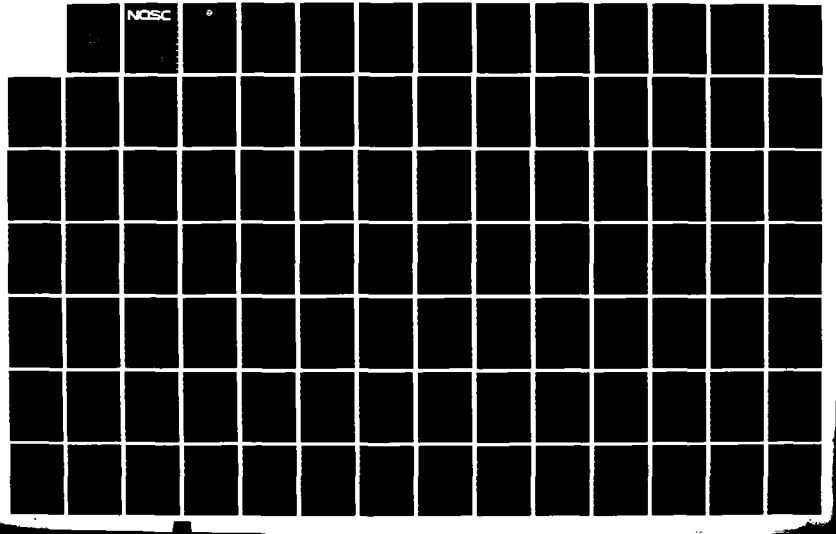
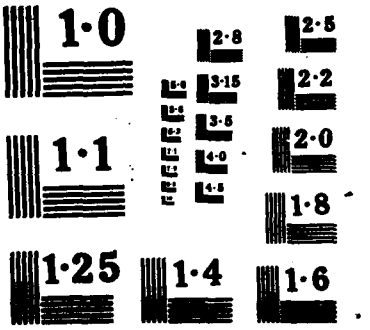
AD-A170 009 SDMS (SHIPBOARD DATA MULTIPLEX SYSTEM) DD 963 SIGNAL LIST DD 963 CLASS SH..(U) NAVAL OCEAN SYSTEMS CENTER SAN DIEGO CA J D DICKINSON NOV 79 NOSC/TD-292 1/2

UNCLASSIFIED F/G 17/2 NL




1·0
1·1
1·25
1·4
1·6
2·8
3·15
3·5
4·0
4·5
2·5
2·2
2·0
1·8

NOSC

NOSC TD 292

NOSC TD 292

AD-A170 009

OTIC FILE COPY

Technical Document 292

SDMS DD 963 SIGNAL LIST

DD 963 class ship signals to be multiplexed by SDMS for TECHEVAL/OPEVAL

JD Dickinson

1 November 1979

Prepared for
Naval Sea Systems Command (NAVSEA 61R)
Washington DC 20362

DTIC
ELECTE
JUL 2 4 1986
A

Approved for public release; distribution unlimited

NAVAL OCEAN SYSTEMS CENTER
SAN DIEGO, CALIFORNIA 92152

86

NAVAL OCEAN SYSTEMS CENTER, SAN DIEGO, CA 92152

AN ACTIVITY OF THE NAVAL MATERIAL COMMAND

SL GUILLE, CAPT, USN
Commander

HL BLOOD
Technical Director

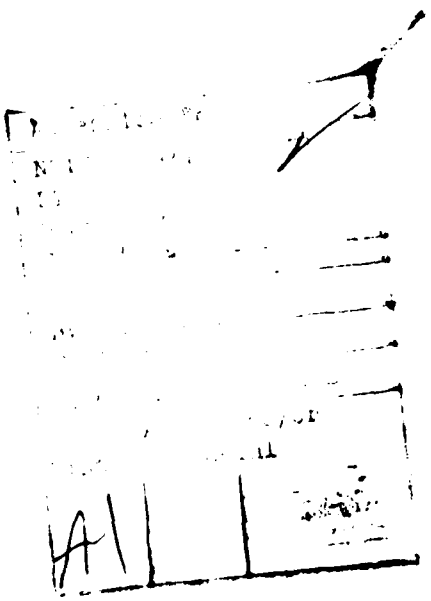
ADMINISTRATIVE INFORMATION

Work was performed under Project Element 63509N, Project S0248-CC (NOSC 825-CS03), by members of the Test and Evaluation Division (NOSC Code 933), for the Naval Sea Systems Command (NAVSEA 61R). This document covers work performed from October 1978 through October 1979 and was approved for publication 26 November 1979.

This document is the product of the SDMS IOM Committee and the contractor, Rockwell International, Marine Systems Division, SDMS Applications Department 352-020.

Released by
WA Wright, Head
Test and Evaluation Division

Under authority of
DP Newman, Head
Product Engineering Department



DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE

REPORT DOCUMENTATION PAGE A170009

1a REPORT SECURITY CLASSIFICATION UNCLASSIFIED	1b RESTRICTIVE MARKINGS
2a SECURITY CLASSIFICATION AUTHORITY	3 DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution is unlimited.
2b DECLASSIFICATION/DOWNGRADING SCHEDULE	
4 PERFORMING ORGANIZATION REPORT NUMBER(S) NOSC TD 292	5 MONITORING ORGANIZATION REPORT NUMBER(S)
6a NAME OF PERFORMING ORGANIZATION Naval Ocean Systems Center 6b OFFICE SYMBOL (If applicable)	7a NAME OF MONITORING ORGANIZATION
6c ADDRESS (City, State and ZIP Code) San Diego, CA 92152-5000	7b ADDRESS (City, State and ZIP Code)
8a NAME OF FUNDING/SPONSORING ORGANIZATION Naval Sea Systems Command 8b OFFICE SYMBOL (If applicable) NAVSEA 61R	9 PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
8c ADDRESS (City, State and ZIP Code) Washington, DC 20362	10 SOURCE OF FUNDING NUMBERS PROGRAM ELEMENT NO: 63509N; PROJECT NO: S0248-CC; TASK NO: S0248-CC; WORK UNIT NO: DN112063

11 TITLE (Include Security Classification)
SDMS DD 963 SIGNAL LIST
DD963 Class Ship Signals to be Multiplexed by SDMS for TECHEVAL/OPEVAL

12 PERSONAL AUTHOR(S)
J.D. Dickinson

13a TYPE OF REPORT	13b TIME COVERED	14 DATE OF REPORT (Year, Month, Day)	15 PAGE COUNT
Final	FROM Oct 78 TO Oct 79	November 1979	129

16 SUPPLEMENTARY NOTATION

17 COSATI CODES			18 SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB-GROUP	communications multiplexing interior communications data/information transfer

19 ABSTRACT (Continue on reverse if necessary and identify by block number)

This document identifies the candidate signals to be multiplexed by the Shipboard Data Multiplex System (SDMS) during TECHEVAL and OPEVAL on a DD 963 class ship.

20 DISTRIBUTION/AVAILABILITY OF ABSTRACT	21 ABSTRACT SECURITY CLASSIFICATION
☐ UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT ☐ DTIC USERS	UNCLASSIFIED
22a NAME OF RESPONSIBLE INDIVIDUAL P.D. Adams	22b TELEPHONE (Include Area Code) (619)225-7494
	22c OFFICE SYMBOL Code 820

DD FORM 1473, 84 JAN

83 APR EDITION MAY BE USED UNTIL EXHAUSTED
ALL OTHER EDITIONS ARE OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE

ABSTRACT

This document identifies the candidate signals to be multiplexed by the Shipboard Data Multiplex System (SDMS) during TECHEVAL and OPEVAL on a DD 963 class ship. It groups the candidate signals according to the interfacing user equipments. It contains block diagrams of the user-equipment groups, showing multiplexed signals, and gives the locations of signals and equipments. It provides additional sorts and characteristics of the SDMS TECHEVAL OPEVAL installation resulting from the candidate signal list as implemented by SDMS; the list is to be used as a basis for further system engineering needed to accomplish installation planning and design for TECHEVAL OPEVAL of the SDMS. The final recommendation of signals to be used will be based on SDMS I/O module availability and circuit compatibility, user signal location and access, and completion of the system engineering for SDMS installation on the DD 963 class ship.

CONTENTS

INTRODUCTION . . . page 3

Background . . . 3
ADAP computer program . . . 3

CANDIDATE SIGNAL LIST . . . 3

Signal list and associated key tables . . . 3
Signal flow diagrams . . . 7
Locations of signals and equipments . . . 7

ADDITIONAL SORTS AND TABULATIONS . . . 10

SDMS transmission characteristics . . . 10
Signal trace . . . 10
Input/output wire list . . . 10
Input/output module count and spare capacity . . . 10
Remote multiplexer configurations . . . 10
Remote multiplexer and input/output unit summaries by zone . . . 10
Message trace table . . . 10
System data . . . 10

APPENDIX A: TABULATED SIGNAL LIST . . . 11

APPENDIX B: INPUT/OUTPUT MODULE DESCRIPTIVE DATA . . . 23

APPENDIX C: INPUT/OUTPUT MODULE AND SIGNAL CODE LETTER ASSIGNMENT TABLE . . . 25

APPENDIX D: COMPARTMENT ADDRESSES AND LOCATIONS . . . 27

APPENDIX E: SIGNAL FLOW DIAGRAMS . . . 31

APPENDIX F: SIGNAL SOURCES AND SINKS, WITH COMPARTMENT ADDRESSES . . . 43

APPENDIX G: ZONE BOUNDARIES . . . 49

APPENDIX H: REMOTE MULTIPLEXER AND INPUT/OUTPUT UNIT LOCATION SUMMARY . . . 51

APPENDIX I: SDMS TRANSMISSION CHARACTERISTICS OF EACH CANDIDATE SIGNAL . . . 53

APPENDIX J: SIGNAL TRACE TABLE . . . 63

APPENDIX K: INPUT/OUTPUT INSTALLATION AND WIRING LIST . . . 69

APPENDIX L: INPUT/OUTPUT MODULE COUNT AND SPARE CAPACITY . . . 89

APPENDIX M: REMOTE MULTIPLEXER CONFIGURATIONS . . . 93

APPENDIX N: REMOTE MULTIPLEXER AND INPUT/OUTPUT UNIT SUMMARIES BY ZONE AND SUBZONE . . . 99

APPENDIX O: MESSAGE TRACE TABLE . . . 117

APPENDIX P: SYSTEM SUMMARY DATA . . . 125

INTRODUCTION

BACKGROUND

The SDMS-EDM Input/Output Module (IOM) Committee was active from June 1978 to June 1979 in establishing a DD 963 candidate signal list for TECHEVAL. NAVSEA established guidelines for this activity, which include the following:

Five main SDMS data buses are to be used.

Reconfiguration to the conventional ship's wiring must be easily accomplished by ship's force.

The candidate signal list should contain representative signals from as many ship systems as possible.

The candidate list should contain a representative mix of signal types and functions.

Changes to the signal list as provided by the IOM Committee have been made to accommodate IOM design characteristics. Further changes to the candidate signal list may be required as the details of the user-equipment interfaces are developed. This signal list is the current basis for further system engineering needed for the SDMS TECHEVAL.

ADAP COMPUTER PROGRAM

Most of the data printouts presented in this document are maintained in a computer data base by means of a computer program called *ADAP*, developed by *Rockwell International*. The Candidate Signal List below introduces portions of this data base showing candidate signals in DD 963 user-equipment groupings, as well as IDM and DD 963 descriptive data.

The last section introduces additional sorts and tabulations made by ADAP.

CANDIDATE SIGNAL LIST

SIGNAL LIST AND ASSOCIATED KEY TABLES

Figure 1 shows candidate DD 963 class ship systems for multiplexing by SDMS. Figures 2 and 3 show proposed SDMS interconnectivity for the candidate systems.

The signal list in appendix A will be used to implement the interconnectivity shown in figures 2 and 3. Appendix B provides input output module (IOM) descriptive data. Appendix C provides IOM and signal code letter assignments used in the signal list tabulation. Appendix D provides the definition of compartment addresses in terms of compartment names and level, frame, and transverse locations. The compartment address is a computer-assigned number representing compartment names in the tabulated signal list (appendix A) and the locations of signal sources and sinks (appendix E).

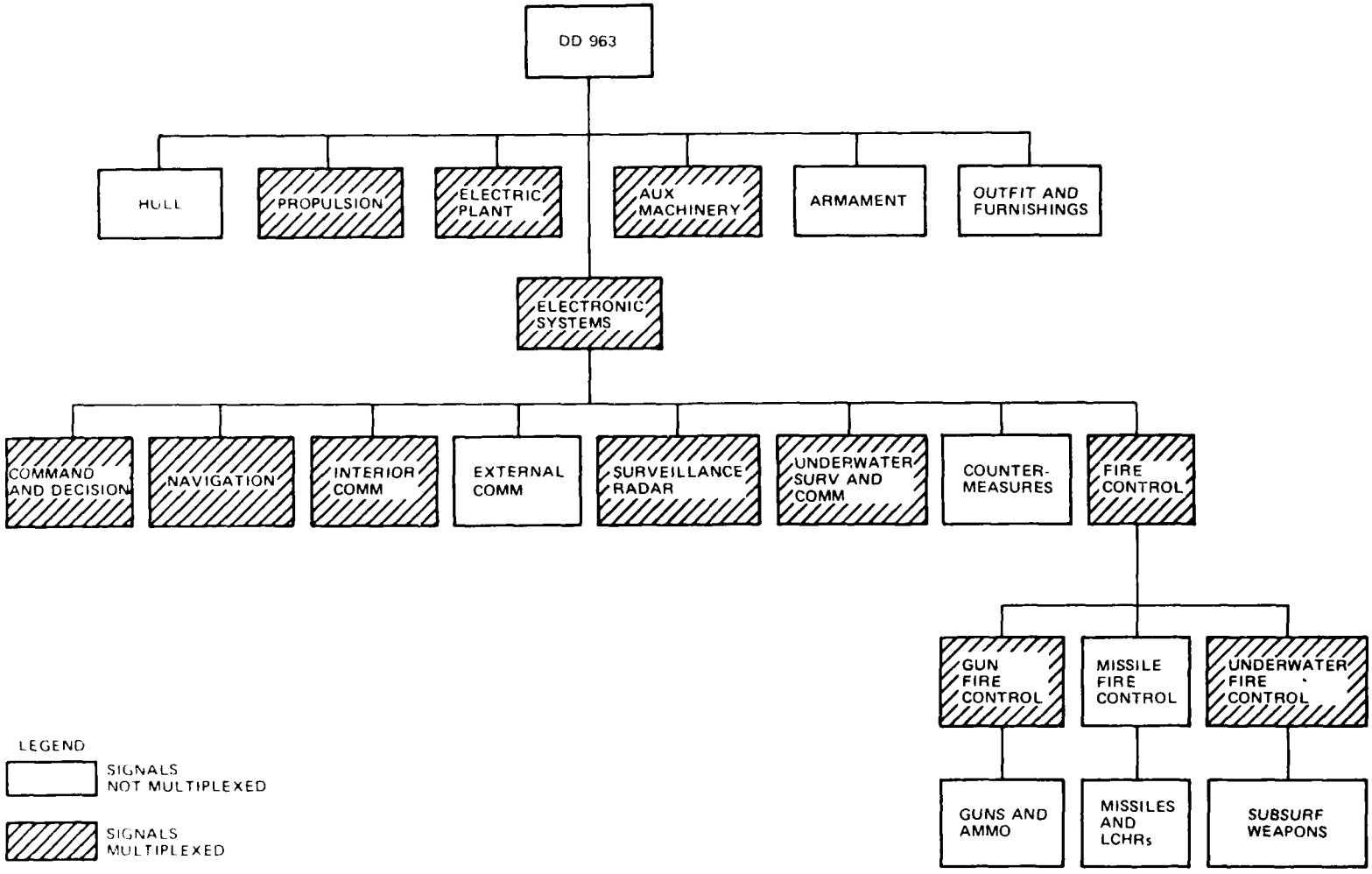


Figure 1. Candidate systems for multiplexing.

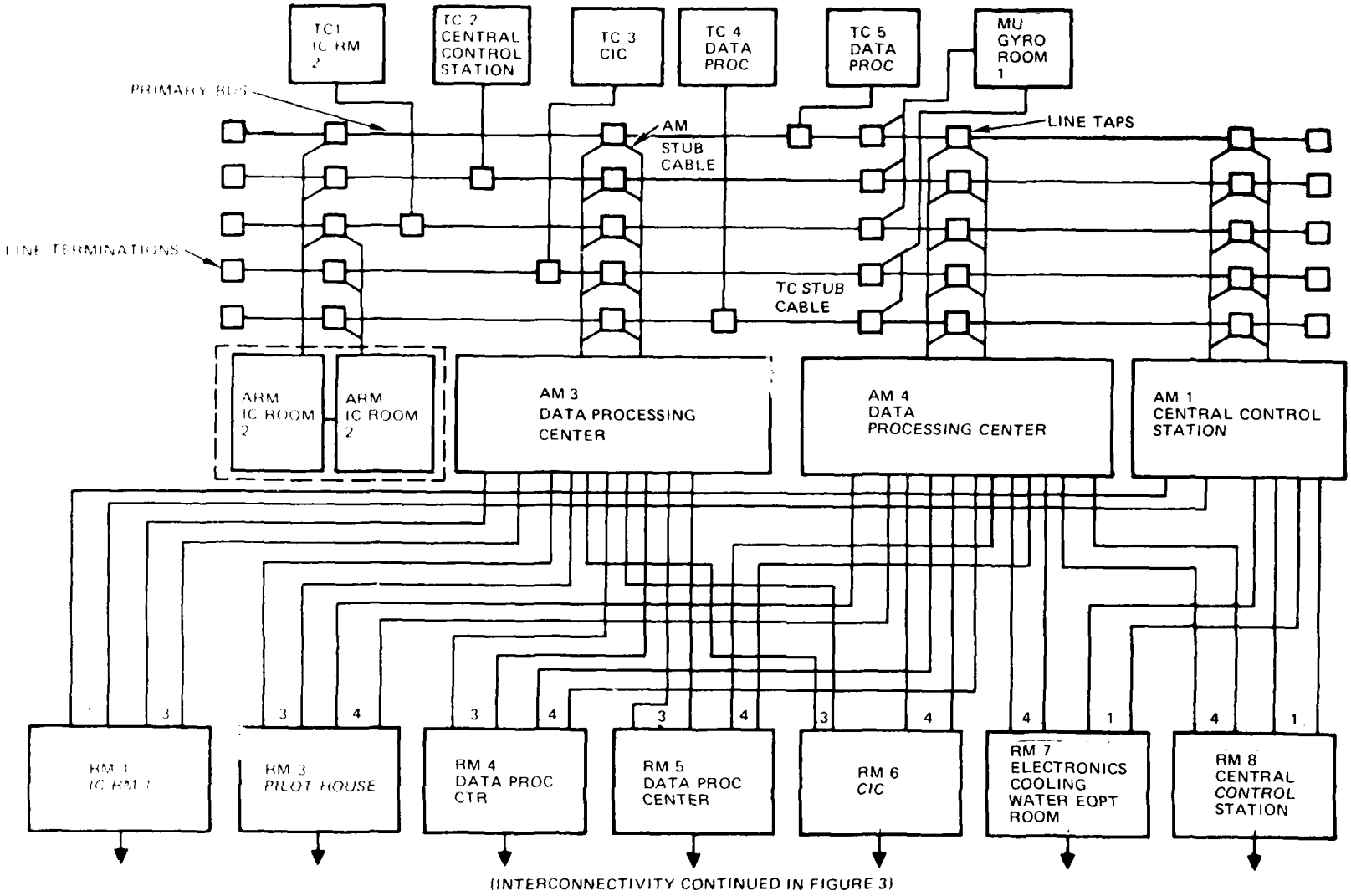


Figure 2. SDMS interconnectivity.

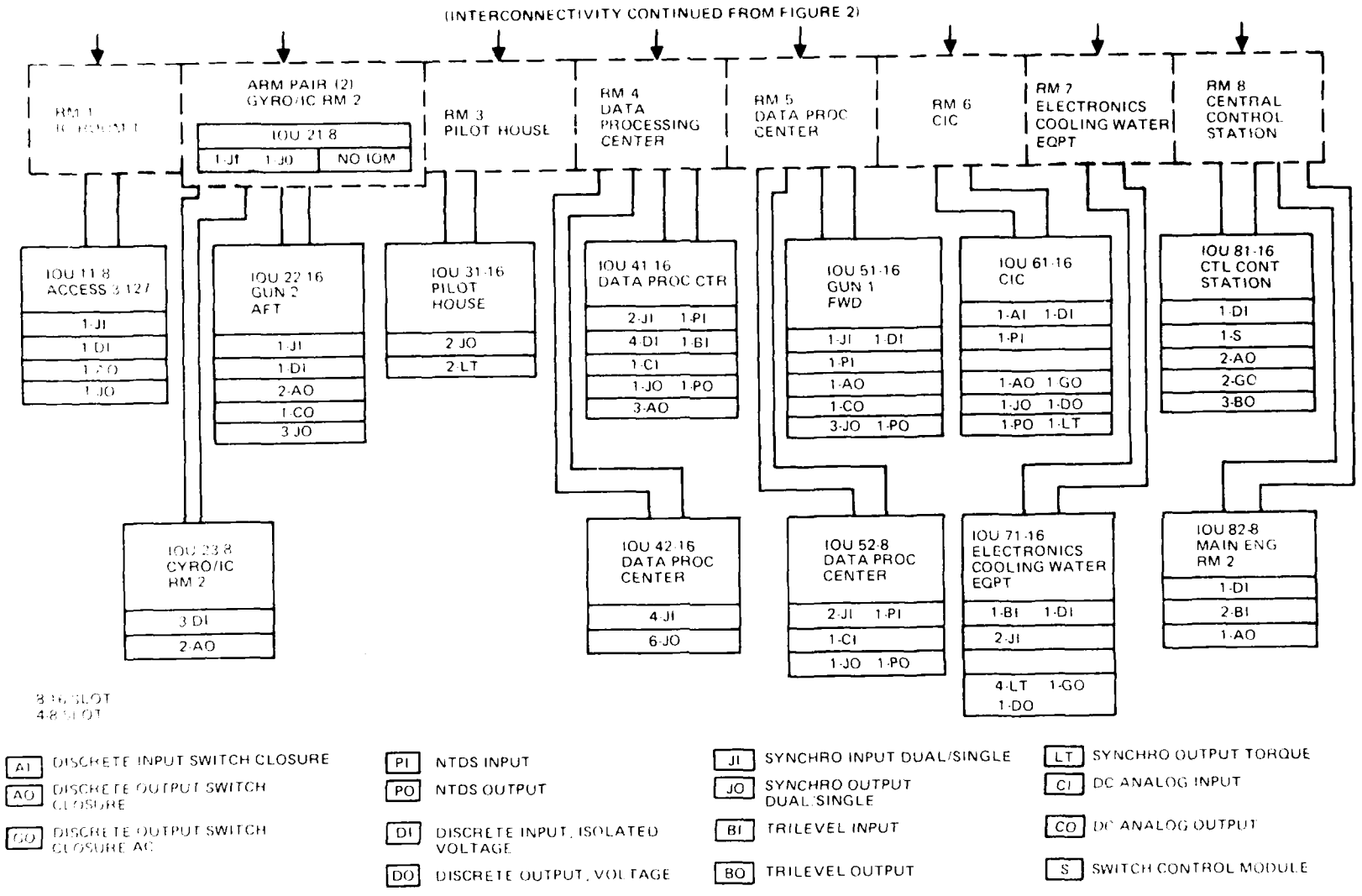


Figure 3. SDMS interconnectivity.

SIGNAL FLOW DIAGRAMS

Appendix E shows DD 963 class ship multiplexed signals, first in overall ship diagrams, then followed by ten system group diagrams as follows:

System	Group
ASW Weapon	01
Gun Weapon	02
Navigation	03
Electric Plant	04
Propulsion	05
Command and Control	06
Underwater Surveillance	07
Radar Surveillance	08
Interior Communication	09
Auxiliary	10

Notice that no SDMS equipment is shown. Instead, the conventional signal flow line is distinguished to indicate signals that are to be multiplexed by SDMS.

LOCATIONS OF SIGNALS AND EQUIPMENTS

Figures 4 and 5 show general locations of signals and SDMS equipments.

Appendix F gives signal source and sink locations, with compartment addresses as defined in appendix E.

Another computer-defined code number, called the zone number, is used in some of the following computer output listings. The zone number is related to the subzone number, remote multiplexer (RM) number, and input/output unit (IOU) number as follows:

Name	Configuration	Range	Example
zone number	XO	10–80	10
subzone number	Y	1–4	2
RM number	X	1–8	3
IOU number	XY	11–82	21

There is one computer output table for which the zone number and alternate (ALT) number do not conform to the foregoing description. Future revisions of the ADAP program will correct this discrepancy. This special case is shown in appendix G, in which the zone and ALT numbers may be considered to be IOU numbers. The ALT IOU number was included in earlier lists for redundant/critical signal configurations and has not been deleted from the computer program. Appendix G provides the zone boundary definitions.

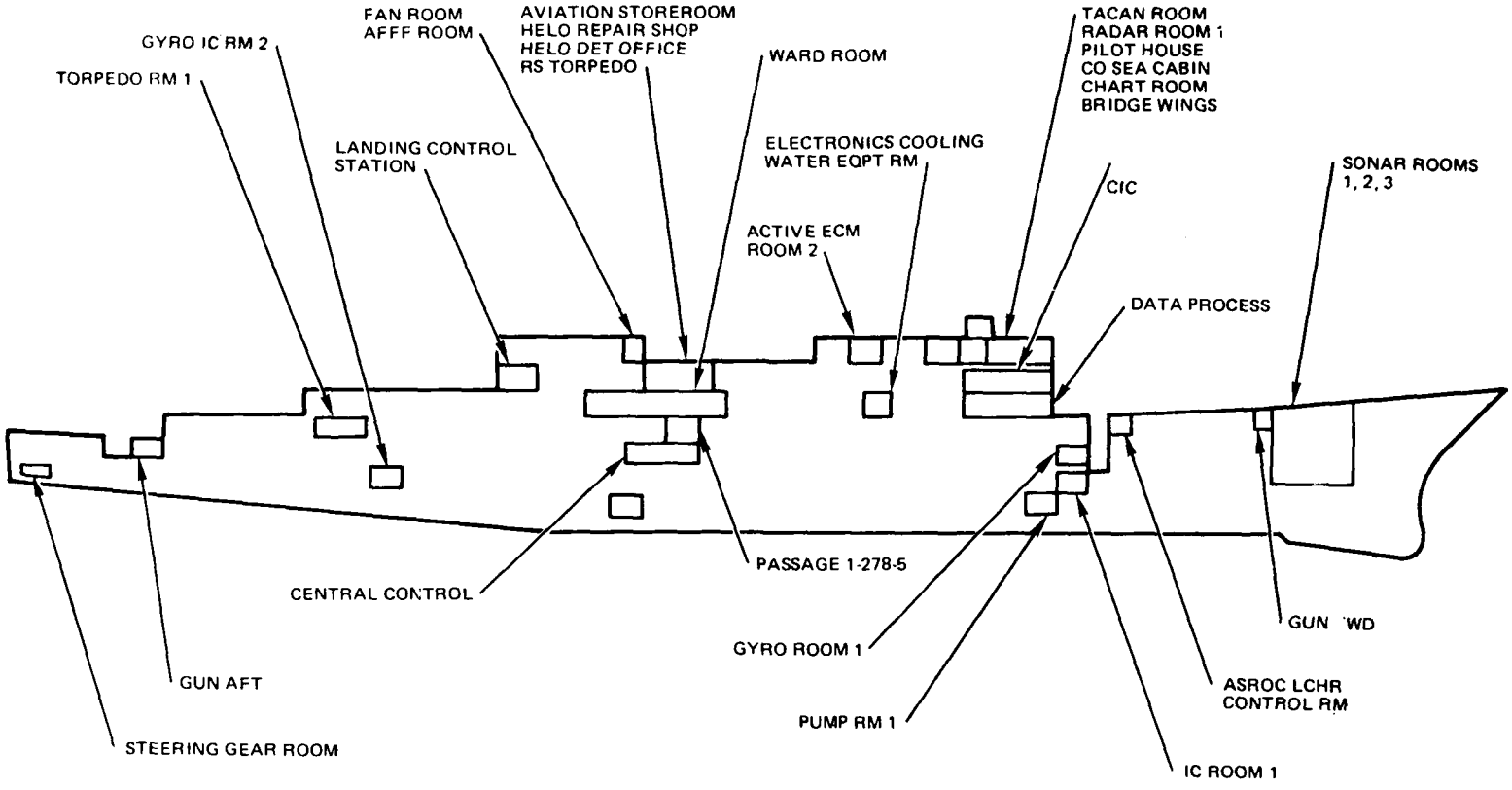


Figure 4. Signal source and sink locations.

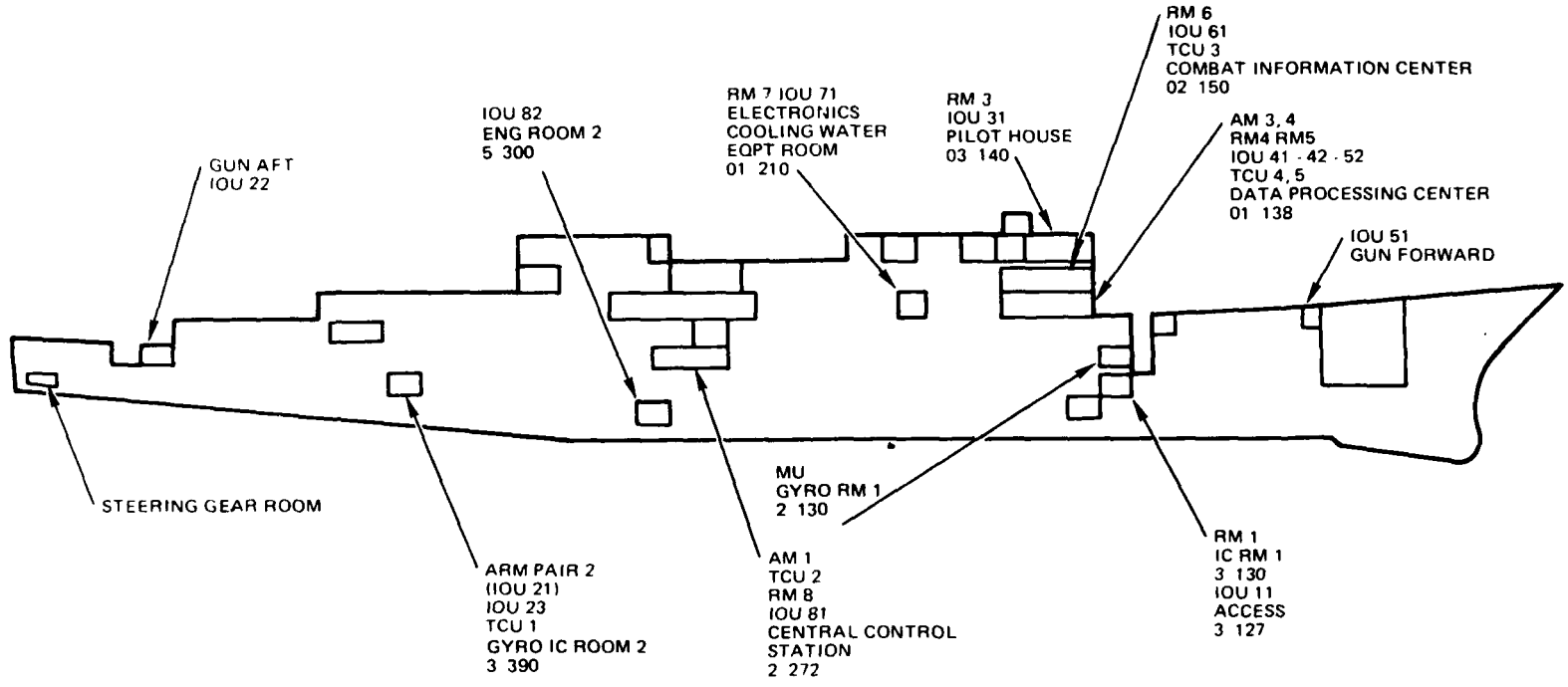


Figure 5. Location of SDMS equipment.

Appendix H provides an RM and IOU location summary showing deck, frame and transverse distances.

ADDITIONAL SORTS AND TABULATIONS

SDMS TRANSMISSION CHARACTERISTICS

Update modes, priority, and update rates of each candidate signal are given in appendix I.

SIGNAL TRACE

Signal connectivity from the IOU slot at the input (source) to the IOU slot at the output (sink) is provided in appendix J.

INPUT/OUTPUT WIRE LIST

The input/output (I/O) installation and wiring list is provided in appendix K.

INPUT/OUTPUT MODULE COUNT AND SPARE CAPACITY

Appendix L shows IOM count by zone and spare IOM capacity.

REMOTE MULTIPLEXER CONFIGURATIONS

Appendix M shows the configuration of each RM.

REMOTE MULTIPLEXER AND INPUT/OUTPUT UNIT SUMMARIES BY ZONE

Appendix N shows RM/IOU summaries by zone and subzone.

MESSAGE TRACE TABLE

Appendix O shows message flow by SDMS message number.

SYSTEM DATA

System summary data, including total numbers of units in SDMS, spare capacity, and total output signal types, are given in appendix P.

