | 0.86608E 00 | 0.41932E 00 | 0.41292E 00 |
| | | 3 | -30.0 | | 43.16 | -6.60 | 18.03 | 0.42895E 01 | 0.63537E 00 | 0.81844E 00 | 0.13640E 01 | 0.12212E 01 | 0.11930E 01 |
| | | | | | 43.16 | 0.00 | 18.03 | 0.72128E 01 | 0.20786E 00 | -0.13654E 01 | 0.16018E 01 | 0.16813E 01 | 0.11546E 01 |
| | | | | | 43.16 | 6.60 | 18.03 | 0.89088E 01 | 0.29031E 00 | -0.16414E 01 | 0.80967E 01 | 0.12376E 01 | 0.11547E 01 |
| | | | | | 43.16 | -20.32 | 18.03 | 0.80770E 01 | 0.94150E 01 | -0.29079E 01 | 0.16394E 01 | 0.15571E 01 | 0.20913E 01 |
| | | | | | 43.16 | 20.32 | 18.03 | 0.23925E 01 | 0.63264E 01 | -0.70833E 01 | 0.93344E 01 | 0.17332E 01 | 0.77466E 01 |
| | | | | | 43.16 | -6.60 | 12.45 | 0.38262E 01 | 0.16730E 00 | 0.57836E 00 | 0.16062E 01 | 0.14841E 01 | 0.15233E 01 |
| | | | | | 43.16 | 6.60 | 12.45 | 0.86838E 01 | 0.16730E 00 | 0.26810E 01 | 0.20096E 01 | 0.20096E 01 | 0.17158E 01 |
| | | | | | 43.16 | -20.32 | 12.45 | 0.61058E 01 | 0.65616E 01 | -0.80013E 00 | 0.13226E 01 | 0.14996E 01 | 0.13956E 01 |
| | | | | | 43.16 | 20.32 | 12.45 | 0.85751E 01 | 0.47216E 01 | -0.18807E 01 | 0.20111E 01 | 0.10049E 01 | 0.92362E 00 |
| | | 4 | -50.0 | | 43.16 | -6.60 | 18.03 | 0.40248E 01 | 0.16953E 01 | 0.16166E 01 | 0.29249E 01 | 0.21779E 01 | 0.24960E 01 |
| | | | | | 43.16 | 0.00 | 18.03 | 0.79239E 01 | 0.61376E 00 | -0.18547E 00 | 0.18547E 01 | 0.19725E 01 | 0.22575E 01 |
| | | | | | 43.16 | 6.60 | 18.03 | 0.96936E 01 | 0.40268E 00 | -0.10272E 01 | 0.12386E 01 | 0.13353E 01 | 0.21331E 01 |
| | | | | | 43.16 | -20.32 | 18.03 | 0.25659E 01 | 0.17038E 01 | -0.62444E 00 | 0.13386E 01 | 0.22575E 01 | 0.21403E 01 |
| | | | | | 43.16 | 20.32 | 18.03 | 0.11555E 01 | 0.50784E 01 | -0.69709E 01 | 0.10509E 01 | 0.22575E 01 | 0.24689E 01 |
| | | | | | 43.16 | -6.60 | 12.45 | 0.17832E 01 | 0.12166E 01 | 0.15931E 01 | 0.21193E 01 | 0.20655E 01 | 0.24689E 01 |
| | | | | | 43.16 | 6.60 | 12.45 | 0.91418E 01 | 0.11141E 01 | -0.22317E 01 | 0.21193E 01 | 0.17832E 01 | 0.24689E 01 |
| | | | | | 43.16 | -20.32 | 12.45 | 0.83138E 01 | 0.89854E 00 | -0.10803E 00 | 0.21193E 01 | 0.17832E 01 | 0.24689E 01 |
| | | | | | 43.16 | 20.32 | 12.45 | 0.57338E 01 | 0.83258E 00 | -0.14919E 01 | 0.24334E 01 | 0.16339E 01 | 0.16129E 01 |
| | | 5 | -90.0 | | 43.16 | -6.60 | 18.03 | 0.33796E 01 | 0.89596E 00 | -0.16332E 00 | 0.23466E 01 | 0.20629E 01 | 0.17083E 01 |
| | | | | | 43.16 | 0.00 | 18.03 | 0.81725E 01 | 0.10727E 01 | -0.97375E 00 | 0.23466E 01 | 0.22245E 01 | 0.20629E 01 |
| | | | | | 43.16 | 6.60 | 18.03 | 0.10525E 01 | 0.10727E 01 | -0.16332E 00 | 0.23466E 01 | 0.20629E 01 | 0.17083E 01 |
| | | | | | 43.16 | -20.32 | 18.03 | 0.29931E 01 | 0.34925E 01 | -0.34633E 01 | 0.19316E 01 | 0.17329E 01 | 0.20629E 01 |
| | | | | | 43.16 | 20.32 | 18.03 | 0.16297E 01 | 0.49386E 01 | -0.17448E 00 | 0.19316E 01 | 0.17329E 01 | 0.20629E 01 |
| | | | | | 43.16 | -6.60 | 12.45 | 0.91461E 01 | 0.16946E 01 | -0.26648E 00 | 0.23609E 01 | 0.16963E 01 | 0.16963E 01 |
| | | | | | 43.16 | 6.60 | 12.45 | 0.91461E 01 | 0.16946E 01 | -0.26648E 00 | 0.23609E 01 | 0.16963E 01 | 0.16963E 01 |
| | | | | | 43.16 | -20.32 | 12.45 | 0.15047E 01 | 0.24067E 00 | -0.92625E 01 | 0.12847E 01 | 0.15989E 01 | 0.14268E 01 |
| | | | | | 43.16 | 20.32 | 12.45 | 0.15047E 01 | 0.24067E 00 | -0.92625E 01 | 0.12847E 01 | 0.15989E 01 | 0.14268E 01 |

8VNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|--------|---|---------|---------|---------|---------|---------|---------|
| 107 | 10.2 | -15.0 | 2 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | 0.0 | 1 | 75.51E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 6 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | -30.0 | 1 | 90.66E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 1 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 2 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 6 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | -50.0 | 1 | 59.77E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 1 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 2 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 6 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | -90.0 | 1 | 46.58E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 1 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 2 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 6 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | -120.0 | 1 | 75.92E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 1 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 2 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 3 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 4 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 5 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 6 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 7 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 8 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 9 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |
| | | | 10 | -150.0 | 1 | 77.11E | 0.00E | 0.00E | 0.00E | 0.00E | 0.00E |

BNVT 242/243 SHIP MAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRB | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|---------|-----|--------|-------|----------|----------|----------|----------|----------|----------|
| 108 10.3 | -15.0 | 2 | 0.0 | 170.69 | 18.03 | 0.76319E | 0.69902E | 0.38932E | 0.61036E | 0.64920E | 0.58999E |
| | | | | 170.69 | 18.03 | 0.81170E | 0.71919E | 0.21170E | 0.49158E | 0.21200E | 0.50291E |
| | | | | 170.69 | 18.03 | 0.81713E | 0.78221E | 0.75497E | 0.49158E | 0.21200E | 0.50291E |
| | | | | 170.69 | 18.03 | 0.22039E | 0.09559E | 0.19232E | 0.81230E | 0.43403E | 0.78391E |
| | | | | 170.69 | 18.03 | 0.77339E | 0.23169E | 0.19232E | 0.81230E | 0.43403E | 0.78391E |
| | | | | 170.69 | 12.45 | 0.83191E | 0.36733E | 0.87859E | 0.50061E | 0.71399E | 0.59813E |
| | | | | 170.69 | 12.45 | 0.87662E | 0.36733E | 0.87859E | 0.50061E | 0.71399E | 0.59813E |
| | | | | 170.69 | 12.45 | 0.91062E | 0.14298E | 0.78268E | 0.34137E | 0.42469E | 0.55140E |
| | | | | 170.69 | 18.03 | 0.77228E | 0.11499E | 0.13351E | 0.99769E | 0.98149E | 0.78228E |
| | | | | 170.69 | 18.03 | 0.83128E | 0.67497E | 0.10357E | 0.97696E | 0.89149E | 0.83128E |
| | | | | 170.69 | 18.03 | 0.79167E | 0.97892E | 0.75902E | 0.10021E | 0.90474E | 0.81587E |
| | | | | 170.69 | 18.03 | 0.77022E | 0.07188E | 0.25088E | 0.94414E | 0.95086E | 0.77022E |
| | | | | 170.69 | 12.45 | 0.24610E | 0.52477E | 0.37379E | 0.66446E | 0.52096E | 0.49160E |
| | | | | 170.69 | 12.45 | 0.71964E | 0.50727E | 0.10653E | 0.41117E | 0.10122E | 0.90559E |
| | | | | 170.69 | 12.45 | 0.75496E | 0.51566E | 0.22880E | 0.51283E | 0.15088E | 0.91562E |
| | | | | 170.69 | 12.45 | 0.73612E | 0.28456E | 0.78815E | 0.19398E | 0.15015E | 0.96763E |
| | | | | 170.69 | 12.45 | 0.90169E | 0.23831E | 0.49608E | 0.47151E | 0.65220E | 0.51875E |
| | | | | 170.69 | 18.03 | 0.54357E | 0.71831E | 0.44213E | 0.13255E | 0.19889E | 0.12775E |
| | | | | 170.69 | 18.03 | 0.61896E | 0.21852E | 0.14232E | 0.14699E | 0.19889E | 0.12775E |
| | | | | 170.69 | 18.03 | 0.64186E | 0.12221E | 0.20059E | 0.13996E | 0.15599E | 0.15767E |
| | | | | 170.69 | 18.03 | 0.76190E | 0.31890E | 0.66864E | 0.23376E | 0.16727E | 0.15767E |
| | | | | 170.69 | 12.45 | 0.71507E | 0.06126E | 0.10919E | 0.14914E | 0.19922E | 0.15096E |
| | | | | 170.69 | 12.45 | 0.62807E | 0.29270E | 0.94372E | 0.27083E | 0.23560E | 0.15767E |
| | | | | 170.69 | 12.45 | 0.84959E | 0.27200E | 0.79546E | 0.13546E | 0.18080E | 0.11263E |
| | | | | 170.69 | 18.03 | 0.67522E | 0.19543E | 0.76151E | 0.21374E | 0.24580E | 0.19338E |
| | | | | 170.69 | 18.03 | 0.83908E | 0.21131E | 0.13008E | 0.15730E | 0.17336E | 0.15730E |
| | | | | 170.69 | 18.03 | 0.83925E | 0.21131E | 0.13008E | 0.15730E | 0.17336E | 0.15730E |
| | | | | 170.69 | 18.03 | 0.53433E | 0.39505E | 0.97099E | 0.10947E | 0.20699E | 0.30849E |
| | | | | 170.69 | 18.03 | 0.38958E | 0.45150E | 0.29402E | 0.25848E | 0.20699E | 0.30849E |
| | | | | 170.69 | 12.45 | 0.63958E | 0.17488E | 0.89610E | 0.24768E | 0.23710E | 0.30959E |
| | | | | 170.69 | 12.45 | 0.83494E | 0.17488E | 0.89610E | 0.24768E | 0.23710E | 0.30959E |
| | | | | 170.69 | 12.45 | 0.43619E | 0.18208E | 0.96866E | 0.17336E | 0.28530E | 0.28012E |
| | | | | 170.69 | 18.03 | 0.82714E | 0.10414E | 0.10433E | 0.45409E | 0.64433E | 0.62898E |
| | | | | 170.69 | 18.03 | 0.88266E | 0.21277E | 0.18232E | 0.48121E | 0.65239E | 0.53192E |
| | | | | 170.69 | 18.03 | 0.87852E | 0.26934E | 0.12323E | 0.48121E | 0.65239E | 0.53192E |
| | | | | 170.69 | 18.03 | 0.25272E | 0.30010E | 0.46615E | 0.33814E | 0.14466E | 0.22449E |
| | | | | 170.69 | 12.45 | 0.95230E | 0.42718E | 0.17539E | 0.47040E | 0.85330E | 0.55417E |
| | | | | 170.69 | 12.45 | 0.49351E | 0.62123E | 0.87019E | 0.25796E | 0.65330E | 0.55417E |
| | | | | 170.69 | 12.45 | 0.83180E | 0.22894E | 0.20159E | 0.37932E | 0.22366E | 0.24026E |
| | | | | 170.69 | 18.03 | 0.87988E | 0.22894E | 0.20159E | 0.37932E | 0.22366E | 0.24026E |
| | | | | 170.69 | 18.03 | 0.87988E | 0.22894E | 0.20159E | 0.37932E | 0.22366E | 0.24026E |
| | | | | 170.69 | 18.03 | 0.80788E | 0.16336E | 0.36681E | 0.20159E | 0.37932E | 0.24026E |
| | | | | 170.69 | 18.03 | 0.80788E | 0.16336E | 0.36681E | 0.20159E | 0.37932E | 0.24026E |
| | | | | 170.69 | 12.45 | 0.86936E | 0.39471E | 0.15398E | 0.49461E | 0.58423E | 0.39869E |
| | | | | 170.69 | 12.45 | 0.95186E | 0.39471E | 0.15398E | 0.49461E | 0.58423E | 0.39869E |
| | | | | 170.69 | 12.45 | 0.71951E | 0.39495E | 0.31233E | 0.28766E | 0.39999E | 0.39869E |
| | | | | 170.69 | 12.45 | 0.71951E | 0.39495E | 0.31233E | 0.28766E | 0.39999E | 0.39869E |
| | | | | 170.69 | 18.03 | 0.82150E | 0.10186E | 0.12318E | 0.15873E | 0.15388E | 0.11604E |
| | | | | 170.69 | 18.03 | 0.82150E | 0.10186E | 0.12318E | 0.15873E | 0.15388E | 0.11604E |
| | | | | 170.69 | 18.03 | 0.66517E | 0.30606E | 0.12411E | 0.44818E | 0.61907E | 0.64878E |
| | | | | 170.69 | 18.03 | 0.94095E | 0.38131E | 0.96509E | 0.10228E | 0.61907E | 0.64878E |
| | | | | 170.69 | 18.03 | 0.35100E | 0.09681E | 0.11100E | 0.20277E | 0.37544E | 0.42378E |
| | | | | 170.69 | 12.45 | 0.81071E | 0.06103E | 0.29539E | 0.56118E | 0.72822E | 0.60378E |
| | | | | 170.69 | 12.45 | 0.65863E | 0.26013E | 0.35815E | 0.71168E | 0.97775E | 0.84072E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| 25 | RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|-----|------|-------|----|--------|-------|--------|--------|-------|-------------|--------------|-------------|-------------|-------------|-------------|
| 1 | 108 | 10.3 | -15.0 | 8 | -180.0 | 9 | 170.69 | -20.32 | 12.43 | 0.88172E 01 | -0.59713E 00 | 0.40379E 00 | 0.23843E 00 | 0.24193E 00 | 0.32679E 00 |
| | | | | | | 10 | 170.69 | -30.64 | 12.43 | 0.91458E 01 | 0.13681E 00 | 0.14156E 00 | 0.25088E 00 | 0.24284E 00 | 0.31972E 00 |

6VMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VFL | ROLL TP | YAW PRONE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-----|-------|-------------|--------------|-------------|-------------|-------------|--------------|
| 109 | 10.4 | 15.0 | 6 | 0.0 | 18.03 | 0.91232E 01 | -0.46433E 01 | 0.86335E 00 | 0.26542E 00 | 0.3707E 00 | 0.39065E 00 |
| | | | | | 18.03 | 0.91913E 01 | -0.12616E 00 | 0.32741E 00 | 0.69344E 01 | 0.75209E 00 | 0.230925E 00 |
| | | | | | 18.03 | 0.79541E 01 | -0.10735E 00 | 0.61402E 00 | 0.12169E 01 | 0.06654E 00 | 0.10284E 00 |
| | | | | | 18.03 | 0.10191E 01 | -0.12209E 01 | 0.13202E 00 | 0.29384E 00 | 0.39554E 00 | 0.63860E 00 |
| | | | | | 12.45 | 0.88305E 01 | -0.12403E 00 | 0.20853E 00 | 0.24866E 00 | 0.33041E 00 | 0.625912E 00 |
| | | | | | 12.45 | 0.99371E 01 | -0.98646E 01 | 0.20073E 00 | 0.15750E 01 | 0.15009E 00 | 0.115667E 00 |
| | | | | | 12.45 | 0.95796E 01 | -0.33666E 01 | 0.25949E 00 | 0.32775E 00 | 0.37223E 00 | 0.541392E 00 |
| | 7 | -30.0 | | | 18.03 | 0.1586E 01 | 0.15818E 01 | 0.4554E 00 | 0.16630E 01 | 0.1714E 00 | 0.14241E 01 |
| | | | | | 18.03 | 0.15001E 01 | 0.67309E 01 | 0.13974E 01 | 0.16949E 01 | 0.1795E 01 | 0.17932E 01 |
| | | | | | 18.03 | 0.17161E 01 | -0.25725E 01 | 0.12747E 01 | 0.19785E 01 | 0.17273E 01 | 0.15273E 01 |
| | | | | | 18.03 | 0.10381E 01 | -0.25927E 01 | 0.14708E 01 | 0.57701E 00 | 0.3476E 00 | 0.183371E 00 |
| | | | | | 12.45 | 0.46343E 01 | -0.91155E 01 | 0.1798E 00 | 0.91749E 01 | 0.0661E 01 | 0.06399E 01 |
| | | | | | 12.45 | 0.60137E 01 | -0.13633E 01 | 0.2112E 00 | 0.18759E 01 | 0.2036E 01 | 0.4378E 01 |
| | | | | | 12.45 | 0.52307E 01 | -0.61761E 00 | 0.6282E 00 | 0.1606E 01 | 0.2036E 01 | 0.4378E 01 |
| | | | | | 12.45 | 0.98392E 01 | -0.41063E 00 | 0.16067E 01 | 0.35548E 00 | 0.14803E 00 | 0.12946E 00 |
| | | | | | 18.03 | 0.39948E 01 | 0.13054E 01 | 0.161E 01 | 0.9593E 01 | 0.1733E 00 | 0.17010E 01 |
| | | | | | 18.03 | 0.91599E 01 | 0.2520E 01 | 0.16910E 01 | 0.25567E 01 | 0.1924E 00 | 0.13985E 01 |
| | | | | | 18.03 | 0.40794E 01 | 0.14655E 01 | 0.73562E 01 | 0.18222E 01 | 0.22468E 00 | 0.3788E 01 |
| | | | | | 18.03 | 0.10509E 01 | 0.27058E 01 | 0.14559E 01 | 0.19794E 01 | 0.22168E 00 | 0.09988E 01 |
| | | | | | 12.45 | 0.26533E 01 | 0.37832E 00 | 0.20544E 01 | 0.12335E 01 | 0.00192E 01 | 0.05313E 01 |
| | | | | | 12.45 | 0.19950E 01 | 0.51818E 01 | 0.51417E 00 | 0.26712E 01 | 0.23114E 01 | 0.029601E 01 |
| | | | | | 12.45 | 0.53086E 01 | 0.1818E 01 | 0.8930E 00 | 0.14605E 01 | 0.14737E 00 | 0.12919E 00 |
| | | | | | 18.03 | 0.19576E 01 | 0.57352E 01 | 0.1579E 01 | 0.31515E 01 | 0.1277E 00 | 0.04596E 01 |
| | | | | | 18.03 | 0.10991E 01 | -0.62438E 01 | 0.10344E 01 | 0.54751E 01 | 0.18136E 00 | 0.01670E 01 |
| | | | | | 18.03 | 0.74677E 01 | -0.65469E 01 | 0.30388E 00 | 0.29347E 01 | 0.00235E 01 | 0.01047E 01 |
| | | | | | 18.03 | 0.91099E 01 | -0.33222E 01 | 0.18206E 00 | 0.15333E 01 | 0.00303E 01 | 0.01820E 01 |
| | | | | | 12.45 | 0.10066E 01 | -0.11038E 01 | 0.18206E 00 | 0.29990E 01 | 0.00303E 01 | 0.01820E 01 |
| | | | | | 12.45 | 0.41066E 01 | -0.11038E 01 | 0.18206E 00 | 0.29990E 01 | 0.00303E 01 | 0.01820E 01 |
| | | | | | 12.45 | 0.41066E 01 | -0.11038E 01 | 0.18206E 00 | 0.29990E 01 | 0.00303E 01 | 0.01820E 01 |

BVMT 242/243 SHIP MAKE TURBULENCE TEST

| RTN VEL | KCL YP | VAL PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|--------|-----------|----|--------|--------|----------|-------------|-------------|-------------|-------------|----------|
| 110 | 10.2 | 15.0 | 2 | 0.0 | 18.03 | 0.157498 | 0.3331E-01 | 0.86992E-00 | 0.13945E-00 | 0.12815E-00 | 0.000000 |
| | | | 3 | 0.00 | 18.003 | 0.661540 | 0.34785E-00 | 0.74496E-00 | 0.10655E-00 | 0.11716E-00 | 0.000000 |
| | | | 4 | 20.62 | 18.003 | 0.991272 | 0.49775E-00 | 0.23621E-00 | 0.13964E-00 | 0.11059E-00 | 0.000000 |
| | | | 5 | -40.64 | 18.003 | 0.671820 | 0.57197E-00 | 0.20884E-00 | 0.26014E-00 | 0.12238E-00 | 0.000000 |
| | | | 6 | 0.00 | 18.003 | 0.992200 | 0.61197E-00 | 0.46274E-00 | 0.17354E-00 | 0.13282E-00 | 0.000000 |
| | | | 9 | -20.32 | 18.003 | 0.992200 | 0.76547E-00 | 0.46274E-00 | 0.35420E-00 | 0.14283E-00 | 0.000000 |
| | | | 10 | -40.64 | 18.003 | 0.926100 | 0.76547E-00 | 0.46274E-00 | 0.35420E-00 | 0.14283E-00 | 0.000000 |
| | | | 3 | 0.00 | 18.003 | 0.792230 | 0.22084E-00 | 0.89720E-00 | 0.17280E-00 | 0.18235E-00 | 0.000000 |
| | | | 4 | 0.00 | 18.003 | 0.792230 | 0.22084E-00 | 0.89720E-00 | 0.17280E-00 | 0.18235E-00 | 0.000000 |
| | | | 5 | 0.00 | 18.003 | 0.792230 | 0.22084E-00 | 0.89720E-00 | 0.17280E-00 | 0.18235E-00 | 0.000000 |
| | | | 6 | 20.62 | 18.003 | 0.396230 | 0.11298E-00 | 0.34353E-00 | 0.18328E-00 | 0.19191E-00 | 0.000000 |
| | | | 9 | -8.60 | 18.003 | 0.396230 | 0.11298E-00 | 0.34353E-00 | 0.18328E-00 | 0.19191E-00 | 0.000000 |
| | | | 10 | -20.32 | 18.003 | 0.839920 | 0.50400E-00 | 0.28293E-00 | 0.13660E-00 | 0.14144E-00 | 0.000000 |
| | | | 4 | -60.60 | 18.003 | 0.909230 | 0.31588E-00 | 0.17685E-00 | 0.17525E-00 | 0.18923E-00 | 0.000000 |
| | | | 3 | 0.00 | 18.003 | 0.571820 | 0.43768E-00 | 0.22819E-00 | 0.32468E-00 | 0.49252E-00 | 0.000000 |
| | | | 4 | 20.32 | 18.003 | 0.571820 | 0.43768E-00 | 0.22819E-00 | 0.32468E-00 | 0.49252E-00 | 0.000000 |
| | | | 5 | -40.64 | 18.003 | 0.189230 | 0.37640E-00 | 0.33649E-00 | 0.31041E-00 | 0.49252E-00 | 0.000000 |
| | | | 6 | 0.00 | 18.003 | 0.189230 | 0.37640E-00 | 0.33649E-00 | 0.31041E-00 | 0.49252E-00 | 0.000000 |
| | | | 9 | -20.32 | 18.003 | 0.702230 | 0.15335E-00 | 0.49713E-00 | 0.17668E-00 | 0.18923E-00 | 0.000000 |
| | | | 10 | -40.64 | 18.003 | 0.702230 | 0.15335E-00 | 0.49713E-00 | 0.17668E-00 | 0.18923E-00 | 0.000000 |

RVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PRIME | X | Y | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 111 | 10.3 | 0.0 | 2 | 0.0 | 0.3273E 01 | 0.51671E 00 | 0.18887E 00 | 0.14388E 01 | 0.12674E 01 | 0.13206E 01 |
| | | | 2 | 0.00 | 0.42325E 00 | 0.15539E 00 | 0.19872E 00 | 0.10782E 01 | 0.12590E 00 | 0.10111E 00 |
| | | | 3 | 0.00 | 0.20992E 01 | 0.22354E 00 | 0.11109E 00 | 0.10747E 01 | 0.13206E 00 | 0.10111E 00 |
| | | | 4 | 20.32 | 0.01492E 01 | 0.26018E 00 | 0.64409E 00 | 0.10898E 00 | 0.14037E 00 | 0.12674E 00 |
| | | | 5 | 40.64 | 0.02252E 01 | 0.54812E 00 | 0.22889E 00 | 0.09049E 01 | 0.17100E 00 | 0.14037E 00 |
| | | | 7 | 0.00 | 0.52325E 01 | 0.57174E 00 | 0.92822E 00 | 0.13733E 01 | 0.17100E 00 | 0.14037E 00 |
| | | | 8 | 0.00 | 0.38384E 01 | 0.37044E 00 | 0.42822E 00 | 0.13733E 01 | 0.17100E 00 | 0.14037E 00 |
| | | | 9 | 20.32 | 0.77872E 01 | 0.33136E 01 | 0.36001E 00 | 0.15072E 00 | 0.17100E 00 | 0.14037E 00 |
| | | | 10 | 40.64 | 0.77872E 01 | 0.40245E 01 | 0.12721E 00 | 0.23971E 00 | 0.17100E 00 | 0.14037E 00 |
| | 3 | -30.0 | 1 | 0.00 | 0.12324E 01 | 0.21011E 01 | 0.13520E 01 | 0.10724E 01 | 0.10135E 01 | 0.12674E 01 |
| | | | 2 | 0.00 | 0.18152E 00 | 0.46358E 00 | 0.39915E 00 | 0.18470E 01 | 0.21475E 01 | 0.15227E 01 |
| | | | 3 | 0.00 | 0.77167E 01 | 0.23576E 00 | 0.14769E 00 | 0.49991E 00 | 0.43763E 00 | 0.40191E 00 |
| | | | 4 | 20.32 | 0.28028E 00 | 0.81180E 00 | 0.17184E 00 | 0.14528E 01 | 0.23089E 01 | 0.12674E 01 |
| | | | 5 | 0.00 | 0.55781E 00 | 0.33038E 00 | 0.18621E 00 | 0.12555E 01 | 0.22479E 01 | 0.12674E 01 |
| | | | 7 | 0.00 | 0.80189E 00 | 0.35675E 00 | 0.18621E 00 | 0.10060E 01 | 0.16150E 01 | 0.12674E 01 |
| | | | 8 | 0.00 | 0.81614E 00 | 0.48410E 00 | 0.17743E 00 | 0.31210E 00 | 0.58319E 00 | 0.66974E 00 |
| | | | 9 | 0.00 | 0.13051E 01 | 0.50244E 00 | 0.17743E 00 | 0.31210E 00 | 0.90309E 00 | 0.66974E 00 |
| | | | 10 | 20.32 | 0.39581E 01 | 0.13714E 01 | 0.26589E 01 | 0.11887E 01 | 0.12374E 01 | 0.12674E 01 |
| | 4 | -50.0 | 1 | 0.00 | 0.74293E 00 | 0.14030E 00 | 0.27831E 00 | 0.80888E 00 | 0.10935E 01 | 0.98211E 00 |
| | | | 2 | 0.00 | 0.72569E 00 | 0.32768E 00 | 0.20591E 00 | 0.15778E 00 | 0.16655E 00 | 0.13867E 00 |
| | | | 3 | 0.00 | 0.40218E 00 | 0.22909E 01 | 0.18214E 00 | 0.16189E 00 | 0.55102E 00 | 0.53310E 00 |
| | | | 4 | 20.32 | 0.50118E 00 | 0.22254E 00 | 0.68214E 00 | 0.91352E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | 5 | 0.00 | 0.14189E 00 | 0.38821E 00 | 0.30214E 00 | 0.19714E 00 | 0.10238E 00 | 0.00000E 00 |
| | | | 7 | 0.00 | 0.44189E 00 | 0.38821E 00 | 0.30214E 00 | 0.19714E 00 | 0.10238E 00 | 0.00000E 00 |
| | | | 8 | 0.00 | 0.40218E 00 | 0.22254E 00 | 0.68214E 00 | 0.91352E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | 9 | 0.00 | 0.50118E 00 | 0.22254E 00 | 0.68214E 00 | 0.91352E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | 10 | 20.32 | 0.40218E 00 | 0.22254E 00 | 0.68214E 00 | 0.91352E 00 | 0.00000E 00 | 0.00000E 00 |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| TIME | WFL | MILL | TP | YAN | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|-----|------|-----|-------|-------|------|--------|------|------------|------------|------------|------------|------------|------------|
| 113 27.7 | 0-0 | 1 | 0-0 | 1 | 0-0 | 0-00 | -6-60 | 6-22 | 0-6634E 01 | 0-1248E 01 | 0-4901E 00 | 0-3443E 01 | 0-3327E 01 | 0-4557E 01 |
| | | 2 | | | | 0-00 | 0-60 | 6-22 | 0-1149E 00 | 0-1149E 00 | 0-1425E 00 | 0-3304E 01 | 0-2320E 01 | 0-3277E 01 |
| | | 3 | | | | 0-00 | 6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-2585E 01 | 0-2124E 01 | 0-2777E 01 |
| | | 4 | | | | 0-00 | -20-64 | 6-22 | 0-1086E 02 | 0-1086E 02 | 0-1492E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 5 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 6 | | | | 0-00 | -6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 7 | | | | 0-00 | -20-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 8 | | | | 0-00 | -40-64 | 6-22 | 0-1831E 02 | 0-1831E 02 | 0-1484E 01 | 0-3624E 01 | 0-3693E 01 | 0-4366E 01 |
| | | 9 | | | | 0-00 | -6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 10 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 1 | 2 | -30.0 | 1 | 0-00 | -6-60 | 6-22 | 0-2874E 01 | 0-2468E 01 | 0-2816E 01 | 0-2733E 01 | 0-2266E 01 | 0-3491E 01 |
| | | 2 | | | | 0-00 | 0-00 | 6-22 | 0-2521E 01 | 0-2521E 01 | 0-2299E 01 | 0-4155E 01 | 0-4623E 01 | 0-4430E 01 |
| | | 3 | | | | 0-00 | 6-60 | 6-22 | 0-1916E 02 | 0-2170E 02 | 0-2299E 01 | 0-3385E 01 | 0-4623E 01 | 0-4430E 01 |
| | | 4 | | | | 0-00 | -20-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 5 | | | | 0-00 | -40-64 | 6-22 | 0-1242E 01 | 0-1242E 01 | 0-1691E 01 | 0-2964E 01 | 0-4258E 01 | 0-4586E 01 |
| | | 6 | | | | 0-00 | -6-60 | 6-22 | 0-2066E 02 | 0-1721E 01 | 0-1721E 01 | 0-2384E 01 | 0-4258E 01 | 0-4586E 01 |
| | | 7 | | | | 0-00 | -20-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 8 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 9 | | | | 0-00 | -6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 10 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 1 | 3 | -50.0 | 1 | 0-00 | -6-60 | 6-22 | 0-3615E 01 | 0-3185E 01 | 0-1317E 01 | 0-2329E 01 | 0-2549E 01 | 0-2791E 01 |
| | | 2 | | | | 0-00 | 0-00 | 6-22 | 0-4429E 02 | 0-4429E 02 | 0-5567E 01 | 0-5122E 01 | 0-5122E 01 | 0-4618E 01 |
| | | 3 | | | | 0-00 | 6-60 | 6-22 | 0-2085E 01 | 0-2340E 01 | 0-2085E 01 | 0-3327E 01 | 0-4080E 01 | 0-4168E 01 |
| | | 4 | | | | 0-00 | -20-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 5 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 6 | | | | 0-00 | -6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 7 | | | | 0-00 | -20-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 8 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 9 | | | | 0-00 | -6-60 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |
| | | 10 | | | | 0-00 | -40-64 | 6-22 | 0-0730E 01 | 0-0730E 01 | 0-1232E 01 | 0-3271E 01 | 0-2340E 01 | 0-3553E 01 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-----------|------|--------|------|---------|---------|---------|---------|---------|---------|
| 114 22.7 | 0.0 | 1 | 0.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 2 | 0.0 | 0.00 | 0.00 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 3 | 0.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 4 | 0.0 | 0.00 | -20.34 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 5 | 0.0 | 0.00 | -40.68 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 6 | 0.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 7 | 0.0 | 0.00 | -20.34 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 8 | 0.0 | 0.00 | -40.68 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 9 | 0.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 10 | 0.0 | 0.00 | -20.34 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | | | | | | | | | | | |
| | | 2 | -30.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 3 | -30.0 | 0.00 | 0.00 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 4 | -30.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 5 | -30.0 | 0.00 | -20.34 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 6 | -30.0 | 0.00 | -40.68 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 7 | -30.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 8 | -30.0 | 0.00 | -20.34 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 9 | -30.0 | 0.00 | -40.68 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |
| | | 10 | -30.0 | 0.00 | -6.60 | 6.22 | 0.93 | 0.21 | 0.00 | 0.40 | 0.99 | 0.98 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-------|-------|---------|---------|---------|---------|----------|---------|---------|---------|---------|
| 115 10.7 | 0.0 | 2 | 0.0 | 1 | 23.88 | -6.60 | 6.22 | 0.5034E | 0.3621E | 0.2492E | 0.1386E | 0.1186E | 0.1157E |
| | | | | | 23.88 | 0.00 | 6.22 | 0.3178E | -0.4297E | 0.2643E | 0.1405E | 0.1008E | 0.1269E |
| | | | | | 23.88 | 0.00 | 6.22 | 0.4960E | 0.1557E | 0.1008E | 0.1405E | 0.1008E | 0.1269E |
| | | | | | 23.88 | -20.64 | 6.22 | 0.9136E | 0.1971E | 0.0844E | 0.1270E | 0.0985E | 0.1442E |
| | | | | | 23.88 | -40.64 | 6.22 | 0.9136E | 0.1971E | 0.0844E | 0.1270E | 0.0985E | 0.1442E |
| | | | | | 23.88 | -60.60 | 6.22 | 0.5050E | 0.2271E | 0.1587E | 0.1587E | 0.1587E | 0.1587E |
| | | | | | 23.88 | -80.64 | 6.22 | 0.5050E | 0.2271E | 0.1587E | 0.1587E | 0.1587E | 0.1587E |
| | | | | | 23.88 | -100.64 | 6.22 | 0.5049E | 0.1866E | 0.3036E | 0.3036E | 0.3036E | 0.3036E |
| | | | | | 23.88 | -6.60 | 6.22 | 0.5049E | 0.1866E | 0.3036E | 0.3036E | 0.3036E | 0.3036E |
| | | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E |
| 115 10.7 | 0.0 | 3 | -30.0 | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.7509E | 0.1997E | 0.1572E | 0.1997E | 0.1572E | 0.1997E | |
| 115 10.7 | 0.0 | 4 | -50.0 | 23.88 | -6.60 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -20.64 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -40.64 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -60.60 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -80.64 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -100.64 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | -6.60 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1584E | 0.3273E | 0.1471E | 0.1584E | 0.1471E | 0.1584E | |
| 115 10.7 | 0.0 | 5 | -90.0 | 23.88 | -6.60 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |
| | | | | 23.88 | 0.00 | 6.22 | 0.1242E | 0.7576E | 0.1038E | 0.1242E | 0.1038E | 0.1242E | |

BVMT 2427243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-------|---|---------|---------|---------|---------|---------|---------|
| 116 | 22.9 | 0.0 | 1 | 0.0 | | 0.1001E | 0.0151E | 0.8847E | 0.0000E | 0.0000E | 0.0000E |
| | | | 2 | 0.0 | | 0.1817E | 0.0137E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 3 | 0.0 | | 0.1947E | 0.0133E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | 0.0 | | 0.2057E | 0.0130E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | 0.0 | | 0.1799E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | 0.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | 0.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | | | | 0.1001E | 0.0151E | 0.8847E | 0.0000E | 0.0000E | 0.0000E |
| | | | 2 | -30.0 | | 0.1817E | 0.0137E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 3 | -30.0 | | 0.1947E | 0.0133E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | -30.0 | | 0.2057E | 0.0130E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | -30.0 | | 0.1799E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | -30.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | -30.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | | | | 0.1001E | 0.0151E | 0.8847E | 0.0000E | 0.0000E | 0.0000E |
| | | | 3 | -50.0 | | 0.1817E | 0.0137E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | -50.0 | | 0.1947E | 0.0133E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | -50.0 | | 0.2057E | 0.0130E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | -50.0 | | 0.1799E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | -50.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | | | | 0.1001E | 0.0151E | 0.8847E | 0.0000E | 0.0000E | 0.0000E |
| | | | 4 | -90.0 | | 0.1817E | 0.0137E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 5 | -90.0 | | 0.1947E | 0.0133E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 6 | -90.0 | | 0.2057E | 0.0130E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |
| | | | 10 | -90.0 | | 0.1817E | 0.0127E | 0.0000E | 0.0000E | 0.0000E | 0.0000E |

RVNT 247243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-------|---|------------|------------|------------|------------|------------|------------|
| 117 | 10.2 | 0.0 | 2 | 0.0 | 1 | 0.5686E 01 | 0.2330E 00 | 0.2489E 00 | 0.1519E 01 | 0.1151E 01 | 0.9982E 00 |
| | | | 3 | 0.60 | 2 | 0.5150E 01 | 0.1808E 00 | 0.1421E 00 | 0.9591E 01 | 0.1052E 00 | 0.1088E 00 |
| | | | 4 | 0.60 | 2 | 0.9073E 01 | 0.1803E 00 | 0.9742E 00 | 0.9710E 01 | 0.1827E 00 | 0.1088E 00 |
| | | | 5 | 0.64 | 2 | 0.9364E 01 | 0.9312E 01 | 0.1705E 00 | 0.3023E 01 | 0.2097E 00 | 0.3993E 00 |
| | | | 6 | 0.64 | 2 | 0.5382E 01 | 0.9534E 01 | 0.5398E 00 | 0.2331E 01 | 0.2069E 00 | 0.3620E 00 |
| | | | 7 | 0.60 | 2 | 0.5712E 01 | 0.5546E 00 | 0.5472E 00 | 0.1434E 01 | 0.1291E 00 | 0.1238E 00 |
| | | | 8 | 0.60 | 2 | 0.8487E 01 | 0.6262E 00 | 0.2712E 00 | 0.1159E 01 | 0.2853E 00 | 0.1228E 00 |
| | | | 9 | 0.64 | 2 | 0.8765E 01 | 0.1758E 00 | 0.1558E 00 | 0.2810E 01 | 0.2921E 00 | 0.2993E 00 |
| | | | 10 | 0.64 | 2 | 0.1657E 01 | 0.5649E 01 | 0.2009E 00 | 0.1672E 01 | 0.1275E 01 | 0.1264E 01 |
| | | | 3 | -30.0 | 2 | 0.2773E 01 | 0.5164E 00 | 0.8512E 00 | 0.1631E 01 | 0.1324E 01 | 0.1382E 01 |
| | | | 4 | 0.60 | 2 | 0.5444E 01 | 0.3905E 00 | 0.1942E 00 | 0.1687E 01 | 0.1836E 01 | 0.1705E 01 |
| | | | 5 | 0.60 | 2 | 0.2923E 01 | 0.5837E 00 | 0.1336E 00 | 0.1690E 01 | 0.1549E 00 | 0.1392E 01 |
| | | | 6 | 0.64 | 2 | 0.8230E 01 | 0.8306E 00 | 0.1370E 00 | 0.9840E 00 | 0.1790E 00 | 0.1023E 01 |
| | | | 7 | 0.64 | 2 | 0.1466E 01 | 0.8523E 00 | 0.2335E 00 | 0.1042E 01 | 0.2350E 01 | 0.1730E 01 |
| | | | 8 | 0.60 | 2 | 0.5766E 01 | 0.9532E 00 | 0.2303E 00 | 0.1095E 01 | 0.1984E 01 | 0.1730E 01 |
| | | | 9 | 0.60 | 2 | 0.1936E 01 | 0.9289E 00 | 0.3003E 00 | 0.1095E 01 | 0.1984E 01 | 0.1730E 01 |
| | | | 10 | 0.64 | 2 | 0.8760E 01 | 0.1238E 01 | 0.4285E 00 | 0.8814E 00 | 0.4990E 00 | 0.1023E 01 |
| | | | 1 | 0.60 | 2 | 0.1211E 00 | 0.5871E 00 | 0.1084E 01 | 0.1407E 01 | 0.1508E 01 | 0.1073E 01 |
| | | | 2 | 0.60 | 2 | 0.1529E 01 | 0.1206E 00 | 0.1577E 00 | 0.1979E 01 | 0.1792E 01 | 0.2017E 01 |
| | | | 3 | 0.60 | 2 | 0.3594E 01 | 0.1670E 00 | 0.1071E 00 | 0.2302E 01 | 0.1733E 01 | 0.2017E 01 |
| | | | 4 | 0.64 | 2 | 0.1796E 01 | 0.4833E 00 | 0.1420E 00 | 0.8356E 00 | 0.5964E 00 | 0.1671E 01 |
| | | | 5 | 0.64 | 2 | 0.3542E 01 | 0.4833E 00 | 0.1086E 01 | 0.2309E 01 | 0.2217E 01 | 0.1671E 01 |
| | | | 6 | 0.60 | 2 | 0.2484E 00 | 0.2861E 00 | 0.6892E 00 | 0.1509E 01 | 0.2178E 01 | 0.2063E 01 |
| | | | 7 | 0.60 | 2 | 0.2490E 01 | 0.1612E 00 | 0.1763E 00 | 0.1021E 01 | 0.2037E 01 | 0.2063E 01 |
| | | | 8 | 0.60 | 2 | 0.1816E 01 | 0.1007E 00 | 0.1672E 00 | 0.2897E 01 | 0.2517E 01 | 0.1893E 01 |
| | | | 9 | 0.64 | 2 | 0.1268E 01 | 0.1863E 00 | 0.1431E 01 | 0.1745E 01 | 0.1358E 01 | 0.1893E 01 |
| | | | 10 | 0.64 | 2 | 0.2827E 01 | 0.6797E 00 | 0.1071E 01 | 0.1622E 01 | 0.1587E 01 | 0.1691E 01 |
| | | | 1 | 0.60 | 2 | 0.4261E 01 | 0.1373E 01 | 0.1299E 01 | 0.2019E 01 | 0.2051E 01 | 0.2049E 01 |
| | | | 2 | 0.60 | 2 | 0.6409E 01 | 0.1747E 01 | 0.1053E 01 | 0.2137E 01 | 0.1731E 01 | 0.2049E 01 |
| | | | 3 | 0.60 | 2 | 0.1555E 01 | 0.5974E 00 | 0.1660E 00 | 0.1363E 01 | 0.1649E 01 | 0.1301E 01 |
| | | | 4 | 0.64 | 2 | 0.2286E 01 | 0.5974E 00 | 0.1197E 01 | 0.0472E 01 | 0.4725E 01 | 0.1618E 01 |
| | | | 5 | 0.64 | 2 | 0.2596E 01 | 0.2825E 01 | 0.1074E 01 | 0.1515E 01 | 0.1524E 01 | 0.1618E 01 |
| | | | 6 | 0.60 | 2 | 0.5274E 01 | 0.2255E 00 | 0.1748E 00 | 0.2710E 01 | 0.1305E 01 | 0.2142E 01 |
| | | | 7 | 0.60 | 2 | 0.2744E 01 | 0.1808E 00 | 0.3593E 00 | 0.1135E 01 | 0.1168E 01 | 0.2142E 01 |
| | | | 8 | 0.60 | 2 | 0.2744E 01 | 0.1808E 00 | 0.3593E 00 | 0.1135E 01 | 0.1168E 01 | 0.2142E 01 |
| | | | 9 | 0.64 | 2 | 0.2744E 01 | 0.1808E 00 | 0.3593E 00 | 0.1135E 01 | 0.1168E 01 | 0.2142E 01 |
| | | | 10 | 0.64 | 2 | 0.2744E 01 | 0.1808E 00 | 0.3593E 00 | 0.1135E 01 | 0.1168E 01 | 0.2142E 01 |

0207 242/243 SHIP MAKE TURBULENCE TEST

| RUN VEL | ROLL | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-------|-------|--------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 118 | 23.0 | 0.0 | 1 | 43.16 | -6.60 | 6.22 | 0.11445E 02 | -0.85121E 00 | 0.13884E 00 | 0.22817E 01 | 0.30202E 01 | 0.28010E 01 |
| | | | 2 | 43.16 | 0.00 | 6.22 | 0.15662E 02 | -0.73191E 00 | 0.07171E 00 | 0.17452E 01 | 0.40464E 01 | 0.25479E 01 |
| | | | 3 | 43.16 | 20.32 | 6.22 | 0.10402E 02 | -0.12113E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | 4 | 43.16 | -40.64 | 6.22 | 0.20075E 02 | 0.98232E 00 | 0.00000E 00 | 0.44788E 01 | 0.00000E 00 | 0.40000E 01 |
| | | | 5 | 43.16 | 0.00 | 6.22 | 0.11892E 02 | 0.00000E 00 | 0.00000E 00 | 0.21092E 01 | 0.00000E 00 | 0.20000E 01 |
| | | | 6 | 43.16 | 0.00 | 6.22 | 0.18112E 02 | 0.78831E 00 | 0.00000E 00 | 0.20773E 01 | 0.00000E 00 | 0.30000E 01 |
| | | | 7 | 43.16 | -20.32 | 6.22 | 0.18645E 02 | -0.78942E 00 | 0.00000E 00 | 0.36888E 01 | 0.00000E 00 | 0.00000E 01 |
| | | | 8 | 43.16 | 40.64 | 6.22 | 0.38750E 02 | 0.28604E 00 | 0.10859E 01 | 0.27051E 01 | 0.29695E 01 | 0.27107E 01 |
| | | | 9 | 43.16 | 0.00 | 6.22 | 0.70749E 02 | -0.22012E 00 | 0.00000E 00 | 0.32971E 01 | 0.00000E 00 | 0.31181E 01 |
| | | | 10 | 43.16 | 0.00 | 6.22 | 0.99016E 02 | 0.51469E 00 | 0.00000E 00 | 0.31885E 01 | 0.00000E 00 | 0.32444E 01 |
| | | | 1 | 43.16 | 20.32 | 6.22 | 0.73317E 02 | 0.00000E 00 | 0.00000E 00 | 0.30245E 01 | 0.00000E 00 | 0.33781E 01 |
| | | | 2 | 43.16 | -40.64 | 6.22 | 0.34821E 02 | 0.17282E 00 | 0.00000E 00 | 0.19591E 01 | 0.00000E 00 | 0.36826E 01 |
| | | | 3 | 43.16 | 0.00 | 6.22 | 0.96193E 02 | 0.14299E 00 | 0.00000E 00 | 0.29949E 01 | 0.00000E 00 | 0.25540E 01 |
| | | | 4 | 43.16 | 20.32 | 6.22 | 0.16373E 02 | -0.12872E 00 | 0.00000E 00 | 0.26779E 01 | 0.00000E 00 | 0.25233E 01 |
| | | | 5 | 43.16 | 0.00 | 6.22 | 0.14385E 02 | 0.58246E 00 | 0.19645E 01 | 0.30842E 01 | 0.00000E 00 | 0.26564E 01 |
| | | | 6 | 43.16 | 0.00 | 6.22 | 0.53426E 02 | 0.33963E 00 | 0.00000E 00 | 0.30408E 01 | 0.00000E 00 | 0.27616E 01 |
| | | | 7 | 43.16 | 20.32 | 6.22 | 0.62992E 02 | 0.00000E 00 | 0.00000E 00 | 0.51104E 01 | 0.00000E 00 | 0.50203E 01 |
| | | | 8 | 43.16 | -40.64 | 6.22 | 0.67305E 02 | 0.13208E 00 | 0.00000E 00 | 0.39286E 01 | 0.00000E 00 | 0.44504E 01 |
| | | | 9 | 43.16 | 0.00 | 6.22 | 0.15419E 02 | 0.18050E 00 | 0.00000E 00 | 0.30286E 01 | 0.00000E 00 | 0.42425E 01 |
| | | | 10 | 43.16 | 20.32 | 6.22 | 0.26872E 02 | 0.20827E 00 | 0.00000E 00 | 0.30702E 01 | 0.00000E 00 | 0.50298E 01 |
| | | | 1 | 43.16 | -6.60 | 6.22 | 0.82732E 02 | 0.27181E 00 | 0.00000E 00 | 0.51125E 01 | 0.00000E 00 | 0.57475E 01 |
| | | | 2 | 43.16 | 0.00 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 3 | 43.16 | 20.32 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 4 | 43.16 | -40.64 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 5 | 43.16 | 0.00 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 6 | 43.16 | 0.00 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 7 | 43.16 | 20.32 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 8 | 43.16 | -40.64 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 9 | 43.16 | 0.00 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |
| | | | 10 | 43.16 | 20.32 | 6.22 | 0.12362E 02 | 0.00000E 00 | 0.00000E 00 | 0.40922E 01 | 0.00000E 00 | 0.44792E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL 1P | YAW PROBE | X | Y | 2 | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-----|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 117 10.2 | 0.0 | 2 | 0.0 | -6.60 | 6.22 | 0.59795E 01 | 0.54131E 00 | 0.37650E 00 | 0.94233E 00 | 0.93898E 00 | 0.89878E 00 |
| | | | | 0.00 | 6.22 | 0.71715E 00 | 0.33204E 00 | 0.12054E 01 | 0.71760E 00 | 0.78669E 00 | 0.95545E 00 |
| | | | | 20.32 | 6.22 | 0.76434E 00 | 0.37480E 00 | 0.10701E 00 | 0.82346E 00 | 0.56667E 00 | 0.61821E 00 |
| | | | | -40.64 | 6.22 | 0.81097E 00 | 0.40834E 00 | 0.98185E 00 | 0.82346E 00 | 0.44622E 00 | 0.32774E 00 |
| | | | | 6.60 | 2.22 | 0.56606E 00 | 0.28089E 00 | 0.49373E 00 | 0.11130E 01 | 0.98551E 00 | 0.70588E 00 |
| | | | | -20.32 | 2.22 | 0.60070E 00 | 0.28991E 00 | 0.41785E 00 | 0.11130E 01 | 0.98551E 00 | 0.70588E 00 |
| | | | | 6.60 | 2.22 | 0.85546E 00 | 0.22110E 00 | 0.48003E 00 | 0.26329E 00 | 0.37225E 00 | 0.33550E 00 |
| | | | | -20.64 | 2.22 | 0.85546E 00 | 0.22110E 00 | 0.48003E 00 | 0.26329E 00 | 0.37225E 00 | 0.33550E 00 |
| | | | | 6.60 | 6.22 | 0.32742E 01 | 0.14219E 00 | 0.37072E 01 | 0.10586E 01 | 0.10997E 01 | 0.11153E 01 |
| | | | | 0.00 | 6.22 | 0.39093E 00 | 0.34404E 00 | 0.30837E 00 | 0.17280E 01 | 0.14009E 01 | 0.11427E 01 |
| | | | | 20.32 | 6.22 | 0.68371E 00 | 0.38612E 00 | 0.10117E 00 | 0.11889E 00 | 0.11777E 00 | 0.14263E 00 |
| | | | | -40.64 | 6.22 | 0.88274E 00 | 0.39986E 00 | 0.16118E 00 | 0.44657E 00 | 0.13479E 00 | 0.11679E 00 |
| | | | | 6.60 | 2.22 | 0.26237E 00 | 0.20987E 00 | 0.98615E 00 | 0.16613E 00 | 0.15009E 00 | 0.11919E 00 |
| | | | | -20.32 | 2.22 | 0.84732E 00 | 0.13139E 00 | 0.87439E 00 | 0.34288E 00 | 0.15009E 00 | 0.11919E 00 |
| | | | | 6.60 | 6.22 | 0.51666E 00 | 0.27372E 00 | 0.19255E 00 | 0.23258E 00 | 0.11800E 00 | 0.16745E 00 |
| | | | | 0.00 | 6.22 | 0.32208E 00 | 0.35804E 00 | 0.97468E 00 | 0.25217E 00 | 0.21939E 00 | 0.18255E 00 |
| | | | | 20.32 | 6.22 | 0.36439E 00 | 0.36471E 00 | 0.11235E 00 | 0.32344E 00 | 0.17035E 00 | 0.15161E 00 |
| | | | | -40.64 | 6.22 | 0.26115E 00 | 0.32335E 00 | 0.90805E 00 | 0.22681E 00 | 0.17035E 00 | 0.15161E 00 |
| | | | | 6.60 | 2.22 | 0.81118E 00 | 0.22695E 00 | 0.72880E 00 | 0.16894E 00 | 0.21108E 00 | 0.19224E 00 |
| | | | | -20.32 | 2.22 | 0.26118E 00 | 0.13395E 00 | 0.12283E 00 | 0.16894E 00 | 0.21108E 00 | 0.19224E 00 |
| | | | | 6.60 | 6.22 | 0.37878E 00 | 0.68030E 00 | 0.13337E 00 | 0.29178E 00 | 0.20563E 00 | 0.20144E 00 |
| | | | | 0.00 | 6.22 | 0.51109E 00 | 0.29238E 00 | 0.17535E 00 | 0.22122E 00 | 0.20206E 00 | 0.18991E 00 |
| | | | | 20.32 | 6.22 | 0.27217E 00 | 0.46645E 00 | 0.18299E 00 | 0.30356E 00 | 0.27713E 00 | 0.22140E 00 |
| | | | | -40.64 | 6.22 | 0.47111E 00 | 0.20495E 00 | 0.18187E 00 | 0.20228E 00 | 0.20694E 00 | 0.22104E 00 |
| | | | | 6.60 | 2.22 | 0.18337E 00 | 0.10977E 00 | 0.69093E 00 | 0.24454E 00 | 0.21929E 00 | 0.21244E 00 |
| | | | | -20.32 | 2.22 | 0.18337E 00 | 0.10977E 00 | 0.69093E 00 | 0.24454E 00 | 0.21929E 00 | 0.21244E 00 |
| | | | | 6.60 | 6.22 | 0.61929E 00 | 0.13210E 00 | 0.22399E 00 | 0.15575E 00 | 0.13623E 00 | 0.15901E 00 |
| | | | | 0.00 | 6.22 | 0.89709E 00 | 0.17045E 00 | 0.22399E 00 | 0.15575E 00 | 0.13623E 00 | 0.15901E 00 |
| | | | | 20.32 | 6.22 | 0.69731E 00 | 0.17045E 00 | 0.22399E 00 | 0.15575E 00 | 0.13623E 00 | 0.15901E 00 |
| | | | | -40.64 | 6.22 | 0.54231E 00 | 0.17045E 00 | 0.22399E 00 | 0.15575E 00 | 0.13623E 00 | 0.15901E 00 |
| | | | | 6.60 | 2.22 | 0.22399E 00 | 0.13395E 00 | 0.13383E 00 | 0.19318E 00 | 0.12227E 00 | 0.12277E 00 |
| | | | | -20.32 | 2.22 | 0.22399E 00 | 0.13395E 00 | 0.13383E 00 | 0.19318E 00 | 0.12227E 00 | 0.12277E 00 |
| | | | | 6.60 | 6.22 | 0.40015E 00 | 0.61118E 00 | 0.15435E 00 | 0.17892E 00 | 0.11708E 00 | 0.13986E 00 |
| | | | | 0.00 | 6.22 | 0.83122E 00 | 0.37171E 00 | 0.15649E 00 | 0.24488E 00 | 0.17035E 00 | 0.17035E 00 |
| | | | | 20.32 | 6.22 | 0.39093E 00 | 0.50989E 00 | 0.18019E 00 | 0.30356E 00 | 0.15035E 00 | 0.17035E 00 |
| | | | | -40.64 | 6.22 | 0.39093E 00 | 0.50989E 00 | 0.18019E 00 | 0.30356E 00 | 0.15035E 00 | 0.17035E 00 |
| | | | | 6.60 | 2.22 | 0.39093E 00 | 0.50989E 00 | 0.18019E 00 | 0.30356E 00 | 0.15035E 00 | 0.17035E 00 |
| | | | | -20.32 | 2.22 | 0.39093E 00 | 0.50989E 00 | 0.18019E 00 | 0.30356E 00 | 0.15035E 00 | 0.17035E 00 |
| | | | | 6.60 | 6.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |
| | | | | 0.00 | 6.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |
| | | | | 20.32 | 6.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |
| | | | | -40.64 | 6.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |
| | | | | 6.60 | 2.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |
| | | | | -20.32 | 2.22 | 0.17139E 00 | 0.27126E 00 | 0.10942E 00 | 0.11658E 00 | 0.16349E 00 | 0.15198E 00 |

8VNT 242/243 SHIP WAKE TURBULENCE TEST

| ROW | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|---|------|---|---------|---------|---------|---------|---------|---------|
| 120 | 23.2 | 0.0 | 1 | 0.0 | 1 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.10 | 0.16 | 0.19 | 0.23 |
| 2 | | | | | 2 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 3 | | | | | 3 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 4 | | | | | 4 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 5 | | | | | 5 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 6 | | | | | 6 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 7 | | | | | 7 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 8 | | | | | 8 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 9 | | | | | 9 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 10 | | | | | 10 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 1 | | | | | 1 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 2 | | | | | 2 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 3 | | | | | 3 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 4 | | | | | 4 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 5 | | | | | 5 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 6 | | | | | 6 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 7 | | | | | 7 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 8 | | | | | 8 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 9 | | | | | 9 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |
| 10 | | | | | 10 | 3 | 6.60 | 6 | 0.41 | 0.00 | 0.33 | 0.15 | 0.23 | 0.23 |

RVMT 2477243 SHIP WAKE TURBULENCE TEST

Table with 14 columns: #UM VEL, ROLL, YAW, PRDR, X, Y, Z, MEAN VX, MEAN VY, MEAN VZ, S.D. VX, S.D. VY, S.D. VZ. It contains three distinct data series labeled 1-3, 4-6, and 7-8, each with 10 rows of data points.

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| DIRN VEL | ROLL | TR | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-----------|----|--------|--------|-------------|--------------|-------------|-------------|-------------|-------------|
| 122 22.5 | 0.0 | 7 | -100.0 | 8 | 170.69 | -20.32 | 0.17924E 02 | -0.99397E 00 | 0.28719E 00 | 0.48513E 00 | 0.21320E 00 | 0.53724E 00 |
| | | | | 10 | 170.69 | -30.64 | 0.16682E 02 | 0.83928E 00 | 0.21631E 00 | 0.57223E 00 | 0.81011E 00 | 0.73487E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PRD/F | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|--------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 123 22.4 | 0-0 | 1 0-0 | 170-69 | -6-60 | 6-22 | 0-13762E 02 | 0-52221E-01 | 0-14888E 01 | 0-17338E 01 | 0-20728E 01 | 0-16774E 01 |
| | | | 170-69 | 0-60 | 6-23 | 0-12493E 02 | 0-89229E 00 | 0-95082E 00 | 0-15089E 01 | 0-20703E 01 | 0-18030E 01 |
| | | | 170-69 | 6-60 | 6-23 | 0-12053E 02 | 0-20523E 00 | 0-95411E 00 | 0-14899E 01 | 0-17170E 01 | 0-16608E 01 |
| | | | 170-69 | -20-32 | 6-22 | 0-18752E 02 | 0-11623E 01 | 0-23672E-01 | 0-72955E 00 | 0-57168E 00 | 0-58850E 00 |
| | | | 170-69 | 20-64 | 6-22 | 0-19764E 02 | 0-14591E 01 | 0-16376E 01 | 0-37032E 00 | 0-57174E 00 | 0-56259E 00 |
| | | | 170-69 | -6-60 | 3-54 | 0-12422E 02 | 0-58731E 00 | 0-13355E 00 | 0-17532E 01 | 0-20870E 01 | 0-17697E 01 |
| | | | 170-69 | 6-60 | 3-54 | 0-12422E 02 | 0-58731E 00 | 0-13355E 00 | 0-17532E 01 | 0-20870E 01 | 0-17697E 01 |
| | | | 170-69 | -20-32 | 2-54 | 0-17032E 02 | 0-49052E 00 | 0-13593E 01 | 0-10223E 00 | 0-50963E 00 | 0-46997E 00 |
| | | | 170-69 | 20-64 | 2-54 | 0-18420E 02 | 0-10140E 01 | 0-17426E 00 | 0-34414E 00 | 0-50348E 00 | 0-46997E 00 |
| | 2 | -30.0 | 170-69 | -6-60 | 6-22 | 0-10779E 02 | 0-12311E 01 | 0-15171E 01 | 0-19882E 01 | 0-31386E 01 | 0-26963E 01 |
| | | | 170-69 | 0-60 | 6-22 | 0-11058E 02 | 0-10821E 01 | 0-23216E 01 | 0-25070E 01 | 0-30542E 01 | 0-23997E 01 |
| | | | 170-69 | 6-60 | 6-22 | 0-11258E 02 | 0-14243E 01 | 0-13727E 01 | 0-25231E 01 | 0-30792E 01 | 0-23997E 01 |
| | | | 170-69 | -20-32 | 6-22 | 0-16234E 02 | 0-23750E 00 | 0-61717E 00 | 0-49144E 00 | 0-18790E 00 | 0-27182E 00 |
| | | | 170-69 | 20-64 | 6-22 | 0-19233E 02 | 0-24750E 00 | 0-42906E 00 | 0-54044E 00 | 0-22860E 00 | 0-27182E 00 |
| | | | 170-69 | -6-60 | 3-54 | 0-11073E 02 | 0-40468E 01 | 0-31561E 01 | 0-19998E 01 | 0-28060E 01 | 0-21784E 01 |
| | | | 170-69 | 6-60 | 3-54 | 0-10767E 02 | 0-39628E 01 | 0-67409E 00 | 0-23981E 01 | 0-31408E 01 | 0-21784E 01 |
| | | | 170-69 | -20-32 | 2-54 | 0-16130E 02 | 0-35221E 00 | 0-25701E 00 | 0-41763E 00 | 0-18219E 00 | 0-21469E 00 |
| | | | 170-69 | 20-64 | 2-54 | 0-16130E 02 | 0-35221E 00 | 0-25701E 00 | 0-41763E 00 | 0-18219E 00 | 0-21469E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | KOLL TF | VAN PROBE | X | Y | Z | REAN VX | REAN VY | REAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|--------|-----|----------|----------|----------|----------|----------|----------|
| 124 | 10.4 | 15.0 | 2 | 0.0 | 6.6 | 0.71450E | 0.40272E | 0.74554E | 0.95653E | 0.66585E | 0.39776E |
| 1 | 170.69 | | | -6.60 | | 0.75633E | 0.35971E | 0.33090E | 0.00302E | 0.00250E | 0.00289E |
| 2 | 170.69 | | | 0.60 | | 0.00000E | 0.60691E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 3 | 170.69 | | | 20.64 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 4 | 170.69 | | | -20.64 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 5 | 170.69 | | | 6.60 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 6 | 170.69 | | | -6.60 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | 170.69 | | | 20.64 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | 170.69 | | | -20.64 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | 170.69 | | | 6.60 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | 170.69 | | | -6.60 | | 0.00000E | 0.40141E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 3 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 4 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 5 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 6 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -30.0 | | | 6.60 | | 0.00000E | 0.50339E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 4 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 5 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 6 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -50.0 | | | 6.60 | | 0.00000E | 0.63809E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 5 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 6 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -90.0 | | | 6.60 | | 0.00000E | 0.98742E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 6 | -120.0 | | | 6.60 | | 0.00000E | 1.32300E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | -120.0 | | | 6.60 | | 0.00000E | 1.32300E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -120.0 | | | 6.60 | | 0.00000E | 1.32300E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -120.0 | | | 6.60 | | 0.00000E | 1.32300E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -120.0 | | | 6.60 | | 0.00000E | 1.32300E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 7 | -150.0 | | | 6.60 | | 0.00000E | 1.67858E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -150.0 | | | 6.60 | | 0.00000E | 1.67858E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -150.0 | | | 6.60 | | 0.00000E | 1.67858E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -150.0 | | | 6.60 | | 0.00000E | 1.67858E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 8 | -180.0 | | | 6.60 | | 0.00000E | 2.03416E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 9 | -180.0 | | | 6.60 | | 0.00000E | 2.03416E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |
| 10 | -180.0 | | | 6.60 | | 0.00000E | 2.03416E | 0.00000E | 0.00000E | 0.00000E | 0.00000E |

BVHT 242/243 SHIP WAKE TURBULENCE TEST

| PIN VFL | ROLL | TP | YAW | PROG | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----|--------|----|--------|--------|-------------|--------------|-------------|-------------|-------------|-------------|
| 124 | 10.4 | 15.0 | 8 | -180.0 | 9 | 170.69 | -20.32 | 0.82654E 01 | -0.60447E 00 | 0.40048E 00 | 0.32387E 00 | 0.44897E 00 | 0.43014E 00 |
| | | | | | 10 | 170.69 | -40.64 | 0.81212E 01 | -0.77468E 01 | 0.16085E 00 | 0.30211E 00 | 0.34391E 00 | 0.38737E 00 |



BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-----|-------|---------|---------|---------|---------|---------|---------|
| 125 | 10.2 | 15.0 | 2 | 0.0 | 6 | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| | | | | | | 75.42 | 0.1527 | 0.4861 | 0.3018 | 0.5718 | 0.6847 |
| 3 | -30.0 | 3 | 6 | 0.0 | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| | | | | | 23.22 | 0.4329 | 0.9068 | 0.1638 | 0.7172 | 0.9958 | |
| 4 | -50.0 | 4 | 6 | 0.0 | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| | | | | | 65.15 | 0.3015 | 0.3827 | 0.1405 | 0.7524 | 1.3208 | |
| 5 | -90.0 | 5 | 6 | 0.0 | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| | | | | | 67.15 | 0.1120 | 0.6254 | 0.1825 | 0.8019 | 1.5908 | |
| 6 | -120.0 | 6 | 6 | 0.0 | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |
| | | | | | 82.19 | 0.7849 | 0.9539 | 0.6614 | 1.3208 | 2.2978 | |

HVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | RDL | TP | YAW | PRDHE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-------|-------|-------|--------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 126 | 10.3 | 15.0 | 2 | 0.0 | 43.16 | -6.60 | 6.22 | 0.71099E 01 | -0.15971E 00 | 0.78694E 00 | 0.67690E 00 | 0.82193E 00 | 0.69620E 00 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.51844E 01 | -0.64922E 00 | 0.26110E 00 | 0.13254E 01 | 0.11365E 01 | 0.91998E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.45130E 01 | -0.12087E 00 | -0.18198E 00 | 0.11255E 01 | 0.05560E 01 | 0.91064E 01 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.93347E 01 | -0.17795E 00 | -0.34191E 00 | 0.40372E 00 | 0.55258E 00 | 0.52162E 00 |
| | | | | | 43.16 | -40.64 | 6.22 | 0.80647E 01 | -0.17577E 00 | 0.15218E 00 | 0.27625E 00 | 0.74629E 00 | 0.65643E 00 |
| | | | | | 43.16 | -6.00 | 3.54 | 0.82307E 01 | -0.69078E 00 | 0.15218E 00 | 0.11632E 01 | 0.14985E 00 | 0.10664E 01 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.81747E 01 | -0.11907E 00 | 0.28003E 00 | 0.10632E 00 | 0.14985E 00 | 0.11274E 00 |
| | | | | | 43.16 | -40.64 | 2.54 | 0.91746E 01 | -0.51185E 01 | 0.46805E 01 | 0.37097E 00 | 0.43094E 00 | 0.44377E 00 |
| | | 3 | -30.0 | | 43.16 | -6.60 | 6.22 | 0.20077E 01 | -0.17559E 01 | 0.45800E 00 | 0.14194E 01 | 0.14570E 01 | 0.11791E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.30387E 01 | -0.14515E 00 | 0.71236E 00 | 0.16629E 01 | 0.14570E 01 | 0.15106E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.49291E 01 | -0.26230E 00 | 0.21403E 01 | 0.19203E 01 | 0.16980E 01 | 0.13001E 01 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.39678E 01 | -0.21809E 00 | 0.19169E 01 | 0.14350E 01 | 0.13013E 00 | 0.12668E 01 |
| | | | | | 43.16 | -40.64 | 6.22 | 0.95065E 01 | -0.11371E 01 | -0.19804E 01 | 0.63727E 00 | 0.97896E 00 | 0.71237E 00 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.17493E 01 | -0.95878E 00 | 0.94026E 01 | 0.14660E 01 | 0.13799E 01 | 0.12256E 01 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.46460E 01 | -0.66214E 00 | 0.22831E 01 | 0.22554E 01 | 0.19810E 01 | 0.14821E 01 |
| | | | | | 43.16 | -40.64 | 2.54 | 0.28500E 01 | -0.10749E 01 | 0.10363E 01 | 0.13799E 00 | 0.11981E 00 | 0.12215E 00 |
| | | | | | 43.16 | -6.60 | 6.22 | 0.43711E 00 | 0.49326E 00 | 0.69429E 00 | 0.10506E 01 | 0.97634E 00 | 0.94938E 00 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.31299E 01 | -0.11696E 01 | 0.13353E 01 | 0.15813E 01 | 0.15466E 01 | 0.13140E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.87421E 00 | -0.10219E 01 | 0.20514E 01 | 0.23767E 01 | 0.18066E 01 | 0.19246E 01 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.23440E 01 | -0.70377E 00 | 0.16592E 00 | 0.17679E 01 | 0.17191E 01 | 0.13848E 01 |
| | | | | | 43.16 | -40.64 | 2.54 | 0.23039E 00 | -0.90185E 00 | 0.61981E 00 | 0.20254E 00 | 0.19191E 00 | 0.14796E 00 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.23338E 01 | -0.35022E 00 | 0.61981E 00 | 0.20254E 00 | 0.19191E 00 | 0.14796E 00 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.11523E 01 | -0.74311E 00 | 0.17206E 01 | 0.21912E 00 | 0.19191E 00 | 0.14796E 00 |
| | | | | | 43.16 | -40.64 | 2.54 | 0.10152E 01 | -0.42810E 00 | 0.12584E 01 | 0.17757E 01 | 0.15515E 01 | 0.13940E 01 |
| | | | | | 43.16 | -6.60 | 6.22 | 0.52452E 01 | -0.14998E 01 | 0.16708E 01 | 0.14150E 01 | 0.13062E 01 | 0.12331E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.62727E 01 | -0.17152E 00 | 0.18079E 01 | 0.22131E 01 | 0.21523E 01 | 0.21232E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.62974E 01 | -0.15255E 00 | 0.15077E 01 | 0.22057E 01 | 0.22057E 01 | 0.21232E 01 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.19967E 01 | -0.11333E 00 | 0.15255E 00 | 0.22057E 01 | 0.22057E 01 | 0.21232E 01 |
| | | | | | 43.16 | -40.64 | 6.22 | 0.12015E 01 | -0.15365E 00 | 0.14358E 00 | 0.17297E 01 | 0.17297E 01 | 0.15001E 01 |
| | | | | | 43.16 | -6.60 | 3.54 | 0.40562E 01 | -0.20809E 01 | 0.71123E 01 | 0.23476E 01 | 0.19271E 01 | 0.15094E 01 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.30106E 01 | -0.69512E 00 | 0.91162E 01 | 0.25810E 01 | 0.24249E 01 | 0.19094E 01 |
| | | | | | 43.16 | -40.64 | 2.54 | 0.49982E 01 | -0.37335E 00 | 0.11679E 01 | 0.11701E 01 | 0.19269E 01 | 0.10981E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | MOLL | Y# | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|-------|--------|------|---------|---------|---------|---------|---------|---------|
| 127 | 10.3 | 15.0 | 2 | 0.0 | 1 | 23.88 | -6.60 | 6.60 | 0.8053 | -0.2664 | 0.2719 | 0.6119 | 0.7107 | 0.8294 |
| | | | | | 2 | 23.88 | 0.00 | 6.60 | 0.5451 | -0.4427 | 0.4687 | 0.0023 | 0.1262 | 0.2923 |
| | | | | | 3 | 23.88 | -20.64 | 6.60 | 0.7032 | 0.2671 | 0.1874 | 0.1125 | 0.2024 | 0.3323 |
| | | | | | 4 | 23.88 | -40.64 | 6.60 | 0.0431 | 0.9013 | 0.7525 | 0.0000 | 0.0000 | 0.6013 |
| | | | | | 5 | 23.88 | -60.64 | 6.60 | 0.8540 | 0.1801 | 0.3254 | 0.0000 | 0.0000 | 0.3254 |
| | | | | | 6 | 23.88 | -40.64 | 6.60 | 0.3771 | -0.7532 | 0.4924 | 0.0000 | 0.0000 | 0.3771 |
| | | | | | 10 | 23.88 | -40.64 | 6.60 | 0.9376 | -0.4420 | 0.1205 | 0.0000 | 0.0000 | 0.9376 |
| | | | | | 3 | 33.88 | 0.00 | 6.60 | 0.3974 | 0.2150 | 0.1973 | 0.0000 | 0.0000 | 0.3974 |
| | | | | | 3 | 33.88 | 0.00 | 6.60 | 0.3536 | 0.2022 | 0.1973 | 0.0000 | 0.0000 | 0.3536 |
| | | | | | 3 | 33.88 | 20.64 | 6.60 | 0.3272 | 0.2022 | 0.1973 | 0.0000 | 0.0000 | 0.3272 |
| | | | | | 7 | 33.88 | -20.64 | 6.60 | 0.0040 | 0.3195 | 0.2383 | 0.0000 | 0.0000 | 0.0040 |
| | | | | | 8 | 33.88 | -60.64 | 6.60 | 0.1040 | 0.1732 | 0.3066 | 0.0000 | 0.0000 | 0.1040 |
| | | | | | 9 | 33.88 | -20.64 | 6.60 | 0.3488 | 0.1823 | 0.1946 | 0.0000 | 0.0000 | 0.3488 |
| | | | | | 10 | 33.88 | -20.64 | 6.60 | 0.9480 | 0.1823 | 0.1946 | 0.0000 | 0.0000 | 0.9480 |
| | | | | | 1 | 33.88 | -60.64 | 6.60 | 0.0376 | 0.2076 | 0.3688 | 0.0000 | 0.0000 | 0.0376 |
| | | | | | 3 | 33.88 | -60.64 | 6.60 | 0.2327 | 0.3585 | 0.2768 | 0.0000 | 0.0000 | 0.2327 |
| | | | | | 3 | 33.88 | -20.64 | 6.60 | 0.2327 | 0.3585 | 0.2768 | 0.0000 | 0.0000 | 0.2327 |
| | | | | | 4 | 33.88 | -20.64 | 6.60 | 0.4474 | 0.1685 | 0.1500 | 0.0000 | 0.0000 | 0.4474 |
| | | | | | 5 | 33.88 | -60.64 | 6.60 | 0.1609 | 0.1190 | 0.2656 | 0.0000 | 0.0000 | 0.1609 |
| | | | | | 7 | 33.88 | -60.64 | 6.60 | 0.4792 | 0.1190 | 0.2656 | 0.0000 | 0.0000 | 0.4792 |
| | | | | | 9 | 33.88 | -20.64 | 6.60 | 0.7929 | 0.5973 | 0.4712 | 0.0000 | 0.0000 | 0.7929 |
| | | | | | 10 | 33.88 | -20.64 | 6.60 | 0.4589 | 0.5973 | 0.4712 | 0.0000 | 0.0000 | 0.4589 |
| | | | | | 2 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 3 | 33.88 | 0.00 | 6.60 | 0.3780 | 0.2085 | 0.0682 | 0.0000 | 0.0000 | 0.3780 |
| | | | | | 4 | 33.88 | 20.64 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 5 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 6 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 7 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 8 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 9 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |
| | | | | | 10 | 33.88 | 0.00 | 6.60 | 0.3050 | 0.1985 | 0.0682 | 0.0000 | 0.0000 | 0.3050 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEI | ROLL | TP | YAW | PROBE | X | Y | 7 | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-----|-------|------|--------|------|----------|----|-----------|----|-----------|----|----------|----|----------|----|----------|----|
| 120 | 10.4 | 15.0 | 2 | 0.0 | | 0.00 | -6.60 | 6.22 | 0.76023E | 01 | -0.45663E | 00 | 0.71221E | 00 | 0.64612E | 00 | 0.72370E | 00 | 0.69694E | 00 |
| | | | | | | 0.00 | 0.00 | 6.22 | 0.27223E | 01 | -0.83650E | 00 | 0.15461E | 00 | 0.18303E | 01 | 0.16885E | 01 | 0.18228E | 01 |
| | | | | | | 0.00 | 6.60 | 6.22 | 0.18784E | 01 | -0.33423E | 00 | -0.67390E | 00 | 0.11987E | 01 | 0.11343E | 01 | 0.12261E | 01 |
| | | | | | | 0.00 | -6.60 | 6.22 | 0.94509E | 01 | -0.89567E | 00 | -0.25442E | 00 | 0.21269E | 00 | 0.29438E | 00 | 0.30103E | 00 |
| | | | | | | 0.00 | -20.64 | 6.22 | 0.96891E | 01 | 0.15093E | 00 | 0.44306E | 00 | 0.10664E | 00 | 0.24077E | 00 | 0.19125E | 00 |
| | | | | | | 0.00 | -40.64 | 6.22 | 0.73174E | 01 | 0.19598E | 00 | 0.19012E | 00 | 0.79939E | 00 | 0.76380E | 00 | 0.83186E | 00 |
| | | | | | | 0.00 | -6.60 | 2.54 | 0.32070E | 00 | 0.32575E | 00 | 0.19539E | 00 | 0.10252E | 01 | 0.10433E | 01 | 0.96440E | 00 |
| | | | | | | 0.00 | -20.32 | 2.54 | 0.88205E | 00 | 0.72726E | 00 | 0.65884E | 00 | 0.21080E | 00 | 0.24338E | 00 | 0.96477E | 00 |
| | | | | | | 0.00 | -40.64 | 2.54 | 0.90426E | 01 | 0.68961E | 01 | 0.17938E | 00 | 0.25397E | 00 | 0.24955E | 00 | 0.35633E | 00 |
| | | | | | | 0.00 | -6.60 | 6.22 | 0.34771E | 01 | -0.34394E | 01 | 0.17043E | 01 | 0.20615E | 01 | 0.18045E | 01 | 0.18112E | 01 |
| | | | | | | 0.00 | 0.00 | 6.22 | 0.14719E | 00 | -0.44265E | 00 | 0.30348E | 00 | 0.16479E | 01 | 0.19654E | 01 | 0.20336E | 01 |
| | | | | | | 0.00 | 6.60 | 6.22 | 0.51170E | 00 | -0.13557E | 00 | 0.17299E | 00 | 0.28407E | 01 | 0.25177E | 01 | 0.20065E | 01 |
| | | | | | | 0.00 | -6.60 | 6.22 | 0.24737E | 00 | 0.14903E | 00 | 0.30296E | 00 | 0.19444E | 01 | 0.15400E | 01 | 0.18976E | 01 |
| | | | | | | 0.00 | -20.64 | 6.22 | 0.70171E | 00 | -0.19571E | 00 | 0.27475E | 01 | 0.11130E | 01 | 0.15400E | 01 | 0.20671E | 01 |
| | | | | | | 0.00 | -40.64 | 6.22 | 0.30781E | 00 | 0.19738E | 00 | 0.31696E | 01 | 0.11884E | 01 | 0.15532E | 01 | 0.17571E | 01 |
| | | | | | | 0.00 | -6.60 | 2.54 | 0.65801E | 00 | -0.25236E | 00 | 0.19395E | 01 | 0.22099E | 01 | 0.25095E | 01 | 0.29375E | 01 |
| | | | | | | 0.00 | -20.32 | 2.54 | 0.10608E | 00 | 0.29749E | 00 | 0.19395E | 01 | 0.22099E | 01 | 0.25095E | 01 | 0.29375E | 01 |
| | | | | | | 0.00 | -40.64 | 2.54 | 0.69699E | 01 | -0.14149E | 01 | 0.32321E | 01 | 0.16471E | 01 | 0.13829E | 01 | 0.21162E | 01 |
| | | | | | | 0.00 | -6.60 | 6.22 | 0.53809E | 00 | 0.16138E | 01 | 0.12896E | 01 | 0.98888E | 00 | 0.10651E | 01 | 0.12135E | 01 |
| | | | | | | 0.00 | 0.00 | 6.22 | 0.22494E | 00 | -0.11513E | 00 | 0.16261E | 01 | 0.25076E | 01 | 0.23083E | 01 | 0.19249E | 00 |
| | | | | | | 0.00 | 6.60 | 6.22 | 0.90494E | 01 | 0.20033E | 00 | 0.17507E | 00 | 0.75076E | 00 | 0.11353E | 01 | 0.62499E | 00 |
| | | | | | | 0.00 | -20.32 | 6.22 | 0.10569E | 00 | -0.18196E | 01 | 0.14783E | 00 | 0.18996E | 01 | 0.17873E | 01 | 0.16816E | 01 |
| | | | | | | 0.00 | -40.64 | 6.22 | 0.16696E | 00 | 0.18164E | 01 | 0.33671E | 00 | 0.29991E | 01 | 0.19971E | 01 | 0.16816E | 01 |
| | | | | | | 0.00 | -6.60 | 2.54 | 0.19385E | 00 | -0.12974E | 00 | 0.19080E | 01 | 0.18015E | 00 | 0.18710E | 01 | 0.10484E | 01 |
| | | | | | | 0.00 | -20.32 | 2.54 | 0.97562E | 00 | 0.24100E | 01 | 0.27288E | 01 | 0.18015E | 00 | 0.12805E | 01 | 0.10484E | 01 |
| | | | | | | 0.00 | -40.64 | 2.54 | 0.53950E | 00 | -0.19429E | 00 | 0.17423E | 02 | 0.13718E | 01 | 0.13180E | 01 | 0.13197E | 01 |
| | | | | | | 0.00 | -6.60 | 6.22 | 0.48216E | 01 | 0.76558E | 00 | 0.75123E | 01 | 0.17773E | 01 | 0.13100E | 01 | 0.16355E | 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| Run | Dist | Dir | Yaw | Roll | Pitch | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|-----|-----|--------|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
| 3 | 18.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.63302E 01 | 0.19341E 02 | 0.75207E 00 | 0.10779E 01 | 0.82515E 00 | 0.62013E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.74637E 01 | 0.21158E 01 | 0.47440E 00 | 0.71348E 00 | 0.70374E 00 | 0.73710E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.90443E 00 | 0.25091E 01 | 0.81810E 00 | 0.56621E 00 | 0.59325E 00 | 0.59777E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.99415E 00 | 0.29041E 01 | 0.23086E 02 | 0.66412E 00 | 0.54895E 00 | 0.61831E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.62102E 00 | 0.19022E 00 | 0.38715E 00 | 0.14488E 01 | 0.89666E 00 | 0.33103E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60552E 00 | 0.18722E 00 | 0.11871E 01 | 0.26863E 00 | 0.74168E 00 | 0.67256E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.92691E 01 | 0.26762E 00 | 0.62669E 01 | 0.60404E 00 | 0.55384E 00 | 0.72957E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60377E 00 | 0.15609E 01 | 0.60533E 00 | 0.33930E 01 | 0.11762E 00 | 0.10968E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60011E 00 | 0.19102E 01 | 0.70917E 00 | 0.19954E 01 | 0.11519E 01 | 0.12949E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.10874E 00 | 0.28220E 01 | 0.30772E 00 | 0.20742E 00 | 0.11513E 00 | 0.13731E 00 | |
| 4 | 50.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.55157E 01 | 0.78335E 00 | 0.70988E 00 | 0.23657E 01 | 0.19933E 01 | 0.16350E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.22662E 00 | 0.97874E 01 | 0.12719E 00 | 0.23525E 01 | 0.18822E 01 | 0.17088E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60103E 00 | 0.12895E 01 | 0.18040E 01 | 0.19008E 00 | 0.18927E 01 | 0.18651E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.38026E 00 | 0.42208E 01 | 0.84407E 00 | 0.20424E 00 | 0.22927E 01 | 0.18978E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.59352E 01 | 0.18778E 01 | 0.89674E 00 | 0.27116E 01 | 0.21167E 00 | 0.21746E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.86403E 00 | 0.13403E 01 | 0.88519E 00 | 0.67132E 00 | 0.11833E 00 | 0.10444E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.50931E 00 | 0.70062E 01 | 0.36476E 00 | 0.24712E 01 | 0.21718E 01 | 0.25232E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.64241E 00 | 0.10592E 01 | 0.67232E 00 | 0.24023E 00 | 0.21500E 01 | 0.22773E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.14662E 00 | 0.06713E 00 | 0.12718E 00 | 0.15185E 01 | 0.00000E 00 | 0.17039E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.43359E 01 | 0.16377E 01 | 0.92713E 00 | 0.27746E 00 | 0.22557E 01 | 0.21030E 01 | |
| 5 | 90.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.85006E 00 | 0.30663E 00 | 0.14437E 00 | 0.28555E 01 | 0.18290E 01 | 0.14777E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.81078E 01 | 0.17269E 01 | 0.72358E 00 | 0.55058E 00 | 0.78443E 00 | 0.89233E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.86778E 01 | 0.98885E 01 | 0.28318E 00 | 0.47923E 00 | 0.57018E 00 | 0.52669E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.56335E 00 | 0.12128E 01 | 0.29372E 01 | 0.19911E 01 | 0.14296E 01 | 0.30881E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.81708E 00 | 0.19711E 01 | 0.20514E 01 | 0.28394E 00 | 0.14553E 01 | 0.23116E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.92124E 00 | 0.33418E 01 | 0.19691E 02 | 0.30075E 00 | 0.91988E 00 | 0.50864E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60594E 01 | 0.18197E 01 | 0.12080E 01 | 0.16675E 01 | 0.20033E 01 | 0.50864E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.38806E 01 | 0.25217E 01 | 0.16385E 01 | 0.23440E 01 | 0.26178E 01 | 0.23125E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.79571E 01 | 0.12064E 01 | 0.64431E 00 | 0.69157E 00 | 0.89643E 00 | 0.64594E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.87381E 00 | 0.52832E 00 | 0.22868E 00 | 0.47924E 00 | 0.45564E 00 | 0.64594E 00 | |
| 6 | 120.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.72866E 00 | 0.19078E 01 | 0.72358E 00 | 0.47923E 00 | 0.78443E 00 | 0.89233E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.81078E 01 | 0.17269E 01 | 0.28318E 00 | 0.55058E 00 | 0.57018E 00 | 0.52669E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.56335E 00 | 0.12128E 01 | 0.29372E 01 | 0.19911E 01 | 0.14296E 01 | 0.30881E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.81708E 00 | 0.19711E 01 | 0.20514E 01 | 0.28394E 00 | 0.14553E 01 | 0.23116E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.92124E 00 | 0.33418E 01 | 0.19691E 02 | 0.30075E 00 | 0.91988E 00 | 0.50864E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60594E 01 | 0.18197E 01 | 0.12080E 01 | 0.16675E 01 | 0.20033E 01 | 0.50864E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.38806E 01 | 0.25217E 01 | 0.16385E 01 | 0.23440E 01 | 0.26178E 01 | 0.23125E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.79571E 01 | 0.12064E 01 | 0.64431E 00 | 0.69157E 00 | 0.89643E 00 | 0.64594E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.87381E 00 | 0.52832E 00 | 0.22868E 00 | 0.47924E 00 | 0.45564E 00 | 0.64594E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.72866E 00 | 0.19078E 01 | 0.72358E 00 | 0.47923E 00 | 0.78443E 00 | 0.89233E 00 | |
| 7 | 150.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.64747E 00 | 0.19341E 02 | 0.75207E 00 | 0.10779E 01 | 0.82515E 00 | 0.62013E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.90443E 00 | 0.25091E 01 | 0.81810E 00 | 0.56621E 00 | 0.54895E 00 | 0.61831E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.62102E 00 | 0.19022E 00 | 0.38715E 00 | 0.14488E 01 | 0.89666E 00 | 0.33103E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60552E 00 | 0.18722E 00 | 0.11871E 01 | 0.26863E 00 | 0.74168E 00 | 0.67256E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.92691E 01 | 0.26762E 00 | 0.62669E 01 | 0.60404E 00 | 0.55384E 00 | 0.72957E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60377E 00 | 0.15609E 01 | 0.60533E 00 | 0.33930E 01 | 0.11762E 00 | 0.10968E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60011E 00 | 0.19102E 01 | 0.70917E 00 | 0.19954E 01 | 0.11519E 01 | 0.12949E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.10874E 00 | 0.28220E 01 | 0.30772E 00 | 0.20742E 00 | 0.11513E 00 | 0.13731E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.55157E 01 | 0.78335E 00 | 0.70988E 00 | 0.23657E 01 | 0.19933E 01 | 0.16350E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.22662E 00 | 0.97874E 01 | 0.12719E 00 | 0.23525E 01 | 0.18822E 01 | 0.17088E 00 | |
| 8 | 180.0 | ? | 0.0 | 170.69 | 6.60 | 6.22 | 0.64747E 00 | 0.19341E 02 | 0.75207E 00 | 0.10779E 01 | 0.82515E 00 | 0.62013E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.90443E 00 | 0.25091E 01 | 0.81810E 00 | 0.56621E 00 | 0.54895E 00 | 0.61831E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.62102E 00 | 0.19022E 00 | 0.38715E 00 | 0.14488E 01 | 0.89666E 00 | 0.33103E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60552E 00 | 0.18722E 00 | 0.11871E 01 | 0.26863E 00 | 0.74168E 00 | 0.67256E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.92691E 01 | 0.26762E 00 | 0.62669E 01 | 0.60404E 00 | 0.55384E 00 | 0.72957E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60377E 00 | 0.15609E 01 | 0.60533E 00 | 0.33930E 01 | 0.11762E 00 | 0.10968E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.60011E 00 | 0.19102E 01 | 0.70917E 00 | 0.19954E 01 | 0.11519E 01 | 0.12949E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.10874E 00 | 0.28220E 01 | 0.30772E 00 | 0.20742E 00 | 0.11513E 00 | 0.13731E 00 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.55157E 01 | 0.78335E 00 | 0.70988E 00 | 0.23657E 01 | 0.19933E 01 | 0.16350E 01 | |
| | | | | 170.69 | 0.00 | 6.22 | 0.22662E 00 | 0.97874E 01 | 0.12719E 00 | 0.23525E 01 | 0.18822E 01 | 0.17088E 00 | |

RVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|--------|-------|--------|--------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 129 | 10.2 | -15.0 | 8 | -180.0 | 9 | 170.69 | -20.32 | 2.54 | 0.89943E 01 | -0.65375E 00 | 0.47892E 00 | 0.19682E 00 | 0.24992E 00 | 0.24451E 00 |
| | | | | | 10 | 170.69 | -30.64 | 2.54 | 0.92803E 01 | -0.10265E 00 | 0.32522E 00 | 0.28931E 00 | 0.34320E 00 | 0.41489E 00 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | KOLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-----|-------|-------|-------|------|------------|-------------|------------|-------------|-------------|-------------|
| 130 | 10.4 | -15.0 | 2 | 0.0 | 1 | 85.33 | -6.60 | 6.22 | 57266E 01 | 0.14612E 00 | 0.5456E 00 | 0.10549E 01 | 0.1028E 01 | 0.78902E 00 |
| | | | | | 2 | 85.33 | 0.00 | 6.22 | 0.0891E 01 | 0.2062E 00 | 0.2098E 00 | 0.1263E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 3 | 85.33 | 0.00 | 6.22 | 0.0987E 01 | 0.2062E 00 | 0.1049E 00 | 0.2212E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 4 | 85.33 | 0.00 | 6.22 | 0.0718E 01 | 0.2052E 00 | 0.1464E 00 | 0.2212E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 5 | 85.33 | 0.00 | 6.22 | 0.0335E 01 | 0.2454E 00 | 0.1979E 00 | 0.3219E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 6 | 85.33 | 0.00 | 6.22 | 0.0074E 01 | 0.96680E 01 | 0.7095E 01 | 0.5366E 01 | 0.10938E 00 | 0.41787E 00 |
| | | | | | 7 | 85.33 | 0.00 | 6.22 | 0.1964E 01 | 0.4163E 00 | 0.1721E 00 | 0.4031E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 8 | 85.33 | 0.00 | 6.22 | 0.1707E 01 | 0.4163E 00 | 0.2085E 00 | 0.1956E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 9 | 85.33 | 0.00 | 6.22 | 0.0565E 01 | 0.9273E 00 | 0.1970E 00 | 0.1259E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 10 | 85.33 | 0.00 | 6.22 | 0.0373E 01 | 0.8190E 00 | 0.0665E 00 | 0.3807E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 11 | 85.33 | 0.00 | 6.22 | 0.0878E 01 | 0.1568E 01 | 0.1818E 01 | 0.2240E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 12 | 85.33 | 0.00 | 6.22 | 0.2420E 01 | 0.2719E 00 | 0.3735E 00 | 0.1749E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 13 | 85.33 | 0.00 | 6.22 | 0.0709E 01 | 0.2719E 00 | 0.2277E 00 | 0.1749E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 14 | 85.33 | 0.00 | 6.22 | 0.0176E 01 | 0.1332E 00 | 0.1030E 00 | 0.1123E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 15 | 85.33 | 0.00 | 6.22 | 0.0514E 01 | 0.5030E 00 | 0.1270E 00 | 0.1123E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 16 | 85.33 | 0.00 | 6.22 | 0.1028E 01 | 0.1288E 00 | 0.1908E 00 | 0.1123E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 17 | 85.33 | 0.00 | 6.22 | 0.3193E 01 | 0.2048E 00 | 0.1509E 01 | 0.1123E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 18 | 85.33 | 0.00 | 6.22 | 0.2269E 01 | 0.7870E 00 | 0.2161E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 19 | 85.33 | 0.00 | 6.22 | 0.6570E 01 | 0.7790E 00 | 0.1199E 00 | 0.2281E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 20 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 21 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 22 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 23 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 24 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 25 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 26 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 27 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 28 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 29 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 30 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 31 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 32 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 33 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 34 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 35 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 36 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 37 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 38 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 39 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |
| | | | | | 40 | 85.33 | 0.00 | 6.22 | 0.0000E 00 | 0.1537E 00 | 0.0000E 00 | 0.2306E 01 | 0.82354E 00 | 0.91628E 00 |

BUWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAW | PRIDE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-------|-----|-------|-------|--------|------|-------------|--------------|--------------|--------------|-------------|-------------|
| 131 | 10.2 | -15.0 | 2 | 0.0 | 43.16 | -6.60 | 6.22 | 0.46718E 01 | -0.11120E 00 | 0.67108E 01 | 0.98275E 00 | 0.12550E 01 | 0.1083E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.61184E 01 | -0.11494E 00 | -0.32549E 00 | 0.12432E 00 | 0.90687E 00 | 0.8421E 00 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.76170E 01 | -0.13004E 00 | 0.20594E 00 | 0.68738E 00 | 0.56890E 00 | 0.49215E 00 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.93481E 01 | -0.81947E 00 | -0.13744E 00 | 0.59629E 00 | 0.42177E 01 | 0.47919E 00 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.98457E 01 | -0.33708E 00 | 0.48535E 00 | 0.28192E 00 | 0.11777E 01 | 0.13039E 01 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.40221E 01 | -0.31344E 00 | -0.56022E 00 | 0.10941E 01 | 0.93012E 00 | 0.15397E 01 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.88234E 01 | -0.63588E 00 | 0.76840E 00 | 0.86545E 00 | 0.44345E 00 | 0.45325E 00 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.91771E 01 | -0.86298E 01 | 0.10022E 00 | 0.34408E 00 | 0.44345E 00 | 0.48083E 00 |
| | | | | | 43.16 | -6.60 | 2 | 0.27416E 01 | -0.31944E 00 | 0.69766E 00 | 0.12550E 01 | 0.12318E 01 | 0.11856E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.43595E 01 | -0.73336E 00 | 0.15277E 00 | 0.19159E 01 | 0.15590E 01 | 0.14710E 00 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.71608E 01 | -0.67637E 00 | 0.19292E 00 | 0.18592E 01 | 0.19551E 01 | 0.18714E 00 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.40180E 01 | -0.31578E 00 | 0.15823E 00 | 0.19177E 00 | 0.91761E 00 | 0.15474E 00 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.86100E 01 | -0.11772E 01 | 0.71566E 00 | 0.18779E 00 | 0.11894E 01 | 0.12117E 00 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.18134E 01 | -0.14090E 01 | 0.71347E 00 | 0.18774E 00 | 0.11894E 01 | 0.12117E 00 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.63347E 01 | -0.19024E 00 | 0.59775E 00 | 0.18774E 00 | 0.11894E 01 | 0.12117E 00 |
| | | | | | 43.16 | -20.64 | 2.54 | 0.82247E 01 | -0.73231E 01 | 0.17717E 01 | 0.10341E 00 | 0.99684E 00 | 0.12320E 01 |
| | | | | | 43.16 | -6.60 | 2 | 0.3180E 00 | 0.64321E 00 | 0.1322E 01 | 0.12313E 01 | 0.20097E 01 | 0.1518E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.57407E 01 | -0.33407E 01 | 0.1548E 01 | 0.27303E 00 | 0.20372E 01 | 0.21289E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.1307E 01 | -0.19111E 00 | 0.27723E 00 | 0.27331E 01 | 0.19049E 01 | 0.14327E 01 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.2721E 00 | -0.17547E 00 | 0.12895E 01 | 0.19228E 01 | 0.17442E 01 | 0.1626E 01 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.3898E 01 | -0.51846E 00 | 0.14695E 00 | 0.16183E 01 | 0.17442E 01 | 0.1626E 01 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.1528E 01 | -0.13379E 00 | 0.79895E 00 | 0.26234E 01 | 0.26110E 01 | 0.1637E 01 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.15451E 01 | -0.34609E 00 | 0.91321E 01 | 0.26234E 01 | 0.26110E 01 | 0.1637E 01 |
| | | | | | 43.16 | -20.64 | 2 | 0.15451E 01 | -0.66670E 00 | 0.12640E 01 | 0.16414E 01 | 0.16322E 01 | 0.1831E 01 |
| | | | | | 43.16 | -6.60 | 6.22 | 0.65692E 00 | -0.78816E 00 | 0.33429E 00 | 0.15171E 01 | 0.16279E 01 | 0.1598E 01 |
| | | | | | 43.16 | 0.00 | 6.22 | 0.3860E 00 | -0.13507E 01 | 0.81033E 00 | 0.25677E 01 | 0.22218E 01 | 0.22281E 01 |
| | | | | | 43.16 | 6.60 | 6.22 | 0.71499E 01 | -0.15095E 01 | -0.43844E 00 | 0.27551E 01 | 0.22373E 01 | 0.2084E 00 |
| | | | | | 43.16 | -20.64 | 6.22 | 0.12232E 00 | -0.35865E 01 | 0.94851E 00 | 0.071370E 01 | 0.12910E 01 | 0.1020E 00 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.18036E 01 | -0.58172E 01 | 0.28172E 00 | 0.14743E 01 | 0.13505E 01 | 0.1030E 00 |
| | | | | | 43.16 | -6.60 | 2.54 | 0.63633E 01 | -0.11152E 00 | 0.28172E 00 | 0.24442E 01 | 0.16000E 01 | 0.16331E 01 |
| | | | | | 43.16 | 6.60 | 2.54 | 0.12507E 01 | -0.11844E 00 | 0.14162E 00 | 0.24442E 01 | 0.16000E 01 | 0.16331E 01 |
| | | | | | 43.16 | -20.64 | 2 | 0.12507E 01 | -0.33280E 02 | 0.64412E 00 | 0.16320E 01 | 0.16322E 01 | 0.2020E 00 |

BYWT 242/243 SHIP WAKE TURBULENCE TEST

| Run Vel | Roll TP | Var Probe | X | Y | Z | Mean VX | Mean VY | Mean VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|--|--|--|--|--|--|--|--|--|
| 132 10.4 | -15.0 | 2 0.0 | 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 | 00 00 00 00 00 00 00 00 00 00 00 00 | 6 6 6 6 6 6 6 6 6 6 6 6 | 0.34 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.10 | 0.73 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 |
| | | 3 -30.0 | 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 | 00 00 00 00 00 00 00 00 00 00 00 00 | 6 6 6 6 6 6 6 6 6 6 6 6 | 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 0.48 | 0.31 0.52 0.52 0.52 0.52 0.52 0.52 0.52 0.52 0.52 0.52 0.52 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 |
| | | 4 -50.0 | 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 | 00 00 00 00 00 00 00 00 00 00 00 00 | 6 6 6 6 6 6 6 6 6 6 6 6 | 0.17 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 0.40 | 0.18 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 |
| | | 5 -80.0 | 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 0000000000 | 00 00 00 00 00 00 00 00 00 00 00 00 | 6 6 6 6 6 6 6 6 6 6 6 6 | 0.30 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.77 0.77 | 0.25 0.31 0.31 0.31 0.31 0.31 0.31 0.31 0.31 0.31 0.31 0.31 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 | 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-------|-------|--------------|-------------|--------------|-------------|-------------|-------------|
| 133 | 10.2 | -15.0 | 2 | 0.0 | 1 | 0.77159E 00 | 0.9513E 01 | -0.86907E 00 | 0.13925E 01 | 0.91138E 00 | 0.10601E 01 |
| | | | | 0.60 | 6.333 | 0.28371E 01 | 0.40937E 00 | -0.32907E 00 | 0.14667E 00 | 0.24138E 01 | 0.15290E 00 |
| | | | | 0.60 | 6.333 | 0.25071E 01 | 0.21375E 00 | -0.35014E 00 | 0.06997E 00 | 0.44150E 00 | 0.00000E 00 |
| | | | | 20.32 | 6.333 | 0.08235E 00 | 0.57044E 00 | -0.64480E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 40.64 | 6.333 | 0.01130E 00 | 0.30422E 00 | -0.67993E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 0.60 | 2.54 | 0.01130E 00 | 0.30422E 00 | -0.67993E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 0.60 | 2.54 | 0.71923E 01 | 0.30422E 00 | -0.67993E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 20.32 | 2.54 | 0.92233E 01 | 0.30422E 00 | -0.67993E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 40.64 | 2.54 | 0.94644E 01 | 0.30422E 00 | -0.67993E 00 | 0.47179E 00 | 0.00000E 00 | 0.50194E 00 |
| | | | | 0.60 | 6.22 | 0.15467E 01 | 0.16128E 01 | -0.83238E 00 | 0.15290E 01 | 0.15592E 01 | 0.17191E 01 |
| | | | | 0.60 | 6.22 | 0.10005E 01 | 0.12067E 00 | -0.82238E 00 | 0.15290E 01 | 0.15592E 01 | 0.17191E 01 |
| | | | | 0.60 | 6.22 | 0.90247E 01 | 0.41200E 00 | -0.82238E 00 | 0.15290E 01 | 0.15592E 01 | 0.17191E 01 |
| | | | | 20.32 | 6.22 | 0.45655E 01 | 0.30422E 00 | -0.83238E 00 | 0.15290E 01 | 0.15592E 01 | 0.17191E 01 |
| | | | | 40.64 | 6.22 | 0.61237E 01 | 0.30422E 00 | -0.83238E 00 | 0.15290E 01 | 0.15592E 01 | 0.17191E 01 |
| | | | | 0.60 | 2.54 | 0.14371E 01 | 0.73478E 00 | -0.73585E 00 | 0.17393E 01 | 0.20672E 00 | 0.16202E 01 |
| | | | | 0.60 | 2.54 | 0.93062E 01 | 0.23155E 00 | -0.30311E 01 | 0.17393E 01 | 0.20672E 00 | 0.16202E 01 |
| | | | | 20.32 | 2.54 | 0.344950E 01 | 0.23155E 00 | -0.30311E 01 | 0.17393E 01 | 0.20672E 00 | 0.16202E 01 |
| | | | | 40.64 | 2.54 | 0.44950E 01 | 0.23155E 00 | -0.30311E 01 | 0.17393E 01 | 0.20672E 00 | 0.16202E 01 |

BVNT 242/243 SHIP WAKE TURBULENCE TEST

| ROW VEL | ROLL | TP | YAW PRGME | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|-----|-------|------|---------|---------|---------|---------|---------|---------|
| 134 | 10.3 | 0.0 | 3 | 0.0 | 6.60 | 6.34 | 0.1795E | 0.1391E | 0.0000E | 0.1465E | 0.1165E | 0.2235E |
| | | | | | 0.00 | 6.34 | 0.1277E | 0.1311E | 0.0000E | 0.1116E | 0.1165E | 0.2488E |
| | | | | | 20.32 | 6.34 | 0.0806E | 0.1228E | 0.0000E | 0.0947E | 0.1208E | 0.1287E |
| | | | | | 6.00 | 6.34 | 0.0754E | 0.1228E | 0.0000E | 0.1180E | 0.1208E | 0.1287E |
| | | | | | 20.32 | 6.34 | 0.1874E | 0.1228E | 0.0000E | 0.1489E | 0.1208E | 0.1287E |
| | | | | | 6.00 | 2.54 | 0.0839E | 0.1350E | 0.0450E | 0.1089E | 0.1305E | 0.1654E |
| | | | | | 20.32 | 2.54 | 0.0790E | 0.1350E | 0.0450E | 0.1192E | 0.1305E | 0.1654E |
| | | | | | 6.00 | 6.34 | 0.1363E | 0.1529E | 0.1205E | 0.1482E | 0.1482E | 0.5312E |
| | | | | | 6.00 | 6.34 | 0.1830E | 0.1605E | 0.2097E | 0.1749E | 0.1749E | 0.5282E |
| | | | | | 20.32 | 6.34 | 0.0347E | 0.1339E | 0.0000E | 0.1234E | 0.1339E | 0.2821E |
| | | | | | 6.00 | 6.34 | 0.0527E | 0.1339E | 0.0000E | 0.1425E | 0.1339E | 0.2821E |
| | | | | | 6.00 | 2.54 | 0.0219E | 0.1404E | 0.0000E | 0.1255E | 0.1404E | 0.2821E |
| | | | | | 20.32 | 2.54 | 0.0399E | 0.1404E | 0.0000E | 0.1169E | 0.1404E | 0.2821E |
| | | | | | 6.00 | 6.34 | 0.1961E | 0.1591E | 0.0000E | 0.1591E | 0.1591E | 0.9510E |
| | | | | | 6.00 | 6.34 | 0.2975E | 0.1591E | 0.0000E | 0.1591E | 0.1591E | 0.9510E |
| | | | | | 20.32 | 6.34 | 0.1330E | 0.1399E | 0.0000E | 0.1399E | 0.1399E | 0.8150E |
| | | | | | 6.00 | 6.34 | 0.1534E | 0.1399E | 0.0000E | 0.1399E | 0.1399E | 0.8150E |
| | | | | | 20.32 | 6.34 | 0.1313E | 0.1399E | 0.0000E | 0.1399E | 0.1399E | 0.8150E |
| | | | | | 6.00 | 2.54 | 0.0817E | 0.1673E | 0.0000E | 0.1673E | 0.1673E | 0.9974E |
| | | | | | 20.32 | 2.54 | 0.1399E | 0.1673E | 0.0000E | 0.1673E | 0.1673E | 0.9974E |

RVMT 242/243 SHIP WAKE TURBULENCE TEST

| GUN VEL | ROLL TP | YAN PRDF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|----------|----|-------|------|--------------|--------------|-------------|-------------|-------------|-------------|
| 135 22.6 | 0.0 1 | 0.0 | 1 | 6.60 | 6.34 | 0.48379E 01 | -0.22282E 02 | 0.11305E 01 | 0.31793E 01 | 0.30083E 01 | 0.23984E 01 |
| | | | 2 | 0.00 | 6.34 | -0.92979E 01 | -0.32282E 02 | 0.11762E 01 | 0.31686E 01 | 0.20083E 01 | 0.23984E 01 |
| | | | 3 | 0.00 | 6.34 | 0.32013E 01 | 0.00000E 00 | 0.15295E 01 | 0.31792E 01 | 0.20083E 01 | 0.23984E 01 |
| | | | 4 | 0.00 | 6.34 | 0.32013E 01 | 0.00000E 00 | 0.15295E 01 | 0.31792E 01 | 0.20083E 01 | 0.23984E 01 |
| | | | 5 | 20.32 | 6.34 | 0.32013E 01 | 0.00000E 00 | 0.15295E 01 | 0.31792E 01 | 0.20083E 01 | 0.23984E 01 |
| | | | 6 | 0.00 | 6.34 | 0.20437E 01 | 0.00000E 00 | 0.80916E 00 | 0.30081E 01 | 0.11762E 01 | 0.23984E 01 |
| | | | 7 | 0.00 | 6.34 | 0.63175E 01 | -0.11771E 01 | 0.54936E 00 | 0.30619E 01 | 0.32909E 01 | 0.23984E 01 |
| | | | 8 | 0.00 | 6.34 | 0.64429E 01 | 0.23882E 01 | 0.12822E 01 | 0.28004E 01 | 0.33310E 01 | 0.23984E 01 |
| | | | 9 | 0.00 | 6.34 | 0.18424E 02 | -0.47112E 00 | 0.12822E 01 | 0.20454E 01 | 0.80735E 00 | 0.23984E 01 |
| | | | 10 | 0.00 | 6.34 | 0.19168E 02 | -0.70873E 00 | 0.39222E 00 | 0.28388E 00 | 0.96622E 00 | 0.97210E 00 |
| | 2 | 10.0 | 1 | 6.60 | 6.34 | 0.15068E 02 | 0.11859E 01 | 0.44788E 01 | 0.17067E 01 | 0.29662E 01 | 0.18864E 01 |
| | | | 2 | 0.00 | 6.34 | 0.38999E 01 | -0.16131E 00 | 0.31592E 00 | 0.30353E 01 | 0.17742E 01 | 0.26313E 01 |
| | | | 3 | 0.00 | 6.34 | 0.40207E 01 | -0.55493E 00 | 0.44414E 00 | 0.13964E 00 | 0.47011E 01 | 0.18861E 01 |
| | | | 4 | 0.00 | 6.34 | 0.19555E 02 | -0.11201E 00 | 0.32000E 01 | 0.37684E 01 | 0.26001E 01 | 0.54341E 01 |
| | | | 5 | 0.00 | 6.34 | 0.11011E 02 | 0.50936E 01 | 0.32000E 01 | 0.20101E 01 | 0.20001E 01 | 0.30530E 01 |
| | | | 6 | 0.00 | 6.34 | 0.16725E 02 | 0.10938E 01 | 0.22046E 01 | 0.20215E 01 | 0.28001E 01 | 0.22240E 01 |
| | | | 7 | 0.00 | 6.34 | 0.34200E 01 | 0.18731E 01 | 0.12822E 01 | 0.10135E 01 | 0.42602E 01 | 0.14604E 01 |
| | | | 8 | 0.00 | 6.34 | 0.18706E 01 | 0.49175E 00 | 0.20702E 01 | 0.10141E 01 | 0.32889E 01 | 0.22637E 01 |
| | | | 9 | 0.00 | 6.34 | 0.15677E 01 | 0.67603E 01 | 0.22766E 01 | 0.20183E 01 | 0.42602E 01 | 0.22637E 01 |
| | 4 | 10.0 | 1 | 6.60 | 6.34 | 0.28634E 01 | 0.67603E 01 | 0.22766E 01 | 0.17105E 01 | 0.15018E 01 | 0.14049E 01 |
| | | | 2 | 0.00 | 6.34 | 0.13773E 01 | 0.22587E 01 | 0.38334E 01 | 0.15094E 01 | 0.33225E 01 | 0.14049E 01 |
| | | | 3 | 0.00 | 6.34 | 0.13773E 01 | 0.22587E 01 | 0.38334E 01 | 0.15094E 01 | 0.33225E 01 | 0.14049E 01 |
| | | | 4 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 5 | 20.32 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 6 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 7 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 8 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 9 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |
| | | | 10 | 0.00 | 6.34 | 0.22587E 01 | 0.42070E 01 | 0.31304E 01 | 0.32843E 01 | 0.28554E 01 | 0.22587E 01 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | VAR | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|----|------|------|------------|------------|------------|------------|------------|------------|
| 136 | 22.2 | 0.0 | 1 | 0.0 | 1 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 2 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 3 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 4 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 5 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 6 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 7 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 8 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 9 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |
| | | | | | 10 | 0.00 | 0.34 | 0.2573E-01 | 0.0000E-00 | 0.0553E-01 | 0.8475E-01 | 0.0000E-00 | 0.2461E-01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| NUM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 137 | 10.3 | 0.0 | 10 | 0.00 | 2.54 | 0.33712E 01 | -0.49045E 00 | 0.17506E 00 | 0.10708E 01 | 0.96973E 00 | 0.10657E 01 |
| | | | 10 | 0.00 | 2.54 | 0.82867E 01 | -0.65514E 01 | 0.12703E 01 | 0.36945E 00 | 0.49822E 00 | 0.45870E 00 |
| | 11 | -30.0 | 1 | 0.00 | 6.34 | 0.14091E 01 | -0.33778E 01 | 0.13901E 01 | 0.14495E 01 | 0.16056E 01 | 0.18281E 01 |
| | | | 2 | 0.00 | 6.34 | 0.12827E 01 | -0.10117E 01 | 0.33308E 01 | 0.22205E 01 | 0.25619E 01 | 0.22892E 01 |
| | | | 3 | 0.00 | 6.34 | 0.86949E 01 | -0.41193E 00 | 0.21865E 01 | 0.24025E 01 | 0.71119E 01 | 0.58165E 01 |
| | | | 4 | 0.00 | 6.34 | 0.34746E 01 | -0.86086E 00 | 0.24226E 01 | 0.30327E 01 | 0.15867E 01 | 0.19188E 01 |
| | | | 5 | 0.00 | 6.34 | 0.96746E 01 | -0.22328E 01 | 0.20505E 01 | 0.23877E 01 | 0.20277E 01 | 0.50983E 01 |
| | | | 6 | 0.00 | 6.34 | 0.38219E 01 | -0.39265E 01 | 0.23877E 01 | 0.12768E 01 | 0.18412E 01 | 0.15098E 01 |
| | | | 7 | 0.00 | 6.34 | 0.94019E 01 | -0.71120E 00 | 0.26400E 01 | 0.83707E 01 | 0.64036E 01 | 0.87003E 01 |
| | | | 8 | 0.00 | 6.34 | 0.17079E 01 | -0.71120E 00 | 0.26400E 01 | 0.12768E 01 | 0.18412E 01 | 0.15098E 01 |
| | | | 9 | 0.00 | 6.34 | 0.90599E 01 | -0.91082E 02 | 0.16530E 01 | 0.36072E 00 | 0.41599E 01 | 0.47772E 01 |
| | | | 10 | 0.00 | 6.34 | 0.12379E 01 | -0.15029E 01 | 0.42412E 01 | 0.26190E 01 | 0.11091E 01 | 0.11256E 01 |
| | 12 | -50.0 | 1 | 0.00 | 6.34 | 0.88577E 01 | -0.20588E 01 | 0.20312E 01 | 0.22144E 01 | 0.19650E 01 | 0.20370E 01 |
| | | | 2 | 0.00 | 6.34 | 0.92900E 01 | -0.28854E 01 | 0.25512E 01 | 0.54836E 01 | 0.76876E 01 | 0.47347E 01 |
| | | | 3 | 0.00 | 6.34 | 0.31070E 01 | -0.18988E 01 | 0.25512E 01 | 0.21730E 01 | 0.13400E 01 | 0.10560E 01 |
| | | | 4 | 0.00 | 6.34 | 0.98800E 01 | -0.10311E 01 | 0.25512E 01 | 0.51738E 01 | 0.71409E 01 | 0.46062E 01 |
| | | | 5 | 0.00 | 6.34 | 0.18035E 01 | -0.19477E 01 | 0.25512E 01 | 0.10289E 01 | 0.19717E 01 | 0.10625E 01 |
| | | | 6 | 0.00 | 6.34 | 0.18035E 01 | -0.19477E 01 | 0.25512E 01 | 0.92807E 01 | 0.10289E 01 | 0.10625E 01 |
| | | | 7 | 0.00 | 6.34 | 0.55953E 01 | -0.15923E 01 | 0.25512E 01 | 0.92807E 01 | 0.10289E 01 | 0.10625E 01 |
| | | | 8 | 0.00 | 6.34 | 0.55953E 01 | -0.15923E 01 | 0.25512E 01 | 0.12071E 01 | 0.10289E 01 | 0.10625E 01 |
| | | | 9 | 0.00 | 6.34 | 0.55953E 01 | -0.15923E 01 | 0.25512E 01 | 0.12071E 01 | 0.10289E 01 | 0.10625E 01 |
| | | | 10 | 0.00 | 6.34 | 0.55953E 01 | -0.15923E 01 | 0.25512E 01 | 0.66211E 00 | 0.73764E 00 | 0.65138E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

Table with columns: RUM VEL, ROLL, TP, YAW, PROBE, X, Y, Z, MEAN VX, MEAN VY, MEAN VZ, S.D. VX, S.D. VY, S.D. VZ. The table contains multiple rows of data grouped by probe number (1-8) and yaw angle (-10.0, 0.0, 20.32, 30.0, 50.0).

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-----------|----|------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 138 22.5 | 0.0 | 8 | -20.0 | 9 | 0.00 | 2.54 | 0.61272E 01 | -0.72532E 00 | 0.70392E 00 | 0.19750E 01 | 0.2128E 01 | 0.21461E 01 |
| | | | | 10 | 0.00 | 2.54 | 0.18838E 02 | -0.72499E 00 | 0.22157E 01 | 0.48504E 00 | 0.61766E 00 | 0.66671E 00 |
| | | 9 | -30.0 | 1 | 0.00 | 6.34 | 0.23869E 00 | 0.63191E 01 | 0.2735E 01 | 0.30775E 01 | 0.24471E 01 | 0.32220E 01 |
| | | | | 2 | 0.00 | 6.34 | 0.28071E 00 | -0.28041E 00 | 0.24621E 00 | 0.42631E 00 | 0.50464E 00 | 0.36060E 00 |
| | | | | 3 | 0.00 | 6.34 | 0.18973E 02 | 0.21472E 00 | 0.48974E 00 | 0.86378E 00 | 0.13173E 00 | 0.90619E 00 |
| | | | | 4 | 0.00 | 6.34 | 0.12016E 00 | -0.18031E 00 | 0.59720E 01 | 0.33633E 00 | 0.31683E 00 | 0.38342E 00 |
| | | | | 5 | 0.00 | 6.34 | 0.20346E 02 | 0.83131E 00 | 0.38229E 01 | 0.33633E 00 | 0.53690E 00 | 0.47163E 00 |
| | | | | 7 | 0.00 | 2.54 | 0.17345E 01 | 0.86732E 00 | 0.46679E 01 | 0.23449E 00 | 0.43390E 00 | 0.27156E 00 |
| | | | | 8 | 0.00 | 2.54 | 0.21155E 01 | 0.26762E 00 | 0.53514E 01 | 0.97659E 00 | 0.19193E 00 | 0.41330E 00 |
| | | | | 9 | 0.00 | 2.54 | 0.38976E 02 | -0.22617E 01 | 0.33514E 01 | 0.31818E 00 | 0.19193E 00 | 0.41330E 00 |
| | | | | 10 | 0.00 | 2.54 | 0.19144E 02 | 0.11107E 01 | 0.23401E 01 | 0.49622E 00 | 0.61133E 00 | 0.37278E 00 |
| | | 10 | -50.0 | 1 | 0.00 | 6.34 | 0.29728E 01 | 0.2385E 01 | 0.10154E 01 | 0.23374E 01 | 0.23374E 01 | 0.2836E 01 |
| | | | | 2 | 0.00 | 6.34 | 0.19685E 00 | 0.43411E 00 | 0.15171E 00 | 0.42631E 00 | 0.57198E 00 | 0.46740E 00 |
| | | | | 3 | 0.00 | 6.34 | 0.14885E 00 | -0.23890E 00 | 0.52074E 00 | 0.11885E 00 | 0.2128E 00 | 0.2128E 00 |
| | | | | 4 | 0.00 | 6.34 | 0.21097E 01 | 0.13890E 00 | 0.30748E 00 | 0.33790E 00 | 0.29790E 00 | 0.29790E 00 |
| | | | | 5 | 0.00 | 6.34 | 0.22639E 02 | 0.28830E 00 | 0.37453E 00 | 0.25790E 00 | 0.29790E 00 | 0.29790E 00 |
| | | | | 7 | 0.00 | 2.54 | 0.22639E 02 | 0.28830E 00 | 0.37453E 00 | 0.25790E 00 | 0.29790E 00 | 0.29790E 00 |
| | | | | 8 | 0.00 | 2.54 | 0.22639E 02 | 0.28830E 00 | 0.37453E 00 | 0.25790E 00 | 0.29790E 00 | 0.29790E 00 |
| | | | | 9 | 0.00 | 2.54 | 0.22639E 02 | 0.28830E 00 | 0.37453E 00 | 0.25790E 00 | 0.29790E 00 | 0.29790E 00 |
| | | | | 10 | 0.00 | 2.54 | 0.22639E 02 | 0.28830E 00 | 0.37453E 00 | 0.25790E 00 | 0.29790E 00 | 0.29790E 00 |

BVMT 262/243 SHIP WAKE TURBULENCE TEST

| ROW VFL | ROLL TP | YAW PRONE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|------|-------|------|---------|-------------|----------|----------|----------|----------|
| 1 | 0.0 | 0.0 | 4.59 | -6.60 | 6.34 | 0.2981E | 0.86134E-01 | 0.2769E | 0.22298E | 0.16446E | 0.1309E |
| 2 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.4096E | 0.52186E | 0.2766E | 0.15929E | 0.1401E | 0.1211E |
| 3 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.15929E | 0.1401E | 0.1211E |
| 4 | 0.0 | 0.0 | 4.59 | 20.32 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 5 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 6 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 7 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 8 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 9 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 10 | 0.0 | 0.0 | 4.59 | 0.00 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 1 | 0.0 | 10.0 | 4.59 | -6.60 | 6.34 | 0.6971E | 0.38146E | 0.14234E | 0.17021E | 0.1533E | 0.1166E |
| 2 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.1360E | 0.31794E | 0.14234E | 0.17021E | 0.1533E | 0.1166E |
| 3 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.2500E | 0.15068E | -0.4291E | 0.10625E | 0.1166E | 0.12027E |
| 4 | 0.0 | 10.0 | 4.59 | 20.32 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.14887E | 0.1247E | 0.26931E |
| 5 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.7075E | 0.63759E | -0.6867E | 0.13984E | 0.1247E | 0.11389E |
| 6 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.6910E | 0.40386E | -0.4691E | 0.18949E | 0.1307E | 0.15361E |
| 7 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.4158E | 0.20605E | 0.9103E | 0.15667E | 0.1307E | 0.12068E |
| 8 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.9128E | 0.22405E | 0.9820E | 0.1649E | 0.1307E | 0.2052E |
| 9 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.5720E | 0.50412E | -0.6450E | 0.13547E | 0.1086E | 0.1152E |
| 10 | 0.0 | 10.0 | 4.59 | 0.00 | 6.34 | 0.8421E | 0.80409E | 0.2717E | 0.89586E | 0.1356E | 0.6541E |
| 1 | 0.0 | 20.0 | 4.59 | -6.60 | 6.34 | 0.3370E | 0.12737E | 0.1135E | 0.2036E | 0.2316E | 0.1718E |
| 2 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.3547E | 0.15038E | 0.9225E | 0.15074E | 0.1316E | 0.1520E |
| 3 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.9054E | 0.57027E | 0.2403E | 0.1190E | 0.2172E | 0.28821E |
| 4 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.3008E | 0.4387E | -0.4803E | 0.1198E | 0.1256E | 0.1097E |
| 5 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.8581E | 0.3302E | 0.1561E | 0.8551E | 0.1256E | 0.1097E |
| 6 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.4029E | 0.32215E | 0.2283E | 0.1339E | 0.1822E | 0.1013E |
| 7 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.9194E | 0.87284E | 0.1489E | 0.1589E | 0.2259E | 0.1223E |
| 8 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.2437E | 0.11550E | 0.3649E | 0.1313E | 0.1259E | 0.1231E |
| 9 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.9260E | 0.1160E | 0.2812E | 0.6235E | 0.9399E | 0.4552E |
| 10 | 0.0 | 20.0 | 4.59 | 0.00 | 6.34 | 0.3657E | 0.6370E | 0.7987E | 0.2720E | 0.2717E | 0.4552E |
| 1 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 2 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 3 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 4 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.2707E | 0.7819E | 0.1793E | 0.4132E | 0.5057E | 0.1917E |
| 5 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.9260E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 6 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.1611E | 0.24231E | 0.1819E | 0.1413E | 0.1291E | 0.1067E |
| 7 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.9119E | 0.4722E | 0.1611E | 0.1683E | 0.1881E | 0.1089E |
| 8 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.1611E | 0.24231E | 0.1819E | 0.1413E | 0.1291E | 0.1067E |
| 9 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.1931E | 0.49156E | 0.3881E | 0.4867E | 0.5758E | 0.2089E |
| 10 | 0.0 | 30.0 | 4.59 | 0.00 | 6.34 | 0.1931E | 0.49156E | 0.3881E | 0.4867E | 0.5758E | 0.2089E |
| 1 | 0.0 | 50.0 | 4.59 | -6.60 | 6.34 | 0.9916E | 0.1685E | 0.2501E | 0.7368E | 0.1258E | 0.5412E |
| 2 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.4204E | 0.7749E | 0.1203E | 0.3190E | 0.3055E | 0.2524E |
| 3 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.1038E | 0.1528E | 0.1692E | 0.1871E | 0.1962E | 0.1586E |
| 4 | 0.0 | 50.0 | 4.59 | 20.32 | 6.34 | 0.3654E | 0.4002E | 0.1344E | 0.4305E | 0.4777E | 0.3440E |
| 5 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.1038E | 0.1528E | 0.1692E | 0.1871E | 0.1962E | 0.1586E |
| 6 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.1107E | 0.1038E | 0.1702E | 0.1299E | 0.1097E | 0.9740E |
| 7 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.2116E | 0.1038E | 0.1170E | 0.1533E | 0.1408E | 0.1720E |
| 8 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.9333E | 0.10179E | 0.2291E | 0.6187E | 0.7488E | 0.6646E |
| 9 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.8970E | 0.16179E | 0.1291E | 0.6187E | 0.7488E | 0.6646E |
| 10 | 0.0 | 50.0 | 4.59 | 0.00 | 6.34 | 0.8970E | 0.16179E | 0.1291E | 0.6187E | 0.7488E | 0.6646E |
| 1 | 0.0 | -10.0 | 4.59 | -6.60 | 6.34 | 0.1962E | 0.3401E | -0.1571E | 0.9413E | 0.9447E | 0.1223E |
| 2 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.5223E | 0.9033E | 0.1477E | 0.1880E | 0.1729E | 0.1325E |
| 3 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.4914E | 0.1923E | 0.9327E | 0.2338E | 0.1876E | 0.1437E |
| 4 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.6513E | 0.5726E | 0.9867E | 0.3309E | 0.1639E | 0.1336E |
| 5 | 0.0 | -10.0 | 4.59 | 20.32 | 6.34 | 0.9797E | 0.97033E | 0.1791E | 0.22298E | 0.16446E | 0.1309E |
| 6 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 7 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 8 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 9 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 10 | 0.0 | -10.0 | 4.59 | 0.00 | 6.34 | 0.3076E | 0.1160E | 0.640E | 0.6235E | 0.9399E | 0.4552E |
| 1 | 0.0 | -20.0 | 4.59 | -6.60 | 6.34 | 0.2493E | 0.1697E | 0.4105E | 0.1223E | 0.1223E | 0.1356E |
| 2 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.7493E | 0.4599E | 0.8813E | 0.1223E | 0.2007E | 0.1737E |
| 3 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.1746E | 0.1242E | 0.2042E | 0.1519E | 0.1979E | 0.1420E |
| 4 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.3998E | 0.1072E | 0.3986E | 0.9580E | 0.9580E | 0.1350E |
| 5 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.8802E | 0.4816E | 0.1489E | 0.5093E | 0.5093E | 0.1507E |
| 6 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.2902E | 0.1799E | 0.1037E | 0.1296E | 0.1296E | 0.1734E |
| 7 | 0.0 | -20.0 | 4.59 | 0.00 | 6.34 | 0.8507E | 0.1799E | 0.1037E | 0.1296E | 0.1296E | 0.1734E |

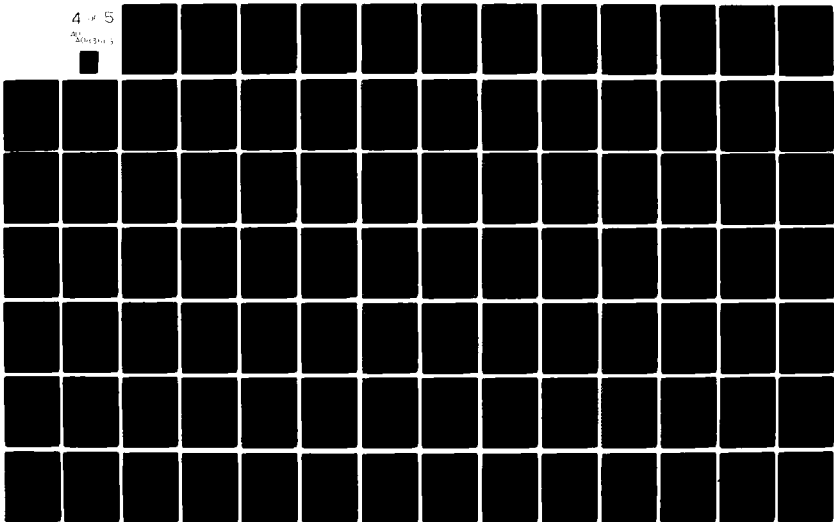
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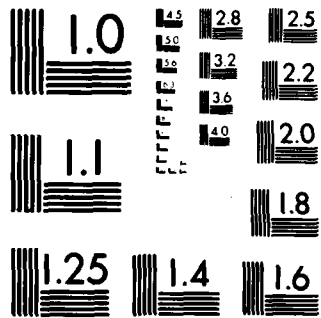
BOEING VERTOL CO PHILADELPHIA PA
INVESTIGATION TO STUDY THE AERODYNAMIC SHIP WAKE TURBULENCE GEN--ETC(U)
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UNCLASSIFIED

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

BVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|----|------|------|--------------|--------------|--------------|--------------|--------------|---------------|
| 139 | 10.3 | 0.0 | 9 | -20.0 | 9 | 4.59 | 2.54 | 0.29749E 01 | -0.78631E 00 | 0.78535E -01 | 0.94981E 00 | 0.99919E 00 | 0.10230E 01 |
| | | | 10 | | 10 | 4.59 | 2.54 | 0.291169E 01 | -0.49446E 00 | 0.10299E -01 | 0.52913E 00 | 0.52511E 00 | 0.47003E 00 |
| | | | 10 | -30.0 | 1 | 4.59 | 6.34 | 0.24329E 01 | 0.33514E 01 | 0.27423E 00 | 0.16001E 01 | 0.13054E 01 | 0.16540E 01 |
| | | | | | 2 | 4.59 | 6.34 | 0.23297E 01 | 0.16154E 00 | 0.27562E 00 | 0.021931E 00 | 0.003057E 00 | 0.023919E 00 |
| | | | | | 3 | 4.59 | 6.34 | 0.30698E 01 | 0.33133E 00 | 0.20726E 00 | 0.001435E 00 | 0.000747E 00 | 0.0019470E 00 |
| | | | | | 4 | 4.59 | 6.34 | 0.32868E 01 | 0.43814E 00 | 0.231687E 00 | 0.001339E 00 | 0.000747E 00 | 0.0017970E 00 |
| | | | | | 5 | 4.59 | 6.34 | 0.10198E 01 | 0.53855E 00 | 0.235234E 00 | 0.001104E 00 | 0.000747E 00 | 0.0014555E 00 |
| | | | | | 6 | 4.59 | 6.34 | 0.10783E 01 | 0.43814E 00 | 0.231687E 00 | 0.001104E 00 | 0.000747E 00 | 0.0014555E 00 |
| | | | | | 7 | 4.59 | 6.34 | 0.98615E 01 | 0.23841E 00 | 0.18232E 00 | 0.001104E 00 | 0.000747E 00 | 0.0014555E 00 |
| | | | | | 8 | 4.59 | 6.34 | 0.12272E 01 | 0.43814E 00 | 0.18232E 00 | 0.001104E 00 | 0.000747E 00 | 0.0014555E 00 |
| | | | | | 10 | 4.59 | 6.34 | 0.95315E 00 | 0.95001E 00 | 0.17698E 01 | 0.10311E 01 | 0.11037E 01 | 0.12571E 01 |
| | | | | | 11 | 4.59 | 6.34 | 0.27120E 01 | 0.12900E 00 | 0.13228E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 3 | 4.59 | 6.34 | 0.91200E 01 | 0.62607E 00 | 0.13228E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 7 | 4.59 | 6.34 | 0.17200E 01 | 0.62607E 00 | 0.13228E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 7 | 4.59 | 6.34 | 0.15133E 01 | 0.18701E 01 | 0.18232E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 8 | 4.59 | 6.34 | 0.10986E 01 | 0.18701E 01 | 0.18232E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 8 | 4.59 | 6.34 | 0.19866E 00 | 0.18701E 01 | 0.18232E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 10 | 4.59 | 6.34 | 0.14985E 01 | 0.18701E 01 | 0.18232E 00 | 0.001037E 00 | 0.000747E 00 | 0.001744E 00 |
| | | | | | 10 | 4.59 | 6.34 | 0.14339E 01 | 0.28306E 00 | 0.23970E 01 | 0.001104E 00 | 0.000747E 00 | 0.0014555E 00 |

BYWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRNDF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|----------|---------|-----------|-------|-------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 140 22.6 | 0-0 1 | 0-0 | 1-59 | -6-60 | 6-34 | 0-62279E 01 | -0-10180E 01 | 0-10145E 00 | 0-27470E 01 | 0-32996E 01 | 0-22574E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-42335E 01 | -0-19488E 00 | 0-32725E 00 | 0-27202E 01 | 0-27915E 01 | 0-22849E 01 |
| | | | 4-59 | 20-32 | 6-34 | 0-61873E 01 | -0-88978E 00 | 0-58462E 00 | 0-33536E 01 | 0-18123E 00 | 0-21750E 01 |
| | | | 5-59 | 6-60 | 6-34 | 0-19703E 02 | -0-36691E 00 | 0-17735E 01 | 0-15850E 01 | 0-38388E 01 | 0-26654E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-77440E 01 | -0-20988E 01 | 0-12103E 00 | 0-35811E 01 | 0-35244E 01 | 0-23670E 01 |
| | | | 8-59 | 6-60 | 2-54 | 0-91071E 01 | -0-22989E 01 | 0-42996E 00 | 0-26739E 01 | 0-37644E 01 | 0-23670E 01 |
| | | | 9-59 | 20-32 | 2-54 | 0-18349E 02 | -0-39568E 01 | 0-22988E 00 | 0-45433E 01 | 0-55017E 01 | 0-28988E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-18797E 02 | -0-10161E 01 | 0-12986E 01 | 0-45433E 01 | 0-55017E 01 | 0-28988E 01 |
| | 2 | 10-0 | 1-59 | -6-60 | 6-34 | 0-13937E 02 | -0-15058E 01 | 0-40673E 01 | 0-34184E 01 | 0-42773E 01 | 0-20737E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-54449E 01 | -0-10312E 01 | 0-68934E 00 | 0-22019E 01 | 0-23130E 01 | 0-35557E 01 |
| | | | 3-59 | 6-60 | 6-34 | 0-19728E 02 | -0-67522E 00 | 0-7817E 01 | 0-22066E 01 | 0-33697E 01 | 0-25131E 01 |
| | | | 5-59 | 20-32 | 6-34 | 0-13624E 01 | -0-24618E 01 | 0-32723E 01 | 0-20473E 01 | 0-25549E 01 | 0-35807E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-15448E 02 | -0-10388E 01 | 0-27802E 01 | 0-41044E 01 | 0-25549E 01 | 0-38079E 01 |
| | | | 8-59 | 6-60 | 2-54 | 0-74669E 01 | -0-37711E 01 | 0-20802E 01 | 0-27175E 01 | 0-25549E 01 | 0-38079E 01 |
| | | | 9-59 | 20-32 | 2-54 | 0-19024E 01 | -0-17564E 01 | 0-21803E 01 | 0-27175E 01 | 0-25549E 01 | 0-38079E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-15629E 02 | -0-79318E 01 | 0-58058E 01 | 0-1512E 01 | 0-31447E 01 | 0-15720E 01 |
| | 3 | 20-0 | 1-59 | 0-60 | 6-34 | 0-17058E 01 | -0-18958E 01 | 0-16613E 01 | 0-1352E 01 | 0-31447E 01 | 0-15720E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-73047E 01 | -0-23382E 01 | 0-10981E 01 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | | | 3-59 | 20-32 | 6-34 | 0-36443E 01 | -0-68390E 01 | 0-13072E 01 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | | | 5-59 | 6-60 | 2-54 | 0-13625E 01 | -0-46033E 01 | 0-30795E 01 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-17792E 02 | -0-60334E 01 | 0-30795E 01 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | | | 9-59 | 20-32 | 2-54 | 0-18364E 01 | -0-1822E 01 | 0-30347E 00 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-31826E 01 | -0-10526E 01 | 0-30347E 00 | 0-22472E 01 | 0-29272E 01 | 0-22707E 01 |
| | 4 | 30-0 | 1-59 | -6-60 | 6-34 | 0-19347E 02 | -0-13520E 01 | 0-58440E 01 | 0-10536E 01 | 0-18908E 01 | 0-10432E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-54087E 01 | -0-16328E 01 | 0-31881E 01 | 0-15030E 01 | 0-36495E 01 | 0-23339E 01 |
| | | | 3-59 | 6-60 | 6-34 | 0-26232E 02 | -0-38285E 00 | 0-24622E 01 | 0-26230E 01 | 0-36495E 01 | 0-23339E 01 |
| | | | 5-59 | 20-32 | 6-34 | 0-11808E 01 | -0-29822E 01 | 0-15030E 01 | 0-38504E 01 | 0-27448E 01 | 0-31144E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-10660E 02 | -0-52872E 01 | 0-33340E 01 | 0-21288E 01 | 0-24459E 01 | 0-21840E 01 |
| | | | 9-59 | 6-60 | 2-54 | 0-51244E 01 | -0-68011E 01 | 0-33340E 01 | 0-38504E 01 | 0-24459E 01 | 0-21840E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-17187E 01 | -0-88748E 01 | 0-88047E 00 | 0-38504E 01 | 0-24459E 01 | 0-21840E 01 |
| | 5 | 50-0 | 1-59 | -6-60 | 6-34 | 0-20271E 02 | -0-2481E 01 | 0-49175E 01 | 0-18309E 01 | 0-26177E 01 | 0-15662E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-17608E 01 | -0-37933E 01 | 0-23345E 01 | 0-18309E 01 | 0-26177E 01 | 0-15662E 01 |
| | | | 3-59 | 6-60 | 6-34 | 0-24566E 02 | -0-18014E 01 | 0-30357E 01 | 0-24477E 01 | 0-32710E 01 | 0-25310E 01 |
| | | | 5-59 | 20-32 | 6-34 | 0-74408E 01 | -0-68884E 01 | 0-14470E 01 | 0-45677E 01 | 0-32710E 01 | 0-25310E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-23709E 02 | -0-55055E 01 | 0-44235E 01 | 0-22251E 01 | 0-32710E 01 | 0-25310E 01 |
| | | | 9-59 | 6-60 | 2-54 | 0-29208E 01 | -0-11093E 01 | 0-23223E 01 | 0-22251E 01 | 0-32710E 01 | 0-25310E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-92208E 02 | -0-14933E 01 | 0-23223E 01 | 0-22251E 01 | 0-32710E 01 | 0-25310E 01 |
| | 7 | 10-0 | 1-59 | -6-60 | 6-34 | 0-54911E 01 | -0-1414E 01 | 0-41822E 01 | 0-19323E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-26027E 01 | -0-11729E 01 | 0-20073E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 3-59 | 6-60 | 6-34 | 0-13911E 02 | -0-55055E 01 | 0-20073E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 5-59 | 20-32 | 6-34 | 0-73302E 01 | -0-38428E 01 | 0-20073E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-91322E 01 | -0-38428E 01 | 0-11922E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 9-59 | 6-60 | 2-54 | 0-18869E 02 | -0-14470E 01 | 0-13419E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | | | 10-59 | 20-32 | 2-54 | 0-57779E 01 | -0-49222E 01 | 0-14315E 01 | 0-20189E 01 | 0-20189E 01 | 0-21928E 01 |
| | 8 | 20-0 | 1-59 | -6-60 | 6-34 | 0-24458E 01 | -0-78905E 01 | 0-14574E 01 | 0-23493E 01 | 0-21547E 01 | 0-24923E 01 |
| | | | 2-59 | 0-60 | 6-34 | 0-15558E 02 | -0-44343E 01 | 0-22818E 01 | 0-21440E 01 | 0-23493E 01 | 0-24923E 01 |
| | | | 3-59 | 6-60 | 6-34 | 0-20167E 01 | -0-42433E 01 | 0-22818E 01 | 0-21440E 01 | 0-23493E 01 | 0-24923E 01 |
| | | | 5-59 | 20-32 | 6-34 | 0-80108E 02 | -0-8442E 01 | 0-37112E 01 | 0-23493E 01 | 0-23493E 01 | 0-24923E 01 |
| | | | 7-59 | 6-60 | 2-54 | 0-1327E 01 | -0-50583E 01 | 0-37112E 01 | 0-23493E 01 | 0-23493E 01 | 0-24923E 01 |
| | | | 9-59 | 6-60 | 2-54 | 0-6993E 02 | -0-50583E 01 | 0-37112E 01 | 0-23493E 01 | 0-23493E 01 | 0-24923E 01 |

BVNT 242/243 SHIP MAKE TURBULENCE TEST

| TIME VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|-------|------|-------------|-------------|--------------|-------------|-------------|-------------|
| 140 22.6 | 0.0 | 8 | 4.59 | 20.32 | 2.54 | 0.58389E 01 | 0.46092E 00 | -0.58339E 01 | 0.18330E 01 | 0.18274E 01 | 0.17371E 01 |
| | 9 | -30.0 | 4.59 | 6.00 | 6.34 | 0.47448E 01 | 0.57938E 01 | 0.39828E 00 | 0.1798E 01 | 0.2459E 01 | 0.34007E 01 |
| | 10 | | 4.59 | 6.00 | 6.34 | 0.27475E 01 | 0.57152E 01 | 0.47389E 00 | 0.1746E 01 | 0.2459E 01 | 0.34007E 01 |
| | 1 | | 4.59 | 20.32 | 6.34 | 0.19275E 01 | 0.42917E 00 | 0.11827E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 2 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 3 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 4 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 5 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 6 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 7 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 8 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 9 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 10 | | 4.59 | 20.32 | 6.34 | 0.20152E 01 | 0.52313E 01 | 0.13294E 00 | 0.17371E 01 | 0.2459E 01 | 0.34007E 01 |
| | 1 | | 4.59 | 6.00 | 6.34 | 0.28950E 01 | 0.28950E 01 | 0.39917E 00 | 0.1995E 01 | 0.2278E 01 | 0.25656E 01 |
| | 2 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.42485E 00 | 0.15999E 01 | 0.2228E 01 | 0.25656E 01 |
| | 3 | | 4.59 | 6.00 | 6.34 | 0.20302E 01 | 0.20302E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 4 | | 4.59 | 20.32 | 6.34 | 0.19994E 01 | 0.19994E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 5 | | 4.59 | 20.32 | 6.34 | 0.23306E 01 | 0.23306E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 6 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 7 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 8 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 9 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |
| | 10 | | 4.59 | 6.00 | 6.34 | 0.23673E 01 | 0.23673E 01 | 0.52237E 00 | 0.13015E 01 | 0.2228E 01 | 0.25656E 01 |

BVMT 242243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRIME | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-------|------|----------|----------|-----------|----------|----------|----------|
| 141 | 10.1 | 0.0 | 1 | 0.0 | 6.34 | 0.26812E | 0.13894E | 0.16600E | 0.14008E | 0.14532E | 0.14373E |
| | | | 2 | 0.0 | 6.34 | 0.30733E | 0.13732E | 0.15258E | 0.12335E | 0.10174E | 0.10737E |
| | | | 3 | 0.0 | 6.34 | 0.37175E | 0.13722E | 0.17371E | 0.12691E | 0.10174E | 0.10737E |
| | | | 4 | 0.0 | 6.34 | 0.20242E | 0.14919E | 0.15504E | 0.18906E | 0.19153E | 0.19501E |
| | | | 5 | 0.0 | 6.34 | 0.30208E | 0.17193E | 0.17506E | 0.16109E | 0.14352E | 0.14893E |
| | | | 6 | 0.0 | 6.34 | 0.31038E | 0.18937E | 0.18314E | 0.15934E | 0.12962E | 0.14888E |
| | | | 7 | 0.0 | 6.34 | 0.84925E | 0.19197E | 0.18304E | 0.16008E | 0.14962E | 0.14989E |
| | | | 8 | 0.0 | 6.34 | 0.84339E | 0.26141E | 0.163974E | 0.66869E | 0.79097E | 0.61360E |
| | | | 9 | 10.0 | 6.34 | 0.61035E | 0.3433E | 0.11760E | 0.18203E | 0.14290E | 0.17351E |
| | | | 10 | 10.0 | 6.34 | 0.22045E | 0.35923E | 0.11568E | 0.13063E | 0.14290E | 0.14663E |
| | | | 1 | 0.0 | 6.34 | 0.22676E | 0.47736E | 0.11796E | 0.12233E | 0.12790E | 0.17234E |
| | | | 2 | 0.0 | 6.34 | 0.24739E | 0.47791E | 0.15767E | 0.22944E | 0.27182E | 0.32034E |
| | | | 3 | 0.0 | 6.34 | 0.66382E | 0.44981E | 0.17111E | 0.21340E | 0.29981E | 0.12013E |
| | | | 4 | 0.0 | 6.34 | 0.55128E | 0.24931E | 0.14908E | 0.21466E | 0.19151E | 0.12888E |
| | | | 5 | 0.0 | 6.34 | 0.42453E | 0.12956E | 0.15272E | 0.21466E | 0.13151E | 0.12888E |
| | | | 6 | 0.0 | 6.34 | 0.87408E | 0.16740E | 0.14444E | 0.14718E | 0.10673E | 0.12888E |
| | | | 7 | 0.0 | 6.34 | 0.57083E | 0.47401E | 0.11334E | 0.15272E | 0.13151E | 0.12888E |
| | | | 8 | 0.0 | 6.34 | 0.15762E | 0.7689E | 0.19211E | 0.1508E | 0.15126E | 0.12549E |
| | | | 9 | 0.0 | 6.34 | 0.75625E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 10 | 0.0 | 6.34 | 0.36235E | 0.45499E | 0.19222E | 0.14011E | 0.12733E | 0.12549E |
| | | | 1 | 0.0 | 6.34 | 0.94833E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 2 | 0.0 | 6.34 | 0.15762E | 0.7689E | 0.19211E | 0.1508E | 0.15126E | 0.12549E |
| | | | 3 | 0.0 | 6.34 | 0.75625E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 4 | 0.0 | 6.34 | 0.36235E | 0.45499E | 0.19222E | 0.14011E | 0.12733E | 0.12549E |
| | | | 5 | 0.0 | 6.34 | 0.94833E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 6 | 0.0 | 6.34 | 0.15762E | 0.7689E | 0.19211E | 0.1508E | 0.15126E | 0.12549E |
| | | | 7 | 0.0 | 6.34 | 0.75625E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 8 | 0.0 | 6.34 | 0.36235E | 0.45499E | 0.19222E | 0.14011E | 0.12733E | 0.12549E |
| | | | 9 | 0.0 | 6.34 | 0.94833E | 0.25428E | 0.19174E | 0.1508E | 0.15126E | 0.12549E |
| | | | 10 | 0.0 | 6.34 | 0.15762E | 0.7689E | 0.19211E | 0.1508E | 0.15126E | 0.12549E |
| | | | 1 | 0.0 | 6.34 | 0.23025E | 0.1188E | 0.17584E | 0.1937E | 0.1575E | 0.13523E |
| | | | 2 | 0.0 | 6.34 | 0.22095E | 0.26233E | 0.13608E | 0.1937E | 0.1575E | 0.13523E |
| | | | 3 | 0.0 | 6.34 | 0.10169E | 0.44301E | 0.12958E | 0.15477E | 0.14060E | 0.17552E |
| | | | 4 | 0.0 | 6.34 | 0.26179E | 0.6718E | 0.15362E | 0.15477E | 0.14060E | 0.17552E |
| | | | 5 | 0.0 | 6.34 | 0.26466E | 0.2177E | 0.15229E | 0.15477E | 0.14060E | 0.17552E |
| | | | 6 | 0.0 | 6.34 | 0.65199E | 0.15750E | 0.15724E | 0.15477E | 0.14060E | 0.17552E |
| | | | 7 | 0.0 | 6.34 | 0.91195E | 0.15750E | 0.15724E | 0.15477E | 0.14060E | 0.17552E |
| | | | 8 | 0.0 | 6.34 | 0.26000E | 0.15750E | 0.15724E | 0.15477E | 0.14060E | 0.17552E |
| | | | 9 | 0.0 | 6.34 | 0.95066E | 0.1188E | 0.17584E | 0.1937E | 0.1575E | 0.13523E |
| | | | 10 | 0.0 | 6.34 | 0.23025E | 0.26233E | 0.13608E | 0.1937E | 0.1575E | 0.13523E |
| | | | 1 | -10.0 | 6.34 | 0.12209E | 0.1188E | 0.15445E | 0.1937E | 0.1575E | 0.13523E |
| | | | 2 | -10.0 | 6.34 | 0.56227E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 3 | -10.0 | 6.34 | 0.22702E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 4 | -10.0 | 6.34 | 0.91732E | 0.1188E | 0.15445E | 0.1937E | 0.1575E | 0.13523E |
| | | | 5 | -10.0 | 6.34 | 0.15252E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 6 | -10.0 | 6.34 | 0.15252E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 7 | -10.0 | 6.34 | 0.91732E | 0.1188E | 0.15445E | 0.1937E | 0.1575E | 0.13523E |
| | | | 8 | -10.0 | 6.34 | 0.15252E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 9 | -10.0 | 6.34 | 0.91732E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 10 | -10.0 | 6.34 | 0.15252E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 1 | -20.0 | 6.34 | 0.23237E | 0.1188E | 0.14031E | 0.1937E | 0.1575E | 0.13523E |
| | | | 2 | -20.0 | 6.34 | 0.18589E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 3 | -20.0 | 6.34 | 0.38949E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 4 | -20.0 | 6.34 | 0.38949E | 0.1188E | 0.14031E | 0.1937E | 0.1575E | 0.13523E |
| | | | 5 | -20.0 | 6.34 | 0.39810E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 6 | -20.0 | 6.34 | 0.39810E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 7 | -20.0 | 6.34 | 0.39810E | 0.1188E | 0.14031E | 0.1937E | 0.1575E | 0.13523E |
| | | | 8 | -20.0 | 6.34 | 0.39810E | 0.22842E | 0.19908E | 0.1937E | 0.1575E | 0.13523E |
| | | | 9 | -20.0 | 6.34 | 0.39810E | 0.40939E | 0.11328E | 0.1937E | 0.1575E | 0.13523E |
| | | | 10 | -20.0 | 6.34 | 0.39810E | 0.1188E | 0.14031E | 0.1937E | 0.1575E | 0.13523E |