APPENDIX A: TABULATED SIGNAL LIST

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE	SOURCE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
0200		GYRO DRIVE ORDER A		D	320	01			A	060						10			
0210		GYRO DRIVE ORDER B		D	320	01			A	060						10			
0220		GYRO DRIVE ORDER C		D	320	01			A	060						10			
0230		MODE SELECT ORDER A		D	320	01			A	060						10			
0240		MODE SELECT ORDER B		D	320	01			A	060						10			
0250		MODE SELECT ORDER C		D	320	01			A	060						10			
0260		SEARCH DEPTH ORDER A		D	320	01			A	060						10			
0270		SEARCH DEPTH ORDER B		D	320	01			A	060						10			
0280		SEARCH DEPTH ORDER C		D	320	01			A	060						10			
0290		TUBE SELECT A		D	320	01			A	060						10			
0300		TUBE SELECT B		D	320	01			A	060						10			
0310		TUBE SELECT C		D	320	01			A	060						10			
0320		TUBE SELECT D		D	320	01			A	060						10			
0330		WEAPON ASSIGNED A		D	320	01			A	060						10			
0340		WEAPON ASSIGNED B		D	320	01			A	060						10			
0350		WEAPON ASSIGNED C		D	320	01			A	060						10			
0471		SECTOR CLEAR STARBOARD		D	060	01			A	320						10			
0472		SECTOR CLEAR PORT		D	060	01			A	320						10			
0360		FIRE ORDER		D	320	01			A	060						10			
0370		ILLUMINATE ENABLE		D	320	01			A	060						10			
0400		LAUNCHER MISFIRE		D	060	01			A	320						10			
0410		LAUNCHER READY		D	060	01			A	320						10			
0420		FIRING SECTOR CLEAR		D	060	01			A	320						10			
0430		STANDBY ORDER		D	320	01			A	060						10			
0440		TORPEDO AWAY		D	060	01			A	320						10			
0450		TORPEDO SYSTEM MISFIRE		D	060	01			A	320						10			
0460		TORPEDO SYSTEM READY		D	060	01			A	320						10			
0470		TSP IN REPOT		D	060	01			A	320						10			
0480		TSP MISFIRE		D	060	01			A	320						10			
0490		TSP OPERABILITY TEST IND		D	060	01			A	320						10			
0500		TSP OVERHEAT WARNING		D	060	01			A	320						10			
0510		TSP PRETEST CONTROL		D	320	01			A	060						10			
0520		TSP TEST CONTROL CODE A		D	320	01			A	060						10			
0530		TSP TEST CONTROL CODE B		D	320	01			A	060						10			
0540		TSP TEST CONTROL CODE C		D	320	01			A	060						10			
0550		TSP TEST CONTROL CODE D		D	320	01			A	060						10			
0560		TSP TEST MODE INDICATION		D	060	01			A	320						10			
0561		WEAPON READY		D	060	01			A	320						10			
0570		GYRO SETTING (SENSE) A		D	060	01			A	320						10			
0580		GYRO SETTING (SENSE) B		D	060	01			A	320						10			
0590		GYRO SETTING (SENSE) C		D	060	01			A	320						10			
0600		GYRO DEPTH SET'G(DEPTH IND)A		D	060	01			A	320						10			
0610		GYRO DEPTH SET'G(DEPTH IND)B		D	060	01			A	320						10			
0620		GYRO DEPTH SET'G(DEPTH IND)C		D	060	01			A	320						10			
0630		TUBE SELECTED A		D	060	01			A	320						10			
0640		TUBE SELECTED B		D	060	01			A	320						10			
0650		TUBE SELECTED C		D	060	01			A	320						10			
0660		TUBE STATUS 1		D	060	01			A	320						10			
0670		TUBE STATUS 2		D	060	01			A	320						10			
0680		TUBE STATUS 3		D	060	01			A	320						10			
0690		TUBE STATUS 4		D	060	01			A	320						10			
0700		TUBE STATUS 5		D	060	01			A	320						10			
0710		TUBE STATUS 6		D	060	01			A	320						10			

INPUT SIGNAL LIST

GUN WEAPON SYSTEM 02

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	SINK MODE	SINK RED PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	DSP
0871C1		OSM TO RADAR AZIMUTH CONVERT		M1	330	02		M1	350					300			
0872C2		OSM TO RADAR AZIMUTH CONVERT		M2	330	02		M1	350					300			
0931C1		OSM TO TDT #2 (VIA ICSS)		M1	330	02		LT	560					10			
0941		OSM TO SDT MK1 MOD3		M1	330	02		M1	330					300			
0942		OSM TO SDT MK1 MOD3		M2	330	02		M2	330					300			
0951		ROLL TO SDT MK1 MOD3		M1	330	02		M1	330					300			
0952		ROLL TO SDT MK1 MOD3		M2	330	02		M2	330					300			
1001		PITCH TO SDT MK1 MOD3		M1	330	02		M1	330					300			
1002		PITCH TO SDT MK1 MOD3		M2	330	02		M2	330					300			
1011		OWN SHIP SPEED TO SDTMK1MOD3		M1	330	02		M1	330					300			
1012		OWN SHIP SPEED TO SDTMK1MOD3		M2	330	02		M2	330					300			
1040		AMMO SELECT ALG	MT51	D	320	02		A	030					10			
1440		AMMO SELECT APT	MT51	D	320	02		A	030					10			
1500		AMMO SELECT COM	MT51	D	320	02		A	030					10			
1540		AMMO SELECT CVT	MT51	D	320	02		A	030					10			
1620		AMMO SELECT ILL	MT51	D	320	02		A	030					10			
1640		AMMO SELECT PD	MT51	D	320	02		A	030					10			
1660		AMMO SELECT RAP	MT51	D	320	02		A	030					10			
1700		AMMO SELECT SED CHG	MT51	D	320	02		A	030					10			
1720		AMMO SELECT SHD CHG	MT51	D	320	02		A	030					10			
1740		AMMO SELECT VT	MT51	D	320	02		A	030					10			
1760		AMMO SELECT WP	MT51	D	320	02		A	030					10			
1800		DIRECT CONTROL REQUEST	MT51	D	320	02		A	030					10			
1820		MUZZLE SETTER RUN	MT51	D	320	02		A	030					10			
1840		FUZE SETTER SAFE	MT51	D	320	02		A	030					10			
1860		LOAD ORDER SINGLE	MT51	D	320	02		A	030					10			
1880		LOAD ORDER CONTINUOUS	MT51	D	320	02		A	030					10			
1900		GUN IN STANDBY	MT51	D	030	02		A	320					10			
1920		GUN FIRED	MT51	D	030	02		A	320					10			
1940		GUN READY TO FIRE	MT51	D	030	02		A	320					10			
1960		MISFIRE	MT51	D	030	02		A	320					10			
1981		ELEVATION ORDER	MT51	M1	320	02		M1	030					300			
1982		ELEVATION ORDER	MT51	M2	320	02		M2	030					300			
2001		GUN ELEVATION ORDER	MT51	M1	320	02		M1	030					300			
2002		GUN ELEVATION ORDER	MT51	M2	320	02		M2	030					300			
2040		ELEVATION RATE ORDER	MT51	C	320	02		C	030					300			
2041		GUN TRAIN ORDER	MT51	M1	320	02		M1	030					300			
2042		GUN TRAIN ORDER	MT51	M2	320	02		M2	030					300			
2060		TRAIN RATE ORDER	MT51	C	320	02		C	030					300			
2101		GUN ELEVATION POSITION	MT51	M1	030	02		M1	320					300			
2102		GUN ELEVATION POSITION	MT51	M2	030	02		M2	320					300			
2121		GUN TRAIN POSITION	MT51	M1	030	02		M1	320					300			
2122		GUN TRAIN POSITION	MT51	M2	030	02		M2	320					300			
2140		AMMO SELECT APT	MT52	D	320	02		A	150					10			
2160		AMMO SELECT APD	MT52	D	320	02		A	150					10			
2200		AMMO SELECT COM	MT52	D	320	02		A	150					10			
2220		AMMO SELECT CVT	MT52	D	320	02		A	150					10			
2240		AMMO SELECT ILL	MT52	D	320	02		A	150					10			
2260		AMMO SELECT PD	MT52	D	320	02		A	150					10			
2300		AMMO SELECT RAP	MT52	D	320	02		A	150					10			
2320		AMMO SELECT SED CHG	MT52	D	320	02		A	150					10			
2340		AMMO SELECT SHD CHG	MT52	D	320	02		A	150					10			
2360		AMMO SELECT VT	MT52	D	320	02		A	150					10			
2380		AMMO SELECT WP	MT52	D	320	02		A	150					10			
2400		DIRECT CONTROL REQUEST	MT52	D	320	02		A	150					10			

SIGNAL ID	Sw CL	SIGNAL NAME		SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
1910		FUZE SETTER RUN	MT52		D	320	02		A	150						10			
1911		FUZE SETTER SAFE	MT52		D	320	02		A	150						10			
1970		LOAD ORDER SINGLE	MT52		D	320	02		A	150						10			
1971		LOAD ORDER CONTINUOUS	MT52		D	320	02		A	150						10			
1990		GUN FIRED	MT52		D	150	02		A	320						10			
1990		GUN IN STANDBY	MT52		D	150	02		A	320						10			
1992		GUN READY TO FIRE	MT52		D	150	02		A	320						10			
1901		MOUNT SYNCH	MT52		D	150	02		A	320						10			
1911	A	GUN ELEVATION ORDER	MT52		M1	321	02		M1	150						300			
1912	A	GUN ELEVATION ORDER	MT52		M2	321	02		M2	150						300			
1911E1	B	GUN ELEVATION ORDER	MT52		M1	560	02		M1	150						300			
1912E2	B	GUN ELEVATION ORDER	MT52		M2	560	02		M2	150						300			
1913E1		GUN ELEVATION ORDER	MT52		M1	560	02		M1	340						300			
1914E2		GUN ELEVATION ORDER	MT52		M2	560	02		M2	340						300			
1920		ELEVATION RATE ORDER	MT52		C	321	02		C	150						300			
1921F1	A	GUN TRAIN ORDER	MT52		M1	321	02		M1	150						300			
1922F2	A	GUN TRAIN ORDER	MT52		M2	321	02		M2	150						300			
1923E1	B	GUN TRAIN ORDER	MT52		M1	560	02		M1	150						300			
1924E2	B	GUN TRAIN ORDER	MT52		M2	560	02		M2	150						300			
1923E1		GUN TRAIN ORDER	MT52		M1	560	02		M1	340						300			
1924E2		GUN TRAIN ORDER	MT52		M2	560	02		M2	340						300			
1941F1	D	GUN ELEVATION POSITION	MT52		M1	321	02		M1	321						300			
1942F2	D	GUN ELEVATION POSITION	MT52		M2	321	02		M2	321						300			
1943E1	C	GUN ELEVATION POSITION	MT52		M1	150	02		M1	321						300			
1944E2	C	GUN ELEVATION POSITION	MT52		M2	150	02		M2	321						300			
1943E1		GUN ELEVATION POSITION	MT52		M1	150	02		M1	340						300			
1944E2		GUN ELEVATION POSITION	MT52		M2	150	02		M2	340						300			
1951F1	C	GUN TRAIN POSITION	MT52		M1	150	02		M1	321						300			
1952F2	C	GUN TRAIN POSITION	MT52		M2	150	02		M2	321						300			
1953E1	D	GUN TRAIN POSITION	MT52		M1	321	02		M1	321						300			
1954E2	D	GUN TRAIN POSITION	MT52		M2	321	02		M2	321						300			
1953E1		GUN TRAIN POSITION	MT52		M1	150	02		M1	340						300			
1954E2		GUN TRAIN POSITION	MT52		M2	150	02		M2	340						300			
1955E1		GUN TRAIN POSITION	MT52		M1	150	02		M1	490						300			
1960		TRAIN RATE ORDER	MT52		C	321	02		C	150						300			
1971J1		FUZE SET ORDER	MT52		M1	321	02		M1	150						300			
1972J2		FUZE SET ORDER	MT52		M2	321	02		M2	150						300			
1975		TGT-2 DESIGNATED RANGE			M1	560	02		M1	340						300			
1976		TGT-2 DESIGNATED RANGE			M2	560	02		M2	340						300			
2121		MT52 SELECT MA-86			A	370	02		SD	050						10			
2122		MT52 SELECT TDT #2			A	370	02		SD	050						10			
2131		POSITION SELECT SDC			A	370	02		SD	050						10			
2132		POSITION SELECT EAT			A	370	02		SD	050						10			

INPUT SIGNAL LIST

NAVIGATION SYSTEM 03

10/29/79 PA. 1

SIGNAL ID	S* CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
0701A1		OSH INDICATOR PILOT HOUSE		M1	190	03		M1	490						10			
0702A2		OSH INDICATOR PILOT HOUSE		M2	190	03		M2	490						10			
0771A1		OSH INDICATOR IC & GYRO RM 2		M1	190	03		J	200						10			
0761A1		OSH INDICATOR #1 CIC		M1	190	03		J	380						10			
0731A1		OSH INDICATOR #2 CIC		M1	190	03		J	390						10			
0901A1		OSH IND DATA PROCESSING CTR		M1	190	03		J	330						10			
0811A1		OSH TO VERT PLOT BRD (CIC)		M1	190	03		LT	430						10			
0821A1		OSH TO SONAR CONTROL (CIC)		M1	190	03		J	410						10			
0730		OSH INDICATOR IC RM #1		J	210	03		J	180						10			
0851B1		OSH IND STEERING GEAR RM		M1	210	03		M1	230						10			
0852B2		OSH IND STEERING GEAR RM		M2	210	03		M2	230						10			
0901B1		OSH IND SHIP CONTROL CONSOLE		M1	210	03		M1	490						10			
0902B2		OSH IND SHIP CONTROL CONSOLE		M2	210	03		M2	490						10			
0811C1		OSH TO TACAN		M1	330	03		L1	440						300			
0812C2		OSH TO TACAN		M2	330	03		L2	440						300			
0901D1		POLE TO TACAN		M1	330	03		L1	440						10			
1020		TACAN EMERGENCY NORMAL		A	420	03		D	440						10			
1030		TACAN EMERGENCY SHUTDOWN		A	420	03		D	440						10			
1040		TACAN EMERG SHUTDN INDICATOR		D	440	03		A	420						10			
1050		TRANSPONDER ON INDICATOR		D	440	03		A	420						10			
1060		TRANSPONDER STANDBY		D	440	03		A	420						10			
1070		MONITOR ALARM		D	440	03		A	420						10			
1080		SYSTEM NORMAL		D	440	03		D	420						10			

INPUT SIGNAL LIST

ELECTRIC PLANT SYSTEM 04

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
0060		TURBINE INLET TEMP HI ALARM		D	220	04		A	090						10			
0070		LUBE FILTER DELTA P HIGH		D	220	04		A	090						10			
0080		FUEL OIL FILTER DELTA P HIGH		D	220	04		A	090						10			
0090		LUBE TEMPERATURE HIGH ALARM		D	220	04		A	090						10			
0100		EXCITER TEMP HIGH ALARM		D	220	04		A	090						10			
0110		GENERATOR STATOR TEMP HIGH		D	220	04		A	090						10			
0120		AIR TEMPERATURE HIGH ALARM		D	220	04		A	090						10			
0130		REAR BEARING TEMP HIGH ALARM		D	220	04		A	090						10			
0140		FRT BEARING TEMP HIGH ALARM		D	220	04		A	090						10			
0150		LUBE PRESSURE LOW ALARM		D	220	04		A	090						10			
0160		HEATER ON, GEN #3 MON/IND		D	170	04		A	090						10			
0170		GEN OPEN (TRIPPED) STATUS SIG		D	170	04		A	090						10			
0180		GEN CLOSED STATUS SIGNAL		D	170	04		A	090						10			
0210		GEN LP AIR MAN START COMMAND		D	090	04		A	160						10			

INPUT SIGNAL LIST

PROPULSION SYSTEM 05

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM DSP
0010		TANK TEMPERATURE SW 1		D	130	05		A	290						10		
0020		TANK TEMPERATURE SW 2		D	140	05		A	290						10		
0030		SEWAGE PLANT PRESSURE SWITCH		D	300	05		A	250						10		
0040		SWITCH PORT REDUCTION GEAR A		D	060	05		A	240						10		
0041		SWITCH PORT REDUCTION GEAR B		D	080	05		A	240						10		
0050		OIL LEVEL SWITCH STUD HUB		D	120	05		A	280						10		

INPUT SIGNAL LIST

COMMAND AND DECISION SYSTEM 06

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
0740		I/O DISPLAY GP AN/UYA-6 IN		P	435	06		P	355						40	50		
0750		I/O DISPLAY GP AN/UYA-6 OUT		P	355	06		P	435						40	50		

INPUT SIGNAL LIST

UNDERWATER SURVEILLANCE SYSTEM 07

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
0720		SONAR TGT SIMULATOR INPUT		P	235	07		P	320						40	50		
0730		SONAR TGT SIMULATOR OUTPUT		P	320	07		P	235						40	50		
0941		O/H TO AN SQS-53 SONAR(ICSS)		M1	340	07		M1	010						10			
0942		O/H TO AN SQS-53 SONAR(ICSS)		M2	340	07		M2	010						10			
094101		ROLL TO SQS-53 SONAR (ICSS)		M1	330	07		M1	010						10			
094202		ROLL TO SQS-53 SONAR (ICSS)		M2	330	07		M2	010						10			
0971		PITCH TO SQS-53 SONAR (ICSS)		M1	330	07		M1	010						10			
0972		PITCH TO SQS-53 SONAR (ICSS)		M2	330	07		M2	010						10			

INPUT SIGNAL LIST

RADAR SURVEILLANCE SYSTEM 08

10/29/79

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE	SOURCE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM DSP
0[illegible]1C1		OSM TO SFS-40			M1	330	08		L1	500						10		
0[illegible]2C2		OSM TO SFS-40			M2	330	08		L2	500						10		
1280		CABINET INTERLOCK 28VAC		D	370	08			G	450						10		
1290		STANDBY INDICATOR		D	370	08			G	450						10		
1300		28VAC CABINET RADIATE REMOTE		D	370	08			G	450						10		
1310		COOLANT FLOW ALARM INDICATOR		D	370	08			G	450						10		
1320		LFDM ANTENNA SEQ CHANGE IND		D	370	08			G	450						10		
1330		LOCAL INDICATOR		D	370	08			G	450						10		
1340		RADIATE INDICATOR		D	370	06			G	450						10		
1350		28VAC RADIATE RECEIVER TEST		D	450	08			G	370						10		
1360		READY INDICATOR		D	370	08			G	450						10		
1370		28VDC STANDBY REMOTE		D	370	08			G	450						10		
1380		REMOTE LFDM LOW POWER IND		D	370	08			G	450						10		
1390		STANDBY RECEIVER TEST		D	370	08			G	450						10		
1400		ANTENNA INTERLOCK/OPERATE		D	450	08			G	370						10		
1410		ANTENNA OPERATE INDICATOR		D	370	08			G	450						10		
1420		DUMMY LOAD INDICATOR		D	370	08			G	450						10		
1421		STANDBY/RADIATE		D	370	08			G	450						10		
1430		CABINET OVERHEAT ALARM IND		D	370	08			G	450						10		
1440		AIR PRESSURE ALARM INDICATOR		D	370	08			G	450						10		

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	SIG ASM	SIG DSP
1090		HI TEMP SET-B (AV STORE RM)		B	460	09		B	100						40			
1091		HI TEMP SET-A (DRY TORP LKR)		B	470	09		B	100						40			
1092		HI TEMP SET-C (MESS HANGER)		B	480	09		B	100						40			
1100		HI [illegible] LEVEL 6 [illegible]-Q-E		B	195	09		B	100						40			
1101		HI [illegible] LEVEL 4 [illegible]-Q-E		B	195	09		B	100						40			
1102		BILGE LEVEL 6 [illegible]-3-Q		B	195	09		B	100						40			
1103		BILGE LEVEL 6-[illegible]2-4-V		B	195	09		B	100						40			
1104		BILGE LEVEL 6 [illegible]-0-E		B	195	09		B	100						40			
1105		BILGE LEVEL 3-[illegible]-1-E		B	195	09		B	100						40			
1106		BILGE LEVEL 3-[illegible]-0-Q		B	195	09		B	100						40			
1107		BILGE LEVEL 2 [illegible]-1-V		B	195	09		B	100						40			
1110		BILGE LEVEL 5-[illegible]-0-E		B	195	09		B	100						40			
1111		BILGE LEVEL 5-[illegible]-01-E		B	195	09		B	100						40			
1112		BILGE LEVEL 5-[illegible]-01-E		B	195	09		B	100						40			
1113		BILGE LEVEL 5-[illegible]-0-E		B	195	09		B	100						40			
1114		BILGE LEVEL 6-[illegible]-3-V		B	195	09		B	100						40			
1115		BILGE LEVEL [illegible] SHAFT ALLEY		B	195	09		B	100						40			
1116		BILGE LEVEL [illegible] SHAFT ALLEY		B	195	09		B	100						40			
1117		BILGE LEVEL [illegible] PLANT		B	195	09		B	100						40			
1120X1		HI LEVEL FILL-AUDIBLE ALARM		D	235	09		G	100						10			
1121X1		HI LEVEL FILL-AUDIBLE ALARM		D	235	09		G	400						10			
1160X2		LO DOME WATER PR-AUDIBLE AL		D	235	09		G	100						10			
1161X2		LO DOME WATER PR-AUDIBLE AL		D	235	09		G	400						10			
1170X3		LO DOME WATER PR-VISUAL AL		D	235	09		G	100						10			
1171X3		LO DOME WATER PR-VISUAL AL		D	235	09		G	400						10			
1180X4		HI DOME WATER PR-AUDIBLE AL		D	235	09		G	100						10			
1181X4		HI DOME WATER PR-AUDIBLE AL		D	235	09		G	400						10			
1190X5		HI DOME WATER PR-VISUAL AL		D	235	09		G	100						10			
1191X5		HI DOME WATER PR-VISUAL AL		D	235	09		G	400						10			
1210X6		LO PRESS AIR-AUDIBLE ALARM		D	235	09		G	100						10			
1211X6		LO PRESS AIR-AUDIBLE ALARM		D	235	09		G	400						10			
1220		FLOW SWITCH - WATER ON		D	235	09		G	400						10			
1240		FLOW SWITCH - WATER OFF		D	235	09		G	400						10			
1230		AIR [illegible] COOLING ALARM		B	040	09		B	100						40			
1250		SONAR COOLING ALARM		B	040	09		B	100						40			
1260		ELEC HI TEMP ALARM (AL LP 1)		B	360	09		B	100						40			
1270		ELEC HI TEMP ALARM (AL LP 2)		B	360	09		B	100						40			
2000		EDUCTOR SUPPLY VALVE OPEN		D	270	09		G	050						10			
2010		EDUCTOR SUPPLY VALVE CLOSED		D	270	09		G	050						10			
2020		EDUCTOR SUCTION VALVE OPEN		D	270	09		G	050						10			
2030		EDUCTOR SUCTION VALVE CLOSED		D	270	09		G	050						10			
2040		EDUCTOR DISCHARGE VALVE OPEN		D	270	09		G	050						10			
2050		EDUCTOR DISCHARGE VALVE CLOSED		D	270	09		G	050						10			
2060		SEAWATER PUMP 2 SUC VAL OPEN		D	270	09		G	050						10			
2070		SEAWATER PUMP 2 SUC VAL CLSD		D	270	09		G	050						10			
2080		SEAWATER ISOLATION VAL OPEN		D	270	09		G	050						10			
2090		SEAWATER ISOLATION VAL CLSD		D	270	09		G	050						10			
2100		BHD 300 ISOLATION VAL OPEN		D	270	09		G	050						10			
2110		BHD 300 ISOLATION VAL CLSD		D	270	09		G	050						10			

INPUT SIGNAL LIST

AUXILLIARY SYSTEM 10

10/29/79 PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
1980		AIR COND PLT 1 SUMMARY FAULT		D	260	10		A	110						10			
1990		AIR COND PLT 2 SUMMARY FAULT		D	260	10		A	110						10			

APPENDIX B: INPUT/OUTPUT MODULE DESCRIPTIVE DATA

IOM DESCRIPTIVE DATA

10/29/79

BOARD NUMBER	NAME	IOM TYPE	GENERIC TYPE	POWER WATTS	CABLE TYPE	# SLOTS PER IOM	# OF CHAN	SIGS/ CHAN	BITS/ CHAN	WDS/ CHAN	LEADS/ SIG
1	DISCRETE INPUT, SWITCH CLOSURE	A I	1	0.0		1	4	4	4	1	2
2	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC	A O	1	0.0		1	4	4	4	1	2
3	TRI-LEVEL DISCRETE INPUT	B I	1	0.0		1	4	2	4	1	2
4	TRI-LEVEL DISCRETE OUTPUT	B O	1	0.0		1	4	2	4	1	2
5	DC ANALOG INPUT, LOW RESOLUTION	C I	2	0.0		1	8	1	8	1	2
6	DC ANALOG OUTPUT, LOW RESOLUTION	C O	2	0.0		1	8	1	8	1	3
7	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL	D I	1	0.0		1	4	4	4	1	2
8	DISCRETE OUTPUT, VOLTAGE LEVEL	D O	1	0.0		1	4	4	4	1	2
9	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,AC	G O	1	0.0		1	4	4	4	1	2
10	SYNCHRO INPUT, 4 CHANNEL	J I	3	0.0		1	4	1	16	1	7
11	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ	J O	3	0.0		2	4	1	16	1	7
12	SYNCHRO OUTPUT, TORQUE DEVICES, 60 HZ	LT O	3	0.0		2	1	1	16	1	7
13	SYNCHRO OUTPUT 60 HZ	L O	3	0.0		2	1	1	16	1	7
14	SYNCHRO INPUT DUAL/SINGLE SPEED DUAL	M I	3	0.0		1	2	1	32	2	11
15	SYNCHRO OUTPUT DUAL/SINGLE SPEED DUAL	M O	3	0.0		2	2	1	32	2	11
16	PARALLEL DATA INPUT, NTDS SLOW	P I	4	0.0		1	1	1	16	0	73
17	PARALLEL DATA OUTPUT, NTDS SLOW	P O	4	0.0		1	1	1	16	0	73
18	DEMAND DIGITAL INPUT	T I	4	0.0		1	1	1	16	0	0
19	SWITCHING CONTROL MODULE	S O	1	0.0		1	16	1	1	1	2

APPENDIX C: INPUT/OUTPUT MODULE AND SIGNAL CODE LETTER ASSIGNMENT TABLE

IOM SIGNAL CODE LETTER ASSIGNMENT TABLE

10/29/79

SIGNAL TYPE CODE	INPUT MODULE TYPE CODE	OUTPUT MODULE TYPE CODE	DESCRIPTION
A	A	A	DISCRETE, SWITCH CLOSURE
B	B	B	DISCRETE, TRI-LEVEL
C	C	C	DC ANALOG
D	D	D	DISCRETE, VOLTAGE LEVEL
G		G	DISCRETE OUTPUT
J	J	J	SYNCHRO, SINGLE SPEED
LT		LT	SYNCHRO, POWER OUTPUT
L1		LT	DUAL SPEED SYNCHRO 60 HZ, SPEED 1
L2		LT	DUAL SPEED SYNCHRO 60 HZ, SPEED 2
M1	J	J	DUAL SPEED SYNCHRO, SPEED 1
M2	J	J	DUAL SPEED SYNCHRO, SPEED 2
P	P	P	PARALLEL DIGITAL, NTDS SLOW
T	T		DEMAND DIGITAL
SD		S	SWITCH CONTROL MODULE

APPENDIX D: COMPARTMENT ADDRESSES AND LOCATIONS

COMPARTMENT ADDRESS	COMPARTMENT NAME	LEVEL	FRAME FT	TRANSVERSE FT	LENGTH FT	WIDTH FT
10	SONAR EQUIPMENT ROOM NO. 1	1	030	10		
30	GUN NO. 1 FORWARD	1	085	0		
40	ASROC COOL/HEAT EQUIPMENT ROOM	1	133	0		
50	PASSAGEWAY	1	272	-3		
60	TORPEDO ROOM NO 2	1	395	-2		
70	SONAR EQUIPMENT NO 2	2	030	1		
80	CENTRAL CONTROL, AREA 1	2	272	0		
90	CENTRAL CONTROL, AREA 2	2	274	0		
100	CENTRAL CONTROL, AREA 3	2	275	0		
110	CENTRAL CONTROL, AREA 4	2	284	0		
120	MAIN ENGINE ROOM NO. 2	2	300	-4		
130	AFT SETTLING TANK, AREA 1	2	323	2		
140	AFT SETTLING TANK, AREA 2	2	323	4		
150	GUN NO. 2 AFT	2	465	0		
160	EMERGENCY GEN #2 SLUBD ROOM, A1	2	476	-4		
170	EMERGENCY GEN #2 SLUBD ROOM, A2	2	476	-04		
180	FORWARD IC ROOM NO. 1, AREA 1	3	130	0		
190	FORWARD IC ROOM NO. 1, AREA 2	3	130	6		
195	GENERAL STORE ROOM	3	276	5		
200	GYRO IC ROOM NO. 2, AREA 1	3	392	0		
210	GYRO IC ROOM NO. 2, AREA 2	3	395	-5		
220	SHIP'S SERVICE EMERGENCY GEN #3	3	428	-02		
230	STEERING GEAR ROOM	3	506	0		
235	SONAR EQUIPMENT ROOM NO. 4	4	036	1		
240	MAIN ENGINE ROOM NO. 1 FORWARD	5	174	0		
250	MAIN ENGINE ROOM NO. 1 AFT	5	195	0		
260	AUX. MACHINERY ROOM FORWARD	5	236	4		
270	AUX. MACHINERY ROOM AFT	5	260	1		
280	MAIN ENGINE ROOM NO. 2 FORWARD	5	300	1		
290	MAIN ENGINE ROOM NO. 2 AFT	5	340	1		
300	SEWAGE PLANT NO. 1	6	350	4		
310	DATA PROCESSING CENTER, AREA 1	01	142	1		
320	DATA PROCESSING CENTER, AREA 2	01	150	0		
321	DATA PROCESSING CENTER, AREA 2	01	150	-1		
330	DATA PROCESSING CENTER, AREA 3	01	150	1		
340	DATA PROCESSING CENTER, AREA 4	01	150	5		
350	DATA PROCESSING CENTER, AREA 5	01	155	10		
355	DATA PROCESSING CENTER, AREA 6	01	160	-9		

COMPARTMENT ADDRESS	COMPARTMENT NAME	LEVEL	FRAME FT	TRANSVERSE FT	LENGTH FT	WIDTH FT
360	ELEX COOLING WATER EQUIPMENT	01	210	1		
370	COMBAT INFORMATION CENTER, A 1	02	139	0		
380	COMBAT INFORMATION CENTER, A 2	02	145	5		
390	COMBAT INFORMATION CENTER, A 3	02	145	10		
400	COMBAT INFORMATION CENTER, A 4	02	150	2		
410	COMBAT INFORMATION CENTER, A 5	02	150	10		
420	COMBAT INFORMATION CENTER, A 6	02	152	0		
430	COMBAT INFORMATION CENTER, A 7	02	160	-15		
435	COMBAT INFORMATION CENTER, A 8	02	170	-2		
440	TACAN ROOM	02	220	1		
450	RADAR ROOM NO. 2	02	257	0		
460	PASSAGEWAY	02	262	0		
470	READY TORPEDO LOCKER	02	282	2		
480	HELO HANGAR	02	342	1		
490	PILOT HOUSE	03	140	0		
500	RADAR ROOM NO. 1 AREA 1	03	154	20		
510	RADAR ROOM NO. 1, AREA 2	03	160	10		
520	RADAR ROOM NO. 1, AREA 3	03	160	20		
530	PORT BRIDGE WING	03	170	20		
540	STBD BRIDGE WING	03	170	-20		
550	ACTIVE ECM ROOM NO. 2	03	220	-1		
560	TDT #2	03	326	13		

APPENDIX E: SIGNAL FLOW DIAGRAMS

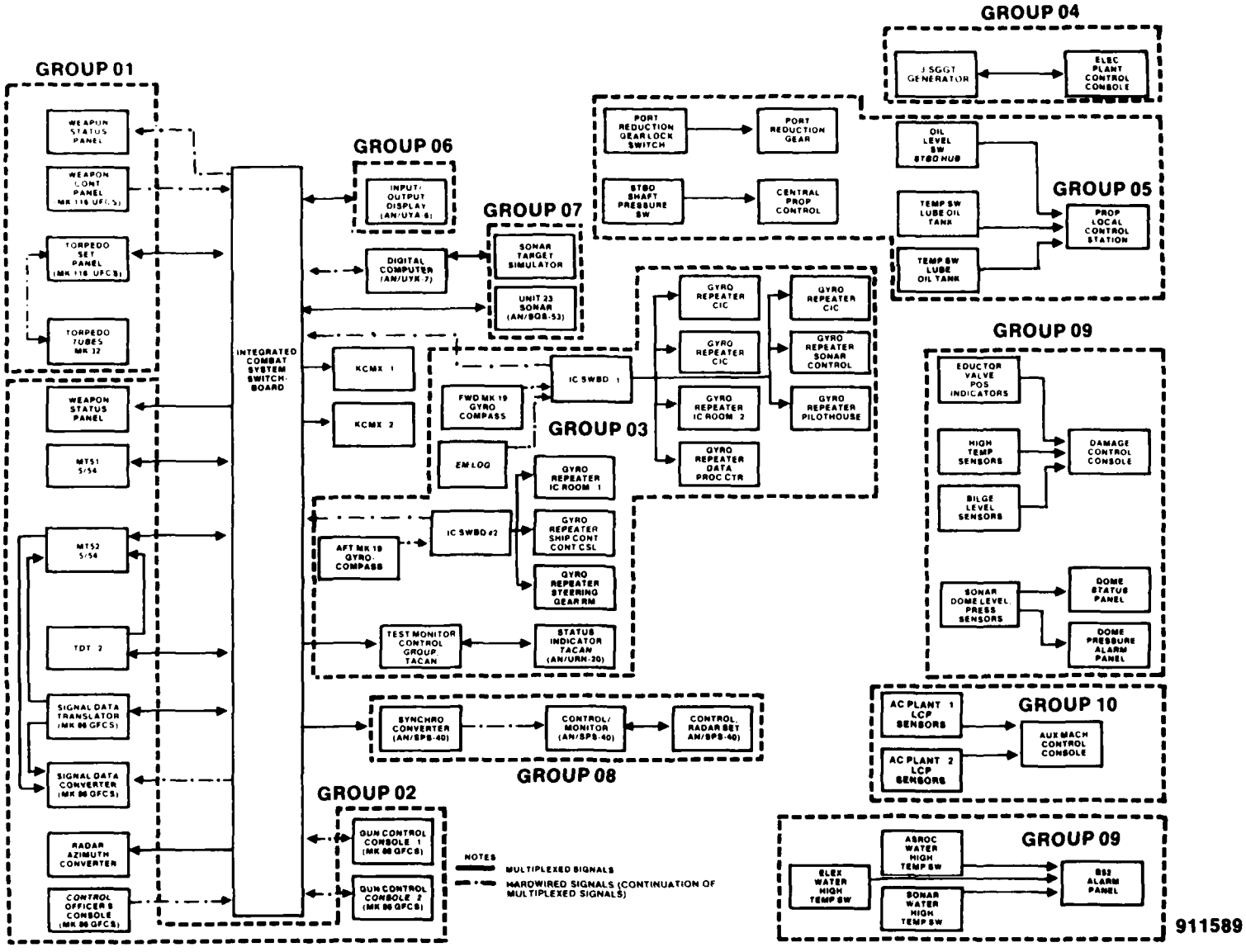


Figure E1. DD 963 class multiplexed configuration (based on 7/03/79 signal list).

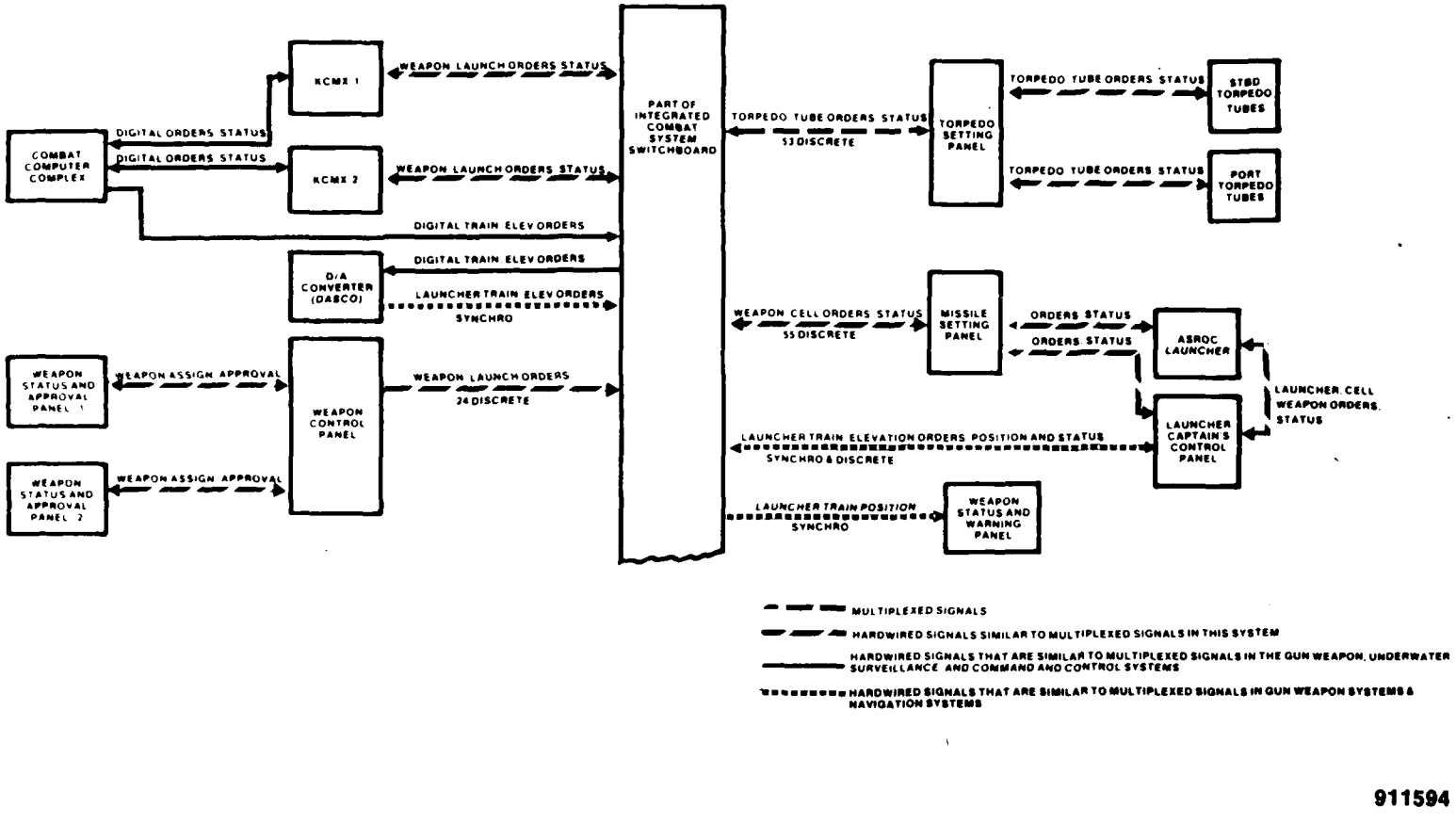


Figure E2. ASW weapon system group 01.

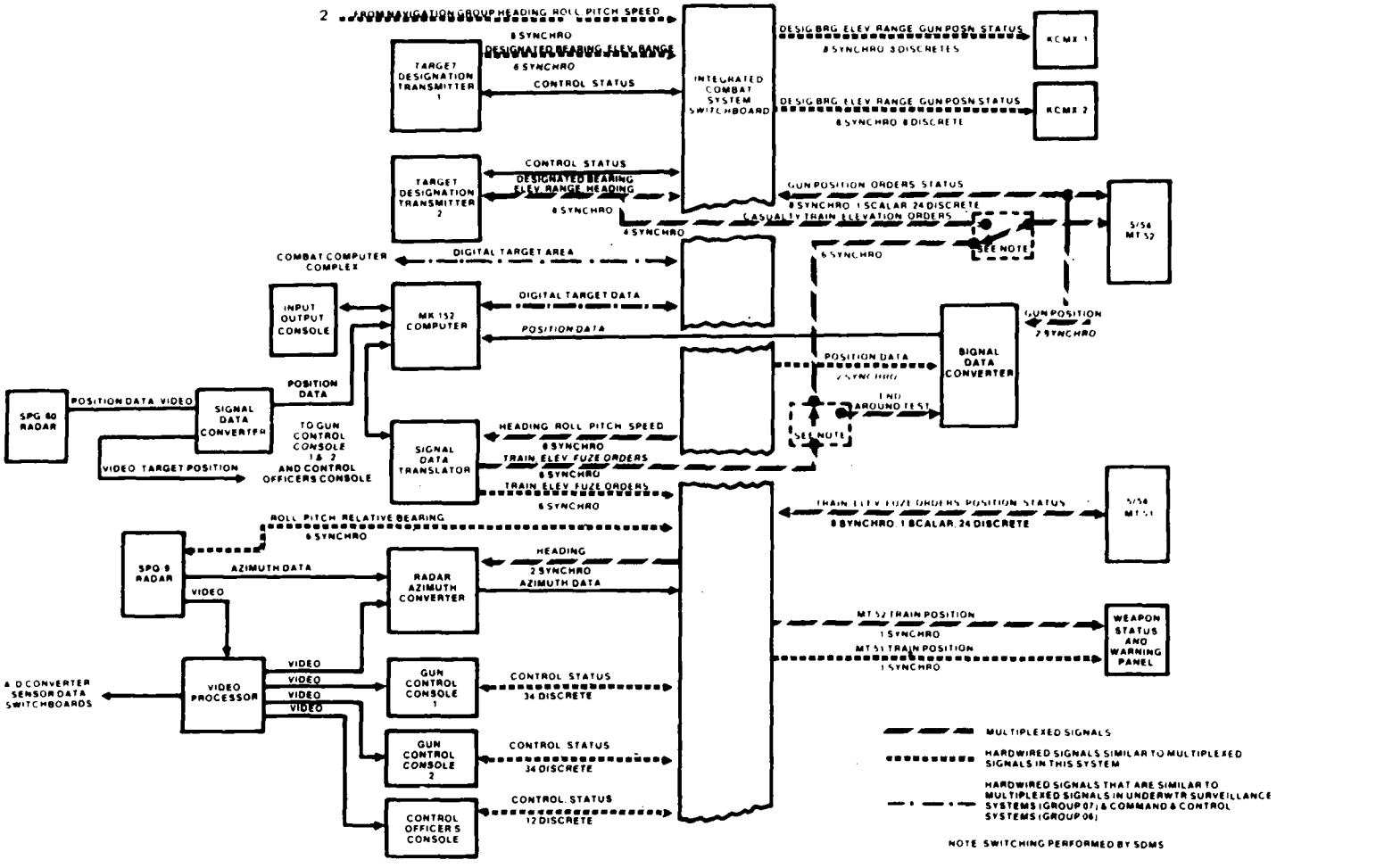


Figure E3. Gun weapon system group 02.

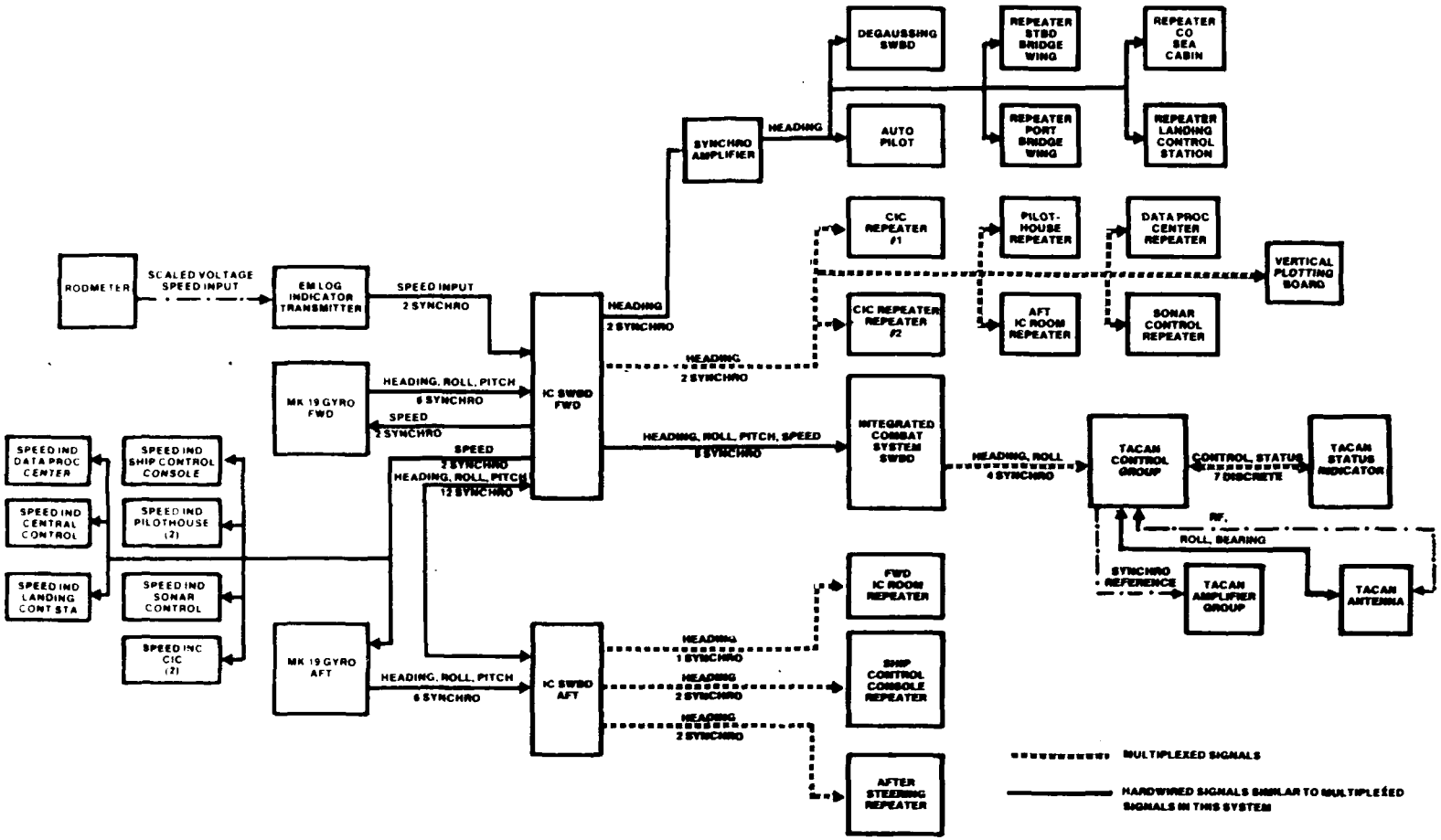


Figure E4. Navigation system group 03.

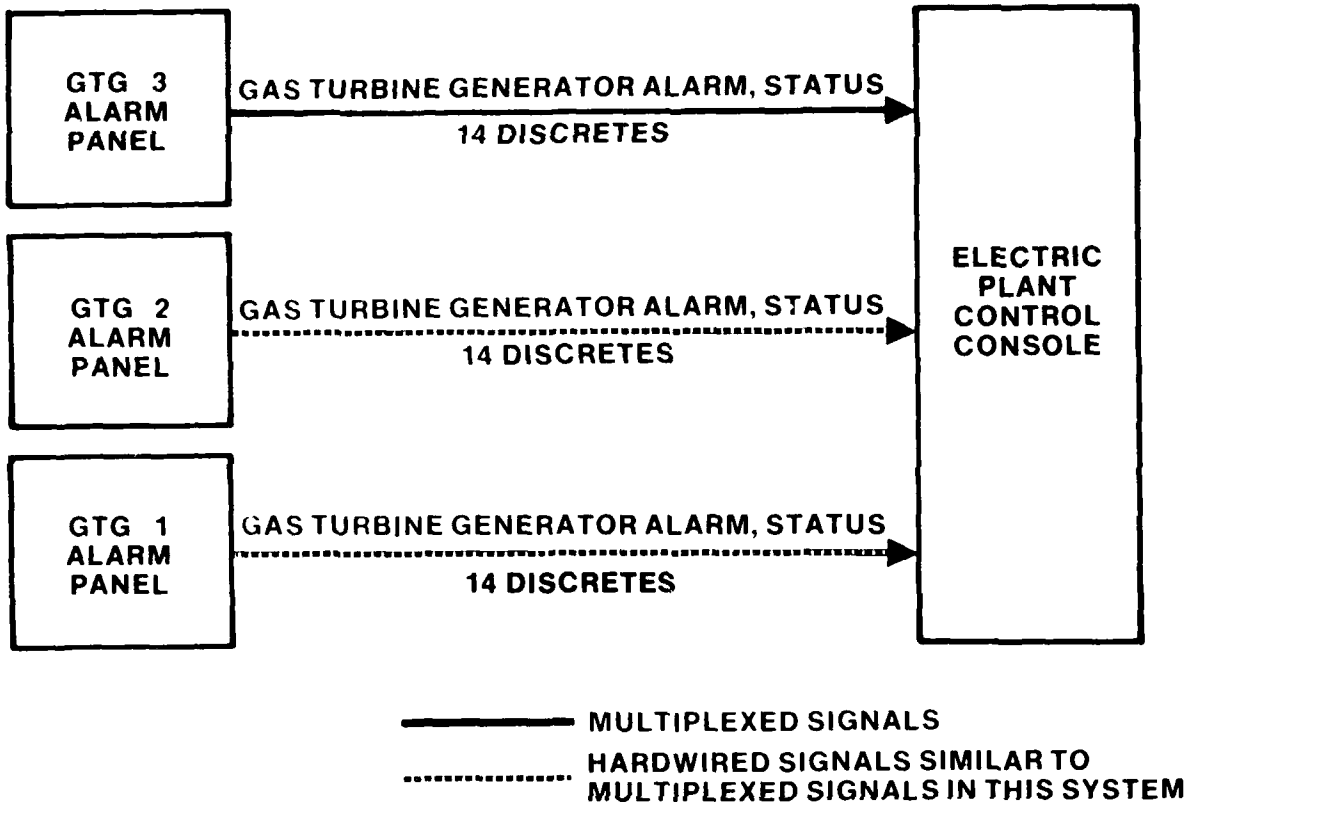


Figure E5. Electric plant system group 04.

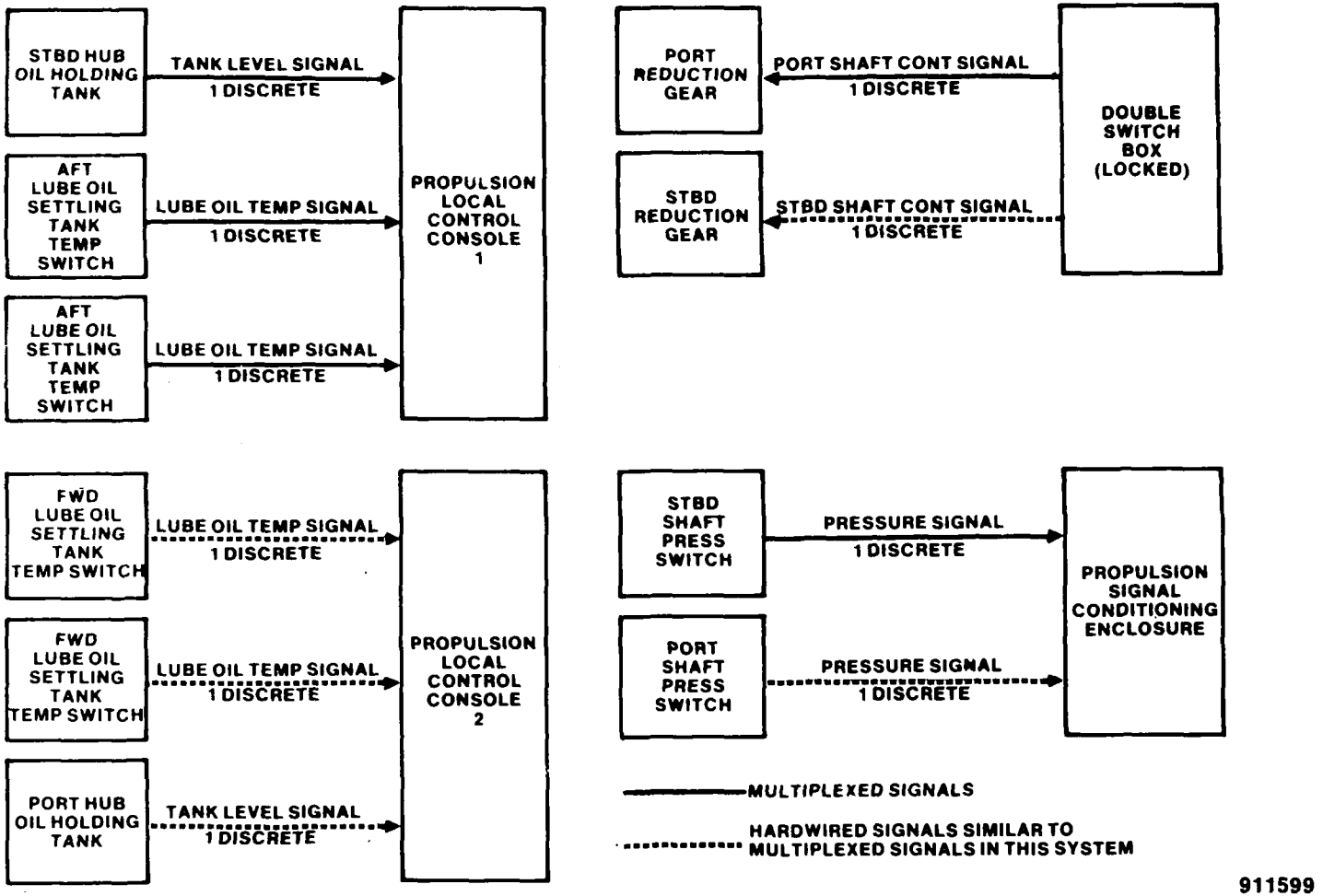


Figure E6. Propulsion system group 05.

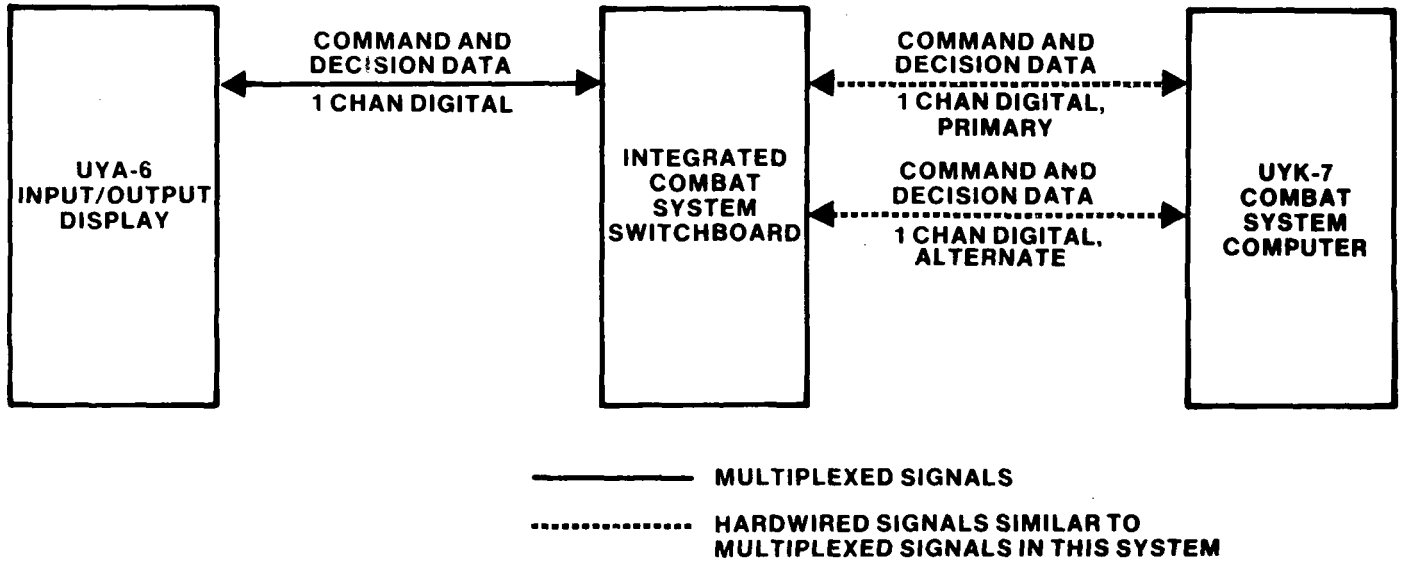


Figure E7. Command and control system group 06.

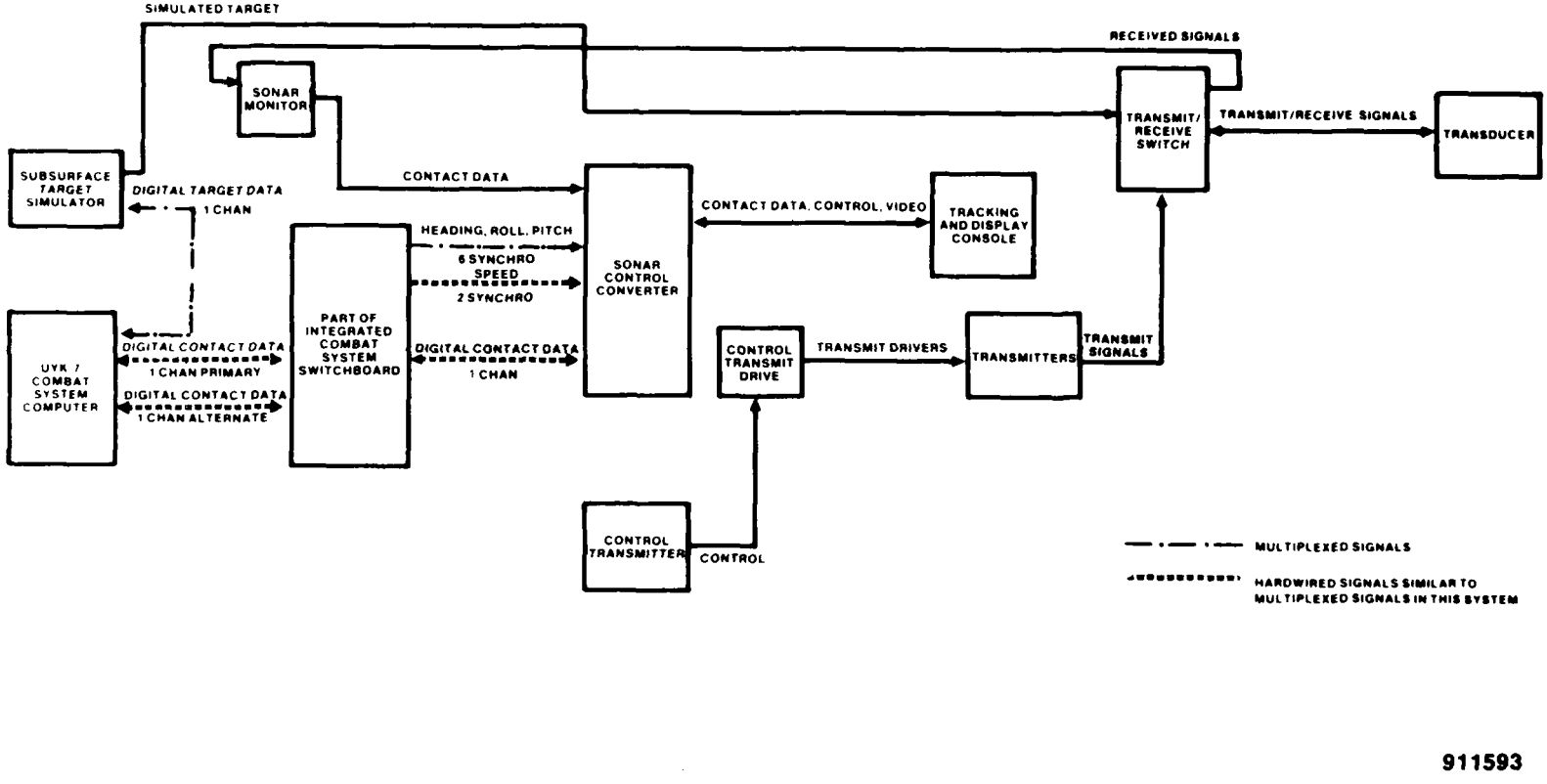


Figure E8. Underwater surveillance system group 07.

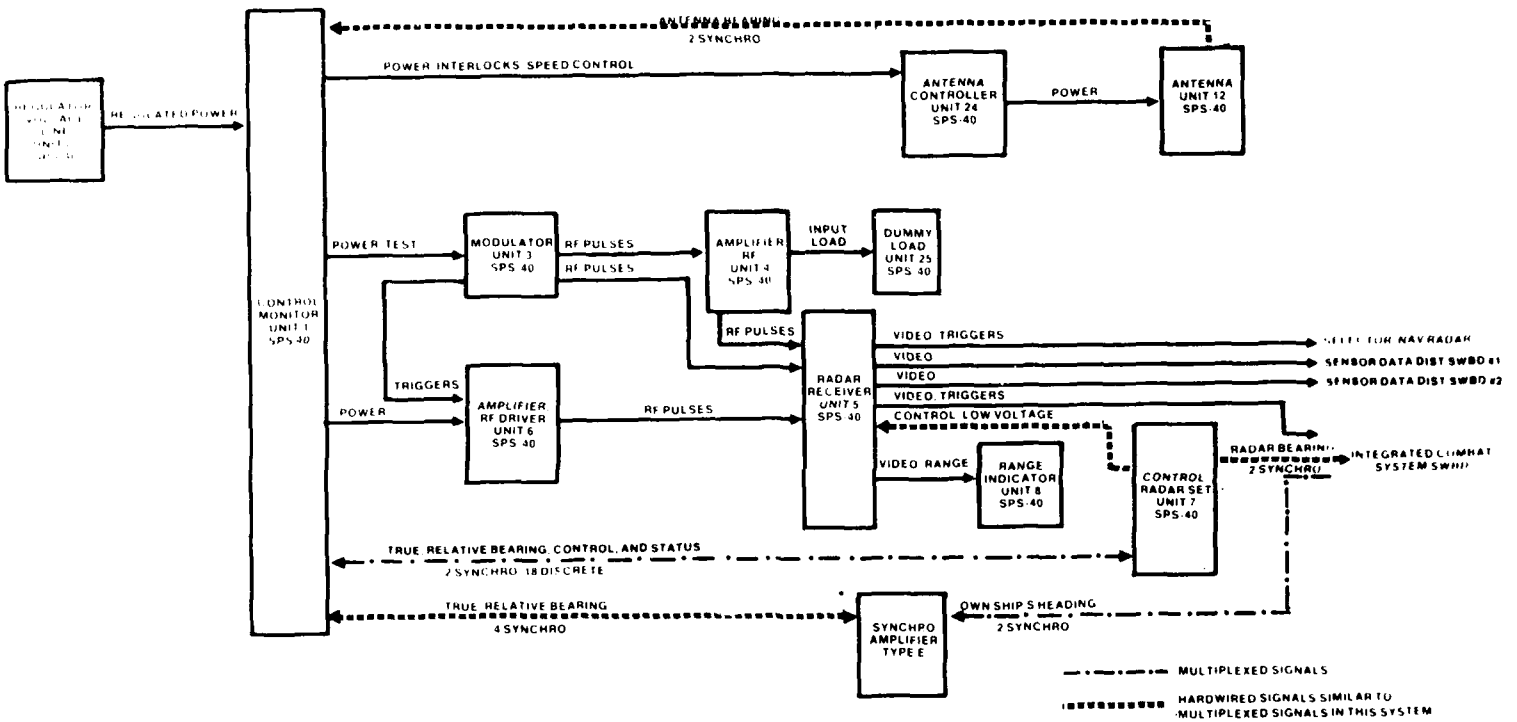


Figure E9. Radar surveillance system group 08.

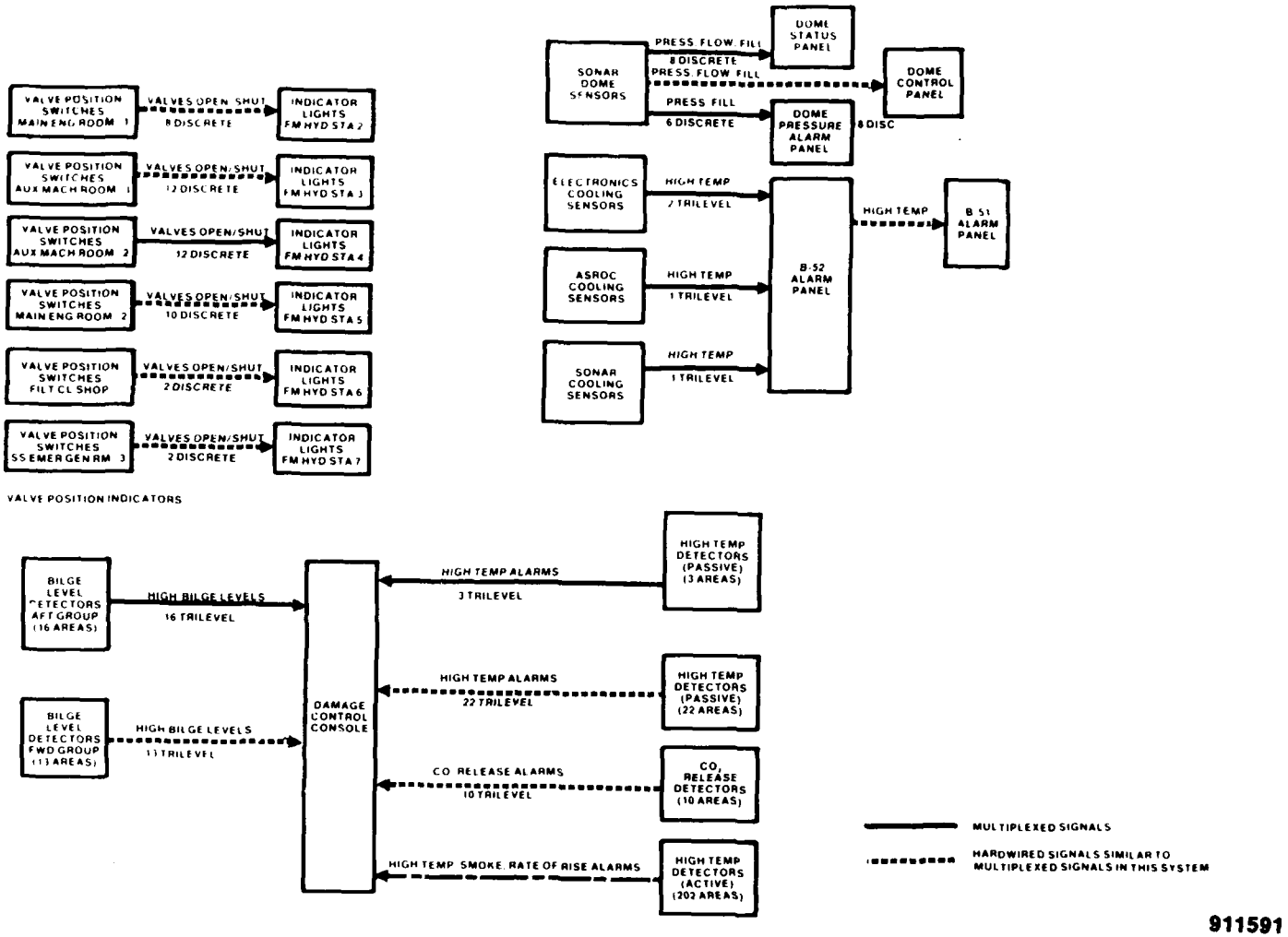


Figure E10. Interior communication system group 09.