BVMT 2427243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|-----|-------|----|------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 141 | 10.1 | 0.0 | 9 | -20.0 | 9 | 9.18 | 2.54 | 0.30749E 01 | -0.54029E 00 | -0.12474E 01 | 0.7161E 00 | 0.97504E 00 | 0.1128E 01 |
| | | | | | 10 | 9.18 | 2.54 | 0.30814E 01 | -0.1547E 00 | 0.16063E 01 | 0.3713E 00 | 0.50667E 00 | 0.43534E 00 |
| | 10 | -30.0 | | | 1 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 2 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 3 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 4 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 5 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 6 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 7 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 8 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 9 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 10 | 9.18 | 6.34 | 0.24187E 01 | 0.03228E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | 11 | -50.0 | | | 1 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 2 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 3 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 4 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 5 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 6 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 7 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 8 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 9 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |
| | | | | | 10 | 9.18 | 6.34 | 0.39496E 01 | 0.075188E 00 | 0.18756E 01 | 0.11202E 00 | 0.2951E 00 | 0.1355E 01 |

RVMT 247243 SHIP WAKE TURBULENCE TEST

| RPM | VEL | ROLL | TP | YAW | PITCH | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-----|-------|------|-------|------|-------------|--------------|-------------|-------------|-------------|-------------|
| 142 | 27.7 | 0.0 | 2 | 0.0 | | 9.18 | -6.60 | 6.34 | 0.61630E 00 | -0.60457E 00 | 0.24844E 00 | 0.34288E 01 | 0.31735E 01 | 0.26779E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.19337E 01 | 0.19825E 01 | 0.24752E 01 | 0.24931E 01 | 0.21439E 01 | 0.25306E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.20240E 01 | 0.17127E 01 | 0.19577E 01 | 0.25493E 01 | 0.21059E 01 | 0.25163E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.10647E 01 | 0.13157E 01 | 0.18224E 01 | 0.31700E 01 | 0.21000E 01 | 0.23085E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18842E 02 | 0.14437E 01 | 0.15253E 01 | 0.24849E 01 | 0.24183E 01 | 0.23055E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.31185E 02 | 0.23373E 01 | 0.41558E 01 | 0.25723E 01 | 0.28277E 01 | 0.29760E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.25485E 02 | 0.19740E 01 | 0.23053E 01 | 0.21920E 01 | 0.21360E 01 | 0.25575E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.39701E 02 | 0.24599E 01 | 0.31909E 01 | 0.21804E 01 | 0.20284E 01 | 0.26954E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.36048E 02 | 0.11925E 01 | 0.17225E 01 | 0.23025E 01 | 0.20593E 01 | 0.26977E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.32068E 02 | 0.27661E 01 | 0.31213E 01 | 0.24237E 01 | 0.20578E 01 | 0.26661E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.10169E 02 | 0.27459E 01 | 0.20775E 01 | 0.29819E 01 | 0.29709E 01 | 0.25511E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.15047E 02 | 0.67466E 01 | 0.17585E 01 | 0.30235E 01 | 0.41415E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.16007E 02 | 0.20477E 01 | 0.21944E 01 | 0.20839E 01 | 0.21669E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.19729E 02 | 0.32055E 01 | 0.19390E 01 | 0.20839E 01 | 0.21348E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.29226E 02 | 0.47281E 01 | 0.16799E 01 | 0.23102E 01 | 0.21972E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18285E 02 | 0.47101E 01 | 0.17022E 01 | 0.26799E 01 | 0.20207E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.19896E 02 | 0.60707E 01 | 0.19947E 01 | 0.24328E 01 | 0.20237E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.17526E 02 | 0.18095E 01 | 0.46769E 01 | 0.23937E 01 | 0.38663E 01 | 0.25899E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.16238E 02 | 0.37077E 01 | 0.20786E 01 | 0.29300E 01 | 0.20404E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.26505E 02 | 0.36000E 01 | 0.17754E 01 | 0.27959E 01 | 0.24024E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.25924E 02 | 0.41528E 01 | 0.26768E 01 | 0.23339E 01 | 0.24024E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.16404E 02 | 0.59811E 01 | 0.52726E 01 | 0.27447E 01 | 0.24635E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.19225E 02 | 0.59811E 01 | 0.52726E 01 | 0.27447E 01 | 0.24635E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.20461E 02 | 0.29613E 01 | 0.12266E 01 | 0.28333E 01 | 0.38369E 01 | 0.18421E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.26905E 02 | 0.23727E 01 | 0.12161E 01 | 0.28440E 01 | 0.33745E 01 | 0.19211E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18227E 02 | 0.49455E 01 | 0.28306E 01 | 0.32440E 01 | 0.21950E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.26277E 02 | 0.55444E 01 | 0.47105E 01 | 0.38718E 01 | 0.21088E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.20279E 02 | 0.22011E 01 | 0.10595E 01 | 0.28510E 01 | 0.20084E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.20730E 02 | 0.19071E 01 | 0.21680E 01 | 0.34405E 01 | 0.20449E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.11833E 02 | 0.21048E 01 | 0.21970E 01 | 0.13444E 01 | 0.22229E 01 | 0.22314E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.14185E 02 | 0.29245E 01 | 0.31364E 01 | 0.18242E 01 | 0.17042E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.26052E 02 | 0.22445E 01 | 0.20638E 01 | 0.27400E 01 | 0.18319E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.17115E 02 | 0.29937E 01 | 0.21909E 01 | 0.19191E 01 | 0.18319E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.23116E 02 | 0.29937E 01 | 0.21909E 01 | 0.19191E 01 | 0.18319E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.11155E 02 | 0.18873E 01 | 0.23705E 01 | 0.24405E 01 | 0.20314E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18699E 02 | 0.63244E 01 | 0.15621E 01 | 0.22449E 01 | 0.25469E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18338E 02 | 0.35948E 01 | 0.15104E 01 | 0.28188E 01 | 0.24743E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.14629E 02 | 0.12020E 01 | 0.20599E 01 | 0.28358E 01 | 0.24743E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.08989E 02 | 0.20236E 01 | 0.10548E 01 | 0.17089E 01 | 0.23227E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.01110E 02 | 0.37099E 01 | 0.23648E 01 | 0.29233E 01 | 0.23227E 01 | 0.28925E 01 |
| | | | | | | 9.18 | -6.60 | 6.34 | 0.18597E 02 | 0.62774E 01 | 0.22936E 01 | 0.29233E 01 | 0.23227E 01 | 0.28925E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-------|-------|------|--------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 142 | 22.7 | 0.0 | 9 | -20.0 | 10 | 9.18 | -20.32 | 2.54 | 0.57206E 01 | -0.31329E 00 | -0.20961E 00 | 0.19282E 01 | 0.18647E 01 | 0.17785E 01 |
| | | | 10 | | | 9.18 | -20.32 | 2.54 | 0.16136E 02 | -0.83291E 00 | 0.23781E 01 | 0.49282E 00 | 0.38034E 00 | 0.35648E 00 |
| | | | 10 | -30.0 | 1 | 9.18 | -6.60 | 6.34 | 0.91451E 00 | 0.37658E 00 | 0.92096E 00 | 0.35723E 00 | 0.37327E 00 | 0.33947E 00 |
| | | | | | 2 | 9.18 | -6.60 | 6.34 | 0.29109E 00 | 0.15101E 00 | 0.32122E 00 | 0.00000E 00 | 0.27327E 00 | 0.24985E 00 |
| | | | | | 3 | 9.18 | -20.32 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 4 | 9.18 | -6.60 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 5 | 9.18 | -6.60 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 6 | 9.18 | -6.60 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 7 | 9.18 | -6.60 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 8 | 9.18 | -6.60 | 6.34 | 0.00904E 00 | 0.19322E 00 | 0.33591E 00 | 0.00000E 00 | 0.01600E 00 | 0.00718E 00 |
| | | | | | 9 | 9.18 | -20.32 | 2.54 | 0.20244E 00 | 0.65370E 00 | 0.32367E 00 | 0.29565E 00 | 0.27327E 00 | 0.25257E 00 |
| | | | | | 10 | 9.18 | -20.32 | 2.54 | 0.19389E 00 | 0.54223E 00 | 0.23509E 00 | 0.26446E 00 | 0.27327E 00 | 0.25257E 00 |
| | | | | | 11 | 9.18 | -6.60 | 6.34 | 0.57784E 00 | 0.18172E 00 | 0.46330E 00 | 0.19039E 00 | 0.24973E 00 | 0.23892E 00 |
| | | | | | 3 | 9.18 | -6.60 | 6.34 | 0.20905E 00 | 0.23651E 00 | 0.13705E 00 | 0.02472E 00 | 0.02472E 00 | 0.02472E 00 |
| | | | | | 4 | 9.18 | -20.32 | 6.34 | 0.22931E 00 | 0.29161E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 5 | 9.18 | -6.60 | 6.34 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 6 | 9.18 | -6.60 | 6.34 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 7 | 9.18 | -6.60 | 6.34 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 8 | 9.18 | -6.60 | 6.34 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 9 | 9.18 | -20.32 | 2.54 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |
| | | | | | 10 | 9.18 | -20.32 | 2.54 | 0.00517E 00 | 0.27327E 00 | 0.26547E 00 | 0.00000E 00 | 0.00000E 00 | 0.00000E 00 |

RVMT 242/243 SHIP MAKE TURBULENCE TEST

| SUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|------|------|----------|----------|----------|----------|----------|----------|
| 144 22.9 | 0.0 | 1 | 0.0 | 6.60 | 6.34 | 0.91105E | 0.30136E | 0.57366E | 0.23109E | 0.22935E | 0.33273E |
| | | 2 | 0.0 | 6.60 | 6.34 | 0.56587E | 0.21182E | 0.19327E | 0.20287E | 0.21567E | 0.23071E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.73443E | 0.15380E | 0.13033E | 0.23987E | 0.27507E | 0.28091E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.19250E | 0.10255E | 0.08390E | 0.33871E | 0.41797E | 0.41111E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.20018E | 0.09069E | 0.10677E | 0.30781E | 0.36396E | 0.35251E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.80616E | 0.17522E | 0.18561E | 0.37081E | 0.31079E | 0.29371E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.11270E | 0.27077E | 0.24151E | 0.27889E | 0.37889E | 0.34713E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.18536E | 0.08043E | 0.05266E | 0.44445E | 0.60445E | 0.68621E |
| | | 2 | 10.0 | 6.60 | 6.34 | 0.10770E | 0.14559E | 0.19929E | 0.30923E | 0.42605E | 0.34454E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.69333E | 0.07049E | 0.11403E | 0.20061E | 0.19907E | 0.21594E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.66355E | 0.39977E | 0.26539E | 0.17199E | 0.19947E | 0.27987E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.19411E | 0.10555E | 0.13033E | 0.43195E | 0.22944E | 0.21594E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.16059E | 0.10977E | 0.26451E | 0.19378E | 0.22944E | 0.31566E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.76077E | 0.51524E | 0.59481E | 0.28678E | 0.41376E | 0.24719E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.77533E | 0.24544E | 0.10977E | 0.21811E | 0.24376E | 0.24376E |
| | | 2 | 20.0 | 6.60 | 6.34 | 0.12707E | 0.14782E | 0.19088E | 0.41852E | 0.30556E | 0.24444E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.10899E | 0.14855E | 0.23045E | 0.28291E | 0.45265E | 0.29717E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.81777E | 0.29423E | 0.32295E | 0.20293E | 0.22429E | 0.24971E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.20091E | 0.56657E | 0.32295E | 0.23299E | 0.22429E | 0.24971E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.44931E | 0.18029E | 0.08566E | 0.40735E | 0.47144E | 0.38850E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.88035E | 0.18029E | 0.08566E | 0.23073E | 0.27144E | 0.23073E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.18533E | 0.27077E | 0.20011E | 0.20539E | 0.24388E | 0.23073E |
| | | 2 | 30.0 | 6.60 | 6.34 | 0.1806E | 0.1956E | 0.3303E | 0.40248E | 0.5242E | 0.3023E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.16920E | 0.2888E | 0.25184E | 0.3065E | 0.34200E | 0.32691E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.69956E | 0.17688E | 0.21443E | 0.22454E | 0.30200E | 0.32691E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.25784E | 0.52788E | 0.43335E | 0.49354E | 0.2000E | 0.27102E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.88622E | 0.6158E | 0.26059E | 0.34879E | 0.26698E | 0.27102E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.9220E | 0.16971E | 0.29093E | 0.3942E | 0.31302E | 0.31302E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.15235E | 0.50767E | 0.3217E | 0.30129E | 0.31302E | 0.29941E |
| | | 2 | 50.0 | 6.60 | 6.34 | 0.1605E | 0.20419E | 0.2605E | 0.5952E | 0.5028E | 0.43113E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.5985E | 0.9660E | 0.3456E | 0.5052E | 0.51615E | 0.43113E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.22818E | 0.23360E | 0.3216E | 0.36614E | 0.33098E | 0.33809E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.21406E | 0.6128E | 0.1101E | 0.96815E | 0.2576E | 0.19311E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.41234E | 0.65893E | 0.2087E | 0.3461E | 0.2576E | 0.20371E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.25596E | 0.5961E | 0.65893E | 0.6336E | 0.49391E | 0.32899E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.2334E | 0.14062E | 0.3767E | 0.33014E | 0.24879E | 0.21899E |
| | | 2 | 70.0 | 6.60 | 6.34 | 0.2129E | 0.4502E | 0.1557E | 0.3007E | 0.43113E | 0.3022E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.2148E | 0.7474E | 0.1904E | 0.45508E | 0.51716E | 0.43113E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.3002E | 0.1833E | 0.1949E | 0.5500E | 0.40847E | 0.43113E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.2472E | 0.09793E | 0.1229E | 0.9072E | 0.10497E | 0.11991E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.1298E | 0.36193E | 0.21320E | 0.2310E | 0.2429E | 0.23370E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.1828E | 0.3593E | 0.2140E | 0.3716E | 0.21320E | 0.23370E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.14230E | 0.2837E | 0.4038E | 0.3447E | 0.21320E | 0.23370E |
| | | 2 | 90.0 | 6.60 | 6.34 | 0.3746E | 0.5597E | 0.1026E | 0.2217E | 0.3449E | 0.23370E |
| | | 3 | 0.0 | 6.60 | 6.34 | 0.2029E | 0.54490E | 0.4334E | 0.3593E | 0.4949E | 0.4108E |
| | | 4 | 0.0 | 6.60 | 6.34 | 0.1761E | 0.35128E | 0.1631E | 0.1631E | 0.4949E | 0.4108E |
| | | 5 | 0.0 | 6.60 | 6.34 | 0.2461E | 0.3019E | 0.2736E | 0.14943E | 0.1562E | 0.2090E |
| | | 7 | 0.0 | 6.60 | 6.34 | 0.1590E | 0.5443E | 0.1963E | 0.1468E | 0.3011E | 0.2090E |
| | | 8 | 0.0 | 6.60 | 6.34 | 0.1590E | 0.5443E | 0.1963E | 0.1468E | 0.3011E | 0.2090E |
| | | 10 | 0.0 | 6.60 | 6.34 | 0.16330E | 0.15311E | 0.2057E | 0.4949E | 0.6514E | 0.5246E |

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| Run VFL | Roll | Yaw | Yaw Probe | X | Y | Z | Mean Vx | Mean Vy | Mean Vz | S.D. Vx | S.D. Vy | S.D. Vz |
|---------|------|-----|-----------|-------|----|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 144 | 22.9 | 0.0 | 7 | 90.0 | 10 | 2.54 | 0.22135E 02 | 0.35378E 01 | 0.19082E 01 | 0.31896E 01 | 0.22148E 01 | 0.27478E 01 |
| | | | | | | | 0.39451E 00 | 0.56212E 00 | 0.00000E 00 | 0.26227E 01 | 0.25021E 01 | 0.25636E 01 |
| | | | 9 | -10.0 | | 6.34 | 0.65104E 01 | 0.15488E 01 | 0.70298E 00 | 0.18729E 01 | 0.15089E 01 | 0.18010E 01 |
| | | | | | | | 0.80890E 01 | 0.44132E 00 | 0.00000E 00 | 0.26448E 01 | 0.20939E 01 | 0.27606E 01 |
| | | | | | | | 0.13120E 02 | 0.35981E 01 | 0.00000E 00 | 0.29839E 01 | 0.15999E 01 | 0.24760E 01 |
| | | | | | | | 0.20283E 01 | 0.03481E 01 | 0.00000E 00 | 0.19883E 01 | 0.17107E 01 | 0.23094E 01 |
| | | | | | | | 0.13402E 01 | 0.18466E 01 | 0.00000E 00 | 0.21547E 01 | 0.21049E 01 | 0.23577E 01 |
| | | | | | | | 0.18654E 01 | 0.03369E 00 | 0.00000E 00 | 0.25171E 01 | 0.21421E 01 | 0.23897E 01 |
| | | | 10 | -20.0 | | 6.34 | 0.74900E 01 | 0.12166E 01 | 0.10815E 01 | 0.17719E 01 | 0.17009E 01 | 0.26688E 01 |
| | | | | | | | 0.83216E 01 | 0.29299E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.88337E 01 | 0.29297E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.20449E 01 | 0.33400E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.25466E 01 | 0.33400E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.19161E 01 | 0.19263E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | 11 | -30.0 | | 6.34 | 0.10232E 01 | 0.06272E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.32801E 01 | 0.39272E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.10913E 01 | 0.39272E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.21322E 01 | 0.39272E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.10760E 01 | 0.39272E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | | | | | 0.19092E 01 | 0.26183E 01 | 0.00000E 00 | 0.31668E 01 | 0.28999E 01 | 0.29710E 01 |
| | | | 12 | -50.0 | | 6.34 | 0.27202E 01 | 0.10719E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.13554E 01 | 0.16846E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.23177E 01 | 0.15742E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.10647E 01 | 0.09204E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.19844E 01 | 0.20446E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.22083E 01 | 0.14359E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | 13 | -70.0 | | 6.34 | 0.31188E 01 | 0.71199E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.19770E 01 | 0.47029E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.25200E 01 | 0.39388E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.29558E 01 | 0.39388E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.22231E 01 | 0.58388E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | | | | | 0.22571E 01 | 0.58388E 01 | 0.00000E 00 | 0.24999E 01 | 0.24999E 01 | 0.25010E 01 |
| | | | 14 | -90.0 | | 6.34 | 0.28692E 01 | 0.47199E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |
| | | | | | | | 0.24626E 01 | 0.53099E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |
| | | | | | | | 0.25856E 01 | 0.20533E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |
| | | | | | | | 0.25856E 01 | 0.20533E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |
| | | | | | | | 0.18344E 01 | 0.31054E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |
| | | | | | | | 0.19547E 01 | 0.20661E 01 | 0.00000E 00 | 0.30599E 01 | 0.30599E 01 | 0.31000E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUW VEL | ROLL TP | YAW PRUBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|--------|------|------------|-------------|-------------|------------|------------|------------|
| 145 | 10.3 | 15.0 | 9 | -20.32 | 2.54 | 0.3337E 01 | -0.9722E 00 | -0.8542E 00 | 0.1138E 01 | 0.1240E 01 | 0.1201E 01 |
| | | | 9 | 20.32 | 2.54 | 0.8963E 01 | 0.3607E 00 | 0.1634E 01 | 0.4333E 01 | 0.3217E 00 | 0.4423E 00 |
| | 10 | -30.0 | 1 | 6.60 | 6.34 | 0.4158E 01 | -0.1916E 01 | 0.7090E 01 | 0.1992E 01 | 0.6011E 01 | 0.1667E 01 |
| | | | 2 | 0.60 | 6.34 | 0.2927E 01 | -0.3204E 00 | 0.4229E 01 | 0.6923E 01 | 0.0013E 01 | 0.1067E 01 |
| | | | 3 | 0.60 | 6.34 | 0.3692E 01 | -0.1874E 00 | 0.9322E 01 | 0.2374E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 4 | 20.32 | 6.34 | 0.3692E 01 | 0.4777E 00 | 0.2222E 01 | 0.2374E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 5 | 20.32 | 6.34 | 0.3120E 01 | -0.1877E 00 | 0.2222E 01 | 0.2374E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 6 | 6.60 | 6.34 | 0.1342E 01 | -0.2866E 01 | 0.2222E 01 | 0.1949E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 7 | 6.60 | 6.34 | 0.1342E 01 | -0.2866E 01 | 0.2222E 01 | 0.1949E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 8 | 20.32 | 6.34 | 0.1342E 01 | -0.2866E 01 | 0.2222E 01 | 0.1949E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 9 | 20.32 | 6.34 | 0.8700E 01 | -0.5405E 00 | 0.4430E 01 | 0.2396E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 10 | 20.32 | 6.34 | 0.8700E 01 | -0.5405E 00 | 0.4430E 01 | 0.2396E 01 | 0.0007E 01 | 0.1067E 01 |
| | 11 | -50.0 | 1 | 6.60 | 6.34 | 0.7195E 00 | -0.8013E 00 | 0.2012E 01 | 0.1044E 01 | 0.1217E 01 | 0.1365E 01 |
| | | | 2 | 0.60 | 6.34 | 0.2644E 01 | -0.5202E 00 | 0.1574E 01 | 0.2234E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 3 | 0.60 | 6.34 | 0.8952E 00 | -0.7956E 00 | 0.1706E 01 | 0.1593E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 4 | 20.32 | 6.34 | 0.2995E 02 | -0.8603E 01 | 0.1275E 01 | 0.1580E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 5 | 20.32 | 6.34 | 0.1029E 02 | -0.8603E 01 | 0.1275E 01 | 0.1580E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 6 | 6.60 | 6.34 | 0.9324E 00 | -0.1731E 01 | 0.2364E 01 | 0.5497E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 7 | 6.60 | 6.34 | 0.9324E 00 | -0.1731E 01 | 0.2364E 01 | 0.5497E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 8 | 20.32 | 6.34 | 0.4044E 01 | -0.1235E 01 | 0.1513E 01 | 0.9797E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 9 | 20.32 | 6.34 | 0.4044E 01 | -0.1235E 01 | 0.1513E 01 | 0.9797E 01 | 0.0007E 01 | 0.1067E 01 |
| | | | 10 | 20.32 | 6.34 | 0.9446E 01 | -0.6208E 00 | 0.2008E 01 | 0.1405E 01 | 0.0007E 01 | 0.1067E 01 |

SVMT 242243 SHIP WAKE TURBULENCE TEST

| "UN VFL | ROLL TP | YAW PRONE | X | Y | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|-------------|-------------|-------------|-------------|-------------|-------------|
| 146 | 23.0 | 15.0 | 1 | 0.0 | 0.1902E 07 | 0.81895E 00 | 0.14933E 01 | 0.20990E 01 | 0.25669E 01 | 0.24395E 01 |
| | | | 2 | | 0.59822E 01 | 0.10472E 01 | 0.65001E 00 | 0.36433E 01 | 0.33298E 01 | 0.47412E 01 |
| | | | 3 | | 0.21059E 01 | 0.10894E 01 | 0.12937E 00 | 0.38271E 01 | 0.23274E 01 | 0.32061E 01 |
| | | | 4 | | 0.19271E 02 | 0.17380E 01 | 0.16037E 01 | 0.07903E 01 | 0.07903E 01 | 0.07903E 01 |
| | | | 5 | | 0.17612E 02 | 0.17336E 01 | 0.12334E 01 | 0.19495E 01 | 0.20267E 01 | 0.29469E 01 |
| | | | 6 | | 0.31205E 01 | 0.16110E 00 | 0.68090E 00 | 0.21712E 01 | 0.31026E 01 | 0.39335E 01 |
| | | | 8 | | 0.18218E 02 | 0.10444E 00 | 0.97582E 00 | 0.21712E 01 | 0.68174E 01 | 0.13681E 01 |
| | | | 10 | | 0.17075E 02 | 0.08151E 00 | 0.11507E 01 | 0.18090E 01 | 0.21314E 01 | 0.18003E 01 |
| | 10.0 | | 1 | | 0.85123E 02 | 0.35365E 01 | 0.38555E 01 | 0.80333E 01 | 0.14389E 01 | 0.75309E 00 |
| | | | 2 | | 0.48226E 01 | 0.20356E 01 | 0.16591E 01 | 0.27573E 01 | 0.43888E 01 | 0.41770E 01 |
| | | | 3 | | 0.19395E 02 | 0.13843E 00 | 0.95153E 00 | 0.24478E 01 | 0.35643E 01 | 0.42121E 01 |
| | | | 4 | | 0.12493E 02 | 0.09495E 01 | 0.28764E 01 | 0.31281E 01 | 0.45409E 01 | 0.43189E 01 |
| | | | 5 | | 0.17907E 02 | 0.12071E 01 | 0.19105E 01 | 0.15086E 01 | 0.22988E 01 | 0.31227E 01 |
| | | | 7 | | 0.47565E 01 | 0.38298E 01 | 0.12431E 01 | 0.15086E 01 | 0.22988E 01 | 0.31227E 01 |
| | | | 8 | | 0.18152E 01 | 0.15572E 01 | 0.21577E 01 | 0.23360E 01 | 0.51112E 01 | 0.23866E 01 |
| | | | 10 | | 0.96422E 01 | 0.18857E 01 | 0.19577E 01 | 0.32447E 01 | 0.51112E 01 | 0.23866E 01 |
| | 20.0 | | 1 | | 0.17818E 02 | 0.73857E 01 | 0.52549E 01 | 0.52733E 01 | 0.97516E 01 | 0.68799E 00 |
| | | | 2 | | 0.18184E 02 | 0.36497E 01 | 0.13266E 01 | 0.62900E 01 | 0.37680E 01 | 0.42777E 01 |
| | | | 3 | | 0.67837E 02 | 0.56888E 01 | 0.41253E 01 | 0.37680E 01 | 0.37680E 01 | 0.42777E 01 |
| | | | 4 | | 0.19470E 02 | 0.61030E 01 | 0.17233E 01 | 0.40355E 01 | 0.37680E 01 | 0.42777E 01 |
| | | | 5 | | 0.26105E 01 | 0.94613E 01 | 0.29498E 01 | 0.29118E 01 | 0.27658E 01 | 0.28648E 01 |
| | | | 6 | | 0.18705E 01 | 0.58138E 01 | 0.30922E 01 | 0.11266E 01 | 0.17264E 01 | 0.24400E 01 |
| | | | 8 | | 0.18064E 01 | 0.55188E 01 | 0.30922E 01 | 0.20818E 01 | 0.36404E 01 | 0.34400E 01 |
| | | | 10 | | 0.51399E 01 | 0.33380E 01 | 0.60092E 01 | 0.29138E 01 | 0.23574E 01 | 0.23254E 01 |
| | 30.0 | | 1 | | 0.18051E 02 | 0.71568E 01 | 0.57096E 01 | 0.72446E 01 | 0.14456E 01 | 0.89572E 00 |
| | | | 2 | | 0.17895E 02 | 0.33038E 01 | 0.24478E 01 | 0.34478E 01 | 0.34478E 01 | 0.32362E 01 |
| | | | 3 | | 0.51399E 01 | 0.57299E 01 | 0.20818E 01 | 0.33370E 01 | 0.44825E 01 | 0.32362E 01 |
| | | | 4 | | 0.34297E 02 | 0.37400E 01 | 0.20818E 01 | 0.33370E 01 | 0.44825E 01 | 0.32362E 01 |
| | | | 5 | | 0.54297E 02 | 0.57421E 01 | 0.32409E 01 | 0.29319E 01 | 0.31094E 01 | 0.32362E 01 |
| | | | 7 | | 0.17074E 01 | 0.35911E 01 | 0.32409E 01 | 0.29319E 01 | 0.31094E 01 | 0.32362E 01 |
| | | | 8 | | 0.18099E 01 | 0.33371E 01 | 0.32409E 01 | 0.29319E 01 | 0.31094E 01 | 0.32362E 01 |
| | | | 10 | | 0.46347E 01 | 0.20880E 01 | 0.12317E 01 | 0.31243E 01 | 0.46446E 01 | 0.30968E 01 |
| | 50.0 | | 1 | | 0.18597E 02 | 0.25709E 01 | 0.71665E 01 | 0.22049E 01 | 0.35092E 01 | 0.17034E 01 |
| | | | 2 | | 0.20396E 02 | 0.45390E 01 | 0.39076E 01 | 0.44549E 01 | 0.42528E 01 | 0.31212E 01 |
| | | | 3 | | 0.36477E 02 | 0.46580E 01 | 0.35076E 01 | 0.58118E 01 | 0.46304E 01 | 0.31212E 01 |
| | | | 4 | | 0.71237E 02 | 0.50897E 01 | 0.35076E 01 | 0.46694E 01 | 0.75850E 01 | 0.42528E 01 |
| | | | 5 | | 0.13297E 02 | 0.49399E 01 | 0.38468E 01 | 0.27017E 01 | 0.27471E 01 | 0.28077E 01 |
| | | | 7 | | 0.17937E 02 | 0.16009E 01 | 0.58022E 01 | 0.40196E 01 | 0.62756E 01 | 0.42528E 01 |
| | | | 8 | | 0.21156E 02 | 0.15439E 01 | 0.29292E 01 | 0.15015E 01 | 0.19251E 01 | 0.27471E 01 |
| | | | 10 | | 0.61370E 01 | 0.34699E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | -10.0 | | 1 | | 0.61330E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 2 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 3 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 4 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 5 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 7 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 8 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | | | 10 | | 0.60530E 01 | 0.32469E 01 | 0.36888E 01 | 0.16686E 01 | 0.21645E 01 | 0.12317E 01 |
| | -20.0 | | 1 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 2 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 3 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 4 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 5 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 8 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |
| | | | 10 | | 0.97599E 01 | 0.25229E 01 | 0.26086E 01 | 0.19932E 01 | 0.29664E 01 | 0.22099E 01 |

0801 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL TP | YAW PRB | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|---------|----|------|-------|-------------|--------------|--------------|-------------|-------------|-------------|
| 146 | 23.0 | 15.0 | 9 | 9.18 | 2.54 | 0.85823E 01 | 0.15269E 01 | -0.23447E 01 | 0.15259E 01 | 0.24911E 01 | 0.26499E 01 |
| | | | 10 | 9.18 | 2.54 | 0.18017E 02 | 0.12235E 01 | 0.24457E 01 | 0.37767E 00 | 0.33849E 00 | 0.20964E 00 |
| | | 9 | 9 | 9.18 | 6.00 | 0.77449E 01 | 0.27027E 01 | 0.40966E 01 | 0.36711E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 10 | 9.18 | 6.00 | 0.77449E 01 | 0.27027E 01 | 0.40966E 01 | 0.36711E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 9 | 9.18 | 20.32 | 0.77449E 01 | 0.27027E 01 | 0.40966E 01 | 0.36711E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 10 | 9.18 | 20.32 | 0.77449E 01 | 0.27027E 01 | 0.40966E 01 | 0.36711E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 9 | 9.18 | 6.00 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |
| | | | 10 | 9.18 | 6.00 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |
| | | | 9 | 9.18 | 20.32 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |
| | | | 10 | 9.18 | 20.32 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |
| | | | 9 | 9.18 | 6.00 | 0.18624E 02 | 0.511294E 01 | 0.80814E 01 | 0.50018E 00 | 0.28757E 00 | 0.80747E 00 |
| | | | 10 | 9.18 | 6.00 | 0.18624E 02 | 0.511294E 01 | 0.80814E 01 | 0.50018E 00 | 0.28757E 00 | 0.80747E 00 |
| | | | 9 | 9.18 | 6.00 | 0.78944E 00 | 0.89765E 00 | 0.87172E 01 | 0.24931E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 10 | 9.18 | 6.00 | 0.78944E 00 | 0.89765E 00 | 0.87172E 01 | 0.24931E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 9 | 9.18 | 20.32 | 0.18716E 02 | 0.20355E 01 | 0.34535E 01 | 0.27731E 01 | 0.36294E 01 | 0.29707E 01 |
| | | | 10 | 9.18 | 20.32 | 0.18716E 02 | 0.20355E 01 | 0.34535E 01 | 0.27731E 01 | 0.36294E 01 | 0.29707E 01 |
| | | | 9 | 9.18 | 6.00 | 0.22530E 02 | 0.12615E 01 | 0.22822E 01 | 0.26827E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 10 | 9.18 | 6.00 | 0.22530E 02 | 0.12615E 01 | 0.22822E 01 | 0.26827E 01 | 0.23629E 01 | 0.20947E 01 |
| | | | 9 | 9.18 | 20.32 | 0.18407E 02 | 0.23660E 01 | 0.41500E 01 | 0.24442E 01 | 0.30523E 01 | 0.23629E 01 |
| | | | 10 | 9.18 | 20.32 | 0.18407E 02 | 0.23660E 01 | 0.41500E 01 | 0.24442E 01 | 0.30523E 01 | 0.23629E 01 |
| | | | 9 | 9.18 | 6.00 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |
| | | | 10 | 9.18 | 6.00 | 0.20712E 01 | 0.33923E 00 | 0.37749E 01 | 0.37527E 01 | 0.44077E 01 | 0.33231E 01 |

BVMT 7427243 SHIP WAKE TURBULENCE TEST

| TIME VEL | ROLL TP | YAW | PORBDF | X | Y | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|----------|---------|-----|--------|------|-------|---------|-------------|-------------|-------------|-------------|-------------|
| 147 10.2 | 15.0 | 1 | 0.0 | 4.59 | -6.60 | 6.34 | 0.55377E 01 | 0.74795E 01 | 0.55700E 00 | 0.98102E 00 | 0.93538E 00 |
| | | | | 4.59 | 0.00 | 6.34 | 0.29815E 00 | 0.29683E 00 | 0.15505E 01 | 0.13401E 01 | 0.10549E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.28771E 01 | 0.14726E 00 | 0.12968E 01 | 0.13866E 01 | 0.14158E 01 |
| | | | | 4.59 | 20.32 | 6.34 | 0.91265E 01 | 0.20986E 00 | 0.57378E 00 | 0.40444E 00 | 0.41425E 00 |
| | | | | 4.59 | -6.60 | 2.54 | 0.65187E 01 | 0.94789E 00 | 0.35030E 00 | 0.77031E 01 | 0.11222E 01 |
| | | | | 4.59 | 6.60 | 2.54 | 0.15017E 00 | 0.52515E 00 | 0.14897E 01 | 0.15881E 01 | 0.15322E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.85674E 01 | 0.48925E 01 | 0.67431E 00 | 0.58881E 00 | 0.57310E 00 |
| | | | | 4.59 | -6.60 | 6.34 | 0.84048E 01 | 0.14268E 00 | 0.39884E 00 | 0.64978E 00 | 0.50701E 00 |
| | | | | 4.59 | 0.00 | 6.34 | 0.44271E 01 | 0.64679E 00 | 0.49941E 00 | 0.22765E 01 | 0.19944E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.13845E 00 | 0.70241E 00 | 0.14370E 01 | 0.15411E 00 | 0.14689E 01 |
| | | | | 4.59 | 20.32 | 6.34 | 0.94476E 01 | 0.50999E 00 | 0.35558E 01 | 0.37631E 00 | 0.53747E 00 |
| | | | | 4.59 | -6.60 | 2.54 | 0.60460E 01 | 0.10121E 00 | 0.16175E 01 | 0.12721E 00 | 0.12341E 01 |
| | | | | 4.59 | 6.60 | 2.54 | 0.86711E 01 | 0.19640E 01 | 0.54532E 01 | 0.66431E 01 | 0.53411E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.18397E 01 | 0.17143E 01 | 0.22542E 01 | 0.13490E 01 | 0.16089E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.88108E 01 | 0.17331E 00 | 0.11778E 01 | 0.44455E 01 | 0.41844E 01 |
| | | | | 4.59 | 0.00 | 6.34 | 0.44030E 01 | 0.67828E 00 | 0.17363E 01 | 0.11388E 01 | 0.12274E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.85971E 01 | 0.6471E 00 | 0.35899E 01 | 0.70748E 00 | 0.31173E 00 |
| | | | | 4.59 | 20.32 | 6.34 | 0.72366E 01 | 0.78258E 00 | 0.15270E 00 | 0.20746E 01 | 0.14996E 01 |
| | | | | 4.59 | -6.60 | 2.54 | 0.31785E 01 | 0.42009E 01 | 0.19037E 00 | 0.21807E 01 | 0.19277E 01 |
| | | | | 4.59 | 6.60 | 2.54 | 0.21359E 01 | 0.62473E 00 | 0.1481E 00 | 0.13705E 01 | 0.52663E 00 |
| | | | | 4.59 | 20.32 | 2.54 | 0.21174E 01 | 0.9071E 01 | 0.13290E 00 | 0.12222E 01 | 0.10073E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.21007E 01 | 0.72609E 01 | 0.4222E 01 | 0.57429E 01 | 0.18119E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.86800E 01 | 0.26091E 01 | 0.18228E 01 | 0.16424E 01 | 0.18119E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.27354E 01 | 0.93140E 01 | 0.15895E 01 | 0.13809E 01 | 0.3045E 00 |
| | | | | 4.59 | -6.60 | 6.34 | 0.84744E 01 | 0.21153E 01 | 0.4770E 00 | 0.1054E 00 | 0.4255E 00 |
| | | | | 4.59 | 0.00 | 6.34 | 0.11298E 01 | 0.10028E 01 | 0.27791E 01 | 0.1054E 00 | 0.79442E 00 |
| | | | | 4.59 | 6.60 | 6.34 | 0.17887E 01 | 0.3354E 00 | 0.17323E 01 | 0.22838E 01 | 0.16209E 01 |
| | | | | 4.59 | 20.32 | 6.34 | 0.97501E 01 | 0.46850E 00 | 0.12522E 01 | 0.18687E 00 | 0.20089E 00 |
| | | | | 4.59 | -6.60 | 2.54 | 0.34818E 01 | 0.69963E 00 | 0.15177E 01 | 0.13403E 01 | 0.54817E 01 |
| | | | | 4.59 | 6.60 | 2.54 | 0.85086E 01 | 0.17905E 00 | 0.47756E 01 | 0.17133E 00 | 0.58117E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.15788E 01 | 0.28642E 01 | 0.12786E 01 | 0.20765E 01 | 0.17738E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.90315E 01 | 0.26106E 01 | 0.64099E 01 | 0.14822E 01 | 0.16051E 01 |
| | | | | 4.59 | 0.00 | 6.34 | 0.31787E 01 | 0.14385E 01 | 0.16090E 01 | 0.14795E 01 | 0.11500E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.86623E 01 | 0.10162E 01 | 0.33598E 01 | 0.14183E 01 | 0.72883E 00 |
| | | | | 4.59 | 20.32 | 6.34 | 0.10238E 01 | 0.70263E 00 | 0.28271E 01 | 0.16797E 01 | 0.40146E 01 |
| | | | | 4.59 | -6.60 | 2.54 | 0.38738E 01 | 0.37269E 00 | 0.20904E 01 | 0.28522E 00 | 0.25522E 00 |
| | | | | 4.59 | 6.60 | 2.54 | 0.1006E 01 | 0.44215E 00 | 0.2029E 01 | 0.43386E 00 | 0.19257E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.23455E 01 | 0.68425E 01 | 0.16594E 01 | 0.13972E 01 | 0.11043E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.82756E 01 | 0.17018E 00 | 0.2233E 01 | 0.2094E 01 | 0.19257E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.46767E 01 | 0.67937E 00 | 0.6433E 01 | 0.2485E 00 | 0.2221E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.90737E 01 | 0.10711E 01 | 0.27116E 01 | 0.64162E 01 | 0.57479E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.1094E 01 | 0.32122E 00 | 0.4869E 01 | 0.9790E 01 | 0.10274E 01 |
| | | | | 4.59 | 0.00 | 6.34 | 0.2673E 00 | 0.19630E 00 | 0.3242E 00 | 0.12397E 01 | 0.1234E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.7707E 01 | 0.52079E 01 | 0.1840E 01 | 0.1607E 01 | 0.1574E 01 |
| | | | | 4.59 | 20.32 | 6.34 | 0.94783E 01 | 0.3360E 01 | 0.1146E 01 | 0.9250E 00 | 0.15370E 01 |
| | | | | 4.59 | -6.60 | 2.54 | 0.46928E 01 | 0.8326E 01 | 0.6306E 00 | 0.1022E 00 | 0.12435E 01 |
| | | | | 4.59 | 6.60 | 2.54 | 0.12435E 01 | 0.30579E 01 | 0.1579E 01 | 0.9173E 00 | 0.12435E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.76308E 01 | 0.91507E 01 | 0.5249E 00 | 0.18033E 01 | 0.10999E 01 |
| | | | | 4.59 | -6.60 | 6.34 | 0.88548E 01 | 0.39150E 01 | 0.14374E 01 | 0.58924E 00 | 0.47393E 00 |
| | | | | 4.59 | 0.00 | 6.34 | 0.45745E 01 | 0.13651E 01 | 0.13999E 01 | 0.12119E 01 | 0.12006E 01 |
| | | | | 4.59 | 6.60 | 6.34 | 0.38545E 01 | 0.10045E 01 | 0.16413E 01 | 0.18146E 01 | 0.15200E 01 |
| | | | | 4.59 | 20.32 | 6.34 | 0.40766E 01 | 0.12670E 00 | 0.12084E 01 | 0.25895E 01 | 0.15176E 01 |
| | | | | 4.59 | -6.60 | 2.54 | 0.75640E 01 | 0.27127E 01 | 0.3549E 00 | 0.70870E 00 | 0.42482E 00 |
| | | | | 4.59 | 6.60 | 2.54 | 0.48020E 01 | 0.15702E 01 | 0.20306E 01 | 0.11883E 01 | 0.18523E 01 |
| | | | | 4.59 | 20.32 | 2.54 | 0.26264E 01 | 0.15702E 01 | 0.9806E 00 | 0.2668E 01 | 0.1923E 01 |

BYWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | |
|---------|------|------|-----|-------|----|------|-------|----------|---------|-----------|---------|----------|---------|----------|
| 147 | 10.2 | 15.0 | 0 | -20.0 | 9 | 4.59 | 2.54 | 0.42516E | 01 | -0.13559E | 01 | 0.13046E | 01 | 0.13722E |
| | | | | | 10 | 4.59 | 2.54 | 0.87540E | 01 | 0.16854E | 01 | 0.65235E | 01 | 0.48996E |
| | | | | | 1 | 4.59 | 6.60 | 0.34763E | 01 | 0.23646E | 01 | 0.20448E | 01 | 0.18723E |
| | | | | | 2 | 4.59 | 6.60 | 0.23844E | 01 | 0.37019E | 01 | 0.17693E | 01 | 0.22042E |
| | | | | | 3 | 4.59 | 6.60 | 0.45221E | 01 | 0.32803E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 4 | 4.59 | 6.60 | 0.30044E | 01 | 0.22093E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 5 | 4.59 | 6.60 | 0.10044E | 01 | 0.30898E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 6 | 4.59 | 6.60 | 0.31666E | 01 | 0.17623E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 7 | 4.59 | 6.60 | 0.58748E | 01 | 0.18235E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 8 | 4.59 | 6.60 | 0.91933E | 01 | 0.23707E | 01 | 0.18925E | 01 | 0.14074E |
| | | | | | 9 | 4.59 | 6.60 | 0.31809E | 01 | 0.22517E | 01 | 0.18925E | 01 | 0.14074E |
| | | | | | 10 | 4.59 | 6.60 | 0.18095E | 01 | 0.20999E | 01 | 0.16923E | 01 | 0.11373E |
| | | | | | 1 | 4.59 | 20.32 | 0.92220E | 00 | 0.00000E | 00 | 0.00000E | 00 | 0.00000E |
| | | | | | 2 | 4.59 | 20.32 | 0.22200E | 00 | 0.20943E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 3 | 4.59 | 20.32 | 0.10318E | 00 | 0.22200E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 4 | 4.59 | 20.32 | 0.34188E | 00 | 0.00000E | 00 | 0.00000E | 00 | 0.00000E |
| | | | | | 5 | 4.59 | 20.32 | 0.56331E | 00 | 0.22309E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 6 | 4.59 | 20.32 | 0.63331E | 00 | 0.20919E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 7 | 4.59 | 20.32 | 0.93331E | 00 | 0.20919E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 8 | 4.59 | 20.32 | 0.63331E | 00 | 0.20919E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 9 | 4.59 | 20.32 | 0.63331E | 00 | 0.20919E | 01 | 0.00000E | 01 | 0.00000E |
| | | | | | 10 | 4.59 | 20.32 | 0.63331E | 00 | 0.20919E | 01 | 0.00000E | 01 | 0.00000E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| DIR VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|----|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 148 22.8 | 15.0 | 0 | -20.0 | 9 | 4.59 | 0.67470E 01 | -0.82502E 00 | -0.13428E 01 | 0.19005E 01 | 0.25762E 01 | 0.25502E 01 |
| | | | | 10 | 4.59 | 0.18826E 02 | -0.84829E 00 | 0.24199E 01 | 0.48787E 01 | 0.61150E 01 | 0.26797E 00 |
| | 9 | -30.0 | | | | 0.83925E 01 | -0.39389E 01 | 0.51488E 01 | 0.31422E 01 | 0.35109E 01 | 0.36375E 01 |
| | | | | | | 0.55207E 01 | -0.81798E 01 | 0.25837E 01 | 0.40816E 01 | 0.34381E 01 | 0.43204E 01 |
| | | | | | | 0.68483E 01 | -0.31798E 01 | 0.37627E 01 | 0.44279E 01 | 0.56926E 01 | 0.41254E 01 |
| | | | | | | 0.69489E 01 | -0.24542E 01 | 0.22323E 01 | 0.41895E 01 | 0.32977E 01 | 0.46878E 01 |
| | | | | | | 0.71700E 01 | -0.18491E 01 | 0.41166E 01 | 0.31928E 01 | 0.27063E 01 | 0.38169E 01 |
| | | | | | | 0.82234E 01 | -0.25238E 01 | 0.56579E 01 | 0.31666E 01 | 0.29998E 01 | 0.37563E 01 |
| | | | | | | 0.19331E 02 | -0.10338E 01 | 0.89579E 01 | 0.48016E 01 | 0.25365E 01 | 0.55513E 01 |
| | | | | | | 0.19331E 02 | -0.92338E 00 | 0.74780E 01 | 0.37293E 01 | 0.27790E 01 | 0.28483E 01 |
| | | | | | | 0.53909E 01 | -0.18383E 01 | 0.36820E 01 | 0.23962E 01 | 0.25285E 01 | 0.24615E 01 |
| | | | | | | 0.29074E 01 | -0.20455E 01 | 0.47323E 01 | 0.42451E 01 | 0.40622E 01 | 0.49849E 01 |
| | | | | | | 0.19745E 01 | -0.28897E 01 | 0.17323E 01 | 0.22883E 01 | 0.30629E 01 | 0.26634E 01 |
| | | | | | | 0.21451E 01 | -0.06606E 00 | 0.19827E 01 | 0.22851E 01 | 0.25291E 01 | 0.25544E 01 |
| | | | | | | 0.21451E 01 | -0.09579E 00 | 0.49827E 01 | 0.36574E 01 | 0.30171E 01 | 0.31078E 01 |
| | | | | | | 0.20123E 01 | -0.24503E 01 | 0.46258E 01 | 0.20847E 01 | 0.33239E 01 | 0.27971E 01 |
| | | | | | | 0.29234E 01 | -0.02092E 01 | 0.37586E 01 | 0.25204E 01 | 0.33890E 01 | 0.29116E 01 |
| | | | | | | 0.20434E 01 | -0.10011E 01 | 0.39531E 01 | 0.32746E 01 | 0.21030E 01 | 0.21163E 01 |
| | 10 | -50.0 | | | | 0.344 | -0.18383E 01 | 0.36820E 01 | 0.23962E 01 | 0.25285E 01 | 0.24615E 01 |
| | | | | | | 0.344 | -0.20455E 01 | 0.47323E 01 | 0.42451E 01 | 0.40622E 01 | 0.49849E 01 |
| | | | | | | 0.344 | -0.28897E 01 | 0.17323E 01 | 0.22883E 01 | 0.30629E 01 | 0.26634E 01 |
| | | | | | | 0.344 | -0.06606E 00 | 0.19827E 01 | 0.22851E 01 | 0.25291E 01 | 0.25544E 01 |
| | | | | | | 0.344 | -0.09579E 00 | 0.49827E 01 | 0.36574E 01 | 0.30171E 01 | 0.31078E 01 |
| | | | | | | 0.344 | -0.24503E 01 | 0.46258E 01 | 0.20847E 01 | 0.33239E 01 | 0.27971E 01 |
| | | | | | | 0.344 | -0.02092E 01 | 0.37586E 01 | 0.25204E 01 | 0.33890E 01 | 0.29116E 01 |
| | | | | | | 0.344 | -0.10011E 01 | 0.39531E 01 | 0.32746E 01 | 0.21030E 01 | 0.21163E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| SIM VEL | ROLL TP | YAW PRIME | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|-------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 149 10.2 | 15.0 | 1 | 0.00 | 6.60 | 6.34 | 0.65745E 01 | -0.14949E 00 | 0.58194E 00 | 0.12300E 01 | 0.10802E 01 | 0.08984E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.19267E 01 | -0.20281E 00 | -0.37982E 00 | 0.14575E 01 | 0.13169E 01 | 0.09646E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.15090E 01 | -0.87222E 01 | -0.54224E 00 | 0.13313E 01 | 0.11464E 01 | 0.09680E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.95163E 01 | -0.22244E 00 | -0.22244E 00 | 0.28911E 00 | 0.34028E 00 | 0.07115E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.93704E 01 | -0.49787E 00 | -0.16436E 01 | 0.48964E 00 | 0.71715E 00 | 0.03335E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.72395E 00 | -0.71222E 00 | -0.21269E 00 | 0.44335E 00 | 0.11297E 00 | 0.06341E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.40050E 00 | -0.12872E 00 | -0.68295E 00 | 0.12057E 01 | 0.11995E 00 | 0.01224E 00 |
| | | | 0.00 | 20.32 | 2.54 | 0.88799E 01 | -0.15273E 00 | 0.69944E 00 | 0.20834E 00 | 0.30556E 00 | 0.06474E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.81822E 01 | 0.31298E 00 | 0.12095E 01 | 0.58346E 00 | 0.65318E 00 | 0.03533E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.46795E 01 | -0.58686E 01 | -0.13095E 00 | 0.23106E 01 | 0.16695E 01 | 0.17260E 01 |
| | | | 0.00 | 6.60 | 6.34 | 0.17750E 01 | -0.21441E 00 | -0.14041E 00 | 0.23106E 01 | 0.16695E 01 | 0.17260E 01 |
| | | | 0.00 | 20.32 | 6.34 | 0.92070E 01 | -0.54372E 00 | -0.80123E 00 | 0.32037E 01 | 0.47272E 01 | 0.12957E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.56494E 01 | -0.37525E 00 | -0.38923E 00 | 0.14057E 00 | 0.12792E 00 | 0.12957E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.81591E 01 | -0.37506E 01 | -0.38923E 00 | 0.14057E 00 | 0.12792E 00 | 0.12957E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.29275E 00 | -0.10903E 01 | -0.16508E 01 | 0.19295E 00 | 0.13999E 01 | 0.13111E 01 |
| | | | 0.00 | 20.32 | 2.54 | 0.36723E 01 | 0.69158E 00 | -0.13559E 00 | 0.14042E 01 | 0.12264E 01 | 0.01271E 01 |
| | | | 0.00 | 6.60 | 6.34 | 0.83355E 01 | 0.41180E 00 | 0.24110E 01 | 0.38616E 00 | 0.49248E 00 | 0.40661E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.27283E 01 | -0.11805E 01 | 0.12044E 00 | 0.22269E 01 | 0.14077E 01 | 0.10660E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.93644E 01 | -0.28196E 00 | 0.12044E 00 | 0.22269E 01 | 0.14077E 01 | 0.10660E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.21097E 01 | -0.16157E 01 | 0.54288E 01 | 0.14510E 01 | 0.28858E 01 | 0.15250E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.85744E 00 | -0.16261E 00 | -0.14000E 00 | 0.15121E 01 | 0.18961E 01 | 0.02041E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.94144E 00 | -0.18709E 00 | -0.65451E 00 | 0.15141E 01 | 0.18961E 01 | 0.02041E 00 |
| | | | 0.00 | 20.32 | 2.54 | 0.86983E 01 | 0.31105E 00 | 0.15403E 01 | 0.12093E 01 | 0.38931E 01 | 0.02520E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.31138E 01 | 0.12577E 01 | 0.54983E 01 | 0.14257E 01 | 0.11911E 01 | 0.01010E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.83431E 01 | -0.61125E 00 | 0.28394E 01 | 0.40048E 00 | 0.59854E 00 | 0.00444E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.93848E 01 | -0.16266E 00 | 0.29944E 00 | 0.40048E 00 | 0.59854E 00 | 0.00444E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.15979E 01 | -0.13738E 00 | -0.87446E 00 | 0.30739E 01 | 0.21209E 01 | 0.29936E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.45479E 01 | -0.14990E 00 | 0.17470E 00 | 0.14709E 01 | 0.19255E 01 | 0.00232E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.47623E 01 | -0.16634E 00 | 0.23200E 00 | 0.19886E 01 | 0.14744E 01 | 0.00598E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.13117E 00 | -0.19123E 00 | -0.70619E 00 | 0.18040E 01 | 0.16948E 01 | 0.00378E 00 |
| | | | 0.00 | 20.32 | 2.54 | 0.46520E 01 | -0.15567E 01 | -0.23916E 01 | 0.15540E 01 | 0.25590E 01 | 0.01020E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.82735E 01 | 0.16542E 00 | 0.32729E 01 | 0.28932E 00 | 0.70209E 01 | 0.31929E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.70743E 01 | -0.50473E 00 | 0.16705E 01 | 0.27223E 00 | 0.27105E 01 | 0.32673E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.94735E 01 | -0.28943E 00 | 0.22109E 01 | 0.27223E 00 | 0.27105E 01 | 0.32673E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.12350E 01 | -0.23377E 00 | 0.22992E 01 | 0.13105E 01 | 0.06001E 00 | 0.00330E 00 |
| | | | 0.00 | 6.60 | 2.54 | 0.16988E 01 | -0.23360E 01 | -0.22992E 01 | 0.40099E 01 | 0.14866E 01 | 0.00285E 00 |
| | | | 0.00 | 20.32 | 2.54 | 0.83966E 01 | -0.57494E 00 | -0.22992E 01 | 0.40099E 01 | 0.14866E 01 | 0.00285E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.62720E 01 | 0.70949E 00 | 0.11898E 01 | 0.32990E 00 | 0.65199E 00 | 0.00438E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.28915E 01 | -0.39979E 00 | 0.81851E 00 | 0.00377E 01 | 0.11771E 01 | 0.00268E 01 |
| | | | 0.00 | 6.60 | 6.34 | 0.15945E 01 | -0.18526E 00 | -0.54966E 00 | 0.15488E 01 | 0.15209E 01 | 0.00119E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.82733E 01 | -0.18848E 00 | 0.15630E 00 | 0.10310E 00 | 0.16633E 00 | 0.00526E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.96439E 01 | -0.16808E 00 | 0.15630E 00 | 0.13305E 00 | 0.05502E 00 | 0.00539E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.45343E 01 | -0.16789E 01 | -0.35588E 00 | 0.14204E 01 | 0.09583E 00 | 0.00153E 00 |
| | | | 0.00 | 20.32 | 2.54 | 0.90306E 01 | -0.16633E 00 | -0.35588E 00 | 0.14204E 01 | 0.09583E 00 | 0.00153E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.13397E 01 | -0.11980E 00 | -0.11188E 00 | 0.12663E 00 | 0.28062E 00 | 0.00153E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.58821E 01 | -0.14924E 01 | 0.11308E 00 | 0.16339E 01 | 0.15169E 01 | 0.00198E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.21074E 00 | -0.16933E 01 | -0.15247E 00 | 0.45405E 00 | 0.14689E 00 | 0.00100E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.81469E 01 | -0.38128E 00 | -0.11520E 00 | 0.15491E 00 | 0.22274E 00 | 0.00100E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.41469E 01 | -0.26445E 00 | -0.18006E 00 | 0.15491E 00 | 0.22274E 00 | 0.00100E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.42122E 01 | -0.26405E 01 | -0.18006E 00 | 0.15491E 00 | 0.22274E 00 | 0.00100E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAM PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----------|-------|-------|------|------------|--------------|-------------|-------------|-------------|-------------|
| 149 | 10.2 | 15.0 | 8 | -20.0 | 20.32 | 2.54 | 0.3923E-04 | -0.13839E-03 | 0.15764E-13 | 0.12502E-04 | 0.12029E-04 | 0.14184E-04 |
| | | | 9 | -30.0 | 6.60 | 6.34 | 0.3559E-04 | 0.2943E-04 | 0.7373E-04 | 0.1563E-04 | 0.1799E-04 | 0.0025E-04 |
| | | | 10 | 0.00 | 6.60 | 6.34 | 0.7200E-04 | 0.3713E-04 | 0.2720E-04 | 0.2132E-04 | 0.3311E-04 | 0.0025E-04 |
| | | | 11 | 0.00 | 6.60 | 6.34 | 0.3923E-04 | 0.2943E-04 | 0.7373E-04 | 0.1563E-04 | 0.1799E-04 | 0.0025E-04 |
| | | | 12 | 10.0 | 6.60 | 6.34 | 0.7200E-04 | 0.3713E-04 | 0.2720E-04 | 0.2132E-04 | 0.3311E-04 | 0.0025E-04 |
| | | | 13 | 20.0 | 6.60 | 6.34 | 0.3923E-04 | 0.2943E-04 | 0.7373E-04 | 0.1563E-04 | 0.1799E-04 | 0.0025E-04 |
| | | | 14 | 30.0 | 6.60 | 6.34 | 0.7200E-04 | 0.3713E-04 | 0.2720E-04 | 0.2132E-04 | 0.3311E-04 | 0.0025E-04 |
| | | | 15 | 50.0 | 6.60 | 6.34 | 0.3923E-04 | 0.2943E-04 | 0.7373E-04 | 0.1563E-04 | 0.1799E-04 | 0.0025E-04 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROF | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|-------|------|------|------|-------|------|----------|----|----------|----|----------|----|----------|----|----------|----|----------|----|
| 150 | 22.8 | 15.0 | 15 | 50.0 | 5 | 0.00 | 20.32 | 6.34 | 0.15530E | 01 | 0.3549E | 00 | 0.42362E | 00 | 0.34696E | 01 | 0.22265E | 01 | 0.29490E | 01 |
| | | | | | 7 | 0.00 | 6.60 | 6.34 | 0.18443E | 02 | 0.3521E | 00 | 0.62662E | 00 | 0.33214E | 01 | 0.22804E | 01 | 0.33214E | 01 |
| | | | | | 8 | 0.00 | 6.60 | 6.34 | 0.96047E | 01 | 0.11635E | 00 | 0.48882E | 00 | 0.73409E | 01 | 0.26679E | 00 | 0.30999E | 00 |
| | | | | | 9 | 0.00 | 20.32 | 2.54 | 0.18495E | 02 | 0.22712E | 04 | 0.48882E | 00 | 0.33409E | 01 | 0.52337E | 00 | 0.56208E | 00 |
| | | | | | 10 | 0.00 | 20.32 | 2.54 | 0.20627E | 04 | 0.29430E | 04 | 0.34366E | 09 | 0.31758E | 05 | 0.27831E | 05 | 0.39335E | 08 |
| | | 17 | -10.0 | | 1 | 0.00 | 6.60 | 6.34 | 0.5590E | 01 | 0.73377E | 00 | 0.56943E | 00 | 0.15290E | 01 | 0.21805E | 01 | 0.29450E | 01 |
| | | | | | 2 | 0.00 | 6.60 | 6.34 | 0.52526E | 01 | 0.62388E | 00 | 0.41930E | 00 | 0.28260E | 01 | 0.24117E | 01 | 0.37450E | 01 |
| | | | | | 3 | 0.00 | 6.60 | 6.34 | 0.35768E | 01 | 0.65160E | 00 | 0.50945E | 00 | 0.35097E | 01 | 0.29331E | 01 | 0.37450E | 01 |
| | | | | | 4 | 0.00 | 20.32 | 2.54 | 0.15768E | 02 | 0.64919E | 01 | 0.41930E | 00 | 0.50945E | 01 | 0.29331E | 01 | 0.37450E | 01 |
| | | | | | 5 | 0.00 | 6.60 | 6.34 | 0.20288E | 01 | 0.43940E | 01 | 0.29005E | 00 | 0.19832E | 01 | 0.18980E | 00 | 0.30999E | 00 |
| | | | | | 6 | 0.00 | 6.60 | 6.34 | 0.88002E | 01 | 0.33940E | 01 | 0.34005E | 00 | 0.19832E | 01 | 0.18980E | 00 | 0.30999E | 00 |
| | | | | | 7 | 0.00 | 6.60 | 6.34 | 0.30832E | 01 | 0.33940E | 01 | 0.34005E | 00 | 0.19832E | 01 | 0.18980E | 00 | 0.30999E | 00 |
| | | | | | 8 | 0.00 | 6.60 | 6.34 | 0.13970E | 01 | 0.33940E | 01 | 0.34005E | 00 | 0.19832E | 01 | 0.18980E | 00 | 0.30999E | 00 |
| | | | | | 9 | 0.00 | 20.32 | 2.54 | 0.20627E | 04 | 0.29430E | 04 | 0.34366E | 09 | 0.31758E | 05 | 0.27831E | 05 | 0.39335E | 08 |
| | | | | | 10 | 0.00 | 20.32 | 2.54 | 0.20627E | 04 | 0.29430E | 04 | 0.34366E | 09 | 0.31758E | 05 | 0.27831E | 05 | 0.39335E | 08 |
| | | 18 | -20.0 | | 1 | 0.00 | 6.60 | 6.34 | 0.8640E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 2 | 0.00 | 6.60 | 6.34 | 0.41700E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 3 | 0.00 | 6.60 | 6.34 | 0.88002E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 4 | 0.00 | 6.60 | 6.34 | 0.20288E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 5 | 0.00 | 20.32 | 2.54 | 0.20288E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 6 | 0.00 | 6.60 | 6.34 | 0.93081E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 7 | 0.00 | 6.60 | 6.34 | 0.30832E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 8 | 0.00 | 6.60 | 6.34 | 0.10673E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 9 | 0.00 | 20.32 | 2.54 | 0.70415E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | | | | 10 | 0.00 | 20.32 | 2.54 | 0.20288E | 01 | 0.38818E | 01 | 0.20637E | 00 | 0.23773E | 01 | 0.26076E | 01 | 0.3198E | 01 |
| | | 19 | -30.0 | | 1 | 0.00 | 6.60 | 6.34 | 0.84524E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 2 | 0.00 | 6.60 | 6.34 | 0.37045E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 3 | 0.00 | 6.60 | 6.34 | 0.68899E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 4 | 0.00 | 20.32 | 2.54 | 0.20477E | 02 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 5 | 0.00 | 6.60 | 6.34 | 0.68909E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 6 | 0.00 | 6.60 | 6.34 | 0.68909E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 7 | 0.00 | 6.60 | 6.34 | 0.94271E | 01 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 8 | 0.00 | 20.32 | 2.54 | 0.19300E | 04 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 9 | 0.00 | 6.60 | 6.34 | 0.20349E | 04 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | | | | 10 | 0.00 | 20.32 | 2.54 | 0.20349E | 04 | 0.4400E | 01 | 0.4031E | 00 | 0.4748E | 01 | 0.25458E | 01 | 0.3502E | 01 |
| | | 20 | -50.0 | | 1 | 0.00 | 6.60 | 6.34 | 0.80188E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 2 | 0.00 | 6.60 | 6.34 | 0.19525E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 3 | 0.00 | 6.60 | 6.34 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 4 | 0.00 | 20.32 | 2.54 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 5 | 0.00 | 6.60 | 6.34 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 6 | 0.00 | 6.60 | 6.34 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 7 | 0.00 | 6.60 | 6.34 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 8 | 0.00 | 6.60 | 6.34 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 9 | 0.00 | 20.32 | 2.54 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |
| | | | | | 10 | 0.00 | 20.32 | 2.54 | 0.18343E | 01 | 0.29284E | 01 | 0.23120E | 00 | 0.20709E | 01 | 0.24340E | 01 | 0.30999E | 00 |