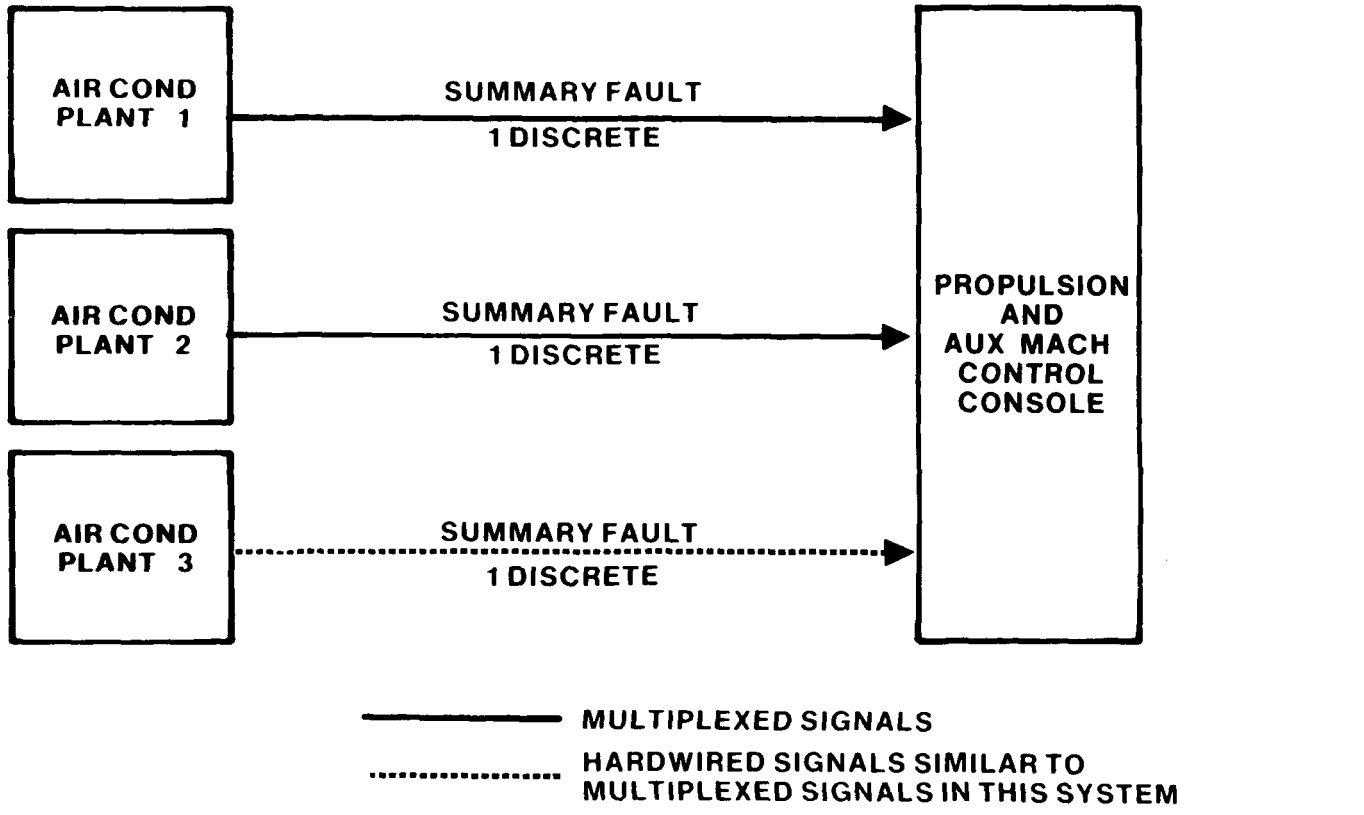


Figure E11. Auxiliary system group 10.

APPENDIX F: SIGNAL SOURCES AND SINKS, WITH COMPARTMENT ADDRESSES

SIGNAL, SOURCE & SINK BY COMAPARTMENT ADDRESS

SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
[illegible] TEMPERATURE SW 1		D	130	05		A	290						10			
[illegible] TEMPERATURE SW 2		D	140	05		A	290						10			
[illegible] PLANT PRESSURE SWITCH		D	300	05		A	250						10			
[illegible] PORT REDUCTION GEAR A		D	080	05		A	240						10			
[illegible] PORT REDUCTION GEAR B		D	080	05		A	240						10			
[illegible] WHEEL SWITCH STBD HDG		D	120	05		A	280						10			
[illegible] INLET TEMP HI ALARM		D	220	04		A	090						10			
[illegible] FILTER DELTA P HIGH		D	220	04		A	090						10			
[illegible] FILTER DELTA P HIGH		D	220	04		A	090						10			
[illegible] TEMPERATURE HIGH ALARM		D	220	04		A	090						10			
[illegible] TEMP HIGH ALARM		D	220	04		A	090						10			
[illegible] STATOR TEMP HIGH		D	220	04		A	090						10			
[illegible] TEMPERATURE HIGH ALARM		D	220	04		A	090						10			
[illegible] BEARING TEMP HIGH ALARM		D	220	04		A	090						10			
[illegible] BEARING TEMP HIGH ALARM		D	220	04		A	090						10			
[illegible] PRESSURE LOW ALARM		D	220	04		A	090						10			
[illegible] ON, GEN #3 MON IND		D	170	04		A	090						10			
[illegible] N (TRIP 3) STATUS SIG		D	170	04		A	090						10			
[illegible] USED STATUS SIGNAL		D	170	04		A	090						10			
[illegible] AIR MAN START COMMAND		D	090	04		A	160						10			
[illegible] DRIVE ORDER A		D	320	01		A	060						10			
[illegible] DRIVE ORDER B		D	320	01		A	060						10			
[illegible] DRIVE ORDER C		D	320	01		A	060						10			
[illegible] SELECT ORDER A		D	320	01		A	060						10			
[illegible] SELECT ORDER B		D	320	01		A	060						10			
[illegible] SELECT ORDER C		D	320	01		A	060						10			
[illegible] DEPTH ORDER A		D	320	01		A	060						10			
[illegible] DEPTH ORDER B		D	320	01		A	060						10			
[illegible] DEPTH ORDER C		D	320	01		A	060						10			
[illegible] SELECT A		D	320	01		A	060						10			
[illegible] SELECT B		D	320	01		A	060						10			
[illegible] SELECT C		D	320	01		A	060						10			
[illegible] SELECT D		D	320	01		A	060						10			
[illegible] ASSIGNED A		D	320	01		A	060						10			
[illegible] ASSIGNED B		D	320	01		A	060						10			
[illegible] ASSIGNED C		D	320	01		A	060						10			
[illegible] CLEAR STARBOARD		D	060	01		A	320						10			
[illegible] CLEAR PORT		D	060	01		A	320						10			
[illegible] ER		D	320	01		A	060						10			
[illegible] MINATE ENABLE		D	320	01		A	060						10			
[illegible] ER MISFIRE		D	060	01		A	320						10			
[illegible] ER READY		D	060	01		A	320						10			
[illegible] STOR CLEAR		D	060	01		A	320						10			
[illegible] ORDER		D	320	01		A	060						10			
[illegible] AWAY		D	060	01		A	320						10			
[illegible] SYSTEM MISFIRE		D	060	01		A	320						10			
[illegible] SYSTEM READY		D	060	01		A	320						10			
[illegible] REMOTE		D	060	01		A	320						10			
[illegible] MISFIRE		D	060	01		A	320						10			
[illegible] RABILITY TEST IND		D	060	01		A	320						10			
[illegible] OVERHEAT WARNING		D	060	01		A	320						10			
[illegible] INTEST CONTROL		D	320	01		A	060						10			
[illegible] TEST CONTROL CODE A		D	320	01		A	060						10			
[illegible] T CONTROL CODE B		D	320	01		A	060						10			
[illegible] T CONTROL CODE C		D	320	01		A	060						10			

SIGNAL ID	SW CC	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM DSP
0450		[illegible] CONTROL CODE D		D	320	01		A	060						10		
0460		[illegible] MODE INDICATION		D	060	01		A	320						10		
0461		WEAP % READY		D	060	01		A	320						10		
0570		GYRO SETTING (SENSE) A		D	060	01		A	320						10		
0580		GYRO SETTING (SENSE) B		D	060	01		A	320						10		
0590		GYRO SETTING (SENSE) C		D	060	01		A	320						10		
0600		GYRO DEPTH SETTG(DEPTH IND)A		D	060	01		A	320						10		
0610		GYRO DEPTH SETTG(DEPTH IND)B		D	060	01		A	320						10		
0620		GYRO DEPTH SETTG(DEPTH IND)C		D	060	01		A	320						10		
0630		TUBE SELECTED A		D	060	01		A	320						10		
0640		TUBE SELECTED B		D	060	01		A	320						10		
0650		TUBE SELECTED C		D	060	01		A	320						10		
0660		TUBE STATUS 1		D	060	01		A	320						10		
0670		TUBE STATUS 2		D	060	01		A	320						10		
0680		TUBE STATUS 3		D	060	01		A	320						10		
0690		TUBE STATUS 4		D	060	01		A	320						10		
0700		TUBE STATUS 5		D	060	01		A	320						10		
0710		TUBE STATUS 6		D	060	01		A	320						10		
0720		SONAR TGT SIMULATOR INPUT		P	235	07		P	320						40	50	
0730		SONAR TGT SIMULATOR OUTPUT		P	320	07		P	235						40	50	
0740		[illegible] DISPLAY GP AN/UYA-6 IN		P	435	06		P	355						40	50	
0750		[illegible] DISPLAY GP AN/UYA-6 OUT		P	355	06		P	435						40	50	
0761A1		OSH INDICATOR PILOT HOUSE		M1	190	03		M1	490						10		
0762A2		OSH INDICATOR PILOT HOUSE		M2	190	03		M2	490						10		
0771A1		OSH INDICATOR IC & GYRO RM 2		M1	190	03		J	200						10		
0781A1		OSH INDICATOR #1 CIC		M1	190	03		J	380						10		
0791A1		OSH INDICATOR #2 CIC		M1	190	03		J	390						10		
0801A1		OSH IND DATA PROCESSING CTR		M1	190	03		J	330						10		
0811A1		OSH TO VERT PLOT BRD (CIC)		M1	190	03		LT	430						10		
0821A1		OSH TO SONAR CONTROL (CIC)		M1	190	03		J	410						10		
0830		OSH INDICATOR IC RM #1		J	210	03		J	180						10		
0841		OSH TO AN/SQS-53 SONAR(ICSS)		M1	340	07		M1	010						10		
0842		OSH TO AN/SQS-53 SONAR(ICSS)		M2	340	07		M2	010						10		
0851B1		OSH IND STEERING GEAR RM		M1	210	03		M1	230						10		
0852B2		OSH IND STEERING GEAR RM		M2	210	03		M2	230						10		
0861B1		OSH IND SHIP CONTROL CONSOLE		M1	210	03		M1	490						10		
0862B2		OSH IND SHIP CONTROL CONSOLE		M2	210	03		M2	490						10		
0871C1		OSH TO RADAR AZIMUTH CONVERT		M1	330	02		M1	350						300		
0872C2		OSH TO RADAR AZIMUTH CONVERT		M2	330	02		M1	350						300		
0881C1		OSH TO TACAN		M1	330	03		L1	440						300		
0882C2		OSH TO TACAN		M2	330	03		L2	440						300		
0891C1		OSH TO SPS-40		M1	330	08		L1	500						10		
0892C2		OSH TO SPS-40		M2	330	08		L2	500						10		
0931C1		OSH TO TDT #2 (VIA ICSS)		M1	330	02		LT	560						10		
0941D1		ROLL TO SQS-53 SONAR (ICSS)		M1	330	07		M1	010						10		
0942D2		ROLL TO SQS-53 SONAR (ICSS)		M2	330	07		M2	010						10		
0951D1		ROLL TO TACAN		M1	330	03		L1	440						10		
0971		PITCH TO SQS-53 SONAR (ICSS)		M1	330	07		M1	010						10		
0972		PITCH TO SQS-53 SONAR (ICSS)		M2	330	07		M2	010						10		
0981		OSH TO SDT MK1 MOD3		M1	330	02		M1	330						300		
0982		OSH TO SDT MK1 MOD3		M2	330	02		M2	330						300		
0991		ROLL TO SDT MK1 MOD3		M1	330	02		M1	330						300		
0992		ROLL TO SDT MK1 MOD3		M2	330	02		M2	330						300		
1001		PITCH TO SDT MK1 MOD3		M1	330	02		M1	330						300		
1002		PITCH TO SDT MK1 MOD3		M2	330	02		M2	330						300		

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM DSP
1011		OWN SHIP SPEED TO SDTMKIMOD3		M1	330	02		M1	330						300		
1012		OWN SHIP SPEED TO SDTMKIMOD3		M2	330	02		M2	330						300		
1020		TACAN EMERGENCY NORMAL		A	420	03		D	440						10		
1030		TACAN EMERGENCY SHUTDOWN		A	420	03		D	440						10		
1040		TACAN EMERG SHUTDN INDICATOR		D	440	03		A	420						10		
1050		TRANSPONDER ON INDICATOR		D	440	03		A	420						10		
1060		TRANSPONDER STANDBY		D	440	03		A	420						10		
1070		MONITOR ALARM		D	440	03		A	420						10		
1080		SYSTEM NORMAL		D	440	03		D	420						10		
1090		HI TEMP DET-B (AV STORE RM)		B	460	09		B	100						40		
1091		HI TEMP DET-A (PORT TORP LAR)		B	470	09		B	100						40		
1092		HI TEMP DET-C (HELO HANGER)		B	480	09		B	100						40		
1100		BILGE LEVEL 6-338-2-F		B	195	09		B	100						40		
1101		BILGE LEVEL 4-464-0-T		B	195	09		B	100						40		
1102		BILGE LEVEL 6-[illegible]4-3-Q		B	195	09		B	100						40		
1103		BILGE LEVEL 6-[illegible]42-4-V		B	195	09		B	100						40		
1104		BILGE LEVEL 6-506-0-F		B	195	09		B	100						40		
1105		BILGE LEVEL 3-[illegible]26-1-E		B	195	09		B	100						40		
1106		BILGE LEVEL 3-[illegible]8-0-Q		B	195	09		B	100						40		
1107		BILGE LEVEL 2-5[illegible]8-1-V		B	195	09		B	100						40		
1110		BILGE LEVEL 5-[illegible]04-0-E		B	195	09		B	100						40		
1111		BILGE LEVEL 5-220-01-E		B	195	09		B	100						40		
1112		BILGE LEVEL 5-2[illegible]0-01-E		B	195	09		B	100						40		
1113		BILGE LEVEL 5-[illegible]00-0-E		B	195	09		B	100						40		
1114		BILGE LEVEL 6-[illegible]62-3-V		B	195	09		B	100						40		
1115		BILGE LEVEL PORT SMAP ALLEY		B	195	09		B	100						40		
1116		BILGE LEVEL STBD SMAP ALLEY		B	195	09		B	100						40		
1117		BILGE LEVEL SEWAGE PLANT		B	195	09		B	100						40		
1120X1		HI LEVEL FILL-AUDIBLE ALARM		D	235	09		G	100						10		
1121X1		HI LEVEL FILL-AUDIBLE ALARM		D	235	09		G	400						10		
1160X2		LO [illegible] WATER PR-AUDIBLE AL		D	235	09		G	100						10		
1161X2		LO [illegible] WATER PR-AUDIBLE AL		D	235	09		G	400						10		
1170X3		LO [illegible] WATER PR-VISUAL AL		D	235	09		G	100						10		
1171X3		LO [illegible] WATER PR-VISUAL AL		D	235	09		G	400						10		
1160X3		HI [illegible] WATER PR-AUDIBLE AL		D	235	09		G	100						10		
1161X3		HI [illegible] WATER PR-AUDIBLE AL		D	235	09		G	400						10		
1190X3		HI [illegible] WATER PR-VISUAL AL		D	235	09		G	100						10		
1191X3		HI [illegible] WATER PR-VISUAL AL		D	235	09		G	400						10		
1210X3		LO PRESS AIR-AUDIBLE ALARM		D	235	09		G	100						10		
1211X3		LO PRESS AIR-AUDIBLE ALARM		D	235	09		G	400						10		
1220		FLOW SWITCH - WATER ON		D	235	09		G	400						10		
1230		FLOW SWITCH - WATER OFF		D	235	09		G	400						10		
1240		AIR [illegible] COOLING ALARM		B	040	09		B	100						40		
1250		SONAR COOLING ALARM		B	040	09		B	100						40		
1260		ELEX HI TEMP ALARM (AL LP 1)		B	360	09		B	100						40		
1270		ELEX HI TEMP ALARM (AL LP 2)		B	360	09		B	100						40		
1280		CABINET INTERLOCK 28VAC		D	370	08		G	450						10		
1290		STANDBY INDICATOR		D	370	08		G	450						10		
1300		28VAC CABINET RADIATE REMOTE		D	370	08		G	450						10		
1310		COOLANT FLOW ALARM INDICATOR		D	370	08		G	450						10		
1320		LEFT ANTENNA SPD CHANGE IND		D	370	08		G	450						10		
1330		LOCAL INDICATOR		D	370	08		G	450						10		
1340		RADIATE INDICATOR		D	370	08		G	450						10		
1350		28VAC RADIATE/RECEIVER TEST		D	450	08		G	370						10		
1360		READY INDICATOR		D	370	08		G	450						10		

SIGNAL ID	SW CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
1370		PRE-STANDBY REMOTE		D	370	09		G	450						10			
1380		RESET LFDM/LMT POWER IND		D	370	08		G	450						10			
1390		STANDBY RECEIVER TEST		D	370	08		G	450						10			
1400		ANTENNA INTERLOCK/OPERATE		D	450	08		G	370						10			
1410		ANTENNA OPERATE INDICATOR		D	370	08		G	450						10			
1420		DUMMY LOAD INDICATOR		D	370	08		G	450						10			
1421		STANDBY/RADIATE		D	370	08		G	450						10			
1430		CABINET OVERHEAT ALARM IND		D	370	08		G	450						10			
1440		AIR PRESSURE ALARM INDICATOR		D	370	08		G	450						10			
1480		AMMO SELECT AAC	MT51	D	320	02		A	030						10			
1490		AMMO SELECT APP	MT51	D	320	02		A	030						10			
1500		AMMO SELECT COM	MT51	D	320	02		A	030						10			
1510		AMMO SELECT CAT	MT51	D	320	02		A	030						10			
1520		AMMO SELECT ILL	MT51	D	320	02		A	030						10			
1530		AMMO SELECT PD	MT51	D	320	02		A	030						10			
1540		AMMO SELECT RAP	MT51	D	320	02		A	030						10			
1550		AMMO SELECT RED CHG	MT51	D	320	02		A	030						10			
1560		AMMO SELECT STD CHG	MT51	D	320	02		A	030						10			
1570		AMMO SELECT VT	MT51	D	320	02		A	030						10			
1580		AMMO SELECT WP	MT51	D	320	02		A	030						10			
1590		DIRECT CONTROL REQUEST	MT51	D	320	02		A	030						10			
1600		FUZE SETTER RUN	MT51	D	320	02		A	030						10			
1610		FUZE SETTER SAFE	MT51	D	320	02		A	030						10			
1620		LOAD ORDER SINGLE	MT51	D	320	02		A	030						10			
1621		LOAD ORDER CONTINUOUS	MT51	D	320	02		A	030						10			
1630		GUN IN STANDBY	MT51	D	030	02		A	320						10			
1640		GUN FIRED	MT51	D	030	02		A	320						10			
1650		GUN READY TO FIRE	MT51	D	030	02		A	320						10			
1651		MOUNT SYNCH	MT51	D	030	02		A	320						10			
1661		FUZE SET ORDER	MT51	M1	320	02		M1	030						300			
1662		FUZE SET ORDER	MT51	M2	320	02		M2	030						300			
1671		GUN ELEVATION ORDER	MT51	M1	320	02		M1	030						300			
1672		GUN ELEVATION ORDER	MT51	M2	320	02		M2	030						300			
1680		ELEVATION RATE ORDER	MT51	C	320	02		C	030						300			
1681		GUN TRAIN ORDER	MT51	M1	320	02		M1	030						300			
1682		GUN TRAIN ORDER	MT51	M2	320	02		M2	030						300			
1690		TRAIN RATE ORDER	MT51	C	320	02		C	030						300			
1711		GUN ELEVATION POSITION	MT51	M1	030	02		M1	320						300			
1712		GUN ELEVATION POSITION	MT51	M2	030	02		M2	320						300			
1721		GUN TRAIN POSITION	MT51	M1	030	02		M1	320						300			
1722		GUN TRAIN POSITION	MT51	M2	030	02		M2	320						300			
1730		AMMO SELECT AAC	MT52	D	320	02		A	150						10			
1740		AMMO SELECT APP	MT52	D	320	02		A	150						10			
1750		AMMO SELECT COM	MT52	D	320	02		A	150						10			
1760		AMMO SELECT CAT	MT52	D	320	02		A	150						10			
1770		AMMO SELECT ILL	MT52	D	320	02		A	150						10			
1780		AMMO SELECT PD	MT52	D	320	02		A	150						10			
1790		AMMO SELECT RAP	MT52	D	320	02		A	150						10			
1800		AMMO SELECT RED CHG	MT52	D	320	02		A	150						10			
1810		AMMO SELECT STD CHG	MT52	D	320	02		A	150						10			
1820		AMMO SELECT VT	MT52	D	320	02		A	150						10			
1830		AMMO SELECT WP	MT52	D	320	02		A	150						10			
1840		DIRECT CONTROL REQUEST	MT52	D	320	02		A	150						10			
1850		FUZE SETTER RUN	MT52	D	320	02		A	150						10			
1860		FUZE SETTER SAFE	MT52	D	320	02		A	150						10			

SIGNAL ID	SA CL	SIGNAL NAME	SIGNAL TRACE CD	SOURCE TYPE	SOURCE ADDR	SOURCE EQPT/CKT	SOURCE SWB	SINK TYPE	SINK ADDR	SINK EQPT/CKT	SINK SWB	UPDATE MODE	UPDATE RED	UPDATE PRTY	UPDATE RATE	DIG WDS	RSK SIG ASM	RSK SIG DSP
1870		LOAD ORDER SINGLE	MT52	D	320	02		A	150						10			
1871		LOAD ORDER CONTINUOUS	MT52	D	320	02		A	150						10			
1880		GUN FIRED	MT52	D	150	02		A	320						10			
1890		GUN IN STANDBY	MT52	D	150	02		A	320						10			
1900		GUN READY TO FIRE	MT52	D	150	02		A	320						10			
1901		MOMENT SYNCH	MT52	D	150	02		A	320						10			
1911	A	GUN ELEVATION ORDER	MT52	M1	321	02		M1	150						300			
1912	A	GUN ELEVATION ORDER	MT52	M2	321	02		M2	150						300			
191281	B	GUN ELEVATION ORDER	MT52	M1	560	02		M1	150						300			
191282	B	GUN ELEVATION ORDER	MT52	M2	560	02		M2	150						300			
191381		GUN ELEVATION ORDER	MT52	M1	560	02		M1	340						300			
191382		GUN ELEVATION ORDER	MT52	M2	560	02		M2	340						300			
1920		ELEVATION RATE ORDER	MT52	C	321	02		C	150						300			
193121	A	GUN TRAIN ORDER	MT52	M1	321	02		M1	150						300			
193122	A	GUN TRAIN ORDER	MT52	M2	321	02		M2	150						300			
193181	B	GUN TRAIN ORDER	MT52	M1	560	02		M1	150						300			
193282	B	GUN TRAIN ORDER	MT52	M2	560	02		M2	150						300			
193381		GUN TRAIN ORDER	MT52	M1	560	02		M1	340						300			
193382		GUN TRAIN ORDER	MT52	M2	560	02		M2	340						300			
194121	D	GUN ELEVATION POSITION	MT52	M1	321	02		M1	321						300			
194122	D	GUN ELEVATION POSITION	MT52	M2	321	02		M2	321						300			
194181	C	GUN ELEVATION POSITION	MT52	M1	150	02		M1	321						300			
194282	C	GUN ELEVATION POSITION	MT52	M2	150	02		M2	321						300			
194381		GUN ELEVATION POSITION	MT52	M1	150	02		M1	340						300			
194382		GUN ELEVATION POSITION	MT52	M2	150	02		M2	340						300			
195121	C	GUN TRAIN POSITION	MT52	M1	150	02		M1	321						300			
195122	C	GUN TRAIN POSITION	MT52	M2	150	02		M2	321						300			
195181	D	GUN TRAIN POSITION	MT52	M1	321	02		M1	321						300			
195282	D	GUN TRAIN POSITION	MT52	M2	321	02		M2	321						300			
195311		GUN TRAIN POSITION	MT52	M1	150	02		M1	340						300			
195312		GUN TRAIN POSITION	MT52	M2	150	02		M2	340						300			
195511		GUN TRAIN POSITION	MT52	M1	150	02		M1	490						300			
1960		TRAIN RATE ORDER	MT52	C	321	02		C	150						300			
197121		FUZE SET ORDER	MT52	M1	321	02		M1	150						300			
197282		FUZE SET ORDER	MT52	M2	321	02		M2	150						300			
1975		TGT-2 DESIGNATED RANGE		M1	560	02		M1	340						300			
1976		TGT-2 DESIGNATED RANGE		M2	560	02		M2	340						300			
1980		AIR COND PLT 1 SUMMARY FAULT		D	260	10		A	110						10			
1990		AIR COND PLT 2 SUMMARY FAULT		D	260	10		A	110						10			
2000		EDUCTOR SUPPLY VALVE OPEN		D	270	09		G	050						10			
2010		EDUCTOR SUPPLY VALVE CLOSED		D	270	09		G	050						10			
2020		EDUCTOR SUCTION VALVE OPEN		D	270	09		G	050						10			
2030		EDUCTOR SUCTION VALVE CLOSED		D	270	09		G	050						10			
2040		EDUCTOR DISCHARGE VALVE OPEN		D	270	09		G	050						10			
2050		EDUCTOR DISCHGE VALVE CLOSED		D	270	09		G	050						10			
2060		SEAWATER PUMP 2 SUC VAL OPEN		D	270	09		G	050						10			
2070		SEAWATER PUMP 2 SUC VAL CLSD		D	270	09		G	050						10			
2080		SEAWATER ISOLATION VAL OPEN		D	270	09		G	050						10			
2090		SEAWATER ISOLATION VAL CLSD		D	270	09		G	050						10			
2100		BHD 300 ISOLATION VAL OPEN		D	270	09		G	050						10			
2110		BHD 300 ISOLATION VAL CLSD		D	270	09		G	050						10			
2121		MT52 SELECT MK-86		A	370	02		SD	050						10			
2122		MT52 SELECT TDT #2		A	370	02		SD	050						10			
2131		POSITION SELECT SDC		A	370	02		SD	050						10			
2132		POSITION SELECT EAT		A	370	02		SD	050						10			

APPENDIX G: ZONE BOUNDARIES

ZONE BOUNDARIES

10/29/79

ZONE	ALT	DECK	FORWARD FRAME	AFTER FRAME	STARBOARD LIMIT	PORT LIMIT	DESCRIPTION
11	12	3	127	138	-14	10	IC ROOM NO 1
11	12	5	138	154	-8	8	PUMP ROOM NO 1
11	12	5	174	204	-10	10	MAIN ENGINE ROOM #1
11	12	5	220	260	-10	10	AUX MACHINE ROOM NO1
21	22	3	382	396	-11	11	GYRO IC ROOM NO2
22	23	2	460	470	-5	5	GUN NO 2 AFT
22	23	2	464	480	-5	5	SS/EMERG GEN 3 S
22	23	3	506	530	-15	15	STEERING GEAR ROOM
23	24	1	366	420	-3	0	TORPEDO ROOM NO 1
23	24	3	426	435	-5	5	SS/EMERG GEN 3 R
31	32	03	140	154	-19	19	PILOT HOUSE
31	32	03	143	177	-26	-15	STBD BRIDGE WING
31	32	03	154	174	-10	4	CHART ROOM
31	32	03	177	188	-20	-8	CO SEA CABIN
31	32	03	143	177	15	26	PORT BRIDGE WING
31	32	03	154	177	0	16	RADAR ROOM NO 1
52	53	01	138	177	-9	-1	DATA PROCESS CENTER
41	42	01	138	177	-9	0	DATA PROCESS CENTER
41	42	1	130	140	-12	0	ASROC COOLHEATEQUIP
42	43	01	138	177	1	20	DATA PROCESS CENTER
42	43	1	13	140	1	20	ASROC COOLHEATEQUIP
51	52	1	80	90	-5	5	GUN NO 1 FORWARD
51	52	1	28	58	-10	10	SONAR EQUIP ROOM NO1
51	52	2	28	58	-8	8	SONAR EQUIP ROOM NO3
51	52	4	28	58	-8	8	SONAR EQUIP ROOM NO3
51	52	1	94	106	-2	0	ASROC LAUNCH CON
61	41	02	138	177	-24	24	COMBAT INFORM CENTER
71	31	01	200	220	-20	2	ELEX COOLWATER EQUIP
71	31	03	212	228	-2	0	ACTIVE ECM ROOM 2
71	31	02	210	230	0	6	TACAN
71	31	02	252	260	-1	0	RADAR ROOM NO 2
71	31	02	260	276	-12	0	AVIATION STOREROOM
71	31	02	260	293	6	12	PASSAGEWAY
71	31	02	267	278	-1	6	HELO DETACH OFFICE
71	31	02	276	284	-12	-4	AVIONICS SHOP
71	31	02	276	292	-12	4	HELO REPAIR SHOP
71	31	02	281	293	2	8	RS TORPEDO ROOM
71	31	02	293	300	10	20	FAN ROOM
71	31	02	293	366	-6	21	HELO HANGER
71	31	02	324	332	-20	-8	HELO CRASH RESCUE RM
71	31	03	292	300	0	6	AFFF ROOM
71	31	03	292	300	-15	-5	FUT ASMD LAUNCH RM
71	31	03	324	336	-18	-6	FIRE CON SYS EQUIPRM
71	31	03	293	300	10	20	FAN ROOM
71	31	03	332	348	14	20	LANDG CONT STA
71	31	03	320	330	10	14	TDT #2 A
81	82	1	270	274	-5	5	PASSAGEWAY
81	82	01	270	316	-12	8	WARDROOM MESS LOUNGE
81	82	01	293	300	-22	-12	FAN ROOM
81	82	2	272	300	-10	10	CENTRAL CONTROL STA
82	83	2	322	330	-5	5	AFT SETTLING TK
82	83	3	276	276	-5	5	GENERAL STORE ROOM
82	83	5	300	345	-5	5	PROF LOC CONT CO
82	83	6	305	350	-5	5	SEWAGE PLANT NO 2

APPENDIX H: REMOTE MULTIPLEXER AND INPUT/OUTPUT UNIT LOCATION SUMMARY

RM/IOU LOCATIONS 10/29/79 PAGE 1

RM	IOU	DECK	FRAME	TRANSVERSE
1		3	127	6
	11	3	130	-6
2		3	383	-9
	21	3	383	-9
	22	2	482	0
	23	3	382	-1
3		03	154	-14
	31	03	154	-14
4		01	156	0
	41	01	156	0
	42	01	156	0
5		01	156	0
	51	1	58	1
	52	01	156	0
6		02	174	-2
	61	02	174	-2
7		01	205	1
	71	01	205	1
8		2	300	0
	81	2	300	0
	82	5	308	27
99		1	0	0
	991	1	0	0
	992	1	0	0

APPENDIX I: SDMS TRANSMISSION CHARACTERISTICS OF EACH CANDIDATE SIGNAL

SIGNAL LIST/DECK, FRAME & TRANSVERSE LOCATIONS

10/29/79

SIGNAL ID	SIGNAL NAME	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
0010	TANK TEMPERATURE SW 1	D	A	P	1	2	323	2	5	340	1	0	10	
0020	TANK TEMPERATURE SW 2	D	A	P	1	2	323	4	5	340	1	0	10	
0030	SEWAGE PLANT PRESSURE SWITCH	D	A	P	1	6	350	4	5	195	0	0	10	
0040	SWITCH PORT REDUCTION GEAR A	D	A	P	1	2	272	0	5	174	0	0	10	
0041	SWITCH PORT REDUCTION GEAR B	D	A	P	1	2	272	0	5	174	0	0	10	
0050	OIL LEVEL SWITCH STBD HUB	D	A	P	1	2	300	-4	5	300	1	0	10	
0060	TURBINE INLET TEMP HI ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0070	LUBO FILTER DELTA P HIGH	D	A	P	1	3	428	-2	2	274	0	0	10	
0080	FUEL OIL FILTER DELTA P HIGH	D	A	P	1	3	428	-2	2	274	0	0	10	
0090	LUBO TEMPERATURE HIGH ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0100	ENG BRGE TEMP HIGH ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0110	GENERATOR STATOR TEMP HIGH	D	A	P	1	3	428	-2	2	274	0	0	10	
0120	AIR TEMPERATURE HIGH ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0130	REAR BEARING TEMP HIGH ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0140	FRT BEARING TEMP HIGH ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0150	LUBO PRESSURE LOW ALARM	D	A	P	1	3	428	-2	2	274	0	0	10	
0160	HEATER ON, GEN #3 MON/IND	D	A	P	1	2	476	-4	2	274	0	0	10	
0170	GEN OPEN (TRIP'D) STATUS SIG	D	A	P	1	2	476	-4	2	274	0	0	10	
0180	GEN CLOSED STATUS SIGNAL	D	A	P	1	2	476	-4	2	274	0	0	10	
0210	GEN LP AIR MAN START COMMAND	D	A	P	1	2	274	0	2	476	-4	0	10	
0220	GYRO DRIVE ORDER A	D	A	P	1	01	150	0	1	395	-2	0	10	
0230	GYRO DRIVE ORDER B	D	A	P	1	01	150	0	1	395	-2	0	10	
0240	GYRO DRIVE ORDER C	D	A	P	1	01	150	0	1	395	-2	0	10	
0250	MODE SELECT ORDER A	D	A	P	1	01	150	0	1	395	-2	0	10	
0260	MODE SELECT ORDER B	D	A	P	1	01	150	0	1	395	-2	0	10	
0270	MODE SELECT ORDER C	D	A	P	1	01	150	0	1	395	-2	0	10	
0280	SEARCH DEPTH ORDER A	D	A	P	1	01	150	0	1	395	-2	0	10	
0290	SEARCH DEPTH ORDER B	D	A	P	1	01	150	0	1	395	-2	0	10	
0300	SEARCH DEPTH ORDER C	D	A	P	1	01	150	0	1	395	-2	0	10	
0310	TUBE SELECT A	D	A	P	1	01	150	0	1	395	-2	0	10	
0320	TUBE SELECT B	D	A	P	1	01	150	0	1	395	-2	0	10	
0330	TUBE SELECT C	D	A	P	1	01	150	0	1	395	-2	0	10	
0340	TUBE SELECT D	D	A	P	1	01	150	0	1	395	-2	0	10	
0350	WEAPON ASSIGNED A	D	A	P	1	01	150	0	1	395	-2	0	10	
0360	WEAPON ASSIGNED B	D	A	P	1	01	150	0	1	395	-2	0	10	