BVMT 7427243 SHIP WAKE TURBULENCE TEST

| WIND VEL | ROLL TP | YAW PRONE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|-------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 151 10.5 | 15.0 | 10 | -20.0 | 20.32 | 4.57 | 0.37283E 01 | -0.75605E 00 | -0.59595E 00 | 0.12733E 01 | 0.13423E 01 | 0.12914E 01 |
| | | | 0.00 | 20.32 | 4.57 | 0.86244E 01 | 0.60996E 01 | -0.21061E 00 | 0.89103E 00 | 0.63023E 00 | 0.21762E 01 |
| | 11 | -30.0 | 0.00 | -6.60 | 4.57 | 0.35377E 01 | 0.77444E 01 | 0.16347E 01 | 0.18069E 01 | 0.20940E 01 | 0.19677E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.36477E 01 | 0.46225E 00 | 0.12447E 01 | 0.22991E 01 | 0.24116E 01 | 0.24477E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.86054E 01 | 0.60119E 00 | 0.14893E 01 | 0.13510E 01 | 0.11921E 01 | 0.17377E 01 |
| | | | 0.00 | 20.32 | 4.57 | 0.71235E 01 | 0.65347E 00 | 0.14893E 01 | 0.13510E 01 | 0.11921E 01 | 0.17377E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.95698E 01 | 0.26971E 01 | 0.15184E 01 | 0.13510E 01 | 0.11921E 01 | 0.17377E 01 |
| | | | 0.00 | -6.60 | 4.57 | 0.33223E 01 | 0.40888E 00 | 0.15693E 01 | 0.13510E 01 | 0.11921E 01 | 0.17377E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.32523E 01 | 0.40888E 00 | 0.15693E 01 | 0.13510E 01 | 0.11921E 01 | 0.17377E 01 |
| | | | 0.00 | 20.32 | 4.57 | 0.86949E 01 | 0.11393E 01 | -0.21216E 00 | 0.83398E 00 | 0.59623E 00 | 0.20351E 01 |
| | 12 | -30.0 | 0.00 | -6.60 | 4.57 | 0.11476E 01 | 0.22099E 00 | 0.88269E 00 | 0.17166E 01 | 0.1999E 01 | 0.1999E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.86864E 01 | 0.45335E 01 | 0.18826E 01 | 0.20113E 01 | 0.1999E 01 | 0.1999E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.96988E 01 | 0.70635E 00 | 0.13655E 01 | 0.14289E 01 | 0.19716E 01 | 0.2193E 01 |
| | | | 0.00 | 20.32 | 4.57 | 0.17989E 01 | 0.53340E 01 | 0.1609E 01 | 0.1793E 01 | 0.16390E 01 | 0.1493E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.8020E 01 | 0.9697E 01 | 0.17110E 01 | 0.32366E 01 | 0.9290E 01 | 0.1623E 01 |
| | | | 0.00 | -6.60 | 4.57 | 0.99140E 02 | 0.17671E 01 | 0.19711E 01 | 0.9290E 01 | 0.22215E 01 | 0.12516E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.10439E 02 | 0.20402E 01 | 0.29277E 01 | 0.7735E 01 | 0.20597E 01 | 0.12516E 01 |
| | | | 0.00 | 20.32 | 4.57 | 0.92288E 01 | 0.11980E 01 | -0.21149E 00 | 0.16519E 01 | 0.20597E 01 | 0.12516E 01 |
| | | | 0.00 | 0.00 | 4.57 | 0.87933E 01 | 0.61975E 01 | -0.21149E 00 | 0.89425E 00 | 0.20597E 01 | 0.12516E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|------|-------|-----|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|
| 152 | 22.8 | 15.0 | 1 | 0.0 | 1 | 0.00 | -6.00 | 2.2 | 13.39 | 73.89 | 20.05 | 0.26 | 0.67 | 2.82 |
| | | | | | | | | | 17.46 | 117.49 | 29.95 | 0.52 | 1.43 | 3.95 |
| | | | | | | | | | 19.93 | 125.53 | 36.92 | 0.60 | 1.87 | 4.45 |
| | | | | | | | | | 19.51 | 132.57 | 37.40 | 0.60 | 1.91 | 4.45 |
| | | | | | | | | | 14.63 | 183.22 | 31.14 | 0.60 | 1.26 | 3.77 |
| | | | | | | | | | 14.89 | 176.44 | 30.33 | 0.60 | 1.26 | 3.77 |
| | | | | | | | | | 18.09 | 124.03 | 38.84 | 0.60 | 1.44 | 4.57 |
| | | | | | | | | | 18.31 | 130.19 | 39.01 | 0.60 | 1.44 | 4.57 |
| | | | | | | | | | 10.99 | 161.16 | 33.68 | 0.60 | 1.10 | 3.51 |
| | | | | | | | | | 19.90 | 171.80 | 32.07 | 0.60 | 1.27 | 4.45 |
| 2 | 10.0 | 2 | 10.0 | 1 | 0.00 | -6.00 | 2.2 | 18.31 | 280.00 | 61.98 | 0.40 | 0.76 | 3.05 | |
| | | | | | | | | 10.99 | 216.11 | 49.31 | 0.60 | 1.03 | 2.29 | |
| | | | | | | | | 19.07 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 19.04 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 19.57 | 221.50 | 36.68 | 0.60 | 1.26 | 3.77 | |
| | | | | | | | | 11.29 | 266.03 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| 3 | 20.0 | 3 | 20.0 | 1 | 0.00 | -6.00 | 2.2 | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| 4 | 30.0 | 4 | 30.0 | 1 | 0.00 | -6.00 | 2.2 | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| 5 | 50.0 | 5 | 50.0 | 1 | 0.00 | -6.00 | 2.2 | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| 7 | -10.0 | 7 | -10.0 | 1 | 0.00 | -6.00 | 2.2 | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| 8 | -20.0 | 8 | -20.0 | 1 | 0.00 | -6.00 | 2.2 | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 10.23 | 231.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 10.77 | 180.00 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |
| | | | | | | | | 18.37 | 271.80 | 32.07 | 0.60 | 1.27 | 4.45 | |
| | | | | | | | | 13.17 | 232.92 | 33.68 | 0.60 | 1.10 | 3.51 | |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PUM VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----|-------|----|------|-------|-------------|-------------|--------------|-------------|-------------|-------------|
| 152 | 22.8 | 15.0 | 8 | -20.0 | 9 | 0.00 | 4.57 | 0.76562E 01 | 0.14594E 00 | -0.57471E 00 | 0.20486E 01 | 0.28849E 01 | 0.23492E 01 |
| | | | | | 10 | 0.00 | 4.57 | 0.13163E 02 | 0.93097E 01 | 0.22511E 01 | 0.16582E 01 | 0.11728E 01 | 0.14346E 01 |
| | | | 9 | -30.0 | 1 | 0.00 | 12.45 | 0.76782E 01 | 0.98071E 00 | 0.34775E 01 | 0.32483E 01 | 0.45087E 01 | 0.37855E 01 |
| | | | | | 2 | 0.00 | 12.45 | 0.91549E 01 | 0.10275E 01 | 0.25721E 00 | 0.44358E 01 | 0.46787E 01 | 0.50669E 01 |
| | | | | | 3 | 0.00 | 12.45 | 0.13280E 02 | 0.13280E 01 | 0.20782E 01 | 0.20337E 01 | 0.24684E 01 | 0.21739E 01 |
| | | | | | 4 | 0.00 | 12.45 | 0.10569E 01 | 0.10569E 01 | 0.33865E 00 | 0.32050E 01 | 0.32201E 01 | 0.46669E 00 |
| | | | | | 5 | 0.00 | 12.45 | 0.20569E 01 | 0.20569E 01 | 0.32850E 01 | 0.38304E 00 | 0.38934E 00 | 0.48644E 00 |
| | | | | | 6 | 0.00 | 4.57 | 0.73412E 01 | 0.73412E 01 | 0.31233E 01 | 0.37337E 01 | 0.30686E 01 | 0.29027E 01 |
| | | | | | 7 | 0.00 | 4.57 | 0.54952E 01 | 0.54952E 01 | 0.46873E 01 | 0.56637E 01 | 0.30813E 01 | 0.56524E 01 |
| | | | | | 8 | 0.00 | 4.57 | 0.23322E 01 | 0.23322E 01 | 0.14168E 00 | 0.37052E 01 | 0.29133E 00 | 0.42844E 01 |
| | | | | | 9 | 0.00 | 4.57 | 0.13542E 02 | 0.95777E 01 | 0.10498E 00 | 0.12459E 01 | 0.08333E 00 | 0.96841E 01 |
| | | | 10 | -50.0 | 1 | 0.00 | 12.45 | 0.41185E 01 | 0.70807E 00 | 0.12160E 01 | 0.37710E 01 | 0.36813E 01 | 0.31960E 01 |
| | | | | | 2 | 0.00 | 12.45 | 0.10719E 01 | 0.10719E 01 | 0.35126E 01 | 0.40831E 01 | 0.48436E 01 | 0.41825E 01 |
| | | | | | 3 | 0.00 | 12.45 | 0.20722E 01 | 0.15105E 00 | 0.23199E 01 | 0.73817E 00 | 0.41369E 01 | 0.41825E 01 |
| | | | | | 4 | 0.00 | 12.45 | 0.31654E 01 | 0.63088E 00 | 0.77259E 01 | 0.36539E 00 | 0.36730E 01 | 0.34364E 01 |
| | | | | | 5 | 0.00 | 12.45 | 0.21336E 01 | 0.39733E 00 | 0.33259E 01 | 0.21027E 01 | 0.29168E 01 | 0.37047E 01 |
| | | | | | 6 | 0.00 | 4.57 | 0.50232E 01 | 0.50232E 01 | 0.34972E 01 | 0.21943E 01 | 0.26377E 01 | 0.29133E 01 |
| | | | | | 7 | 0.00 | 4.57 | 0.50918E 01 | 0.52684E 01 | 0.36972E 01 | 0.19458E 01 | 0.26377E 01 | 0.29133E 01 |
| | | | | | 8 | 0.00 | 4.57 | 0.20831E 01 | 0.23444E 01 | 0.34693E 01 | 0.29158E 01 | 0.27304E 01 | 0.24667E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-------|------|------|------|-------------|-------------|-------------|-------------|-------------|--------------|
| 153 | 10.6 | 15.0 | 1 | 0.0 | 4.59 | 2.45 | 0.51955E 01 | 0.22635E 00 | 0.41329E 00 | 0.17286E 01 | 0.10374E 01 | 0.94709E 00 |
| | | | 2 | 0.0 | 4.59 | 2.45 | 0.40752E 01 | 0.12594E 00 | 0.24660E 00 | 0.15999E 01 | 0.11299E 01 | 0.96015E 00 |
| | | | 3 | 0.0 | 4.59 | 2.45 | 0.58172E 01 | 0.15046E 00 | 0.41184E 00 | 0.15999E 01 | 0.11299E 01 | 0.96015E 00 |
| | | | 4 | 0.0 | 4.59 | 2.45 | 0.64106E 01 | 0.23235E 00 | 0.31747E 00 | 0.39547E 01 | 0.24819E 00 | 0.679671E 00 |
| | | | 5 | 0.0 | 4.59 | 2.45 | 0.61195E 01 | 0.45477E 00 | 0.35332E 00 | 0.35512E 01 | 0.29374E 00 | 0.71054E 01 |
| | | | 6 | 0.0 | 4.59 | 2.45 | 0.67120E 01 | 0.49707E 00 | 0.31333E 00 | 0.17621E 01 | 0.29374E 00 | 0.71054E 01 |
| | | | 7 | 0.0 | 4.59 | 2.45 | 0.67120E 01 | 0.49707E 00 | 0.31333E 00 | 0.17621E 01 | 0.29374E 00 | 0.71054E 01 |
| | | | 8 | 0.0 | 4.59 | 2.45 | 0.67120E 01 | 0.49707E 00 | 0.31333E 00 | 0.17621E 01 | 0.29374E 00 | 0.71054E 01 |
| | | | 9 | 0.0 | 4.59 | 2.45 | 0.67120E 01 | 0.49707E 00 | 0.31333E 00 | 0.17621E 01 | 0.29374E 00 | 0.71054E 01 |
| | | | 10 | 0.0 | 4.59 | 2.45 | 0.62953E 01 | 0.44534E 01 | 0.31659E 01 | 0.32443E 00 | 0.45918E 00 | 0.50087E 01 |
| | | | 1 | 10.0 | 4.59 | 2.45 | 0.85600E 01 | 0.11128E 01 | 0.2157E 01 | 0.49873E 01 | 0.51278E 00 | 0.53095E 00 |
| | | | 2 | 10.0 | 4.59 | 2.45 | 0.82077E 01 | 0.17128E 01 | 0.23361E 01 | 0.19873E 01 | 0.13739E 01 | 0.10000E 01 |
| | | | 3 | 10.0 | 4.59 | 2.45 | 0.60621E 01 | 0.36045E 00 | 0.20511E 01 | 0.22733E 01 | 0.13767E 01 | 0.15099E 01 |
| | | | 4 | 10.0 | 4.59 | 2.45 | 0.52218E 01 | 0.29074E 00 | 0.38991E 01 | 0.12620E 01 | 0.26205E 01 | 0.45175E 01 |
| | | | 5 | 10.0 | 4.59 | 2.45 | 0.69660E 01 | 0.27049E 00 | 0.43936E 00 | 0.12620E 01 | 0.18016E 01 | 0.10974E 01 |
| | | | 6 | 10.0 | 4.59 | 2.45 | 0.85598E 01 | 0.27049E 00 | 0.43936E 00 | 0.12620E 01 | 0.18016E 01 | 0.10974E 01 |
| | | | 7 | 10.0 | 4.59 | 2.45 | 0.20899E 01 | 0.17088E 01 | 0.17983E 01 | 0.16571E 01 | 0.14087E 01 | 0.66697E 01 |
| | | | 8 | 10.0 | 4.59 | 2.45 | 0.87870E 01 | 0.42888E 01 | 0.11069E 01 | 0.16571E 01 | 0.14087E 01 | 0.66697E 01 |
| | | | 9 | 10.0 | 4.59 | 2.45 | 0.43369E 01 | 0.30673E 01 | 0.23087E 01 | 0.14288E 01 | 0.10105E 01 | 0.35694E 01 |
| | | | 10 | 10.0 | 4.59 | 2.45 | 0.43369E 01 | 0.30673E 01 | 0.23087E 01 | 0.14288E 01 | 0.10105E 01 | 0.35694E 01 |
| | | | 1 | 20.0 | 4.59 | 2.45 | 0.85862E 01 | 0.33838E 01 | 0.24640E 01 | 0.38301E 01 | 0.55990E 00 | 0.44040E 00 |
| | | | 2 | 20.0 | 4.59 | 2.45 | 0.93320E 01 | 0.8437E 01 | 0.24640E 01 | 0.38301E 01 | 0.55990E 00 | 0.44040E 00 |
| | | | 3 | 20.0 | 4.59 | 2.45 | 0.93320E 01 | 0.8437E 01 | 0.24640E 01 | 0.38301E 01 | 0.55990E 00 | 0.44040E 00 |
| | | | 4 | 20.0 | 4.59 | 2.45 | 0.95463E 01 | 0.4936E 01 | 0.37195E 01 | 0.21225E 01 | 0.20185E 01 | 0.42051E 00 |
| | | | 5 | 20.0 | 4.59 | 2.45 | 0.36188E 01 | 0.4936E 01 | 0.37195E 01 | 0.21225E 01 | 0.20185E 01 | 0.42051E 00 |
| | | | 6 | 20.0 | 4.59 | 2.45 | 0.88734E 01 | 0.71807E 01 | 0.14104E 01 | 0.20666E 01 | 0.20185E 01 | 0.42051E 00 |
| | | | 7 | 20.0 | 4.59 | 2.45 | 0.33541E 01 | 0.8187E 01 | 0.49031E 01 | 0.49233E 01 | 0.20185E 01 | 0.42051E 00 |
| | | | 8 | 20.0 | 4.59 | 2.45 | 0.33541E 01 | 0.8187E 01 | 0.49031E 01 | 0.49233E 01 | 0.20185E 01 | 0.42051E 00 |
| | | | 9 | 20.0 | 4.59 | 2.45 | 0.88166E 01 | 0.24151E 01 | 0.24051E 01 | 0.20393E 01 | 0.18250E 01 | 0.39867E 01 |
| | | | 10 | 20.0 | 4.59 | 2.45 | 0.21345E 01 | 0.15086E 01 | 0.3270E 01 | 0.30966E 01 | 0.42877E 00 | 0.67493E 01 |
| | | | 1 | 30.0 | 4.59 | 2.45 | 0.88088E 01 | 0.5664E 01 | 0.31105E 01 | 0.5117E 01 | 0.6617E 00 | 0.36874E 00 |
| | | | 2 | 30.0 | 4.59 | 2.45 | 0.10106E 01 | 0.5184E 01 | 0.2604E 01 | 0.5239E 01 | 0.6617E 00 | 0.36874E 00 |
| | | | 3 | 30.0 | 4.59 | 2.45 | 0.38428E 01 | 0.1094E 01 | 0.1603E 01 | 0.2457E 01 | 0.7387E 00 | 0.50460E 01 |
| | | | 4 | 30.0 | 4.59 | 2.45 | 0.77734E 01 | 0.1094E 01 | 0.1603E 01 | 0.2457E 01 | 0.7387E 00 | 0.50460E 01 |
| | | | 5 | 30.0 | 4.59 | 2.45 | 0.34500E 01 | 0.8040E 00 | 0.94575E 00 | 0.19277E 01 | 0.23077E 00 | 0.57150E 01 |
| | | | 6 | 30.0 | 4.59 | 2.45 | 0.24603E 01 | 0.70277E 01 | 0.49490E 01 | 0.24177E 01 | 0.23077E 00 | 0.57150E 01 |
| | | | 7 | 30.0 | 4.59 | 2.45 | 0.59584E 01 | 0.2646E 01 | 0.30020E 01 | 0.20020E 01 | 0.69010E 00 | 0.20055E 01 |
| | | | 8 | 30.0 | 4.59 | 2.45 | 0.59584E 01 | 0.2646E 01 | 0.30020E 01 | 0.20020E 01 | 0.69010E 00 | 0.20055E 01 |
| | | | 9 | 30.0 | 4.59 | 2.45 | 0.30309E 01 | 0.21436E 01 | 0.3529E 01 | 0.1666E 01 | 0.28837E 00 | 0.20244E 01 |
| | | | 10 | 30.0 | 4.59 | 2.45 | 0.30309E 01 | 0.21436E 01 | 0.3529E 01 | 0.1666E 01 | 0.28837E 00 | 0.20244E 01 |
| | | | 1 | 50.0 | 4.59 | 2.45 | 0.92823E 01 | 0.31245E 00 | 0.34428E 01 | 0.50033E 00 | 0.74422E 00 | 0.48827E 00 |
| | | | 2 | 50.0 | 4.59 | 2.45 | 0.81026E 01 | 0.3940E 00 | 0.20844E 01 | 0.30999E 01 | 0.4422E 00 | 0.49509E 00 |
| | | | 3 | 50.0 | 4.59 | 2.45 | 0.10179E 01 | 0.63373E 00 | 0.23307E 01 | 0.24026E 01 | 0.2026E 00 | 0.69449E 01 |
| | | | 4 | 50.0 | 4.59 | 2.45 | 0.22147E 01 | 0.3340E 00 | 0.23307E 01 | 0.24026E 01 | 0.2026E 00 | 0.69449E 01 |
| | | | 5 | 50.0 | 4.59 | 2.45 | 0.29019E 01 | 0.26247E 00 | 0.24455E 01 | 0.24026E 01 | 0.2026E 00 | 0.69449E 01 |
| | | | 6 | 50.0 | 4.59 | 2.45 | 0.26657E 01 | 0.26247E 00 | 0.24455E 01 | 0.24026E 01 | 0.2026E 00 | 0.69449E 01 |
| | | | 7 | 50.0 | 4.59 | 2.45 | 0.17666E 01 | 0.29244E 01 | 0.21682E 01 | 0.21155E 01 | 0.28154E 00 | 0.23593E 00 |
| | | | 8 | 50.0 | 4.59 | 2.45 | 0.17666E 01 | 0.29244E 01 | 0.21682E 01 | 0.21155E 01 | 0.28154E 00 | 0.23593E 00 |
| | | | 9 | 50.0 | 4.59 | 2.45 | 0.17666E 01 | 0.29244E 01 | 0.21682E 01 | 0.21155E 01 | 0.28154E 00 | 0.23593E 00 |
| | | | 10 | 50.0 | 4.59 | 2.45 | 0.17666E 01 | 0.29244E 01 | 0.21682E 01 | 0.21155E 01 | 0.28154E 00 | 0.23593E 00 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRIME | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|----------|-----------|------|-------|-------|-------------|-------------|-------------|-------------|-------------|--------------|
| 154 27.8 | 15.0 | 6 0.0 | 4.59 | -6.60 | 12.45 | 0.13542E 02 | 0.16931E 00 | 0.51092E 00 | 0.22892E 01 | 0.22279E 01 | 0.24688E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.16672E 02 | 0.15819E 01 | 0.53609E 00 | 0.21437E 01 | 0.23200E 01 | 0.26272E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.19902E 02 | 0.19940E 01 | 0.53944E 00 | 0.25570E 01 | 0.23936E 01 | 0.29181E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.19285E 02 | 0.19860E 01 | 0.54209E 00 | 0.21580E 01 | 0.22135E 01 | 0.17540E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.15844E 02 | 0.16094E 01 | 0.51583E 00 | 0.21716E 01 | 0.22428E 01 | 0.19564E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.18605E 02 | 0.16261E 01 | 0.50637E 00 | 0.24932E 01 | 0.24770E 01 | 0.29535E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.12259E 02 | 0.18159E 01 | 0.51128E 00 | 0.10893E 01 | 0.15225E 02 | 0.44662E -01 |
| | 7 10.0 | | 4.59 | -6.60 | 12.45 | 0.18167E 02 | 0.18935E 01 | 0.5092E 01 | 0.3912E 00 | 0.03567E 00 | 0.44407E 00 |
| | | | 4.59 | 0.00 | 12.45 | 0.17592E 02 | 0.20592E 01 | 0.54072E 00 | 0.25339E 01 | 0.25700E 01 | 0.37444E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.11020E 02 | 0.12033E 01 | 0.48030E 00 | 0.3350E 00 | 0.39883E 01 | 0.62855E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.13631E 02 | 0.13735E 01 | 0.48094E 01 | 0.21550E 01 | 0.23888E 01 | 0.31519E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.18964E 02 | 0.18937E 01 | 0.51988E 00 | 0.16946E 01 | 0.20562E 01 | 0.28885E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.21277E 02 | 0.22334E 01 | 0.55440E 00 | 0.35755E 01 | 0.30510E 01 | 0.28005E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.18364E 02 | 0.15551E 01 | 0.42566E 00 | 0.35755E 01 | 0.30510E 01 | 0.28005E 01 |
| | 8 20.0 | | 4.59 | -6.60 | 12.45 | 0.18364E 02 | 0.12704E 00 | 0.38666E 00 | 0.3046E 00 | 0.51276E 00 | 0.34237E 00 |
| | | | 4.59 | 0.00 | 12.45 | 0.20703E 02 | 0.17409E 01 | 0.39995E 00 | 0.17964E 01 | 0.41094E 01 | 0.21225E 00 |
| | | | 4.59 | 20.32 | 12.45 | 0.19877E 02 | 0.19379E 01 | 0.48094E 01 | 0.40237E 01 | 0.41224E 01 | 0.45229E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.20703E 02 | 0.19707E 01 | 0.48094E 01 | 0.32180E 01 | 0.46712E 01 | 0.35085E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.17600E 02 | 0.17600E 01 | 0.42566E 00 | 0.32180E 01 | 0.46712E 01 | 0.45229E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.18301E 02 | 0.18301E 01 | 0.42566E 00 | 0.22031E 01 | 0.41467E 01 | 0.33133E 01 |
| | 9 30.0 | | 4.59 | -6.60 | 12.45 | 0.18758E 02 | 0.1512E 00 | 0.36984E 00 | 0.28398E 00 | 0.52507E 00 | 0.3701E 00 |
| | | | 4.59 | 0.00 | 12.45 | 0.19941E 02 | 0.19631E 01 | 0.3361E 01 | 0.62398E 01 | 0.71258E 01 | 0.39235E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.20274E 02 | 0.20640E 01 | 0.3361E 01 | 0.26031E 01 | 0.31928E 01 | 0.45214E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.19892E 02 | 0.20743E 01 | 0.33333E 01 | 0.33333E 01 | 0.35998E 01 | 0.39686E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.2217E 02 | 0.2443E 01 | 0.39821E 01 | 0.5091E 01 | 0.5689E 01 | 0.60271E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.18584E 02 | 0.18339E 01 | 0.40969E 00 | 0.41516E 01 | 0.45067E 01 | 0.47701E 01 |
| | 10 50.0 | | 4.59 | -6.60 | 12.45 | 0.19600E 02 | 0.14593E 01 | 0.3116E 01 | 0.37773E 01 | 0.49667E 01 | 0.39116E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.17914E 02 | 0.1242E 00 | 0.29116E 01 | 0.3872E 00 | 0.5910E 00 | 0.70071E 00 |
| | | | 4.59 | 20.32 | 12.45 | 0.17593E 02 | 0.10839E 00 | 0.2531E 01 | 0.99628E 00 | 0.49814E 00 | 0.41935E 00 |
| | | | 4.59 | -6.60 | 12.45 | 0.20377E 02 | 0.11555E 01 | 0.32833E 01 | 0.4142E 01 | 0.5170E 01 | 0.42994E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.20146E 02 | 0.20670E 01 | 0.32833E 01 | 0.33333E 01 | 0.4662E 01 | 0.5117E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.18908E 02 | 0.18339E 01 | 0.37433E 01 | 0.6672E 01 | 0.60354E 01 | 0.7442E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.14058E 02 | 0.13180E 01 | 0.18965E 00 | 0.2228E 01 | 0.40152E 01 | 0.47130E 01 |
| | 12 -10.0 | | 4.59 | 0.00 | 12.45 | 0.1599E 01 | 0.1698E 00 | 0.3157E 00 | 0.130E 01 | 0.1751E 01 | 0.20271E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.1707E 02 | 0.1928E 01 | 0.3847E 00 | 0.1269E 01 | 0.1799E 01 | 0.24740E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.2008E 02 | 0.1931E 01 | 0.3522E 01 | 0.2169E 01 | 0.2198E 01 | 0.35740E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.1434E 01 | 0.1108E 00 | 0.3084E 00 | 0.2180E 01 | 0.2625E 01 | 0.29097E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.1340E 01 | 0.1034E 00 | 0.3084E 00 | 0.1884E 01 | 0.2180E 01 | 0.29097E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.1319E 02 | 0.1034E 01 | 0.3084E 00 | 0.1884E 01 | 0.2180E 01 | 0.29097E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.18104E 02 | 0.1887E 00 | 0.2679E 01 | 0.2608E 01 | 0.4956E 01 | 0.3457E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.15643E 02 | 0.1540E 01 | 0.3191E 01 | 0.3582E 01 | 0.3914E 01 | 0.4299E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.2045E 02 | 0.1663E 01 | 0.3084E 00 | 0.2664E 01 | 0.4956E 01 | 0.3457E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.1282E 02 | 0.1502E 01 | 0.2622E 00 | 0.1208E 01 | 0.2008E 01 | 0.2330E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.1127E 01 | 0.13770E 01 | 0.2622E 00 | 0.26456E 01 | 0.2456E 01 | 0.3257E 01 |
| | 13 -20.0 | | 4.59 | -6.60 | 12.45 | 0.1404E 02 | 0.1404E 00 | 0.2679E 01 | 0.2608E 01 | 0.4956E 01 | 0.3457E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.15643E 02 | 0.1540E 01 | 0.3191E 01 | 0.3582E 01 | 0.3914E 01 | 0.4299E 01 |
| | | | 4.59 | 20.32 | 12.45 | 0.2045E 02 | 0.1663E 01 | 0.3084E 00 | 0.2664E 01 | 0.4956E 01 | 0.3457E 01 |
| | | | 4.59 | -6.60 | 12.45 | 0.1282E 02 | 0.1502E 01 | 0.2622E 00 | 0.1208E 01 | 0.2008E 01 | 0.2330E 01 |
| | | | 4.59 | 0.00 | 12.45 | 0.1127E 01 | 0.13770E 01 | 0.2622E 00 | 0.26456E 01 | 0.2456E 01 | 0.3257E 01 |

8VMT 2427243 SHIP WAKE TURBULENCE TEST

| PUM VEL | ROLL | YF | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----------|-------|------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 154 | 22.8 | 15.0 | 13 | -20.0 | 4.59 | 4.57 | 0.8211E 01 | 0.15475E 00 | 0.21033E 01 | 0.19707E 01 | 0.25970E 01 | 0.21877E 01 |
| | | | 10 | | 4.59 | 4.57 | 0.13201E 02 | 0.93366E 01 | 0.10233E 00 | 0.11770E 01 | 0.83242E 00 | 0.81255E 01 |
| | | 14 | -30.0 | 1 | 4.59 | 4.57 | 0.80229E 01 | 0.51789E 00 | 0.36801E 01 | 0.30426E 01 | 0.43806E 01 | 0.26151E 01 |
| | | | | 2 | 4.59 | 4.57 | 0.15081E 02 | 0.00323E 00 | 0.11373E 01 | 0.27704E 01 | 0.44921E 01 | 0.30507E 01 |
| | | | | 3 | 4.59 | 4.57 | 0.13009E 02 | 0.19232E 00 | 0.13705E 01 | 0.27099E 01 | 0.43239E 01 | 0.30167E 01 |
| | | | | 4 | 4.59 | 4.57 | 0.20671E 01 | 0.27376E 00 | 0.35099E 01 | 0.30957E 01 | 0.43765E 01 | 0.30167E 01 |
| | | | | 5 | 4.59 | 4.57 | 0.74359E 01 | 0.00733E 00 | 0.35099E 01 | 0.30957E 01 | 0.43765E 01 | 0.30167E 01 |
| | | | | 6 | 4.59 | 4.57 | 0.73000E 01 | 0.28200E 00 | 0.25308E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 7 | 4.59 | 4.57 | 0.13000E 02 | 0.15178E 00 | 0.25308E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 8 | 4.59 | 4.57 | 0.13457E 02 | 0.00323E 00 | 0.25308E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 9 | 4.59 | 4.57 | 0.39457E 01 | 0.93366E 00 | 0.18706E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | 15 | -50.0 | 1 | 4.59 | 4.57 | 0.13089E 02 | 0.93366E 00 | 0.18706E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 2 | 4.59 | 4.57 | 0.19559E 02 | 0.00323E 00 | 0.27400E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 3 | 4.59 | 4.57 | 0.25101E 02 | 0.96962E 00 | 0.27400E 01 | 0.27897E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 4 | 4.59 | 4.57 | 0.21456E 02 | 0.25375E 01 | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 5 | 4.59 | 4.57 | 0.19968E 02 | 0.00323E 00 | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 6 | 4.59 | 4.57 | 0.18981E 02 | 0.43756E 01 | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 7 | 4.59 | 4.57 | 0.14310E 02 | 0.10121E 02 | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 8 | 4.59 | 4.57 | | | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 9 | 4.59 | 4.57 | | | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |
| | | | | 10 | 4.59 | 4.57 | | | 0.39632E 01 | 0.31222E 01 | 0.43806E 01 | 0.30507E 01 |

BVMT 2427243 SHIP WAKE TURBULENCE TEST

| 0UM VFL | ROLL TP | YAW PRIME | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|---|------------|--------------|-------------|-------------|-------------|-------------|
| 155 | 10.2 | 15.0 | 2 | 0.0 | | 0.6059E 01 | 0.09113E -01 | 0.2332E 00 | 0.14761E 01 | 0.97930E 00 | 0.93512E 00 |
| | | | 1 | 0.0 | | 0.3539E 00 | 0.1729E 00 | 0.1262E 00 | 0.13580E 01 | 0.9429E 00 | 0.10723E 01 |
| | | | 3 | 0.0 | | 0.9112E 00 | 0.04309E 00 | 0.5026E 00 | 0.13774E 01 | 0.9729E 00 | 0.17192E 01 |
| | | | 4 | 0.0 | | 0.2112E 00 | 0.1427E 00 | 0.5720E 00 | 0.31031E 01 | 0.9749E 00 | 0.16177E 00 |
| | | | 5 | 0.0 | | 0.4422E 00 | 0.03276E 00 | 0.7955E 00 | 0.6390E 00 | 0.6990E 00 | 0.5477E 00 |
| | | | 7 | 0.0 | | 0.2577E 00 | 0.0428E 00 | 0.3818E 00 | 0.61044E 01 | 0.6290E 01 | 0.8810E 01 |
| | | | 8 | 0.0 | | 0.8466E 00 | 0.09094E 01 | 0.4177E 00 | 0.1377E 00 | 0.4108E 00 | 0.8810E 01 |
| | | | 10 | 0.0 | | 0.6066E 00 | 0.02927E 01 | 0.5330E -01 | 0.02816E 00 | 0.62717E 00 | 0.3943E 00 |
| | 3 | 10.0 | 1 | 0.0 | | 0.8726E 01 | 0.07602E -01 | 0.7335E 00 | 0.4405E 00 | 0.6577E 00 | 0.6118E 00 |
| | | | 2 | 0.0 | | 0.9969E 00 | 0.07186E 00 | 0.2582E 00 | 0.4902E 00 | 0.6743E 00 | 0.7118E 00 |
| | | | 3 | 0.0 | | 0.7140E 00 | 0.03947E 00 | 0.6045E 00 | 0.1947E 00 | 0.6748E 01 | 0.1332E 01 |
| | | | 5 | 0.0 | | 0.9911E 00 | 0.1137E 00 | 0.7073E 00 | 0.0277E 00 | 0.3690E 01 | 0.0322E 00 |
| | | | 7 | 0.0 | | 0.8342E 00 | 0.1184E 00 | 0.1466E 00 | 0.1051E 01 | 0.1160E 01 | 0.9692E 01 |
| | | | 8 | 0.0 | | 0.4063E 00 | 0.1198E 01 | 0.3318E 00 | 0.1516E 01 | 0.1160E 01 | 0.1036E 01 |
| | | | 9 | 0.0 | | 0.8867E 00 | 0.03133E 00 | 0.9505E 00 | 0.1704E 00 | 0.4620E 01 | 0.1705E 01 |
| | | | 10 | 0.0 | | 0.4069E 00 | 0.02878E 01 | 0.3528E 00 | 0.15800E 01 | 0.1117E 01 | 0.1156E 01 |
| | 4 | 20.0 | 1 | 0.0 | | 0.8753E 00 | 0.14182E 00 | 0.2040E 01 | 0.2613E 00 | 0.39207E 00 | 0.2439E 00 |
| | | | 3 | 0.0 | | 0.4207E 00 | 0.1316E 00 | 0.1039E 00 | 0.1239E 01 | 0.12339E 01 | 0.2258E 01 |
| | | | 4 | 0.0 | | 0.9676E 00 | 0.03301E 00 | 0.3726E 00 | 0.23013E 00 | 0.22590E 01 | 0.02261E 01 |
| | | | 5 | 0.0 | | 0.3923E 00 | 0.03563E 00 | 0.2934E 00 | 0.17645E 00 | 0.18022E 00 | 0.03981E 01 |
| | | | 7 | 0.0 | | 0.8963E 00 | 0.03214E 01 | 0.1323E 00 | 0.17645E 00 | 0.19439E 01 | 0.03981E 01 |
| | | | 8 | 0.0 | | 0.8891E 00 | 0.02337E 00 | 0.1790E 00 | 0.4416E 00 | 0.19439E 01 | 0.03981E 01 |
| | | | 9 | 0.0 | | 0.3466E 00 | 0.02337E 00 | 0.1790E 00 | 0.4416E 00 | 0.19439E 01 | 0.03981E 01 |
| | | | 10 | 0.0 | | 0.2741E 00 | 0.01939E 01 | 0.1605E 00 | 0.1500E 01 | 0.1040E 01 | 0.02751E 01 |
| | 5 | 30.0 | 1 | 0.0 | | 0.8892E 00 | 0.17627E 00 | 0.2295E 01 | 0.3065E 00 | 0.4674E 00 | 0.2490E 00 |
| | | | 2 | 0.0 | | 0.9277E 00 | 0.0443E 01 | 0.2362E 00 | 0.0293E 00 | 0.2104E 00 | 0.2490E 00 |
| | | | 3 | 0.0 | | 0.4702E 00 | 0.07274E 00 | 0.7713E 00 | 0.0293E 00 | 0.2104E 00 | 0.2490E 00 |
| | | | 5 | 0.0 | | 0.4088E 00 | 0.0712E 00 | 0.9113E 00 | 0.0293E 00 | 0.2104E 00 | 0.2490E 00 |
| | | | 7 | 0.0 | | 0.3207E 00 | 0.0712E 00 | 0.1522E 00 | 0.0293E 00 | 0.2104E 00 | 0.2490E 00 |
| | | | 8 | 0.0 | | 0.3795E 00 | 0.0712E 00 | 0.1622E 00 | 0.0293E 00 | 0.2104E 00 | 0.2490E 00 |
| | | | 9 | 0.0 | | 0.2633E 00 | 0.08624E 01 | 0.9903E -01 | 0.1862E 01 | 0.1635E 00 | 0.4264E 00 |
| | | | 10 | 0.0 | | 0.2633E 00 | 0.08624E 01 | 0.9903E -01 | 0.1862E 01 | 0.1635E 00 | 0.4264E 00 |
| | 6 | 50.0 | 1 | 0.0 | | 0.9276E 00 | 0.02624E 00 | 0.2959E 01 | 0.5413E 00 | 0.7361E 00 | 0.3208E 00 |
| | | | 3 | 0.0 | | 0.1088E 00 | 0.09379E 00 | 0.1826E 00 | 0.8339E 00 | 0.1713E 00 | 0.1713E 00 |
| | | | 4 | 0.0 | | 0.3011E 00 | 0.09530E 00 | 0.1762E 00 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | | | 5 | 0.0 | | 0.4688E 00 | 0.11670E 00 | 0.1989E 01 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | | | 7 | 0.0 | | 0.9322E 00 | 0.03375E 00 | 0.1809E 00 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | | | 8 | 0.0 | | 0.1715E 00 | 0.02375E 00 | 0.1809E 00 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | | | 9 | 0.0 | | 0.1715E 00 | 0.02375E 00 | 0.1809E 00 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | | | 10 | 0.0 | | 0.1715E 00 | 0.02375E 00 | 0.1809E 00 | 0.0228E 01 | 0.3605E 01 | 0.0228E 01 |
| | 8 | -10.0 | 1 | 0.0 | | 0.3763E 00 | 0.4396E 00 | 0.2040E 01 | 0.9144E 00 | 0.83120E 00 | 0.9287E 00 |
| | | | 2 | 0.0 | | 0.5210E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 3 | 0.0 | | 0.8712E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 4 | 0.0 | | 0.9747E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 5 | 0.0 | | 0.3477E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 7 | 0.0 | | 0.4700E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 8 | 0.0 | | 0.6440E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 9 | 0.0 | | 0.6440E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | | | 10 | 0.0 | | 0.6440E 00 | 0.1550E 01 | 0.1542E 00 | 0.0228E 01 | 0.1596E 00 | 0.1146E 01 |
| | 9 | -20.0 | 1 | 0.0 | | 0.3788E 00 | 0.7822E 00 | 0.2979E 01 | 0.1587E 00 | 0.1587E 00 | 0.1587E 00 |
| | | | 2 | 0.0 | | 0.5529E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 3 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 4 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 5 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 7 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 8 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 9 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |
| | | | 10 | 0.0 | | 0.5719E 00 | 0.1570E 00 | 0.1499E 00 | 0.2299E 01 | 0.2299E 01 | 0.2299E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | NO. C | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-------|-------|------|-------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 155 | 10.2 | 15.0 | 9 | -20.0 | 10 | 9.18 | 20.32 | 4.57 | 0.37909E 01 | -0.45417E 00 | -0.97881E 00 | 0.11651E 00 | 0.10694E 00 | 0.12069E 01 |
| | | | 10 | | | 9.18 | 20.32 | 4.57 | 0.65918E 01 | 0.46620E 01 | -0.46354E 01 | 0.25459E 00 | 0.42056E 00 | 0.72607E 01 |
| | | | 1 | -30.0 | | 9.18 | 6.00 | 4.57 | 0.48399E 01 | 0.24956E 00 | 0.91791E 00 | 0.62799E 00 | 0.17977E 00 | 0.05128E 00 |
| | | | 2 | | | 9.18 | 6.00 | 4.57 | 0.55605E 00 | 0.49168E 01 | 0.17886E 00 | 0.23534E 00 | 0.17977E 00 | 0.38129E 00 |
| | | | 3 | | | 9.18 | 6.00 | 4.57 | 0.57587E 00 | 0.27677E 00 | 0.19244E 00 | 0.16279E 00 | 0.17977E 00 | 0.28129E 00 |
| | | | 4 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 5 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 6 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 7 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 8 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 9 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 10 | | | 9.18 | 6.00 | 4.57 | 0.43030E 00 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 11 | -30.0 | | 9.18 | 6.00 | 4.57 | 0.38446E 00 | 0.30280E 00 | 0.17886E 00 | 0.23534E 00 | 0.17977E 00 | 0.38129E 00 |
| | | | 12 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 13 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 14 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 15 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 16 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 17 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 18 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 19 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 20 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 21 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 22 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 23 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 24 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 25 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 26 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 27 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 28 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 29 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |
| | | | 30 | | | 9.18 | 6.00 | 4.57 | 0.32080E 01 | 0.00000E 00 | 0.22770E 00 | 0.16279E 00 | 0.17977E 00 | 0.17977E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| UM VEL | ROLL TP | WAKE PROFILE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|--------------|------|-------|-------|---------|---------|---------|---------|---------|---------|
| 156 22-8 | 1 | 0-0 | 9-18 | -6-60 | 12-45 | 0-1391E | 0-3460E | 0-1769E | 0-2183E | 0-4919E | 0-2417E |
| | | | 9-18 | 0-60 | 12-45 | 0-1984E | 0-1287E | 0-0951E | 0-1823E | 0-1408E | 0-2314E |
| | | | 9-18 | 0-60 | 12-45 | 0-1972E | 0-0903E | 0-1552E | 0-1705E | 0-1444E | 0-2314E |
| | | | 9-18 | 0-60 | 12-45 | 0-1457E | 0-4568E | 0-1767E | 0-2105E | 0-1294E | 0-2314E |
| | | | 9-18 | 0-60 | 12-45 | 0-1845E | 0-1882E | 0-2017E | 0-2105E | 0-1294E | 0-2314E |
| | | | 9-18 | 0-60 | 12-45 | 0-1058E | 0-5217E | 0-1480E | 0-4471E | 0-5487E | 0-1367E |
| 2 | 10-0 | | 9-18 | 0-60 | 12-45 | 0-1811E | 0-1933E | 0-1597E | 0-3910E | 0-1974E | 0-4919E |
| | | | 9-18 | 0-60 | 12-45 | 0-1103E | 0-1725E | 0-1108E | 0-2629E | 0-1753E | 0-3910E |
| | | | 9-18 | 0-60 | 12-45 | 0-1637E | 0-2135E | 0-1482E | 0-3525E | 0-2321E | 0-5487E |
| | | | 9-18 | 0-60 | 12-45 | 0-2985E | 0-0672E | 0-0935E | 0-1849E | 0-1084E | 0-3910E |
| | | | 9-18 | 0-60 | 12-45 | 0-1788E | 0-3235E | 0-1293E | 0-2649E | 0-1994E | 0-3910E |
| | | | 9-18 | 0-60 | 12-45 | 0-1728E | 0-1819E | 0-1760E | 0-2549E | 0-1994E | 0-3910E |
| | | | 9-18 | 0-60 | 12-45 | 0-1618E | 0-1480E | 0-1683E | 0-3582E | 0-2549E | 0-3910E |
| 3 | 20-0 | | 9-18 | 0-60 | 12-45 | 0-1827E | 0-8692E | 0-3913E | 0-4260E | 0-2914E | 0-7325E |
| | | | 9-18 | 0-60 | 12-45 | 0-1986E | 0-2431E | 0-1709E | 0-3608E | 0-2504E | 0-5487E |
| | | | 9-18 | 0-60 | 12-45 | 0-1972E | 0-3920E | 0-1440E | 0-4004E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-9322E | 0-1933E | 0-4006E | 0-3508E | 0-3321E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1695E | 0-1966E | 0-3243E | 0-3007E | 0-3321E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1844E | 0-0261E | 0-1165E | 0-3403E | 0-1636E | 0-4919E |
| 4 | 30-0 | | 9-18 | 0-60 | 12-45 | 0-1856E | 0-3785E | 0-1149E | 0-4622E | 0-2532E | 0-5487E |
| | | | 9-18 | 0-60 | 12-45 | 0-2223E | 0-6252E | 0-1920E | 0-5022E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-2001E | 0-1847E | 0-2028E | 0-4004E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1982E | 0-2714E | 0-1457E | 0-3608E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1873E | 0-2714E | 0-1115E | 0-3608E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-4710E | 0-2312E | 0-1612E | 0-4710E | 0-2312E | 0-6033E |
| 5 | 50-0 | | 9-18 | 0-60 | 12-45 | 0-2028E | 0-0556E | 0-0417E | 0-4622E | 0-1084E | 0-7325E |
| | | | 9-18 | 0-60 | 12-45 | 0-2488E | 0-1323E | 0-3887E | 0-4622E | 0-1084E | 0-7325E |
| | | | 9-18 | 0-60 | 12-45 | 0-1208E | 0-1759E | 0-2885E | 0-4326E | 0-1084E | 0-7325E |
| | | | 9-18 | 0-60 | 12-45 | 0-3700E | 0-1815E | 0-3078E | 0-4326E | 0-1084E | 0-7325E |
| | | | 9-18 | 0-60 | 12-45 | 0-1988E | 0-1815E | 0-3078E | 0-4326E | 0-1084E | 0-7325E |
| 7 | -10-0 | | 9-18 | 0-60 | 12-45 | 0-8573E | 0-1605E | 0-2561E | 0-2049E | 0-1205E | 0-2914E |
| | | | 9-18 | 0-60 | 12-45 | 0-1547E | 0-1518E | 0-2808E | 0-4260E | 0-3243E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1046E | 0-2699E | 0-2150E | 0-4260E | 0-3243E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1778E | 0-1000E | 0-2554E | 0-2150E | 0-3243E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-4429E | 0-0692E | 0-0028E | 0-2150E | 0-3243E | 0-6033E |
| 8 | -20-0 | | 9-18 | 0-60 | 12-45 | 0-2488E | 0-3785E | 0-1149E | 0-4622E | 0-2532E | 0-5487E |
| | | | 9-18 | 0-60 | 12-45 | 0-2001E | 0-1847E | 0-2028E | 0-4004E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1982E | 0-2714E | 0-1457E | 0-3608E | 0-2774E | 0-6033E |
| | | | 9-18 | 0-60 | 12-45 | 0-1873E | 0-2714E | 0-1115E | 0-3608E | 0-2774E | 0-6033E |

BVWT 242743 SHIP WAKE TURBULENCE TEST

| RUN | VEL | NOIL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-------|-------|------|--------|------|-------------|-------------|--------------|------------|-------------|-------------|
| 156 | 22.8 | 15.0 | 8 | -20.0 | 10 | 9.18 | -20.32 | 4.57 | 0.85370E 01 | 0.61409E 00 | -0.75430E 01 | 0.1780E 01 | 0.35487E 01 | 0.25412E 01 |
| | | | 9 | | | 9.18 | | | 0.1133E 02 | 0.92370E 01 | 0.10190E 00 | 0.1207E 01 | 0.85564E 00 | 0.53795E 01 |
| | | | 10 | | | 9.18 | | | 0.92271E 01 | 0.7041E 00 | 0.0517E 00 | 0.3693E 01 | 0.3323E 01 | 0.3457E 01 |
| | | | 1 | -30.0 | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 2 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 3 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 4 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 5 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 6 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 7 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 8 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 9 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 10 | | | 9.18 | 0.00 | 2.2 | 0.1204E 01 | 0.1507E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 1 | -50.0 | | 9.18 | 0.00 | 2.2 | 0.34292E 01 | 0.43176E 00 | 0.32531E 01 | 0.3208E 01 | 0.24664E 01 | 0.27235E 01 |
| | | | 2 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 3 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 4 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 5 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 6 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 7 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 8 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 9 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |
| | | | 10 | | | 9.18 | 0.00 | 2.2 | 0.18025E 01 | 0.13078E 00 | 0.05147E 00 | 0.0000E 00 | 0.0000E 00 | 0.0000E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|-----|-----------|-----------|---------|-----------|-----------|----------|
| 157 | 10.4 | 0.0 | 2 | 0.0 | 1.2 | 0.77305E | 0.451706E | 0.0 | 0.99901E | 0.10639E | 0.94148E |
| | | | 3 | 0.0 | 1.2 | 0.460146E | 0.272444E | 0.0 | 0.437391E | 0.119050E | 0.83918E |
| | | | 4 | 0.0 | 1.2 | 0.981199E | 0.675294E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 5 | 0.0 | 1.2 | 0.954869E | 0.208448E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 6 | 0.0 | 1.2 | 0.420344E | 0.552551E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 7 | 0.0 | 1.2 | 0.916688E | 0.552551E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 8 | 0.0 | 1.2 | 0.633188E | 0.447111E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 9 | 0.0 | 1.2 | 0.817074E | 0.640099E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 10 | 0.0 | 1.2 | 0.215971E | 0.209274E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 11 | 0.0 | 1.2 | 0.989366E | 0.229174E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 12 | 0.0 | 1.2 | 0.687449E | 0.34933E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 13 | 0.0 | 1.2 | 0.90976E | 0.23316E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 14 | 0.0 | 1.2 | 0.857106E | 0.53207E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 15 | 0.0 | 1.2 | 0.50282E | 0.48507E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 16 | 0.0 | 1.2 | 0.32017E | 0.01923E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 17 | 0.0 | 1.2 | 0.50127E | 0.02933E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 18 | 0.0 | 1.2 | 0.13664E | 0.056784E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 19 | 0.0 | 1.2 | 0.9002E | 0.12354E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 20 | 0.0 | 1.2 | 0.44355E | 0.23447E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 21 | 0.0 | 1.2 | 0.94935E | 0.53777E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 22 | 0.0 | 1.2 | 0.98732E | 0.94477E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 23 | 0.0 | 1.2 | 0.77320E | 0.53551E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 24 | 0.0 | 1.2 | 0.31160E | 0.09551E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 25 | 0.0 | 1.2 | 0.91809E | 0.29820E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 26 | 0.0 | 1.2 | 0.9093E | 0.06831E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 27 | 0.0 | 1.2 | 0.71368E | 0.22946E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 28 | 0.0 | 1.2 | 0.10824E | 0.58174E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 29 | 0.0 | 1.2 | 0.10423E | 0.15364E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 30 | 0.0 | 1.2 | 0.9993E | 0.70682E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 31 | 0.0 | 1.2 | 0.58749E | 0.41669E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 32 | 0.0 | 1.2 | 0.79908E | 0.55518E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 33 | 0.0 | 1.2 | 0.27106E | 0.38901E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 34 | 0.0 | 1.2 | 0.53711E | 0.78675E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 35 | 0.0 | 1.2 | 0.62E | 0.61840E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 36 | 0.0 | 1.2 | 0.7895E | 0.44352E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 37 | 0.0 | 1.2 | 0.31820E | 0.61817E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 38 | 0.0 | 1.2 | 0.58909E | 0.92929E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 39 | 0.0 | 1.2 | 0.59713E | 0.66409E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 40 | 0.0 | 1.2 | 0.37106E | 0.54609E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 41 | 0.0 | 1.2 | 0.7895E | 0.44352E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 42 | 0.0 | 1.2 | 0.31820E | 0.61817E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 43 | 0.0 | 1.2 | 0.58909E | 0.92929E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 44 | 0.0 | 1.2 | 0.59713E | 0.66409E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 45 | 0.0 | 1.2 | 0.37106E | 0.54609E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 46 | 0.0 | 1.2 | 0.7895E | 0.44352E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 47 | 0.0 | 1.2 | 0.31820E | 0.61817E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 48 | 0.0 | 1.2 | 0.58909E | 0.92929E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 49 | 0.0 | 1.2 | 0.59713E | 0.66409E | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | 50 | 0.0 | 1.2 | 0.37106E | 0.54609E | 0.0 | 0.0 | 0.0 | 0.0 |

8VNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|---------|------|-----|-----|-------|----|------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 157 | 10.4 | 0.0 | 9 | -20.0 | 9 | 9.18 | 4.57 | 0.33910E 01 | -0.24520E 00 | -0.26784E 00 | 0.93957E 00 | 0.88971E 00 | 0.10119E 01 |
| | | | 10 | -30.0 | 10 | 9.18 | 4.57 | 0.63442E 01 | -0.46284E 01 | -0.39073E 01 | 0.61041E 00 | 0.43171E 00 | 0.70534E 01 |
| | | | | | 1 | 9.18 | 4.5 | 0.29705E 01 | 0.13628E 00 | 0.15361E 00 | 0.155E 00 | 0.24E 00 | 0.777E 00 |
| | | | | | 2 | 9.18 | 4.5 | 0.39996E 01 | -0.6280E 00 | 0.12893E 00 | 0.1502E 00 | 0.330E 00 | 0.213E 00 |
| | | | | | 3 | 9.18 | 4.5 | 0.85821E 01 | -0.23176E 00 | 0.0781E 00 | 0.4206E 00 | 0.20E 00 | 0.43397E 00 |
| | | | | | 4 | 9.18 | 4.5 | 0.63013E 01 | -0.10473E 00 | 0.08200E 00 | 0.17892E 00 | 0.12E 00 | 0.17168E 00 |
| | | | | | 5 | 9.18 | 4.5 | 0.99724E 01 | -0.27976E 01 | 0.02400E 00 | 0.10292E 00 | 0.09E 00 | 0.32408E 00 |
| | | | | | 6 | 9.18 | 4.5 | 0.20161E 01 | -0.11760E 00 | 0.14893E 00 | 0.15140E 00 | 0.13E 00 | 0.17918E 00 |
| | | | | | 7 | 9.18 | 4.5 | 0.44103E 01 | -0.17761E 00 | 0.0233E 00 | 0.15742E 00 | 0.12E 00 | 0.11558E 00 |
| | | | | | 8 | 9.18 | 4.5 | 0.11313E 01 | -0.45751E 01 | -0.2233E 00 | 0.16553E 00 | 0.12E 00 | 0.11558E 00 |
| | | | | | 9 | 9.18 | 4.5 | 0.44688E 01 | 0.45751E 01 | -0.2233E 00 | 0.60553E 00 | 0.42E 00 | 0.11558E 00 |
| | | | | | 10 | 9.18 | 4.5 | 0.14794E 01 | 0.76117E 01 | 0.108E 00 | 1.582E 00 | 1.605E 00 | 0.14853E 00 |
| | | | | | 11 | 9.18 | 4.5 | 0.48731E 01 | -0.74817E 01 | 0.12764E 00 | 1.582E 00 | 1.605E 00 | 0.14853E 00 |
| | | | | | 2 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 3 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 4 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 5 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 6 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 7 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 8 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 9 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |
| | | | | | 10 | 9.18 | 4.5 | 0.98234E 01 | -0.62343E 00 | 0.07494E 00 | 0.73609E 00 | 0.70E 00 | 0.2220E 00 |

8VWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | VY | VZ | S.D. | VX | VY | VZ | S.D. |
|-----|------|------|----|-------|-------|------|--------|------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|------|
| 158 | 22.6 | 0.0 | 8 | -20.0 | 9 | 9.18 | -20.32 | 4.57 | 0.64920E 01 | 0.53746E 00 | 0.90221E 00 | -0.10346E 00 | 0.19139E 01 | 0.19139E 01 | 0.19759E 01 | 0.18481E 01 | |
| | | | | | 10 | 9.18 | 20.32 | 4.57 | 0.13345E 02 | 0.94391E 01 | -0.10346E 00 | -0.10346E 00 | 0.11818E 01 | 0.11818E 01 | 0.23597E 01 | 0.91638E 02 | |
| | | | 9 | -30.0 | 1 | 9.18 | -6.60 | 2.25 | 0.5236E 01 | 0.14868E 00 | 0.25547E 01 | 0.25547E 01 | 0.3437E 01 | 0.3437E 01 | 0.23054E 01 | 0.35883E 01 | |
| | | | | | 2 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 3 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 4 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 5 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 6 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 7 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 8 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 9 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 10 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 1 | 9.18 | -6.60 | 4.45 | 0.5728E 01 | 0.51498E 00 | 0.25156E 01 | 0.25156E 01 | 0.4282E 01 | 0.4282E 01 | 0.2705E 01 | 0.5025E 01 | |
| | | | | | 2 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 3 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 4 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 5 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 6 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 7 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 8 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 9 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |
| | | | | | 10 | 9.18 | -6.60 | 4.45 | 0.0000E 00 | 0.10521E 00 | 0.0000E 00 | 0.0000E 00 | 0.3500E 01 | 0.3500E 01 | 0.2654E 01 | 0.33000E 01 | |

RVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | MOLL TP | VAR PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|---|----------|----------|----------|----------|----------|----------|
| 159 | 10.9 | 0.0 | 2 | 0.0 | | 0.7218E | 0.12356E | 0.50273E | 0.2297E | 0.1015E | 0.8850E |
| | | | 1 | | 5 | 0.54727E | 0.15161E | 0.2720E | 0.11082E | 0.14949E | 1.17540E |
| | | | 2 | | 5 | 0.97177E | 0.15433E | 0.28058E | 0.18085E | 0.81477E | 0.95107E |
| | | | 3 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 4 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 5 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 6 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 7 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 8 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 9 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| | | | 10 | | 5 | 0.53999E | 0.18336E | 0.27335E | 0.17899E | 0.64242E | 0.65205E |
| 1 | 10.0 | | 3 | | 5 | 0.80390E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 1 | | 5 | 0.70238E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 2 | | 5 | 0.65102E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 3 | | 5 | 0.51727E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 4 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 5 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 6 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 7 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 8 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 9 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| | | | 10 | | 5 | 0.44444E | 0.02445E | 0.13512E | 0.3420E | 0.8907E | 0.04149E |
| 1 | 30.0 | | 4 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 1 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 2 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 3 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 4 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 5 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 6 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 7 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 8 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 9 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| | | | 10 | | 5 | 0.2397E | 0.20547E | 0.2800E | 0.162E | 0.1789E | 0.239E |
| 1 | 50.0 | | 5 | | 5 | 0.92109E | 0.10401E | 0.20847E | 0.1750E | 0.1853E | 0.2858E |
| | | | 1 | | 5 | 0.50288E | 0.23375E | 0.40405E | 0.222E | 0.2171E | 0.2858E |
| | | | 2 | | 5 | 0.10715E | 0.50153E | 0.11079E | 0.328E | 0.2571E | 0.2858E |
| | | | 3 | | 5 | 0.11599E | 0.68618E | 0.11277E | 0.328E | 0.2571E | 0.2858E |
| | | | 4 | | 5 | 0.32710E | 0.94866E | 0.15245E | 0.328E | 0.2571E | 0.2858E |
| | | | 5 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| | | | 6 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| | | | 7 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| | | | 8 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| | | | 9 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| | | | 10 | | 5 | 0.37025E | 0.71709E | 0.13222E | 0.328E | 0.2571E | 0.2858E |
| 1 | 70.0 | | 7 | | 5 | 0.51909E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 1 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 2 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 3 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 4 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 5 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 6 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 7 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 8 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 9 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| | | | 10 | | 5 | 0.49322E | 0.20462E | 0.1042E | 0.525E | 0.594E | 0.746E |
| 1 | 90.0 | | 8 | | 5 | 0.94239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 1 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 2 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 3 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 4 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 5 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 6 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 7 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 8 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 9 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| | | | 10 | | 5 | 0.64239E | 0.18637E | 0.1183E | 0.509E | 0.1062E | 0.800E |
| 1 | 10.0 | | 9 | | 5 | 0.5018E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 1 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 2 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 3 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 4 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 5 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 6 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 7 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 8 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 9 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |
| | | | 10 | | 5 | 0.44555E | 0.57014E | 0.1702E | 0.135E | 0.1099E | 0.1799E |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TR | YAW | PITCH | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|
| 160 | 22.3 | 0.0 | 1 | 0.0 | 23.88 | -6.60 | 12.45 | 0.1200 | -0.9880 | 0.9487 | 0.2451 | 0.2554 | 0.2719 |
| | | | | | 23.88 | 0.60 | 12.45 | 0.1000 | 0.3000 | 0.4604 | 0.1779 | 0.2923 | 0.3146 |
| | | | | | 23.88 | 0.60 | 12.45 | 0.1966 | 0.1600 | 0.1833 | 0.0731 | 0.1747 | 0.1608 |
| | | | | | 23.88 | 0.60 | 12.45 | 0.2463 | 0.1800 | 0.0233 | 0.0459 | 0.0744 | 0.1190 |
| | | | | | 23.88 | 0.60 | 12.45 | 0.1800 | 0.1200 | 0.1517 | 0.2052 | 0.3077 | 0.2572 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1485 | 0.1332 | 0.1145 | 0.3124 | 0.3077 | 0.2572 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1340 | 0.9365 | 0.1035 | 0.1035 | 0.1035 | 0.1243 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1627 | 0.3470 | 0.3427 | 0.2325 | 0.2525 | 0.2188 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2104 | 0.1469 | 0.1709 | 0.2797 | 0.3597 | 0.3669 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1990 | 0.1866 | 0.4210 | 0.2660 | 0.3195 | 0.3220 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1975 | 0.9303 | 0.1998 | 0.4242 | 0.4901 | 0.1622 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1591 | 0.1016 | 0.8472 | 0.3324 | 0.4190 | 0.2911 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1533 | 0.1520 | 0.1598 | 0.1445 | 0.2187 | 0.2322 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1171 | 0.7375 | 0.2176 | 0.4538 | 0.5182 | 0.6180 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1720 | 0.1520 | 0.5399 | 0.2565 | 0.3975 | 0.2193 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1127 | 0.1871 | 0.4789 | 0.3448 | 0.4126 | 0.4651 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2210 | 0.2280 | 0.1122 | 0.3233 | 0.4651 | 0.4569 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1082 | 0.1859 | 0.1086 | 0.3223 | 0.4062 | 0.2923 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2000 | 0.8025 | 0.3202 | 0.4882 | 0.5950 | 0.4430 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2061 | 0.6891 | 0.2028 | 0.3143 | 0.3785 | 0.3717 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1463 | 0.6891 | 0.1977 | 0.1501 | 0.1061 | 0.1537 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1671 | 0.1232 | 0.4971 | 0.2865 | 0.3444 | 0.2627 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1307 | 0.1252 | 0.1987 | 0.2503 | 0.2877 | 0.2646 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1910 | 0.5908 | 0.1295 | 0.4732 | 0.5898 | 0.4809 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2275 | 0.3700 | 0.4944 | 0.4021 | 0.2752 | 0.3199 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1506 | 0.3100 | 0.1503 | 0.3961 | 0.3737 | 0.5521 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.3671 | 0.6189 | 0.3228 | 0.3302 | 0.4077 | 0.3522 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.1153 | 0.1931 | 0.2844 | 0.3302 | 0.4077 | 0.3522 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1807 | 0.3566 | 0.3810 | 0.1744 | 0.2444 | 0.2023 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1816 | 0.3810 | 0.3810 | 0.1931 | 0.2444 | 0.1931 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2354 | 0.1212 | 0.1201 | 0.1385 | 0.2291 | 0.3684 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2354 | 0.1212 | 0.1201 | 0.1385 | 0.2291 | 0.3684 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2044 | 0.1926 | 0.3684 | 0.4437 | 0.5316 | 0.4437 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.1503 | 0.1926 | 0.3684 | 0.4437 | 0.5316 | 0.4437 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2449 | 0.2763 | 0.2763 | 0.3714 | 0.4332 | 0.4332 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2449 | 0.1870 | 0.2763 | 0.3714 | 0.4332 | 0.4332 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2652 | 0.1870 | 0.2763 | 0.2007 | 0.1419 | 0.1696 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2652 | 0.1870 | 0.2763 | 0.2007 | 0.1419 | 0.1696 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2009 | 0.1926 | 0.1926 | 0.1385 | 0.2291 | 0.3684 |
| | | | | | 23.88 | 20.32 | 4.57 | 0.2009 | 0.1926 | 0.1926 | 0.1385 | 0.2291 | 0.3684 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |
| | | | | | 23.88 | 6.60 | 12.45 | 0.2554 | 0.2554 | 0.2554 | 0.0000 | 0.0000 | 0.0000 |

// JOB FICHE A B C D E F 04 MAY 79 08.539 HRS
// XEO FICHE A B C D E F 04 MAY 79 08.540 HRBMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|---|---------|---------|---------|---------|---------|---------|
| 161 | 10.2 | 15.0 | 2 | 0.0 | 1 | 4.5 | 0.2425 | 0.4866 | 0.1999 | 0.1421 | 0.1580 |
| | | | 3 | 0.0 | 1 | 4.5 | 0.3542 | 0.5997 | 0.1488 | 0.1171 | 0.1571 |
| | | | 4 | 0.0 | 1 | 4.5 | 0.4427 | 0.6891 | 0.1384 | 0.0922 | 0.1508 |
| | | | 5 | 0.0 | 1 | 4.5 | 0.5060 | 0.7446 | 0.1369 | 0.0735 | 0.1470 |
| | | | 6 | 0.0 | 1 | 4.5 | 0.5287 | 0.7710 | 0.1447 | 0.0646 | 0.1455 |
| | | | 7 | 0.0 | 1 | 4.5 | 0.5312 | 0.7749 | 0.1466 | 0.0598 | 0.1452 |
| | | | 8 | 0.0 | 1 | 4.5 | 0.5350 | 0.7816 | 0.1473 | 0.0573 | 0.1453 |
| | | | 9 | 0.0 | 1 | 4.5 | 0.5386 | 0.7869 | 0.1485 | 0.0559 | 0.1454 |
| | | | 10 | 0.0 | 1 | 4.5 | 0.5426 | 0.7934 | 0.1499 | 0.0549 | 0.1454 |
| 3 | 10.0 | | 1 | 0.0 | 3 | 4.5 | 0.4573 | 0.8816 | 0.3790 | 0.1553 | 0.4232 |
| | | | 2 | 0.0 | 3 | 4.5 | 0.5180 | 0.9867 | 0.3523 | 0.1480 | 0.4325 |
| | | | 3 | 0.0 | 3 | 4.5 | 0.5649 | 1.0876 | 0.3245 | 0.1413 | 0.4425 |
| | | | 4 | 0.0 | 3 | 4.5 | 0.6287 | 1.1813 | 0.2976 | 0.1350 | 0.4506 |
| | | | 5 | 0.0 | 3 | 4.5 | 0.6984 | 1.2681 | 0.2731 | 0.1291 | 0.4579 |
| | | | 6 | 0.0 | 3 | 4.5 | 0.7368 | 1.3481 | 0.2535 | 0.1247 | 0.4645 |
| | | | 7 | 0.0 | 3 | 4.5 | 0.7668 | 1.4217 | 0.2375 | 0.1213 | 0.4700 |
| | | | 8 | 0.0 | 3 | 4.5 | 0.7929 | 1.4895 | 0.2254 | 0.1192 | 0.4746 |
| | | | 9 | 0.0 | 3 | 4.5 | 0.8199 | 1.5520 | 0.2173 | 0.1180 | 0.4783 |
| | | | 10 | 0.0 | 3 | 4.5 | 0.8472 | 1.6098 | 0.2123 | 0.1175 | 0.4811 |
| 4 | 20.0 | | 1 | 0.0 | 4 | 4.5 | 0.9312 | 0.9396 | 0.3873 | 0.2308 | 0.4001 |
| | | | 2 | 0.0 | 4 | 4.5 | 1.0836 | 1.2329 | 0.2722 | 0.2192 | 0.4166 |
| | | | 3 | 0.0 | 4 | 4.5 | 1.2358 | 1.5155 | 0.2043 | 0.2130 | 0.4323 |
| | | | 4 | 0.0 | 4 | 4.5 | 1.3879 | 1.7979 | 0.1672 | 0.2077 | 0.4473 |
| | | | 5 | 0.0 | 4 | 4.5 | 1.5399 | 2.0803 | 0.1391 | 0.2034 | 0.4619 |
| | | | 6 | 0.0 | 4 | 4.5 | 1.6919 | 2.3628 | 0.1198 | 0.1999 | 0.4762 |
| | | | 7 | 0.0 | 4 | 4.5 | 1.8439 | 2.6452 | 0.1070 | 0.1974 | 0.4899 |
| | | | 8 | 0.0 | 4 | 4.5 | 1.9959 | 2.9277 | 0.0970 | 0.1955 | 0.5031 |
| | | | 9 | 0.0 | 4 | 4.5 | 2.1479 | 3.2101 | 0.0900 | 0.1941 | 0.5158 |
| | | | 10 | 0.0 | 4 | 4.5 | 2.2999 | 3.4925 | 0.0853 | 0.1932 | 0.5279 |
| 5 | 30.0 | | 1 | 0.0 | 5 | 4.5 | 1.0710 | 0.3030 | 0.2075 | 0.1889 | 0.3167 |
| | | | 2 | 0.0 | 5 | 4.5 | 1.1979 | 0.4839 | 0.1897 | 0.1874 | 0.3304 |
| | | | 3 | 0.0 | 5 | 4.5 | 1.3248 | 0.6648 | 0.1737 | 0.1867 | 0.3440 |
| | | | 4 | 0.0 | 5 | 4.5 | 1.4517 | 0.8457 | 0.1608 | 0.1862 | 0.3575 |
| | | | 5 | 0.0 | 5 | 4.5 | 1.5786 | 1.0266 | 0.1509 | 0.1858 | 0.3709 |
| | | | 6 | 0.0 | 5 | 4.5 | 1.7055 | 1.2075 | 0.1430 | 0.1855 | 0.3843 |
| | | | 7 | 0.0 | 5 | 4.5 | 1.8324 | 1.3884 | 0.1371 | 0.1852 | 0.3977 |
| | | | 8 | 0.0 | 5 | 4.5 | 1.9593 | 1.5693 | 0.1322 | 0.1850 | 0.4110 |
| | | | 9 | 0.0 | 5 | 4.5 | 2.0862 | 1.7502 | 0.1282 | 0.1849 | 0.4243 |
| | | | 10 | 0.0 | 5 | 4.5 | 2.2131 | 1.9311 | 0.1250 | 0.1848 | 0.4376 |
| 6 | 50.0 | | 1 | 0.0 | 6 | 4.5 | 1.2672 | 0.8613 | 0.3827 | 0.2519 | 0.4282 |
| | | | 2 | 0.0 | 6 | 4.5 | 1.4297 | 1.3938 | 0.2668 | 0.2382 | 0.4445 |
| | | | 3 | 0.0 | 6 | 4.5 | 1.5922 | 1.9263 | 0.1982 | 0.2245 | 0.4608 |
| | | | 4 | 0.0 | 6 | 4.5 | 1.7547 | 2.4588 | 0.1497 | 0.2108 | 0.4771 |
| | | | 5 | 0.0 | 6 | 4.5 | 1.9172 | 2.9913 | 0.1170 | 0.1971 | 0.4934 |
| | | | 6 | 0.0 | 6 | 4.5 | 2.0797 | 3.5238 | 0.0973 | 0.1834 | 0.5097 |
| | | | 7 | 0.0 | 6 | 4.5 | 2.2422 | 4.0563 | 0.0868 | 0.1707 | 0.5260 |
| | | | 8 | 0.0 | 6 | 4.5 | 2.4047 | 4.5888 | 0.0829 | 0.1580 | 0.5423 |
| | | | 9 | 0.0 | 6 | 4.5 | 2.5672 | 5.1213 | 0.0819 | 0.1453 | 0.5586 |
| | | | 10 | 0.0 | 6 | 4.5 | 2.7297 | 5.6538 | 0.0828 | 0.1326 | 0.5749 |
| 8 | -10.0 | | 1 | 0.0 | 8 | 4.5 | 0.5259 | 0.3194 | 0.1407 | 0.1452 | 0.1425 |
| | | | 2 | 0.0 | 8 | 4.5 | 0.5928 | 0.4989 | 0.1408 | 0.1269 | 0.1358 |
| | | | 3 | 0.0 | 8 | 4.5 | 0.6597 | 0.6784 | 0.1410 | 0.1086 | 0.1271 |
| | | | 4 | 0.0 | 8 | 4.5 | 0.7266 | 0.8579 | 0.1411 | 0.0903 | 0.1184 |
| | | | 5 | 0.0 | 8 | 4.5 | 0.7935 | 1.0374 | 0.1412 | 0.0720 | 0.1097 |
| | | | 6 | 0.0 | 8 | 4.5 | 0.8604 | 1.2169 | 0.1413 | 0.0537 | 0.1010 |
| | | | 7 | 0.0 | 8 | 4.5 | 0.9273 | 1.3964 | 0.1414 | 0.0354 | 0.0923 |
| | | | 8 | 0.0 | 8 | 4.5 | 0.9942 | 1.5759 | 0.1415 | 0.0171 | 0.0836 |
| | | | 9 | 0.0 | 8 | 4.5 | 1.0611 | 1.7554 | 0.1416 | 0.0000 | 0.0749 |
| | | | 10 | 0.0 | 8 | 4.5 | 1.1280 | 1.9349 | 0.1417 | 0.0000 | 0.0662 |
| 9 | -20.0 | | 1 | 0.0 | 9 | 4.5 | 0.8496 | 0.5322 | 0.1937 | 0.1466 | 0.1634 |
| | | | 2 | 0.0 | 9 | 4.5 | 1.0391 | 1.0855 | 0.1303 | 0.1393 | 0.1511 |
| | | | 3 | 0.0 | 9 | 4.5 | 1.2286 | 1.6388 | 0.0847 | 0.1319 | 0.1388 |
| | | | 4 | 0.0 | 9 | 4.5 | 1.4181 | 2.1921 | 0.0519 | 0.1245 | 0.1265 |
| | | | 5 | 0.0 | 9 | 4.5 | 1.6076 | 2.7454 | 0.0363 | 0.1171 | 0.1142 |
| | | | 6 | 0.0 | 9 | 4.5 | 1.7971 | 3.2987 | 0.0290 | 0.1097 | 0.1019 |
| | | | 7 | 0.0 | 9 | 4.5 | 1.9866 | 3.8520 | 0.0290 | 0.1023 | 0.0896 |
| | | | 8 | 0.0 | 9 | 4.5 | 2.1761 | 4.4053 | 0.0291 | 0.0949 | 0.0773 |

'BVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-------|-------|------|--------|------|------------|-------------|------------|------------|------------|-------------|
| 161 | 10.2 | 15.0 | 9 | -20.0 | 9 | 4.59 | -20.32 | 4.57 | 0.3552E 01 | 0.3742E 01 | 0.2572E 01 | 0.1059E 01 | 0.1030E 01 | 0.92629E 00 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.6274E 01 | 0.4433E 01 | 0.5829E 01 | 0.2551E 00 | 0.4421E 00 | 0.3728E 01 |
| | | 10 | | -30.0 | 1 | 4.59 | -6.60 | 4.57 | 0.2437E 01 | 0.23647E 01 | 0.1323E 01 | 0.1819E 01 | 0.2299E 01 | 0.1679E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.8633E 01 | 0.42207E 01 | 0.2330E 01 | 0.2414E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.6824E 01 | 0.44607E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | -6.60 | 4.57 | 0.1800E 01 | 0.46331E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.6602E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.6790E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | -20.32 | 4.57 | 0.6790E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.1852E 01 | 0.18260E 01 | 0.1032E 01 | 0.2293E 01 | 0.2372E 01 | 0.1732E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.8624E 01 | 0.44607E 01 | 0.2330E 01 | 0.2414E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.6824E 01 | 0.44607E 01 | 0.2330E 01 | 0.2414E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | -6.60 | 4.57 | 0.1032E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.1032E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.1032E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | -20.32 | 4.57 | 0.1032E 01 | 0.43232E 01 | 0.2367E 01 | 0.2485E 01 | 0.3292E 01 | 0.1472E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.1167E 01 | 0.47051E 01 | 0.2700E 01 | 0.2616E 01 | 0.4932E 01 | 0.1986E 01 |
| | | | | | | 4.59 | 6.60 | 4.57 | 0.1167E 01 | 0.47051E 01 | 0.2700E 01 | 0.2616E 01 | 0.4932E 01 | 0.1986E 01 |
| | | | | | | 4.59 | 20.32 | 4.57 | 0.1167E 01 | 0.47051E 01 | 0.2700E 01 | 0.2616E 01 | 0.4932E 01 | 0.1986E 01 |
| | | | | | | 4.59 | -20.32 | 4.57 | 0.1167E 01 | 0.47051E 01 | 0.2700E 01 | 0.2616E 01 | 0.4932E 01 | 0.1986E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PRDF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-------|------|------|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 162 | 22.7 | 15.0 | 9 | -20.0 | 9 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 10 | | | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 10 | -30.0 | 1 | 4.59 | 6.00 | 4.57 | 0.60820E 01 | 0.79866E 00 | 0.27194E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 3 | 6.00 | 2 | 4.59 | 6.00 | 4.57 | 0.62338E 01 | 0.73025E 00 | 0.23505E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 5 | 20.32 | 2 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 5 | 6.00 | 2 | 4.59 | 6.00 | 4.57 | 0.60820E 01 | 0.79866E 00 | 0.27194E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 8 | 20.32 | 2 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 10 | | 10 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 10 | -30.0 | 2 | 4.59 | 6.00 | 4.57 | 0.60820E 01 | 0.79866E 00 | 0.27194E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 3 | 6.00 | 2 | 4.59 | 6.00 | 4.57 | 0.62338E 01 | 0.73025E 00 | 0.23505E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 7 | 20.32 | 2 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |
| | | | 8 | 6.00 | 2 | 4.59 | 6.00 | 4.57 | 0.60820E 01 | 0.79866E 00 | 0.27194E 00 | 0.11110E 01 | 0.45193E 00 | 0.31627E 01 |
| | | | 10 | 20.32 | 2 | 4.59 | 20.32 | 4.57 | 0.82703E 01 | 0.64131E 00 | 0.11978E 00 | 0.14937E 01 | 0.23937E 00 | 0.23690E 01 |

SVMT 242/243 SHIP WAKE TURBULENCE TEST

| °UN VEL | ROLL TP | YAM PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|-----|----|---------|---------|---------|---------|---------|---------|
| 163 | 10.8 | 15.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 2 | 10.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 3 | 20.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 4 | 30.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 5 | 50.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 7 | -10.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 8 | -20.0 | 1 | 0.0 | 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 2 | 0.0 | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 3 | 0.0 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 4 | 0.0 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 5 | 0.0 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 6 | 0.0 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 8 | 0.0 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | 10 | 0.0 | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-------|--------|------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 163 10.8 | 15.0 | 8 | -20.0 | 10 | 0.00 | -20.32 | 4.57 | 0.4269E-01 | 0.5571E-01 | 0.50756E 00 | 0.10233E 01 | 0.10023E 01 | 0.10838E 01 |
| | | 9 | -30.0 | 1 | 0.00 | -6.60 | 12.45 | 0.2445E 01 | 0.2741E 00 | 0.31857E 00 | 0.18952E 01 | 0.20721E 00 | 0.16948E 01 |
| | | 3 | 0.00 | 3 | 0.00 | 6.00 | 12.45 | 0.8254E 01 | 0.1439E 00 | 0.19905E 00 | 0.24475E 00 | 0.61023E 00 | 0.48889E 00 |
| | | 4 | 0.00 | 20.32 | 0.00 | 20.32 | 12.45 | 0.74831E 00 | 0.61055E 00 | 0.44531E 00 | 0.41051E 00 | 0.12022E 00 | 0.18852E 00 |
| | | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 12.45 | 0.9852E 00 | 0.10222E 00 | 0.29566E 00 | 0.31594E 00 | 0.69832E 00 | 0.55572E 00 |
| | | 6 | 0.00 | 6.60 | 0.00 | 6.60 | 4.57 | 0.9747E 00 | 0.1227E 00 | 0.2526E 00 | 0.41840E 00 | 0.16948E 01 | 0.48889E 00 |
| | | 8 | 0.00 | -20.32 | 0.00 | -20.32 | 4.57 | 0.30170E-01 | -0.3252E-01 | 0.00000E 00 | 0.37840E-01 | 0.10714E-01 | 0.61023E-01 |
| | | 10 | 0.00 | 0.00 | 0.00 | 0.00 | 4.57 | 0.19187E 00 | 0.8584E 00 | 0.1394E 00 | 0.26509E 00 | 0.91494E 00 | 0.19697E 00 |
| | | 2 | 0.00 | 0.00 | 0.00 | 0.00 | 4.57 | 0.4988E 00 | 0.4870E 00 | 0.2745E 00 | 0.40732E 00 | 0.7427E 00 | 0.10172E 00 |
| | | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 4.57 | 0.1898E 00 | 0.0910E 00 | 0.0622E 00 | 0.12825E 00 | 0.10714E 00 | 0.0910E 00 |
| | | 7 | 0.00 | 20.32 | 0.00 | 20.32 | 4.57 | 0.19222E 00 | 0.0919E 00 | 0.0944E 00 | 0.0919E 00 | 0.10714E 00 | 0.0910E 00 |
| | | 8 | 0.00 | 6.60 | 0.00 | 6.60 | 4.57 | 0.0522E 00 | 0.1124E 00 | 0.0944E 00 | 0.0919E 00 | 0.10714E 00 | 0.0910E 00 |
| | | 10 | 0.00 | -20.32 | 0.00 | -20.32 | 4.57 | 0.0516E 00 | 0.1293E 00 | 0.0944E 00 | 0.0919E 00 | 0.10714E 00 | 0.0910E 00 |

RVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|-----|-----|---|---------|---------|---------|---------|---------|---------|
| 164 | 22.8 | 0.0 | 1 | 0.0 | 1 | 1.60 | 0.37 | 0.76 | 0.15 | 0.70 | 0.57 |
| | | | | | | 1.70 | 0.35 | 0.84 | 0.18 | 0.72 | 0.59 |
| | | | | | | 1.80 | 0.33 | 0.92 | 0.21 | 0.74 | 0.61 |
| | | | | | | 1.90 | 0.31 | 0.99 | 0.24 | 0.76 | 0.63 |
| | | | | | | 2.00 | 0.29 | 1.07 | 0.27 | 0.78 | 0.65 |
| | | | | | | 2.10 | 0.27 | 1.14 | 0.30 | 0.80 | 0.67 |
| | | | | | | 2.20 | 0.25 | 1.22 | 0.33 | 0.82 | 0.69 |
| | | | | | | 2.30 | 0.23 | 1.29 | 0.36 | 0.84 | 0.71 |
| | | | | | | 2.40 | 0.21 | 1.37 | 0.39 | 0.86 | 0.73 |
| | | | | | | 2.50 | 0.19 | 1.44 | 0.42 | 0.88 | 0.75 |
| 2 | 10.0 | 2 | 0.0 | 0.0 | 1 | 1.81 | 0.39 | 1.86 | 0.19 | 0.91 | 0.72 |
| | | | | | | 1.90 | 0.37 | 1.94 | 0.21 | 0.93 | 0.74 |
| | | | | | | 2.00 | 0.35 | 2.02 | 0.23 | 0.95 | 0.76 |
| | | | | | | 2.10 | 0.33 | 2.10 | 0.25 | 0.97 | 0.78 |
| | | | | | | 2.20 | 0.31 | 2.18 | 0.27 | 0.99 | 0.80 |
| | | | | | | 2.30 | 0.29 | 2.26 | 0.29 | 1.01 | 0.82 |
| | | | | | | 2.40 | 0.27 | 2.34 | 0.31 | 1.03 | 0.84 |
| | | | | | | 2.50 | 0.25 | 2.42 | 0.33 | 1.05 | 0.86 |
| | | | | | | 2.60 | 0.23 | 2.50 | 0.35 | 1.07 | 0.88 |
| | | | | | | 2.70 | 0.21 | 2.58 | 0.37 | 1.09 | 0.90 |
| 3 | 20.0 | 3 | 0.0 | 0.0 | 1 | 1.95 | 0.47 | 2.04 | 0.27 | 1.04 | 0.89 |
| | | | | | | 2.05 | 0.45 | 2.12 | 0.29 | 1.06 | 0.91 |
| | | | | | | 2.15 | 0.43 | 2.20 | 0.31 | 1.08 | 0.93 |
| | | | | | | 2.25 | 0.41 | 2.28 | 0.33 | 1.10 | 0.95 |
| | | | | | | 2.35 | 0.39 | 2.36 | 0.35 | 1.12 | 0.97 |
| | | | | | | 2.45 | 0.37 | 2.44 | 0.37 | 1.14 | 0.99 |
| | | | | | | 2.55 | 0.35 | 2.52 | 0.39 | 1.16 | 1.01 |
| | | | | | | 2.65 | 0.33 | 2.60 | 0.41 | 1.18 | 1.03 |
| | | | | | | 2.75 | 0.31 | 2.68 | 0.43 | 1.20 | 1.05 |
| | | | | | | 2.85 | 0.29 | 2.76 | 0.45 | 1.22 | 1.07 |
| 4 | 30.0 | 4 | 0.0 | 0.0 | 1 | 2.00 | 0.56 | 2.10 | 0.36 | 1.13 | 0.98 |
| | | | | | | 2.10 | 0.54 | 2.18 | 0.38 | 1.15 | 1.00 |
| | | | | | | 2.20 | 0.52 | 2.26 | 0.40 | 1.17 | 1.02 |
| | | | | | | 2.30 | 0.50 | 2.34 | 0.42 | 1.19 | 1.04 |
| | | | | | | 2.40 | 0.48 | 2.42 | 0.44 | 1.21 | 1.06 |
| | | | | | | 2.50 | 0.46 | 2.50 | 0.46 | 1.23 | 1.08 |
| | | | | | | 2.60 | 0.44 | 2.58 | 0.48 | 1.25 | 1.10 |
| | | | | | | 2.70 | 0.42 | 2.66 | 0.50 | 1.27 | 1.12 |
| | | | | | | 2.80 | 0.40 | 2.74 | 0.52 | 1.29 | 1.14 |
| | | | | | | 2.90 | 0.38 | 2.82 | 0.54 | 1.31 | 1.16 |
| 5 | 50.0 | 5 | 0.0 | 0.0 | 1 | 2.15 | 0.64 | 2.25 | 0.45 | 1.22 | 1.07 |
| | | | | | | 2.25 | 0.62 | 2.33 | 0.47 | 1.24 | 1.09 |
| | | | | | | 2.35 | 0.60 | 2.41 | 0.49 | 1.26 | 1.11 |
| | | | | | | 2.45 | 0.58 | 2.49 | 0.51 | 1.28 | 1.13 |
| | | | | | | 2.55 | 0.56 | 2.57 | 0.53 | 1.30 | 1.15 |
| | | | | | | 2.65 | 0.54 | 2.65 | 0.55 | 1.32 | 1.17 |
| | | | | | | 2.75 | 0.52 | 2.73 | 0.57 | 1.34 | 1.19 |
| | | | | | | 2.85 | 0.50 | 2.81 | 0.59 | 1.36 | 1.21 |
| | | | | | | 2.95 | 0.48 | 2.89 | 0.61 | 1.38 | 1.23 |
| | | | | | | 3.05 | 0.46 | 2.97 | 0.63 | 1.40 | 1.25 |
| 7 | 10.0 | 7 | 0.0 | 0.0 | 1 | 2.20 | 0.72 | 2.30 | 0.54 | 1.31 | 1.12 |
| | | | | | | 2.30 | 0.70 | 2.38 | 0.56 | 1.33 | 1.14 |
| | | | | | | 2.40 | 0.68 | 2.46 | 0.58 | 1.35 | 1.16 |
| | | | | | | 2.50 | 0.66 | 2.54 | 0.60 | 1.37 | 1.18 |
| | | | | | | 2.60 | 0.64 | 2.62 | 0.62 | 1.39 | 1.20 |
| | | | | | | 2.70 | 0.62 | 2.70 | 0.64 | 1.41 | 1.22 |
| | | | | | | 2.80 | 0.60 | 2.78 | 0.66 | 1.43 | 1.24 |
| | | | | | | 2.90 | 0.58 | 2.86 | 0.68 | 1.45 | 1.26 |
| | | | | | | 3.00 | 0.56 | 2.94 | 0.70 | 1.47 | 1.28 |
| | | | | | | 3.10 | 0.54 | 3.02 | 0.72 | 1.49 | 1.30 |
| 8 | 20.0 | 8 | 0.0 | 0.0 | 1 | 2.30 | 0.80 | 2.40 | 0.63 | 1.40 | 1.17 |
| | | | | | | 2.40 | 0.78 | 2.48 | 0.65 | 1.42 | 1.19 |
| | | | | | | 2.50 | 0.76 | 2.56 | 0.67 | 1.44 | 1.21 |
| | | | | | | 2.60 | 0.74 | 2.64 | 0.69 | 1.46 | 1.23 |
| | | | | | | 2.70 | 0.72 | 2.72 | 0.71 | 1.48 | 1.25 |
| | | | | | | 2.80 | 0.70 | 2.80 | 0.73 | 1.50 | 1.27 |
| | | | | | | 2.90 | 0.68 | 2.88 | 0.75 | 1.52 | 1.29 |
| | | | | | | 3.00 | 0.66 | 2.96 | 0.77 | 1.54 | 1.31 |
| | | | | | | 3.10 | 0.64 | 3.04 | 0.79 | 1.56 | 1.33 |
| | | | | | | 3.20 | 0.62 | 3.12 | 0.81 | 1.58 | 1.35 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PWM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|----------|---------|-----------|------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 164.22.8 | 0.0 | 8 | 0.00 | -20.32 | 4.51 | 0.1330E-02 | 0.52719E-01 | 0.48119E-00 | 0.10501E-01 | 0.22355E-00 | 0.22035E-01 |
| | | 9 | 0.00 | -6.60 | 4.51 | 0.49505E-02 | 0.73759E-01 | 0.13146E-01 | 0.38849E-02 | 0.42548E-01 | 0.38980E-01 |
| | | 10 | 0.00 | 0.00 | 4.51 | 0.11877E-02 | 0.16269E-01 | 0.00000E-00 | 0.44277E-02 | 0.52291E-01 | 0.34899E-01 |
| | | 1 | 0.00 | 0.00 | 12.32 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 2 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 3 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 4 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 5 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 6 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 7 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 8 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 9 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 10 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 1 | 0.00 | 0.00 | 12.32 | 0.10239E-02 | 0.16269E-01 | 0.00000E-00 | 0.50797E-02 | 0.57697E-01 | 0.46378E-01 |
| | | 2 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 3 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 4 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 5 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 6 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 7 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 8 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 9 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |
| | | 10 | 0.00 | 0.00 | 4.51 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 | 0.00000E-00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|------|-------|------|------|------|--------|------|------|------|--------|------|--------|------|--------|------|--------|------|
| 165 | 10.4 | 0.0 | 2 | 10.0 | 1 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 2 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 3 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 4 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 5 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 6 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 7 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 8 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 9 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 10 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 1 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 2 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 3 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 4 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 5 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 6 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 7 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 8 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 9 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |
| | | | | | 10 | 9.65 | 6.60 | 2.22 | 0.8135 | 1.14 | 0.54 | 0.00 | 0.1918 | 0.00 | 0.4008 | 0.00 | 0.7690 | 0.00 | 0.5095 | 0.00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|----|------|---|---------|---------|---------|---------|---------|---------|
| 166 | 22.5 | 0.0 | 2 | 10.0 | 1 | 0.1633 | 0.2996 | 0.3901 | 0.8957 | 0.1424 | 1.1263 |
| | | | 3 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 4 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 5 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 6 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 7 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 8 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 9 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 10 | 6.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 1 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 2 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 3 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 4 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 5 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 6 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 7 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 8 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 9 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 10 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 1 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 2 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 3 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 4 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 5 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 6 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 7 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 8 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 9 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |
| | | | 10 | 20.0 | 5 | 0.1621 | 0.2537 | 0.2462 | 1.1427 | 0.2091 | 1.1946 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|---------|---------|-----------|----|-----|-------|-------------|--------------|-------------|-------------|------------|-------------|
| 167 | 22.5 | 0.0 | 1 | 0.0 | 12.45 | 0.10851E 02 | -0.89197E 00 | 0.15086E 01 | 0.23634E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 2 | 0.0 | 12.45 | 0.51947E 00 | -0.45677E 00 | 0.17750E 01 | 0.23821E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 3 | 0.0 | 12.45 | 0.10520E 00 | -0.17126E 00 | 0.11055E 01 | 0.27039E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 4 | 0.0 | 12.45 | 0.20234E 00 | -0.23267E 00 | 0.11660E 01 | 0.27039E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 5 | 0.0 | 12.45 | 0.20234E 00 | -0.23267E 00 | 0.11660E 01 | 0.27039E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 7 | 0.0 | 12.45 | 0.20234E 00 | -0.23267E 00 | 0.11660E 01 | 0.27039E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 8 | 0.0 | 4.27 | 0.20234E 00 | -0.23267E 00 | 0.11660E 01 | 0.27039E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 9 | 0.0 | 4.27 | 0.18828E 02 | -0.30889E 01 | 0.20243E 00 | 0.26021E 01 | 0.2402E 01 | 0.29564E 01 |
| | | | 10 | 0.0 | 4.27 | 0.15015E 02 | -0.51501E 01 | 0.10740E 00 | 0.26021E 01 | 0.2402E 01 | 0.29564E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|------|----|-------|-------|-------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 160 | 10.4 | 0.0 | 5 | 180.0 | 1 | -4.57 | -6.60 | 2.54 | 0.69003E 01 | 0.30075E 00 | 0.79303E 00 | 0.13277E 01 | 0.16905E 01 | 0.12937E 01 |
| | | | | | 2 | -4.57 | 0.00 | 2.54 | 0.47289E 01 | 0.95510E 00 | 0.12851E 00 | 0.23553E 01 | 0.24666E 01 | 0.20742E 01 |
| | | | | | 3 | -4.57 | 6.60 | 2.54 | 0.67279E 01 | 0.40596E 01 | 0.94857E 00 | 0.23700E 01 | 0.20300E 01 | 0.18745E 00 |
| | | | | | 4 | -4.57 | 20.32 | 2.54 | 0.11479E 02 | 0.20872E 01 | 0.14177E 00 | 0.41810E 00 | 0.90000E 00 | 0.85491E 00 |
| | | | | | 5 | -4.57 | 40.64 | 2.54 | 0.10502E 02 | 0.49116E 00 | 0.99777E 00 | 0.35899E 00 | 0.82522E 00 | 0.84912E 00 |
| | | | | | 6 | -4.57 | -20.32 | 2.54 | 0.10502E 02 | 0.49116E 00 | 0.67827E 00 | 0.29862E 00 | 0.50900E 00 | 0.49606E 00 |
| 6 | 155.0 | | | | 1 | -4.57 | -6.60 | 2.54 | 0.10472E 02 | 0.34409E 01 | 0.20637E 01 | 0.58620E 00 | 0.91039E 00 | 0.7882E 00 |
| | | | | | 2 | -4.57 | 0.00 | 2.54 | 0.57970E 01 | 0.37477E 01 | 0.29795E 01 | 0.26939E 01 | 0.21823E 01 | 0.20143E 01 |
| | | | | | 3 | -4.57 | 6.60 | 2.54 | 0.57970E 01 | 0.37477E 01 | 0.19795E 01 | 0.18538E 01 | 0.10824E 01 | 0.29213E 00 |
| | | | | | 4 | -4.57 | 20.32 | 2.54 | 0.90895E 01 | 0.33208E 01 | 0.24375E 00 | 0.49439E 00 | 0.71332E 00 | 0.25974E 00 |
| | | | | | 5 | -4.57 | 40.64 | 2.54 | 0.10319E 02 | 0.33208E 01 | 0.24631E 00 | 0.41810E 00 | 0.71332E 00 | 0.25974E 00 |
| | | | | | 6 | -4.57 | -20.32 | 2.54 | 0.11018E 02 | 0.12070E 01 | 0.24093E 01 | 0.23005E 00 | 0.36315E 00 | 0.33674E 00 |
| 8 | 210.0 | | | | 1 | -4.57 | -6.60 | 2.54 | 0.61090E 01 | 0.67076E 01 | 0.14803E 00 | 0.16058E 01 | 0.12089E 01 | 0.9817E 00 |
| | | | | | 2 | -4.57 | 0.00 | 2.54 | 0.81759E 01 | 0.29322E 01 | 0.38249E 00 | 0.45874E 01 | 0.22326E 00 | 0.15622E 01 |
| | | | | | 3 | -4.57 | 6.60 | 2.54 | 0.10495E 02 | 0.62424E 00 | 0.10871E 00 | 0.45874E 01 | 0.50255E 00 | 0.45915E 00 |
| | | | | | 4 | -4.57 | 20.32 | 2.54 | 0.11895E 02 | 0.2244E 00 | 0.10871E 00 | 0.45874E 01 | 0.50255E 00 | 0.45915E 00 |
| | | | | | 5 | -4.57 | 40.64 | 2.54 | 0.11793E 02 | 0.2244E 00 | 0.15893E 01 | 0.45874E 01 | 0.50255E 00 | 0.45915E 00 |
| | | | | | 6 | -4.57 | -20.32 | 2.54 | 0.82473E 01 | 0.11607E 01 | 0.14270E 01 | 0.25047E 00 | 0.27422E 00 | 0.27966E 00 |
| 10 | 220.0 | | | | 1 | -4.57 | -6.60 | 2.54 | 0.82495E 01 | 0.12747E 01 | 0.15104E 01 | 0.17593E 01 | 0.90986E 00 | 0.10134E 01 |
| | | | | | 2 | -4.57 | 0.00 | 2.54 | 0.72244E 02 | 0.44927E 01 | 0.86977E 00 | 0.17593E 01 | 0.22081E 00 | 0.20664E 00 |
| | | | | | 3 | -4.57 | 6.60 | 2.54 | 0.10428E 02 | 0.44927E 01 | 0.93637E 00 | 0.17593E 01 | 0.22081E 00 | 0.20664E 00 |
| | | | | | 4 | -4.57 | 20.32 | 2.54 | 0.11607E 02 | 0.19057E 00 | 0.18116E 00 | 0.46012E 00 | 0.78449E 00 | 0.71668E 00 |
| | | | | | 5 | -4.57 | 40.64 | 2.54 | 0.11607E 02 | 0.19057E 00 | 0.18116E 00 | 0.46012E 00 | 0.78449E 00 | 0.71668E 00 |
| | | | | | 6 | -4.57 | -20.32 | 2.54 | 0.54408E 01 | 0.36270E 01 | 0.26003E 01 | 0.33948E 00 | 0.32442E 00 | 0.26883E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|---|--------|------|------------|------------|------------|------------|------------|------------|
| 169 | 22.7 | 0.0 | 2 | 155.0 | 1 | 6.60 | 2.54 | 0.2286E 02 | 0.9013E 01 | 0.3482E 01 | 0.7528E 00 | 0.1483E 01 | 0.1400E 01 |
| | | | | | 2 | 0.00 | 2.54 | 0.1320E 02 | 0.1001E 02 | 0.3172E 01 | 0.4842E 00 | 0.1091E 01 | 0.4394E 01 |
| | | | | | 3 | 6.60 | 2.54 | 0.2012E 02 | 0.8062E 01 | 0.4191E 01 | 0.1642E 00 | 0.1075E 01 | 0.8307E 00 |
| | | | | | 4 | 20.32 | 2.54 | 0.2151E 02 | 0.7053E 01 | 0.4971E 01 | 0.3148E 00 | 0.1857E 01 | 0.2647E 00 |
| | | | | | 5 | 40.64 | 2.54 | 0.2337E 02 | 0.7034E 01 | 0.2971E 01 | 0.6800E 00 | 0.1617E 01 | 0.9465E 00 |
| | | | | | 6 | -20.32 | 2.54 | 0.2406E 02 | 0.1054E 01 | 0.4810E 01 | 0.5385E 00 | 0.1533E 01 | 0.1204E 00 |
| | | | | | 7 | -40.64 | 2.54 | 0.1705E 02 | 0.5319E 01 | 0.1425E 01 | 0.3402E 01 | 0.3137E 01 | 0.3141E 01 |
| | | | | | 1 | 6.60 | 2.54 | 0.8025E 02 | 0.9326E 01 | 0.5760E 01 | 0.6445E 00 | 0.3827E 01 | 0.4027E 01 |
| | | | | | 2 | 0.00 | 2.54 | 0.1210E 02 | 0.1089E 02 | 0.4460E 01 | 0.6615E 00 | 0.3830E 01 | 0.4923E 01 |
| | | | | | 3 | 6.60 | 2.54 | 0.1265E 02 | 0.5737E 01 | 0.2742E 01 | 0.4053E 00 | 0.9190E 01 | 0.8723E 00 |
| | | | | | 4 | 20.32 | 2.54 | 0.2385E 02 | 0.5049E 01 | 0.6123E 01 | 0.4289E 00 | 0.1420E 01 | 0.8080E 00 |
| | | | | | 5 | 40.64 | 2.54 | 0.2269E 02 | 0.9663E 00 | 0.3809E 01 | 0.3179E 00 | 0.1422E 01 | 0.8080E 00 |
| | | | | | 6 | -20.32 | 2.54 | 0.2315E 02 | 0.8362E 00 | 0.1409E 01 | 0.2880E 00 | 0.6649E 00 | 0.4302E 00 |
| | | | | | 7 | -40.64 | 2.54 | 0.1533E 02 | 0.1321E 02 | 0.3623E 01 | 0.2362E 01 | 0.1409E 01 | 0.1519E 01 |
| | | | | | 1 | 6.60 | 2.54 | 0.2209E 02 | 0.1430E 02 | 0.2208E 01 | 0.4222E 00 | 0.4233E 01 | 0.4210E 00 |
| | | | | | 2 | 0.00 | 2.54 | 0.2485E 02 | 0.4291E 01 | 0.8659E 01 | 0.6853E 00 | 0.7080E 01 | 0.8824E 00 |
| | | | | | 3 | 6.60 | 2.54 | 0.2501E 02 | 0.3651E 01 | 0.8658E 01 | 0.3942E 00 | 0.5977E 01 | 0.8048E 00 |
| | | | | | 4 | 20.32 | 2.54 | 0.2571E 02 | 0.5063E 01 | 0.6558E 01 | 0.5220E 00 | 0.9661E 00 | 0.5060E 00 |
| | | | | | 5 | 40.64 | 2.54 | 0.2274E 02 | 0.5063E 01 | 0.5146E 01 | 0.2605E 00 | 0.1738E 01 | 0.5060E 00 |
| | | | | | 6 | -20.32 | 2.54 | 0.1646E 02 | 0.5063E 01 | 0.5146E 01 | 0.2793E 00 | 0.6887E 00 | 0.1843E 00 |
| | | | | | 7 | -40.64 | 2.54 | 0.1856E 02 | 0.1404E 02 | 0.3525E 01 | 0.1493E 01 | 0.9113E 01 | 0.3317E 00 |
| | | | | | 1 | 6.60 | 2.54 | 0.1949E 02 | 0.1918E 02 | 0.5925E 01 | 0.4280E 00 | 0.4824E 01 | 0.1048E 01 |
| | | | | | 2 | 0.00 | 2.54 | 0.2271E 02 | 0.4468E 01 | 0.2629E 01 | 0.6868E 00 | 0.9742E 00 | 0.1359E 01 |
| | | | | | 3 | 6.60 | 2.54 | 0.2479E 02 | 0.4468E 01 | 0.9674E 01 | 0.3037E 00 | 0.6216E 00 | 0.1542E 00 |
| | | | | | 4 | 20.32 | 2.54 | 0.2529E 02 | 0.3327E 01 | 0.3470E 01 | 0.3470E 00 | 0.8362E 00 | 0.4712E 00 |
| | | | | | 5 | 40.64 | 2.54 | 0.2283E 02 | 0.9627E 01 | 0.1333E 01 | 0.3580E 00 | 0.8362E 00 | 0.1722E 00 |
| | | | | | 6 | -20.32 | 2.54 | 0.1422E 02 | 0.6183E 01 | 0.3041E 01 | 0.7662E 00 | 0.6224E 00 | 0.6811E 00 |

SVWT 2427243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ | |
|-----|------|------|----|-------|-------|------|-------|------|---------|----|---------|----|---------|----|---------|----|---------|----|---------|----|---------|
| 170 | 10.3 | 0.0 | 2 | 150.0 | 1 | 0.00 | 6.60 | 2.54 | 0.1056E | 02 | 0.3410E | 01 | 0.1054E | 01 | 0.1083E | 01 | 0.1217E | 01 | 0.1083E | 01 | |
| | | | | | 2 | 0.00 | 6.60 | 2.54 | 0.0822E | 00 | 0.4310E | 01 | 0.7112E | 00 | 0.1294E | 01 | 0.1869E | 01 | 0.1294E | 01 | |
| | | | | | 3 | 0.00 | 20.32 | 2.54 | 0.9470E | 00 | 0.3101E | 00 | 0.3960E | 00 | 0.3802E | 00 | 0.1866E | 00 | 0.1866E | 00 | 0.1866E |
| | | | | | 4 | 0.00 | 20.64 | 2.54 | 0.1072E | 00 | 0.1781E | 00 | 0.1428E | 00 | 0.3020E | 00 | 0.1799E | 00 | 0.1799E | 00 | 0.1799E |
| | | | | | 5 | 0.00 | 20.64 | 2.54 | 0.1159E | 02 | 0.1198E | 01 | 0.2809E | 01 | 0.2225E | 00 | 0.6091E | 00 | 0.6091E | 00 | 0.6091E |
| | | | | | 6 | 0.00 | 20.32 | 2.54 | 0.1837E | 02 | 0.3205E | 01 | 0.5901E | 00 | 0.1517E | 01 | 0.1685E | 01 | 0.1685E | 01 | 0.1685E |
| | | | | | 7 | 0.00 | 6.60 | 2.54 | 0.0000E | 00 | 0.3201E | 00 | 0.4474E | 00 | 0.4154E | 01 | 0.3141E | 01 | 0.3141E | 01 | 0.3141E |
| | | | | | 8 | 0.00 | 6.60 | 2.54 | 0.6271E | 00 | 0.3918E | 00 | 0.6737E | 00 | 0.3127E | 00 | 0.3182E | 01 | 0.3182E | 01 | 0.3182E |
| | | | | | 9 | 0.00 | 20.32 | 2.54 | 0.2978E | 00 | 0.3742E | 00 | 0.3120E | 00 | 0.2792E | 00 | 0.5152E | 00 | 0.5152E | 00 | 0.5152E |
| | | | | | 10 | 0.00 | 20.64 | 2.54 | 0.0793E | 00 | 0.1705E | 00 | 0.1988E | 00 | 0.2745E | 00 | 0.4827E | 00 | 0.4827E | 00 | 0.4827E |
| | | | | | 11 | 0.00 | 20.96 | 2.54 | 0.1263E | 02 | 0.2137E | 00 | 0.1095E | 01 | 0.2421E | 00 | 0.9162E | 01 | 0.9162E | 01 | 0.9162E |
| | | | | | 12 | 0.00 | 20.32 | 2.54 | 0.8955E | 01 | 0.3501E | 00 | 0.2855E | 00 | 0.1921E | 01 | 0.1921E | 01 | 0.1921E | 01 | 0.1921E |
| | | | | | 13 | 0.00 | 6.60 | 2.54 | 0.6432E | 01 | 0.3501E | 00 | 0.2855E | 00 | 0.1921E | 01 | 0.1921E | 01 | 0.1921E | 01 | 0.1921E |
| | | | | | 14 | 0.00 | 6.60 | 2.54 | 0.1331E | 00 | 0.1857E | 00 | 0.2367E | 00 | 0.1232E | 00 | 0.1313E | 01 | 0.1313E | 01 | 0.1313E |
| | | | | | 15 | 0.00 | 20.32 | 2.54 | 0.1099E | 00 | 0.3822E | 00 | 0.1388E | 01 | 0.3865E | 00 | 0.1978E | 00 | 0.1978E | 00 | 0.1978E |
| | | | | | 16 | 0.00 | 20.64 | 2.54 | 0.1054E | 02 | 0.4885E | 01 | 0.1843E | 00 | 0.1652E | 00 | 0.2605E | 00 | 0.2605E | 00 | 0.2605E |
| | | | | | 17 | 0.00 | 20.32 | 2.54 | 0.1491E | 02 | 0.1305E | 01 | 0.1867E | 01 | 0.1652E | 00 | 0.2605E | 00 | 0.2605E | 00 | 0.2605E |
| | | | | | 18 | 0.00 | 6.60 | 2.54 | 0.1127E | 00 | 0.5369E | 01 | 0.2783E | 01 | 0.8806E | 01 | 0.8933E | 00 | 0.8933E | 00 | 0.8933E |
| | | | | | 19 | 0.00 | 6.60 | 2.54 | 0.1067E | 00 | 0.5359E | 01 | 0.2730E | 01 | 0.8806E | 01 | 0.6122E | 00 | 0.6122E | 00 | 0.6122E |
| | | | | | 20 | 0.00 | 20.32 | 2.54 | 0.1219E | 00 | 0.6118E | 00 | 0.4344E | 00 | 0.6523E | 00 | 0.1073E | 00 | 0.1073E | 00 | 0.1073E |
| | | | | | 21 | 0.00 | 20.64 | 2.54 | 0.1049E | 00 | 0.3653E | 00 | 0.1760E | 00 | 0.4433E | 00 | 0.5086E | 00 | 0.5086E | 00 | 0.5086E |
| | | | | | 22 | 0.00 | 20.32 | 2.54 | 0.8719E | 01 | 0.1304E | 01 | 0.1867E | 01 | 0.2303E | 00 | 0.4659E | 00 | 0.4659E | 00 | 0.4659E |
| | | | | | 23 | 0.00 | 6.60 | 2.54 | 0.6370E | 01 | 0.3877E | 01 | 0.6365E | 00 | 0.3737E | 01 | 0.6933E | 01 | 0.6933E | 01 | 0.6933E |
| | | | | | 24 | 0.00 | 6.60 | 2.54 | 0.1006E | 00 | 0.5321E | 01 | 0.5111E | 00 | 0.7846E | 00 | 0.3718E | 01 | 0.3718E | 01 | 0.3718E |
| | | | | | 25 | 0.00 | 20.32 | 2.54 | 0.1345E | 00 | 0.5121E | 00 | 0.3023E | 00 | 0.5585E | 00 | 0.1535E | 00 | 0.1535E | 00 | 0.1535E |
| | | | | | 26 | 0.00 | 20.64 | 2.54 | 0.1053E | 00 | 0.4433E | 00 | 0.3023E | 00 | 0.6116E | 00 | 0.3212E | 00 | 0.3212E | 00 | 0.3212E |
| | | | | | 27 | 0.00 | 20.32 | 2.54 | 0.1053E | 00 | 0.4433E | 00 | 0.3023E | 00 | 0.6116E | 00 | 0.3212E | 00 | 0.3212E | 00 | 0.3212E |

8VHT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|-------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 171 | 22.8 | 0.0 | 2 | 150.0 | 1 | 2.54 | 0.2341E 02 | 0.58156E 01 | 0.23719E 01 | 0.12887E 01 | 0.1919E 01 | 0.16376E 01 |
| | | | | | 6.60 | 2.54 | 0.2377E 02 | 0.5827E 01 | 0.23749E 00 | 0.12974E 01 | 0.19413E 01 | 0.16366E 01 |
| | | | | | 0.00 | 2.54 | 0.19242E 02 | 0.28975E 01 | 0.72649E 01 | 0.13030E 01 | 0.24413E 01 | 0.13866E 01 |
| | | | | | 20.32 | 2.54 | 0.19293E 02 | 0.28948E 01 | 0.72699E 01 | 0.13090E 01 | 0.24496E 01 | 0.13851E 00 |
| | | | | | 40.64 | 2.54 | 0.2222E 02 | 0.36310E 01 | 0.16116E 00 | 0.27898E 00 | 0.10542E 01 | 0.52937E 00 |
| | | | | | 40.64 | 2.54 | 0.23846E 02 | 0.6446E 01 | 0.6111E 00 | 0.33114E 00 | 0.10644E 00 | 0.72013E 00 |
| | | | | | -20.32 | 2.54 | 0.24720E 02 | 0.1168E 01 | 0.57116E 01 | 0.33292E 00 | 0.58669E 00 | 0.38002E 00 |
| | | | | | 6.60 | 2.54 | 0.2209E 02 | 0.3382E 01 | 0.1264E 01 | 0.1009E 01 | 0.1304E 01 | 0.1126E 01 |
| | | | | | 6.60 | 2.54 | 0.1979E 02 | 0.3393E 01 | 0.1269E 01 | 0.1009E 01 | 0.1304E 01 | 0.1126E 01 |
| | | | | | 6.90 | 2.54 | 0.1979E 02 | 0.3393E 01 | 0.1269E 01 | 0.1009E 01 | 0.1304E 01 | 0.1126E 01 |
| | | | | | 20.32 | 2.54 | 0.19820E 02 | 0.3392E 01 | 0.1269E 01 | 0.1009E 01 | 0.1304E 01 | 0.1126E 01 |
| | | | | | 40.64 | 2.54 | 0.19844E 02 | 0.3392E 01 | 0.1269E 01 | 0.1009E 01 | 0.1304E 01 | 0.1126E 01 |
| | | | | | 40.64 | 2.54 | 0.2212E 02 | 0.2739E 01 | 0.14170E 01 | 0.15004E 01 | 0.2049E 00 | 0.7989E 00 |
| | | | | | -20.32 | 2.54 | 0.27198E 02 | 0.54915E 00 | 0.40884E 01 | 0.12758E 01 | 0.69022E 01 | 0.5380E 00 |
| | | | | | 6.60 | 2.54 | 0.29356E 02 | 0.87451E 00 | 0.28461E 00 | 0.13030E 01 | 0.15874E 01 | 0.12786E 01 |
| | | | | | 6.60 | 2.54 | 0.11555E 02 | 0.24402E 01 | 0.32302E 00 | 0.31603E 01 | 0.41854E 01 | 0.23120E 01 |
| | | | | | 20.32 | 2.54 | 0.17587E 02 | 0.7965E 01 | 0.3230E 00 | 0.26522E 00 | 0.2449E 01 | 0.19365E 00 |
| | | | | | 40.64 | 2.54 | 0.2009E 02 | 0.2476E 01 | 0.31508E 01 | 0.38222E 00 | 0.6517E 00 | 0.6031E 00 |
| | | | | | 40.64 | 2.54 | 0.2829E 02 | 0.2029E 01 | 0.29105E 01 | 0.26840E 00 | 0.8697E 00 | 0.4571E 00 |
| | | | | | -20.32 | 2.54 | 0.2801E 02 | 0.2854E 01 | 0.3838E 00 | 0.27056E 00 | 0.68515E 00 | 0.2995E 00 |
| | | | | | 6.60 | 2.54 | 0.1929E 02 | 0.79578E 01 | 0.58744E 01 | 0.2805E 01 | 0.2222E 01 | 0.1795E 01 |
| | | | | | 6.60 | 2.54 | 0.23204E 02 | 0.1343E 02 | 0.17954E 01 | 0.2326E 00 | 0.90406E 00 | 0.98458E 00 |
| | | | | | 20.32 | 2.54 | 0.25556E 02 | 0.2813E 01 | 0.8675E 00 | 0.4395E 00 | 0.7037E 00 | 0.60357E 00 |
| | | | | | 40.64 | 2.54 | 0.25556E 02 | 0.34514E 00 | 0.11998E 01 | 0.39382E 00 | 0.63226E 00 | 0.6290E 00 |
| | | | | | 40.64 | 2.54 | 0.2347E 02 | 0.9686E 01 | 0.11988E 01 | 0.24422E 00 | 0.69970E 00 | 0.3890E 00 |
| | | | | | -20.32 | 2.54 | 0.1825E 02 | 0.23781E 01 | 0.44539E 01 | 0.38653E 00 | 0.14936E 01 | 0.23067E 00 |
| | | | | | 6.60 | 2.54 | 0.15423E 02 | 0.7281E 01 | 0.19177E 01 | 0.70956E 01 | 0.6930E 01 | 0.5700E 01 |
| | | | | | 6.60 | 2.54 | 0.2223E 02 | 0.8927E 01 | 0.24867E 01 | 0.62328E 01 | 0.930E 01 | 0.57190E 01 |
| | | | | | 6.90 | 2.54 | 0.2223E 02 | 0.8927E 01 | 0.24867E 01 | 0.62328E 01 | 0.930E 01 | 0.57190E 01 |
| | | | | | 20.32 | 2.54 | 0.27178E 02 | 0.4733E 01 | 0.1899E 01 | 0.9564E 00 | 0.1260E 01 | 0.1198E 01 |
| | | | | | 40.64 | 2.54 | 0.2730E 02 | 0.8870E 01 | 0.2525E 01 | 0.29160E 00 | 0.7438E 00 | 0.4491E 00 |
| | | | | | 40.64 | 2.54 | 0.2730E 02 | 0.8870E 01 | 0.2525E 01 | 0.29160E 00 | 0.7438E 00 | 0.4491E 00 |
| | | | | | -20.32 | 2.54 | 0.27169E 02 | 0.8870E 01 | 0.2525E 01 | 0.29160E 00 | 0.7438E 00 | 0.4491E 00 |
| | | | | | 6.60 | 2.54 | 0.73846E 01 | 0.2684E 00 | 0.52641E 01 | 0.14904E 01 | 0.1777E 01 | 0.12623E 01 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VEI | ROLL TP | YAW PRD | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | |
|----------|---------|---------|------|--------|------|------------|------------|------------|------------|------------|------------|------------|
| 172 10.3 | 0.0 | 2 | 1.59 | 6.60 | 2.54 | 0.1697E 02 | 0.2676E 01 | 0.3877E 00 | 0.6251E 00 | 0.3359E 00 | 0.1055E 01 | |
| | | | 4.59 | 0.60 | 2.54 | 0.1205E 02 | 0.2333E 01 | 0.5318E 00 | 0.4525E 00 | 0.2201E 00 | 0.2444E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.1019E 02 | 0.2283E 01 | 0.3644E 00 | 0.3207E 00 | 0.3207E 00 | 0.3207E 00 | 0.3207E 00 |
| | | | 4.59 | 40.64 | 2.54 | 0.1051E 02 | 0.1787E 01 | 0.2644E 00 | 0.4219E 00 | 0.4219E 00 | 0.4219E 00 | 0.4219E 00 |
| | | | 4.59 | -20.32 | 2.54 | 0.1182E 02 | 0.3225E 01 | 0.2404E 01 | 0.1293E 00 | 0.1293E 00 | 0.1293E 00 | 0.1293E 00 |
| | | | 4.59 | 6.60 | 2.54 | 0.1150E 02 | 0.1073E 01 | 0.2793E 01 | 0.1293E 00 | 0.1293E 00 | 0.1293E 00 | 0.1293E 00 |
| | | | 4.59 | 20.32 | 2.54 | 0.1549E 02 | 0.3567E 01 | 0.1554E 00 | 0.1337E 01 | 0.1337E 01 | 0.1337E 01 | 0.1337E 01 |
| 4 180.0 | 0.0 | 3 | 4.59 | 6.60 | 2.54 | 0.1541E 02 | 0.4785E 01 | 0.1389E 00 | 0.4404E 00 | 0.2500E 01 | 0.2143E 01 | |
| | | | 4.59 | 20.32 | 2.54 | 0.2037E 02 | 0.3233E 01 | 0.2976E 01 | 0.2271E 00 | 0.2271E 00 | 0.2271E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.1533E 02 | 0.1144E 01 | 0.1708E 01 | 0.1708E 01 | 0.1708E 01 | 0.1708E 01 | |
| | | | 4.59 | -20.32 | 2.54 | 0.2259E 02 | 0.1144E 01 | 0.1708E 01 | 0.1708E 01 | 0.1708E 01 | 0.1708E 01 | |
| | | | 4.59 | 6.60 | 2.54 | 0.1029E 02 | 0.1590E 01 | 0.5720E 00 | 0.2427E 00 | 0.2427E 00 | 0.2427E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.2891E 02 | 0.1201E 01 | 0.4716E 00 | 0.1054E 00 | 0.1054E 00 | 0.1054E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.1150E 02 | 0.2517E 01 | 0.5781E 00 | 0.3682E 00 | 0.3682E 00 | 0.3682E 00 | |
| 5 210.0 | 0.0 | 3 | 4.59 | 6.60 | 2.54 | 0.1044E 02 | 0.1318E 01 | 0.4913E 00 | 0.1011E 00 | 0.1556E 00 | 0.1345E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.1097E 02 | 0.3873E 01 | 0.2948E 01 | 0.5073E 00 | 0.5073E 00 | 0.5073E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.1303E 02 | 0.6045E 01 | 0.2708E 00 | 0.3850E 00 | 0.3850E 00 | 0.3850E 00 | |
| | | | 4.59 | -20.32 | 2.54 | 0.2306E 02 | 0.1022E 01 | 0.1933E 01 | 0.3483E 00 | 0.3483E 00 | 0.3483E 00 | |
| | | | 4.59 | 6.60 | 2.54 | 0.1940E 02 | 0.3535E 01 | 0.1780E 01 | 0.1207E 00 | 0.1207E 00 | 0.1207E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.1940E 02 | 0.2130E 01 | 0.1780E 01 | 0.1207E 00 | 0.1207E 00 | 0.1207E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.2955E 02 | 0.2130E 01 | 0.1780E 01 | 0.1207E 00 | 0.1207E 00 | 0.1207E 00 | |
| 6 250.0 | 0.0 | 3 | 4.59 | 6.60 | 2.54 | 0.1233E 02 | 0.3609E 01 | 0.6273E 01 | 0.9714E 00 | 0.6035E 00 | 0.9104E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.1065E 02 | 0.2092E 01 | 0.5639E 00 | 0.3340E 00 | 0.3340E 00 | 0.3340E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.2067E 02 | 0.2446E 01 | 0.3259E 00 | 0.1339E 00 | 0.1339E 00 | 0.1339E 00 | |
| | | | 4.59 | -20.32 | 2.54 | 0.1026E 02 | 0.4278E 01 | 0.2509E 00 | 0.1015E 00 | 0.1015E 00 | 0.1015E 00 | |
| | | | 4.59 | 6.60 | 2.54 | 0.2095E 02 | 0.1477E 01 | 0.3509E 01 | 0.5073E 00 | 0.5073E 00 | 0.5073E 00 | |
| | | | 4.59 | 20.32 | 2.54 | 0.1065E 02 | 0.2092E 01 | 0.5639E 00 | 0.3340E 00 | 0.3340E 00 | 0.3340E 00 | |
| | | | 4.59 | 40.64 | 2.54 | 0.2067E 02 | 0.2446E 01 | 0.3259E 00 | 0.1339E 00 | 0.1339E 00 | 0.1339E 00 | |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-------|-------|------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 173 | 22.7 | 0.0 | 2 | 150.0 | 4.59 | 6.60 | 2.54 | 0.24806E 02 | 0.5531E 01 | 0.9402E 00 | 0.1481E 01 | 0.2925E 01 | 0.19015E 01 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.25229E 02 | 0.5517E 01 | 0.8669E 00 | 0.1511E 01 | 0.2925E 01 | 0.12319E 01 |
| | | | | | 4.59 | 20.32 | 2.54 | 0.01640E 02 | 0.4128E 01 | 0.2344E 01 | 0.4308E 00 | 0.10338E 00 | 0.44390E 00 |
| | | | | | 4.59 | 40.64 | 2.54 | 0.24009E 02 | 0.91676E 01 | 0.18071E 01 | 0.3008E 00 | 0.10338E 00 | 0.54985E 00 |
| | | | | | 4.59 | -20.32 | 2.54 | 0.24839E 02 | 0.10399E 01 | 0.5938E 01 | 0.28470E 00 | 0.5343E 00 | 0.36011E 00 |
| | | 3 | 120.0 | 1 | 4.59 | 6.60 | 2.54 | 0.21575E 02 | 0.24406E 01 | 0.81082E 00 | 0.1768E 01 | 0.19167E 01 | 0.11099E 01 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.23751E 02 | 0.28924E 01 | 0.2150E 00 | 0.18543E 01 | 0.19167E 01 | 0.14566E 01 |
| | | | | | 4.59 | 20.32 | 2.54 | 0.21575E 02 | 0.28924E 01 | 0.81082E 00 | 0.1768E 01 | 0.19167E 01 | 0.14566E 01 |
| | | | | | 4.59 | 40.64 | 2.54 | 0.24839E 02 | 0.27971E 01 | 0.18071E 01 | 0.3008E 00 | 0.10338E 00 | 0.54985E 00 |
| | | | | | 4.59 | -20.32 | 2.54 | 0.27040E 02 | 0.67713E 00 | 0.3503E 01 | 0.10725E 01 | 0.1244E 01 | 0.8914E 01 |
| | | 4 | 180.0 | 1 | 4.59 | 6.60 | 2.54 | 0.21306E 02 | 0.52866E 00 | 0.2181E 00 | 0.17387E 01 | 0.16621E 01 | 0.12311E 01 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.18731E 02 | 0.17615E 01 | 0.38468E 00 | 0.42652E 01 | 0.40990E 01 | 0.26619E 01 |
| | | | | | 4.59 | 20.32 | 2.54 | 0.23836E 02 | 0.23370E 01 | 0.40285E 00 | 0.21244E 00 | 0.25395E 00 | 0.30843E 00 |
| | | | | | 4.59 | 40.64 | 2.54 | 0.22680E 02 | 0.20184E 01 | 0.5802E 00 | 0.31847E 00 | 0.63322E 00 | 0.50823E 00 |
| | | | | | 4.59 | -20.32 | 2.54 | 0.22659E 02 | 0.2135E 01 | 0.8014E 00 | 0.3823E 00 | 0.7759E 00 | 0.91310E 00 |
| | | 5 | 210.0 | 1 | 4.59 | 6.60 | 2.54 | 0.2467E 02 | 0.8608E 01 | 0.7669E 01 | 0.1033E 01 | 0.5892E 00 | 0.12337E 01 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.2461E 02 | 0.866E 01 | 0.2929E 01 | 0.1033E 01 | 0.5892E 00 | 0.12337E 01 |
| | | | | | 4.59 | 20.32 | 2.54 | 0.23579E 02 | 0.2466E 01 | 0.1727E 01 | 0.6632E 00 | 0.16917E 00 | 0.79356E 00 |
| | | | | | 4.59 | 40.64 | 2.54 | 0.25903E 02 | 0.26578E 01 | 0.1378E 01 | 0.36742E 00 | 0.6643E 00 | 0.43219E 00 |
| | | | | | 4.59 | -20.32 | 2.54 | 0.2174E 02 | 0.24036E 01 | 0.44917E 01 | 0.37150E 00 | 0.2081E 00 | 0.20396E 00 |
| | | 6 | 240.0 | 1 | 4.59 | 6.60 | 2.54 | 0.21908E 02 | 0.32515E 01 | 0.4091E 01 | 0.4443E 00 | 0.14338E 01 | 0.69351E 00 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.21328E 02 | 0.18917E 01 | 0.5566E 01 | 0.2311E 01 | 0.2035E 01 | 0.2927E 01 |
| | | | | | 4.59 | 6.60 | 2.54 | 0.23561E 02 | 0.1768E 01 | 0.28924E 01 | 0.2666E 01 | 0.2035E 01 | 0.4321E 01 |
| | | | | | 4.59 | 20.32 | 2.54 | 0.23561E 02 | 0.1768E 01 | 0.28924E 01 | 0.2666E 01 | 0.2035E 01 | 0.4321E 01 |
| | | | | | 4.59 | 40.64 | 2.54 | 0.20615E 02 | 0.18206E 01 | 0.32421E 01 | 0.2947E 00 | 0.19167E 00 | 0.15913E 00 |
| | | | | | 4.59 | -20.32 | 2.54 | 0.12337E 02 | 0.29336E 01 | 0.5123E 01 | 0.23713E 00 | 0.2017E 00 | 0.1033E 00 |

BMVT 262243 SHIP WAKE TURBULENCE TEST

| °IM VEL | ROLL TP | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|---|------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 174 10.3 | 0.0 | 2 150.0 | 1 | 0.60 | 2.54 | 0.1062E 02 | 0.44537E 01 | 0.13087E 01 | 0.92160E 00 | 0.94568E 00 | 0.93704E 00 |
| | | | 2 | 0.60 | 2.54 | 0.12522E 02 | 0.44685E 00 | 0.12869E 01 | 0.80900E 00 | 0.66568E 00 | 0.53288E 00 |
| | | | 3 | 0.60 | 2.54 | 0.10110E 02 | 0.52112E 00 | 0.42676E 01 | 0.49975E 00 | 0.14373E 00 | 0.51923E 00 |
| | | | 4 | 0.64 | 2.54 | 0.10110E 02 | 0.52112E 00 | 0.42676E 01 | 0.49975E 00 | 0.14373E 00 | 0.51923E 00 |
| | | | 5 | 0.64 | 2.54 | 0.11017E 02 | 0.62021E 00 | 0.37954E 01 | 0.30305E 00 | 0.63520E 00 | 0.32188E 00 |
| | | | 6 | 0.32 | 2.54 | 0.11375E 02 | 0.50021E 00 | 0.27604E 01 | 0.39931E 00 | 0.44821E 00 | 0.36175E 00 |
| | | 3 120.0 | 1 | 0.60 | 2.54 | 0.11613E 02 | 0.49187E 01 | 0.19962E 01 | 0.65557E 00 | 0.60838E 00 | 0.52137E 00 |
| | | | 2 | 0.60 | 2.54 | 0.11613E 02 | 0.49187E 01 | 0.19962E 01 | 0.65557E 00 | 0.60838E 00 | 0.52137E 00 |
| | | | 3 | 0.60 | 2.54 | 0.07074E 02 | 0.33191E 00 | 0.45709E 01 | 0.21066E 00 | 0.12320E 00 | 0.17869E 00 |
| | | | 4 | 0.64 | 2.54 | 0.07074E 02 | 0.33191E 00 | 0.45709E 01 | 0.21066E 00 | 0.12320E 00 | 0.17869E 00 |
| | | | 5 | 0.64 | 2.54 | 0.07074E 02 | 0.33191E 00 | 0.45709E 01 | 0.21066E 00 | 0.12320E 00 | 0.17869E 00 |
| | | | 6 | 0.32 | 2.54 | 0.11977E 02 | 0.19974E 00 | 0.33821E 01 | 0.32390E 00 | 0.51770E 00 | 0.66833E 00 |
| | | | 7 | 0.32 | 2.54 | 0.12808E 02 | 0.62226E 00 | 0.61471E 01 | 0.46693E 00 | 0.58701E 00 | 0.47474E 00 |
| | | 4 180.0 | 1 | 0.60 | 2.54 | 0.09575E 02 | 0.75133E 00 | 0.51190E 01 | 0.12969E 00 | 0.13497E 00 | 0.89016E 00 |
| | | | 2 | 0.60 | 2.54 | 0.09575E 02 | 0.75133E 00 | 0.51190E 01 | 0.12969E 00 | 0.13497E 00 | 0.89016E 00 |
| | | | 3 | 0.60 | 2.54 | 0.09575E 02 | 0.75133E 00 | 0.51190E 01 | 0.12969E 00 | 0.13497E 00 | 0.89016E 00 |
| | | | 4 | 0.60 | 2.54 | 0.09575E 02 | 0.75133E 00 | 0.51190E 01 | 0.12969E 00 | 0.13497E 00 | 0.89016E 00 |
| | | | 5 | 0.64 | 2.54 | 0.11923E 02 | 0.23234E 00 | 0.18593E 01 | 0.30305E 00 | 0.40392E 00 | 0.60508E 00 |
| | | | 6 | 0.32 | 2.54 | 0.10463E 02 | 0.14234E 00 | 0.32218E 01 | 0.21066E 00 | 0.26222E 00 | 0.35888E 00 |
| | | 5 210.0 | 1 | 0.60 | 2.54 | 0.06978E 02 | 0.25978E 00 | 0.36837E 01 | 0.9573E 00 | 0.78972E 00 | 0.52895E 00 |
| | | | 2 | 0.60 | 2.54 | 0.12298E 02 | 0.50978E 00 | 0.37427E 01 | 0.79868E 00 | 0.32244E 00 | 0.70988E 00 |
| | | | 3 | 0.60 | 2.54 | 0.12094E 02 | 0.34918E 00 | 0.37427E 01 | 0.79868E 00 | 0.32244E 00 | 0.70988E 00 |
| | | | 4 | 0.64 | 2.54 | 0.12094E 02 | 0.34918E 00 | 0.37427E 01 | 0.79868E 00 | 0.32244E 00 | 0.70988E 00 |
| | | | 5 | 0.64 | 2.54 | 0.12094E 02 | 0.34918E 00 | 0.37427E 01 | 0.79868E 00 | 0.32244E 00 | 0.70988E 00 |
| | | | 6 | 0.32 | 2.54 | 0.09241E 02 | 0.15191E 00 | 0.11447E 01 | 0.23037E 00 | 0.10972E 00 | 0.1883E 00 |
| | | 6 240.0 | 1 | 0.60 | 2.54 | 0.09792E 02 | 0.19191E 00 | 0.12579E 01 | 0.35292E 00 | 0.64529E 00 | 0.9203E 00 |
| | | | 2 | 0.60 | 2.54 | 0.11450E 02 | 0.31177E 00 | 0.44206E 01 | 0.37599E 00 | 0.12367E 00 | 0.6199E 00 |
| | | | 3 | 0.60 | 2.54 | 0.11450E 02 | 0.31177E 00 | 0.44206E 01 | 0.37599E 00 | 0.12367E 00 | 0.6199E 00 |
| | | | 4 | 0.64 | 2.54 | 0.12800E 02 | 0.13039E 00 | 0.10996E 01 | 0.30098E 00 | 0.6009E 00 | 0.9292E 00 |
| | | | 5 | 0.64 | 2.54 | 0.12800E 02 | 0.13039E 00 | 0.10996E 01 | 0.30098E 00 | 0.6009E 00 | 0.9292E 00 |
| | | | 6 | 0.32 | 2.54 | 0.09574E 02 | 0.25521E 00 | 0.1593E 01 | 0.32485E 00 | 0.20073E 00 | 0.17459E 00 |

0VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|------|------|------------|------------|------------|------------|------------|------------|
| 175 22.8 | 0.0 | 2 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 3 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 4 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 5 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 6 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 7 | 150.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | 3 | 120.0 | 0.00 | 0.60 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 3 | 120.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 4 | 120.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 5 | 120.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 6 | 120.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 7 | 120.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | 5 | 180.0 | 0.00 | 0.60 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 3 | 180.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 4 | 180.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 5 | 180.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 6 | 180.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 7 | 180.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | 5 | 210.0 | 0.00 | 0.60 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 3 | 210.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 4 | 210.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 5 | 210.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 6 | 210.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 7 | 210.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | 6 | 240.0 | 0.00 | 0.60 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 3 | 240.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 4 | 240.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 5 | 240.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 6 | 240.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |
| | | 7 | 240.0 | 0.00 | 2.54 | 0.2109E 02 | 0.5763E 01 | 0.1231E 01 | 0.3114E 00 | 0.1897E 01 | 0.1498E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|----|-------|-------|-------|--------|------|-------------|--------------|--------------|-------------|-------------|--------------|
| 177 | 23.1 | 0.0 | 12 | 210.0 | 4 | 23.88 | 20.32 | 2.54 | 0.26318E 02 | -0.49558E 01 | -0.4084E 01 | 0.33859E 00 | 0.67564E 00 | 0.65084E 00 |
| | | | | | 5 | 23.88 | 40.64 | 2.54 | 0.26318E 02 | -0.17204E 01 | -0.39679E 00 | 0.23792E 00 | 0.79339E 00 | 0.43606E 00 |
| | | | | | 6 | 23.88 | -40.64 | 2.54 | 0.21721E 02 | -0.92493E 01 | 0.39717E 01 | 0.34056E 00 | 0.39076E 00 | 0.25558E 00 |
| | | | | | 7 | 23.88 | -20.32 | 2.54 | 0.20576E 02 | -0.28479E 01 | 0.11584E 01 | 0.19914E 00 | 0.84293E 00 | 0.37113E 00 |
| | | | 13 | 240.0 | 1 | 23.88 | -6.60 | 2.54 | 0.17154E 02 | -0.24799E 01 | 0.50074E 01 | 0.51367E 00 | 0.14640E 01 | 0.64814E 00 |
| | | | | | 2 | 23.88 | 0.00 | 2.54 | 0.18811E 02 | -0.49331E 01 | 0.59579E 01 | 0.45147E 00 | 0.13105E 01 | 0.58104E 00 |
| | | | | | 3 | 23.88 | 6.60 | 2.54 | 0.18809E 02 | -0.65767E 01 | 0.52413E 01 | 0.26075E 00 | 0.26279E 00 | 0.255537E 00 |
| | | | | | 4 | 23.88 | 20.32 | 2.54 | 0.22259E 02 | -0.83747E 01 | 0.53667E 01 | 0.36623E 00 | 0.54631E 00 | 0.22147E 00 |
| | | | | | 5 | 23.88 | 40.64 | 2.54 | 0.32538E 02 | -0.48477E 01 | 0.17527E 01 | 0.33587E 00 | 0.12079E 01 | 0.22147E 00 |
| | | | | | 6 | 23.88 | -40.64 | 2.54 | 0.19316E 02 | -0.83818E 01 | 0.18552E 01 | 0.37743E 00 | 0.12079E 01 | 0.22147E 00 |
| | | | | | 7 | 23.88 | -20.32 | 2.54 | 0.16582E 02 | -0.47979E 01 | 0.45590E 01 | 0.53149E 00 | 0.12461E 01 | 0.10853E 00 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VFL | ROLL | TP | YAN PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|-------|--------|------|-------------|-------------|------------|------------|-------------|-------------|
| 179 | 9.6 | 0.0 | 3 | 150.0 | 0.00 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.4009E 00 | 0.79267E 00 | 0.60287E 00 |
| | | | | | 0.00 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3971E 00 | 0.11272E 01 | 0.4769E 00 |
| | | | | | 20.02 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3777E 00 | 0.11272E 01 | 0.4769E 00 |
| | | | | | 40.04 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3097E 00 | 0.71665E 00 | 0.61772E 00 |
| | | | | | 60.06 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3371E 00 | 0.3694E 00 | 0.71712E 00 |
| | | | | | 80.08 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3719E 00 | 0.8934E 00 | 0.74272E 00 |
| | | | | | 100.10 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2101E 00 | 0.21104E 00 | 0.35983E 00 |
| | | | | | 120.12 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.4373E 00 | 0.5049E 00 | 0.4309E 00 |
| | | | | | 140.14 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.4027E 00 | 0.8509E 00 | 0.4688E 00 |
| | | | | | 160.16 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3865E 00 | 0.8509E 00 | 0.3488E 00 |
| | | | | | 180.18 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3653E 00 | 0.1111E 01 | 0.8895E 00 |
| | | | | | 20.02 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1053E 00 | 0.1180E 01 | 0.8895E 00 |
| | | | | | 40.04 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1053E 00 | 0.1180E 01 | 0.8895E 00 |
| | | | | | 60.06 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1053E 00 | 0.2325E 01 | 0.1177E 00 |
| | | | | | 80.08 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2066E 00 | 0.3104E 00 | 0.3264E 00 |
| | | | | | 100.10 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3270E 00 | 0.5119E 00 | 0.5157E 00 |
| | | | | | 120.12 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3316E 00 | 0.6502E 00 | 0.6027E 00 |
| | | | | | 140.14 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2653E 00 | 0.5812E 00 | 0.6155E 00 |
| | | | | | 160.16 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2740E 00 | 0.2814E 00 | 0.2925E 00 |
| | | | | | 180.18 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1444E 00 | 0.2583E 00 | 0.4770E 00 |
| | | | | | 20.02 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1618E 00 | 0.4027E 00 | 0.2510E 00 |
| | | | | | 40.04 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1969E 00 | 0.5171E 00 | 0.2392E 00 |
| | | | | | 60.06 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1800E 00 | 0.3717E 00 | 0.1958E 00 |
| | | | | | 80.08 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2688E 00 | 0.5577E 00 | 0.1958E 00 |
| | | | | | 100.10 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2409E 00 | 0.7370E 00 | 0.4041E 00 |
| | | | | | 120.12 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2740E 00 | 0.7370E 00 | 0.5237E 00 |
| | | | | | 140.14 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2520E 00 | 0.1349E 00 | 0.1241E 00 |
| | | | | | 160.16 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.6520E 00 | 0.1349E 00 | 0.1241E 00 |
| | | | | | 180.18 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3509E 00 | 0.9414E 00 | 0.3064E 00 |
| | | | | | 20.02 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3897E 00 | 0.9414E 00 | 0.3064E 00 |
| | | | | | 40.04 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3273E 00 | 0.3977E 00 | 0.3719E 00 |
| | | | | | 60.06 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.3003E 00 | 0.3977E 00 | 0.3719E 00 |
| | | | | | 80.08 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2763E 00 | 0.6183E 00 | 0.3719E 00 |
| | | | | | 100.10 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2503E 00 | 0.6183E 00 | 0.3719E 00 |
| | | | | | 120.12 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2298E 00 | 0.1328E 01 | 0.1359E 00 |
| | | | | | 140.14 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.2084E 00 | 0.1328E 01 | 0.1359E 00 |
| | | | | | 160.16 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1884E 00 | 0.1328E 01 | 0.1359E 00 |
| | | | | | 180.18 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1684E 00 | 0.1328E 01 | 0.1359E 00 |
| | | | | | 20.02 | 6.34 | 0.10110E 02 | 0.27975E 01 | 0.1554E 01 | 0.1484E 00 | 0.1328E 01 | 0.1359E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|-----------|---|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 179 | 22.8 | 0.0 | 2 | 150.0 | 6.34 | 0.23400E 02 | 0.25640E 01 | 0.25339E 01 | 0.31805E 00 | 0.98693E 00 | 0.57367E 00 |
| | | | 3 | 6.00 | 6.34 | 0.23307E 02 | 0.25878E 01 | 0.25335E 01 | 0.31906E 00 | 0.98693E 00 | 0.57367E 00 |
| | | | 4 | 6.00 | 6.34 | 0.22288E 02 | 0.22605E 01 | 0.22072E 01 | 0.00239E 00 | 0.00193E 01 | 0.00366E 01 |
| | | | 5 | 20.32 | 6.34 | 0.22288E 02 | 0.22605E 01 | 0.22072E 01 | 0.00239E 00 | 0.00193E 01 | 0.00366E 01 |
| | | | 6 | 20.32 | 6.34 | 0.22288E 02 | 0.22605E 01 | 0.22072E 01 | 0.00239E 00 | 0.00193E 01 | 0.00366E 01 |
| | | | 7 | 20.32 | 6.34 | 0.22288E 02 | 0.22605E 01 | 0.22072E 01 | 0.00239E 00 | 0.00193E 01 | 0.00366E 01 |
| | | | 3 | 120.0 | 6.34 | 0.20179E 02 | 0.26622E 00 | 0.41749E 01 | 0.40449E 00 | 0.13476E 01 | 0.65487E 00 |
| | | | 4 | 6.00 | 6.34 | 0.19014E 02 | 0.14945E 01 | 0.19293E 01 | 0.44482E 00 | 0.10401E 01 | 0.65487E 00 |
| | | | 5 | 6.00 | 6.34 | 0.19763E 02 | 0.14945E 01 | 0.19293E 01 | 0.44482E 00 | 0.10401E 01 | 0.65487E 00 |
| | | | 6 | 20.32 | 6.34 | 0.20244E 02 | 0.20498E 02 | 0.20627E 01 | 0.43118E 00 | 0.09222E 01 | 0.65487E 00 |
| | | | 7 | 20.32 | 6.34 | 0.20244E 02 | 0.20498E 02 | 0.20627E 01 | 0.43118E 00 | 0.09222E 01 | 0.65487E 00 |
| | | | 4 | 180.0 | 6.34 | 0.22298E 02 | 0.87649E 02 | 0.69365E 00 | 0.2481E 00 | 0.61399E 00 | 0.5092E 00 |
| | | | 3 | 6.00 | 6.34 | 0.22413E 02 | 0.28697E 01 | 0.67077E 00 | 0.36508E 00 | 0.84745E 00 | 0.5092E 00 |
| | | | 4 | 6.00 | 6.34 | 0.22390E 02 | 0.28697E 01 | 0.67077E 00 | 0.36508E 00 | 0.84745E 00 | 0.5092E 00 |
| | | | 5 | 20.32 | 6.34 | 0.22452E 02 | 0.22007E 01 | 0.12441E 00 | 0.39769E 00 | 0.93037E 00 | 0.5092E 00 |
| | | | 6 | 20.32 | 6.34 | 0.22452E 02 | 0.22007E 01 | 0.12441E 00 | 0.39769E 00 | 0.93037E 00 | 0.5092E 00 |
| | | | 7 | 20.32 | 6.34 | 0.22452E 02 | 0.22007E 01 | 0.12441E 00 | 0.39769E 00 | 0.93037E 00 | 0.5092E 00 |
| | | | 5 | 210.0 | 6.34 | 0.21103E 02 | 0.11124E 01 | 0.33581E 01 | 0.25935E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 3 | 6.00 | 6.34 | 0.21033E 02 | 0.11124E 01 | 0.33581E 01 | 0.25935E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 4 | 6.00 | 6.34 | 0.21438E 02 | 0.13520E 01 | 0.33044E 01 | 0.25935E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 5 | 20.32 | 6.34 | 0.21659E 02 | 0.10510E 01 | 0.36514E 00 | 0.24998E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 6 | 20.32 | 6.34 | 0.21725E 02 | 0.18108E 01 | 0.36033E 00 | 0.21445E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 7 | 20.32 | 6.34 | 0.20968E 02 | 0.29648E 01 | 0.38603E 00 | 0.32348E 00 | 0.82847E 00 | 0.41743E 00 |
| | | | 6 | 240.0 | 6.34 | 0.18522E 02 | 0.26543E 01 | 0.45339E 01 | 0.44001E 00 | 0.13955E 01 | 0.64714E 00 |
| | | | 3 | 6.00 | 6.34 | 0.20333E 02 | 0.44863E 01 | 0.52471E 01 | 0.47429E 00 | 0.13955E 01 | 0.64714E 00 |
| | | | 4 | 6.00 | 6.34 | 0.19711E 02 | 0.67110E 01 | 0.31960E 01 | 0.47429E 00 | 0.13955E 01 | 0.64714E 00 |
| | | | 5 | 20.32 | 6.34 | 0.23117E 02 | 0.42105E 01 | 0.15808E 01 | 0.56353E 00 | 0.09222E 01 | 0.64714E 00 |
| | | | 6 | 20.32 | 6.34 | 0.20645E 02 | 0.86733E 01 | 0.10085E 01 | 0.33562E 00 | 0.09222E 01 | 0.64714E 00 |
| | | | 7 | 20.32 | 6.34 | 0.17450E 02 | 0.52831E 01 | 0.46885E 01 | 0.40659E 00 | 0.09222E 01 | 0.64714E 00 |