10/29/79

SIGNAL ID	------- SIGNAL NAME --------	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	=SOURCE LOCATION= DECK	FRAME	TRANSV	==SINK LOCATION== DECK	FRAME	TRANSV	NO. WDS	UPDATES PER SEC	VITAL
0370	WEAPON ASSIGNED C	D	A	P	1	01	150	0	1	395	-2	0	10	
0371	SECTOR CLEAR STARBOARD	D	A	P	1	1	395	-2	01	150	0	0	10	
0372	SECTOR CLEAR PORT	D	A	P	1	1	395	-2	01	150	0	0	10	
0380	FIRE ORDER	D	A	P	1	01	150	0	1	395	-2	0	10	
0390	ILLUMINATE ENABLE	D	A	P	1	01	150	0	1	395	-2	0	10	
0400	LAUNCHER MISFIRE	D	A	P	1	1	395	-2	01	150	0	0	10	
0410	LAUNCHER READY	D	A	P	1	1	395	-2	01	150	0	0	10	
0420	FIRING SECTOR CLEAR	D	A	P	1	1	395	-2	01	150	0	0	10	
0430	STANDBY ORDER	D	A	P	1	01	150	0	1	395	-2	0	10	
0440	TORPEDO AWAY	D	A	P	1	1	395	-2	01	150	0	0	10	
0450	TORPEDO SYSTEM MISFIRE	D	A	P	1	1	395	-2	01	150	0	0	10	
0460	TORPEDO SYSTEM READY	D	A	P	1	1	395	-2	01	150	0	0	10	
0470	TSP IN REMOTE	D	A	P	1	1	395	-2	01	150	0	0	10	
0480	TSP MISFIRE	D	A	P	1	1	395	-2	01	150	0	0	10	
0490	TSP OPERABILITY TEST IND	D	A	P	1	1	395	-2	01	150	0	0	10	
0500	TSP OVERHEAT WARNING	D	A	P	1	1	395	-2	01	150	0	0	10	
0510	TSP PRETEST CONTROL	D	A	P	1	01	150	0	1	395	-2	0	10	
0520	TSP TEST CONTROL CODE A	D	A	P	1	01	150	0	1	395	-2	0	10	
0530	TSP TEST CONTROL CODE B	D	A	P	1	01	150	0	1	395	-2	0	10	
0540	TSP TEST CONTROL CODE C	D	A	P	1	01	150	0	1	395	-2	0	10	
0550	TSP TEST CONTROL CODE D	D	A	P	1	01	150	0	1	395	-2	0	10	
0560	TSP TEST MODE INDICATION	D	A	P	1	1	395	-2	01	150	0	0	10	
0561	WEAPON READY	D	A	P	1	1	395	-2	01	150	0	0	10	
0570	GYRO SETTING (SENSE) A	D	A	P	1	1	395	-2	01	150	0	0	10	
0580	GYRO SETTING (SENSE) B	D	A	P	1	1	395	-2	01	150	0	0	10	
0590	GYRO SETTING (SENSE) C	D	A	P	1	1	395	-2	01	150	0	0	10	
0600	GYRO DEPTH SET'G(DEPTH IND)A	D	A	P	1	1	395	-2	01	150	0	0	10	
0610	GYRO DEPTH SET'G(DEPTH IND)B	D	A	P	1	1	395	-2	01	150	0	0	10	
0620	GYRO DEPTH SET'G(DEPTH IND)C	D	A	P	1	1	395	-2	01	150	0	0	10	
0630	TUBE SELECTED A	D	A	P	1	1	395	-2	01	150	0	0	10	
0640	TUBE SELECTED B	D	A	P	1	1	395	-2	01	150	0	0	10	
0650	TUBE SELECTED C	D	A	P	1	1	395	-2	01	150	0	0	10	
0660	TUBE STATUS 1	D	A	P	1	1	395	-2	01	150	0	0	10	
0670	TUBE STATUS 2	D	A	P	1	1	395	-2	01	150	0	0	10	
0680	TUBE STATUS 3	D	A	P	1	1	395	-2	01	150	0	0	10	

10/29/79

SIGNAL ID	SIGNAL NAME	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
0690	TUBE STATUS 4	D	A	P	1	1	395	-2	01	150	0	0	10	
0700	TUBE STATUS 5	D	A	P	1	1	395	-2	01	150	0	0	10	
0710	TUBE STATUS 6	D	A	P	1	1	395	-2	01	150	0	0	10	
0720	SONAR TGT SIMULATOR INPUT	P	P	P	1	4	36	1	01	150	0	50	40	
0730	SONAR TGT SIMULATOR OUTPUT	P	P	P	1	01	150	0	4	36	1	50	40	
0740	I/O DISPLAY GP AN/UYA-6 IN	P	P	P	1	02	170	-2	01	160	-9	50	40	
0750	I/O DISPLAY GP AN/UYA-6 OUT	P	P	P	1	01	160	-9	02	170	-2	50	40	
0761A1	OSH INDICATOR PILOT HOUSE	M1	M1	P	1	3	130	6	03	140	0	1	10	
0762A2	OSH INDICATOR PILOT HOUSE	M2	M2	P	1	3	130	6	03	140	0	1	10	
0771A1	OSH INDICATOR IC & GYRO RM 2	M1	J	P	1	3	130	6	3	392	0	1	10	
0781A1	OSH INDICATOR #1 CIC	M1	J	P	1	3	130	6	02	145	5	1	10	
0791A1	OSH INDICATOR #2 CIC	M1	J	P	1	3	130	6	02	145	10	1	10	
0801A1	OSH IND DATA PROCESSING CTR	M1	J	P	1	3	130	6	01	150	1	1	10	
0811A1	OSH TO VERT PLOT BRD (CIC)	M1	LT	P	1	3	130	6	02	160	-15	1	10	
0821A1	OSH TO SONAR CONTROL (CIC)	M1	J	P	1	3	130	6	02	150	10	1	10	
0830	OSH INDICATOR IC RM #1	J	J	P	1	3	395	-5	3	130	0	1	10	
0841	OSH TO AN/SQS-53 SONAR(ICSS)	M1	M1	P	1	01	150	5	1	30	10	1	10	
0842	OSH TO AN/SQS-53 SONAR(ICSS)	M2	M2	P	1	01	150	5	1	30	10	1	10	
0851B1	OSH IND STEERING GEAR RM	M1	M1	P	1	3	395	-5	3	506	0	1	10	
0852B2	OSH IND STEERING GEAR RM	M2	M2	P	1	3	395	-5	3	506	0	1	10	
0861B1	OSH IND SHIP CONTROL CONSOLE	M1	M1	P	1	3	395	-5	03	140	0	1	10	
0862B2	OSH IND SHIP CONTROL CONSOLE	M2	M2	P	1	3	395	-5	03	140	0	1	10	
0871C1	OSH TO RADAR AZIMUTH CONVERT	M1	M1	P	1	01	150	1	01	155	10	1	300	
0872C2	OSH TO RADAR AZIMUTH CONVERT	M2	M1	P	1	01	150	1	01	155	10	1	300	
0881C1	OSH TO TACAN	M1	L1	P	1	01	150	1	02	220	1	1	300	
0882C2	OSH TO TACAN	M2	L2	P	1	01	150	1	02	220	1	1	300	
0891C1	OSH TO SPS-40	M1	L1	P	1	01	150	1	03	154	20	1	10	
0892C2	OSH TO SPS-40	M2	L2	P	1	01	150	1	03	154	20	1	10	
0931C1	OSH TO TDT #2 (VIA ICSS)	M1	LT	P	1	01	150	1	03	326	13	1	10	
0941D1	ROLL TO SQS-53 SONAR (ICSS)	M1	M1	P	1	01	150	1	1	30	10	1	10	
0942D2	ROLL TO SQS-53 SONAR (ICSS)	M2	M2	P	1	01	150	1	1	30	10	1	10	
0951D1	ROLL TO TACAN	M1	L1	P	1	01	150	1	02	220	1	1	10	
0971	PITCH TO SQS-53 SONAR (ICSS)	M1	M1	P	1	01	150	1	1	30	10	1	10	
0972	PITCH TO SQS-53 SONAR (ICSS)	M2	M2	P	1	01	150	1	1	30	10	1	10	
0981	OSH TO SDT MK1 MOD3	M1	M1	P	1	01	150	1	01	150	1	1	300	

10/29/79

SIGNAL ID	SIGNAL NAME	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
0992	OSH TO SDT MK1 MOD3	M2	M2	P	1	01	150	1	01	150	1	1	300	
0991	ROLL TO SDT MK1 MOD3	M1	M1	P	1	01	150	1	01	150	1	1	300	
0992	ROLL TO SDT MK1 MOD3	M2	M2	P	1	01	150	1	01	150	1	1	300	
1001	PITCH TO SDT MK1 MOD3	M1	M1	P	1	01	150	1	01	150	1	1	300	
1002	PITCH TO SDT MK1 MOD3	M2	M2	P	1	01	150	1	01	150	1	1	300	
1011	OWN SHIP SPEED TO SDTMK1MOD3	M1	M1	P	1	01	150	1	01	150	1	1	300	
1012	OWN SHIP SPEED TO SDTMK1MOD3	M2	M2	P	1	01	150	1	01	150	1	1	300	
1020	TACAN EMERGENCY NORMAL	A	D	P	1	02	152	0	02	220	1	0	10	
1030	TACAN EMERGENCY SHUTDOWN	A	D	P	1	02	152	0	02	220	1	0	10	
1040	TACAN EMERG SHUTDN INDICATOR	D	A	P	1	02	220	1	02	152	0	0	10	
1050	TRANSPONDER ON INDICATOR	D	A	P	1	02	220	1	02	152	0	0	10	
1060	TRANSPONDER STANDBY	D	A	P	1	02	220	1	02	152	0	0	10	
1070	MONITOR ALARM	D	A	P	1	02	220	1	02	152	0	0	10	
1080	SYSTEM NORMAL	D	D	P	1	02	220	1	02	152	0	0	10	
1090	HI TEMP DET-B (AV STORE RM)	B	B	P	1	02	262	0	2	275	0	0	40	
1091	HI TEMP DET-A (RDY TORP LKR)	B	B	P	1	02	282	2	2	275	0	0	40	
1092	HI TEMP DET-C (HELO HANGER)	B	B	P	1	02	342	1	2	275	0	0	40	
1100	BILGE LEVEL 6-338-2-F	B	B	P	1	3	276	5	2	275	0	0	40	
1101	BILGE LEVEL 4-464-0-T	B	B	P	1	3	276	5	2	275	0	0	40	
1102	BILGE LEVEL 6-464-3-Q	B	B	P	1	3	276	5	2	275	0	0	40	
1103	BILGE LEVEL 6-382-4-V	B	B	P	1	3	276	5	2	275	0	0	40	
1104	BILGE LEVEL 6-506-0-F	B	B	P	1	3	276	5	2	275	0	0	40	
1105	BILGE LEVEL 3-426-1-E	B	B	P	1	3	276	5	2	275	0	0	40	
1106	BILGE LEVEL 3-398-0-Q	B	B	P	1	3	276	5	2	275	0	0	40	
1107	BILGE LEVEL 2-518-1-V	B	B	P	1	3	276	5	2	275	0	0	40	
1110	BILGE LEVEL 5-174-0-E	B	B	P	1	3	276	5	2	275	0	0	40	
1111	BILGE LEVEL 5-220-01-E	B	B	P	1	3	276	5	2	275	0	0	40	
1112	BILGE LEVEL 5-260-01-E	B	B	P	1	3	276	5	2	275	0	0	40	
1113	BILGE LEVEL 5-300-0-E	B	B	P	1	3	276	5	2	275	0	0	40	
1114	BILGE LEVEL 6-382-3-V	B	B	P	1	3	276	5	2	275	0	0	40	
1115	BILGE LEVEL PORT SHAFT ALLEY	B	B	P	1	3	276	5	2	275	0	0	40	
1116	BILGE LEVEL STBD SHAFT ALLEY	B	B	P	1	3	276	5	2	275	0	0	40	
1117	BILGE LEVEL SEWAGE PLANT	B	B	P	1	3	276	5	2	275	0	0	40	
1120X1	HI LEVEL FILL-AUDIBLE ALARM	D	G	P	1	4	36	1	2	275	0	0	10	
1121X1	HI LEVEL FILL-AUDIBLE ALARM	D	G	P	1	4	36	1	02	150	2	0	10	

SIGNAL ID	SIGNAL NAME	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
1160x2	LO DOME WATER PR-AUDIBLE AL	D	G	P	1	4	36	1	2	275	0	0	10	
1161x2	LO DOME WATER PR-AUDIBLE AL	D	G	P	1	4	36	1	02	150	2	0	10	
1170x3	LO DOME WATER PR-VISUAL AL	D	G	P	1	4	36	1	2	275	0	0	10	
1171x3	LO DOME WATER PR-VISUAL AL	D	G	P	1	4	36	1	02	150	2	0	10	
1180x4	HI DOME WATER PR-AUDIBLE AL	D	G	P	1	4	36	1	2	275	0	0	10	
1181x4	HI DOME WATER PR-AUDIBLE AL	D	G	P	1	4	36	1	02	150	2	0	10	
1190x5	HI DOME WATER PR-VISUAL AL	D	G	P	1	4	36	1	2	275	0	0	10	
1191x5	HI DOME WATER PR-VISUAL AL	D	G	P	1	4	36	1	02	150	2	0	10	
1210x6	LO PRESS AIR-AUDIBLE ALARM	D	G	P	1	4	36	1	2	275	0	0	10	
1211x6	LO PRESS AIR-AUDIBLE ALARM	D	G	P	1	4	36	1	02	150	2	0	10	
1220	FLOW SWITCH - WATER ON	D	G	P	1	4	36	1	02	150	2	0	10	
1230	FLOW SWITCH - WATER OFF	D	G	P	1	4	36	1	02	150	2	0	10	
1240	ASROC COOLING ALARM	B	B	P	1	1	133	0	2	275	0	0	40	
1250	SONAR COOLING ALARM	B	B	P	1	1	133	0	2	275	0	0	40	
1260	ELEX HI TEMP ALARM (AL LP 1)	B	B	P	1	01	210	1	2	275	0	0	40	
1270	ELEX HI TEMP ALARM (AL LP 2)	B	B	P	1	01	210	1	2	275	0	0	40	
1280	CABINET INTERLOCK 28VAC	D	G	P	1	02	139	0	02	252	0	0	10	
1290	STANDBY INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1300	28VAC CABINET RADIATE REMOTE	D	G	P	1	02	139	0	02	252	0	0	10	
1310	COOLANT FLOW ALARM INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1320	LFOM ANTENNA SPD CHANGE IND	D	G	P	1	02	139	0	02	252	0	0	10	
1330	LOCAL INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1340	RADIATE INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1350	28VAC RADIATE/RECEIVER TEST	D	G	P	1	02	252	0	02	139	0	0	10	
1360	READY INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1370	PRESTANDBY REMOTE	D	G	P	1	02	139	0	02	252	0	0	10	
1380	REMOTE LFOM/LRM POWER IND	D	G	P	1	02	139	0	02	252	0	0	10	
1390	STANDBY RECEIVER TEST	D	G	P	1	02	139	0	02	252	0	0	10	
1400	ANTENNA INTERLOCK/OPERATE	D	G	P	1	02	252	0	02	139	0	0	10	
1410	ANTENNA OPERATE INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1420	DUMMY LOAD INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1421	STANDBY/RADIATE	D	G	P	1	02	139	0	02	252	0	0	10	
1430	CABINET OVERHEAT ALARM IND	D	G	P	1	02	139	0	02	252	0	0	10	
1440	AIR PRESSURE ALARM INDICATOR	D	G	P	1	02	139	0	02	252	0	0	10	
1480	AMMO SELECT ACC MT51	D	A	P	1	01	150	0	1	85	0	0	10	

SIGNAL ID	SIGNAL NAME		INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	-SOURCE LOCATION- DECK	FRAME	TRANSV	--SINK LOCATION-- DECK	FRAME	TRANSV	NO. WDS	UPDATES PER SEC	VITAL
1490	AMMO SELECT AAP	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1500	AMMO SELECT COM	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1510	AMMO SELECT CVT	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1520	AMMO SELECT ILL	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1530	AMMO SELECT PD	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1540	AMMO SELECT RAP	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1550	AMMO SELECT RED CHG	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1560	AMMO SELECT STD CHG	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1570	AMMO SELECT VT	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1580	AMMO SELECT WP	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1590	DIRECT CONTROL REQUEST	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1600	FUZE SETTER RUN	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1610	FUZE SETTER SAFE	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1620	LOAD ORDER SINGLE	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1621	LOAD ORDER CONTINUOUS	MT51	D	A	P	1	01	150	0	1	85	0	0	10	
1630	GUN IN STANDBY	MT51	D	A	P	1	1	85	0	01	150	0	0	10	
1640	GUN FIRED	MT51	D	A	P	1	1	85	0	01	150	0	0	10	
1650	GUN READY TO FIRE	MT51	D	A	P	1	1	85	0	01	150	0	0	10	
1651	MOUNT SYNCH	MT51	D	A	P	1	1	85	0	01	150	0	0	10	
1661	FUZE SET ORDER	MT51	M1	M1	P	1	01	150	0	1	85	0	1	300	
1662	FUZE SET ORDER	MT51	M2	M2	P	1	01	150	0	1	85	0	1	300	
1671	GUN ELEVATION ORDER	MT51	M1	M1	P	1	01	150	0	1	85	0	1	300	
1672	GUN ELEVATION ORDER	MT51	M2	M2	P	1	01	150	0	1	85	0	1	300	
1680	ELEVATION RATE ORDER	MT51	C	C	P	1	01	150	0	1	85	0	1	300	
1691	GUN TRAIN ORDER	MT51	M1	M1	P	1	01	150	0	1	85	0	1	300	
1692	GUN TRAIN ORDER	MT51	M2	M2	P	1	01	150	0	1	85	0	1	300	
1700	TRAIN RATE ORDER	MT51	C	C	P	1	01	150	0	1	85	0	1	300	
1711	GUN ELEVATION POSITION	MT51	M1	M1	P	1	1	85	0	01	150	0	1	300	
1712	GUN ELEVATION POSITION	MT51	M2	M2	P	1	1	85	0	01	150	0	1	300	
1721	GUN TRAIN POSITION	MT51	M1	M1	P	1	1	85	0	01	150	0	1	300	
1722	GUN TRAIN POSITION	MT51	M2	M2	P	1	1	85	0	01	150	0	1	300	
1730	AMMO SELECT AAC	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1740	AMMO SELECT AFP	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1750	AMMO SELECT COM	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1760	AMMO SELECT CVT	MT52	D	A	P	1	01	150	0	2	465	0	0	10	

SIGNAL ID	SIGNAL NAME		INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
1770	AMMO SELECT ILL	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1780	AMMO SELECT PD	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1790	AMMO SELECT RAP	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1800	AMMO SELECT RED CHG	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1810	AMMO SELECT STD CHG	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1820	AMMO SELECT WP	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1830	AMMO SELECT WP	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1840	DIRECT CONTROL REQUEST	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1850	FUZE SETTER RUN	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1860	FUZE SETTER SAFE	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1870	LOAD ORDER SINGLE	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1871	LOAD ORDER CONTINUOUS	MT52	D	A	P	1	01	150	0	2	465	0	0	10	
1880	GUN FIRED	MT52	D	A	P	1	2	465	0	01	150	0	0	10	
1890	GUN IN STANDBY	MT52	D	A	P	1	2	465	0	01	150	0	0	10	
1900	GUN READY TO FIRE	MT52	D	A	P	1	2	465	0	01	150	0	0	10	
1901	MOUNT SYNCH	MT52	D	A	P	1	2	465	0	01	150	0	0	10	
1911	GUN ELEVATION ORDER	MT52	M1	M1	P	1	01	150	-1	2	465	0	1	300	
1911E1	GUN ELEVATION ORDER	MT52	M1	M1	P	1	03	326	13	2	465	0	1	300	
1912	GUN ELEVATION ORDER	MT52	M2	M2	P	1	01	150	-1	2	465	0	1	300	
1912E2	GUN ELEVATION ORDER	MT52	M2	M2	P	1	03	326	13	2	465	0	1	300	
1913E1	GUN ELEVATION ORDER	MT52	M1	M1	P	1	03	326	13	01	150	5	1	300	
1914E2	GUN ELEVATION ORDER	MT52	M2	M2	P	1	03	326	13	01	150	5	1	300	
1920	ELEVATION RATE ORDER	MT52	C	C	P	1	01	150	-1	2	465	0	1	300	
1931F1	GUN TRAIN ORDER	MT52	M1	M1	P	1	01	150	-1	2	465	0	1	300	
1931G1	GUN TRAIN ORDER	MT52	M1	M1	P	1	03	326	13	2	465	0	1	300	
1932F2	GUN TRAIN ORDER	MT52	M2	M2	P	1	01	150	-1	2	465	0	1	300	
1932G2	GUN TRAIN ORDER	MT52	M2	M2	P	1	03	326	13	2	465	0	1	300	
1933G1	GUN TRAIN ORDER	MT52	M1	M1	P	1	03	326	13	01	150	5	1	300	
1934G2	GUN TRAIN ORDER	MT52	M2	M2	P	1	03	326	13	01	150	5	1	300	
1941F1	GUN ELEVATION POSITION	MT52	M1	M1	P	1	01	150	-1	01	150	-1	1	300	
1941H1	GUN ELEVATION POSITION	MT52	M1	M1	P	1	2	465	0	01	150	-1	1	300	
1942F2	GUN ELEVATION POSITION	MT52	M2	M2	P	1	01	150	-1	01	150	-1	1	300	
1942H2	GUN ELEVATION POSITION	MT52	M2	M2	P	1	2	465	0	01	150	-1	1	300	
1943H1	GUN ELEVATION POSITION	MT52	M1	M1	P	1	2	465	0	01	150	5	1	300	
1944H2	GUN ELEVATION POSITION	MT52	M2	M2	P	1	2	465	0	01	150	5	1	300	

10/29/79

SIGNAL ID	SIGNAL NAME	INPUT TYPE	OUTPUT TYPE	UPDATE MODE	P R	SOURCE LOCATION DECK	SOURCE LOCATION FRAME	SOURCE LOCATION TRANSV	SINK LOCATION DECK	SINK LOCATION FRAME	SINK LOCATION TRANSV	NO. WDS	UPDATES PER SEC	VITAL
1951I1	GUN TRAIN POSITION MT52	M1	M1	P	1	2	465	0	01	150	-1	1	300	
1951J1	GUN TRAIN POSITION MT52	M1	M1	P	1	01	150	-1	01	150	-1	1	300	
1952I2	GUN TRAIN POSITION MT52	M2	M2	P	1	2	465	0	01	150	-1	1	300	
1952J2	GUN TRAIN POSITION MT52	M2	M2	P	1	01	150	-1	01	150	-1	1	300	
1953I1	GUN TRAIN POSITION MT52	M1	M1	P	1	2	465	0	01	150	5	1	300	
1953I2	GUN TRAIN POSITION MT52	M2	M2	P	1	2	465	0	01	150	5	1	300	
1955I1	GUN TRAIN POSITION MT52	M1	M1	P	1	2	465	0	03	140	0	1	300	
1960	TRAIN RATE ORDER MT52	C	C	P	1	01	150	-1	2	465	0	1	300	
1971J1	FUZE SET ORDER MT52	M1	M1	P	1	01	150	-1	2	465	0	1	300	
1972J2	FUZE SET ORDER MT52	M2	M2	P	1	01	150	-1	2	465	0	1	300	
1975	TGT-2 DESIGNATED RANGE	M1	M1	P	1	03	326	13	01	150	5	1	300	
1976	TGT-2 DESIGNATED RANGE	M2	M2	P	1	03	326	13	01	150	5	1	300	
1980	AIR COND PLT 1 SUMMARY FAULT	D	A	P	1	5	236	4	2	284	0	0	10	
1990	AIR COND PLT 2 SUMMARY FAULT	D	A	P	1	5	236	4	2	284	0	0	10	
2000	EDUCTOR SUPPLY VALVE OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2010	EDUCTOR SUPPLY VALVE CLOSED	D	G	P	1	5	260	1	1	272	-3	0	10	
2020	EDUCTOR SUCTION VALVE OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2030	EDUCTOR SUCTION VALVE CLOSED	D	G	P	1	5	260	1	1	272	-3	0	10	
2040	EDUCTOR DISCHARGE VALVE OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2050	EDUCTOR DISCHGE VALVE CLOSED	D	G	P	1	5	260	1	1	272	-3	0	10	
2060	SEAWATER PUMP 2 SUC VAL OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2070	SEAWATER PUMP 2 SUC VAL CLSD	D	G	P	1	5	260	1	1	272	-3	0	10	
2080	SEAWATER ISOLATION VAL OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2090	SEAWATER ISOLATION VAL CLSD	D	G	P	1	5	260	1	1	272	-3	0	10	
2100	BHD 300 ISOLATION VAL OPEN	D	G	P	1	5	260	1	1	272	-3	0	10	
2110	BHD 300 ISOLATION VAL CLSD	D	G	P	1	5	260	1	1	272	-3	0	10	
2121	MT52 SELECT MK-86	A	SD	P	1	02	139	0	1	272	-3	0	10	
2122	MT52 SELECT TDT #2	A	SD	P	1	02	139	0	1	272	-3	0	10	
2131	POSITION SELECT SOC	A	SD	P	1	02	139	0	1	272	-3	0	10	
2132	POSITION SELECT EAT	A	SD	P	1	02	139	0	1	272	-3	0	10	

APPENDIX J: SIGNAL TRACE TABLE

SIGNAL TRACE TABLE — 10/29/79 — PAGE 1

SIGNAL ID	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
0010	[illegible] TEMPERATURE SW 1	38	8	82	4	2	1	D		8	82	1	2	1	A		P	1	10	
0020	[illegible] TEMPERATURE SW 2	38	8	82	4	2	2	D		8	82	1	2	2	A		P	1	10	
0030	[illegible] PLANT PRESSURE SWITCH	2	8	82	4	1	1	D		1	11	1	2	1	A		P	1	10	
0040	[illegible] PORT REDUCTION GEAR A	2	8	81	9	1	1	D		1	11	1	1	1	A		P	1	10	
0050	[illegible] PORT REDUCTION GEAR B	2	8	81	9	1	2	D		1	11	1	1	2	A		P	1	10	
0060	[illegible] FUEL SWITCH STBD HUB	38	8	81	9	3	1	D		8	82	1	1	1	A		P	1	10	
0070	[illegible] INLET TEMP #1 ALARM	33	2	23	5	1	1	D		8	81	1	3	1	A		P	1	10	
0080	[illegible] FILTER DELTA P HIGH	33	2	23	5	1	2	D		8	81	1	3	2	A		P	1	10	
0090	[illegible] FILTER DELTA P HIGH	33	2	23	5	1	3	D		8	81	1	3	3	A		P	1	10	
0100	[illegible] TEMPERATURE HIGH ALARM	33	2	23	5	1	4	D		8	81	1	3	4	A		P	1	10	
0110	[illegible] PRESSURE TEMP HIGH ALARM	33	2	23	5	2	1	D		8	81	1	4	1	A		P	1	10	
0120	[illegible] GENERATOR STATOR TEMP HIGH	33	2	23	5	2	2	D		8	81	1	4	2	A		P	1	10	
0130	[illegible] TEMPERATURE HIGH ALARM	33	2	23	5	2	3	D		8	81	1	4	3	A		P	1	10	
0140	[illegible] BEARING TEMP HIGH ALARM	33	2	23	5	2	4	D		8	81	1	4	4	A		P	1	10	
0150	[illegible] BEARING TEMP HIGH ALARM	33	2	23	5	3	1	D		8	81	2	1	1	A		P	1	10	
0160	[illegible] PRESSURE LOW ALARM	33	2	23	5	3	2	D		8	81	2	1	2	A		P	1	10	
0170	[illegible] ON, GEN #3 MON/IND	33	2	22	10	2	1	D		8	81	1	2	1	A		P	1	10	
0180	[illegible] OPEN (TRIPPED) STATUS SIG	33	2	22	10	2	2	D		8	81	1	2	2	A		P	1	10	
0190	[illegible] CLOSED STATUS SIGNAL	33	2	22	10	2	3	D		8	81	1	2	3	A		P	1	10	
0200	[illegible] AIR MAN START COMMAND	9	8	81	9	2	1	D		2	22	2	1	1	A		P	1	10	
0210	[illegible] DRIVE ORDER A	5	4	41	10	1	1	D		2	23	1	1	1	A		P	1	10	
0220	[illegible] DRIVE ORDER B	5	4	41	10	1	2	D		2	23	1	1	2	A		P	1	10	
0230	[illegible] DRIVE ORDER C	5	4	41	10	1	3	D		2	23	1	1	3	A		P	1	10	
0240	[illegible] SELECT ORDER A	5	4	41	10	1	4	D		2	23	1	1	4	A		P	1	10	
0250	[illegible] SELECT ORDER B	5	4	41	10	2	1	D		2	23	1	2	1	A		P	1	10	
0260	[illegible] SELECT ORDER C	5	4	41	10	2	2	D		2	23	1	2	2	A		P	1	10	
0270	[illegible] DEPTH ORDER A	5	4	41	10	2	3	D		2	23	1	2	3	A		P	1	10	
0280	[illegible] DEPTH ORDER B	5	4	41	10	2	4	D		2	23	1	2	4	A		P	1	10	
0290	[illegible] DEPTH ORDER C	5	4	41	10	3	1	D		2	23	1	3	1	A		P	1	10	
0300	[illegible] SELECT A	5	4	41	10	3	2	D		2	23	1	3	2	A		P	1	10	
0310	[illegible] SELECT B	5	4	41	10	3	3	D		2	23	1	3	3	A		P	1	10	
0320	[illegible] SELECT C	5	4	41	10	3	4	D		2	23	1	3	4	A		P	1	10	
0330	[illegible] SELECT D	5	4	41	10	4	1	D		2	23	1	4	1	A		P	1	10	
0340	[illegible] ASSIGNED A	5	4	41	10	4	2	D		2	23	1	4	2	A		P	1	10	
0350	[illegible] ASSIGNED B	5	4	41	10	4	3	D		2	23	1	4	3	A		P	1	10	
0360	[illegible] ASSIGNED C	5	4	41	10	4	4	D		2	23	1	4	4	A		P	1	10	
0371	[illegible] CLEAR STARBOARD	14	2	23	3	1	1	D		4	41	1	2	1	A		P	1	10	
0372	[illegible] CLEAR PORT	14	2	23	3	1	2	D		4	41	1	2	2	A		P	1	10	
0380	[illegible] ORDER	5	4	41	11	1	1	D		2	23	2	1	1	A		P	1	10	
0390	[illegible] ENABLE	5	4	41	11	1	2	D		2	23	2	1	2	A		P	1	10	
0400	[illegible] MISFIRE	14	2	23	3	1	3	D		4	41	1	2	3	A		P	1	10	
0410	[illegible] READY	14	2	23	3	1	4	D		4	41	1	2	4	A		P	1	10	
0420	[illegible] SECTOR CLEAR	14	2	23	3	2	1	D		4	41	1	3	1	A		P	1	10	
0430	[illegible] ORDER	5	4	41	11	1	3	D		2	23	2	1	3	A		P	1	10	
0440	[illegible] AAAY	14	2	23	3	2	2	D		4	41	1	3	2	A		P	1	10	
0450	[illegible] SYSTEM MISFIRE	14	2	23	3	2	3	D		4	41	1	3	3	A		P	1	10	
0460	[illegible] SYSTEM READY	14	2	23	3	2	4	D		4	41	1	3	4	A		P	1	10	
0470	[illegible] REMOTE	14	2	23	3	3	1	D		4	41	1	4	1	A		P	1	10	
0480	[illegible] MISFIRE	14	2	23	3	3	2	D		4	41	1	4	2	A		P	1	10	
0490	[illegible] VERABILITY TEST IND	14	2	23	3	3	3	D		4	41	1	4	3	A		P	1	10	
0500	[illegible] OVERHEAT WARNING	14	2	23	3	3	4	D		4	41	1	4	4	A		P	1	10	
0510	[illegible] METEST CONTROL	5	4	41	11	1	4	D		2	23	2	1	4	A		P	1	10	
0520	TSP TEST CONTROL CODE A	5	4	41	11	2	1	D		2	23	2	2	1	A		P	1	10	
0530	TSP TEST CONTROL CODE B	5	4	41	11	2	2	D		2	23	2	2	2	A		P	1	10	
0540	TSP TEST CONTROL CODE C	5	4	41	11	2	3	D		2	23	2	2	3	A		P	1	10	

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
0550		TSP TEST CONTROL CODE D	5	4	41	11	2	4		D	2	23	2	2	4		A	P	1	10	
0560		TSP TEST MODE INDICATION	14	2	23	3	4	1		D	4	41	2	1	1		A	P	1	10	
0561		*WEAPON READY	14	2	23	3	4	2		D	4	41	2	1	2		A	P	1	10	
0570		GYRO SETTING (SENSE) A	14	2	23	3	4	3		D	4	41	2	1	3		A	P	1	10	
0580		GYRO SETTING (SENSE) B	14	2	23	3	4	4		D	4	41	2	1	4		A	P	1	10	
0590		GYRO SETTING (SENSE) C	14	2	23	4	1	1		D	4	41	2	2	1		A	P	1	10	
0600		GYRO DEPTH SET'G(DEPTH IND)A	14	2	23	4	1	2		D	4	41	2	2	2		A	P	1	10	
0610		GYRO DEPTH SET'G(DEPTH IND)B	14	2	23	4	1	3		D	4	41	2	2	3		A	P	1	10	
0620		GYRO DEPTH SET'G(DEPTH IND)C	14	2	23	4	1	4		D	4	41	2	2	4		A	P	1	10	
0630		TUBE SELECTED A	14	2	23	4	2	1		D	4	41	2	3	1		A	P	1	10	
0640		TUBE SELECTED B	14	2	23	4	2	2		D	4	41	2	3	2		A	P	1	10	
0650		TUBE SELECTED C	14	2	23	4	2	3		D	4	41	2	3	3		A	P	1	10	
0660		TUBE STATUS 1	14	2	23	4	2	4		D	4	41	2	3	4		A	P	1	10	
0670		TUBE STATUS 2	14	2	23	4	3	1		D	4	41	2	4	1		A	P	1	10	
0680		TUBE STATUS 3	14	2	23	4	3	2		D	4	41	2	4	2		A	P	1	10	
0690		TUBE STATUS 4	14	2	23	4	3	3		D	4	41	2	4	3		A	P	1	10	
0700		TUBE STATUS 5	14	2	23	4	3	4		D	4	41	2	4	4		A	P	1	10	
0710		TUBE STATUS 6	14	2	23	4	4	1		D	4	41	3	1	1		A	P	1	10	
0720		SONAR TGT SIMULATOR INPUT	17	5	51	12	1	1		P	4	41	6	1	1		P	P	1	40	50
0730		SONAR TGT SIMULATOR OUTPUT	22	4	41	15	1	1		P	5	51	9	1	1		P	P	1	40	50
0740		I/O DISPLAY GP AN/UYA-6 IN	25	6	61	11	1	1		P	5	52	3	1	1		P	P	1	40	50
0750		I/O DISPLAY GP AN/UYA-6 OUT	28	5	52	7	1	1		P	6	61	8	1	1		P	P	1	40	50
0761A1		OSH INDICATOR PILOT HOUSE	10	1	11	5	1	1		J	3	31	1	1	1		J	P	1	10	1
07624Z		OSH INDICATOR PILOT HOUSE	10	1	11	5	2	1		J	3	31	1	2	1		J	P	1	10	1
0771A1		OSH INDICATOR IC & GYRO RM 2	3	1	11	5	1	1	M	J	2	21	1	1	1		J	P	1	10	1
0781A1		OSH INDICATOR #1 CIC	26	1	11	5	1	1	M	J	6	61	4	1	1		J	P	1	10	1
0791A1		OSH INDICATOR #2 CIC	26	1	11	5	1	1	M	J	6	61	4	2	1		J	P	1	10	1
0801A1		OSH IND DATA PROCESSING CTR	13	1	11	5	1	1	M	J	4	42	1	1	1		J	P	1	10	1
0811A1		OSH TO VERT PLOT BRD (CIC)	26	1	11	5	1	1	M	J	6	61	6	1	1		LT	P	1	10	1
0821A1		OSH TO SONAR CONTROL (CIC)	26	1	11	5	1	1	M	J	6	61	4	3	1		J	P	1	10	1
0830		OSH INDICATOR IC RM #1	1	2	21	3	1	1		J	1	11	2	1	1		J	P	1	10	1
0841		OSH TO AN/SQS-53 SONAR(ICSS)	21	4	42	15	3	1		J	5	51	5	3	1		J	P	1	10	1
0842		OSH TO AN/SQS-53 SONAR(ICSS)	21	4	42	15	4	1		J	5	51	5	4	1		J	P	1	10	1
0851B1		OSH IND STEERING GEAR RM	4	2	21	3	2	1		J	2	22	4	1	1		J	P	1	10	1
0852B2		OSH IND STEERING GEAR RM	4	2	21	3	3	1		J	2	22	4	2	1		J	P	1	10	1
0861B1		OSH IND SHIP CONTROL CONSOLE	11	2	21	3	2	1	M	J	3	31	1	3	1		J	P	1	10	1
0862B2		OSH IND SHIP CONTROL CONSOLE	11	2	21	3	3	1	M	J	3	31	1	4	1		J	P	1	10	1
0871C1		OSH TO RADAR AZIMUTH CONVERT	15	4	42	13	1	1		J	4	42	3	2	1		J	P	1	300	1
0872C2		OSH TO RADAR AZIMUTH CONVERT	15	4	42	13	2	1		J	4	42	3	3	1		J	P	1	300	1
0881D1		OSH TO TACAN	30	4	42	13	1	1	M	J	7	71	3	1	1		LT	P	1	300	1
0882D2		OSH TO TACAN	30	4	42	13	2	1	M	J	7	71	5	1	1		LT	P	1	300	1
0891E1		OSH TO SPS-40	12	4	42	13	1	1	M	J	3	31	5	1	1		LT	P	1	10	1
0892E2		OSH TO SPS-40	12	4	42	13	2	1	M	J	3	31	7	1	1		LT	P	1	10	1
0941D1		OSH TO TDT #1 (VIA ICSS)	30	4	42	13	1	1	M	J	7	71	7	1	1		LT	P	1	10	1
0941B1		ROLL TO SQS-53 SONAR (ICSS)	21	4	42	16	1	1		J	5	51	7	1	1		J	P	1	10	1
0942B2		ROLL TO SQS-53 SONAR (ICSS)	21	4	42	16	2	1		J	5	51	7	2	1		J	P	1	10	1
0951D1		ROLL TO TACAN	30	4	42	16	1	1	M	J	7	71	9	1	1		LT	P	1	10	1
0971		PITCH TO SQS-53 SONAR (ICSS)	21	4	42	16	3	1		J	5	51	7	3	1		J	P	1	10	1
0972		PITCH TO SQS-53 SONAR (ICSS)	21	4	42	16	4	1		J	5	51	7	4	1		J	P	1	10	1
0981		OSH TO SDT MK1 MOD3	15	4	42	13	3	1		J	4	42	3	4	1		J	P	1	300	1
0982		OSH TO SDT MK1 MOD3	15	4	42	13	4	1		J	4	42	5	1	1		J	P	1	300	1
0991		ROLL TO SDT MK1 MOD3	15	4	42	14	1	1		J	4	42	5	2	1		J	P	1	300	1
0992		ROLL TO SDT MK1 MOD3	15	4	42	14	2	1		J	4	42	5	3	1		J	P	1	300	1
1001		PITCH TO SDT MK1 MOD3	15	4	42	14	3	1		J	4	42	5	4	1		J	P	1	300	1
1002		PITCH TO SDT MK1 MOD3	15	4	42	14	4	1		J	4	42	7	1	1		J	P	1	300	1

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1011		OWN SHIP SPEED TO SDTMA1MOD3	15	4	42	15	1	1		J	4	42	7	2	1		J	P	1	300	1
1012		OWN SHIP SPEED TO SDTMA1MOD3	15	4	42	15	2	1		J	4	42	7	3	1		J	P	1	300	1
1020		TACAN EMERGENCY NORMAL	31	6	61	9	1	1		A	7	71	1	1	1		D	P	1	10	
1030		TACAN EMERGENCY SHUTDOWN	31	6	61	9	1	2		A	7	71	1	1	2		D	P	1	10	
1040		TACAN EMERG SHUTDN INDICATOR	29	7	71	12	1	1		D	6	61	1	1	1		A	P	1	10	
1050		TRANSPONDER ON INDICATOR	29	7	71	12	1	2		D	6	61	1	1	2		A	P	1	10	
1060		TRANSPONDER STANDBY	29	7	71	12	1	3		D	6	61	1	1	3		A	P	1	10	
1070		MONITOR ALARM	29	7	71	12	1	4		D	6	61	1	1	4		A	P	1	10	
1080		SYSTEM NORMAL	29	7	71	12	2	1		D	6	61	2	1	1		D	P	1	10	
1090		HI TEMP DET-B (AV STORE RM)	37	7	71	11	1	1		B	8	81	3	2	1		B	P	1	40	
1091		HI TEMP DET-A (RDY TORP LKR)	37	7	71	11	1	2		B	8	81	3	2	2		B	P	1	40	
1092		HI TEMP DET-C (HELO HANGER)	37	7	71	11	2	1		B	8	81	3	3	1		B	P	1	40	
1100		BILGE LEVEL 6-338-2-F	38	8	82	2	1	1		B	8	81	4	1	1		B	P	1	40	
1101		BILGE LEVEL 4-464-0-T	38	8	82	2	1	2		B	8	81	4	1	2		B	P	1	40	
1102		BILGE LEVEL 6-464-3-Q	38	8	82	2	2	1		B	8	81	4	2	1		B	P	1	40	
1103		BILGE LEVEL 6-382-4-V	38	8	82	2	2	2		B	8	81	4	2	2		B	P	1	40	
1104		BILGE LEVEL 6-506-0-F	38	8	82	2	3	1		B	8	81	4	3	1		B	P	1	40	
1105		BILGE LEVEL 3-426-1-E	38	8	82	2	3	2		B	8	81	4	3	2		B	P	1	40	
1106		BILGE LEVEL 3-398-0-Q	38	8	82	2	4	1		B	8	81	4	4	1		B	P	1	40	
1107		BILGE LEVEL 2-518-1-V	38	8	82	2	4	2		B	8	81	4	4	2		B	P	1	40	
1110		BILGE LEVEL 5-174-0-E	38	8	82	3	1	1		B	8	81	5	1	1		B	P	1	40	
1111		BILGE LEVEL 5-220-01-E	38	8	82	3	1	2		B	8	81	5	1	2		B	P	1	40	
1112		BILGE LEVEL 5-260-01-E	38	8	82	3	2	1		B	8	81	5	2	1		B	P	1	40	
1113		BILGE LEVEL 5-300-0-E	38	8	82	3	2	2		B	8	81	5	2	2		B	P	1	40	
1114		BILGE LEVEL 6-382-3-V	38	8	82	3	3	1		B	8	81	5	3	1		B	P	1	40	
1115		BILGE LEVEL PORT SHAFT ALLEY	38	8	82	3	3	2		B	8	81	5	3	2		B	P	1	40	
1116		BILGE LEVEL STBD SHAFT ALLEY	38	8	82	3	4	1		B	8	81	5	4	1		B	P	1	40	
1117		BILGE LEVEL SEWAGE PLANT	38	8	82	3	4	2		B	8	81	5	4	2		B	P	1	40	
1120X1		HI LEVEL FILL-AUDIBLE ALARM	35	5	51	10	3	1		D	8	81	6	4	1		G	P	1	10	
1121X1		HI LEVEL FILL-AUDIBLE ALARM	27	5	51	10	3	1	M	D	6	61	3	1	1		G	P	1	10	
1160X2		LO DOME WATER PR-AUDIBLE AL	35	5	51	10	3	2		D	8	81	6	4	2		G	P	1	10	
1161X2		LO DOME WATER PR-AUDIBLE AL	27	5	51	10	3	2	M	D	6	61	3	1	2		G	P	1	10	
1170X3		LO DOME WATER PR-VISUAL AL	35	5	51	10	3	3		D	8	81	6	4	3		G	P	1	10	
1171X3		LO DOME WATER PR-VISUAL AL	27	5	51	10	3	3	M	D	6	61	3	1	3		G	P	1	10	
1180X4		HI DOME WATER PR-AUDIBLE AL	35	5	51	10	3	4		D	8	81	6	4	4		G	P	1	10	
1181X4		HI DOME WATER PR-AUDIBLE AL	27	5	51	10	3	4	M	D	6	61	3	1	4		G	P	1	10	
1190X5		HI DOME WATER PR-VISUAL AL	35	5	51	10	4	1		D	8	81	7	1	1		G	P	1	10	
1191X5		HI DOME WATER PR-VISUAL AL	27	5	51	10	4	1	M	D	6	61	3	2	1		G	P	1	10	
1210X6		LO PRESS AIR-AUDIBLE ALARM	35	5	51	10	4	2		D	8	81	7	1	2		G	P	1	10	
1211X6		LO PRESS AIR-AUDIBLE ALARM	27	5	51	10	4	2	M	D	6	61	3	2	2		G	P	1	10	
1220		FLOW SWITCH - WATER ON	27	5	51	10	2	1		D	6	61	3	2	3		G	P	1	10	
1230		FLOW SWITCH - WATER OFF	27	5	51	10	2	2		D	6	61	3	2	4		G	P	1	10	
1240		ASROC COOLING ALARM	34	4	41	7	1	1		B	8	81	3	1	1		B	P	1	40	
1250		SONAR COOLING ALARM	34	4	41	7	1	2		B	8	81	3	1	2		B	P	1	40	
1260		ELEX HI TEMP ALARM (AL LP 1)	37	7	71	11	2	2		B	8	81	3	3	2		B	P	1	40	
1270		ELEX HI TEMP ALARM (AL LP 2)	37	7	71	11	3	1		B	8	81	3	4	1		B	P	1	40	
1280		CABINET INTERLOCK 28VAC	31	6	61	10	1	1		D	7	71	2	1	1		G	P	1	10	
1290		STANDBY INDICATOR	31	6	61	10	1	2		D	7	71	2	1	2		G	P	1	10	
1300		28VAC CABINET RADIATE REMOTE	31	6	61	10	1	3		D	7	71	2	1	3		G	P	1	10	
1310		COOLANT FLOW ALARM INDICATOR	31	6	61	10	1	4		D	7	71	2	1	4		G	P	1	10	
1320		LFCM ANTENNA SPD CHANGE IND	31	6	61	10	2	1		D	7	71	2	2	1		G	P	1	10	
1330		LOCAL INDICATOR	31	6	61	10	2	2		D	7	71	2	2	2		G	P	1	10	
1340		RADIATE INDICATOR	31	6	61	10	2	3		D	7	71	2	2	3		G	P	1	10	
1350		28VAC RADIATE/RECEIVER TEST	29	7	71	12	2	2		D	6	61	3	3	1		G	P	1	10	
1360		READY INDICATOR	31	6	61	10	2	4		D	7	71	2	2	4		G	P	1	10	

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1370		PRESTANDBY REMOTE	31	6	61	10	3	1		D	7	71	2	3	1		G	P	1	10	
1380		REMOTE LFDM/LRM POWER IND	31	6	61	10	3	2		D	7	71	2	3	2		G	P	1	10	
1390		STANDBY RECEIVER TEST	31	6	61	10	3	3		D	7	71	2	3	3		G	P	1	10	
1400		ANTENNA INTERLOCK/OPERATE	29	7	71	12	2	3		D	6	61	3	3	2		G	P	1	10	
1410		ANTENNA OPERATE INDICATOR	31	6	61	10	3	4		D	7	71	2	3	4		G	P	1	10	
1420		DUMMY LOAD INDICATOR	31	6	61	10	4	1		D	7	71	2	4	1		G	P	1	10	
1421		STANDBY/RADIATE	31	6	61	10	4	2		D	7	71	2	4	2		G	P	1	10	
1430		CABINET OVERHEAT ALARM IND	31	6	61	10	4	3		D	7	71	2	4	3		G	P	1	10	
1440		AIR PRESSURE ALARM INDICATOR	31	6	61	10	4	4		D	7	71	2	4	4		G	P	1	10	
1480		AMMO SELECT AAC MT51	21	4	41	11	3	1		D	5	51	1	1	1		A	P	1	10	
1490		AMMO SELECT APP MT51	21	4	41	11	3	2		D	5	51	1	1	2		A	P	1	10	
1500		AMMO SELECT COM MT51	21	4	41	11	3	3		D	5	51	1	1	3		A	P	1	10	
1510		AMMO SELECT CVT MT51	21	4	41	11	3	4		D	5	51	1	1	4		A	P	1	10	
1520		AMMO SELECT ILL MT51	21	4	41	11	4	1		D	5	51	1	2	1		A	P	1	10	
1530		AMMO SELECT PD MT51	21	4	41	11	4	2		D	5	51	1	2	2		A	P	1	10	
1540		AMMO SELECT RAP MT51	21	4	41	11	4	3		D	5	51	1	2	3		A	P	1	10	
1550		AMMO SELECT RED CHG MT51	21	4	41	11	4	4		D	5	51	1	2	4		A	P	1	10	
1560		AMMO SELECT STD CHG MT51	21	4	41	12	1	1		D	5	51	1	3	1		A	P	1	10	
1570		AMMO SELECT VT MT51	21	4	41	12	1	2		D	5	51	1	3	2		A	P	1	10	
1580		AMMO SELECT WP MT51	21	4	41	12	1	3		D	5	51	1	3	3		A	P	1	10	
1590		DIRECT CONTROL REQUEST MT51	21	4	41	12	1	4		D	5	51	1	3	4		A	P	1	10	
1600		FUZE SETTER RUN MT51	21	4	41	12	2	1		D	5	51	1	4	1		A	P	1	10	
1610		FUZE SETTER SAFE MT51	21	4	41	12	2	2		D	5	51	1	4	2		A	P	1	10	
1620		LOAD ORDER SINGLE MT51	21	4	41	12	2	3		D	5	51	1	4	3		A	P	1	10	
1621		LOAD ORDER CONTINUOUS MT51	21	4	41	12	2	4		D	5	51	1	4	4		A	P	1	10	
1630		GUN IN STANDBY MT51	16	5	51	10	1	1		D	4	41	3	2	1		A	P	1	10	
1640		GUN FIRED MT51	16	5	51	10	1	2		D	4	41	3	2	2		A	P	1	10	
1650		GUN READY TO FIRE MT51	16	5	51	10	1	3		D	4	41	3	2	3		A	P	1	10	
1651		MOUNT SYNCH MT51	16	5	51	10	1	4		D	4	41	3	2	4		A	P	1	10	
1661		FUZE SET ORDER MT51	23	4	41	13	1	1		J	5	51	3	1	1		J	P	1	300	1
1662		FUZE SET ORDER MT51	23	4	41	13	2	1		J	5	51	3	2	1		J	P	1	300	1
1671		GUN ELEVATION ORDER MT51	23	4	41	13	3	1		J	5	51	3	3	1		J	P	1	300	1
1672		GUN ELEVATION ORDER MT51	23	4	41	13	4	1		J	5	51	3	4	1		J	P	1	300	1
1680		ELEVATION RATE ORDER MT51	23	4	41	8	1	1		C	5	51	2	1	1		C	P	1	300	1
1691		GUN TRAIN ORDER MT51	23	4	41	14	1	1		J	5	51	5	1	1		J	P	1	300	1
1692		GUN TRAIN ORDER MT51	23	4	41	14	2	1		J	5	51	5	2	1		J	P	1	300	1
1700		TRAIN RATE ORDER MT51	23	4	41	8	2	1		C	5	51	2	2	1		C	P	1	300	1
1711		GUN ELEVATION POSITION MT51	18	5	51	11	1	1		J	4	41	4	1	1		J	P	1	300	1
1712		GUN ELEVATION POSITION MT51	18	5	51	11	2	1		J	4	41	4	2	1		J	P	1	300	1
1721		GUN TRAIN POSITION MT51	18	5	51	11	3	1		J	4	41	4	3	1		J	P	1	300	1
1722		GUN TRAIN POSITION MT51	18	5	51	11	4	1		J	4	41	4	4	1		J	P	1	300	1
1730		AMMO SELECT AAC MT52	5	4	41	9	1	1		D	2	22	1	1	1		A	P	1	10	
1740		AMMO SELECT APP MT52	5	4	41	9	1	2		D	2	22	1	1	2		A	P	1	10	
1750		AMMO SELECT COM MT52	5	4	41	9	1	3		D	2	22	1	1	3		A	P	1	10	
1760		AMMO SELECT CVT MT52	5	4	41	9	1	4		D	2	22	1	1	4		A	P	1	10	
1770		AMMO SELECT ILL MT52	5	4	41	9	2	1		D	2	22	1	2	1		A	P	1	10	
1780		AMMO SELECT PD MT52	5	4	41	9	2	2		D	2	22	1	2	2		A	P	1	10	
1790		AMMO SELECT RAP MT52	5	4	41	9	2	3		D	2	22	1	2	3		A	P	1	10	
1800		AMMO SELECT RED CHG MT52	5	4	41	9	2	4		D	2	22	1	2	4		A	P	1	10	
1810		AMMO SELECT STD CHG MT52	5	4	41	9	3	1		D	2	22	1	3	1		A	P	1	10	
1820		AMMO SELECT VT MT52	5	4	41	9	3	2		D	2	22	1	3	2		A	P	1	10	
1830		AMMO SELECT WP MT52	5	4	41	9	3	3		D	2	22	1	3	3		A	P	1	10	
1840		DIRECT CONTROL REQUEST MT52		4	41	9	3	4		D	2	22	1	3	4		A	P	1	10	
1850		FUZE SETTER RUN MT52		4	41	9	4	1		D	2	22	1	4	1		A	P	1	10	
1860		FUZE SETTER SAFE MT52	5	4	41	9	4	2		D	2	22	1	4	2		A	P	1	10	

SIGNAL ID	SA CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1870		LOAD ORDER SINGLE	MT52	5	4	41	9	4	3	D	2	22	1	4	3		A	P	1	10	
1871		LOAD ORDER CONTINUOUS	MT52	5	4	41	9	4	4	D	2	22	1	4	4		A	P	1	10	
1880		GUN FIRED	MT52	14	2	22	10	1	1	D	4	41	1	1	1		A	P	1	10	
1890		GUN ON STANDBY	MT52	14	2	22	10	1	2	D	4	41	1	1	2		A	P	1	10	
1900		GUN READY TO FIRE	MT52	14	2	22	10	1	3	D	4	41	1	1	3		A	P	1	10	
1901		MOUNT SYNCH	MT52	14	2	22	10	1	4	D	4	41	1	1	4		A	P	1	10	
1911	A	GUN ELEVATION ORDER	MT52	7	5	52	5	1	1	J	2	22	4	3	1		J	P	1	300	1
1911E1	B	GUN ELEVATION ORDER	MT52	8	7	71	13	1	1	J	2	22	4	3	1		J	P	1	300	1
1912	A	GUN ELEVATION ORDER	MT52	7	5	52	5	2	1	J	2	22	4	4	1		J	P	1	300	1
1912E2	B	GUN ELEVATION ORDER	MT52	8	7	71	13	2	1	J	2	22	4	4	1		J	P	1	300	1
1913E1		GUN ELEVATION ORDER	MT52	19	7	71	13	1	1	M J	4	42	7	4	1		J	P	1	300	1
1914E2		GUN ELEVATION ORDER	MT52	19	7	71	13	2	1	M J	4	42	9	1	1		J	P	1	300	1
1920		ELEVATION RATE ORDER	MT52	6	5	52	4	1	1	C	2	22	3	1	1		C	P	1	300	1
1931E1	A	GUN TRAIN ORDER	MT52	7	5	52	5	3	1	J	2	22	6	1	1		J	P	1	300	1
1931E1	B	GUN TRAIN ORDER	MT52	8	7	71	13	3	1	J	2	22	6	1	1	M	J	P	1	300	1
1932E2	A	GUN TRAIN ORDER	MT52	7	5	52	5	4	1	J	2	22	6	2	1		J	P	1	300	1
1932E2	B	GUN TRAIN ORDER	MT52	8	7	71	13	4	1	J	2	22	6	2	1	M	J	P	1	300	1
1933E1		GUN TRAIN ORDER	MT52	19	7	71	13	3	1	M J	4	42	9	2	1		J	P	1	300	1
1934E2		GUN TRAIN ORDER	MT52	19	7	71	13	4	1	M J	4	42	9	3	1		J	P	1	300	1
1941E1	D	GUN ELEVATION POSITION	MT52	24	5	52	5	3	1	M J	5	52	1	3	1		J	P	1	300	1
1942E1	C	GUN ELEVATION POSITION	MT52	20	2	22	11	1	1	J	5	52	1	3	1	M	J	P	1	300	1
1942E2	D	GUN ELEVATION POSITION	MT52	24	5	52	5	4	1	M J	5	52	1	4	1		J	P	1	300	1
1942E2	C	GUN ELEVATION POSITION	MT52	20	2	22	11	2	1	J	5	52	1	4	1	M	J	P	1	300	1
1943E1		GUN ELEVATION POSITION	MT52	14	2	22	11	1	1	M J	4	42	1	2	1		J	P	1	300	1
1943E2		GUN ELEVATION POSITION	MT52	14	2	22	11	2	1	M J	4	42	1	3	1		J	P	1	300	1
1951E1	C	GUN TRAIN POSITION	MT52	20	2	22	11	3	1	J	5	52	1	1	1		J	P	1	300	1
1951E1	D	GUN TRAIN POSITION	MT52	24	5	52	6	1	1	J	5	52	1	1	1	M	J	P	1	300	1
1952E2	C	GUN TRAIN POSITION	MT52	20	2	22	11	4	1	J	5	52	1	2	1		J	P	1	300	1
1952E2	D	GUN TRAIN POSITION	MT52	24	5	52	6	2	1	J	5	52	1	2	1	M	J	P	1	300	1
1953E1		GUN TRAIN POSITION	MT52	14	2	22	11	3	1	M J	4	42	1	4	1		J	P	1	300	1
1953E2		GUN TRAIN POSITION	MT52	14	2	22	11	4	1	M J	4	42	3	1	1		J	P	1	300	1
1954E1		GUN TRAIN POSITION	MT52	11	2	22	11	3	1	M J	3	31	3	1	1		J	P	1	300	1
1960		TRAIN RATE ORDER	MT52	6	5	52	4	2	1	C	2	22	3	2	1		C	P	1	300	1
1971J1		FUZE SET ORDER	MT52	6	5	52	6	1	1	M J	2	22	6	3	1		J	P	1	300	1
1972J2		FUZE SET ORDER	MT52	6	5	52	6	2	1	M J	2	22	6	4	1		J	P	1	300	1
1975		TGT-2 DESIGNATED RANGE		19	7	71	14	1	1	J	4	42	9	4	1		J	P	1	300	1
1976		TGT-2 DESIGNATED RANGE		19	7	71	14	2	1	J	4	42	11	1	1		J	P	1	300	1
1980		AIR COND PLT 1 SUMMARY FAULT		32	1	11	4	1	1	D	8	81	1	1	1		A	P	1	10	
1990		AIR COND PLT 2 SUMMARY FAULT		32	1	11	4	1	2	D	8	81	1	1	2		A	P	1	10	
2000		EDUCTOR SUPPLY VALVE OPEN		32	1	11	4	1	3	D	8	81	6	1	1		G	P	1	10	
2010		EDUCTOR SUPPLY VALVE CLOSED		32	1	11	4	1	4	D	8	81	6	1	2		G	P	1	10	
2020		EDUCTOR SUCTION VALVE OPEN		32	1	11	4	2	1	D	8	81	6	1	3		G	P	1	10	
2030		EDUCTOR SUCTION VALVE CLOSED		32	1	11	4	2	2	D	8	81	6	1	4		G	P	1	10	
2040		EDUCTOR DISCHARGE VALVE OPEN		32	1	11	4	2	3	D	8	81	6	2	1		G	P	1	10	
2050		EDUCTOR DISCHGE VALVE CLOSED		32	1	11	4	2	4	D	8	81	6	2	2		G	P	1	10	
2060		SEAWATER PUMP 2 SUC VAL OPEN		32	1	11	4	3	1	D	8	81	6	2	3		G	P	1	10	
2070		SEAWATER PUMP 2 SUC VAL CLSD		32	1	11	4	3	2	D	8	81	6	2	4		G	P	1	10	
2080		SEAWATER ISOLATION VAL OPEN		32	1	11	4	3	3	D	8	81	6	3	1		G	P	1	10	
2090		SEAWATER ISOLATION VAL CLSD		32	1	11	4	3	4	D	8	81	6	3	2		G	P	1	10	
2100		BHD 300 ISOLATION VAL OPEN		32	1	11	4	4	1	D	8	81	6	3	3		G	P	1	10	
2110		BHD 300 ISOLATION VAL CLSD		32	1	11	4	4	2	D	8	81	6	3	4		G	P	1	10	
2121		MT52 SELECT MK-86		36	6	61	9	2	1	A	8	81	8	1	1		S	P	1	10	
2122		MT52 SELECT TDT #2		36	6	61	9	2	2	A	8	81	8	2	1		S	P	1	10	
2131		POSITION SELECT SDC		36	6	61	9	2	3	A	8	81	8	3	1		S	P	1	10	
2132		POSITION SELECT EAT		36	6	61	9	2	4	A	8	81	8	4	1		S	P	1	10	

APPENDIX K: INPUT/OUTPUT INSTALLATION AND WIRING LIST

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
1	11	3	127	6	3	138	-6

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	0040	1	1	1	1 -2	1 -2	62
1	A	O	0041	1	1	1	3 -4	1 -2	62
1	A	O	0030	2	1	2	1 -2	1 -2	83
2	J	O	0830	1	2	1	1 -7	1 -7	14
4	D	I	1980	1	4	1	1 -2	1 -2	128
4	D	I	1990	1	4	1	3 -4	1 -2	128
4	D	I	2000	1	4	1	5 -6	1 -2	149
4	D	I	2010	1	4	1	7 -8	1 -2	149
4	D	I	2020	2	4	2	1 -2	1 -2	149
4	D	I	2030	2	4	2	3 -4	1 -2	149
4	D	I	2040	2	4	2	5 -6	1 -2	149
4	D	I	2050	2	4	2	7 -8	1 -2	149
4	D	I	2060	3	4	3	1 -2	1 -2	149
4	D	I	2070	3	4	3	3 -4	1 -2	149
4	D	I	2080	3	4	3	5 -6	1 -2	149
4	D	I	2090	3	4	3	7 -8	1 -2	149
4	D	I	2100	4	4	4	1 -2	1 -2	149
4	D	I	2110	4	4	4	3 -4	1 -2	149
5	J	I	0761A1 0771A1 0781A1 0791A1 0801A1 0811A1 0821A1	1	5	1	1 -7	1 -7	20
5	J	I	0762A2	2	5	2	1 -7	1 -7	20

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
2	21	3	383	-9	3	383	-9

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	J	O	0771A1	1	1	1	1 -7	1 -7	18
3	J	I	0830	1	3	1	1 -7	1 -7	16
3	J	I	0851B1 0861B1	2	3	2	1 -7	1 -7	16
3	J	I	0852B2 0862B2	3	3	3	1 -7	1 -7	16

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
2	22	3	383	-9	2	482	0

IOU SLOT NUMBER	ICM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	1730	1	1	1	1 -2	1 -2	17
1	A	O	1740	1	1	1	3 -4	1 -2	17
1	A	O	1750	1	1	1	5 -6	1 -2	17
1	A	O	1760	1	1	1	7 -8	1 -2	17
1	A	O	1770	2	1	2	1 -2	1 -2	17
1	A	O	1780	2	1	2	3 -4	1 -2	17
1	A	O	1790	2	1	2	5 -6	1 -2	17
1	A	O	1800	2	1	2	7 -8	1 -2	17
1	A	O	1810	3	1	3	1 -2	1 -2	17
1	A	O	1820	3	1	3	3 -4	1 -2	17
1	A	O	1830	3	1	3	5 -6	1 -2	17
1	A	O	1840	3	1	3	7 -8	1 -2	17
1	A	O	1850	4	1	4	1 -2	1 -2	17
1	A	O	1860	4	1	4	3 -4	1 -2	17
1	A	O	1870	4	1	4	5 -6	1 -2	17
1	A	O	1871	4	1	4	7 -8	1 -2	17
2	A	O	0210	1	2	1	1 -2	1 -2	10
3	C	O	1920	1	3	1	1 -3	1 -3	17
3	C	O	1960	2	3	2	1 -3	1 -3	17
4	J	O	0851B1	1	4	1	1 -7	1 -7	34
4	J	O	0852B2	2	4	2	1 -7	1 -7	34
4	J	O	1911 1911E1	3	4	3	1 -7	1 -7	17
4	J	O	1912 1912E2	4	4	4	1 -7	1 -7	17
6	J	O	1931F1 1931G1	1	6	1	1 -7	1 -7	17
6	J	O	1932F2 1932G2	2	6	2	1 -7	1 -7	17
6	J	O	1971J1	3	6	3	1 -7	1 -7	17
6	J	O	1972J2	4	6	4	1 -7	1 -7	17
10	D	I	1880	1	10	1	1 -2	1 -2	17
10	D	I	1890	1	10	1	3 -4	1 -2	17
10	D	I	1900	1	10	1	5 -6	1 -2	17
10	D	I	1901	1	10	1	7 -8	1 -2	17
10	D	I	0160	2	10	2	1 -2	1 -2	10
10	D	I	0170	2	10	2	3 -4	1 -2	10
10	D	I	0180	2	10	2	5 -6	1 -2	10
11	J	I	1941H1 1943H1	1	11	1	1 -7	1 -7	17
11	J	I	1942H2 1944H2	2	11	2	1 -7	1 -7	17
11	J	I	1951I1 1953I1 1955I1	3	11	3	1 -7	1 -7	17
11	J	I	1952I2 1954I2	4	11	4	1 -7	1 -7	17