BVMT 2427243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-----|------|----|-------|-------|-------|--------|------|-------------|--------------|--------------|-------------|-------------|-------------|
| 180 | 9.7 | 0.0 | 2 | 130.0 | 1 | 43.16 | -6.60 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 2 | 43.16 | 0.00 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 3 | 43.16 | 0.00 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 4 | 43.16 | 20.32 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 5 | 43.16 | 40.64 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.10190E 02 | -0.18903E 00 | -0.48793E 01 | 0.18233E 00 | 0.29533E 00 | 0.27599E 00 |
| | | | | | 7 | 43.16 | -20.32 | 6.34 | 0.10618E 02 | -0.14285E 01 | -0.27340E 00 | 0.16233E 00 | 0.28146E 00 | 0.39032E 00 |
| | | | | | 1 | 43.16 | 0.00 | 6.34 | 0.94871E 01 | 0.88971E 00 | 0.75223E 00 | 0.29213E 00 | 0.63213E 00 | 0.42291E 00 |
| | | | | | 2 | 43.16 | 0.00 | 6.34 | 0.94871E 01 | 0.88971E 00 | 0.75223E 00 | 0.29213E 00 | 0.63213E 00 | 0.42291E 00 |
| | | | | | 3 | 43.16 | 20.32 | 6.34 | 0.94871E 01 | 0.88971E 00 | 0.75223E 00 | 0.29213E 00 | 0.63213E 00 | 0.42291E 00 |
| | | | | | 4 | 43.16 | 40.64 | 6.34 | 0.94871E 01 | 0.88971E 00 | 0.75223E 00 | 0.29213E 00 | 0.63213E 00 | 0.42291E 00 |
| | | | | | 5 | 43.16 | -20.32 | 6.34 | 0.94871E 01 | 0.88971E 00 | 0.75223E 00 | 0.29213E 00 | 0.63213E 00 | 0.42291E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.97864E 01 | -0.83780E 00 | 0.16998E 00 | 0.19465E 00 | 0.60596E 00 | 0.34721E 00 |
| | | | | | 1 | 43.16 | -6.60 | 6.34 | 0.10543E 02 | 0.20429E 00 | 0.17693E 00 | 0.20193E 00 | 0.68917E 00 | 0.42191E 00 |
| | | | | | 2 | 43.16 | 0.00 | 6.34 | 0.10543E 02 | 0.20429E 00 | 0.17693E 00 | 0.20193E 00 | 0.68917E 00 | 0.42191E 00 |
| | | | | | 3 | 43.16 | 20.32 | 6.34 | 0.10543E 02 | 0.20429E 00 | 0.17693E 00 | 0.20193E 00 | 0.68917E 00 | 0.42191E 00 |
| | | | | | 4 | 43.16 | 40.64 | 6.34 | 0.10543E 02 | 0.20429E 00 | 0.17693E 00 | 0.20193E 00 | 0.68917E 00 | 0.42191E 00 |
| | | | | | 5 | 43.16 | -20.32 | 6.34 | 0.10543E 02 | 0.20429E 00 | 0.17693E 00 | 0.20193E 00 | 0.68917E 00 | 0.42191E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.10714E 02 | 0.14086E 01 | 0.10879E 01 | 0.20448E 00 | 0.22409E 00 | 0.27449E 00 |
| | | | | | 1 | 43.16 | 0.00 | 6.34 | 0.99274E 01 | 0.43874E 00 | 0.16120E 00 | 0.30300E 00 | 0.52649E 00 | 0.35977E 00 |
| | | | | | 2 | 43.16 | 0.00 | 6.34 | 0.99274E 01 | 0.43874E 00 | 0.16120E 00 | 0.30300E 00 | 0.52649E 00 | 0.35977E 00 |
| | | | | | 3 | 43.16 | 20.32 | 6.34 | 0.99274E 01 | 0.43874E 00 | 0.16120E 00 | 0.30300E 00 | 0.52649E 00 | 0.35977E 00 |
| | | | | | 4 | 43.16 | 40.64 | 6.34 | 0.99274E 01 | 0.43874E 00 | 0.16120E 00 | 0.30300E 00 | 0.52649E 00 | 0.35977E 00 |
| | | | | | 5 | 43.16 | -20.32 | 6.34 | 0.99274E 01 | 0.43874E 00 | 0.16120E 00 | 0.30300E 00 | 0.52649E 00 | 0.35977E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.10200E 02 | -0.16077E 01 | -0.19207E 00 | 0.15551E 00 | 0.22663E 00 | 0.22870E 00 |
| | | | | | 1 | 43.16 | 0.00 | 6.34 | 0.93197E 01 | 0.79295E 00 | 0.11165E 00 | 0.29731E 00 | 0.37447E 00 | 0.20671E 00 |
| | | | | | 2 | 43.16 | 0.00 | 6.34 | 0.93197E 01 | 0.79295E 00 | 0.11165E 00 | 0.29731E 00 | 0.37447E 00 | 0.20671E 00 |
| | | | | | 3 | 43.16 | 20.32 | 6.34 | 0.93197E 01 | 0.79295E 00 | 0.11165E 00 | 0.29731E 00 | 0.37447E 00 | 0.20671E 00 |
| | | | | | 4 | 43.16 | 40.64 | 6.34 | 0.93197E 01 | 0.79295E 00 | 0.11165E 00 | 0.29731E 00 | 0.37447E 00 | 0.20671E 00 |
| | | | | | 5 | 43.16 | -20.32 | 6.34 | 0.93197E 01 | 0.79295E 00 | 0.11165E 00 | 0.29731E 00 | 0.37447E 00 | 0.20671E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.94902E 01 | -0.16022E 01 | -0.10430E 01 | 0.13185E 00 | 0.92950E 00 | 0.19468E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-------|-------|-------|------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 181 | 23.3 | 0.0 | 2 | 150.0 | 1 | 43.16 | 6.60 | 6.34 | 0.21568E 02 | 0.15656E 00 | 0.16678E 01 | 0.25599E 01 | 0.21421E 01 | 0.47995E 00 | 0.29971E 00 | 0.33838E 00 | 0.81360E 00 | 0.5277E 00 | 0.43996E 00 | 0.43996E 00 |
| | | | | | 2 | 43.16 | 6.60 | 6.34 | 0.22288E 02 | 0.22063E 01 | 0.20131E 01 | 0.27034E 01 | 0.25310E 01 | 0.45062E 00 | 0.38523E 00 | 0.48804E 00 | 0.90114E 00 | 0.35496E 00 | 0.35496E 00 | 0.35496E 00 |
| | | | | | 3 | 43.16 | 6.60 | 6.34 | 0.23310E 02 | 0.20131E 01 | 0.20131E 01 | 0.27034E 01 | 0.25310E 01 | 0.45062E 00 | 0.38523E 00 | 0.48804E 00 | 0.90114E 00 | 0.35496E 00 | 0.35496E 00 | 0.35496E 00 |
| | | | | | 4 | 43.16 | 6.60 | 6.34 | 0.22627E 02 | 0.22912E 01 | 0.22912E 01 | 0.27034E 01 | 0.25310E 01 | 0.45062E 00 | 0.38523E 00 | 0.48804E 00 | 0.90114E 00 | 0.35496E 00 | 0.35496E 00 | 0.35496E 00 |
| | | | | | 5 | 43.16 | 6.60 | 6.34 | 0.20171E 02 | 0.10863E 01 | 0.10863E 01 | 0.19237E 01 | 0.19237E 01 | 0.42088E 00 | 0.20602E 00 | 0.25310E 00 | 0.79880E 00 | 0.68315E 00 | 0.38792E 00 | 0.38792E 00 |
| | | | | | 6 | 43.16 | 6.60 | 6.34 | 0.22004E 02 | 0.13638E 01 | 0.13638E 01 | 0.19237E 01 | 0.19237E 01 | 0.42088E 00 | 0.22433E 00 | 0.22433E 00 | 0.79880E 00 | 0.68315E 00 | 0.38792E 00 | 0.38792E 00 |
| | | | | | 7 | 43.16 | 6.60 | 6.34 | 0.21872E 02 | 0.11938E 01 | 0.11938E 01 | 0.19237E 01 | 0.19237E 01 | 0.42088E 00 | 0.22966E 00 | 0.22966E 00 | 0.79880E 00 | 0.68315E 00 | 0.38792E 00 | 0.38792E 00 |
| | | | | | 8 | 43.16 | 6.60 | 6.34 | 0.23053E 02 | 0.09765E 01 | 0.09765E 01 | 0.19237E 01 | 0.19237E 01 | 0.42088E 00 | 0.27772E 00 | 0.27772E 00 | 0.79880E 00 | 0.68315E 00 | 0.38792E 00 | 0.38792E 00 |
| | | | | | 9 | 43.16 | 6.60 | 6.34 | 0.20953E 02 | 0.14202E 01 | 0.14202E 01 | 0.19237E 01 | 0.19237E 01 | 0.42088E 00 | 0.32949E 00 | 0.32949E 00 | 0.79880E 00 | 0.68315E 00 | 0.38792E 00 | 0.38792E 00 |
| | | | | | 10 | 43.16 | 6.60 | 6.34 | 0.22746E 02 | 0.28253E 01 | 0.28253E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.19863E 00 | 0.19863E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 11 | 43.16 | 6.60 | 6.34 | 0.22443E 02 | 0.32557E 01 | 0.32557E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.27273E 00 | 0.27273E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 12 | 43.16 | 6.60 | 6.34 | 0.22508E 02 | 0.32508E 01 | 0.32508E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.25203E 00 | 0.25203E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 13 | 43.16 | 6.60 | 6.34 | 0.24076E 02 | 0.02427E 01 | 0.02427E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.24370E 00 | 0.24370E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 14 | 43.16 | 6.60 | 6.34 | 0.22872E 02 | 0.02026E 01 | 0.02026E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.24370E 00 | 0.24370E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 15 | 43.16 | 6.60 | 6.34 | 0.23300E 02 | 0.02774E 01 | 0.02774E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.22192E 00 | 0.22192E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 16 | 43.16 | 6.60 | 6.34 | 0.21328E 02 | 0.48338E 00 | 0.48338E 00 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.23198E 00 | 0.23198E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 17 | 43.16 | 6.60 | 6.34 | 0.23013E 02 | 0.21545E 01 | 0.21545E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.26563E 00 | 0.26563E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 18 | 43.16 | 6.60 | 6.34 | 0.23768E 02 | 0.35071E 01 | 0.35071E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.26224E 00 | 0.26224E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 19 | 43.16 | 6.60 | 6.34 | 0.25009E 02 | 0.00747E 01 | 0.00747E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.28120E 00 | 0.28120E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 20 | 43.16 | 6.60 | 6.34 | 0.21620E 02 | 0.03246E 01 | 0.03246E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.20745E 00 | 0.20745E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 21 | 43.16 | 6.60 | 6.34 | 0.19739E 02 | 0.11584E 01 | 0.11584E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.2023E 00 | 0.2023E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 22 | 43.16 | 6.60 | 6.34 | 0.21972E 02 | 0.04013E 01 | 0.04013E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.21725E 00 | 0.21725E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 23 | 43.16 | 6.60 | 6.34 | 0.21704E 02 | 0.03768E 01 | 0.03768E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.28335E 00 | 0.28335E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 24 | 43.16 | 6.60 | 6.34 | 0.23616E 02 | 0.04267E 01 | 0.04267E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.28381E 00 | 0.28381E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 25 | 43.16 | 6.60 | 6.34 | 0.20638E 02 | 0.04796E 01 | 0.04796E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.25189E 00 | 0.25189E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |
| | | | | | 26 | 43.16 | 6.60 | 6.34 | 0.19667E 02 | 0.03768E 01 | 0.03768E 01 | 0.27743E 01 | 0.27743E 01 | 0.46118E 00 | 0.26906E 00 | 0.26906E 00 | 0.69556E 00 | 0.52155E 00 | 0.35195E 00 | 0.35195E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RYM VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S-D. VX | S-D. VY | S-D. VZ |
|---------|---------|-----------|---|-------|------|--------------|-------------|-------------|-------------|-------------|-------------|
| 102 | 9-8 | 0-0 | 2 | 150-0 | 6-34 | 0-113116E 02 | 0-28187E 01 | 0-2799E 01 | 0-35090E 00 | 0-77424E 00 | 0-62956E 00 |
| | | | 3 | 6-60 | 6-34 | 0-113116E 02 | 0-28187E 01 | 0-2799E 01 | 0-37464E 00 | 0-77424E 00 | 0-62956E 00 |
| | | | 4 | 20-32 | 6-34 | 0-101333E 02 | 0-17279E 01 | 0-18917E 01 | 0-56972E 00 | 0-12821E 01 | 0-5158E 00 |
| | | | 5 | 40-64 | 6-34 | 0-110933E 02 | 0-12444E 01 | 0-50440E 00 | 0-56972E 00 | 0-12821E 01 | 0-5158E 00 |
| | | | 6 | 40-64 | 6-34 | 0-11554E 02 | 0-10092E 01 | 0-66647E 00 | 0-39853E 00 | 0-74078E 00 | 0-7442E 00 |
| | | | 7 | 20-32 | 6-34 | 0-11554E 02 | 0-83725E 00 | 0-24370E 01 | 0-24420E 00 | 0-53204E 00 | 0-38261E 00 |
| | 3 | 120-0 | 1 | 6-60 | 6-34 | 0-11659E 02 | 0-4471E 01 | 0-2398E 01 | 0-41238E 00 | 0-52341E 00 | 0-38750E 00 |
| | | | 2 | 20-32 | 6-34 | 0-9570E 01 | 0-1847E 00 | 0-2662E 01 | 0-91103E 01 | 0-89802E 00 | 0-31239E 01 |
| | | | 3 | 20-32 | 6-34 | 0-9570E 01 | 0-1847E 00 | 0-2662E 01 | 0-91103E 01 | 0-89802E 00 | 0-31239E 01 |
| | | | 4 | 20-32 | 6-34 | 0-9570E 01 | 0-1847E 00 | 0-2662E 01 | 0-91103E 01 | 0-89802E 00 | 0-31239E 01 |
| | | | 5 | 20-32 | 6-34 | 0-9570E 01 | 0-1847E 00 | 0-2662E 01 | 0-91103E 01 | 0-89802E 00 | 0-31239E 01 |
| | | | 6 | 20-32 | 6-34 | 0-11553E 02 | 0-83725E 00 | 0-24370E 01 | 0-24420E 00 | 0-53204E 00 | 0-38261E 00 |
| | 4 | 180-0 | 1 | 6-60 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | | | 2 | 20-32 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | | | 3 | 20-32 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | | | 4 | 20-32 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | | | 5 | 20-32 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | | | 6 | 20-32 | 6-34 | 0-10675E 02 | 0-1192E 01 | 0-23046E 00 | 0-30310E 00 | 0-51756E 00 | 0-40853E 00 |
| | 5 | 210-0 | 1 | 6-60 | 6-34 | 0-1019E 02 | 0-3943E 01 | 0-21860E 01 | 0-17724E 00 | 0-31290E 00 | 0-20595E 00 |
| | | | 2 | 20-32 | 6-34 | 0-11623E 02 | 0-4641E 01 | 0-84751E 00 | 0-29867E 00 | 0-62902E 00 | 0-39382E 00 |
| | | | 3 | 20-32 | 6-34 | 0-12267E 02 | 0-15840E 00 | 0-26798E 01 | 0-35695E 00 | 0-82902E 00 | 0-39382E 00 |
| | | | 4 | 20-64 | 6-34 | 0-12267E 02 | 0-10320E 00 | 0-1698E 01 | 0-39427E 00 | 0-70966E 00 | 0-40031E 00 |
| | | | 5 | 20-64 | 6-34 | 0-10601E 02 | 0-10320E 00 | 0-1698E 01 | 0-39427E 00 | 0-70966E 00 | 0-40031E 00 |
| | | | 6 | 20-32 | 6-34 | 0-9602E 01 | 0-19414E 01 | 0-76318E 00 | 0-16943E 00 | 0-57931E 01 | 0-77242E 01 |
| | 6 | 240-0 | 1 | 6-60 | 6-34 | 0-1019E 02 | 0-3610E 01 | 0-2902E 01 | 0-13700E 00 | 0-12109E 00 | 0-10625E 00 |
| | | | 2 | 20-32 | 6-34 | 0-12656E 02 | 0-5264E 01 | 0-20054E 00 | 0-15276E 00 | 0-32902E 00 | 0-39382E 00 |
| | | | 3 | 20-32 | 6-34 | 0-12656E 02 | 0-5264E 01 | 0-20054E 00 | 0-15276E 00 | 0-32902E 00 | 0-39382E 00 |
| | | | 4 | 20-64 | 6-34 | 0-12656E 02 | 0-5264E 01 | 0-20054E 00 | 0-15276E 00 | 0-32902E 00 | 0-39382E 00 |
| | | | 5 | 20-64 | 6-34 | 0-12656E 02 | 0-5264E 01 | 0-20054E 00 | 0-15276E 00 | 0-32902E 00 | 0-39382E 00 |
| | | | 6 | 20-32 | 6-34 | 0-85300E 01 | 0-43770E 01 | 0-22809E 01 | 0-11720E 00 | 0-11715E 00 | 0-16136E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-------|-------|------|--------|------|------------|------------|------------|------------|------------|------------|
| 183.22.8 | 0.0 | 2 | 150.0 | 1 | 9.18 | -6.60 | 6.34 | 0.2385E 02 | 0.4117E 01 | 0.3527E 00 | 0.3867E 00 | 0.9138E 00 | 0.5980E 00 |
| | | | | 3 | 9.18 | 0.90 | 6.34 | 0.2199E 02 | 0.3074E 01 | 0.1023E 01 | 0.3280E 00 | 0.9336E 00 | 0.5422E 00 |
| | | | | 5 | 9.18 | 20.32 | 6.34 | 0.2192E 02 | 0.2601E 01 | 0.2790E 01 | 0.2197E 00 | 0.1086E 00 | 0.2832E 00 |
| | | | | 7 | 9.18 | -40.64 | 6.34 | 0.2440E 02 | 0.3018E 01 | 0.1205E 01 | 0.3787E 00 | 0.9861E 00 | 0.5167E 00 |
| | | | | 9 | 9.18 | -20.32 | 6.34 | 0.2462E 02 | 0.6417E 01 | 0.4003E 01 | 0.3347E 00 | 0.6670E 00 | 0.4827E 00 |
| | | 3 | 120.0 | 1 | 9.18 | -6.60 | 6.34 | 0.2538E 02 | 0.4775E 01 | 0.2376E 01 | 0.3291E 00 | 0.9882E 00 | 0.4866E 00 |
| | | | | 3 | 9.18 | 0.90 | 6.34 | 0.2517E 02 | 0.5601E 01 | 0.6670E 01 | 0.4529E 00 | 0.1907E 01 | 0.1058E 01 |
| | | | | 5 | 9.18 | 20.32 | 6.34 | 0.1909E 02 | 0.1960E 01 | 0.6778E 01 | 0.4529E 00 | 0.1809E 01 | 0.1017E 01 |
| | | | | 7 | 9.18 | -40.64 | 6.34 | 0.1971E 02 | 0.3871E 01 | 0.5140E 01 | 0.3868E 00 | 0.1766E 01 | 0.6291E 01 |
| | | | | 9 | 9.18 | -20.32 | 6.34 | 0.2668E 02 | 0.5391E 01 | 0.2797E 01 | 0.2799E 00 | 0.8470E 00 | 0.5021E 00 |
| | | 5 | 180.0 | 1 | 9.18 | -6.60 | 6.34 | 0.2215E 02 | 0.1903E 01 | 0.1195E 00 | 0.2909E 00 | 0.8647E 00 | 0.4068E 00 |
| | | | | 3 | 9.18 | 0.90 | 6.34 | 0.2386E 02 | 0.1933E 01 | 0.1855E 00 | 0.4468E 00 | 0.9524E 00 | 0.5600E 00 |
| | | | | 5 | 9.18 | 20.32 | 6.34 | 0.2381E 02 | 0.3098E 01 | 0.7992E 03 | 0.5513E 00 | 0.1017E 01 | 0.7124E 01 |
| | | | | 7 | 9.18 | -40.64 | 6.34 | 0.2462E 02 | 0.2123E 01 | 0.3306E 00 | 0.3306E 00 | 0.1017E 01 | 0.4887E 01 |
| | | | | 9 | 9.18 | -20.32 | 6.34 | 0.2271E 02 | 0.7856E 01 | 0.1789E 00 | 0.3514E 00 | 0.8867E 01 | 0.4430E 01 |
| | | 5 | 210.0 | 1 | 9.18 | -6.60 | 6.34 | 0.2146E 02 | 0.5018E 01 | 0.4272E 01 | 0.5617E 00 | 0.1628E 01 | 0.9239E 01 |
| | | | | 3 | 9.18 | 0.90 | 6.34 | 0.2349E 02 | 0.8390E 01 | 0.1402E 01 | 0.6851E 00 | 0.1805E 01 | 0.7183E 01 |
| | | | | 5 | 9.18 | 20.32 | 6.34 | 0.2583E 02 | 0.3942E 01 | 0.2252E 01 | 0.5979E 00 | 0.1580E 01 | 0.1094E 01 |
| | | | | 7 | 9.18 | -40.64 | 6.34 | 0.2283E 02 | 0.1394E 01 | 0.1643E 01 | 0.5322E 00 | 0.6292E 00 | 0.3351E 00 |
| | | | | 9 | 9.18 | -20.32 | 6.34 | 0.1973E 02 | 0.4322E 01 | 0.4118E 01 | 0.4187E 00 | 0.7437E 00 | 0.2338E 00 |
| | | 6 | 240.0 | 1 | 9.18 | -6.60 | 6.34 | 0.2143E 02 | 0.6332E 01 | 0.7414E 01 | 0.4451E 00 | 0.5003E 00 | 0.4863E 00 |
| | | | | 3 | 9.18 | 0.90 | 6.34 | 0.2516E 02 | 0.8609E 02 | 0.4716E 01 | 0.4932E 00 | 0.6893E 00 | 0.4545E 00 |
| | | | | 5 | 9.18 | 20.32 | 6.34 | 0.2736E 02 | 0.1007E 01 | 0.1922E 00 | 0.3314E 00 | 0.4549E 00 | 0.3310E 00 |
| | | | | 7 | 9.18 | -40.64 | 6.34 | 0.2710E 02 | 0.6050E 01 | 0.9722E 00 | 0.2554E 00 | 0.8669E 00 | 0.6311E 00 |
| | | | | 9 | 9.18 | -20.32 | 6.34 | 0.2170E 02 | 0.8988E 01 | 0.4160E 01 | 0.3837E 00 | 0.2357E 00 | 0.1590E 00 |

BVWT 242/243 SHIP WAKE TURBULENCE TEST

| PIN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|-------|------|------------|------------|------------|------------|------------|------------|
| 184 10.3 | 0.0 | 2 | 150.0 | 6.60 | 6.34 | 0.1123E 02 | 0.2226E 01 | 0.1002E 00 | 0.3101E 00 | 0.6220E 00 | 0.3562E 00 |
| | | | | 0.60 | 6.34 | 0.1123E 02 | 0.3557E 01 | 0.1250E 00 | 0.3171E 00 | 0.6260E 00 | 0.8361E 00 |
| | | | | 20.32 | 6.34 | 0.1028E 02 | 0.4609E 00 | 0.2471E 00 | 0.4447E 00 | 0.1137E 01 | 0.5897E 00 |
| | | | | 40.64 | 6.34 | 0.1087E 02 | 0.5907E 00 | 0.6463E 00 | 0.2185E 00 | 0.1377E 00 | 0.0211E 00 |
| | | | | 60.96 | 6.34 | 0.1145E 02 | 0.3218E 01 | 0.3589E 00 | 0.1310E 00 | 0.6394E 00 | 0.3416E 00 |
| | | | | 81.28 | 6.34 | 0.1156E 02 | 0.1304E 01 | 0.2392E 01 | 0.1641E 00 | 0.2678E 00 | 0.1926E 00 |
| | 3 | 120.0 | 6.60 | 6.60 | 6.34 | 0.1232E 02 | 0.3891E 01 | 0.1174E 01 | 0.4472E 00 | 0.8157E 00 | 0.6554E 00 |
| | | | | 0.60 | 6.34 | 0.1232E 02 | 0.4655E 01 | 0.2471E 00 | 0.5038E 00 | 0.1214E 01 | 0.4347E 00 |
| | | | | 20.32 | 6.34 | 0.1171E 02 | 0.3211E 01 | 0.6121E 00 | 0.6746E 00 | 0.1075E 00 | 0.5117E 00 |
| | | | | 40.64 | 6.34 | 0.9208E 02 | 0.3121E 01 | 0.1780E 00 | 0.4178E 00 | 0.8650E 00 | 0.9489E 00 |
| | | | | 60.96 | 6.34 | 0.1273E 02 | 0.3200E 01 | 0.5168E 00 | 0.1632E 00 | 0.8654E 00 | 0.6032E 00 |
| | | | | 81.28 | 6.34 | 0.1273E 02 | 0.3200E 01 | 0.5168E 00 | 0.1198E 00 | 0.4954E 00 | 0.2919E 00 |
| | 4 | 180.0 | 6.60 | 6.60 | 6.34 | 0.1026E 02 | 0.2511E 01 | 0.3467E 00 | 0.2946E 00 | 0.5749E 00 | 0.4036E 00 |
| | | | | 0.60 | 6.34 | 0.1026E 02 | 0.4722E 01 | 0.2778E 00 | 0.2388E 00 | 0.1170E 01 | 0.8019E 00 |
| | | | | 20.32 | 6.34 | 0.1026E 02 | 0.3722E 00 | 0.2778E 00 | 0.2686E 00 | 0.1047E 00 | 0.7947E 00 |
| | | | | 40.64 | 6.34 | 0.1187E 02 | 0.4252E 01 | 0.1355E 00 | 0.2085E 00 | 0.3322E 00 | 0.4230E 00 |
| | | | | 60.96 | 6.34 | 0.1063E 02 | 0.4252E 01 | 0.1011E 01 | 0.2085E 00 | 0.2192E 00 | 0.4680E 00 |
| | | | | 81.28 | 6.34 | 0.1063E 02 | 0.4252E 01 | 0.1011E 01 | 0.2357E 00 | 0.2440E 00 | 0.2018E 00 |
| | 5 | 210.0 | 6.60 | 6.60 | 6.34 | 0.1099E 02 | 0.3906E 01 | 0.2119E 00 | 0.2926E 00 | 0.4720E 00 | 0.3495E 00 |
| | | | | 0.60 | 6.34 | 0.1099E 02 | 0.4800E 01 | 0.1823E 00 | 0.4944E 00 | 0.7334E 00 | 0.6125E 00 |
| | | | | 20.32 | 6.34 | 0.1256E 02 | 0.3567E 01 | 0.3723E 00 | 0.4944E 00 | 0.1004E 01 | 0.7893E 00 |
| | | | | 40.64 | 6.34 | 0.1256E 02 | 0.3567E 01 | 0.3723E 00 | 0.3011E 00 | 0.3691E 00 | 0.4281E 00 |
| | | | | 60.96 | 6.34 | 0.1079E 02 | 0.3533E 01 | 0.1847E 00 | 0.2957E 00 | 0.2545E 00 | 0.2094E 00 |
| | | | | 81.28 | 6.34 | 0.9204E 01 | 0.2937E 01 | 0.2072E 01 | 0.3443E 00 | 0.1064E 00 | 0.4309E 00 |
| | 6 | 240.0 | 6.60 | 6.60 | 6.34 | 0.1232E 02 | 0.4344E 01 | 0.3917E 01 | 0.8119E 00 | 0.6675E 00 | 0.4985E 00 |
| | | | | 0.60 | 6.34 | 0.1232E 02 | 0.5276E 01 | 0.2703E 00 | 0.8447E 00 | 0.7032E 00 | 0.5682E 00 |
| | | | | 20.32 | 6.34 | 0.1266E 02 | 0.3327E 01 | 0.1650E 00 | 0.5443E 00 | 0.7452E 00 | 0.5723E 00 |
| | | | | 40.64 | 6.34 | 0.1266E 02 | 0.3327E 01 | 0.1650E 00 | 0.3650E 00 | 0.6133E 00 | 0.7681E 00 |
| | | | | 60.96 | 6.34 | 0.1266E 02 | 0.3327E 01 | 0.2080E 00 | 0.1333E 00 | 0.3829E 00 | 0.2628E 00 |
| | | | | 81.28 | 6.34 | 0.8268E 01 | 0.3562E 01 | 0.2700E 00 | 0.3321E 00 | 0.6924E 00 | 0.3258E 00 |

BYMT 242/243 SHIP WAKE TURBULENCE TEST

| PUM VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|------|----|-----------|---|------|------|-------------|-------------|--------------|-------------|-------------|-------------|
| 185 22.6 | 0.0 | 2 | 150.0 | 1 | 4.59 | 6.34 | 0.24087E 02 | 0.3738E 01 | -0.12767E 01 | 0.3502E 00 | 0.77805E 00 | 0.59434E 00 |
| | | | | 2 | 4.59 | 6.34 | 0.21394E 02 | 0.36738E 01 | 0.3414E 00 | 0.3798E 00 | 0.80164E 00 | 0.52397E 00 |
| | | | | 3 | 4.59 | 6.34 | 0.21394E 02 | 0.36738E 01 | 0.3414E 00 | 0.3798E 00 | 0.80164E 00 | 0.52397E 00 |
| | | | | 4 | 4.59 | 6.34 | 0.22811E 02 | 0.3425E 01 | 0.15780E 01 | 0.49252E 00 | 0.88676E 00 | 0.54759E 00 |
| | | | | 5 | 4.59 | 6.34 | 0.24715E 02 | 0.54003E 01 | 0.17025E 00 | 0.32741E 00 | 0.90646E 00 | 0.52069E 00 |
| | | | | 6 | 4.59 | 6.34 | 0.24715E 02 | 0.54003E 01 | 0.17025E 00 | 0.32741E 00 | 0.90646E 00 | 0.52069E 00 |
| | | | | 7 | 4.59 | 6.34 | 0.24715E 02 | 0.54003E 01 | 0.17025E 00 | 0.32741E 00 | 0.90646E 00 | 0.52069E 00 |
| | | 3 | 120.0 | 1 | 4.59 | 6.34 | 0.25815E 02 | 0.42291E 01 | 0.37922E 00 | 0.47677E 00 | 0.12008E 01 | 0.75116E 00 |
| | | | | 2 | 4.59 | 6.34 | 0.2667E 02 | 0.63178E 01 | 0.42228E 01 | 0.10229E 01 | 0.27282E 01 | 0.15159E 01 |
| | | | | 3 | 4.59 | 6.34 | 0.23121E 02 | 0.39716E 01 | 0.6332E 01 | 0.1130E 01 | 0.2755E 01 | 0.21401E 01 |
| | | | | 4 | 4.59 | 6.34 | 0.13291E 02 | 0.30716E 01 | 0.57796E 01 | 0.12646E 01 | 0.17490E 01 | 0.17077E 01 |
| | | | | 5 | 4.59 | 6.34 | 0.18222E 02 | 0.4729E 01 | 0.57796E 01 | 0.41989E 00 | 0.17490E 01 | 0.17077E 01 |
| | | | | 6 | 4.59 | 6.34 | 0.2552E 02 | 0.2768E 01 | 0.9493E 00 | 0.41989E 00 | 0.17490E 01 | 0.17077E 01 |
| | | | | 7 | 4.59 | 6.34 | 0.26396E 02 | 0.24145E 00 | 0.33650E 01 | 0.32034E 00 | 0.17065E 01 | 0.8523E 00 |
| | | 4 | 180.0 | 1 | 4.59 | 6.34 | 0.21905E 02 | 0.71991E 01 | 0.17064E 00 | 0.29978E 00 | 0.84644E 00 | 0.44493E 00 |
| | | | | 2 | 4.59 | 6.34 | 0.22384E 02 | 0.22004E 01 | 0.4278E 01 | 0.56159E 00 | 0.12490E 01 | 0.80358E 00 |
| | | | | 3 | 4.59 | 6.34 | 0.21698E 02 | 0.3554E 01 | 0.29521E 00 | 0.73831E 00 | 0.12490E 01 | 0.80358E 00 |
| | | | | 4 | 4.59 | 6.34 | 0.23862E 02 | 0.22231E 01 | 0.33397E 00 | 0.30334E 00 | 0.5903E 00 | 0.52266E 00 |
| | | | | 5 | 4.59 | 6.34 | 0.24566E 02 | 0.18230E 01 | 0.19915E 01 | 0.50675E 00 | 0.94338E 00 | 0.52894E 00 |
| | | | | 6 | 4.59 | 6.34 | 0.2219E 02 | 0.8379E 01 | 0.2484E 00 | 0.60181E 00 | 0.15119E 00 | 0.5895E 01 |
| | | | | 7 | 4.59 | 6.34 | 0.22254E 02 | 0.25064E 01 | 0.94189E 00 | 0.28034E 00 | 0.84561E 00 | 0.51953E 00 |
| | | 5 | 210.0 | 1 | 4.59 | 6.34 | 0.2065E 02 | 0.7165E 01 | 0.55125E 01 | 0.65139E 00 | 0.84361E 00 | 0.61517E 00 |
| | | | | 2 | 4.59 | 6.34 | 0.23862E 02 | 0.9587E 01 | 0.3798E 01 | 0.65139E 00 | 0.84361E 00 | 0.61517E 00 |
| | | | | 3 | 4.59 | 6.34 | 0.23072E 02 | 0.92740E 01 | 0.9320E 00 | 0.6099E 00 | 0.12738E 01 | 0.17325E 01 |
| | | | | 4 | 4.59 | 6.34 | 0.2368E 02 | 0.29381E 00 | 0.9906E 01 | 0.3687E 00 | 0.5070E 00 | 0.4346E 00 |
| | | | | 5 | 4.59 | 6.34 | 0.25112E 02 | 0.2591E 00 | 0.16173E 01 | 0.42064E 00 | 0.86032E 00 | 0.52968E 00 |
| | | | | 6 | 4.59 | 6.34 | 0.21966E 02 | 0.93612E 01 | 0.4020E 01 | 0.3943E 00 | 0.22709E 00 | 0.16709E 00 |
| | | | | 7 | 4.59 | 6.34 | 0.1923E 02 | 0.47406E 01 | 0.4332E 01 | 0.5833E 00 | 0.15627E 01 | 0.94249E 00 |
| | | 6 | 240.0 | 1 | 4.59 | 6.34 | 0.2378E 02 | 0.8037E 01 | 0.69772E 01 | 0.30707E 00 | 0.3720E 00 | 0.39801E 00 |
| | | | | 2 | 4.59 | 6.34 | 0.2435E 02 | 0.10428E 02 | 0.58912E 01 | 0.38731E 00 | 0.73992E 00 | 0.44438E 00 |
| | | | | 3 | 4.59 | 6.34 | 0.2468E 02 | 0.1056E 02 | 0.3427E 01 | 0.34877E 00 | 0.6216E 00 | 0.35571E 00 |
| | | | | 4 | 4.59 | 6.34 | 0.2483E 02 | 0.1664E 01 | 0.1960E 01 | 0.30825E 00 | 0.94196E 00 | 0.6543E 00 |
| | | | | 5 | 4.59 | 6.34 | 0.2016E 02 | 0.2893E 01 | 0.31921E 01 | 0.30510E 00 | 0.7197E 00 | 0.39707E 00 |
| | | | | 6 | 4.59 | 6.34 | 0.21478E 02 | 0.9607E 01 | 0.4164E 01 | 0.2751E 00 | 0.1406E 00 | 0.1495E 00 |
| | | | | 7 | 4.59 | 6.34 | 0.15801E 02 | 0.3818E 01 | 0.64697E 01 | 0.18300E 00 | 0.21358E 00 | 0.1602E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| °UN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-------|-------|-------|-------|------|---------|----|---------|----|----------|----|---------|----|---------|----|---------|----|
| 196 | 10.1 | 0.0 | 2 | 150.0 | 1 | 0.00 | 0.00 | 6.34 | 0.1170E | 02 | 0.2033E | 01 | -0.6684E | 00 | 0.2686E | 00 | 0.5570E | 00 | 0.3763E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1055E | 02 | 0.3823E | 01 | -0.1044E | 00 | 0.3690E | 00 | 0.5175E | 00 | 0.6903E | 00 |
| | | | | | | 20.64 | 20.64 | 6.34 | 0.1077E | 02 | 0.5216E | 01 | 0.2320E | 00 | 0.4494E | 00 | 0.5026E | 00 | 0.3918E | 00 |
| | | | | | | 40.64 | 40.64 | 6.34 | 0.1095E | 02 | 0.3956E | 02 | -0.4860E | 00 | 0.3391E | 00 | 0.3886E | 00 | 0.3063E | 00 |
| | | | | | | 20.32 | 20.32 | 6.34 | 0.1147E | 02 | 0.2114E | 01 | -0.0234E | 01 | 0.2517E | 00 | 0.4797E | 00 | 0.4479E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1207E | 02 | 0.4508E | 01 | 0.2845E | 00 | 0.5263E | 00 | 0.1173E | 01 | 0.8519E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1245E | 02 | 0.3276E | 01 | 0.2740E | 00 | 0.4992E | 00 | 0.1442E | 00 | 0.8590E | 00 |
| | | | | | | 20.64 | 20.64 | 6.34 | 0.1292E | 02 | 0.2550E | 01 | 0.2550E | 00 | 0.4097E | 00 | 0.2842E | 00 | 0.5232E | 00 |
| | | | | | | 40.64 | 40.64 | 6.34 | 0.1328E | 02 | 0.2827E | 01 | 0.2550E | 00 | 0.3737E | 00 | 0.2939E | 00 | 0.4327E | 00 |
| | | | | | | 20.32 | 20.32 | 6.34 | 0.1288E | 02 | 0.1695E | 00 | -0.0216E | 01 | 0.4188E | 00 | 0.6709E | 00 | 0.7977E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1295E | 02 | 0.3733E | 01 | 0.3255E | 00 | 0.2157E | 00 | 0.5733E | 00 | 0.3817E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1305E | 02 | 0.1844E | 00 | 0.2418E | 00 | 0.2170E | 00 | 0.1169E | 01 | 0.9055E | 00 |
| | | | | | | 20.64 | 20.64 | 6.34 | 0.1195E | 02 | 0.5900E | 01 | 0.0845E | 00 | 0.3485E | 00 | 0.1689E | 00 | 0.3910E | 00 |
| | | | | | | 40.64 | 40.64 | 6.34 | 0.1063E | 02 | 0.4543E | 01 | 0.0161E | 00 | 0.3788E | 00 | 0.2234E | 00 | 0.3697E | 00 |
| | | | | | | 20.32 | 20.32 | 6.34 | 0.1063E | 02 | 0.1543E | 00 | -0.0969E | 00 | 0.2292E | 00 | 0.2317E | 00 | 0.3660E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1063E | 02 | 0.5277E | 01 | 0.2359E | 00 | 0.2514E | 00 | 0.2674E | 00 | 0.3245E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1209E | 02 | 0.4959E | 01 | 0.2268E | 00 | 0.2916E | 00 | 0.2064E | 00 | 0.3468E | 00 |
| | | | | | | 20.64 | 20.64 | 6.34 | 0.1277E | 02 | 0.4251E | 01 | 0.0312E | 00 | 0.4306E | 00 | 0.5199E | 00 | 0.6250E | 00 |
| | | | | | | 40.64 | 40.64 | 6.34 | 0.1215E | 02 | 0.4380E | 01 | 0.0187E | 00 | 0.4052E | 00 | 0.4710E | 00 | 0.4250E | 00 |
| | | | | | | 20.32 | 20.32 | 6.34 | 0.1081E | 02 | 0.4923E | 01 | 0.1927E | 00 | 0.4052E | 00 | 0.2641E | 00 | 0.3424E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1001E | 02 | 0.2823E | 01 | 0.1927E | 00 | 0.2330E | 00 | 0.2342E | 00 | 0.5000E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1231E | 02 | 0.5044E | 01 | 0.2694E | 00 | 0.2103E | 00 | 0.1634E | 00 | 0.1828E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1189E | 02 | 0.3767E | 01 | 0.2694E | 00 | 0.2087E | 00 | 0.4580E | 00 | 0.2047E | 00 |
| | | | | | | 20.64 | 20.64 | 6.34 | 0.1199E | 02 | 0.2137E | 00 | 0.0000E | 00 | 0.2597E | 00 | 0.1604E | 00 | 0.3747E | 00 |
| | | | | | | 40.64 | 40.64 | 6.34 | 0.1247E | 02 | 0.1527E | 00 | 0.0000E | 00 | 0.3316E | 00 | 0.2344E | 00 | 0.4782E | 00 |
| | | | | | | 20.32 | 20.32 | 6.34 | 0.1078E | 02 | 0.1195E | 00 | 0.0000E | 00 | 0.2321E | 00 | 0.2344E | 00 | 0.3535E | 00 |
| | | | | | | 0.00 | 0.00 | 6.34 | 0.1078E | 02 | 0.1195E | 00 | 0.0000E | 00 | 0.2321E | 00 | 0.2344E | 00 | 0.3535E | 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-------|-------|-------|-------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 187 | 22.5 | 0.0 | 2 | 150.0 | 0.00 | 6.60 | 6.34 | 0.23485E 02 | 0.58665E 01 | 0.17687E 01 | 0.42335E 00 | 0.81439E 00 | 0.54694E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.23192E 02 | 0.58172E 01 | 0.17536E 01 | 0.40900E 00 | 0.79532E 00 | 0.85479E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.20160E 02 | 0.52574E 01 | 0.16404E 01 | 0.37368E 00 | 0.71023E 00 | 0.43138E 00 |
| | | | | | 20.32 | 20.64 | 6.34 | 0.20785E 02 | 0.52092E 01 | 0.16164E 01 | 0.37063E 00 | 0.70711E 00 | 0.43088E 00 |
| | | | | | 40.64 | 40.64 | 6.34 | 0.22107E 02 | 0.53390E 01 | 0.17013E 00 | 0.37063E 00 | 0.70711E 00 | 0.43088E 00 |
| | | | | | 20.32 | 20.32 | 6.34 | 0.24411E 02 | 0.53683E 01 | 0.17680E 01 | 0.39505E 00 | 0.55232E 00 | 0.47992E 00 |
| | | 3 | 125.0 | | 0.00 | 6.60 | 6.34 | 0.25731E 02 | 0.45225E 01 | 0.19308E 00 | 0.34817E 00 | 0.97038E 00 | 0.73658E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.23880E 02 | 0.44037E 01 | 0.18683E 00 | 0.65788E 00 | 0.18822E 00 | 0.11794E 01 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.24469E 02 | 0.44557E 01 | 0.18644E 00 | 0.47520E 00 | 0.17133E 00 | 0.11561E 00 |
| | | | | | 20.32 | 20.64 | 6.34 | 0.19789E 02 | 0.37050E 01 | 0.12954E 01 | 0.47520E 00 | 0.17133E 00 | 0.83025E 00 |
| | | | | | 40.64 | 40.64 | 6.34 | 0.24758E 02 | 0.49199E 01 | 0.17310E 01 | 0.28663E 00 | 0.47520E 00 | 0.83025E 00 |
| | | | | | 20.32 | 20.32 | 6.34 | 0.26113E 02 | 0.49470E 00 | 0.19310E 01 | 0.47168E 00 | 0.84111E 00 | 0.55361E 00 |
| | | 4 | 180.0 | | 0.00 | 6.60 | 6.34 | 0.20903E 02 | 0.60707E 01 | 0.16685E 00 | 0.19513E 00 | 0.59982E 00 | 0.23358E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.21961E 02 | 0.51193E 01 | 0.15078E 00 | 0.34430E 00 | 0.98467E 00 | 0.46441E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.23744E 02 | 0.52116E 01 | 0.17130E 00 | 0.44304E 00 | 0.11995E 01 | 0.79101E 00 |
| | | | | | 20.32 | 20.64 | 6.34 | 0.24836E 02 | 0.52191E 01 | 0.17985E 00 | 0.33531E 00 | 0.77160E 00 | 0.46777E 00 |
| | | | | | 40.64 | 40.64 | 6.34 | 0.22555E 02 | 0.52173E 01 | 0.17000E 01 | 0.32985E 00 | 0.92377E 00 | 0.46777E 00 |
| | | | | | 20.32 | 20.32 | 6.34 | 0.22775E 02 | 0.52173E 01 | 0.17000E 01 | 0.21087E 00 | 0.66942E 00 | 0.27661E 00 |
| | | 5 | 210.0 | | 0.00 | 6.60 | 6.34 | 0.10808E 02 | 0.78629E 01 | 0.54995E 01 | 0.51575E 00 | 0.54413E 00 | 0.48026E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.23295E 02 | 0.40477E 01 | 0.24097E 01 | 0.53357E 00 | 0.86318E 00 | 0.67330E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.25699E 02 | 0.48499E 01 | 0.27070E 01 | 0.60906E 00 | 0.15643E 00 | 0.11444E 00 |
| | | | | | 20.32 | 20.64 | 6.34 | 0.25715E 02 | 0.48499E 01 | 0.27070E 01 | 0.30058E 00 | 0.42664E 00 | 0.12250E 00 |
| | | | | | 40.64 | 40.64 | 6.34 | 0.22276E 02 | 0.48164E 00 | 0.18116E 01 | 0.23679E 00 | 0.69825E 00 | 0.33337E 00 |
| | | | | | 20.32 | 20.32 | 6.34 | 0.18446E 02 | 0.50895E 01 | 0.41099E 01 | 0.25548E 00 | 0.21305E 01 | 0.66697E 00 |
| | | 6 | 230.0 | | 0.00 | 6.60 | 6.34 | 0.25446E 02 | 0.46483E 01 | 0.58544E 01 | 0.10799E 00 | 0.60885E 00 | 0.43947E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.25691E 02 | 0.46483E 01 | 0.58544E 01 | 0.51418E 00 | 0.11444E 00 | 0.47477E 00 |
| | | | | | 0.00 | 0.00 | 6.34 | 0.25911E 02 | 0.46483E 01 | 0.58544E 01 | 0.62037E 00 | 0.11444E 00 | 0.47477E 00 |
| | | | | | 20.32 | 20.64 | 6.34 | 0.25911E 02 | 0.46483E 01 | 0.58544E 01 | 0.34466E 00 | 0.11444E 00 | 0.47477E 00 |
| | | | | | 40.64 | 40.64 | 6.34 | 0.25911E 02 | 0.46483E 01 | 0.58544E 01 | 0.25166E 00 | 0.11444E 00 | 0.47477E 00 |
| | | | | | 20.32 | 20.32 | 6.34 | 0.23136E 02 | 0.57122E 00 | 0.10152E 02 | 0.20168E 01 | 0.34411E 01 | 0.13066E 01 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| UN | VEL | ROLL | TP | YAN | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|----|------|------|----|-------|-------|------|--------|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|
| 1 | 10.2 | 0.0 | 2 | 155.0 | 1 | 4.57 | -6.60 | 6.34 | 0.1061E 02 | 0.7410E 01 | 0.3410E 01 | 0.7125E 01 | 0.2327E 01 | 0.6065E 01 | 0.4871E 00 | 0.5682E 00 | 0.4435E 00 | 0.9682E 00 | 0.5843E 00 | 0.00 |
| 2 | | | | | 2 | 4.57 | 0.60 | 6.34 | 0.8117E 01 | 0.2262E 01 | 0.0212E 01 | 0.2162E 01 | 0.2966E 01 | 0.2327E 01 | 0.6343E 00 | 0.6343E 00 | 0.6343E 00 | 0.6343E 00 | 0.6343E 00 | 0.00 |
| 3 | | | | | 3 | 4.57 | 20.32 | 6.34 | 0.1000E 02 | 0.1799E 01 | 0.0179E 01 | 0.1799E 01 | 0.1630E 01 | 0.1630E 01 | 0.4408E 00 | 0.4408E 00 | 0.4408E 00 | 0.4408E 00 | 0.4408E 00 | 0.00 |
| 4 | | | | | 4 | 4.57 | 40.64 | 6.34 | 0.1108E 02 | 0.3929E 01 | 0.0392E 01 | 0.3929E 01 | 0.1934E 01 | 0.1934E 01 | 0.2131E 00 | 0.2131E 00 | 0.2131E 00 | 0.2131E 00 | 0.2131E 00 | 0.00 |
| 5 | | | | | 5 | 4.57 | -20.32 | 6.34 | 0.1126E 02 | 0.1374E 01 | 0.0137E 01 | 0.1374E 01 | 0.1749E 01 | 0.1749E 01 | 0.3836E 00 | 0.3836E 00 | 0.3836E 00 | 0.3836E 00 | 0.3836E 00 | 0.00 |
| 6 | | | | | 6 | 4.57 | 0.60 | 6.34 | 0.8114E 01 | 0.1832E 01 | 0.0183E 01 | 0.1832E 01 | 0.1479E 01 | 0.1479E 01 | 0.1130E 01 | 0.1130E 01 | 0.1130E 01 | 0.1130E 01 | 0.1130E 01 | 0.00 |
| 7 | | | | | 7 | 4.57 | 6.60 | 6.34 | 0.8008E 01 | 0.1531E 01 | 0.0153E 01 | 0.1531E 01 | 0.2030E 01 | 0.2030E 01 | 0.1486E 01 | 0.1486E 01 | 0.1486E 01 | 0.1486E 01 | 0.1486E 01 | 0.00 |
| 8 | | | | | 8 | 4.57 | 20.32 | 6.34 | 0.8803E 01 | 0.1082E 01 | 0.0108E 01 | 0.1082E 01 | 0.9730E 01 | 0.9730E 01 | 0.9408E 00 | 0.9408E 00 | 0.9408E 00 | 0.9408E 00 | 0.9408E 00 | 0.00 |
| 9 | | | | | 9 | 4.57 | 40.64 | 6.34 | 0.1173E 02 | 0.3392E 01 | 0.0339E 01 | 0.3392E 01 | 0.1068E 01 | 0.1068E 01 | 0.2992E 00 | 0.2992E 00 | 0.2992E 00 | 0.2992E 00 | 0.2992E 00 | 0.00 |
| 10 | | | | | 10 | 4.57 | -20.32 | 6.34 | 0.1074E 02 | 0.1365E 01 | 0.0136E 01 | 0.1365E 01 | 0.1410E 01 | 0.1410E 01 | 0.2319E 00 | 0.2319E 00 | 0.2319E 00 | 0.2319E 00 | 0.2319E 00 | 0.00 |
| 11 | | | | | 11 | 4.57 | 0.60 | 6.34 | 0.1930E 02 | 0.4405E 01 | 0.0440E 01 | 0.4405E 01 | 0.2505E 01 | 0.2505E 01 | 0.9791E 00 | 0.9791E 00 | 0.9791E 00 | 0.9791E 00 | 0.9791E 00 | 0.00 |
| 12 | | | | | 12 | 4.57 | 6.60 | 6.34 | 0.1200E 02 | 0.2717E 01 | 0.0271E 01 | 0.2717E 01 | 0.1523E 01 | 0.1523E 01 | 0.4152E 00 | 0.4152E 00 | 0.4152E 00 | 0.4152E 00 | 0.4152E 00 | 0.00 |
| 13 | | | | | 13 | 4.57 | 20.32 | 6.34 | 0.1274E 02 | 0.3153E 01 | 0.0315E 01 | 0.3153E 01 | 0.3230E 01 | 0.3230E 01 | 0.4221E 00 | 0.4221E 00 | 0.4221E 00 | 0.4221E 00 | 0.4221E 00 | 0.00 |
| 14 | | | | | 14 | 4.57 | 40.64 | 6.34 | 0.1343E 02 | 0.3553E 01 | 0.0355E 01 | 0.3553E 01 | 0.2320E 01 | 0.2320E 01 | 0.3249E 00 | 0.3249E 00 | 0.3249E 00 | 0.3249E 00 | 0.3249E 00 | 0.00 |
| 15 | | | | | 15 | 4.57 | -20.32 | 6.34 | 0.1193E 02 | 0.1754E 01 | 0.0175E 01 | 0.1754E 01 | 0.2049E 01 | 0.2049E 01 | 0.2386E 00 | 0.2386E 00 | 0.2386E 00 | 0.2386E 00 | 0.2386E 00 | 0.00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|----|-------|-------|------|--------|------|-------------|-------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 189 | 22.8 | 0.0 | 2 | 155.0 | 1 | 4.57 | -6.60 | 6.34 | 0.22928E 02 | 0.22928E 02 | 0.62338E 01 | 0.23338E 01 | 0.95383E 01 | 0.24666E 00 | 0.34666E 00 | 0.27771E 00 | 0.52978E 00 | | | |
| | | | | | 2 | 4.57 | 0.00 | 6.34 | 0.20891E 02 | 0.20891E 02 | 0.39228E 01 | 0.42474E 00 | 0.40330E 01 | 0.42474E 00 | 0.42474E 00 | 0.42474E 00 | 0.42474E 00 | 0.42474E 00 | 0.42474E 00 | |
| | | | | | 3 | 4.57 | 6.00 | 6.34 | 0.20660E 02 | 0.20660E 02 | 0.52284E 01 | 0.52284E 01 | 0.45000E 01 | 0.52284E 01 | 0.52284E 01 | 0.52284E 01 | 0.52284E 01 | 0.52284E 01 | 0.52284E 01 | 0.52284E 01 |
| | | | | | 4 | 4.57 | 20.32 | 6.34 | 0.22290E 02 | 0.22290E 02 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 | 0.22290E 01 |
| | | | | | 5 | 4.57 | 40.64 | 6.34 | 0.22769E 02 | 0.22769E 02 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 | 0.22769E 01 |
| | | | | | 6 | 4.57 | -20.32 | 6.34 | 0.24143E 02 | 0.24143E 02 | 0.19208E 01 | 0.19208E 01 | 0.36078E 01 | 0.22307E 00 | 0.22307E 00 | 0.22307E 00 | 0.22307E 00 | 0.22307E 00 | 0.22307E 00 | 0.22307E 00 |
| | | | | | 7 | 4.57 | 0.00 | 6.34 | 0.19197E 02 | 0.19197E 02 | 0.52185E 01 | 0.52185E 01 | 0.56115E 01 | 0.69480E 00 | 0.69480E 00 | 0.69480E 00 | 0.69480E 00 | 0.69480E 00 | 0.69480E 00 | 0.69480E 00 |
| | | | | | 8 | 4.57 | 6.00 | 6.34 | 0.18660E 02 | 0.18660E 02 | 0.75314E 01 | 0.75314E 01 | 0.39244E 01 | 0.18660E 01 | 0.18660E 01 | 0.18660E 01 | 0.18660E 01 | 0.18660E 01 | 0.18660E 01 | 0.18660E 01 |
| | | | | | 9 | 4.57 | 20.32 | 6.34 | 0.23951E 02 | 0.23951E 02 | 0.26718E 01 | 0.26718E 01 | 0.22104E 01 | 0.23951E 01 | 0.23951E 01 | 0.23951E 01 | 0.23951E 01 | 0.23951E 01 | 0.23951E 01 | 0.23951E 01 |
| | | | | | 10 | 4.57 | 40.64 | 6.34 | 0.24598E 02 | 0.24598E 02 | 0.168510E 01 | 0.168510E 01 | 0.78621E 01 | 0.43051E 00 | 0.43051E 00 | 0.43051E 00 | 0.43051E 00 | 0.43051E 00 | 0.43051E 00 | 0.43051E 00 |
| | | | | | 11 | 4.57 | -20.32 | 6.34 | 0.22281E 02 | 0.22281E 02 | 0.22223E 01 | 0.22223E 01 | 0.19821E 01 | 0.35559E 00 | 0.35559E 00 | 0.35559E 00 | 0.35559E 00 | 0.35559E 00 | 0.35559E 00 | 0.35559E 00 |
| | | | | | 12 | 4.57 | 0.00 | 6.34 | 0.20803E 02 | 0.20803E 02 | 0.72660E 01 | 0.72660E 01 | 0.67866E 01 | 0.11574E 01 | 0.11574E 01 | 0.11574E 01 | 0.11574E 01 | 0.11574E 01 | 0.11574E 01 | 0.11574E 01 |
| | | | | | 13 | 4.57 | 6.00 | 6.34 | 0.24404E 02 | 0.24404E 02 | 0.10963E 02 | 0.10963E 02 | 0.10706E 01 | 0.42009E 00 | 0.42009E 00 | 0.42009E 00 | 0.42009E 00 | 0.42009E 00 | 0.42009E 00 | 0.42009E 00 |
| | | | | | 14 | 4.57 | 20.32 | 6.34 | 0.22732E 02 | 0.22732E 02 | 0.11300E 02 | 0.11300E 02 | 0.88502E 01 | 0.33819E 00 | 0.33819E 00 | 0.33819E 00 | 0.33819E 00 | 0.33819E 00 | 0.33819E 00 | 0.33819E 00 |
| | | | | | 15 | 4.57 | 40.64 | 6.34 | 0.25228E 02 | 0.25228E 02 | 0.10506E 01 | 0.10506E 01 | 0.66679E 01 | 0.48569E 00 | 0.48569E 00 | 0.48569E 00 | 0.48569E 00 | 0.48569E 00 | 0.48569E 00 | 0.48569E 00 |
| | | | | | 16 | 4.57 | -20.32 | 6.34 | 0.23223E 02 | 0.23223E 02 | 0.98020E 01 | 0.98020E 01 | 0.44187E 01 | 0.33895E 00 | 0.33895E 00 | 0.33895E 00 | 0.33895E 00 | 0.33895E 00 | 0.33895E 00 | 0.33895E 00 |
| | | | | | 17 | 4.57 | 0.00 | 6.34 | 0.17541E 02 | 0.17541E 02 | 0.29192E 01 | 0.29192E 01 | 0.77760E 01 | 0.36583E 00 | 0.36583E 00 | 0.36583E 00 | 0.36583E 00 | 0.36583E 00 | 0.36583E 00 | 0.36583E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|---|------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 190 10.4 | 15.0 | 2 150.0 | 1 | 0.00 | 6.34 | 0.1599E 02 | 0.2359E 01 | 0.17139E 00 | 0.30510E 00 | 0.22479E 00 | 0.33871E 00 |
| | | | 2 | 0.00 | 6.34 | 0.10162E 02 | 0.41935E 01 | 0.22095E 01 | 0.43343E 00 | 0.29755E 01 | 0.70366E 00 |
| | | | 3 | 0.00 | 6.34 | 0.10481E 02 | 0.01687E 01 | 0.20957E 01 | 0.58099E 00 | 0.11945E 01 | 0.78966E 00 |
| | | | 4 | 0.00 | 6.34 | 0.11231E 02 | 0.01432E 01 | 0.11945E 01 | 0.58099E 00 | 0.06960E 00 | 0.47810E 00 |
| | | | 5 | 0.00 | 6.34 | 0.11614E 02 | 0.01390E 01 | 0.12276E 01 | 0.38165E 00 | 0.06960E 00 | 0.56320E 00 |
| | | | 6 | 0.00 | 6.34 | 0.12021E 02 | 0.01111E 01 | 0.22631E 01 | 0.59769E 00 | 0.06960E 00 | 0.26109E 00 |
| | | 3 120.0 | 1 | 0.00 | 6.34 | 0.11111E 02 | 0.03357E 01 | 0.21263E 01 | 0.10664E 00 | 0.06960E 00 | 0.57206E 00 |
| | | | 2 | 0.00 | 6.34 | 0.09962E 02 | 0.01432E 01 | 0.39358E 01 | 0.44360E 00 | 0.06960E 00 | 0.85271E 00 |
| | | | 3 | 0.00 | 6.34 | 0.13025E 02 | 0.01333E 01 | 0.25749E 01 | 0.39358E 00 | 0.06960E 00 | 0.57148E 00 |
| | | | 4 | 0.00 | 6.34 | 0.13225E 02 | 0.01333E 01 | 0.15613E 01 | 0.28873E 00 | 0.06960E 00 | 0.37271E 00 |
| | | 5 180.0 | 1 | 0.00 | 6.34 | 0.09893E 02 | 0.01571E 01 | 0.23740E 01 | 0.21196E 00 | 0.06960E 00 | 0.3039E 00 |
| | | | 2 | 0.00 | 6.34 | 0.10235E 02 | 0.01209E 01 | 0.23070E 01 | 0.23740E 00 | 0.06960E 00 | 0.3709E 00 |
| | | | 3 | 0.00 | 6.34 | 0.11235E 02 | 0.01209E 01 | 0.22222E 01 | 0.23740E 00 | 0.06960E 00 | 0.49776E 00 |
| | | | 4 | 0.00 | 6.34 | 0.11765E 02 | 0.01209E 01 | 0.22222E 01 | 0.23740E 00 | 0.06960E 00 | 0.49776E 00 |
| | | | 5 | 0.00 | 6.34 | 0.11034E 02 | 0.01131E 01 | 0.21722E 01 | 0.23740E 00 | 0.06960E 00 | 0.53825E 00 |
| | | 6 210.0 | 1 | 0.00 | 6.34 | 0.1054E 02 | 0.01131E 01 | 0.21497E 01 | 0.15005E 00 | 0.06960E 00 | 0.19778E 00 |
| | | | 2 | 0.00 | 6.34 | 0.1378E 02 | 0.0168E 01 | 0.2537E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 3 | 0.00 | 6.34 | 0.19062E 02 | 0.01296E 01 | 0.31862E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 4 | 0.00 | 6.34 | 0.12462E 02 | 0.0168E 01 | 0.1768E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 5 | 0.00 | 6.34 | 0.12299E 02 | 0.0168E 01 | 0.1537E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 6 | 0.00 | 6.34 | 0.88915E 01 | 0.02384E 01 | 0.31904E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | 7 220.0 | 1 | 0.00 | 6.34 | 0.1110E 02 | 0.0168E 01 | 0.29770E 01 | 0.1861E 00 | 0.06960E 00 | 0.19168E 00 |
| | | | 2 | 0.00 | 6.34 | 0.1166E 02 | 0.0168E 01 | 0.20630E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 3 | 0.00 | 6.34 | 0.1278E 02 | 0.0168E 01 | 0.17030E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 4 | 0.00 | 6.34 | 0.1104E 02 | 0.0168E 01 | 0.20930E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 5 | 0.00 | 6.34 | 0.8892E 02 | 0.0168E 01 | 0.20930E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |
| | | | 6 | 0.00 | 6.34 | 0.8892E 02 | 0.0168E 01 | 0.20930E 01 | 0.23740E 00 | 0.06960E 00 | 0.4425E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|------|-----|-------|-------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 191 | 10.8 | 15.0 | 3 | 150.0 | 23.88 | -6.60 | 6.34 | 0.10280E 02 | 0.22746E 01 | 0.17318E 01 | 0.32784E 00 | 0.64747E 00 | 0.59892E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.10899E 02 | 0.06692E 01 | 0.15943E 01 | 0.44167E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 20.32 | 6.34 | 0.10507E 02 | 0.25013E 01 | 0.19733E 01 | 0.43318E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 40.64 | 6.34 | 0.11083E 02 | 0.14397E 01 | 0.14006E 01 | 0.42717E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.11010E 02 | 0.28916E 01 | 0.19265E 01 | 0.42717E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.11430E 02 | 0.11941E 01 | 0.12641E 01 | 0.42972E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.91685E 01 | 0.23192E 01 | 0.29225E 01 | 0.31264E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.87502E 01 | 0.10419E 01 | 0.25920E 01 | 0.32577E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 20.32 | 6.34 | 0.92003E 01 | 0.14594E 01 | 0.13740E 01 | 0.32505E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | 40.64 | 6.34 | 0.10121E 02 | 0.08272E 01 | 0.20950E 01 | 0.32488E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.12014E 02 | 0.02210E 01 | 0.20855E 01 | 0.32327E 00 | 0.10945E 01 | 0.45162E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.10716E 02 | 0.64127E 00 | 0.15035E 01 | 0.18891E 00 | 0.45054E 00 | 0.33241E 00 |
| | | | | | 23.88 | -6.60 | 6.34 | 0.10604E 02 | 0.58585E 00 | 0.46984E 00 | 0.36004E 00 | 0.88251E 00 | 0.35616E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.11368E 02 | 0.69938E 01 | 0.51425E 01 | 0.47911E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | 6.60 | 6.34 | 0.10473E 02 | 0.14834E 01 | 0.49858E 01 | 0.40219E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | 20.32 | 6.34 | 0.11343E 02 | 0.84069E 01 | 0.24115E 01 | 0.44301E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | 40.64 | 6.34 | 0.11716E 02 | 0.71407E 01 | 0.11159E 01 | 0.42901E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.10810E 02 | 0.48527E 01 | 0.14442E 01 | 0.42574E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.10610E 02 | 0.14809E 01 | 0.20238E 01 | 0.42343E 00 | 0.13099E 01 | 0.42573E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.10067E 02 | 0.79457E 00 | 0.16708E 01 | 0.35437E 00 | 0.93468E 00 | 0.18474E 00 |
| | | | | | 23.88 | 6.60 | 6.34 | 0.10788E 02 | 0.28219E 01 | 0.21797E 01 | 0.34799E 00 | 0.10027E 01 | 0.33802E 00 |
| | | | | | 23.88 | 20.32 | 6.34 | 0.12321E 02 | 0.40590E 01 | 0.20736E 01 | 0.34489E 00 | 0.10027E 01 | 0.33802E 00 |
| | | | | | 23.88 | 40.64 | 6.34 | 0.12233E 02 | 0.16734E 01 | 0.23788E 01 | 0.34489E 00 | 0.10027E 01 | 0.33802E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.10166E 02 | 0.68879E 01 | 0.13822E 01 | 0.23194E 00 | 0.36666E 00 | 0.23824E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.94766E 01 | 0.46171E 01 | 0.14341E 01 | 0.25319E 00 | 0.33517E 00 | 0.19863E 00 |
| | | | | | 23.88 | 0.00 | 6.34 | 0.87666E 01 | 0.30198E 01 | 0.14341E 01 | 0.25319E 00 | 0.33517E 00 | 0.19863E 00 |
| | | | | | 23.88 | 6.60 | 6.34 | 0.94524E 01 | 0.32638E 01 | 0.24552E 01 | 0.24733E 00 | 0.35118E 00 | 0.32503E 00 |
| | | | | | 23.88 | 20.32 | 6.34 | 0.10384E 02 | 0.37526E 01 | 0.22031E 01 | 0.25288E 00 | 0.35118E 00 | 0.32503E 00 |
| | | | | | 23.88 | 40.64 | 6.34 | 0.10146E 02 | 0.25050E 01 | 0.26496E 01 | 0.30367E 00 | 0.35118E 00 | 0.32503E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.10146E 02 | 0.43776E 01 | 0.18144E 01 | 0.14913E 00 | 0.47277E 00 | 0.70490E 00 |
| | | | | | 23.88 | -20.32 | 6.34 | 0.86051E 01 | 0.43311E 01 | 0.19254E 01 | 0.16603E 00 | 0.23427E 00 | 0.82246E 00 |

BVWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|---------|----------|-------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 19 10.4 | 15.0 | 2 150.0 | 43.16 | -6.60 | 6.34 | 0.10159E 02 | 0.69476E 01 | 0.14643E 00 | 0.24951E 00 | 0.62047E 00 | 0.33925E 00 |
| | | | 43.16 | 0.00 | 6.34 | 0.10722E 01 | 0.10547E 01 | 0.26740E 00 | 0.26991E 00 | 0.59278E 00 | 0.36141E 00 |
| | | | 43.16 | 20.32 | 6.34 | 0.10561E 02 | 0.10493E 01 | 0.19931E 00 | 0.25035E 00 | 0.65989E 00 | 0.35244E 00 |
| | | | 43.16 | 40.64 | 6.34 | 0.11333E 02 | 0.10411E 01 | 0.86641E 00 | 0.24269E 00 | 0.38992E 00 | 0.29391E 00 |
| | | | 43.16 | 60.96 | 6.34 | 0.11059E 02 | 0.49921E 01 | 0.27737E 00 | 0.30332E 00 | 0.66977E 00 | 0.57289E 00 |
| | | | 43.16 | -20.32 | 6.34 | 0.10499E 02 | 0.13766E 01 | 0.17714E 01 | 0.21138E 00 | 0.28729E 00 | 0.11871E 00 |
| | | | 43.16 | -6.60 | 6.34 | 0.95513E 01 | 0.28027E 00 | 0.57950E 00 | 0.29140E 00 | 0.80739E 00 | 0.60328E 00 |
| | | | 43.16 | 6.60 | 6.34 | 0.10111E 01 | 0.85242E 01 | 0.73866E 00 | 0.30598E 00 | 0.89476E 00 | 0.51233E 00 |
| | | | 43.16 | 20.32 | 6.34 | 0.92741E 02 | 0.15153E 00 | 0.10964E 01 | 0.31744E 00 | 0.10668E 01 | 0.58466E 00 |
| | | | 43.16 | 40.64 | 6.34 | 0.10488E 02 | 0.24236E 00 | 0.57376E 00 | 0.37802E 00 | 0.12028E 00 | 0.52566E 00 |
| | | | 43.16 | 60.96 | 6.34 | 0.11197E 02 | 0.48679E 01 | 0.42903E 00 | 0.37175E 00 | 0.55244E 01 | 0.38206E 01 |
| | | | 43.16 | -20.32 | 6.34 | 0.99433E 01 | 0.11263E 01 | 0.61871E 01 | 0.13671E 00 | 0.27388E 00 | 0.25806E 00 |
| | | | 43.16 | -6.60 | 6.34 | 0.10455E 02 | 0.35627E 00 | 0.90379E 00 | 0.29666E 00 | 0.10018E 01 | 0.54211E 00 |
| | | | 43.16 | 6.60 | 6.34 | 0.10185E 02 | 0.18091E 00 | 0.22912E 01 | 0.41270E 00 | 0.11232E 01 | 0.73052E 00 |
| | | | 43.16 | 20.32 | 6.34 | 0.11061E 02 | 0.19091E 00 | 0.33792E 01 | 0.35928E 00 | 0.25788E 00 | 0.70922E 00 |
| | | | 43.16 | 40.64 | 6.34 | 0.11493E 02 | 0.16911E 00 | 0.13179E 01 | 0.32928E 00 | 0.27887E 00 | 0.49422E 00 |
| | | | 43.16 | 60.96 | 6.34 | 0.10733E 02 | 0.16911E 00 | 0.11925E 01 | 0.29940E 00 | 0.26220E 00 | 0.33566E 00 |
| | | | 43.16 | -20.32 | 6.34 | 0.10603E 02 | 0.14852E 01 | 0.22458E 00 | 0.12749E 00 | 0.27590E 00 | 0.29081E 00 |
| | | | 43.16 | -6.60 | 6.34 | 0.99929E 01 | 0.33011E 00 | 0.30599E 00 | 0.33884E 00 | 0.77042E 00 | 0.55309E 00 |
| | | | 43.16 | 6.60 | 6.34 | 0.10720E 02 | 0.24291E 01 | 0.31109E 00 | 0.30399E 00 | 0.10410E 01 | 0.66759E 00 |
| | | | 43.16 | 20.32 | 6.34 | 0.11091E 02 | 0.12666E 01 | 0.33450E 01 | 0.30446E 00 | 0.26588E 00 | 0.74666E 00 |
| | | | 43.16 | 40.64 | 6.34 | 0.11988E 02 | 0.14729E 01 | 0.15597E 01 | 0.25988E 00 | 0.12677E 00 | 0.35999E 00 |
| | | | 43.16 | 60.96 | 6.34 | 0.10529E 01 | 0.47176E 01 | 0.13299E 01 | 0.19988E 00 | 0.23877E 00 | 0.25537E 00 |
| | | | 43.16 | -20.32 | 6.34 | 0.97715E 01 | 0.15695E 01 | 0.31261E 00 | 0.29915E 00 | 0.35923E 00 | 0.41632E 00 |
| | | | 43.16 | -6.60 | 6.34 | 0.91908E 01 | 0.51001E 00 | 0.95621E 00 | 0.29560E 00 | 0.26877E 00 | 0.54123E 00 |
| | | | 43.16 | 6.60 | 6.34 | 0.97428E 01 | 0.24856E 01 | 0.12099E 00 | 0.45191E 00 | 0.11598E 01 | 0.54131E 00 |
| | | | 43.16 | 20.32 | 6.34 | 0.93330E 02 | 0.17766E 01 | 0.14851E 00 | 0.32329E 00 | 0.23294E 00 | 0.67181E 00 |
| | | | 43.16 | 40.64 | 6.34 | 0.10335E 02 | 0.14244E 01 | 0.11806E 01 | 0.24406E 00 | 0.20474E 00 | 0.31964E 00 |
| | | | 43.16 | 60.96 | 6.34 | 0.10144E 02 | 0.12512E 01 | 0.16105E 01 | 0.24495E 00 | 0.21552E 00 | 0.35066E 00 |
| | | | 43.16 | -20.32 | 6.34 | 0.91229E 01 | 0.42587E 01 | 0.85855E 00 | 0.21887E 00 | 0.16116E 00 | 0.57660E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.O. VX | S.O. VY | S.O. VZ | |
|-----|-------|-------|----|-------|-------|--------|--------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 193 | 10.3 | -15.0 | 3 | 150.0 | 1 | 43.16 | 6.60 | 6.34 | 0.10196E 02 | 0.10254E 01 | 0.79167E 00 | 0.20613E 00 | 0.54872E 00 | 0.41420E 00 | |
| | | | | | 2 | 43.16 | 6.60 | 6.34 | 0.10822E 02 | 0.15319E 01 | 0.71200E 00 | 0.48923E 00 | 0.70922E 00 | 0.44780E 00 | |
| | | | | | 3 | 43.16 | 6.60 | 6.34 | 0.09890E 01 | 0.06486E 00 | 0.01217E 00 | 0.51537E 00 | 0.16354E 01 | 0.80988E 00 | 0.49356E 00 |
| | | | | | 4 | 43.16 | 20.32 | 6.34 | 0.11399E 02 | 0.17587E 01 | 0.02096E 01 | 0.33334E 00 | 0.52766E 00 | 0.30713E 00 | 0.49356E 00 |
| | | | | | 5 | 43.16 | 40.64 | 6.34 | 0.11073E 02 | 0.17598E 01 | 0.01436E 01 | 0.31942E 00 | 0.47342E 00 | 0.30713E 00 | 0.49356E 00 |
| | | | | | 6 | 43.16 | -20.32 | 6.34 | 0.10703E 02 | 0.09700E 00 | 0.02781E 00 | 0.29199E 00 | 0.48018E 00 | 0.50162E 00 | 0.49356E 00 |
| | | | | | 7 | 43.16 | -20.32 | 6.34 | 0.10703E 02 | 0.09700E 00 | 0.02781E 00 | 0.29199E 00 | 0.48018E 00 | 0.50162E 00 | 0.49356E 00 |
| 5 | 180.0 | | | 1 | 43.16 | 6.60 | 6.34 | 0.93368E 01 | 0.10758E 01 | 0.13892E 01 | 0.39527E 00 | 0.71508E 00 | 0.46702E 00 | | |
| | | | | 2 | 43.16 | 6.60 | 6.34 | 0.93165E 01 | 0.10358E 01 | 0.12371E 01 | 0.33711E 00 | 0.83753E 00 | 0.40388E 00 | | |
| | | | | 3 | 43.16 | 6.60 | 6.34 | 0.93172E 01 | 0.10726E 01 | 0.13442E 01 | 0.49224E 00 | 0.97774E 00 | 0.40388E 00 | | |
| | | | | 4 | 43.16 | 20.32 | 6.34 | 0.10219E 02 | 0.18998E 01 | 0.01897E 01 | 0.35205E 00 | 0.35470E 00 | 0.59199E 00 | | |
| | | | | 5 | 43.16 | 40.64 | 6.34 | 0.10207E 02 | 0.18998E 01 | 0.01897E 01 | 0.35205E 00 | 0.35470E 00 | 0.59199E 00 | | |
| | | | | 6 | 43.16 | 20.32 | 6.34 | 0.98923E 01 | 0.13947E 01 | 0.01789E 01 | 0.22627E 00 | 0.32507E 00 | 0.22627E 00 | 0.42670E 00 | |
| | | | | 7 | 43.16 | -20.32 | 6.34 | 0.98923E 01 | 0.13947E 01 | 0.01789E 01 | 0.22627E 00 | 0.32507E 00 | 0.22627E 00 | 0.42670E 00 | |
| 6 | 210.0 | | | 1 | 43.16 | 6.60 | 6.34 | 0.10665E 02 | 0.52587E 00 | 0.24470E 00 | 0.29560E 00 | 0.94572E 00 | 0.45502E 00 | | |
| | | | | 2 | 43.16 | 6.60 | 6.34 | 0.16220E 02 | 0.29483E 01 | 0.11470E 00 | 0.29776E 00 | 0.78336E 00 | 0.22734E 00 | | |
| | | | | 3 | 43.16 | 6.60 | 6.34 | 0.10316E 02 | 0.22661E 01 | 0.08143E 01 | 0.39953E 00 | 0.90857E 00 | 0.52234E 00 | | |
| | | | | 4 | 43.16 | 20.32 | 6.34 | 0.11285E 02 | 0.24810E 01 | 0.05586E 01 | 0.31907E 00 | 0.80927E 00 | 0.42204E 00 | | |
| | | | | 5 | 43.16 | 40.64 | 6.34 | 0.11712E 02 | 0.21198E 01 | 0.01128E 01 | 0.47114E 00 | 0.64455E 00 | 0.42204E 00 | | |
| | | | | 6 | 43.16 | 20.32 | 6.34 | 0.10757E 02 | 0.14052E 00 | 0.04622E 01 | 0.21892E 00 | 0.42954E 00 | 0.34451E 00 | | |
| | | | | 7 | 43.16 | -20.32 | 6.34 | 0.10757E 02 | 0.14052E 00 | 0.04622E 01 | 0.21892E 00 | 0.42954E 00 | 0.34451E 00 | | |
| 7 | 240.0 | | | 1 | 43.16 | 6.60 | 6.34 | 0.10173E 02 | 0.26473E 01 | 0.25619E 00 | 0.26164E 00 | 0.60747E 00 | 0.31035E 00 | | |
| | | | | 2 | 43.16 | 6.60 | 6.34 | 0.10874E 02 | 0.14799E 01 | 0.25268E 00 | 0.35056E 00 | 0.73752E 00 | 0.31035E 00 | | |
| | | | | 3 | 43.16 | 6.60 | 6.34 | 0.10029E 02 | 0.12300E 01 | 0.09723E 00 | 0.40966E 00 | 0.70746E 00 | 0.47880E 00 | | |
| | | | | 4 | 43.16 | 20.32 | 6.34 | 0.11395E 02 | 0.10686E 01 | 0.03358E 00 | 0.33780E 00 | 0.59341E 00 | 0.65001E 00 | | |
| | | | | 5 | 43.16 | 40.64 | 6.34 | 0.11970E 02 | 0.06155E 00 | 0.01388E 01 | 0.31348E 00 | 0.94815E 00 | 0.66880E 00 | | |
| | | | | 6 | 43.16 | 20.32 | 6.34 | 0.10704E 02 | 0.15725E 01 | 0.02061E 00 | 0.26494E 00 | 0.51792E 00 | 0.70321E 00 | | |
| | | | | 7 | 43.16 | -20.32 | 6.34 | 0.10356E 02 | 0.15395E 01 | 0.02744E 00 | 0.18052E 00 | 0.24003E 00 | 0.20303E 00 | | |
| 7 | 240.0 | | | 1 | 43.16 | 6.60 | 6.34 | 0.93212E 01 | 0.39495E 00 | 0.15059E 01 | 0.28008E 00 | 0.66559E 00 | 0.43499E 00 | | |
| | | | | 2 | 43.16 | 6.60 | 6.34 | 0.93323E 01 | 0.39597E 01 | 0.15059E 01 | 0.28008E 00 | 0.66559E 00 | 0.43499E 00 | | |
| | | | | 3 | 43.16 | 6.60 | 6.34 | 0.89632E 01 | 0.35068E 01 | 0.13617E 01 | 0.25553E 00 | 0.45453E 00 | 0.43499E 00 | | |
| | | | | 4 | 43.16 | 20.32 | 6.34 | 0.10027E 02 | 0.18943E 01 | 0.01897E 01 | 0.49475E 00 | 0.82596E 00 | 0.69623E 00 | | |
| | | | | 5 | 43.16 | 40.64 | 6.34 | 0.10027E 02 | 0.18943E 01 | 0.01897E 01 | 0.49475E 00 | 0.82596E 00 | 0.69623E 00 | | |
| | | | | 6 | 43.16 | 20.32 | 6.34 | 0.10017E 02 | 0.17962E 01 | 0.01897E 01 | 0.45917E 00 | 0.82596E 00 | 0.69623E 00 | | |
| | | | | 7 | 43.16 | -20.32 | 6.34 | 0.93205E 01 | 0.39062E 01 | 0.14962E 01 | 0.28319E 00 | 0.68815E 00 | 0.58837E 00 | | |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-------|-------|-------|-------|-------|------|----------|----------|----------|----------|----------|----------|
| 194 | 10.6 | -15.0 | 2 | 150.0 | 23.88 | 6.60 | 6.34 | 0.10680E | 0.17800E | 0.89960E | 0.18400E | 0.10990E | 0.31346E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.09731E | 0.15160E | 0.77129E | 0.03720E | 0.07303E | 0.23912E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.09731E | 0.15160E | 0.77129E | 0.03720E | 0.07303E | 0.23912E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.10932E | 0.04730E | 0.47000E | 0.03447E | 0.09170E | 0.26713E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.11536E | 0.09362E | 0.15671E | 0.01042E | 0.05035E | 0.15421E |
| | | 3 | 120.0 | 1 | 23.88 | 6.60 | 6.34 | 0.92344E | 0.21801E | 0.21491E | 0.35370E | 0.94005E | 0.55559E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.10046E | 0.19310E | 0.18371E | 0.05332E | 0.13210E | 0.25067E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.91588E | 0.36692E | 0.22933E | 0.23720E | 0.10480E | 0.51222E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.96590E | 0.48136E | 0.47994E | 0.40282E | 0.65081E | 0.27996E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.10476E | 0.05067E | 0.21155E | 0.03298E | 0.05041E | 0.14637E |
| | | 4 | 180.0 | 1 | 23.88 | 6.60 | 6.34 | 0.10499E | 0.13760E | 0.10460E | 0.25700E | 0.44250E | 0.26995E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.11291E | 0.21200E | 0.17061E | 0.06035E | 0.09294E | 0.46610E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.11744E | 0.19000E | 0.10599E | 0.06017E | 0.07294E | 0.50834E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.10751E | 0.07745E | 0.15311E | 0.03927E | 0.03829E | 0.37548E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.09785E | 0.14652E | 0.17031E | 0.16021E | 0.19435E | 0.21830E |
| | | 5 | 210.0 | 1 | 23.88 | 6.60 | 6.34 | 0.97853E | 0.25710E | 0.38854E | 0.25451E | 0.10710E | 0.47931E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.02127E | 0.03708E | 0.22322E | 0.00195E | 0.00443E | 0.46620E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.02127E | 0.03708E | 0.22322E | 0.00195E | 0.00443E | 0.46620E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.02127E | 0.03708E | 0.22322E | 0.00195E | 0.00443E | 0.46620E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.09150E | 0.04517E | 0.19917E | 0.02924E | 0.03041E | 0.40242E |
| | | 6 | 240.0 | 1 | 23.88 | 6.60 | 6.34 | 0.97853E | 0.14958E | 0.19917E | 0.29262E | 0.85371E | 0.46306E |
| | | | | | 23.88 | 6.60 | 6.34 | 0.97853E | 0.14958E | 0.19917E | 0.29262E | 0.85371E | 0.46306E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.03220E | 0.03000E | 0.55049E | 0.00242E | 0.00394E | 0.28247E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.03220E | 0.03000E | 0.55049E | 0.00242E | 0.00394E | 0.28247E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.03220E | 0.03000E | 0.55049E | 0.00242E | 0.00394E | 0.28247E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.03220E | 0.03000E | 0.55049E | 0.00242E | 0.00394E | 0.28247E |
| | | | | | 23.88 | 20.32 | 6.34 | 0.03220E | 0.03000E | 0.55049E | 0.00242E | 0.00394E | 0.28247E |

GVNT 242/243 SHIP MAKE TURBULENCE TEST

| PUN VFL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 195 10.6 | -15.0 | 2 150.0 | 0.00 | 6.60 | 6.34 | 0.11375E 02 | 0.32479E 01 | 0.34242E 00 | 0.48244E 00 | 0.99070E 00 | 0.65309E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.11572E 01 | 0.44622E 01 | 0.19485E 01 | 0.40179E 00 | 0.57334E 00 | 0.67156E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.95018E 01 | 0.35668E 01 | 0.12722E 01 | 0.48299E 00 | 0.57736E 01 | 0.49144E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.10768E 02 | 0.11514E 01 | 0.45942E 00 | 0.45566E 00 | 0.10064E 01 | 0.10233E 01 |
| | | | 0.00 | 40.64 | 6.34 | 0.11219E 02 | 0.17425E 01 | 0.57133E 01 | 0.29905E 00 | 0.51899E 00 | 0.39070E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.11566E 02 | 0.82223E 00 | 0.26563E 01 | 0.31606E 00 | 0.34003E 00 | 0.73085E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.10908E 02 | 0.39603E 01 | 0.18451E 01 | 0.66487E 00 | 0.97285E 00 | 0.67613E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.10786E 02 | 0.40035E 01 | 0.23722E 00 | 0.11974E 01 | 0.18222E 01 | 0.10817E 01 |
| | | | 0.00 | 6.60 | 6.34 | 0.33646E 01 | 0.41019E 01 | 0.67053E 01 | 0.62708E 01 | 0.18941E 01 | 0.67817E 01 |
| | | | 0.00 | 20.32 | 6.34 | 0.88895E 01 | 0.31171E 01 | 0.32429E 01 | 0.40816E 01 | 0.39863E 01 | 0.26881E 01 |
| | | | 0.00 | 40.64 | 6.34 | 0.11923E 02 | 0.31134E 01 | 0.24479E 00 | 0.39393E 00 | 0.12246E 01 | 0.36686E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.12469E 02 | 0.58717E 00 | 0.74794E 00 | 0.25574E 00 | 0.42689E 00 | 0.84599E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.10181E 02 | 0.51201E 00 | 0.43143E 01 | 0.36701E 00 | 0.94207E 00 | 0.61986E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.97821E 01 | 0.49564E 01 | 0.36388E 00 | 0.10566E 01 | 0.13767E 01 | 0.97341E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.11240E 02 | 0.49822E 01 | 0.59516E 00 | 0.58682E 00 | 0.10505E 00 | 0.68271E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.11798E 02 | 0.49822E 01 | 0.14810E 01 | 0.27720E 00 | 0.43547E 00 | 0.55117E 00 |
| | | | 0.00 | 40.64 | 6.34 | 0.10798E 02 | 0.49822E 01 | 0.14810E 01 | 0.27720E 00 | 0.43547E 00 | 0.55117E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.10758E 02 | 0.49822E 01 | 0.14810E 01 | 0.27720E 00 | 0.43547E 00 | 0.55117E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.10378E 02 | 0.40593E 01 | 0.23515E 01 | 0.16494E 00 | 0.17196E 00 | 0.15998E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.11092E 02 | 0.47731E 01 | 0.68157E 01 | 0.23891E 00 | 0.37750E 00 | 0.32762E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.12000E 02 | 0.44568E 01 | 0.27689E 01 | 0.28284E 00 | 0.93898E 00 | 0.64526E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.12062E 02 | 0.80462E 01 | 0.16989E 01 | 0.26569E 00 | 0.46457E 00 | 0.42098E 00 |
| | | | 0.00 | 40.64 | 6.34 | 0.10834E 02 | 0.47036E 01 | 0.19018E 01 | 0.15308E 00 | 0.26558E 00 | 0.22098E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.94144E 01 | 0.28999E 01 | 0.17805E 01 | 0.28830E 00 | 0.11623E 00 | 0.37187E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.14718E 02 | 0.41489E 01 | 0.30334E 01 | 0.39561E 00 | 0.34355E 00 | 0.25952E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.12920E 02 | 0.46862E 01 | 0.33032E 01 | 0.38864E 00 | 0.37864E 00 | 0.20248E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.13284E 02 | 0.28717E 01 | 0.17489E 01 | 0.50895E 00 | 0.35690E 00 | 0.31776E 00 |
| | | | 0.00 | 20.32 | 6.34 | 0.12709E 02 | 0.24689E 01 | 0.17762E 01 | 0.36288E 00 | 0.60078E 00 | 0.61944E 00 |
| | | | 0.00 | 40.64 | 6.34 | 0.10535E 02 | 0.24689E 01 | 0.17762E 01 | 0.36288E 00 | 0.60078E 00 | 0.61944E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.77132E 01 | 0.20305E 01 | 0.21045E 01 | 0.10714E 00 | 0.34921E 00 | 0.49330E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.77132E 01 | 0.20305E 01 | 0.21045E 01 | 0.10714E 00 | 0.34921E 00 | 0.49330E 00 |
| | | | 0.00 | 0.00 | 6.34 | 0.77132E 01 | 0.20305E 01 | 0.21045E 01 | 0.10714E 00 | 0.34921E 00 | 0.49330E 00 |
| | | | 0.00 | 6.60 | 6.34 | 0.77132E 01 | 0.20305E 01 | 0.21045E 01 | 0.10714E 00 | 0.34921E 00 | 0.49330E 00 |
| | | | 0.00 | -20.32 | 6.34 | 0.77132E 01 | 0.20305E 01 | 0.21045E 01 | 0.10714E 00 | 0.34921E 00 | 0.49330E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|-------|----|-------|-------|------|--------|-------|------------|------------|------------|------------|------------|------------|
| 196 | 10.2 | -15.0 | 3 | 150.0 | 1 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 3 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 4 | 0.00 | 20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 5 | 0.00 | 40.64 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 6 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 4 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 5 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 6 | 0.00 | 20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 7 | 0.00 | 40.64 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 8 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 9 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 1 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 3 | 0.00 | 0.00 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 4 | 0.00 | 20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 5 | 0.00 | 40.64 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 6 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.1414E 02 | 0.2257E 01 | 0.1494E 00 | 0.3093E 00 | 0.5869E 00 | 0.4766E 00 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S-D. | VX | S-D. | VY | S-D. | VZ |
|-----|------|-------|----|-------|-------|-------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|
| 197 | 10.1 | -15.0 | 2 | 150.0 | 1 | 23.88 | 6.60 | 12.45 | 0.10654E 02 | 0.17872E 01 | 0.10132E 01 | 0.18872E 01 | 0.10132E 01 | 0.10132E 01 | 0.32729E 00 | 0.72764E 00 | 0.49441E 00 | 0.11337E 01 | 0.52744E 00 | 0.00 |
| | | | | | 2 | 23.88 | 6.60 | 12.45 | 0.11364E 02 | 0.11081E 00 | 0.16854E 01 | 0.11081E 00 | 0.16854E 01 | 0.16854E 01 | 0.40517E 00 | 0.11337E 01 | 0.45004E 00 | 0.11337E 01 | 0.45004E 00 | 0.00 |
| | | | | | 3 | 23.88 | 20.64 | 12.45 | 0.10851E 02 | 0.17840E 01 | 0.19107E 00 | 0.17840E 01 | 0.19107E 00 | 0.19107E 00 | 0.32992E 00 | 0.45004E 00 | 0.48903E 00 | 0.48903E 00 | 0.48903E 00 | 0.00 |
| | | | | | 4 | 23.88 | 40.64 | 12.45 | 0.11588E 02 | 0.17840E 01 | 0.19107E 00 | 0.17840E 01 | 0.19107E 00 | 0.19107E 00 | 0.14020E 00 | 0.67639E 00 | 0.48903E 00 | 0.48903E 00 | 0.48903E 00 | 0.00 |
| | | | | | 5 | 23.88 | -20.64 | 12.45 | 0.11414E 02 | 0.10822E 01 | 0.19107E 00 | 0.10822E 01 | 0.19107E 00 | 0.19107E 00 | 0.18483E 00 | 0.24829E 00 | 0.24829E 00 | 0.24829E 00 | 0.24829E 00 | 0.00 |
| | | | | | 6 | 23.88 | 6.60 | 12.45 | 0.98089E 01 | 0.27165E 01 | 0.23611E 01 | 0.27165E 01 | 0.23611E 01 | 0.23611E 01 | 0.40305E 00 | 0.72725E 00 | 0.50811E 00 | 0.50811E 00 | 0.50811E 00 | 0.00 |
| | | | | | 7 | 23.88 | 6.60 | 12.45 | 0.99831E 01 | 0.15112E 00 | 0.20391E 01 | 0.15112E 00 | 0.20391E 01 | 0.20391E 01 | 0.52476E 00 | 0.17222E 01 | 0.37660E 00 | 0.37660E 00 | 0.37660E 00 | 0.00 |
| | | | | | 1 | 23.88 | 20.64 | 12.45 | 0.10350E 02 | 0.80638E 01 | 0.21300E 00 | 0.80638E 01 | 0.21300E 00 | 0.21300E 00 | 0.36270E 00 | 0.71523E 00 | 0.71523E 00 | 0.71523E 00 | 0.71523E 00 | 0.00 |
| | | | | | 2 | 23.88 | 40.64 | 12.45 | 0.10620E 02 | 0.10715E 01 | 0.27372E 01 | 0.10715E 01 | 0.27372E 01 | 0.36270E 00 | 0.71523E 00 | 0.71523E 00 | 0.71523E 00 | 0.71523E 00 | 0.71523E 00 | 0.00 |
| | | | | | 3 | 23.88 | -20.64 | 12.45 | 0.11140E 02 | 0.50937E 00 | 0.32606E 01 | 0.50937E 00 | 0.32606E 01 | 0.32606E 01 | 0.17555E 00 | 0.36876E 00 | 0.21357E 00 | 0.21357E 00 | 0.21357E 00 | 0.00 |
| | | | | | 4 | 23.88 | 6.60 | 12.45 | 0.10738E 02 | 0.80186E 01 | 0.26863E 01 | 0.80186E 01 | 0.26863E 01 | 0.26863E 01 | 0.26181E 00 | 0.54217E 00 | 0.34605E 00 | 0.34605E 00 | 0.34605E 00 | 0.00 |
| | | | | | 5 | 23.88 | 6.60 | 12.45 | 0.10764E 02 | 0.14344E 01 | 0.37110E 01 | 0.14344E 01 | 0.37110E 01 | 0.37110E 01 | 0.38528E 00 | 0.54217E 00 | 0.34605E 00 | 0.34605E 00 | 0.34605E 00 | 0.00 |
| | | | | | 6 | 23.88 | 20.64 | 12.45 | 0.11564E 02 | 0.16847E 01 | 0.37110E 01 | 0.16847E 01 | 0.37110E 01 | 0.37110E 01 | 0.39528E 00 | 0.54217E 00 | 0.34605E 00 | 0.34605E 00 | 0.34605E 00 | 0.00 |
| | | | | | 7 | 23.88 | 40.64 | 12.45 | 0.12144E 02 | 0.13829E 01 | 0.37110E 01 | 0.13829E 01 | 0.37110E 01 | 0.37110E 01 | 0.40179E 00 | 0.54217E 00 | 0.34605E 00 | 0.34605E 00 | 0.34605E 00 | 0.00 |
| | | | | | 1 | 23.88 | -20.64 | 12.45 | 0.10934E 02 | 0.14970E 01 | 0.62588E 01 | 0.14970E 01 | 0.62588E 01 | 0.62588E 01 | 0.24277E 00 | 0.31170E 00 | 0.38587E 00 | 0.38587E 00 | 0.38587E 00 | 0.00 |
| | | | | | 2 | 23.88 | 6.60 | 12.45 | 0.10924E 02 | 0.52370E 00 | 0.26719E 00 | 0.52370E 00 | 0.26719E 00 | 0.26719E 00 | 0.17577E 00 | 0.42789E 00 | 0.31121E 00 | 0.31121E 00 | 0.31121E 00 | 0.00 |
| | | | | | 3 | 23.88 | 6.60 | 12.45 | 0.10642E 02 | 0.34054E 01 | 0.86685E 01 | 0.34054E 01 | 0.86685E 01 | 0.86685E 01 | 0.13594E 00 | 0.70233E 00 | 0.51738E 00 | 0.51738E 00 | 0.51738E 00 | 0.00 |
| | | | | | 4 | 23.88 | 20.64 | 12.45 | 0.12066E 02 | 0.15247E 00 | 0.10708E 01 | 0.15247E 00 | 0.10708E 01 | 0.10708E 01 | 0.37325E 00 | 0.62315E 00 | 0.62315E 00 | 0.62315E 00 | 0.62315E 00 | 0.00 |
| | | | | | 5 | 23.88 | 40.64 | 12.45 | 0.12560E 02 | 0.32842E 00 | 0.10511E 01 | 0.32842E 00 | 0.10511E 01 | 0.10511E 01 | 0.22443E 00 | 0.58027E 00 | 0.54217E 00 | 0.54217E 00 | 0.54217E 00 | 0.00 |
| | | | | | 6 | 23.88 | -20.64 | 12.45 | 0.10479E 02 | 0.15056E 01 | 0.13309E 01 | 0.15056E 01 | 0.13309E 01 | 0.13309E 01 | 0.21104E 00 | 0.55047E 00 | 0.48580E 00 | 0.48580E 00 | 0.48580E 00 | 0.00 |
| | | | | | 1 | 23.88 | 6.60 | 12.45 | 0.94764E 01 | 0.11618E 01 | 0.14056E 01 | 0.11618E 01 | 0.14056E 01 | 0.32726E 00 | 0.10507E 01 | 0.10507E 01 | 0.10507E 01 | 0.10507E 01 | 0.10507E 01 | 0.00 |
| | | | | | 2 | 23.88 | 6.60 | 12.45 | 0.10044E 01 | 0.30507E 01 | 0.20219E 01 | 0.30507E 01 | 0.20219E 01 | 0.30507E 01 | 0.43374E 00 | 0.18912E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.00 |
| | | | | | 3 | 23.88 | 20.64 | 12.45 | 0.10821E 02 | 0.36628E 01 | 0.29947E 01 | 0.36628E 01 | 0.29947E 01 | 0.29947E 01 | 0.27491E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.00 |
| | | | | | 4 | 23.88 | 40.64 | 12.45 | 0.12302E 02 | 0.26616E 01 | 0.83252E 02 | 0.26616E 01 | 0.83252E 02 | 0.37043E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.29681E 00 | 0.00 |
| | | | | | 5 | 23.88 | -20.64 | 12.45 | 0.10544E 02 | 0.45858E 01 | 0.18400E 01 | 0.45858E 01 | 0.18400E 01 | 0.18400E 01 | 0.94473E 00 | 0.64008E 01 | 0.64008E 01 | 0.64008E 01 | 0.64008E 01 | 0.00 |
| | | | | | 6 | 23.88 | 6.60 | 12.45 | 0.92018E 01 | 0.30124E 01 | 0.13212E 01 | 0.30124E 01 | 0.13212E 01 | 0.23159E 00 | 0.18211E 00 | 0.48009E 00 | 0.48009E 00 | 0.48009E 00 | 0.48009E 00 | 0.00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| Run | Y | X | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|-------|-------|-------|-------------|--------------|-------------|-------------|-------------|-------------|
| 1 150.0 | 6.60 | 43.16 | 12.45 | 0.10305E 02 | 0.11648E 01 | 0.20762E 00 | 0.26305E 00 | 0.69296E 00 | 0.34957E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10247E 02 | 0.11893E 01 | 0.20661E 00 | 0.25221E 00 | 0.69296E 00 | 0.34957E 00 |
| | 20.32 | 43.16 | 12.45 | 0.11060E 02 | 0.11043E 01 | 0.20209E 01 | 0.25221E 00 | 0.69296E 00 | 0.34957E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10955E 02 | 0.10955E 01 | 0.17933E 01 | 0.25221E 00 | 0.69296E 00 | 0.34957E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10745E 02 | 0.11343E 01 | 0.17247E 01 | 0.25221E 00 | 0.69296E 00 | 0.34957E 00 |
| | 6.60 | 43.16 | 12.45 | 0.78851E 01 | 0.11238E 01 | 0.76754E 00 | 0.20148E 00 | 0.51203E 00 | 0.51457E 00 |
| | 6.60 | 43.16 | 12.45 | 0.96618E 02 | 0.16008E 01 | 0.52727E 00 | 0.23740E 00 | 0.93097E 00 | 0.51457E 00 |
| 2 180.0 | 6.60 | 43.16 | 12.45 | 0.10445E 02 | 0.11081E 01 | 0.14467E 01 | 0.26699E 00 | 0.89211E 00 | 0.75747E 00 |
| | 20.32 | 43.16 | 12.45 | 0.11360E 02 | 0.11927E 01 | 0.14673E 01 | 0.26699E 00 | 0.89211E 00 | 0.75747E 00 |
| | 40.64 | 43.16 | 12.45 | 0.11360E 02 | 0.11927E 01 | 0.14673E 01 | 0.26699E 00 | 0.89211E 00 | 0.75747E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10289E 02 | 0.12854E 01 | 0.14543E 01 | 0.26699E 00 | 0.89211E 00 | 0.75747E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10544E 02 | 0.15546E 01 | 0.11664E 00 | 0.23931E 00 | 0.56208E 00 | 0.29459E 00 |
| | 6.60 | 43.16 | 12.45 | 0.11242E 02 | 0.11657E 01 | 0.29699E 00 | 0.28193E 00 | 0.88173E 00 | 0.41099E 00 |
| | 6.60 | 43.16 | 12.45 | 0.11339E 02 | 0.12919E 01 | 0.42447E 01 | 0.26699E 00 | 0.89211E 00 | 0.75747E 00 |
| 3 210.0 | 6.60 | 43.16 | 12.45 | 0.11822E 02 | 0.15129E 01 | 0.12569E 01 | 0.27207E 00 | 0.49207E 00 | 0.44551E 00 |
| | 20.32 | 43.16 | 12.45 | 0.11822E 02 | 0.15129E 01 | 0.12569E 01 | 0.27207E 00 | 0.49207E 00 | 0.44551E 00 |
| | 40.64 | 43.16 | 12.45 | 0.11822E 02 | 0.15129E 01 | 0.12569E 01 | 0.27207E 00 | 0.49207E 00 | 0.44551E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10720E 02 | 0.11752E 01 | 0.61406E 00 | 0.24770E 00 | 0.76491E 00 | 0.81525E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10058E 02 | 0.14867E 01 | 0.66272E 00 | 0.25881E 00 | 0.50382E 00 | 0.45895E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10805E 02 | 0.16207E 01 | 0.14429E 00 | 0.22893E 00 | 0.35502E 00 | 0.29285E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10281E 02 | 0.18812E 01 | 0.15977E 01 | 0.29779E 00 | 0.61016E 00 | 0.28285E 00 |
| 4 240.0 | 6.60 | 43.16 | 12.45 | 0.11954E 02 | 0.127519E 00 | 0.22061E 01 | 0.24502E 00 | 0.29337E 00 | 0.58742E 00 |
| | 20.32 | 43.16 | 12.45 | 0.11954E 02 | 0.127519E 00 | 0.22061E 01 | 0.24502E 00 | 0.29337E 00 | 0.58742E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10710E 02 | 0.14867E 01 | 0.15321E 01 | 0.24223E 00 | 0.51274E 00 | 0.18953E 00 |
| | 40.64 | 43.16 | 12.45 | 0.94002E 01 | 0.65843E 00 | 0.38596E 00 | 0.24223E 00 | 0.31822E 00 | 0.35048E 00 |
| | 6.60 | 43.16 | 12.45 | 0.94002E 01 | 0.65843E 00 | 0.38596E 00 | 0.24223E 00 | 0.31822E 00 | 0.35048E 00 |
| | 6.60 | 43.16 | 12.45 | 0.94002E 01 | 0.65843E 00 | 0.38596E 00 | 0.24223E 00 | 0.31822E 00 | 0.35048E 00 |
| | 6.60 | 43.16 | 12.45 | 0.10493E 02 | 0.176017E 01 | 0.87682E 01 | 0.33044E 00 | 0.58597E 00 | 0.28210E 00 |
| 5 240.0 | 6.60 | 43.16 | 12.45 | 0.10493E 02 | 0.176017E 01 | 0.87682E 01 | 0.33044E 00 | 0.58597E 00 | 0.28210E 00 |
| | 20.32 | 43.16 | 12.45 | 0.10493E 02 | 0.176017E 01 | 0.87682E 01 | 0.33044E 00 | 0.58597E 00 | 0.28210E 00 |
| | 40.64 | 43.16 | 12.45 | 0.11421E 02 | 0.13822E 01 | 0.77193E 01 | 0.25874E 00 | 0.45509E 00 | 0.29736E 00 |
| | 40.64 | 43.16 | 12.45 | 0.10163E 02 | 0.14484E 01 | 0.77193E 01 | 0.25874E 00 | 0.45509E 00 | 0.29736E 00 |
| | 6.60 | 43.16 | 12.45 | 0.93195E 01 | 0.16175E 01 | 0.32341E 00 | 0.23541E 00 | 0.34851E 00 | 0.21092E 00 |
| | 6.60 | 43.16 | 12.45 | 0.93195E 01 | 0.16175E 01 | 0.32341E 00 | 0.23541E 00 | 0.34851E 00 | 0.21092E 00 |
| | 6.60 | 43.16 | 12.45 | 0.93195E 01 | 0.16175E 01 | 0.32341E 00 | 0.23541E 00 | 0.34851E 00 | 0.21092E 00 |

BYMT 242/243 SHIP MAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|------|----|-------|-------|-------|------|------------|------------|------------|------------|------------|-------------|------------|
| 2 | 11-2 | 15-0 | 2 | 150-0 | 1 | 2 | 0-00 | 2 | 0-1034E 02 | 0-1593E 01 | 0-8966E 00 | 0-3623E 00 | 0-70159E 00 | 0-5874E 00 |
| 2 | | | | | 2 | 0-00 | 2 | 0-1133E 02 | 0-1922E 01 | 0-7980E 00 | 0-3221E 00 | 0-1185E 01 | 0-5335E 00 | 0-3358E 00 |
| 2 | | | | | 3 | 20-32 | 2 | 0-1069E 02 | 0-1322E 01 | 0-9471E 01 | 0-3035E 00 | 0-4254E 00 | 0-1565E 01 | 0-8156E 00 |
| 2 | | | | | 4 | 40-64 | 2 | 0-1100E 02 | 0-1095E 01 | 0-1713E 01 | 0-1707E 00 | 0-4210E 00 | 0-4254E 00 | 0-4620E 00 |
| 2 | | | | | 5 | 20-32 | 2 | 0-1123E 02 | 0-1144E 01 | 0-1988E 01 | 0-2178E 00 | 0-4210E 00 | 0-4254E 00 | 0-5907E 00 |
| 3 | 120-0 | | | | 1 | 0-60 | 2 | 0-9333E 01 | 0-2176E 01 | 0-2952E 01 | 0-5185E 00 | 0-7501E 00 | 0-5948E 00 | 0-5948E 00 |
| 2 | | | | | 2 | 0-00 | 2 | 0-1026E 02 | 0-1743E 01 | 0-1546E 01 | 0-4321E 00 | 0-9784E 00 | 0-5482E 00 | 0-5482E 00 |
| 2 | | | | | 3 | 20-32 | 2 | 0-9343E 02 | 0-1167E 01 | 0-2164E 01 | 0-5339E 00 | 0-5128E 00 | 0-6600E 00 | 0-6600E 00 |
| 2 | | | | | 4 | 40-64 | 2 | 0-1147E 02 | 0-1362E 01 | 0-3175E 01 | 0-4339E 00 | 0-5128E 00 | 0-5427E 00 | 0-5427E 00 |
| 2 | | | | | 5 | 20-32 | 2 | 0-1082E 02 | 0-6670E 00 | 0-1005E 01 | 0-2870E 00 | 0-4416E 00 | 0-2595E 00 | 0-2595E 00 |
| 2 | | | | | 6 | 40-64 | 2 | 0-1082E 02 | 0-6670E 00 | 0-1005E 01 | 0-2870E 00 | 0-4416E 00 | 0-2595E 00 | 0-2595E 00 |
| 4 | 180-0 | | | | 1 | 0-60 | 2 | 0-1533E 02 | 0-7255E 01 | 0-8788E 01 | 0-2099E 00 | 0-4085E 00 | 0-4085E 00 | 0-2315E 00 |
| 2 | | | | | 2 | 0-00 | 2 | 0-1067E 02 | 0-9832E 01 | 0-1900E 00 | 0-2733E 00 | 0-7440E 00 | 0-5482E 00 | 0-5482E 00 |
| 2 | | | | | 3 | 20-32 | 2 | 0-1104E 02 | 0-1147E 01 | 0-2320E 00 | 0-3221E 00 | 0-5128E 00 | 0-6600E 00 | 0-6600E 00 |
| 2 | | | | | 4 | 40-64 | 2 | 0-1082E 02 | 0-6670E 00 | 0-1005E 01 | 0-2870E 00 | 0-4416E 00 | 0-2595E 00 | 0-2595E 00 |
| 2 | | | | | 5 | 20-32 | 2 | 0-1082E 02 | 0-6670E 00 | 0-1005E 01 | 0-2870E 00 | 0-4416E 00 | 0-2595E 00 | 0-2595E 00 |
| 5 | 210-0 | | | | 1 | 0-60 | 2 | 0-1155E 02 | 0-6755E 01 | 0-1931E 01 | 0-3062E 00 | 0-1290E 01 | 0-1290E 01 | 0-3719E 00 |
| 2 | | | | | 2 | 0-00 | 2 | 0-1133E 02 | 0-2782E 01 | 0-1749E 01 | 0-4191E 00 | 0-1290E 01 | 0-1290E 01 | 0-3719E 00 |
| 2 | | | | | 3 | 20-32 | 2 | 0-1095E 02 | 0-1952E 01 | 0-1588E 01 | 0-3391E 00 | 0-5128E 00 | 0-6600E 00 | 0-6600E 00 |
| 2 | | | | | 4 | 40-64 | 2 | 0-1045E 02 | 0-1678E 01 | 0-1588E 01 | 0-2474E 00 | 0-6232E 00 | 0-7146E 00 | 0-7146E 00 |
| 2 | | | | | 5 | 20-32 | 2 | 0-1004E 02 | 0-1979E 01 | 0-1588E 01 | 0-2474E 00 | 0-6232E 00 | 0-7146E 00 | 0-7146E 00 |
| 6 | 250-0 | | | | 1 | 0-60 | 2 | 0-9195E 01 | 0-3088E 01 | 0-2944E 01 | 0-3258E 00 | 0-9403E 00 | 0-9403E 00 | 0-4726E 00 |
| 2 | | | | | 2 | 0-00 | 2 | 0-9449E 02 | 0-3649E 01 | 0-2195E 01 | 0-2730E 00 | 0-5257E 00 | 0-5257E 00 | 0-2175E 00 |
| 2 | | | | | 3 | 20-32 | 2 | 0-1044E 02 | 0-3709E 01 | 0-8052E 00 | 0-3557E 00 | 0-8649E 00 | 0-8649E 00 | 0-1436E 00 |
| 2 | | | | | 4 | 40-64 | 2 | 0-1095E 02 | 0-2246E 01 | 0-1588E 01 | 0-2721E 00 | 0-5128E 00 | 0-6600E 00 | 0-6600E 00 |
| 2 | | | | | 5 | 20-32 | 2 | 0-8977E 01 | 0-3451E 01 | 0-2019E 01 | 0-1886E 00 | 0-8312E 00 | 0-8312E 00 | 0-3593E 00 |
| 2 | | | | | 6 | 40-64 | 2 | 0-8977E 01 | 0-3451E 01 | 0-2019E 01 | 0-1886E 00 | 0-8312E 00 | 0-8312E 00 | 0-3593E 00 |
| 2 | | | | | 7 | 20-32 | 2 | 0-8977E 01 | 0-3451E 01 | 0-2019E 01 | 0-1886E 00 | 0-8312E 00 | 0-8312E 00 | 0-3593E 00 |

8VWT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN | VX | MEAN | VY | MEAN | VZ | S.D. | VX | S.D. | VY | S.D. | VZ |
|-----|------|------|-------|-------|-------|------|--------|-------|----------|----|----------|----|----------|----|----------|----|----------|----|----------|----|
| 201 | 10.7 | 15.0 | 2 | 150.0 | 1 | 0.00 | -6.60 | 12.45 | 0.1101E | 02 | 0.20374E | 01 | 0.28032E | 00 | 0.41114E | 00 | 0.54666E | 00 | 0.47119E | 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.45 | 0.2641E | 02 | 0.16781E | 00 | 0.1442E | 00 | 0.38774E | 00 | 0.79249E | 00 | 0.58791E | 00 |
| | | | | | 3 | 0.00 | 20.32 | 12.45 | 0.10997E | 02 | 0.16548E | 00 | 0.13488E | 00 | 0.4683E | 00 | 0.60469E | 00 | 0.50714E | 00 |
| | | | | | 4 | 0.00 | 40.64 | 12.45 | 0.11253E | 02 | 0.13488E | 00 | 0.16551E | 00 | 0.2508E | 00 | 0.38202E | 00 | 0.28279E | 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.11228E | 02 | 0.34489E | 01 | 0.14531E | 01 | 0.23550E | 00 | 0.29701E | 00 | 0.54119E | 00 |
| | | 3 | 120.0 | | 1 | 0.00 | -6.60 | 12.45 | 0.1465E | 02 | 0.3048E | 01 | 0.1820E | 01 | 0.3203E | 00 | 0.7125E | 00 | 0.5371E | 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.45 | 0.1813E | 02 | 0.33830E | 01 | 0.29468E | 01 | 0.41580E | 00 | 0.4954E | 00 | 0.4399E | 00 |
| | | | | | 3 | 0.00 | 20.32 | 12.45 | 0.10687E | 02 | 0.32129E | 01 | 0.36677E | 01 | 0.40057E | 01 | 0.83578E | 01 | 0.5301E | 00 |
| | | | | | 4 | 0.00 | 40.64 | 12.45 | 0.2157E | 01 | 0.22475E | 01 | 0.22549E | 01 | 0.10287E | 00 | 0.1778E | 00 | 0.1560E | 00 |
| | | | | | 6 | 0.00 | -20.32 | 12.54 | 0.11837E | 02 | 0.35685E | 00 | 0.3311E | 01 | 0.31860E | 00 | 0.95215E | 00 | 0.80637E | 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.12370E | 02 | 0.45224E | 00 | 0.11839E | 01 | 0.32795E | 00 | 0.36112E | 00 | 0.31769E | 00 |
| | | 4 | 180.0 | | 1 | 0.00 | -6.60 | 12.45 | 0.10089E | 02 | 0.16558E | 00 | 0.1496E | 00 | 0.29474E | 00 | 0.4984E | 00 | 0.4059E | 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.45 | 0.1083E | 02 | 0.18794E | 01 | 0.1737E | 00 | 0.3113E | 00 | 0.6639E | 00 | 0.5187E | 00 |
| | | | | | 3 | 0.00 | 20.32 | 12.45 | 0.1727E | 02 | 0.20742E | 01 | 0.2190E | 00 | 0.3672E | 00 | 0.6639E | 00 | 0.5187E | 00 |
| | | | | | 4 | 0.00 | 40.64 | 12.45 | 0.1747E | 02 | 0.21330E | 01 | 0.15226E | 01 | 0.2966E | 00 | 0.4481E | 00 | 0.2350E | 00 |
| | | | | | 5 | 0.00 | -20.32 | 12.54 | 0.10747E | 02 | 0.22791E | 00 | 0.1537E | 01 | 0.23590E | 00 | 0.4481E | 00 | 0.2350E | 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.10522E | 02 | 0.47157E | 01 | 0.1633E | 01 | 0.33975E | 00 | 0.4965E | 00 | 0.2194E | 00 |
| | | 5 | 210.0 | | 1 | 0.00 | -6.60 | 12.45 | 0.10156E | 02 | 0.39405E | 01 | 0.23336E | 01 | 0.32817E | 00 | 0.4520E | 00 | 0.32199E | 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.45 | 0.11398E | 02 | 0.46464E | 01 | 0.2784E | 00 | 0.35669E | 00 | 0.5702E | 00 | 0.45050E | 00 |
| | | | | | 3 | 0.00 | 20.32 | 12.45 | 0.11075E | 02 | 0.41335E | 01 | 0.24230E | 00 | 0.4436E | 00 | 0.7987E | 00 | 0.65238E | 00 |
| | | | | | 4 | 0.00 | 40.64 | 12.45 | 0.2094E | 01 | 0.3801E | 01 | 0.31568E | 01 | 0.38076E | 00 | 0.4605E | 00 | 0.50350E | 00 |
| | | | | | 5 | 0.00 | -20.32 | 12.54 | 0.2275E | 01 | 0.19945E | 01 | 0.12568E | 01 | 0.19019E | 00 | 0.28939E | 01 | 0.20252E | 00 |
| | | | | | 6 | 0.00 | -20.32 | 12.54 | 0.1065E | 01 | 0.37624E | 01 | 0.1244E | 01 | 0.2641E | 00 | 0.39389E | 01 | 0.31208E | 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.08154E | 01 | 0.35025E | 01 | 0.23469E | 01 | 0.2621E | 00 | 0.4434E | 00 | 0.31208E | 00 |
| | | 6 | 240.0 | | 1 | 0.00 | -6.60 | 12.45 | 0.10534E | 02 | 0.31857E | 01 | 0.2503E | 01 | 0.25539E | 00 | 0.66100E | 00 | 0.25879E | 00 |
| | | | | | 2 | 0.00 | 0.00 | 12.45 | 0.1531E | 02 | 0.41703E | 01 | 0.2266E | 01 | 0.33989E | 00 | 0.5782E | 00 | 0.3999E | 00 |
| | | | | | 3 | 0.00 | 20.32 | 12.45 | 0.10937E | 02 | 0.45848E | 01 | 0.20720E | 01 | 0.27858E | 00 | 0.24136E | 00 | 0.2337E | 00 |
| | | | | | 4 | 0.00 | 40.64 | 12.45 | 0.22314E | 01 | 0.38855E | 00 | 0.1558E | 01 | 0.1885E | 00 | 0.4662E | 00 | 0.24863E | 00 |
| | | | | | 5 | 0.00 | -20.32 | 12.54 | 0.2621E | 02 | 0.30505E | 01 | 0.13558E | 01 | 0.24485E | 00 | 0.6441E | 00 | 0.30484E | 00 |
| | | | | | 6 | 0.00 | -20.32 | 12.54 | 0.2281E | 02 | 0.47142E | 01 | 0.24943E | 01 | 0.19724E | 00 | 0.1734E | 00 | 0.1981E | 00 |
| | | | | | 7 | 0.00 | -20.32 | 12.54 | 0.11691E | 02 | 0.47142E | 01 | 0.24943E | 01 | 0.19724E | 00 | 0.1734E | 00 | 0.1981E | 00 |

8VMT 242/243 SHIP WAKE TURBULENCE TEST

| PWM VEL | ROLL TP | YAW PROBF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|------|------|-------|------------|------------|------------|------------|------------|------------|
| 202 10.1 | 0.0 | 3 150.0 | 0.00 | 0.00 | 12.45 | 0.1244E 02 | 0.2144E 01 | 0.3918E 00 | 0.4376E 00 | 0.7580E 00 | 0.6600E 00 |
| | | | 0.00 | 0.00 | 4.45 | 0.1167E 02 | 0.2161E 01 | 0.1009E 00 | 0.4381E 00 | 0.1020E 00 | 0.0000E 00 |
| | | | 0.00 | 0.00 | 4.45 | 0.1167E 02 | 0.2161E 01 | 0.1009E 00 | 0.4381E 00 | 0.1020E 00 | 0.0000E 00 |
| | | | 0.00 | 0.00 | 4.45 | 0.1167E 02 | 0.2161E 01 | 0.1009E 00 | 0.4381E 00 | 0.1020E 00 | 0.0000E 00 |
| | | | 0.00 | 0.00 | 4.45 | 0.1167E 02 | 0.2161E 01 | 0.1009E 00 | 0.4381E 00 | 0.1020E 00 | 0.0000E 00 |
| | | | 0.00 | 0.00 | 12.54 | 0.1172E 02 | 0.1172E 01 | 0.1245E 00 | 0.4375E 00 | 0.3006E 00 | 0.2160E 00 |
| | | 5 120.0 | 0.00 | 0.00 | 5.45 | 0.1172E 02 | 0.1172E 01 | 0.1245E 00 | 0.4375E 00 | 0.7735E 00 | 0.2331E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1172E 02 | 0.1172E 01 | 0.1245E 00 | 0.4375E 00 | 0.7735E 00 | 0.2331E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1172E 02 | 0.1172E 01 | 0.1245E 00 | 0.4375E 00 | 0.7735E 00 | 0.2331E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1172E 02 | 0.1172E 01 | 0.1245E 00 | 0.4375E 00 | 0.7735E 00 | 0.2331E 00 |
| | | | 0.00 | 0.00 | 12.54 | 0.1236E 02 | 0.1236E 01 | 0.5165E 00 | 0.3033E 00 | 0.9368E 00 | 0.6270E 00 |
| | | 5 180.0 | 0.00 | 0.00 | 3.45 | 0.1192E 02 | 0.1192E 01 | 0.9377E 00 | 0.3741E 00 | 0.1284E 01 | 0.5688E 00 |
| | | | 0.00 | 0.00 | 3.45 | 0.1192E 02 | 0.1192E 01 | 0.9377E 00 | 0.3741E 00 | 0.1284E 01 | 0.5688E 00 |
| | | | 0.00 | 0.00 | 3.45 | 0.1192E 02 | 0.1192E 01 | 0.9377E 00 | 0.3741E 00 | 0.1284E 01 | 0.5688E 00 |
| | | | 0.00 | 0.00 | 3.45 | 0.1192E 02 | 0.1192E 01 | 0.9377E 00 | 0.3741E 00 | 0.1284E 01 | 0.5688E 00 |
| | | | 0.00 | 0.00 | 12.54 | 0.1095E 02 | 0.1095E 01 | 0.1324E 00 | 0.3848E 00 | 0.3033E 00 | 0.4906E 00 |
| | | 6 210.0 | 0.00 | 0.00 | 5.45 | 0.1175E 02 | 0.1175E 01 | 0.2200E 00 | 0.3928E 00 | 0.4237E 00 | 0.2860E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1175E 02 | 0.1175E 01 | 0.2200E 00 | 0.3928E 00 | 0.4237E 00 | 0.2860E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1175E 02 | 0.1175E 01 | 0.2200E 00 | 0.3928E 00 | 0.4237E 00 | 0.2860E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1175E 02 | 0.1175E 01 | 0.2200E 00 | 0.3928E 00 | 0.4237E 00 | 0.2860E 00 |
| | | | 0.00 | 0.00 | 12.54 | 0.1199E 02 | 0.1199E 01 | 0.2247E 00 | 0.3557E 00 | 0.3033E 00 | 0.4906E 00 |
| | | 7 240.0 | 0.00 | 0.00 | 5.45 | 0.1199E 02 | 0.1199E 01 | 0.2247E 00 | 0.3557E 00 | 0.1919E 00 | 0.1657E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1199E 02 | 0.1199E 01 | 0.2247E 00 | 0.3557E 00 | 0.1919E 00 | 0.1657E 00 |
| | | | 0.00 | 0.00 | 5.45 | 0.1199E 02 | 0.1199E 01 | 0.2247E 00 | 0.3557E 00 | 0.1919E 00 | 0.1657E 00 |
| | | | 0.00 | 0.00 | 12.54 | 0.1199E 02 | 0.1199E 01 | 0.2247E 00 | 0.3557E 00 | 0.1919E 00 | 0.1657E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|-------|------|-------|-------|-------|--------|--------|------------|------------|------------|------------|------------|------------|------------|
| 203 | 22.6 | 0.0 | 2 | 150.0 | 1 | 0.00 | -6.60 | 12.45 | 0.2154E 02 | 0.3416E 01 | 0.2616E 00 | 0.3201E 00 | 0.8059E 00 | 0.6593E 00 |
| | | | | | | 0.00 | 0.00 | 12.45 | 0.2176E 02 | 0.2718E 01 | 0.2014E 00 | 0.3510E 00 | 0.9130E 00 | 0.6737E 00 |
| | | | | | | 0.00 | 0.00 | 12.45 | 0.2180E 02 | 0.2717E 01 | 0.2006E 00 | 0.3510E 00 | 0.9130E 00 | 0.6737E 00 |
| | | | | | | 0.00 | 20.64 | 12.45 | 0.2271E 02 | 0.2309E 01 | 0.2304E 00 | 0.4844E 00 | 0.1430E 01 | 0.8200E 00 |
| | | | | | | 0.00 | 40.64 | 12.45 | 0.2271E 02 | 0.2309E 01 | 0.2304E 00 | 0.4844E 00 | 0.1430E 01 | 0.8200E 00 |
| | | | | | | 0.00 | -20.32 | 12.45 | 0.2413E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 |
| | | | | | | 0.00 | 0.00 | 12.45 | 0.2494E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 |
| 3 | 120.0 | 3 | 120.0 | 1 | 0.00 | -6.60 | 12.45 | 0.2494E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 | 0.8067E 00 |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2508E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 | 0.8067E 00 |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2508E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 | 0.8067E 00 |
| | | | | | 0.00 | 20.64 | 12.45 | 0.1982E 02 | 0.3772E 01 | 0.1380E 00 | 0.2710E 00 | 0.3745E 01 | 0.3728E 01 | 0.7154E 00 |
| | | | | | 0.00 | 40.64 | 12.45 | 0.1982E 02 | 0.3772E 01 | 0.1380E 00 | 0.2710E 00 | 0.3745E 01 | 0.3728E 01 | 0.7154E 00 |
| | | | | | 0.00 | -20.32 | 12.45 | 0.2494E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 | 0.8067E 00 |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2494E 02 | 0.1231E 01 | 0.2918E 00 | 0.5284E 00 | 0.1768E 01 | 0.5216E 00 | 0.8067E 00 |
| 4 | 180.0 | 4 | 180.0 | 1 | 0.00 | -6.60 | 12.45 | 0.2176E 02 | 0.3659E 01 | 0.6008E 00 | 0.2924E 00 | 0.7155E 00 | 0.4541E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2176E 02 | 0.3659E 01 | 0.6008E 00 | 0.2924E 00 | 0.7155E 00 | 0.4541E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2176E 02 | 0.3659E 01 | 0.6008E 00 | 0.2924E 00 | 0.7155E 00 | 0.4541E 00 | |
| | | | | | 0.00 | 20.64 | 12.45 | 0.2176E 02 | 0.3659E 01 | 0.6008E 00 | 0.2924E 00 | 0.7155E 00 | 0.4541E 00 | |
| | | | | | 0.00 | 40.64 | 12.45 | 0.2176E 02 | 0.3659E 01 | 0.6008E 00 | 0.2924E 00 | 0.7155E 00 | 0.4541E 00 | |
| | | | | | 0.00 | -20.32 | 12.45 | 0.2221E 02 | 0.3374E 01 | 0.2895E 00 | 0.4043E 00 | 0.9179E 00 | 0.6572E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2221E 02 | 0.3374E 01 | 0.2895E 00 | 0.4043E 00 | 0.9179E 00 | 0.6572E 00 | |
| 5 | 210.0 | 5 | 210.0 | 1 | 0.00 | -6.60 | 12.45 | 0.1177E 02 | 0.5632E 01 | 0.3752E 01 | 0.5422E 00 | 1.4024E 00 | 0.8913E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2230E 02 | 0.7301E 01 | 0.2423E 00 | 0.6152E 00 | 0.1530E 01 | 0.1136E 01 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2230E 02 | 0.7301E 01 | 0.2423E 00 | 0.6152E 00 | 0.1530E 01 | 0.1136E 01 | |
| | | | | | 0.00 | 20.64 | 12.45 | 0.2509E 02 | 0.1654E 01 | 0.4700E 00 | 0.2437E 00 | 0.5902E 00 | 0.4007E 00 | |
| | | | | | 0.00 | 40.64 | 12.45 | 0.2509E 02 | 0.1654E 01 | 0.4700E 00 | 0.2437E 00 | 0.5902E 00 | 0.4007E 00 | |
| | | | | | 0.00 | -20.32 | 12.45 | 0.1922E 02 | 0.6319E 01 | 0.5249E 00 | 0.3559E 00 | 0.2058E 00 | 0.3747E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.1922E 02 | 0.6319E 01 | 0.5249E 00 | 0.3559E 00 | 0.2058E 00 | 0.3747E 00 | |
| 6 | 240.0 | 6 | 240.0 | 1 | 0.00 | -6.60 | 12.45 | 0.2465E 02 | 0.7926E 01 | 0.9887E 01 | 0.4630E 00 | 0.8272E 00 | 0.5070E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2465E 02 | 0.7926E 01 | 0.9887E 01 | 0.4630E 00 | 0.8272E 00 | 0.5070E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2465E 02 | 0.7926E 01 | 0.9887E 01 | 0.4630E 00 | 0.8272E 00 | 0.5070E 00 | |
| | | | | | 0.00 | 20.64 | 12.45 | 0.2617E 02 | 0.4937E 01 | 0.4058E 00 | 0.4478E 00 | 0.8518E 00 | 0.5980E 00 | |
| | | | | | 0.00 | 40.64 | 12.45 | 0.2617E 02 | 0.4937E 01 | 0.4058E 00 | 0.4478E 00 | 0.8518E 00 | 0.5980E 00 | |
| | | | | | 0.00 | -20.32 | 12.45 | 0.2304E 02 | 0.9936E 01 | 0.6803E 00 | 0.2601E 00 | 0.8232E 00 | 0.3817E 00 | |
| | | | | | 0.00 | 0.00 | 12.45 | 0.2304E 02 | 0.9936E 01 | 0.6803E 00 | 0.2601E 00 | 0.8232E 00 | 0.3817E 00 | |

BVNT 242/243 SHIP WAKE TURBULENCE TEST

| PUN VEL | ROLL TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|--------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 705 22.7 | 0.0 | 2 | 23.88 | 0.60 | 12.45 | 0.22264E 02 | 0.15856E 01 | 0.74907E 00 | 0.35279E 00 | 0.71245E 00 | 0.50672E 00 |
| | | 3 | 23.88 | 0.60 | 12.45 | 0.23530E 02 | 0.13808E 00 | 0.11647E 00 | 0.37396E 00 | 0.10424E 00 | 0.64858E 00 |
| | | 4 | 23.88 | 20.64 | 12.45 | 0.21407E 02 | 0.24045E 01 | 0.13709E 00 | 0.38785E 00 | 0.63407E 00 | 0.63666E 00 |
| | | 5 | 23.88 | 40.64 | 12.45 | 0.23209E 02 | 0.31979E 01 | 0.97376E 00 | 0.24383E 00 | 0.74837E 01 | 0.49970E 00 |
| | | 6 | 23.88 | -20.64 | 12.54 | 0.23746E 02 | 0.36513E 01 | 0.20779E 01 | 0.23084E 00 | 0.14077E 00 | 0.49970E 00 |
| | | 7 | 23.88 | -20.32 | 12.54 | 0.23746E 02 | 0.14400E 01 | 0.17751E 01 | 0.27545E 00 | 0.69015E 00 | 0.35442E 00 |
| | 3 | 120.0 | 23.88 | 0.60 | 12.45 | 0.28235E 02 | 0.12915E 00 | 0.33884E 01 | 0.41671E 00 | 0.10237E 01 | 0.63528E 00 |
| | | 3 | 23.88 | 0.60 | 12.45 | 0.28766E 02 | 0.10979E 00 | 0.33599E 01 | 0.42908E 00 | 0.11831E 01 | 0.64839E 00 |
| | | 4 | 23.88 | 20.64 | 12.45 | 0.19753E 02 | 0.19431E 01 | 0.35477E 01 | 0.42908E 00 | 0.12281E 01 | 0.66595E 00 |
| | | 5 | 23.88 | 40.64 | 12.45 | 0.20990E 02 | 0.19700E 01 | 0.15440E 01 | 0.33599E 00 | 0.73010E 00 | 0.39651E 00 |
| | | 6 | 23.88 | -20.64 | 12.54 | 0.29113E 02 | 0.29724E 01 | 0.33940E 01 | 0.65833E 00 | 0.13746E 01 | 0.66744E 00 |
| | | 7 | 23.88 | -20.32 | 12.54 | 0.22694E 02 | 0.10944E 01 | 0.42440E 01 | 0.29839E 00 | 0.14615E 00 | 0.23080E 00 |
| | 4 | 180.0 | 23.88 | 0.60 | 12.45 | 0.24383E 02 | 0.13519E 00 | 0.81151E 01 | 0.29913E 00 | 0.57448E 00 | 0.48177E 00 |
| | | 3 | 23.88 | 0.60 | 12.45 | 0.24383E 02 | 0.13519E 00 | 0.21250E 00 | 0.26021E 00 | 0.86451E 00 | 0.57215E 00 |
| | | 4 | 23.88 | 20.64 | 12.45 | 0.23922E 02 | 0.28299E 01 | 0.21250E 00 | 0.30275E 00 | 0.10293E 01 | 0.71183E 00 |
| | | 5 | 23.88 | 40.64 | 12.45 | 0.23255E 02 | 0.17055E 01 | 0.30449E 00 | 0.30449E 00 | 0.10293E 01 | 0.49292E 00 |
| | | 6 | 23.88 | -20.64 | 12.54 | 0.23267E 02 | 0.88225E 01 | 0.33184E 00 | 0.30275E 00 | 0.88571E 00 | 0.42292E 00 |
| | | 7 | 23.88 | -20.32 | 12.54 | 0.23841E 02 | 0.89908E 01 | 0.33184E 00 | 0.30275E 00 | 0.11983E 00 | 0.88808E 00 |
| | 5 | 210.0 | 23.88 | 0.60 | 12.45 | 0.23448E 02 | 0.20344E 01 | 0.15026E 01 | 0.47843E 00 | 0.12509E 01 | 0.69753E 00 |
| | | 3 | 23.88 | 0.60 | 12.45 | 0.23448E 02 | 0.20344E 01 | 0.15026E 01 | 0.46143E 00 | 0.13000E 01 | 0.78673E 00 |
| | | 4 | 23.88 | 20.64 | 12.45 | 0.23937E 02 | 0.53461E 01 | 0.16557E 01 | 0.46143E 00 | 0.13130E 01 | 0.79577E 00 |
| | | 5 | 23.88 | 40.64 | 12.45 | 0.23516E 02 | 0.31680E 01 | 0.33311E 00 | 0.48936E 00 | 0.55730E 00 | 0.34895E 00 |
| | | 6 | 23.88 | -20.64 | 12.54 | 0.23516E 02 | 0.31680E 01 | 0.33311E 00 | 0.32078E 00 | 0.68744E 00 | 0.40865E 00 |
| | | 7 | 23.88 | -20.32 | 12.54 | 0.23577E 02 | 0.97709E 01 | 0.38688E 01 | 0.32078E 00 | 0.42474E 00 | 0.41339E 00 |
| | 6 | 240.0 | 23.88 | 0.60 | 12.45 | 0.23524E 02 | 0.33988E 01 | 0.40944E 01 | 0.45665E 00 | 0.13759E 01 | 0.77655E 00 |
| | | 3 | 23.88 | 0.60 | 12.45 | 0.23524E 02 | 0.33988E 01 | 0.40944E 01 | 0.56691E 00 | 0.13759E 01 | 0.77655E 00 |
| | | 4 | 23.88 | 20.64 | 12.45 | 0.23577E 02 | 0.50752E 01 | 0.48152E 01 | 0.36971E 00 | 0.96839E 00 | 0.81033E 00 |
| | | 5 | 23.88 | 40.64 | 12.45 | 0.23932E 02 | 0.50306E 01 | 0.13015E 01 | 0.47562E 00 | 0.13502E 01 | 0.84604E 00 |
| | | 6 | 23.88 | -20.64 | 12.54 | 0.23622E 02 | 0.48805E 01 | 0.40077E 01 | 0.35359E 00 | 0.24144E 00 | 0.57006E 00 |
| | | 7 | 23.88 | -20.32 | 12.54 | 0.23622E 02 | 0.48805E 01 | 0.40077E 01 | 0.42359E 00 | 0.11219E 01 | 0.17419E 00 |

OVMT 242/243 SHIP MAKE TURBULENCE TEST

| RUN VEL | ROLL TP | YAW PRODR | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|-------|------|------------|-------------|-------------|-------------|--------------|--------------|
| 296 11.0 | 0.0 | 2 150.0 | 43.16 | 6.60 | 2.45 | 0.1503E 02 | 0.3154E 01 | 0.2977E 00 | 0.2180E 00 | 0.63947E 00 | 0.3302E 00 |
| | | | 43.16 | 0.00 | 2.45 | 0.1127E 02 | 0.3206E 01 | 0.4787E 00 | 0.2297E 00 | 0.796781E 00 | 0.016218E 00 |
| | | | 43.16 | 20.32 | 2.45 | 0.1129E 02 | 0.3181E 01 | 0.6692E 01 | 0.36943E 00 | 0.55869E 00 | 0.00581E 00 |
| | | | 43.16 | 40.64 | 2.45 | 0.1158E 02 | 0.3204E 01 | 0.1030E 01 | 0.23953E 00 | 0.4439E 00 | 0.009944E 00 |
| | | | 43.16 | 20.32 | 2.54 | 0.1079E 02 | 0.3253E 01 | 0.1082E 01 | 0.20764E 00 | 0.26567E 00 | 0.034630E 00 |
| | 3 120.0 | | 43.16 | 6.60 | 2.45 | 0.9892E 01 | 0.15437E 01 | 0.1068E 01 | 0.32821E 00 | 0.8227E 00 | 0.04969E 00 |
| | | | 43.16 | 0.00 | 2.45 | 0.1064E 02 | 0.2228E 01 | 0.1286E 01 | 0.38109E 00 | 0.9626E 01 | 0.048036E 00 |
| | | | 43.16 | 20.32 | 2.45 | 0.1070E 02 | 0.29027E 01 | 0.75170E 01 | 0.43320E 00 | 0.11452E 01 | 0.005982E 00 |
| | | | 43.16 | 40.64 | 2.45 | 0.1087E 02 | 0.33909E 01 | 0.13663E 01 | 0.43604E 00 | 0.39606E 00 | 0.005133E 00 |
| | | | 43.16 | 20.32 | 2.54 | 0.1037E 02 | 0.3680E 01 | 0.13353E 01 | 0.45490E 00 | 0.80710E 00 | 0.004309E 01 |
| | 4 180.0 | | 43.16 | 6.60 | 2.45 | 0.1048E 02 | 0.13749E 01 | 0.2718E 01 | 0.24594E 00 | 0.31985E 00 | 0.038619E 00 |
| | | | 43.16 | 0.00 | 2.45 | 0.1140E 02 | 0.15117E 01 | 0.1825E 01 | 0.27123E 00 | 0.71881E 00 | 0.005419E 00 |
| | | | 43.16 | 20.32 | 2.45 | 0.1050E 02 | 0.15117E 01 | 0.1694E 01 | 0.23895E 00 | 0.27884E 00 | 0.005183E 00 |
| | | | 43.16 | 40.64 | 2.45 | 0.1071E 02 | 0.15117E 01 | 0.1071E 01 | 0.24210E 00 | 0.27884E 00 | 0.005183E 00 |
| | | | 43.16 | 20.32 | 2.54 | 0.1084E 02 | 0.12919E 01 | 0.1071E 01 | 0.24210E 00 | 0.6009E 00 | 0.005183E 00 |
| | 5 210.0 | | 43.16 | 6.60 | 2.45 | 0.1078E 02 | 0.12694E 01 | 0.1742E 01 | 0.21277E 00 | 0.21570E 00 | 0.004110E 00 |
| | | | 43.16 | 0.00 | 2.45 | 0.1278E 02 | 0.1718E 01 | 0.1634E 01 | 0.21297E 00 | 0.2788E 00 | 0.005549E 00 |
| | | | 43.16 | 20.32 | 2.45 | 0.1031E 02 | 0.1623E 01 | 0.1095E 01 | 0.22978E 00 | 0.7297E 00 | 0.005712E 00 |
| | | | 43.16 | 40.64 | 2.45 | 0.1031E 02 | 0.1623E 01 | 0.2097E 01 | 0.22978E 00 | 0.2916E 00 | 0.005712E 00 |
| | | | 43.16 | 20.32 | 2.54 | 0.1031E 02 | 0.13936E 01 | 0.1314E 01 | 0.22222E 00 | 0.4372E 00 | 0.005528E 00 |
| | 6 240.0 | | 43.16 | 6.60 | 2.45 | 0.1031E 02 | 0.13936E 01 | 0.1314E 01 | 0.18029E 00 | 0.62894E 00 | 0.005260E 00 |
| | | | 43.16 | 0.00 | 2.45 | 0.9310E 01 | 0.65149E 01 | 0.6391E 01 | 0.28648E 00 | 0.48145E 00 | 0.004355E 00 |
| | | | 43.16 | 20.32 | 2.45 | 0.9310E 01 | 0.27133E 01 | 0.9926E 01 | 0.36037E 00 | 0.7467E 00 | 0.005729E 00 |
| | | | 43.16 | 40.64 | 2.45 | 0.1023E 02 | 0.2005E 01 | 0.9517E 01 | 0.29118E 00 | 0.5108E 00 | 0.004134E 00 |
| | | | 43.16 | 20.32 | 2.54 | 0.1023E 02 | 0.17033E 01 | 0.3713E 01 | 0.24811E 00 | 0.5108E 00 | 0.004134E 00 |
| | | | 43.16 | 40.64 | 2.54 | 0.9237E 01 | 0.16220E 01 | 0.4806E 01 | 0.25688E 00 | 0.7607E 00 | 0.004134E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | TP | YAW PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|-------|-------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 207 | 22.6 | 0.0 | 2 | 150.0 | 1 | 43.16 | 0.21521E 02 | 0.62706E 01 | 0.45108E 00 | 0.31671E 00 | 0.89979E 00 | 0.58490E 00 |
| | | | | | 2 | 43.16 | 0.21377E 02 | 0.19770E 01 | 0.48240E 01 | 0.30144E 00 | 0.10647E 01 | 0.59687E 00 |
| | | | | | 3 | 43.16 | 0.23369E 02 | 0.17388E 01 | 0.29640E 01 | 0.30727E 00 | 0.10191E 01 | 0.59360E 00 |
| | | | | | 4 | 43.16 | 0.23499E 02 | 0.17323E 01 | 0.23025E 01 | 0.27417E 00 | 0.10156E 01 | 0.59436E 00 |
| | | | | | 5 | 43.16 | 0.23312E 02 | 0.17851E 01 | 0.19969E 01 | 0.27416E 00 | 0.10156E 01 | 0.59436E 00 |
| | | | | | 6 | 43.16 | 0.22312E 02 | 0.17851E 01 | 0.19969E 01 | 0.27416E 00 | 0.10156E 01 | 0.59436E 00 |
| | | | | | 7 | 43.16 | 0.22312E 02 | 0.17851E 01 | 0.19969E 01 | 0.27416E 00 | 0.10156E 01 | 0.59436E 00 |
| | | 3 | 120.0 | 1 | 43.16 | 12.45 | 0.20442E 02 | 0.12709E 01 | 0.82928E 00 | 0.23873E 00 | 0.72558E 00 | 0.41435E 00 |
| | | | | | 2 | 43.16 | 0.20098E 02 | 0.12793E 01 | 0.84338E 00 | 0.29218E 00 | 0.84338E 00 | 0.42897E 00 |
| | | | | | 3 | 43.16 | 0.21255E 02 | 0.12623E 01 | 0.85300E 00 | 0.26492E 00 | 0.83389E 00 | 0.38381E 00 |
| | | | | | 4 | 43.16 | 0.21648E 02 | 0.12488E 01 | 0.85478E 00 | 0.26492E 00 | 0.83389E 00 | 0.40184E 00 |
| | | | | | 5 | 43.16 | 0.22669E 02 | 0.12412E 01 | 0.87478E 00 | 0.43187E 00 | 0.93008E 00 | 0.51865E 01 |
| | | | | | 6 | 43.16 | 0.21416E 02 | 0.14901E 01 | 0.87478E 00 | 0.37567E 00 | 0.79845E 00 | 0.51222E 01 |
| | | | | | 7 | 43.16 | 0.21416E 02 | 0.14901E 01 | 0.87478E 00 | 0.37567E 00 | 0.79845E 00 | 0.51222E 01 |
| | | 4 | 180.0 | 1 | 43.16 | 12.45 | 0.23108E 02 | 0.22538E 01 | 0.61635E 00 | 0.33517E 00 | 0.82754E 00 | 0.56754E 00 |
| | | | | | 2 | 43.16 | 0.23888E 02 | 0.24638E 01 | 0.37809E 00 | 0.37308E 00 | 0.10407E 01 | 0.56754E 00 |
| | | | | | 3 | 43.16 | 0.23083E 02 | 0.28281E 01 | 0.67284E 00 | 0.31845E 00 | 0.10738E 01 | 0.59662E 00 |
| | | | | | 4 | 43.16 | 0.23650E 02 | 0.21407E 01 | 0.67284E 00 | 0.25413E 00 | 0.61966E 00 | 0.41175E 00 |
| | | | | | 5 | 43.16 | 0.23369E 02 | 0.23355E 01 | 0.30666E 00 | 0.33913E 00 | 0.90566E 00 | 0.47164E 00 |
| | | | | | 6 | 43.16 | 0.22542E 02 | 0.20355E 01 | 0.17735E 00 | 0.10106E 01 | 0.91157E 00 | 0.47164E 00 |
| | | | | | 7 | 43.16 | 0.22542E 02 | 0.20355E 01 | 0.17735E 00 | 0.10106E 01 | 0.91157E 00 | 0.47164E 00 |
| | | 5 | 210.0 | 1 | 43.16 | 12.45 | 0.21473E 02 | 0.49649E 00 | 0.51689E 00 | 0.30226E 00 | 0.89912E 00 | 0.51350E 00 |
| | | | | | 2 | 43.16 | 0.23273E 02 | 0.19470E 01 | 0.44927E 00 | 0.32423E 00 | 0.96372E 00 | 0.52021E 00 |
| | | | | | 3 | 43.16 | 0.23167E 02 | 0.22195E 01 | 0.59747E 00 | 0.33185E 00 | 0.96372E 00 | 0.52021E 00 |
| | | | | | 4 | 43.16 | 0.23725E 02 | 0.26701E 01 | 0.24881E 00 | 0.19463E 00 | 0.65202E 00 | 0.36988E 00 |
| | | | | | 5 | 43.16 | 0.22728E 02 | 0.29701E 01 | 0.12570E 00 | 0.29764E 00 | 0.10617E 01 | 0.35972E 00 |
| | | | | | 6 | 43.16 | 0.22172E 02 | 0.30835E 01 | 0.26460E 00 | 0.20998E 00 | 0.14217E 01 | 0.29315E 01 |
| | | | | | 7 | 43.16 | 0.22172E 02 | 0.30835E 01 | 0.26460E 00 | 0.20998E 00 | 0.14217E 01 | 0.29315E 01 |
| | | 6 | 240.0 | 1 | 43.16 | 12.45 | 0.20093E 02 | 0.59905E 00 | 0.12803E 01 | 0.25060E 00 | 0.72440E 00 | 0.37112E 00 |
| | | | | | 2 | 43.16 | 0.21707E 02 | 0.40917E 00 | 0.13161E 00 | 0.28367E 00 | 0.88924E 00 | 0.39305E 00 |
| | | | | | 3 | 43.16 | 0.22077E 02 | 0.34714E 00 | 0.92252E 00 | 0.17021E 00 | 0.71021E 00 | 0.38818E 00 |
| | | | | | 4 | 43.16 | 0.23254E 02 | 0.38874E 00 | 0.13717E 00 | 0.22765E 00 | 0.15238E 00 | 0.69325E 00 |
| | | | | | 5 | 43.16 | 0.23049E 02 | 0.38874E 00 | 0.13717E 00 | 0.22765E 00 | 0.15238E 00 | 0.69325E 00 |
| | | | | | 6 | 43.16 | 0.23049E 02 | 0.38874E 00 | 0.13717E 00 | 0.22765E 00 | 0.15238E 00 | 0.69325E 00 |
| | | | | | 7 | 43.16 | 0.23049E 02 | 0.38874E 00 | 0.13717E 00 | 0.22765E 00 | 0.15238E 00 | 0.69325E 00 |

BVMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN | VFL | ROLL | TP | YAW | PRDF | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|------|------|-------|-----|------|------|--------|------|----------|-----------|----------|----------|------------|-------------|
| 208 | 10-1 | 0-0 | 2 | 0-0 | 1 | 0-00 | 6-60 | 6-34 | 0-67101E | 0-34814E | 0-42666E | 0-13297E | 0-15276E | 0-15731E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-68979E | 0-52187E | 0-29331E | 0-10047E | 0-79609E | 0-0-07028E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-11668E | 0-117859E | 0-17222E | 0-33226E | 0-12555E | 0-0-12247E |
| | | | | | | 0-00 | 20-32 | 6-34 | 0-12110E | 0-26870E | 0-11522E | 0-36092E | 0-0-82428E | 0-0-97994E |
| | | | | | | 0-00 | 40-64 | 6-34 | 0-11881E | 0-44782E | 0-17403E | 0-37217E | 0-22381E | 0-0-74985E |
| | | | | | | 0-00 | -20-32 | 6-34 | 0-10968E | 0-27414E | 0-30430E | 0-40230E | 0-82581E | 0-0-74382E |
| | | 3 | 30-0 | | | 0-00 | 6-60 | 6-34 | 0-1831E | 0-26007E | 0-2198E | 0-50859E | 0-1172E | 0-47661E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-68701E | 0-39928E | 0-21978E | 0-29883E | 0-14601E | 0-25611E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-98701E | 0-53749E | 0-23792E | 0-57186E | 0-25771E | 0-25014E |
| | | | | | | 0-00 | 20-32 | 6-34 | 0-12070E | 0-53749E | 0-46337E | 0-17109E | 0-63741E | 0-0-35922E |
| | | | | | | 0-00 | 40-64 | 6-34 | 0-10957E | 0-30943E | 0-48432E | 0-12175E | 0-63858E | 0-0-35922E |
| | | | | | | 0-00 | -20-32 | 6-34 | 0-10957E | 0-22783E | 0-15944E | 0-39390E | 0-11462E | 0-0-24312E |
| | | 4 | 50-0 | | | 0-00 | 6-60 | 6-34 | 0-1031E | 0-87143E | 0-3184E | 0-76299E | 0-1728E | 0-81954E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-12351E | 0-38840E | 0-23300E | 0-29411E | 0-20414E | 0-10048E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-42726E | 0-35376E | 0-3891E | 0-26946E | 0-25380E | 0-0-10846E |
| | | | | | | 0-00 | 20-32 | 6-34 | 0-60668E | 0-30186E | 0-3891E | 0-18878E | 0-19802E | 0-0-20149E |
| | | | | | | 0-00 | 40-64 | 6-34 | 0-10779E | 0-30237E | 0-22157E | 0-22482E | 0-21897E | 0-0-28134E |
| | | | | | | 0-00 | -20-32 | 6-34 | 0-72899E | 0-17940E | 0-24798E | 0-34772E | 0-17302E | 0-0-259150E |
| | | 5 | -30-0 | | | 0-00 | 6-60 | 6-34 | 0-6351E | 0-36653E | 0-37916E | 0-15483E | 0-15544E | 0-0-11416E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-68078E | 0-81638E | 0-1537E | 0-10401E | 0-11374E | 0-0-10649E |
| | | | | | | 0-00 | 20-32 | 6-34 | 0-11678E | 0-52187E | 0-10622E | 0-40401E | 0-0-85233E | 0-0-70555E |
| | | | | | | 0-00 | 40-64 | 6-34 | 0-11093E | 0-47487E | 0-10555E | 0-26240E | 0-0-58283E | 0-0-38588E |
| | | | | | | 0-00 | -20-32 | 6-34 | 0-26716E | 0-18162E | 0-61137E | 0-31964E | 0-54444E | 0-0-54808E |
| | | 6 | -50-0 | | | 0-00 | 6-60 | 6-34 | 0-26716E | 0-42190E | 0-137E | 0-17051E | 0-20644E | 0-1901E |
| | | | | | | 0-00 | 0-00 | 6-34 | 0-11685E | 0-31190E | 0-23809E | 0-17440E | 0-28986E | 0-0-21581E |
| | | | | | | 0-00 | 20-32 | 6-34 | 0-11685E | 0-31190E | 0-23809E | 0-17440E | 0-28986E | 0-0-21581E |
| | | | | | | 0-00 | 40-64 | 6-34 | 0-11685E | 0-31190E | 0-23809E | 0-17440E | 0-28986E | 0-0-21581E |
| | | | | | | 0-00 | -20-32 | 6-34 | 0-11685E | 0-31190E | 0-23809E | 0-17440E | 0-28986E | 0-0-21581E |

NOTE

The remaining pages in Appendix B present data from the extended 10.4 second runs performed during the airwake test. The mean velocity and standard deviation results were calculated using all 1704 samples taken during the 10.4 second run.

Results presented for the corresponding runs in the main body of Appendix B data were calculated from consideration of 600 samples, rather than for the entire extended 1704 sample run.