RM NAME	RM NUMBER	RM LOCATION DECK FRAME TRANS	IOU/J-BOX LOCATION DECK FRAME TRANS
2	23	3 383 -9	3 382 -1

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	0220	1	1	1	1 -2	1 -2	34
1	A	O	0230	1	1	1	3 -4	1 -2	34
1	A	O	0240	1	1	1	5 -6	1 -2	34
1	A	O	0250	1	1	1	7 -8	1 -2	34
1	A	O	0260	2	1	2	1 -2	1 -2	34
1	A	O	0270	2	1	2	3 -4	1 -2	34
1	A	O	0280	2	1	2	5 -6	1 -2	34
1	A	O	0290	2	1	2	7 -8	1 -2	34
1	A	O	0300	3	1	3	1 -2	1 -2	34
1	A	O	0310	3	1	3	3 -4	1 -2	34
1	A	O	0320	3	1	3	5 -6	1 -2	34
1	A	O	0330	3	1	3	7 -8	1 -2	34
1	A	O	0340	4	1	4	1 -2	1 -2	34
1	A	O	0350	4	1	4	3 -4	1 -2	34
1	A	O	0360	4	1	4	5 -6	1 -2	34
1	A	O	0370	4	1	4	7 -8	1 -2	34
2	A	O	0380	1	2	1	1 -2	1 -2	34
2	A	O	0390	1	2	1	3 -4	1 -2	34
2	A	O	0430	1	2	1	5 -6	1 -2	34
2	A	O	0510	1	2	1	7 -8	1 -2	34
2	A	O	0520	2	2	2	1 -2	1 -2	34
2	A	O	0530	2	2	2	3 -4	1 -2	34
2	A	O	0540	2	2	2	5 -6	1 -2	34
2	A	O	0550	2	2	2	7 -8	1 -2	34
3	D	I	0371	1	3	1	1 -2	1 -2	34
3	D	I	0372	1	3	1	3 -4	1 -2	34
3	D	I	0400	1	3	1	5 -6	1 -2	34
3	D	I	0410	1	3	1	7 -8	1 -2	34
3	D	I	0420	2	3	2	1 -2	1 -2	34
3	D	I	0440	2	3	2	3 -4	1 -2	34
3	D	I	0450	2	3	2	5 -6	1 -2	34
3	D	I	0460	2	3	2	7 -8	1 -2	34
3	D	I	0470	3	3	3	1 -2	1 -2	34
3	D	I	0480	3	3	3	3 -4	1 -2	34
3	D	I	0490	3	3	3	5 -6	1 -2	34
3	D	I	0500	3	3	3	7 -8	1 -2	34
3	D	I	0560	4	3	4	1 -2	1 -2	34
3	D	I	0561	4	3	4	3 -4	1 -2	34
3	D	I	0570	4	3	4	5 -6	1 -2	34
3	D	I	0580	4	3	4	7 -8	1 -2	34
4	D	I	0590	1	4	1	1 -2	1 -2	34
4	D	I	0600	1	4	1	3 -4	1 -2	34
4	D	I	0610	1	4	1	5 -6	1 -2	34
4	D	I	0620	1	4	1	7 -8	1 -2	34
4	D	I	0630	2	4	2	1 -2	1 -2	34
4	D	I	0640	2	4	2	3 -4	1 -2	34
4	D	I	0650	2	4	2	5 -6	1 -2	34
4	D	I	0660	2	4	2	7 -8	1 -2	34
4	D	I	0670	3	4	3	1 -2	1 -2	34

RM NUMBER	ICU/J-BOX NUMBER	RM LOCATION DECK FRAME TRANS	ICU/J-BOX LOCATION DECK FRAME TRANS
2	23	3 383 -9	3 382 -1

ICU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
4	D	I	0660	3	4	3	3 -4	1 -2	34
4	D	I	0690	3	4	3	5 -6	1 -2	34
4	D	I	0700	3	4	3	7 -8	1 -2	34
4	D	I	0710	4	4	4	1 -2	1 -2	34
5	D	I	0060	1	5	1	1 -2	1 -2	47
5	D	I	0070	1	5	1	3 -4	1 -2	47
5	D	I	0080	1	5	1	5 -6	1 -2	47
5	D	I	0090	1	5	1	7 -8	1 -2	47
5	D	I	0100	2	5	2	1 -2	1 -2	47
5	D	I	0110	2	5	2	3 -4	1 -2	47
5	D	I	0120	2	5	2	5 -6	1 -2	47
5	D	I	0130	2	5	2	7 -8	1 -2	47
5	D	I	0140	3	5	3	1 -2	1 -2	47
5	D	I	0150	3	5	3	3 -4	1 -2	47

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK FRAME TRANS	IOU/J-BOX LOCATION DECK FRAME TRANS
3	31	03 154 -14	03 154 -14

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	[illegible]	O	07B1A1	1	1	1	1 -7	1 -7	28
1	[illegible]	O	0762A2	2	1	2	1 -7	1 -7	28
1	[illegible]	O	0861B1	3	1	3	1 -7	1 -7	28
1	[illegible]	O	0862B2	4	1	4	1 -7	1 -7	28
3	[illegible]	O	1955I1	1	3	1	1 -7	1 -7	28
5	LT	O	0891C1	1	5	1	1 -7	1 -7	34
7	LT	O	0892C2	1	7	1	1 -7	1 -7	34

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	FRAME	TRANS	IOU/J-BOX LOCATION DECK	FRAME	TRANS
4	41	01	156	0	01	156	0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	1680	1	1	1	1 -2	1 -2	6
1	A	O	1690	1	1	1	3 -4	1 -2	6
1	A	O	1900	1	1	1	5 -6	1 -2	6
1	A	O	1901	1	1	1	7 -8	1 -2	6
1	A	O	0371	2	1	2	1 -2	1 -2	6
1	A	O	0372	2	1	2	3 -4	1 -2	6
1	A	O	0400	2	1	2	5 -6	1 -2	6
1	A	O	0410	2	1	2	7 -8	1 -2	6
1	A	O	0420	3	1	3	1 -2	1 -2	6
1	A	O	0440	3	1	3	3 -4	1 -2	6
1	A	O	0450	3	1	3	5 -6	1 -2	6
1	A	O	0460	3	1	3	7 -8	1 -2	6
1	A	O	0470	4	1	4	1 -2	1 -2	6
1	A	O	0480	4	1	4	3 -4	1 -2	6
1	A	O	0490	4	1	4	5 -6	1 -2	6
1	A	O	0500	4	1	4	7 -8	1 -2	6
2	A	O	0560	1	2	1	1 -2	1 -2	6
2	A	O	0561	1	2	1	3 -4	1 -2	6
2	A	O	0570	1	2	1	5 -6	1 -2	6
2	A	O	0580	1	2	1	7 -8	1 -2	6
2	A	O	0590	2	2	2	1 -2	1 -2	6
2	A	O	0600	2	2	2	3 -4	1 -2	6
2	A	O	0610	2	2	2	5 -6	1 -2	6
2	A	O	0620	2	2	2	7 -8	1 -2	6
2	A	O	0630	3	2	3	1 -2	1 -2	6
2	A	O	0640	3	2	3	3 -4	1 -2	6
2	A	O	0650	3	2	3	5 -6	1 -2	6
2	A	O	0660	3	2	3	7 -8	1 -2	6
2	A	O	0670	4	2	4	1 -2	1 -2	6
2	A	O	0680	4	2	4	3 -4	1 -2	6
2	A	O	0690	4	2	4	5 -6	1 -2	6
2	A	O	0700	4	2	4	7 -8	1 -2	6
3	A	O	0710	1	3	1	1 -2	1 -2	6
3	A	O	1630	2	3	2	1 -2	1 -2	6
3	A	O	1640	2	3	2	3 -4	1 -2	6
3	A	O	1650	2	3	2	5 -6	1 -2	6
3	A	O	1651	2	3	2	7 -8	1 -2	6
4	J	O	1711	1	4	1	1 -7	1 -7	6
4	J	O	1712	2	4	2	1 -7	1 -7	6
4	J	O	1721	3	4	3	1 -7	1 -7	6
4	J	O	1722	4	4	4	1 -7	1 -7	6
6	P	O	0720	1	6	1	1-73	1-73	6
7	B	I	1240	1	7	1	1 -2	1 -2	33
7	B	I	1250	1	7	1	3 -4	1 -2	33
8	C	I	1680	1	8	1	1 -2	1 -2	6
8	C	I	1700	2	8	2	1 -2	1 -2	6
9	D	I	1730	1	9	1	1 -2	1 -2	6
9	D	I	1740	1	9	1	3 -4	1 -2	6
9	D	I	1750	1	9	1	5 -6	1 -2	6

RM NUMBER	IOU/U-BOX NUMBER	RM LOCATION DECK FRAME TRANS	IOU/U-BOX LOCATION DECK FRAME TRANS
4	41	01 156 0	01 156 0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
9	D	I	1760	1	9	1	7 -8	1 -2	6
9	D	I	1770	2	9	2	1 -2	1 -2	6
9	D	I	1780	2	9	2	3 -4	1 -2	6
9	D	I	1790	2	9	2	5 -6	1 -2	6
9	D	I	1800	2	9	2	7 -8	1 -2	6
9	D	I	1810	3	9	3	1 -2	1 -2	6
9	D	I	1820	3	9	3	3 -4	1 -2	6
9	D	I	1830	3	9	3	5 -6	1 -2	6
9	D	I	1840	3	9	3	7 -8	1 -2	6
9	D	I	1850	4	9	4	1 -2	1 -2	6
9	D	I	1860	4	9	4	3 -4	1 -2	6
9	D	I	1870	4	9	4	5 -6	1 -2	6
9	D	I	1871	4	9	4	7 -8	1 -2	6
10	D	I	0220	1	10	1	1 -2	1 -2	6
10	D	I	0230	1	10	1	3 -4	1 -2	6
10	D	I	0240	1	10	1	5 -6	1 -2	6
10	D	I	0250	1	10	1	7 -8	1 -2	6
10	D	I	0260	2	10	2	1 -2	1 -2	6
10	D	I	0270	2	10	2	3 -4	1 -2	6
10	D	I	0280	2	10	2	5 -6	1 -2	6
10	D	I	0290	2	10	2	7 -8	1 -2	6
10	D	I	0300	3	10	3	1 -2	1 -2	6
10	D	I	0310	3	10	3	3 -4	1 -2	6
10	D	I	0320	3	10	3	5 -6	1 -2	6
10	D	I	0330	3	10	3	7 -8	1 -2	6
10	D	I	0340	4	10	4	1 -2	1 -2	6
10	D	I	0350	4	10	4	3 -4	1 -2	6
10	D	I	0360	4	10	4	5 -6	1 -2	6
10	D	I	0370	4	10	4	7 -8	1 -2	6
11	D	I	0380	1	11	1	1 -2	1 -2	6
11	D	I	0390	1	11	1	3 -4	1 -2	6
11	D	I	0430	1	11	1	5 -6	1 -2	6
11	D	I	0510	1	11	1	7 -8	1 -2	6
11	D	I	0520	2	11	2	1 -2	1 -2	6
11	D	I	0530	2	11	2	3 -4	1 -2	6
11	D	I	0540	2	11	2	5 -6	1 -2	6
11	D	I	0550	2	11	2	7 -8	1 -2	6
11	D	I	1480	3	11	3	1 -2	1 -2	6
11	D	I	1490	3	11	3	3 -4	1 -2	6
11	D	I	1500	3	11	3	5 -6	1 -2	6
11	D	I	1510	3	11	3	7 -8	1 -2	6
11	D	I	1520	4	11	4	1 -2	1 -2	6
11	D	I	1530	4	11	4	3 -4	1 -2	6
11	D	I	1540	4	11	4	5 -6	1 -2	6
11	D	I	1550	4	11	4	7 -8	1 -2	6
12	D	I	1560	1	12	1	1 -2	1 -2	6
12	D	I	1570	1	12	1	3 -4	1 -2	6
12	D	I	1580	1	12	1	5 -6	1 -2	6
12	D	I	1590	1	12	1	7 -8	1 -2	6

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK FRAME TRANS	IOU/J-BOX LOCATION DECK FRAME TRANS
4	41	01 156 0	01 156 0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
12	J	I	1600	2	12	2	1 -2	1 -2	6
12	J	I	1610	2	12	2	3 -4	1 -2	6
12	J	I	1620	2	12	2	5 -6	1 -2	6
12	J	I	1621	2	12	2	7 -8	1 -2	6
13	J	I	1661	1	13	1	1 -7	1 -7	6
13	J	I	1662	2	13	2	1 -7	1 -7	6
13	J	I	1671	3	13	3	1 -7	1 -7	6
13	J	I	1672	4	13	4	1 -7	1 -7	6
14	J	I	1691	1	14	1	1 -7	1 -7	6
14	J	I	1692	2	14	2	1 -7	1 -7	6
15	P	I	0730	1	15	1	1-73	1-73	6

RM NUMBER	IOU J-BOX NUMBER	RM LOCATION DECK FRAME TRANS	IOU/J-BOX LOCATION DECK FRAME TRANS
4	42	01 156 0	01 156 0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	J	O	0801A1	1	1	1	1 -7	1 -7	7
1	J	O	1943H1	2	1	2	1 -7	1 -7	11
1	J	O	1944H2	3	1	3	1 -7	1 -7	11
1	J	O	1953I1	4	1	4	1 -7	1 -7	11
3	J	O	1954I2	1	3	1	1 -7	1 -7	11
3	J	O	0871C1	2	3	2	1 -7	1 -7	11
3	J	O	0872C2	3	3	3	1 -7	1 -7	11
3	J	O	0981	4	3	4	1 -7	1 -7	7
5	J	O	0982	1	5	1	1 -7	1 -7	7
5	J	O	0991	2	5	2	1 -7	1 -7	7
5	J	O	0992	3	5	3	1 -7	1 -7	7
5	J	O	1001	4	5	4	1 -7	1 -7	7
7	J	O	1002	1	7	1	1 -7	1 -7	7
7	J	O	1011	2	7	2	1 -7	1 -7	7
7	J	O	1012	3	7	3	1 -7	1 -7	7
7	J	O	1913E1	4	7	4	1 -7	1 -7	11
9	J	O	1914E2	1	9	1	1 -7	1 -7	11
9	J	O	1933G1	2	9	2	1 -7	1 -7	11
9	J	O	1934G2	3	9	3	1 -7	1 -7	11
9	J	O	1975	4	9	4	1 -7	1 -7	11
11	J	O	1976	1	11	1	1 -7	1 -7	11
13	J	I	0871C1 0881C1 0891C1 0931C1	1	13	1	1 -7	1 -7	7
13	J	I	0872C2 0882C2 0892C2	2	13	2	1 -7	1 -7	7
13	J	I	0981	3	13	3	1 -7	1 -7	7
13	J	I	0982	4	13	4	1 -7	1 -7	7
14	J	I	0991	1	14	1	1 -7	1 -7	7
14	J	I	0992	2	14	2	1 -7	1 -7	7
14	J	I	1001	3	14	3	1 -7	1 -7	7
14	J	I	1002	4	14	4	1 -7	1 -7	7
15	J	I	1011	1	15	1	1 -7	1 -7	7
15	J	I	1012	2	15	2	1 -7	1 -7	7
15	J	I	0841	3	15	3	1 -7	1 -7	11
15	J	I	0842	4	15	4	1 -7	1 -7	11
16	J	I	0941D1 0951D1	1	16	1	1 -7	1 -7	7
16	J	I	0942D2	2	16	2	1 -7	1 -7	7
16	J	I	0971	3	16	3	1 -7	1 -7	7
16	J	I	0972	4	16	4	1 -7	1 -7	7

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
5	51	01	156	0	1	58	1

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	1480	1	1	1	1 -2	1 -2	28
1	A	O	1490	1	1	1	3 -4	1 -2	28
1	A	O	1500	1	1	1	5 -6	1 -2	28
1	A	O	1510	1	1	1	7 -8	1 -2	28
1	A	O	1520	2	1	2	1 -2	1 -2	28
1	A	O	1530	2	1	2	3 -4	1 -2	28
1	A	O	1540	2	1	2	5 -6	1 -2	28
1	A	O	1550	2	1	2	7 -8	1 -2	28
1	A	O	1560	3	1	3	1 -2	1 -2	28
1	A	O	1570	3	1	3	3 -4	1 -2	28
1	A	O	1580	3	1	3	5 -6	1 -2	28
1	A	O	1590	3	1	3	7 -8	1 -2	28
1	A	O	1600	4	1	4	1 -2	1 -2	28
1	A	O	1610	4	1	4	3 -4	1 -2	28
1	A	O	1620	4	1	4	5 -6	1 -2	28
1	A	O	1621	4	1	4	7 -8	1 -2	28
2	C	O	1680	1	2	1	1 -3	1 -3	28
2	C	O	1700	2	2	2	1 -3	1 -3	28
3	J	O	1661	1	3	1	1 -7	1 -7	28
3	J	O	1662	2	3	2	1 -7	1 -7	28
3	J	O	1671	3	3	3	1 -7	1 -7	28
3	J	O	1672	4	3	4	1 -7	1 -7	28
5	J	O	1691	1	5	1	1 -7	1 -7	28
5	J	O	1692	2	5	2	1 -7	1 -7	28
5	J	O	0841	3	5	3	1 -7	1 -7	37
5	J	O	0842	4	5	4	1 -7	1 -7	37
7	J	O	0941D1	1	7	1	1 -7	1 -7	37
7	J	O	0942D2	2	7	2	1 -7	1 -7	37
7	J	O	0971	3	7	3	1 -7	1 -7	37
7	J	O	0972	4	7	4	1 -7	1 -7	37
9	P	O	0730	1	9	1	1-73	1-73	52
10	D	I	1630	1	10	1	1 -2	1 -2	28
10	D	I	1640	1	10	1	3 -4	1 -2	28
10	D	I	1650	1	10	1	5 -6	1 -2	28
10	D	I	1651	1	10	1	7 -8	1 -2	28
10	D	I	1220	2	10	2	1 -2	1 -2	52
10	D	I	1230	2	10	2	3 -4	1 -2	52
10	D	I	1120X1 1121X1	3	10	3	1 -2	1 -2	52
10	D	I	1160X2 1161X2	3	10	3	3 -4	1 -2	52
10	D	I	1170X3 1171X3	3	10	3	5 -6	1 -2	52
10	D	I	1180X4 1181X4	3	10	3	7 -8	1 -2	52
10	D	I	1190X5 1191X5	4	10	4	1 -2	1 -2	52
10	D	I	1210X6 1211X6	4	10	4	3 -4	1 -2	52

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
5	51	01	156	0	1	58	1

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
11	J	I	1711	1	11	1	1 -7	1 -7	28
11	J	I	1712	2	11	2	1 -7	1 -7	28
11	J	I	1721	3	11	3	1 -7	1 -7	28
11	J	I	1722	4	11	4	1 -7	1 -7	28
12	P	I	0720	1	12	1	1-73	1-73	52

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	FRAME	TRANS	IOU/J-BOX LOCATION DECK	FRAME	TRANS
5	52	01	156	0	01	156	0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	J	O	1951I1 1951J1	1	1	1	1 -7	1 -7	7
1	J	O	1952I2 1952J2	2	1	2	1 -7	1 -7	7
1	J	O	1941F1 1941H1	3	1	3	1 -7	1 -7	7
1	J	O	1942F2 1942H2	4	1	4	1 -7	1 -7	7
3	P	O	0740	1	3	1	1-73	1-73	13
4	C	I	1920	1	4	1	1 -2	1 -2	7
4	C	I	1960	2	4	2	1 -2	1 -2	7
5	J	I	1911	1	5	1	1 -7	1 -7	7
5	J	I	1912	2	5	2	1 -7	1 -7	7
5	J	I	1931F1 1941F1	3	5	3	1 -7	1 -7	7
5	J	I	1932F2 1942F2	4	5	4	1 -7	1 -7	7
6	J	I	1951J1 1971J1	1	6	1	1 -7	1 -7	7
6	J	I	1952J2 1972J2	2	6	2	1 -7	1 -7	7
7	P	I	0750	1	7	1	1-73	1-73	13

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
6	61	02	174	-2	02	174	-2

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	1040	1	1	1	1 -2	1 -2	24
1	A	O	1050	1	1	1	3 -4	1 -2	24
1	A	O	1060	1	1	1	5 -6	1 -2	24
1	A	O	1070	1	1	1	7 -8	1 -2	24
2	D	O	1080	1	2	1	1 -2	1 -2	24
3	G	O	1121X1	1	3	1	1 -2	1 -2	28
3	G	O	1161X2	1	3	1	3 -4	1 -2	28
3	G	O	1171X3	1	3	1	5 -6	1 -2	28
3	G	O	1181X4	1	3	1	7 -8	1 -2	28
3	G	O	1191X5	2	3	2	1 -2	1 -2	28
3	G	O	1211X6	2	3	2	3 -4	1 -2	28
3	G	O	1220	2	3	2	5 -6	1 -2	28
3	G	O	1230	2	3	2	7 -8	1 -2	28
3	G	O	1350	3	3	3	1 -2	1 -2	37
3	G	O	1400	3	3	3	3 -4	1 -2	37
4	J	O	0781A1	1	4	1	1 -7	1 -7	36
4	J	O	0791A1	2	4	2	1 -7	1 -7	41
4	J	O	0821A1	3	4	3	1 -7	1 -7	36
6	LT	O	0811A1	1	6	1	1 -7	1 -7	27
8	P	O	0750	1	8	1	1-73	1-73	4
9	A	I	1020	1	9	1	1 -2	1 -2	24
9	A	I	1030	1	9	1	3 -4	1 -2	24
9	A	I	2121	2	9	2	1 -2	1 -2	37
9	A	I	2122	2	9	2	3 -4	1 -2	37
9	A	I	2131	2	9	2	5 -6	1 -2	37
9	A	I	2132	2	9	2	7 -8	1 -2	37
10	D	I	1280	1	10	1	1 -2	1 -2	37
10	D	I	1290	1	10	1	3 -4	1 -2	37
10	D	I	1300	1	10	1	5 -6	1 -2	37
10	D	I	1310	1	10	1	7 -8	1 -2	37
10	D	I	1320	2	10	2	1 -2	1 -2	37
10	D	I	1330	2	10	2	3 -4	1 -2	37
10	D	I	1340	2	10	2	5 -6	1 -2	37
10	D	I	1360	2	10	2	7 -8	1 -2	37
10	D	I	1370	3	10	3	1 -2	1 -2	37
10	D	I	1380	3	10	3	3 -4	1 -2	37
10	D	I	1390	3	10	3	5 -6	1 -2	37
10	D	I	1410	3	10	3	7 -8	1 -2	37
10	D	I	1420	4	10	4	1 -2	1 -2	37
10	D	I	1421	4	10	4	3 -4	1 -2	37
10	D	I	1430	4	10	4	5 -6	1 -2	37
10	D	I	1440	4	10	4	7 -8	1 -2	37
11	P	I	0740	1	11	1	1-73	1-73	4

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	FRAME	TRANS	IOU/J-BOX LOCATION DECK	FRAME	TRANS
7	71	01	205	1	01	205	1

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	D	O	1020	1	1	1	1 -2	1 -2	25
1	D	O	1030	1	1	1	3 -4	1 -2	25
2	G	O	1280	1	2	1	1 -2	1 -2	58
2	G	O	1290	1	2	1	3 -4	1 -2	58
2	G	O	1300	1	2	1	5 -6	1 -2	58
2	G	O	1310	1	2	1	7 -8	1 -2	58
2	G	O	1320	2	2	2	1 -2	1 -2	58
2	G	O	1330	2	2	2	3 -4	1 -2	58
2	G	O	1340	2	2	2	5 -6	1 -2	58
2	G	O	1360	2	2	2	7 -8	1 -2	58
2	G	O	1370	3	2	3	1 -2	1 -2	58
2	G	O	1380	3	2	3	3 -4	1 -2	58
2	G	O	1390	3	2	3	5 -6	1 -2	58
2	G	O	1410	3	2	3	7 -8	1 -2	58
2	G	O	1420	4	2	4	1 -2	1 -2	58
2	G	O	1421	4	2	4	3 -4	1 -2	58
2	G	O	1430	4	2	4	5 -6	1 -2	58
2	G	O	1440	4	2	4	7 -8	1 -2	58
3	LT	O	0861C1	1	3	1	1 -7	1 -7	25
5	LT	O	0862C2	1	5	1	1 -7	1 -7	25
7	LT	O	0931C1	1	7	1	1 -7	1 -7	153
9	LT	O	0951D1	1	9	1	1 -7	1 -7	25
11	B	I	1090	1	11	1	1 -2	1 -2	68
11	B	I	1091	1	11	1	3 -4	1 -2	88
11	B	I	1092	2	11	2	1 -2	1 -2	147
11	B	I	1260	2	11	2	3 -4	1 -2	5
11	B	I	1270	3	11	3	1 -2	1 -2	5
12	D	I	1040	1	12	1	1 -2	1 -2	25
12	D	I	1050	1	12	1	3 -4	1 -2	25
12	D	I	1060	1	12	1	5 -6	1 -2	25
12	D	I	1070	1	12	1	7 -8	1 -2	25
12	D	I	1080	2	12	2	1 -2	1 -2	25
12	D	I	1350	2	12	2	3 -4	1 -2	58
12	D	I	1400	2	12	2	5 -6	1 -2	58
13	J	I	1911E1 1913E1	1	13	1	1 -7	1 -7	153
13	J	I	1912E2 1914E2	2	13	2	1 -7	1 -7	153
13	J	I	1931G1 1933G1	3	13	3	1 -7	1 -7	153
13	J	I	1932G2 1934G2	4	13	4	1 -7	1 -7	153
14	J	I	1975	1	14	1	1 -7	1 -7	153
14	J	I	1976	2	14	2	1 -7	1 -7	153

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
8	81	2	300	0	2	300	0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	1980	1	1	1	1 -2	1 -2	16
1	A	O	1990	1	1	1	3 -4	1 -2	16
1	A	O	0160	2	1	2	1 -2	1 -2	26
1	A	O	0170	2	1	2	3 -4	1 -2	26
1	A	O	0180	2	1	2	5 -6	1 -2	26
1	A	O	0060	3	1	3	1 -2	1 -2	26
1	A	O	0070	3	1	3	3 -4	1 -2	26
1	A	O	0080	3	1	3	5 -6	1 -2	26
1	A	O	0090	3	1	3	7 -8	1 -2	26
1	A	O	0100	4	1	4	1 -2	1 -2	26
1	A	O	0110	4	1	4	3 -4	1 -2	26
1	A	O	0120	4	1	4	5 -6	1 -2	26
1	A	O	0130	4	1	4	7 -8	1 -2	26
2	A	O	0140	1	2	1	1 -2	1 -2	26
2	A	O	0150	1	2	1	3 -4	1 -2	26
3	B	O	1240	1	3	1	1 -2	1 -2	25
3	B	O	1250	1	3	1	3 -4	1 -2	25
3	B	O	1090	2	3	2	1 -2	1 -2	25
3	B	O	1091	2	3	2	3 -4	1 -2	25
3	B	O	1092	3	3	3	1 -2	1 -2	25
3	B	O	1260	3	3	3	3 -4	1 -2	25
3	B	O	1270	4	3	4	1 -2	1 -2	25
4	B	O	1100	1	4	1	1 -2	1 -2	25
4	B	O	1101	1	4	1	3 -4	1 -2	25
4	B	O	1102	2	4	2	1 -2	1 -2	25
4	B	O	1103	2	4	2	3 -4	1 -2	25
4	B	O	1104	3	4	3	1 -2	1 -2	25
4	B	O	1105	3	4	3	3 -4	1 -2	25
4	B	O	1106	4	4	4	1 -2	1 -2	25
4	B	O	1107	4	4	4	3 -4	1 -2	25
5	B	O	1110	1	5	1	1 -2	1 -2	25
5	B	O	1111	1	5	1	3 -4	1 -2	25
5	B	O	1112	2	5	2	1 -2	1 -2	25
5	B	O	1113	2	5	2	3 -4	1 -2	25
5	B	O	1114	3	5	3	1 -2	1 -2	25
5	B	O	1115	3	5	3	3 -4	1 -2	25
5	B	O	1116	4	5	4	1 -2	1 -2	25
5	B	O	1117	4	5	4	3 -4	1 -2	25
6	G	O	2000	1	6	1	1 -2	1 -2	41
6	G	O	2010	1	6	1	3 -4	1 -2	41
6	G	O	2020	1	6	1	5 -6	1 -2	41
6	G	O	2030	1	6	1	7 -8	1 -2	41
6	G	O	2040	2	6	2	1 -2	1 -2	41
6	G	O	2050	2	6	2	3 -4	1 -2	41
6	G	O	2060	2	6	2	5 -6	1 -2	41
6	G	O	2070	2	6	2	7 -8	1 -2	41
6	G	O	2080	3	6	3	1 -2	1 -2	41
6	G	O	2090	3	6	3	3 -4	1 -2	41
6	G	O	2100	3	6	3	5 -6	1 -2	41

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
8	81	2	300	0	2	300	0

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
6	G	O	2110	3	6	3	7 -8	1 -2	41
6	G	O	1120X1	4	6	4	1 -2	1 -2	25
6	G	O	1160X2	4	6	4	3 -4	1 -2	25
6	G	O	1170X3	4	6	4	5 -6	1 -2	25
6	G	O	1180X4	4	6	4	7 -8	1 -2	25
7	G	O	1190X5	1	7	1	1 -2	1 -2	25
7	G	O	1210X6	1	7	1	3 -4	1 -2	25
8	S	O	2121	1	8	1	1 -2	1 -2	41
8	S	O	2122	2	8	2	1 -2	1 -2	41
8	S	O	2131	3	8	3	1 -2	1 -2	41
8	S	O	2132	4	8	4	1 -2	1 -2	41
9	D	I	0040	1	9	1	1 -2	1 -2	28
9	D	I	0041	1	9	1	3 -4	1 -2	28
9	D	I	0210	2	9	2	1 -2	1 -2	26
9	D	I	0050	3	9	3	1 -2	1 -2	4

RM NUMBER	IOU/J-BOX NUMBER	RM LOCATION DECK	RM LOCATION FRAME	RM LOCATION TRANS	IOU/J-BOX LOCATION DECK	IOU/J-BOX LOCATION FRAME	IOU/J-BOX LOCATION TRANS
8	82	2	300	0	5	308	27

IOU SLOT NUMBER	IOM TYPE	I/O	SIGNAL ID	IOM CHANNEL NUMBER	TERMINAL NUMBER STRIP	GROUP	PIN	LEAD NUMBER	CABLE DISTANCE
1	A	O	0050	1	1	1	1 -2	1 -2	34
1	A	O	0010	2	1	2	1 -2	1 -2	58
1	A	O	0020	2	1	2	3 -4	1 -2	58
2	B	I	1100	1	2	1	1 -2	1 -2	74
2	B	I	1101	1	2	1	3 -4	1 -2	74
2	B	I	1102	2	2	2	1 -2	1 -2	74
2	B	I	1103	2	2	2	3 -4	1 -2	74
2	B	I	1104	3	2	3	1 -2	1 -2	74
2	B	I	1105	3	2	3	3 -4	1 -2	74
2	B	I	1106	4	2	4	1 -2	1 -2	74
2	B	I	1107	4	2	4	3 -4	1 -2	74
3	B	I	1110	1	3	1	1 -2	1 -2	74
3	B	I	1111	1	3	1	3 -4	1 -2	74
3	B	I	1112	2	3	2	1 -2	1 -2	74
3	B	I	1113	2	3	2	3 -4	1 -2	74
3	B	I	1114	3	3	3	1 -2	1 -2	74
3	B	I	1115	3	3	3	3 -4	1 -2	74
3	B	I	1116	4	3	4	1 -2	1 -2	74
3	B	I	1117	4	3	4	3 -4	1 -2	74
4	D	I	0030	1	4	1	1 -2	1 -2	75
4	D	I	0010	2	4	2	1 -2	1 -2	70
4	D	I	0020	2	4	2	3 -4	1 -2	68

APPENDIX L: INPUT/OUTPUT MODULE COUNT AND SPARE CAPACITY

OUTPUT IOM COUNT BY TYPE 10/29/79

SUBZONE	A	B	C	D	G	J	LT	L	M	P	S
11	1	0	0	0	0	1	0	0	0	0	0
21	0	0	0	0	0	1	0	0	0	0	0
22	2	0	1	0	0	3	0	0	0	0	0
23	2	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	2	2	0	0	0	0
41	3	0	0	0	0	1	0	0	0	1	0
42	0	0	0	0	0	6	0	0	0	0	0
51	1	0	1	0	0	3	0	0	0	1	0
52	0	0	0	0	0	1	0	0	0	1	0
61	1	0	0	1	1	1	1	0	0	1	0
71	0	0	0	1	1	0	4	0	0	0	0
81	2	3	0	0	2	0	0	0	0	0	1
82	1	0	0	0	0	0	0	0	0	0	0
991	0	0	0	0	0	0	0	0	0	0	0
992	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13	3	2	2	4	19	7	0	0	4	1

SPARE SIGNAL CAPACITY BY IOM TYPE 10/29/79

SUBZONE	A	B	C	D	G	J	LT	L	M	P	S
11	13	0	0	0	0	3	0	0	0	0	0
21	0	0	0	0	0	3	0	0	0	0	0
22	15	0	6	0	0	2	0	0	0	0	0
23	8	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	3	0	0	0	0	0
41	11	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	3	0	0	0	0	0
51	0	0	6	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0
61	12	0	0	15	6	1	0	0	0	0	0
71	0	0	0	14	0	0	0	0	0	0	0
81	17	1	0	0	14	0	0	0	0	0	12
82	13	0	0	0	0	0	0	0	0	0	0
991	0	0	0	0	0	0	0	0	0	0	0
992	0	0	0	0	0	0	0	0	0	0	0
TOTAL	89	1	12	29	20	15	0	0	0	0	12