SVNT 242/243 SHIP WAKE TURBULENCE TEST

| RUN_VEL | ROLL | IP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|-------|----|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 25 | 22.4 | 0.0 | 1 | 0.0 | 1 | 170.69 | 6.22 | 0.1306E 02 | 0.12204E 01 | 0.10054E 01 | 0.18012E 01 | 0.24565E 01 | 0.18858E 01 |
| | | | | | 2 | 170.69 | 6.22 | 0.1300E 02 | 0.12856E 00 | 0.11894E 01 | 0.16551E 01 | 0.24123E 01 | 0.19945E 01 |
| | | | | | 3 | 170.69 | 6.22 | 0.1230E 02 | 0.12129E 00 | 0.11948E 01 | 0.16488E 01 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 4 | 170.69 | 6.22 | 0.1844E 02 | 0.12153E 00 | 0.12320E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 5 | 170.69 | 2.54 | 0.1982E 02 | 0.12050E 00 | 0.12621E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 6 | 170.69 | 2.54 | 0.1287E 02 | 0.12920E 00 | 0.12773E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 7 | 170.69 | 2.54 | 0.1806E 02 | 0.10411E 00 | 0.12731E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 8 | 170.69 | 2.54 | 0.1819E 02 | 0.10411E 00 | 0.12731E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 9 | 170.69 | 2.54 | 0.1819E 02 | 0.10411E 00 | 0.12731E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 10 | 170.69 | 2.54 | 0.1819E 02 | 0.10411E 00 | 0.12731E 01 | 0.19699E 00 | 0.23777E 01 | 0.17277E 01 |
| | | | | | 1 | 170.69 | 6.22 | 0.10230E 02 | 0.29091E 01 | 0.1598E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 2 | 170.69 | 6.22 | 0.1039E 02 | 0.28127E 01 | 0.17324E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 3 | 170.69 | 6.22 | 0.1045E 02 | 0.28127E 01 | 0.17324E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 4 | 170.69 | 6.22 | 0.1624E 02 | 0.16919E 01 | 0.2520E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 5 | 170.69 | 6.22 | 0.1924E 02 | 0.12797E 01 | 0.2520E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 6 | 170.69 | 6.22 | 0.1924E 02 | 0.12797E 01 | 0.2520E 01 | 0.26715E 01 | 0.3512E 01 | 0.3500E 01 |
| | | | | | 7 | 170.69 | 2.54 | 0.1610E 02 | 0.45748E 01 | 0.1810E 01 | 0.60740E 01 | 0.68055E 01 | 0.84972E 01 |
| | | | | | 8 | 170.69 | 2.54 | 0.1610E 02 | 0.45748E 01 | 0.1810E 01 | 0.60740E 01 | 0.68055E 01 | 0.84972E 01 |
| | | | | | 9 | 170.69 | 2.54 | 0.17830E 02 | 0.18220E 01 | 0.1810E 01 | 0.60740E 01 | 0.68055E 01 | 0.84972E 01 |
| | | | | | 10 | 170.69 | 2.54 | 0.17830E 02 | 0.18220E 01 | 0.1810E 01 | 0.60740E 01 | 0.68055E 01 | 0.84972E 01 |

6VMT 242/243 SHIP WAKE TURBULENCE TEST

| RUN_VEL | ROLL | JP | YAW_PROBE | X | Y | Z | MEAN_VX | MEAN_VY | MEAN_VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----------|------|------|-------|-------------|-------------|-------------|-------------|-------------|-------------|
| 51 | 72.7 | 0.0 | 1 | 0.0 | 0.00 | 18.03 | 0.18085E 02 | 0.10320E 00 | 0.13554E 01 | 0.19933E 01 | 0.20398E 01 | 0.18413E 01 |
| | | | 2 | 0.00 | 0.00 | 18.03 | 0.12321E 02 | 0.07335E 00 | 0.13678E 00 | 0.19885E 01 | 0.20378E 01 | 0.3110E 01 |
| | | | 3 | 0.00 | 0.00 | 18.03 | 0.17991E 02 | 0.08738E 00 | 0.03683E 00 | 0.20144E 01 | 0.18729E 01 | 0.23169E 01 |
| | | | 4 | 0.00 | 0.00 | 18.03 | 0.16890E 02 | 0.07553E 01 | 0.03539E 01 | 0.20262E 00 | 0.18733E 00 | 0.15921E 01 |
| | | | 5 | 0.00 | 0.00 | 18.03 | 0.20829E 02 | 0.06100E 00 | 0.08882E 00 | 0.30866E 00 | 0.20339E 00 | 0.3492E 00 |
| | | | 7 | 0.00 | 0.00 | 12.45 | 0.14577E 02 | 0.01813E 01 | 0.30384E 00 | 0.20401E 01 | 0.20355E 01 | 0.34400E 01 |
| | | | 9 | 0.00 | 0.00 | 12.45 | 0.19072E 02 | 0.02910E 01 | 0.25628E 00 | 0.19879E 01 | 0.13470E 01 | 0.11929E 01 |
| | | | 10 | 0.00 | 0.00 | 12.45 | 0.19268E 02 | 0.02537E 01 | 0.74696E 00 | 0.40284E 00 | 0.50527E 00 | 0.43262E 00 |
| | | | 1 | 0.00 | 0.00 | 18.03 | 0.20053E 02 | 0.04037E 02 | 0.45142E 01 | 0.29135E 00 | 0.47708E 00 | 0.34625E 00 |
| | | 2 | 30.0 | 0.00 | 0.00 | 18.03 | 0.20884E 02 | 0.01671E 01 | 0.51908E 01 | 0.4947E 00 | 0.59171E 00 | 0.5697E 00 |
| | | 3 | 0.00 | 0.00 | 0.00 | 18.03 | 0.21062E 02 | 0.01918E 01 | 0.38647E 00 | 0.5230E 00 | 0.60347E 00 | 0.6815E 00 |
| | | 4 | 0.00 | 0.00 | 0.00 | 18.03 | 0.21524E 02 | 0.01635E 01 | 0.85499E 00 | 0.52552E 00 | 0.68493E 01 | 0.4217E 01 |
| | | 5 | 0.00 | 0.00 | 0.00 | 18.03 | 0.21108E 02 | 0.03377E 01 | 0.37222E 00 | 0.24422E 00 | 0.35466E 00 | 0.30798E 00 |
| | | 7 | 0.00 | 0.00 | 0.00 | 12.45 | 0.21211E 02 | 0.01094E 00 | 0.47955E 00 | 0.24981E 00 | 0.40788E 00 | 0.30752E 00 |
| | | 9 | 0.00 | 0.00 | 0.00 | 12.45 | 0.25839E 02 | 0.03874E 01 | 0.39731E 00 | 0.25722E 00 | 0.40727E 00 | 0.4952E 00 |
| | | 10 | 0.00 | 0.00 | 0.00 | 12.45 | 0.15610E 02 | 0.01466E 01 | 0.50478E 00 | 0.31275E 00 | 0.42198E 01 | 0.32600E 01 |

SVMT 242/243 SHIP WAKE TURBULENCE TEST

| SWI_VEL | ROLL | TP | YAW | PROBE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ | S.U. VZ |
|---------|------|-----|-----|-------|--------|-------|-------|-------------|-------------|-------------|-------------|-------------|-------------|---------|
| 44 | 22.7 | 0.0 | 1 | 0.0 | 170.69 | -6.60 | 18.03 | 0.1627E 02 | 0.10803E 01 | 0.12192E 01 | 0.13003E 01 | 0.14783E 01 | 0.11831E 01 | 01 |
| | | | | | 170.69 | 0.00 | 18.03 | 0.15615E 02 | 0.15346E 00 | 0.55516E 00 | 0.11897E 01 | 0.12106E 01 | 0.13698E 01 | 01 |
| | | | | | 170.69 | 8.99 | 18.03 | 0.15905E 02 | 0.28619E 00 | 0.52292E 00 | 0.11899E 01 | 0.12994E 01 | 0.13498E 01 | 01 |
| | | | | | 170.69 | 20.32 | 18.03 | 0.18490E 02 | 0.78943E 00 | 0.17663E 01 | 0.19520E 00 | 0.23806E 00 | 0.29717E 00 | 00 |
| | | | | | 170.69 | 40.64 | 19.03 | 0.18717E 02 | 0.38971E 00 | 0.67692E 00 | 0.3920E 00 | 0.37140E 00 | 0.68081E 00 | 00 |
| | | | | | 170.69 | -6.60 | 12.45 | 0.16120E 02 | 0.33402E 00 | 0.26925E 01 | 0.15344E 01 | 0.17895E 01 | 0.15764E 01 | 01 |
| | | | | | 170.69 | 6.90 | 12.45 | 0.16309E 02 | 0.31565E 00 | 0.11079E 01 | 0.14371E 00 | 0.16743E 01 | 0.17419E 01 | 01 |
| | | | | | 170.69 | 20.32 | 12.45 | 0.17863E 02 | 0.29801E 00 | 0.69089E 00 | 0.95174E 00 | 0.84530E 00 | 0.76384E 00 | 00 |
| | | | | | 170.69 | 40.64 | 12.45 | 0.18624E 02 | 0.51353E 02 | 0.78671E 00 | 0.46191E 00 | 0.54100E 00 | 0.47392E 00 | 00 |
| | | | | | 170.69 | -6.60 | 18.03 | 0.16904E 02 | 0.14893E 01 | 0.97053E 00 | 0.21300E 01 | 0.25011E 01 | 0.25060E 01 | 01 |
| | | | | | 170.69 | 0.00 | 18.03 | 0.17343E 02 | 0.23260E 01 | 0.21785E 01 | 0.22342E 01 | 0.23348E 01 | 0.26421E 01 | 01 |
| | | | | | 170.69 | 6.60 | 18.03 | 0.15690E 02 | 0.41225E 01 | 0.24805E 01 | 0.22284E 01 | 0.21111E 01 | 0.24971E 01 | 01 |
| | | | | | 170.69 | 20.32 | 18.03 | 0.18163E 02 | 0.21274E 01 | 0.12923E 01 | 0.12295E 01 | 0.16765E 00 | 0.14907E 01 | 00 |
| | | | | | 170.69 | 40.64 | 18.03 | 0.18470E 02 | 0.23277E 01 | 0.31099E 01 | 0.28030E 00 | 0.36288E 00 | 0.51830E 00 | 00 |
| | | | | | 170.69 | -6.60 | 12.45 | 0.14601E 02 | 0.18399E 00 | 0.27945E 01 | 0.29857E 01 | 0.33448E 01 | 0.31450E 01 | 01 |
| | | | | | 170.69 | 6.60 | 12.45 | 0.14521E 02 | 0.41899E 00 | 0.26194E 01 | 0.27857E 01 | 0.34315E 01 | 0.31904E 01 | 01 |
| | | | | | 170.69 | 20.32 | 12.45 | 0.16664E 02 | 0.41721E 01 | 0.29482E 01 | 0.17354E 01 | 0.21170E 01 | 0.16920E 01 | 01 |
| | | | | | 170.69 | 40.64 | 12.45 | 0.18369E 02 | 0.11668E 01 | 0.80555E 00 | 0.29945E 00 | 0.47028E 00 | 0.28201E 00 | 00 |

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BOEING VERTOL CO PHILADELPHIA PA

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INVESTIGATION TO STUDY THE AERODYNAMIC SHIP WAKE TURBULENCE GEN--ETC(U)

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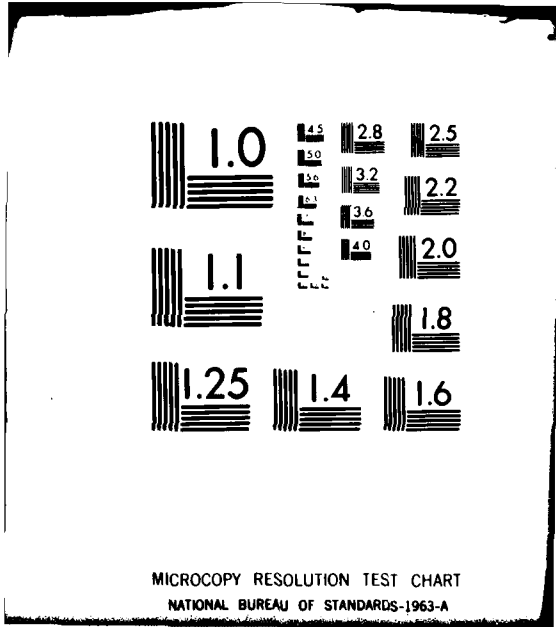
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6VNT 2427253 SHIP WAKE TURBULENCE TEST

| RUN_VEL | ROLL | IP | YAW | PROBE | X | Y | Z | MEAN_VX | MEAN_VY | MEAN_VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|----|-----|-------|------|--------|-------|------------|-------------|------------|------------|------------|------------|
| 23.1 | 0.0 | 1 | 0.0 | 1 | 0.00 | -6.60 | 18.03 | 0.1636E 02 | -0.5602E 00 | 0.8137E 00 | 0.2057E 00 | 0.2186E 01 | 0.1928E 00 |
| | | 2 | | | 0.00 | 0.00 | 18.03 | 0.1635E 02 | -0.1660E 00 | 0.7503E 00 | 0.2164E 00 | 0.2195E 01 | 0.1957E 00 |
| | | 3 | | | 0.00 | 6.62 | 18.03 | 0.1640E 02 | -0.1344E 00 | 0.9122E 00 | 0.2229E 00 | 0.2150E 01 | 0.2055E 00 |
| | | 4 | | | 0.00 | -20.64 | 18.03 | 0.1602E 02 | -0.1208E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 5 | | | 0.00 | 0.00 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 6 | | | 0.00 | 0.00 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 7 | | | 0.00 | -8.60 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 8 | | | 0.00 | -20.64 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 9 | | | 0.00 | 0.00 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 10 | | | 0.00 | -20.64 | 12.45 | 0.1602E 02 | -0.2552E 00 | 0.7869E 00 | 0.2216E 00 | 0.2170E 01 | 0.2086E 00 |
| | | 1 | | | 0.00 | -6.60 | 18.03 | 0.1854E 02 | 0.3880E 01 | 0.3259E 01 | 0.4285E 01 | 0.3250E 01 | 0.2116E 01 |
| | | 2 | | | 0.00 | 0.00 | 18.03 | 0.1749E 02 | 0.8412E 01 | 0.4643E 01 | 0.2801E 01 | 0.3090E 01 | 0.2158E 01 |
| | | 3 | | | 0.00 | 6.62 | 18.03 | 0.1749E 02 | 0.8412E 01 | 0.4643E 01 | 0.2801E 01 | 0.3090E 01 | 0.2158E 01 |
| | | 4 | | | 0.00 | -20.64 | 18.03 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 5 | | | 0.00 | 0.00 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 6 | | | 0.00 | 0.00 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 7 | | | 0.00 | -8.60 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 8 | | | 0.00 | -20.64 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 9 | | | 0.00 | 0.00 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |
| | | 10 | | | 0.00 | -20.64 | 12.45 | 0.1656E 02 | 0.8151E 01 | 0.4157E 01 | 0.2934E 01 | 0.3160E 01 | 0.2197E 01 |

8VBT 2427243 SHIP WAKE TURBULNCE TEST

| ALIN_VEL | ROLL_IP | YAW_PROBE | X | Y | Z | MEAN_VX | MEAN_VY | MEAN_VZ | S.D. VX | S.D. VY | S.D. VZ |
|----------|---------|-----------|-------|--------|------|-------------|-------------|-------------|-------------|-------------|-------------|
| 114 22.7 | 0.0 | 1 | 0.0 | 0.00 | 6.22 | 0.6973E 01 | 1.3413E 01 | 0.25093E 00 | 0.2829E 01 | 0.3174E 01 | 0.34696E 01 |
| | | 2 | 0.0 | 0.00 | 6.22 | 0.19472E 01 | 0.51399E 01 | 0.14693E 00 | 0.28336E 01 | 0.23122E 01 | 0.20717E 01 |
| | | 3 | 0.0 | 0.00 | 6.22 | 0.19907E 02 | 0.10759E 01 | 0.45949E 00 | 0.47949E 01 | 0.24869E 00 | 0.30547E 00 |
| | | 4 | 0.0 | 20.32 | 6.22 | 0.20324E 02 | 0.14755E 01 | 0.25237E 00 | 0.47601E 00 | 0.33371E 00 | 0.3271E 00 |
| | | 5 | 0.0 | -40.66 | 6.22 | 0.74775E 01 | 0.22455E 01 | 0.14621E 00 | 0.35238E 01 | 0.35415E 00 | 0.60908E 00 |
| | | 6 | 0.0 | 0.00 | 2.54 | 0.87499E 01 | 0.22417E 01 | 0.11021E 00 | 0.36368E 01 | 0.36022E 01 | 0.36354E 01 |
| | | 7 | 0.0 | 0.00 | 2.54 | 0.87499E 01 | 0.22417E 01 | 0.11021E 00 | 0.36368E 01 | 0.36022E 01 | 0.36354E 01 |
| | | 8 | 0.0 | 20.32 | 2.54 | 0.18963E 02 | 0.81298E 00 | 0.15617E 00 | 0.30440E 01 | 0.75023E 00 | 0.37196E 01 |
| | | 10 | 0.0 | -40.64 | 2.54 | 0.18963E 02 | 0.81298E 00 | 0.15617E 00 | 0.30440E 01 | 0.75023E 00 | 0.37196E 01 |
| | | 1 | 0.0 | 0.00 | 6.22 | 0.2907E 01 | 0.73021E 01 | 0.27035E 00 | 0.31985E 01 | 0.20772E 01 | 0.35668E 01 |
| | | 2 | -30.0 | 0.00 | 6.22 | 0.21607E 02 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 3 | 0.0 | 0.00 | 6.22 | 0.19174E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 4 | 0.0 | 20.32 | 6.22 | 0.19907E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 5 | 0.0 | -40.66 | 6.22 | 0.19907E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 6 | 0.0 | 0.00 | 2.54 | 0.23021E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 7 | 0.0 | 0.00 | 2.54 | 0.23021E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 8 | 0.0 | 20.32 | 2.54 | 0.23021E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 9 | 0.0 | 0.00 | 2.54 | 0.23021E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |
| | | 10 | 0.0 | -40.64 | 2.54 | 0.23021E 01 | 0.22755E 01 | 0.18237E 00 | 0.31442E 01 | 0.20772E 01 | 0.42662E 01 |

BVH 242723 SHIP WAKE TURBULENCE TEST

| RUN VEL | ROLL | IP | YAW | PROG | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|---------|------|-----|-----|------|----|--------|------|----------|----------|----------|----------|----------|----------|
| 12.1 | 22.4 | 0.0 | 1 | 0.0 | 1 | 170.69 | 6.22 | 0.13780E | 0.61089E | 0.14555E | 0.17706E | 0.21461E | 0.17324E |
| | | | | | 2 | 170.69 | 6.22 | 0.13787E | 0.10831E | 0.80540E | 0.15462E | 0.19355E | 0.18153E |
| | | | | | 3 | 170.69 | 6.22 | 0.14904E | 0.34708E | 0.95945E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 4 | 170.69 | 6.22 | 0.14904E | 0.16081E | 0.30070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 5 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 6 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 7 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 8 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 9 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 10 | 170.69 | 6.22 | 0.13787E | 0.16081E | 0.14070E | 0.16733E | 0.17302E | 0.16414E |
| | | | | | 1 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 2 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 3 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 4 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 5 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 6 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 7 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 8 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 9 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |
| | | | | | 10 | 170.69 | 6.22 | 0.11269E | 0.15491E | 0.21139E | 0.20049E | 0.31599E | 0.28042E |

SVNT 242743 SHIP WAKE TURBULENCE TEST

| 388 | EJAN_VFL | RFLA | TP | YAW | PDUDE | X | Y | Z | MEAN VX | MEAN VY | MEAN VZ | S.D. VX | S.D. VY | S.D. VZ |
|-----|----------|------|-----|-----|-------|----|------|------|---------|---------|---------|---------|---------|---------|
| | 176 | 22.2 | 0.0 | 1 | 0.0 | 1 | 0.00 | 0.34 | 0.49 | 0.17 | 0.82 | 0.29 | 0.30 | 0.71 |
| | | | | | | 2 | 0.00 | 0.34 | 0.72 | 0.18 | 0.82 | 0.27 | 0.30 | 0.71 |
| | | | | | | 3 | 0.00 | 0.34 | 0.72 | 0.18 | 0.82 | 0.27 | 0.30 | 0.71 |
| | | | | | | 7 | 0.00 | 0.34 | 0.72 | 0.18 | 0.82 | 0.27 | 0.30 | 0.71 |
| | | | | | | 8 | 0.00 | 0.34 | 0.72 | 0.18 | 0.82 | 0.27 | 0.30 | 0.71 |
| | | | | | | 10 | 0.00 | 0.34 | 0.72 | 0.18 | 0.82 | 0.27 | 0.30 | 0.71 |



80WT 242/243 SHIP WAKE TUMBULENCE TEST

| W | RUN_VEL | ROLL | TP | YAW_PROBE | X | Y | Z | MEAN_VX | MEAN_VY | MEAN_VZ | S.D. VX | S.D. VY | S.D. VZ |
|----|---------|------|-----|-----------|-----|-------|-------|-------------|--------------|--------------|-------------|-------------|-------------|
| 09 | 167 | 22.5 | 0.0 | 1 | 0.0 | -9.65 | 12.45 | 0.10052E 02 | -0.60801E 00 | 0.14109E 01 | 0.23594E 01 | 0.31700E 01 | 0.27499E 01 |
| | | | | | | -9.65 | 12.45 | 0.52803E 01 | -0.40515E 00 | 0.36772E 00 | 0.27712E 01 | 0.23302E 01 | 0.24240E 01 |
| | | | | | | -9.65 | 12.45 | 0.10600E 02 | 0.25722E 00 | -0.68713E 00 | 0.27894E 01 | 0.28741E 01 | 0.31224E 01 |
| | | | | | | -9.65 | 12.45 | 0.20199E 02 | 0.25722E 00 | 0.68713E 00 | 0.27894E 01 | 0.28741E 01 | 0.31224E 01 |
| | | | | | | -9.65 | 12.45 | 0.23014E 01 | 0.22353E 00 | 0.11913E 01 | 0.27810E 01 | 0.31224E 01 | 0.27499E 01 |
| | | | | | | -9.65 | 12.45 | 0.28597E 01 | 0.42204E 00 | 0.1736E 01 | 0.26706E 01 | 0.30245E 01 | 0.27499E 01 |

APPENDIX C

The following pages present additional
Horizontal Plane - Mean Velocity Component
Vector Maps derived from the DD 963 Airwake
Wind Tunnel Test.

Figures C-1 through C-5 depict the flow field at various heights above the landing deck with the ship yawed + 50° or + 90° and at 0° roll angle.



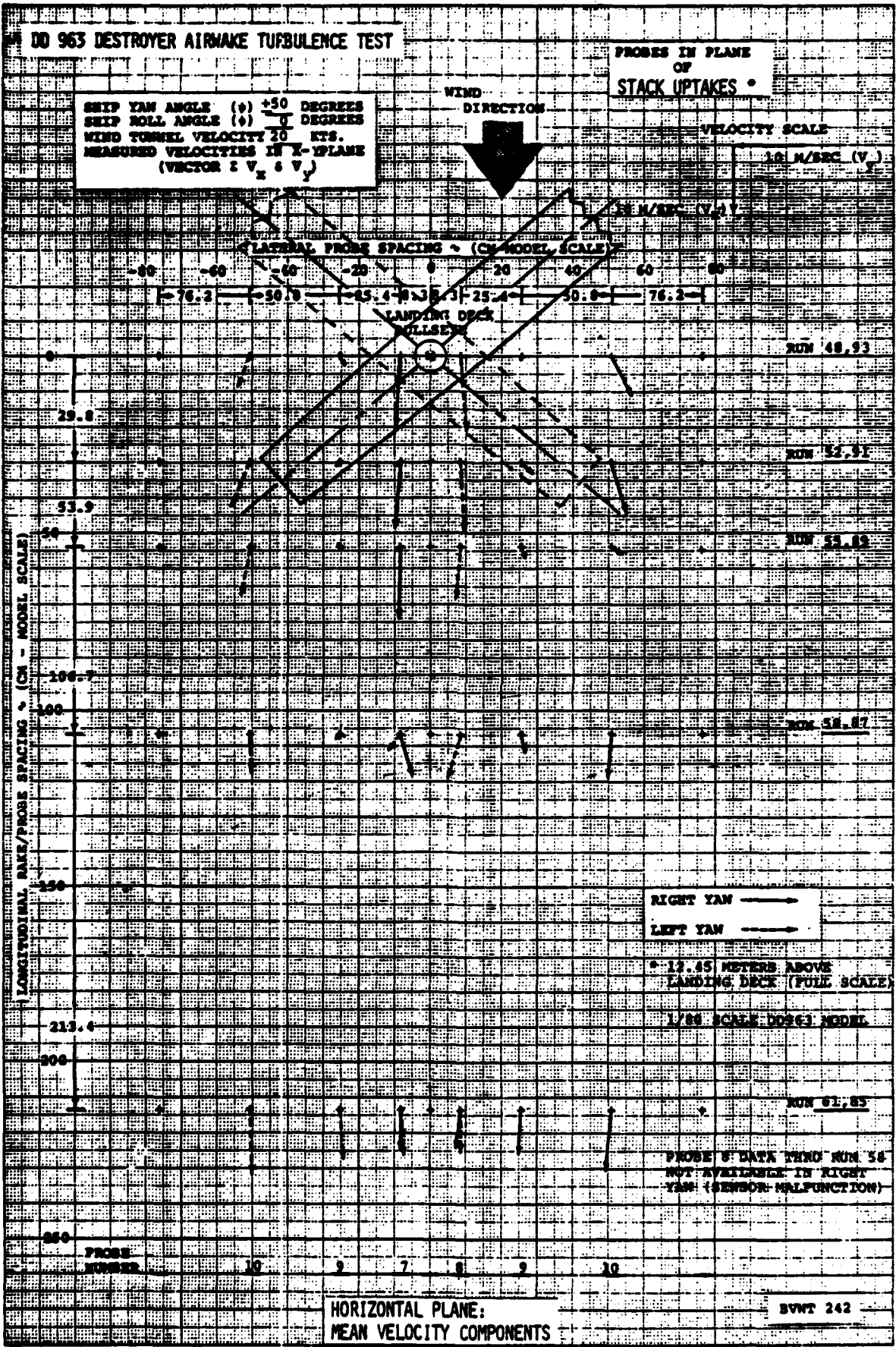


Figure C1.

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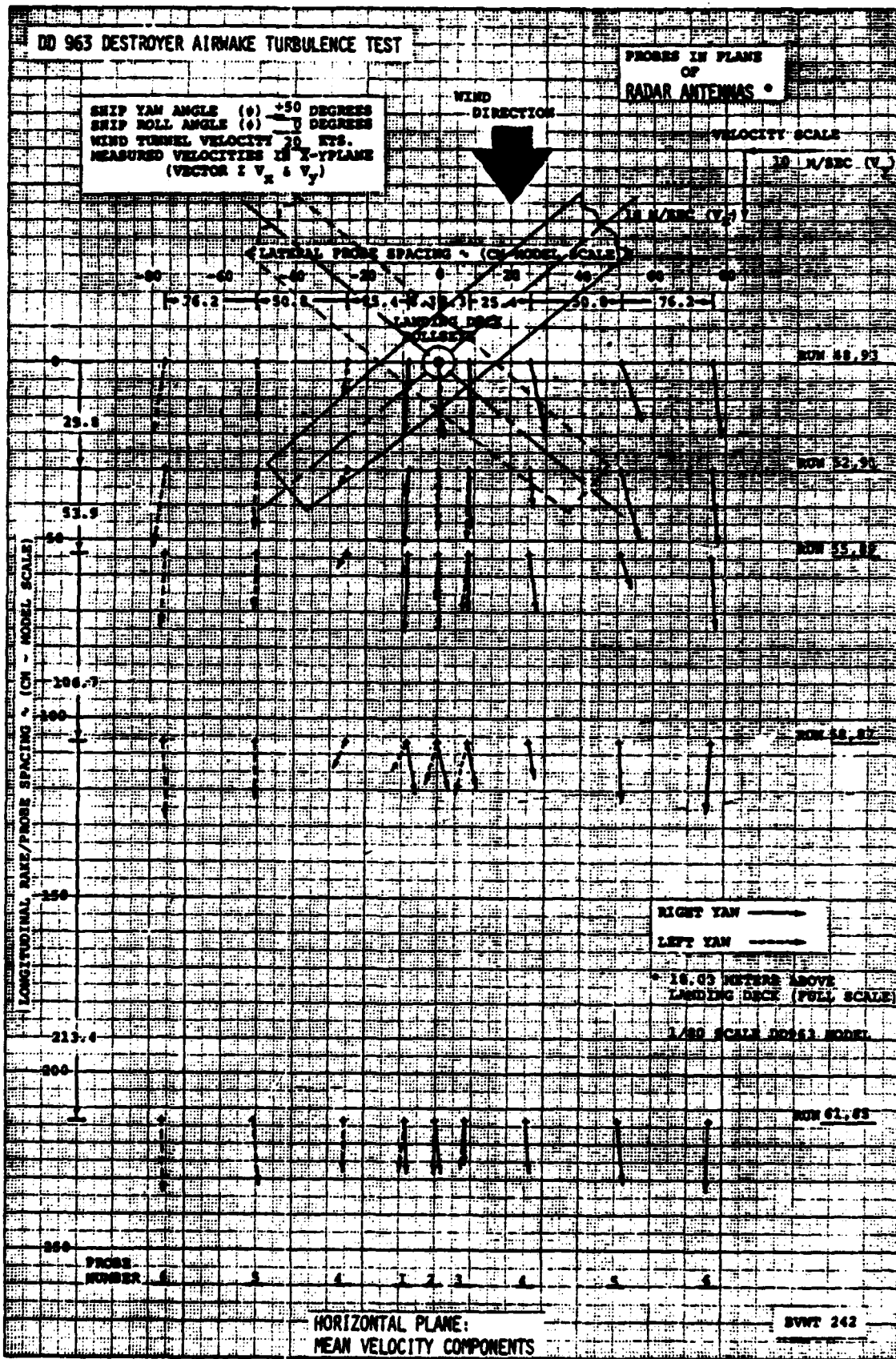


Figure C2.

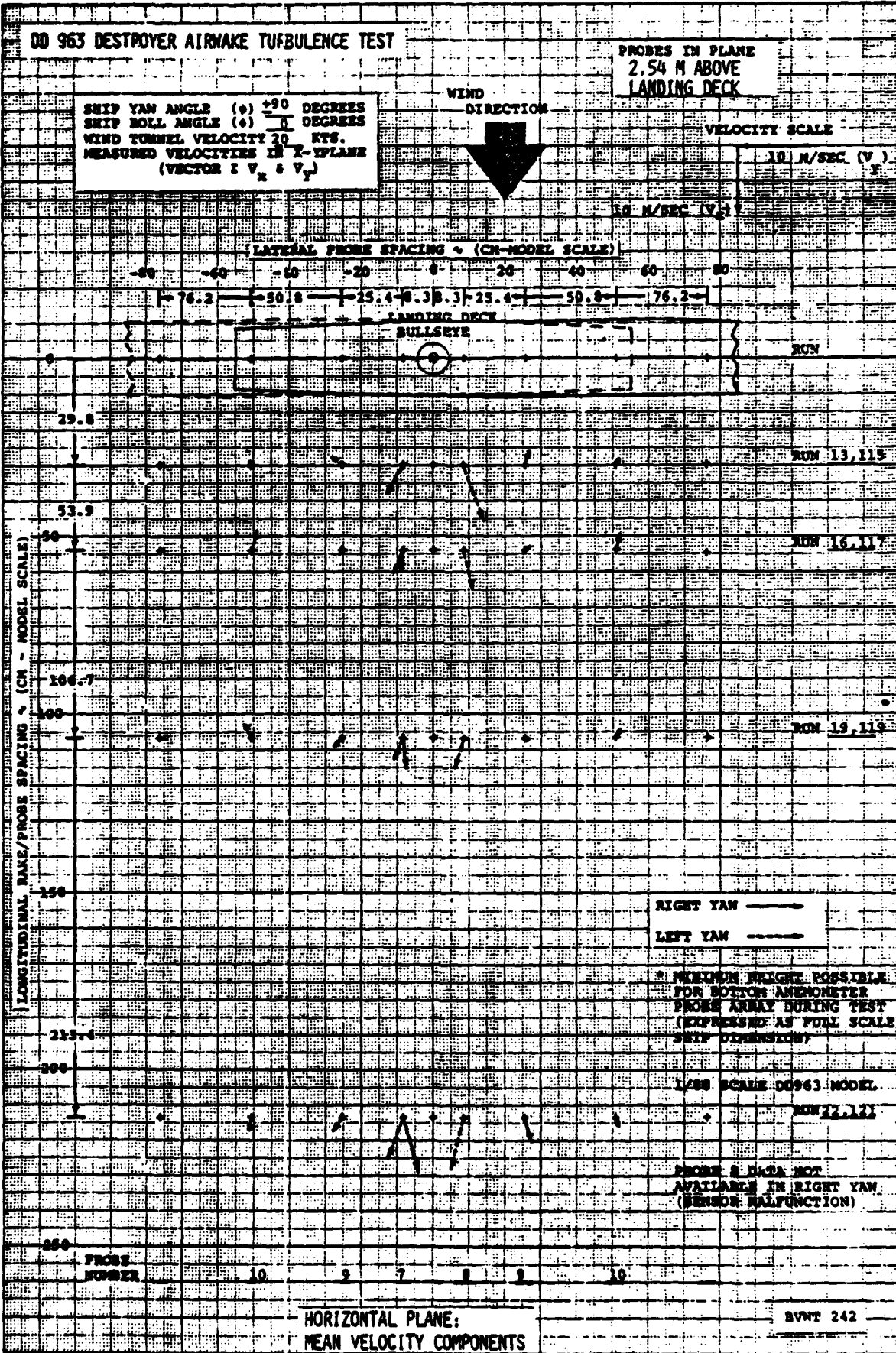


Figure C3.

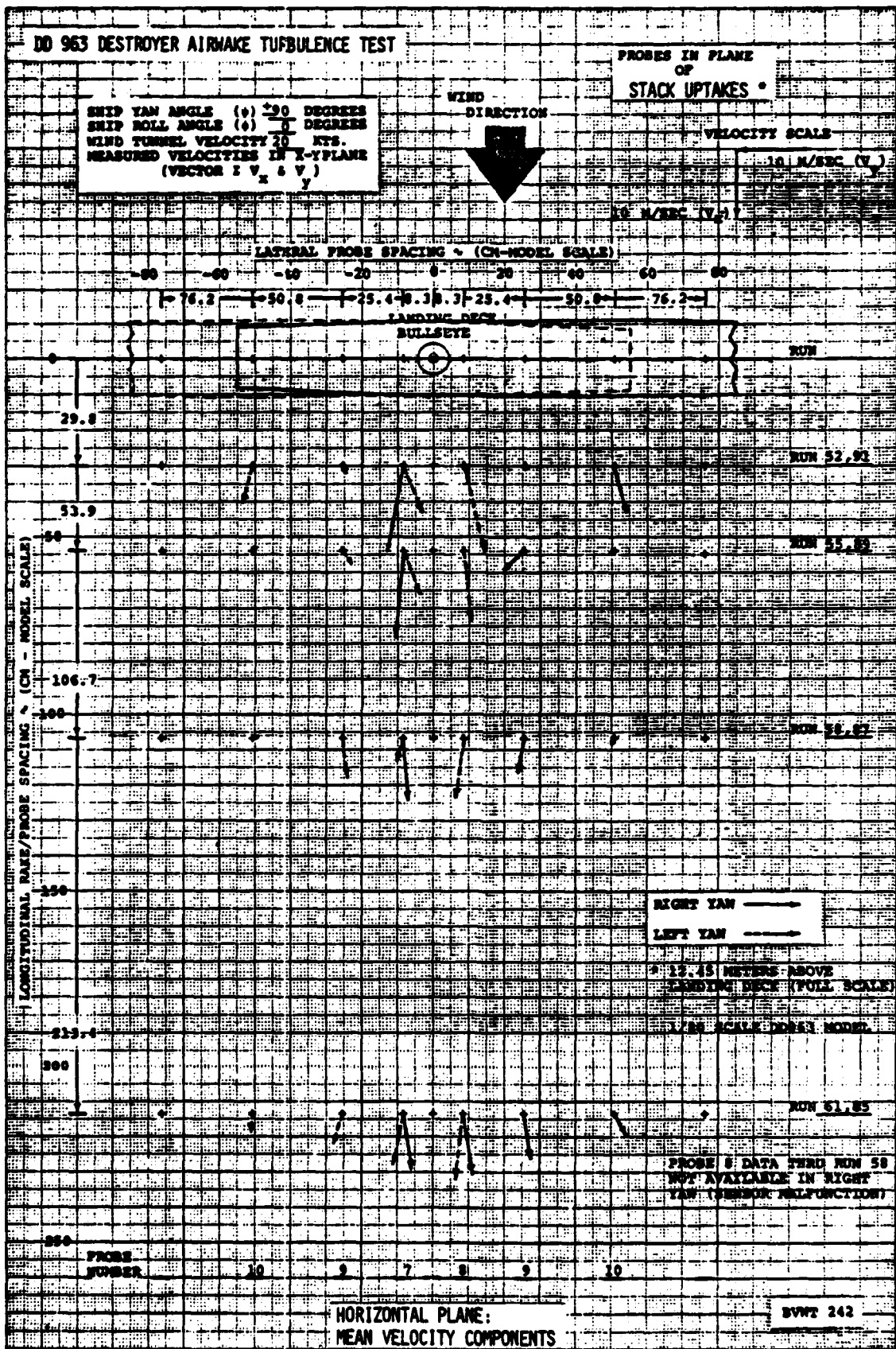


Figure C4.

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

SHIP YAW ANGLE (θ) ± 90 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR V_x & V_y)

WIND DIRECTION



PROBES IN PLANE OF RADAR ANTENNAS *

VELOCITY SCALE

10 M/SEC (V_x)

10 M/SEC (V_y)

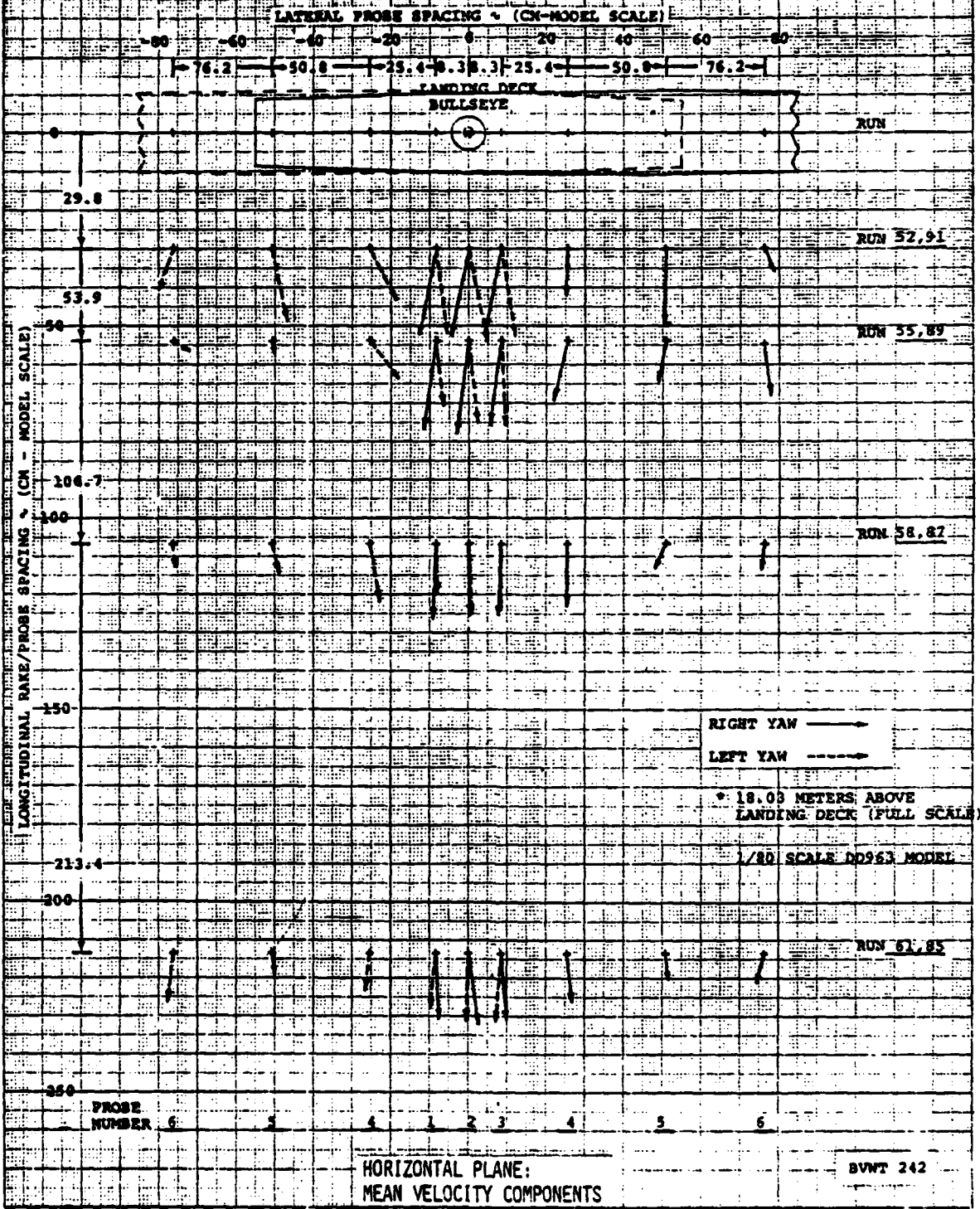


Figure C5.

Figures C-6 through C-14 are useful in analyzing effects of rolling the ship 15° to the right, on the turbulent flow field for various conditions of yaw and height above the deck.

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DD 963 DESTROYER AIRNAKE TURBULENCE TEST

PROBES IN PLANE
2.54 M ABOVE
LANDING DECK

SHIP YAW ANGLE (ψ) 0 DEGREES
SHIP ROLL ANGLE (ϕ) 215 DEGREES
WIND TUNNEL VELOCITY 20 KTS.
MEASURED VELOCITIES IN X-Y PLANE
(VECTOR $\pm V_x$ & V_y)

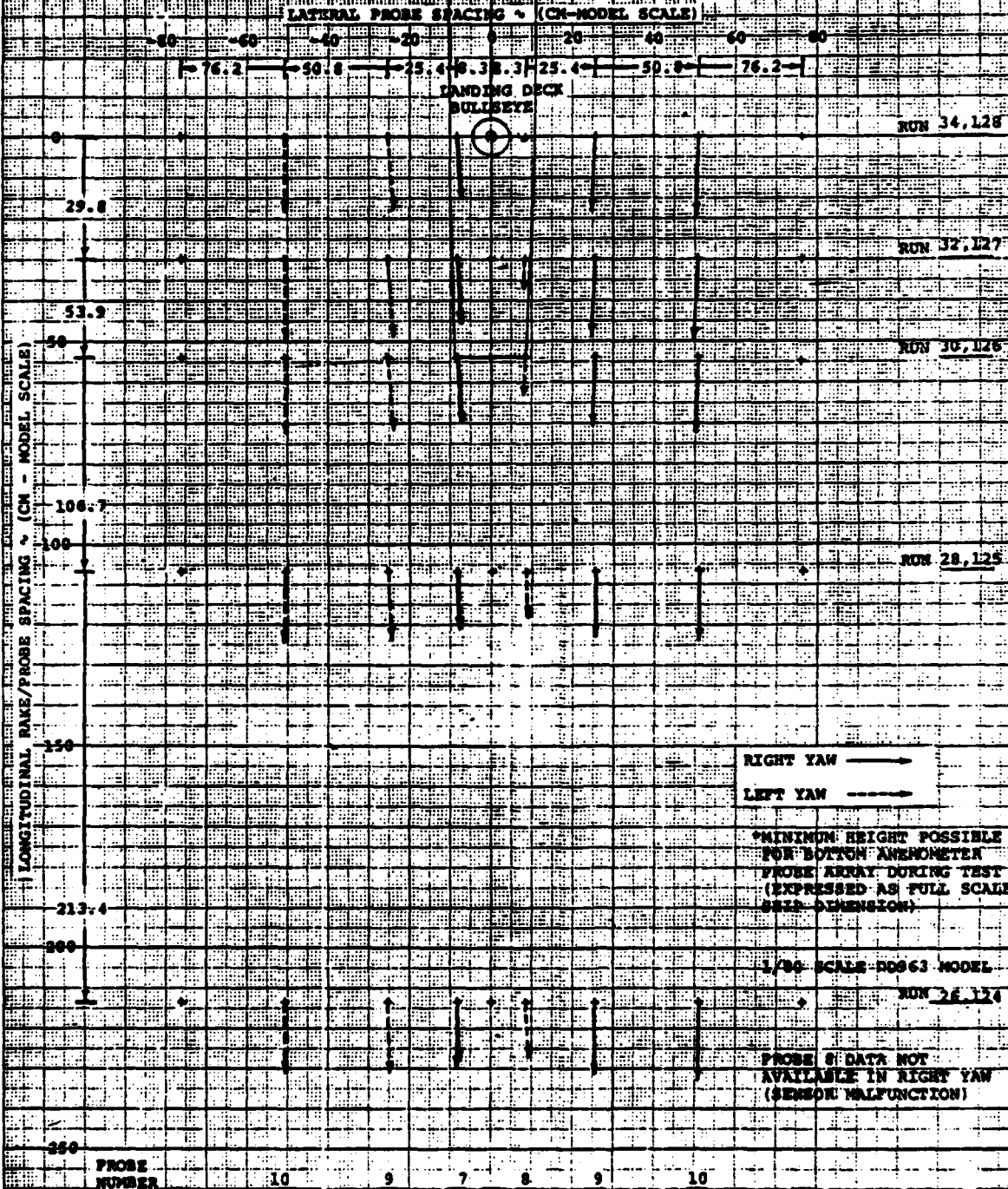
WIND
DIRECTION



VELOCITY SCALE

10 M/SEC (V_x)

10 M/SEC (V_y)



HORIZONTAL PLANE:
MEAN VELOCITY COMPONENTS

BVMT 242

Figure C6.

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

SHIP YAW ANGLE (ψ) 0 DEGREES
 SHIP ROLL ANGLE (ϕ) 15 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR $\pm V_x$ & V_y)

PROBES IN PLANE OF HANGAR ROOF

WIND DIRECTION

VELOCITY SCALE

10 M/SEC (V_x)

10 M/SEC (V_x)

LATERAL PROBE SPACING ~ (CM-MODEL SCALE)

-80 -60 -40 -20 0 20 40 60 80
 -76.2 -50.8 -25.4 0 25.4 50.8 76.2

LANDING DECK BULLSEYE

RUN 14, 128

RUN 32, 127

RUN 30, 126

RUN 28, 125

LONGITUDINAL RAKE/PROBE SPACING ~ (CM - MODEL SCALE)

29.8

53.9

106.7

150

213.4

300

350

RIGHT YAW →

LEFT YAW ←

8.22 METERS ABOVE LANDING DECK (FULL SCALE)

1/20 SCALE DD963 MODEL

RUN 26, 124

PROBE NUMBER

HORIZONTAL PLANE; MEAN VELOCITY COMPONENTS

BWWT 242

Figure C7.

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

PROBES IN PLANE OF STACK UPTAKES

SHIP YAW ANGLE (ψ) 0 DEGREES
 SHIP ROLL ANGLE (ϕ) -15 DEGREES
 WIND TUNNEL VELOCITY 20 KTS.
 MEASURED VELOCITIES IN X-Y PLANE
 (VECTOR V_x & V_y)

WIND DIRECTION



VELOCITY SCALE

10 M/SEC (V_x)

10 M/SEC (V_y)

LATERAL PROBE SPACING ~ (CM-MODEL SCALE)



RUN 75,110

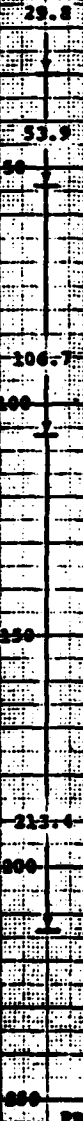
RUN 77,185

RUN 79,100

RUN 81,99

RUN 83,91

LONGITUDINAL RATE/PROBE SPACING ~ (CM - MODEL SCALE)



RIGHT YAW \rightarrow
 LEFT YAW \leftarrow

~ 12.45 METERS ABOVE LANDING DECK (FULL SCALE)

1/100 SCALE DD963 MODEL

PROBE NUMBER



HORIZONTAL PLANE:
 MEAN VELOCITY COMPONENTS

BWVT 242

Figure C8.

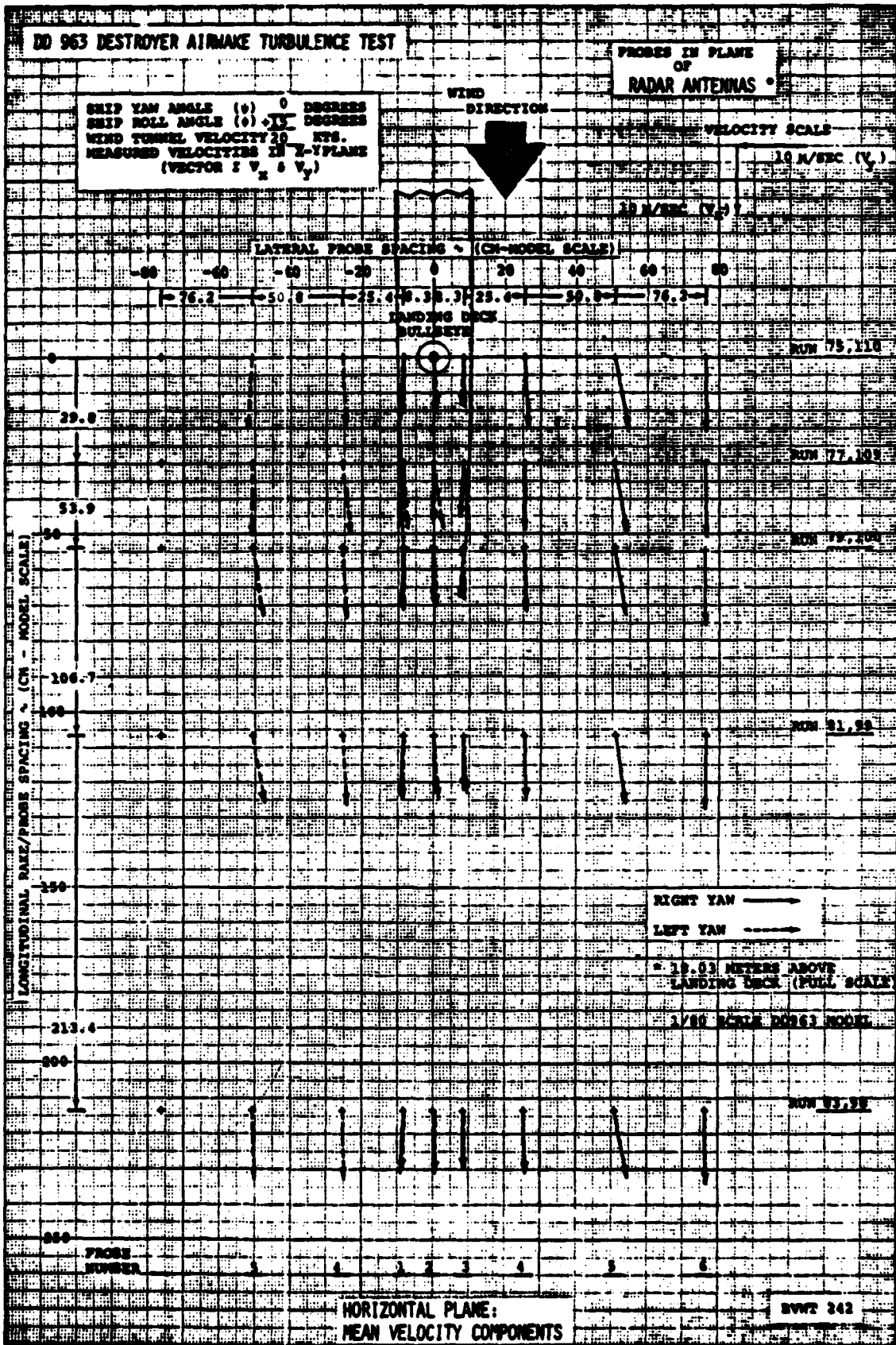


Figure C9.

DD 963 DESTROYER AIRMAKE TURBULENCE TEST

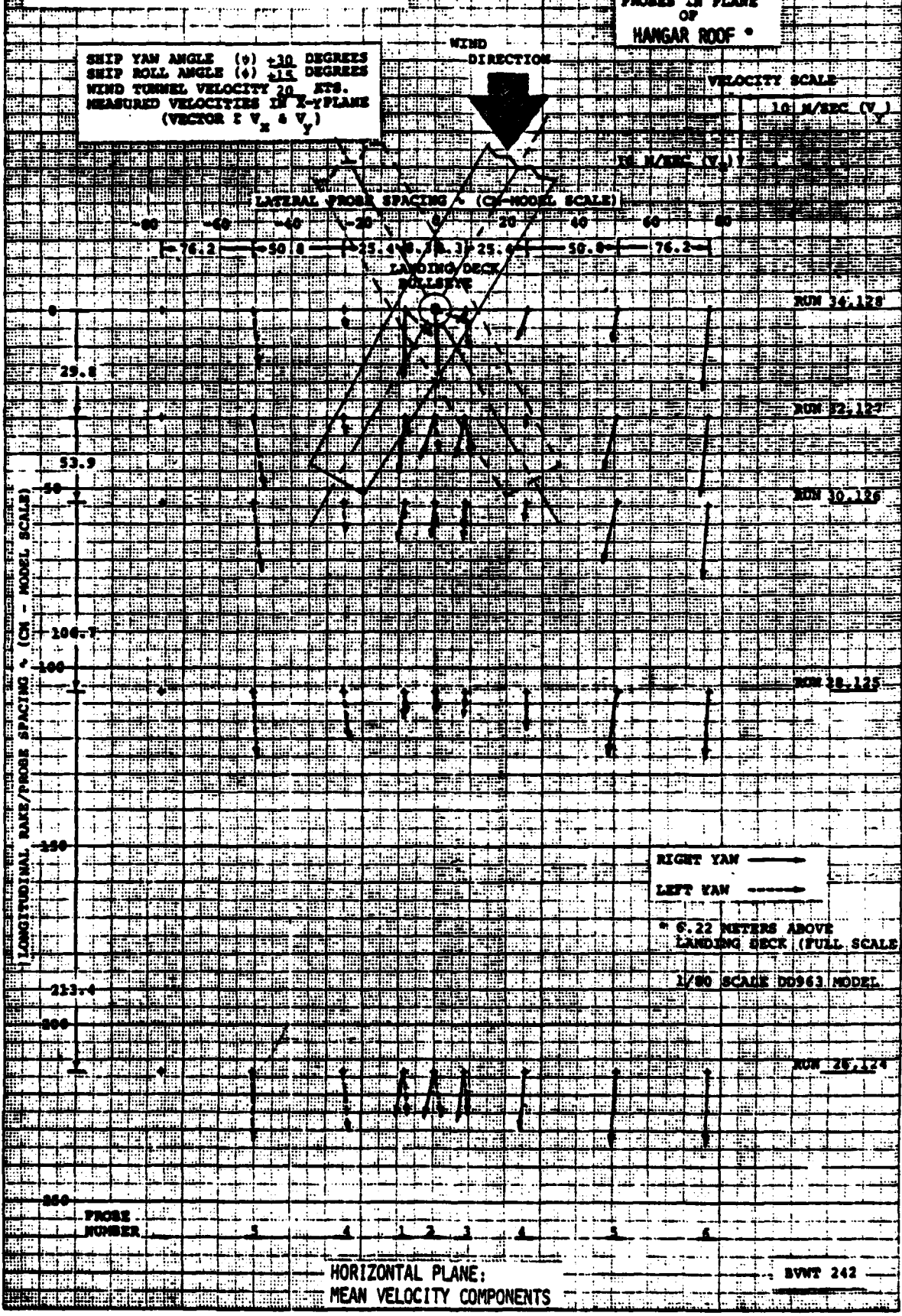


Figure C10.

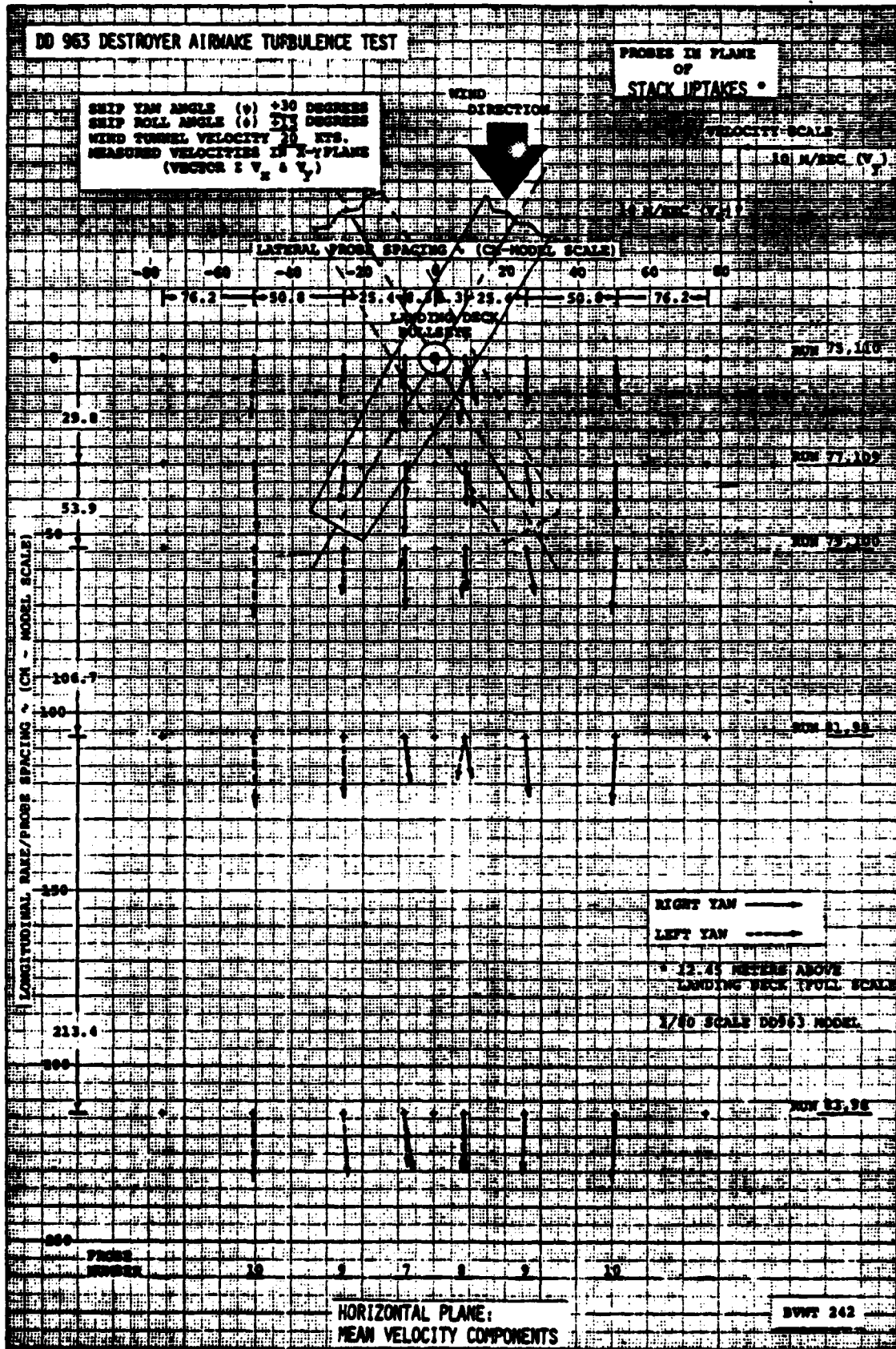


Figure C11.

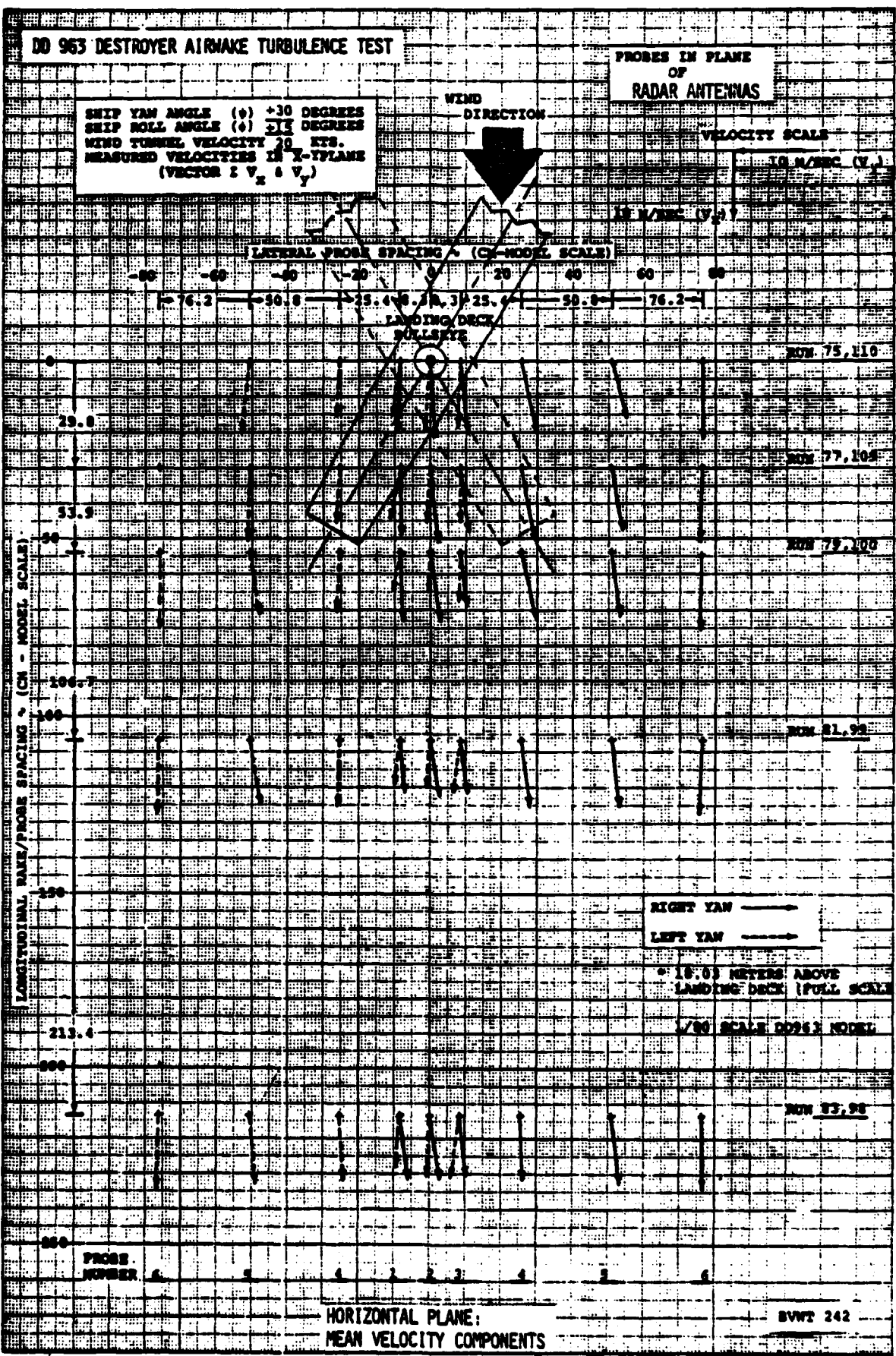


Figure C12.

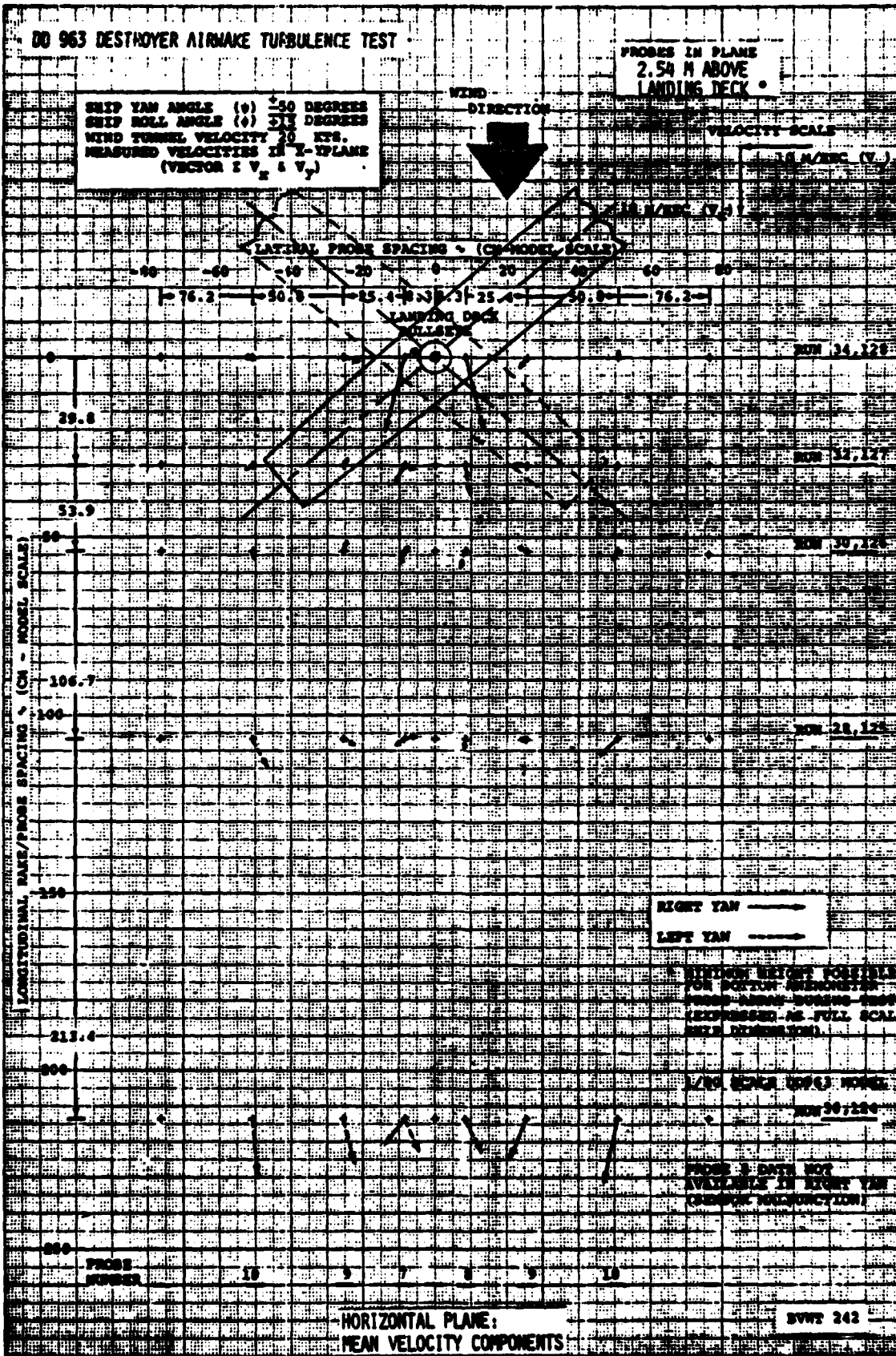


Figure C13.

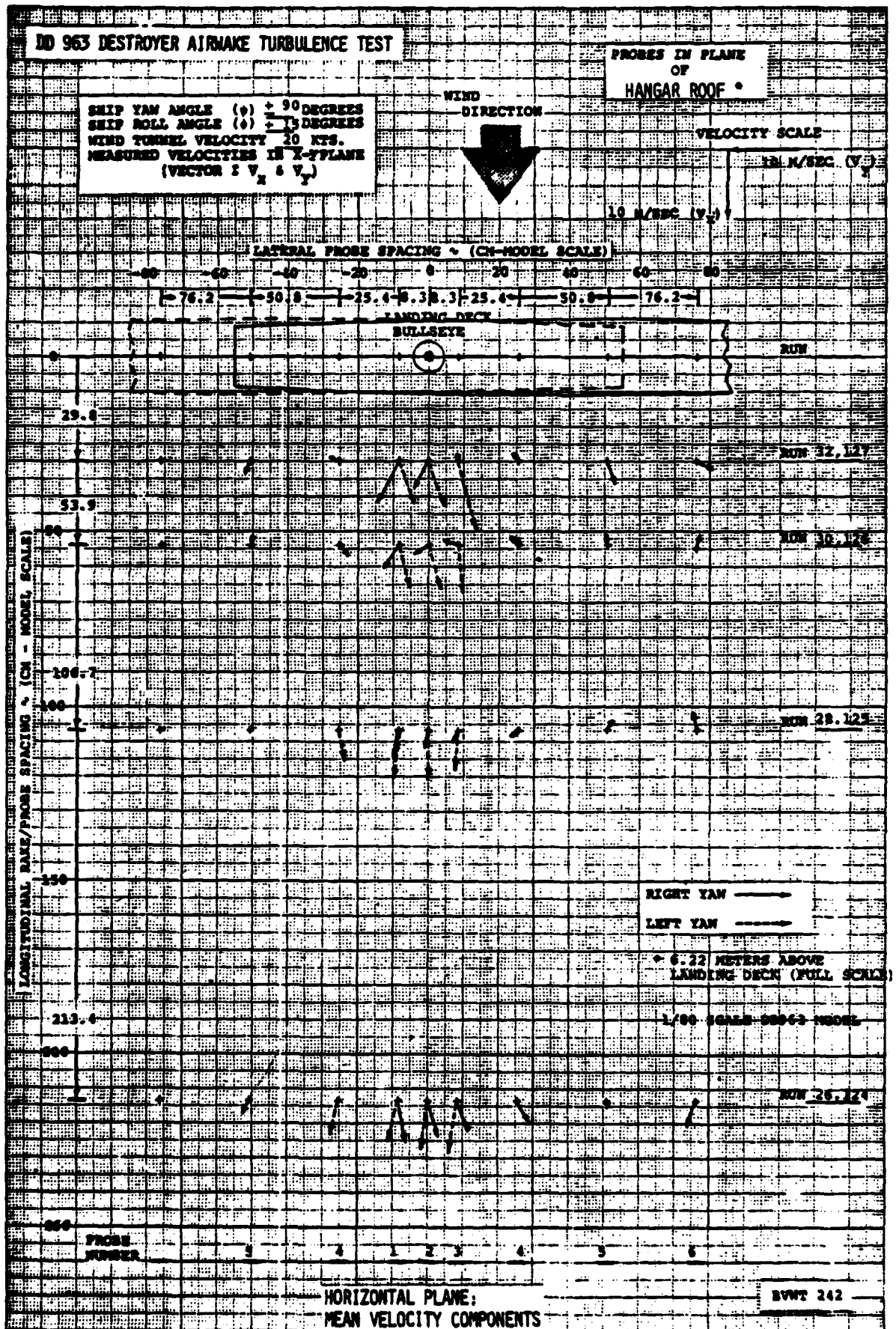
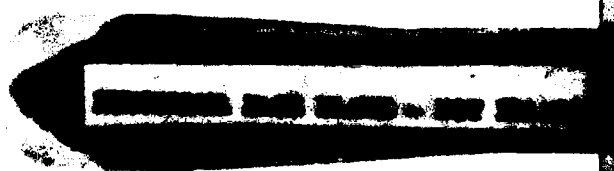


Figure C14.

Figure C-15 shows the flow field at the stack uptake height with the ship at 0° yaw and 0° roll angle, and at 45 knot remote wind velocity.



DD 963 DESTROYER AIRWAKE TURBULENCE TEST

PROBES IN PLANE OF STACK UPTAKES *

SHIP YAW ANGLE (ψ) 0 DEGREES
 SHIP ROLL ANGLE (ϕ) 0 DEGREES
 WIND TUNNEL VELOCITY 45 KTS.
 MEASURED VELOCITIES IN X-Y PLANE (VECTOR Σv_x & v_y)

WIND DIRECTION



VELOCITY SCALE

20 M/SEC (v_x)

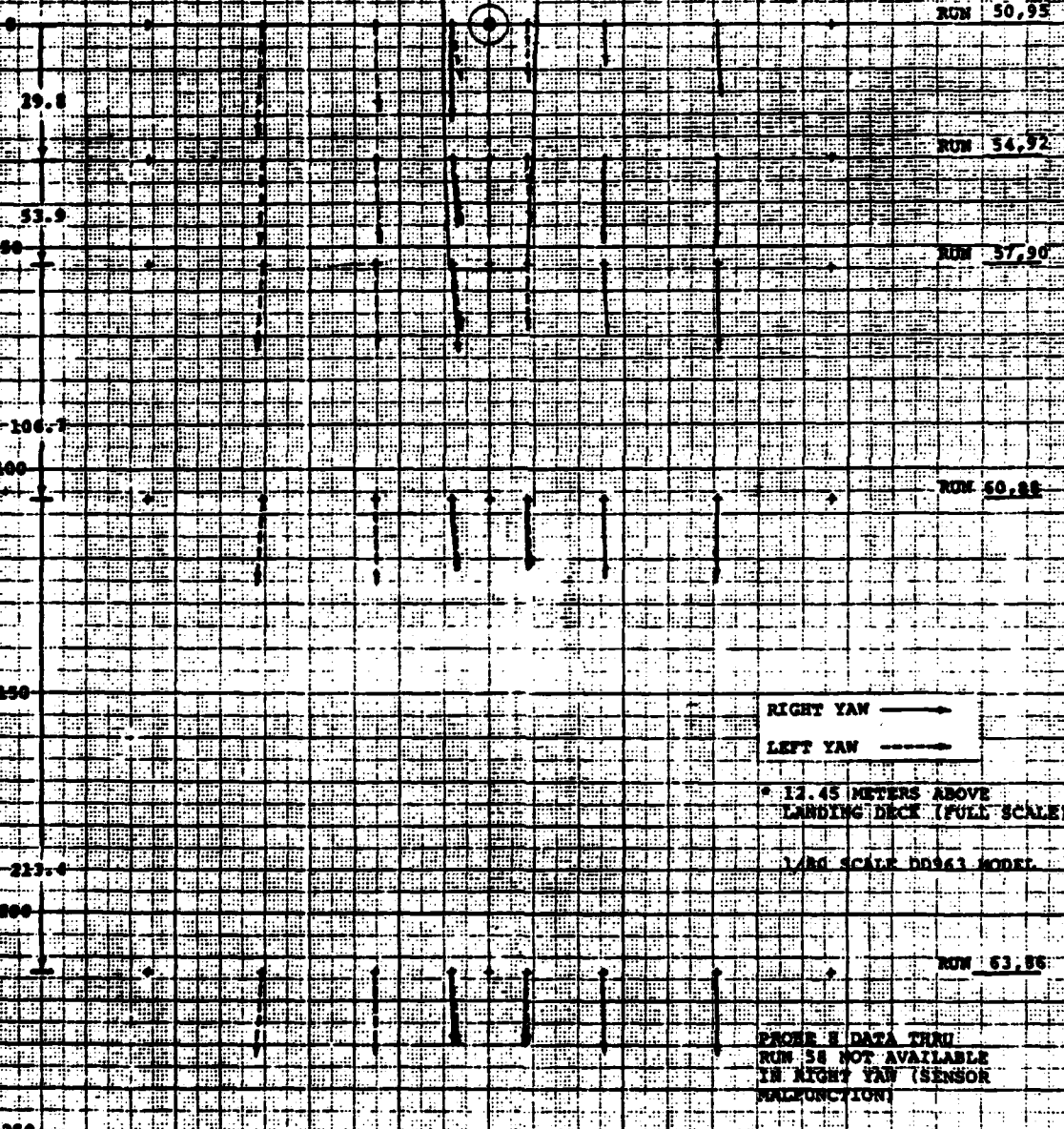
20 M/SEC (v_y)

LATERAL PROBE SPACING ~ (CM - MODEL SCALE)

76.2 50.8 25.4 0.3 0.3 25.4 50.8 76.2

LANDING DECK BULLSEYE

LONGITUDINAL TAKE/PROBE SPACING ~ (CM - MODEL SCALE)



RIGHT YAW \longrightarrow
 LEFT YAW \dashrightarrow

* 12.45 METERS ABOVE LANDING DECK (FULL SCALE)

1/80 SCALE DD963 MODEL

PROBE # DATA THRU RUN 58 NOT AVAILABLE IN RIGHT YAW (SENSOR MALFUNCTION)

PROBE NUMBER 10 9 7 8 9 10

HORIZONTAL PLANE: MEAN VELOCITY COMPONENTS

SVWT 242

Figure C15.

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