INPUT IOM COUNT BY TYPE

10/29/79

SUBZONE	A	B	C	D	J	M	P	T
11	0	0	0	1	1	0	0	0
21	0	0	0	0	1	0	0	0
22	0	0	0	1	1	0	0	0
23	0	0	0	3	0	0	0	0
31	0	0	0	0	0	0	0	0
41	0	1	1	4	2	0	1	0
42	0	0	0	0	4	0	0	0
51	0	0	0	1	1	0	1	0
52	0	0	1	0	2	0	1	0
61	1	0	0	1	0	0	1	0
71	0	1	0	1	2	0	0	0
81	0	0	0	1	0	0	0	0
82	0	2	0	1	0	0	0	0
991	0	0	0	0	0	0	0	0
992	0	0	0	0	0	0	0	0
TOTAL	1	4	2	14	14	0	4	0

INPUT SPARE SIGNAL CAPACITY BY IOM TYPE

10/29/79

SUBZONE	A	B	C	D	J	M	P	T
11	0	0	0	2	2	0	0	0
21	0	0	0	0	1	0	0	0
22	0	0	0	9	0	0	0	0
23	0	0	0	9	0	0	0	0
31	0	0	0	0	0	0	0	0
41	0	6	6	8	2	0	0	0
42	0	0	0	0	0	0	0	0
51	0	0	0	4	0	0	0	0
52	0	0	6	0	2	0	0	0
61	10	0	0	0	0	0	0	0
71	0	3	0	9	2	0	0	0
81	0	0	0	12	0	0	0	0
82	0	0	0	13	0	0	0	0
991	0	0	0	0	0	0	0	0
992	0	0	0	0	0	0	0	0
TOTAL	10	9	12	66	9	0	0	0

APPENDIX M: REMOTE MULTIPLEXER CONFIGURATIONS

10/29/79

RM CONFIGURATION

RM NUMBER 1

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	3	X		P	1	2	5	10	1
1	10	X		P	1	3	0	10	2
2	13	X		P	1	4	7	10	1
3	26	X		P	1	6	3	10	4
4	32	X		P	1	8	2	10	4
5	1		X	P	1	2	0	10	1
6	2		X	P	1	8	0	10	2

RM UPDATE RATE = 70 (MSGS/SEC) TOTAL PROMS FOR RM= 7

10/29/79

RM CONFIGURATION

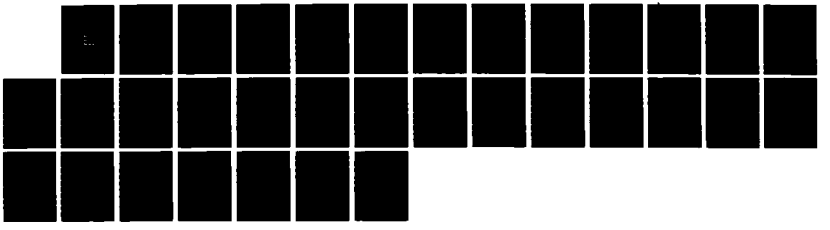
RM NUMBER 2

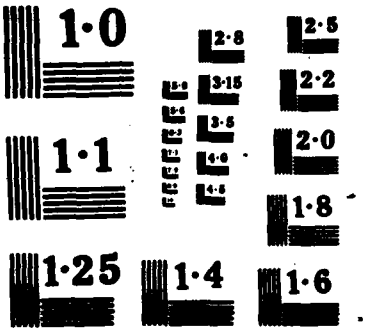
PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	1	X		P	1	1	5	10	1
1	11	X		P	1	3	1	300	3
2	14	X		P	1	4	8	300	13
3	20	X		P	1	5	8	300	4
4	38	X		P	1	8	3	10	4
5	3		X	P	1	1	0	10	1
6	4		X	P	1	2	6	10	2
7	5		X	P	1	4	0	10	10
8	6		X	P	1	5	0	300	4
9	7		X	P	1	5	1	300	4
10	8		X	P	1	7	0	300	4
11	9		X	P	1	8	1	10	1

RM UPDATE RATE = 1870 (MSGS/SEC) TOTAL PROMS FOR RM=12

AD-A170 009 SDMS (SHIPBOARD DATA MULTIPLEX SYSTEM) DD 963 SIGNAL LIST DD 963 CLASS SH..(U) NAVAL OCEAN SYSTEMS CENTER SAN DIEGO CA J D DICKINSON NOV 79 NOSC/TD-292 2/2

UNCLASSIFIED F/G 17/2 NL




1·0
1·1
1·25
1·4
1·6
1·8
2·0
2·2
2·5
2·8
3·15
3·5

10/29/79

RM CONFIGURATION

RM NUMBER 3

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	10		X	P	1	1	1	10	2
1	11		X	P	1	2	1	300	3
2	12		X	P	1	4	1	10	2

RM UPDATE RATE = 320 (MSGS/SEC) TOTAL PROMS FOR RM= 3

10/29/79

RM CONFIGURATION

RM NUMBER 4

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	5	X		P	1	2	7	10	10
1	12	X		P	1	3	2	10	2
2	21	X		P	1	5	9	10	10
3	22	X		P	1	5	10	40	50
4	23	X		P	1	5	11	300	8
5	30	X		P	1	7	4	300	4
6	34	X		P	1	8	4	40	1
7	13		X	P	1	1	2	10	1
8	14		X	P	1	2	2	300	13
9	15		X	P	1	4	9	300	10
11	16		X	P	1	5	2	10	1
12	17		X	P	1	5	3	40	50
13	18		X	P	1	5	4	300	4
14	19		X	P	1	7	1	300	6

RM UPDATE RATE = 2270 (MSGS/SEC) TOTAL PROMS FOR RM=15

10/29/79

RM CONFIGURATION

RM NUMBER 5

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	6	X		P	1	2	8	300	4
1	7	X		P	1	2	9	300	4
2	16	X		P	1	4	11	10	1
3	17	X		P	1	4	12	40	50
4	18	X		P	1	4	13	300	4
5	27	X		P	1	6	4	10	2
6	28	X		P	1	6	5	40	50
7	35	X		P	1	8	5	10	2
8	20		X	P	1	2	3	300	4
9	21		X	P	1	4	2	10	10
10	22		X	P	1	4	3	40	50
11	23		X	P	1	4	4	300	8
12	24		X	P	1	5	12	300	4
13	25		X	P	1	6	0	40	50

RM UPDATE RATE = 2300 (MSGS/SEC) TOTAL PROMS FOR RM=14

10/29/79

RM CONFIGURATION

RM NUMBER 6

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	25	X		P	1	5	13	40	50
1	31	X		P	1	7	5	10	5
2	36	X		P	1	8	6	10	4
3	26		X	P	1	1	3	10	4
4	27		X	P	1	5	5	10	2
5	28		X	P	1	5	6	40	50
6	29		X	P	1	7	2	10	3

RM UPDATE RATE = 130 (MSGS/SEC) TOTAL PROMS FOR RM= 7

10/29/79

RM CONFIGURATION

RM NUMBER 7

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	8	X		P	1	2	10	300	4
1	19	X		P	1	4	14	300	6
2	29	X		P	1	6	6	10	3
3	37	X		P	1	8	7	40	3
4	30		X	P	1	4	5	300	4
5	31		X	P	1	6	1	10	5

RM UPDATE RATE = 960 (MSGS/SEC)

TOTAL PROMS FOR RM= 6

10/29/79

RM CONFIGURATION

RM NUMBER 8

PROM POSITION NUMBER	MESSAGE NUMBER	SOURCE	SINK	UPDATE MODE	PRIORITY	OTHER RM	OTHER PROM	UPDATE RATE	DATA WORDS
0	2	X		P	1	1	6	10	2
1	9	X		P	1	2	11	10	1
2	32		X	P	1	1	4	10	4
3	33		X	P	1	2	4	10	4
4	34		X	P	1	4	6	40	1
5	35		X	P	1	5	7	10	2
6	36		X	P	1	6	2	10	4
7	37		X	P	1	7	3	40	3
8	38		X	P	1	8	8	40	10

RM UPDATE RATE = 220 (MSGS/SEC)

TOTAL PROMS FOR RM=10

TOTAL NUMBER OF PROMS REQUIRED= 74

APPENDIX N: REMOTE MULTIPLEXER AND INPUT/OUTPUT UNIT SUMMARIES BY ZONE AND SUBZONE

SUMMARY FOR ZONE 10 10/29/79 PAGE 1

RM NUMBER 1
NUMBER OF PROMS 7
NUMBER OF IOUS 1

RM LOCATION		
DECK	FRAME	TRANSVERSE
3	127	6

	INPUT	OUTPUT	TOTAL	__CAPACITY
NUMBER OF SIGNALS	22	4	26	
NUMBER OF MESSAGES	5	2	7	
MESSAGE RATE, HZ	50	20	70	
DATA RATE, BPS	1920	480	2400	0.12

SUBZONE 1

IOU 11

LOCATION: DECK 3
FRAME 138
TRANSVERSE -6

TOTAL INPUT SIGNALS 22
TOTAL OUTPUT SIGNALS 4
TOTAL SIGNALS 26

TOTAL INPUT MODULES 2
TOTAL OUTPUT MODULES 2
TOTAL MODULES 4

TOTAL SLOTS USED 5

TOTAL POWER REQUIRED 0.0

SUMMARY FOR ZONE 10 (CONTINUED) 10/29/79 PAGE 2

RM NUMBER 1 SUBZONE 1

IOU 1

INPUT_MODULE_TYPES

D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL	1
J	SYNCHRO INPUT, 4 CHANNEL	1

OUTPUT_MODULE_TYPES

A	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC	1
J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ	1

SUMMARY FOR ZONE 20 10/29/79 PAGE 3

RM NUMBER 2
NUMBER OF PROMS 12
NUMBER OF IOUS 3

RM LOCATION

DECK	FRAME	TRANSVERSE
3	383	-9

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	60	56	116	
NUMBER OF MESSAGES	6	7	13	
MESSAGE RATE, HZ	930	940	1870	
DATA RATE, BPS	97120	59840	156960	8.17

SUBZONE	1	2	3
IOU	21	22	23
LOCATION: DECK	3	2	3
FRAME	383	482	382
TRANSVERSE	-9	0	-1
TOTAL INPUT SIGNALS	5	16	39
TOTAL OUTPUT SIGNALS	1	31	24
TOTAL SIGNALS	6	47	63
TOTAL INPUT MODULES	1	2	3
TOTAL OUTPUT MODULES	1	6	2
TOTAL MODULES	2	8	5
TOTAL SLOTS USED	3	11	5
TOTAL POWER REQUIRED	0.0	0.0	0.0

SUMMARY FOR ZONE 20 (CONTINUED) 10/29/79 PAGE 4

RM NUMBER 2	SUBZONE	1	2	3
	IOU	21	22	23
INPUT_MODULE_TYPES				
D DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL		0	1	3
J SYNCHRO INPUT, 4 CHANNEL		1	1	0
OUTPUT_MODULE_TYPES				
A DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC		0	2	2
C DC ANALOG OUTPUT, LOW RESOLUTION		0	1	0
J SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ		1	3	0

RM NUMBER 3
NUMBER OF PROMS 3
NUMBER OF IOUS 1

RM LOCATION

DECK	FRAME	TRANSVERSE
03	154	-14

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	0	7	7	
NUMBER OF MESSAGES	0	3	3	
MESSAGE RATE, HZ	0	320	320	
DATA RATE, BPS	0	15040	15040	0.78

SUBZONE		1
IOU		31
LOCATION:	DECK	03
	FRAME	154
	TRANSVERSE	-14
TOTAL INPUT SIGNALS		0
TOTAL OUTPUT SIGNALS		7
TOTAL SIGNALS		7
TOTAL INPUT MODULES		0
TOTAL OUTPUT MODULES		4
TOTAL MODULES		4
TOTAL SLOTS USED		8
TOTAL POWER REQUIRED		0.0

SUMMARY FOR ZONE 30 (CONTINUED) 10/29/79 PAGE 6

RM NUMBER 3 SUBZONE 1

IOU 31

OUTPUT_MODULE_TYPES

J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ	2
LT	SYNCHRO OUTPUT, TORQUE DEVICES, 60 HZ	2

[illegible]	4
NUMBER OF PROMS	15
NUMBER OF IOUS	2

RM LOCATION

DECK	FRAME	TRANSVERSE
01	156	0

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	89	63	152	
NUMBER OF MESSAGES	8	7	15	
MESSAGE RATE, HZ	1010	1260	2270	
DATA RATE, BPS	141760	190720	332480	17.32

SUBZONE		1	2
IOU		41	42
LOCATION:	DECK	01	01
	FRAME	156	156
	TRANSVERSE	0	0
TOTAL INPUT SIGNALS		67	22
TOTAL OUTPUT SIGNALS		42	21
TOTAL SIGNALS		109	43
TOTAL INPUT MODULES		9	4
TOTAL OUTPUT MODULES		5	6
TOTAL MODULES		14	10
TOTAL SLOTS USED		15	16
TOTAL POWER REQUIRED		0.0	0.0

SUMMARY FOR ZONE 40 (CONTINUED) 10/29/79 PAGE 8

RM NUMBER 4

		SUBZONE	1	2
		IOU	41	42
INPUT_MODULE_TYPES				
B	TRI-LEVEL DISCRETE INPUT		1	0
C	DC ANALOG INPUT, LOW RESOLUTION		1	0
D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL		4	0
J	SYNCHRO INPUT, 4 CHANNEL		2	4
P	PARALLEL DATA INPUT, NTDS SLOW		1	0
OUTPUT_MODULE_TYPES				
A	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC		3	0
J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ		1	6
P	PARALLEL DATA OUTPUT, NTDS SLOW		1	0

SUMMARY FOR ZONE 50 10/29/79 PAGE 9

RM NUMBER 5
NUMBER OF PROMS 14
NUMBER OF IOUS 2

RM LOCATION		
DECK	FRAME	TRANSVERSE
01	156	0

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	36	40	76	
NUMBER OF MESSAGES	9	6	15	
MESSAGE RATE, HZ	1310	990	2300	
DATA RATE, BPS	141600	142400	284000	14.79

SUBZONE	1	2
IOU	51	52
LOCATION: DECK	1	01
FRAME	58	156
TRANSVERSE	1	0
TOTAL INPUT SIGNALS	23	13
TOTAL OUTPUT SIGNALS	31	9
TOTAL SIGNALS	54	22
TOTAL INPUT MODULES	3	4
TOTAL OUTPUT MODULES	6	2
TOTAL MODULES	9	6
TOTAL SLOTS USED	12	7
TOTAL POWER REQUIRED	0.0	0.0

RM NUMBER 5

		SUBZONE	1	2
		IOU	51	52
INPUT_MODULE_TYPES				
C	DC ANALOG INPUT, LOW RESOLUTION		0	1
D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL		1	0
J	SYNCHRO INPUT, 4 CHANNEL		1	2
P	PARALLEL DATA INPUT, NTDS SLOW		1	1
OUTPUT_MODULE_TYPES				
A	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC		1	0
C	DC ANALOG OUTPUT, LOW RESOLUTION		1	0
J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ		3	1
P	PARALLEL DATA OUTPUT, NTDS SLOW		1	1

RM NUMBER 6
NUMBER OF PROMS 7
NUMBER OF IOUS 1

RM LOCATION	
DECK	02
FRAME	174
TRANSVERSE	-2

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	23	20	43	
NUMBER OF MESSAGES	3	4	7	
MESSAGE RATE, HZ	60	70	130	
DATA RATE, BPS	33440	33440	66880	3.48

SUBZONE 1

IOU 61

LOCATION: DECK 02
FRAME 174
TRANSVERSE -2

TOTAL INPUT SIGNALS 23
TOTAL OUTPUT SIGNALS 20
TOTAL SIGNALS 43

TOTAL INPUT MODULES 3
TOTAL OUTPUT MODULES 6
TOTAL MODULES 9

TOTAL SLOTS USED 11

TOTAL POWER REQUIRED 0.0

RM NUMBER 6 SUBZONE 1

IOU 61

INPUT_MODULE_TYPES

A	DISCRETE INPUT, SWITCH CLOSURE	1
D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL	1
P	PARALLEL DATA INPUT, NTDS SLOW	1

OUTPUT_MODULE_TYPES

A	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC	1
D	DISCRETE OUTPUT, VOLTAGE LEVEL	1
G	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,AC	1
J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ	1
LT	SYNCHRO OUTPUT, TORQUE DEVICES, 60 HZ	1
P	PARALLEL DATA OUTPUT, NTDS SLOW	1

SUMMARY FOR ZONE 70 10/29/79 PAGE 13

RM NUMBER 7
NUMBER OF PROMS 6
NUMBER OF IOUS 1

RM LOCATION		
DECK	FRAME	TRANSVERSE
01	205	1

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	22	22	44	
NUMBER OF MESSAGES	4	2	6	
MESSAGE RATE, HZ	650	310	960	
DATA RATE, BPS	50400	20000	70400	3.67

SUBZONE 1

IOU 71

LOCATION: DECK 01
FRAME 205
TRANSVERSE 1

TOTAL INPUT SIGNALS 22
TOTAL OUTPUT SIGNALS 22
TOTAL SIGNALS 44

TOTAL INPUT MODULES 4
TOTAL OUTPUT MODULES 6
TOTAL MODULES 10

TOTAL SLOTS USED 14

TOTAL POWER REQUIRED 0.0

RM NUMBER 7 SUBZONE 1

IOU 71

INPUT_MODULE_TYPES

B	TRI-LEVEL DISCRETE INPUT	1
D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL	1
J	SYNCHRO INPUT, 4 CHANNEL	2

OUTPUT_MODULE_TYPES

D	DISCRETE OUTPUT, VOLTAGE LEVEL	1
G	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,AC	1
LT	SYNCHRO OUTPUT, TORQUE DEVICES, 60 HZ	4

RM NUMBER 8
NUMBER OF PROMS 10
NUMBER OF IOUS 2

RM LOCATION

DECK	FRAME	TRANSVERSE
2	300	0

	INPUT	OUTPUT	TOTAL	CAPACITY
NUMBER OF SIGNALS	23	63	86	
NUMBER OF MESSAGES	3	7	10	
MESSAGE RATE, HZ	60	160	220	
DATA RATE, BPS	6880	11200	18080	0.94

SUBZONE	1	2
IOU	81	82
LOCATION: DECK	2	5
FRAME	300	308
TRANSVERSE	0	27
TOTAL INPUT SIGNALS	4	19
TOTAL OUTPUT SIGNALS	60	3
TOTAL SIGNALS	64	22
TOTAL INPUT MODULES	1	3
TOTAL OUTPUT MODULES	8	1
TOTAL MODULES	9	4
TOTAL SLOTS USED	9	4
TOTAL POWER REQUIRED	0.0	0.0

SUMMARY FOR ZONE 80 (CONTINUED) 10/29/79 PAGE 16

RM NUMBER 8	SUBZONE	1	2
	IOU	81	82
INPUT_MODULE_TYPES			
B TRI-LEVEL DISCRETE INPUT		0	2
D DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL		1	1
OUTPUT_MODULE_TYPES			
A DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC		2	1
B TRI-LEVEL DISCRETE OUTPUT		3	0
G DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,AC		2	0
S SWITCHING CONTROL MODULE		1	0

APPENDIX O: MESSAGE TRACE TABLE

MESSAGE TRACE TABLE — 10/29/79 — PAGE 1

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
0830		OSH INDICATOR IC RM #1	1	2	21	3	1	1		J	1	11	2	1	1		J	P	1	10	1
0040		SWITCH PORT REDUCTION GEAR A	2	8	81	9	1	1		D	1	11	1	1	1		A	P	1	10	
0041		SWITCH PORT REDUCTION GEAR B	2	8	81	9	1	2		D	1	11	1	1	2		A	P	1	10	
0030		SEWAGE PLANT PRESSURE SWITCH	2	8	82	4	1	1		D	1	11	1	2	1		A	P	1	10	
0771A1		OSH INDICATOR IC & GYRO RM 2	3	1	11	5	1	1	M	J	2	21	1	1	1		J	P	1	10	1
085181		OSH IND STEERING GEAR RM	4	2	21	3	2	1		J	2	22	4	1	1		J	P	1	10	1
085282		OSH IND STEERING GEAR RM	4	2	21	3	3	1		J	2	22	4	2	1		J	P	1	10	1
1730		AMMO SELECT AAC MT52	5	4	41	9	1	1		D	2	22	1	1	1		A	P	1	10	
1740		AMMO SELECT APP MT52	5	4	41	9	1	2		D	2	22	1	1	2		A	P	1	10	
1750		AMMO SELECT COM MT52	5	4	41	9	1	3		D	2	22	1	1	3		A	P	1	10	
1760		AMMO SELECT CVT MT52	5	4	41	9	1	4		D	2	22	1	1	4		A	P	1	10	
1770		AMMO SELECT ILL MT52	5	4	41	9	2	1		D	2	22	1	2	1		A	P	1	10	
1780		AMMO SELECT PD MT52	5	4	41	9	2	2		D	2	22	1	2	2		A	P	1	10	
1790		AMMO SELECT RAP MT52	5	4	41	9	2	3		D	2	22	1	2	3		A	P	1	10	
1800		AMMO SELECT RED CHG MT52	5	4	41	9	2	4		D	2	22	1	2	4		A	P	1	10	
1810		AMMO SELECT STD CHG MT52	5	4	41	9	3	1		D	2	22	1	3	1		A	P	1	10	
1820		AMMO SELECT VT MT52	5	4	41	9	3	2		D	2	22	1	3	2		A	P	1	10	
1830		AMMO SELECT WP MT52	5	4	41	9	3	3		D	2	22	1	3	3		A	P	1	10	
1840		DIRECT CONTROL REQUEST MT52	5	4	41	9	3	4		D	2	22	1	3	4		A	P	1	10	
1850		FUZE SETTER RUN MT52	5	4	41	9	4	1		D	2	22	1	4	1		A	P	1	10	
1860		FUZE SETTER SAFE MT52	5	4	41	9	4	2		D	2	22	1	4	2		A	P	1	10	
1870		LOAD ORDER SINGLE MT52	5	4	41	9	4	3		D	2	22	1	4	3		A	P	1	10	
1871		LOAD ORDER CONTINUOUS MT52	5	4	41	9	4	4		D	2	22	1	4	4		A	P	1	10	
0220		GYRO DRIVE ORDER A	5	4	41	10	1	1		D	2	23	1	1	1		A	P	1	10	
0230		GYRO DRIVE ORDER B	5	4	41	10	1	2		D	2	23	1	1	2		A	P	1	10	
0240		GYRO DRIVE ORDER C	5	4	41	10	1	3		D	2	23	1	1	3		A	P	1	10	
0250		MODE SELECT ORDER A	5	4	41	10	1	4		D	2	23	1	1	4		A	P	1	10	
0260		MODE SELECT ORDER B	5	4	41	10	2	1		D	2	23	1	2	1		A	P	1	10	
0270		MODE SELECT ORDER C	5	4	41	10	2	2		D	2	23	1	2	2		A	P	1	10	
0280		SEARCH DEPTH ORDER A	5	4	41	10	2	3		D	2	23	1	2	3		A	P	1	10	
0290		SEARCH DEPTH ORDER B	5	4	41	10	2	4		D	2	23	1	2	4		A	P	1	10	
0300		SEARCH DEPTH ORDER C	5	4	41	10	3	1		D	2	23	1	3	1		A	P	1	10	
0310		TUBE SELECT A	5	4	41	10	3	2		D	2	23	1	3	2		A	P	1	10	
0320		TUBE SELECT B	5	4	41	10	3	3		D	2	23	1	3	3		A	P	1	10	
0330		TUBE SELECT C	5	4	41	10	3	4		D	2	23	1	3	4		A	P	1	10	
0340		TUBE SELECT D	5	4	41	10	4	1		D	2	23	1	4	1		A	P	1	10	
0350		WEAPON ASSIGNED A	5	4	41	10	4	2		D	2	23	1	4	2		A	P	1	10	
0360		WEAPON ASSIGNED B	5	4	41	10	4	3		D	2	23	1	4	3		A	P	1	10	
0370		WEAPON ASSIGNED C	5	4	41	10	4	4		D	2	23	1	4	4		A	P	1	10	
0380		FIRE ORDER	5	4	41	11	1	1		D	2	23	2	1	1		A	P	1	10	
0390		ILLUMINATE ENABLE	5	4	41	11	1	2		D	2	23	2	1	2		A	P	1	10	
0430		STANDBY ORDER	5	4	41	11	1	3		D	2	23	2	1	3		A	P	1	10	
0510		TSP PRETEST CONTROL	5	4	41	11	1	4		D	2	23	2	1	4		A	P	1	10	
0520		TSP TEST CONTROL CODE A	5	4	41	11	2	1		D	2	23	2	2	1		A	P	1	10	
0530		TSP TEST CONTROL CODE B	5	4	41	11	2	2		D	2	23	2	2	2		A	P	1	10	
0540		TSP TEST CONTROL CODE C	5	4	41	11	2	3		D	2	23	2	2	3		A	P	1	10	
0550		TSP TEST CONTROL CODE D	5	4	41	11	2	4		D	2	23	2	2	4		A	P	1	10	
1920		ELEVATION RATE ORDER MT52	6	5	52	4	1	1		C	2	22	3	1	1		C	P	1	300	1
1960		TRAIN RATE ORDER MT52	6	5	52	4	2	1		C	2	22	3	2	1		C	P	1	300	1
1971J1		FUZE SET ORDER MT52	6	5	52	6	1	1	M	J	2	22	6	3	1		J	P	1	300	1

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1972J2		FUZE SET ORDER MT52	6	5	52	6	2	1	M	J	2	22	6	4	1		J	P	1	300	1
1911	A	GUN ELEVATION ORDER MT52	7	5	52	5	1	1		J	2	22	4	3	1		J	P	1	300	1
1912	A	GUN ELEVATION ORDER MT52	7	5	52	5	2	1		J	2	22	4	4	1		J	P	1	300	1
1931F1	A	GUN TRAIN ORDER MT52	7	5	52	5	3	1		J	2	22	6	1	1		J	P	1	300	1
1932F2	A	GUN TRAIN ORDER MT52	7	5	52	5	4	1		J	2	22	6	2	1		J	P	1	300	1
1911E1	B	GUN ELEVATION ORDER MT52	8	7	71	13	1	1		J	2	22	4	3	1		J	P	1	300	1
1912E2	B	GUN ELEVATION ORDER MT52	8	7	71	13	2	1		J	2	22	4	4	1		J	P	1	300	1
1931G1	B	GUN TRAIN ORDER MT52	8	7	71	13	3	1		J	2	22	6	1	1	M	J	P	1	300	1
1932G2	B	GUN TRAIN ORDER MT52	8	7	71	13	4	1		J	2	22	6	2	1	M	J	P	1	300	1
0210		GEN LP AIR MAN START COMMAND	9	8	81	9	2	1		D	2	22	2	1	1		A	P	1	10	
0761A1		OSH INDICATOR PILOT HOUSE	10	1	11	5	1	1		J	3	31	1	1	1		J	P	1	10	1
0762A2		OSH INDICATOR PILOT HOUSE	10	1	11	5	2	1		J	3	31	1	2	1		J	P	1	10	1
0861B1		OSH IND SHIP CONTROL CONSOLE	11	2	21	3	2	1	M	J	3	31	1	3	1		J	P	1	10	1
0862B2		OSH IND SHIP CONTROL CONSOLE	11	2	21	3	3	1	M	J	3	31	1	4	1		J	P	1	10	1
1955I1		GUN TRAIN POSITION MT52	11	2	22	11	3	1	M	J	3	31	3	1	1		J	P	1	300	1
0891C1		OSH TO SPS-40	12	4	42	13	1	1	M	J	3	31	5	1	1		LT	P	1	10	1
0892C2		OSH TO SPS-40	12	4	42	13	2	1	M	J	3	31	7	1	1		LT	P	1	10	1
0801A1		OSH IND DATA PROCESSING CTR	13	1	11	5	1	1	M	J	4	42	1	1	1		J	P	1	10	1
1880		GUN FIRED MT52	14	2	22	10	1	1		D	4	41	1	1	1		A	P	1	10	
1890		GUN IN STANDBY MT52	14	2	22	10	1	2		D	4	41	1	1	2		A	P	1	10	
1900		GUN READY TO FIRE MT52	14	2	22	10	1	3		D	4	41	1	1	3		A	P	1	10	
1901		MOUNT SYNCH MT52	14	2	22	10	1	4		D	4	41	1	1	4		A	P	1	10	
0371		SECTOR CLEAR STARBOARD	14	2	23	3	1	1		D	4	41	1	2	1		A	P	1	10	
0372		SECTOR CLEAR PORT	14	2	23	3	1	2		D	4	41	1	2	2		A	P	1	10	
0400		LAUNCHER MISFIRE	14	2	23	3	1	3		D	4	41	1	2	3		A	P	1	10	
0410		LAUNCHER READY	14	2	23	3	1	4		D	4	41	1	2	4		A	P	1	10	
0420		FIRING SECTOR CLEAR	14	2	23	3	2	1		D	4	41	1	3	1		A	P	1	10	
0440		TORPEDO AWAY	14	2	23	3	2	2		D	4	41	1	3	2		A	P	1	10	
0450		TORPEDO SYSTEM MISFIRE	14	2	23	3	2	3		D	4	41	1	3	3		A	P	1	10	
0460		TORPEDO SYSTEM READY	14	2	23	3	2	4		D	4	41	1	3	4		A	P	1	10	
0470		TSP IN REMOTE	14	2	23	3	3	1		D	4	41	1	4	1		A	P	1	10	
0480		TSP MISFIRE	14	2	23	3	3	2		D	4	41	1	4	2		A	P	1	10	
0490		TSP OPERABILITY TEST IND	14	2	23	3	3	3		D	4	41	1	4	3		A	P	1	10	
0500		TSP OVERHEAT WARNING	14	2	23	3	3	4		D	4	41	1	4	4		A	P	1	10	
0560		TSP TEST MODE INDICATION	14	2	23	3	4	1		D	4	41	2	1	1		A	P	1	10	
0561		WEAPON READY	14	2	23	3	4	2		D	4	41	2	1	2		A	P	1	10	
0570		GYRO SETTING (SENSE) A	14	2	23	3	4	3		D	4	41	2	1	3		A	P	1	10	
0580		GYRO SETTING (SENSE) B	14	2	23	3	4	4		D	4	41	2	1	4		A	P	1	10	
0590		GYRO SETTING (SENSE) C	14	2	23	4	1	1		D	4	41	2	2	1		A	P	1	10	
0600		GYRO DEPTH SET'G(DEPTH IND)A	14	2	23	4	1	2		D	4	41	2	2	2		A	P	1	10	
0610		GYRO DEPTH SET'G(DEPTH IND)B	14	2	23	4	1	3		D	4	41	2	2	3		A	P	1	10	
0620		GYRO DEPTH SET'G(DEPTH IND)C	14	2	23	4	1	4		D	4	41	2	2	4		A	P	1	10	
0630		TUBE SELECTED A	14	2	23	4	2	1		D	4	41	2	3	1		A	P	1	10	
0640		TUBE SELECTED B	14	2	23	4	2	2		D	4	41	2	3	2		A	P	1	10	
0650		TUBE SELECTED C	14	2	23	4	2	3		D	4	41	2	3	3		A	P	1	10	
0660		TUBE STATUS 1	14	2	23	4	2	4		D	4	41	2	3	4		A	P	1	10	
0670		TUBE STATUS 2	14	2	23	4	3	1		D	4	41	2	4	1		A	P	1	10	

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
0680		TUBE STATUS 3	14	2	23	4	3	2		D	4	41	2	4	2		A	P	1	10	
0690		TUBE STATUS 4	14	2	23	4	3	3		D	4	41	2	4	3		A	P	1	10	
0700		TUBE STATUS 5	14	2	23	4	3	4		D	4	41	2	4	4		A	P	1	10	
0710		TUBE STATUS 6	14	2	23	4	4	1		D	4	41	3	1	1		A	P	1	10	
194341		GUN ELEVATION POSITION MT52	14	2	22	11	1	1	M	J	4	42	1	2	1		J	P	1	300	1
194442		GUN ELEVATION POSITION MT52	14	2	22	11	2	1	M	J	4	42	1	3	1		J	P	1	300	1
195311		GUN TRAIN POSITION MT52	14	2	22	11	3	1	M	J	4	42	1	4	1		J	P	1	300	1
195412		GUN TRAIN POSITION MT52	14	2	22	11	4	1	M	J	4	42	3	1	1		J	P	1	300	1
0871C1		OSH TO RADAR AZIMUTH CONVERT	15	4	42	13	1	1		J	4	42	3	2	1		J	P	1	300	1
0872C2		OSH TO RADAR AZIMUTH CONVERT	15	4	42	13	2	1		J	4	42	3	3	1		J	P	1	300	1
0981		OSH TO SDT MK1 MOD3	15	4	42	13	3	1		J	4	42	3	4	1		J	P	1	300	1
0982		OSH TO SDT MK1 MOD3	15	4	42	13	4	1		J	4	42	5	1	1		J	P	1	300	1
0991		ROLL TO SDT MK1 MOD3	15	4	42	14	1	1		J	4	42	5	2	1		J	P	1	300	1
0992		ROLL TO SDT MK1 MOD3	15	4	42	14	2	1		J	4	42	5	3	1		J	P	1	300	1
1001		PITCH TO SDT MK1 MOD3	15	4	42	14	3	1		J	4	42	5	4	1		J	P	1	300	1
1002		PITCH TO SDT MK1 MOD3	15	4	42	14	4	1		J	4	42	7	1	1		J	P	1	300	1
1011		OWN SHIP SPEED TO SDTMK1MOD3	15	4	42	15	1	1		J	4	42	7	2	1		J	P	1	300	1
1012		OWN SHIP SPEED TO SDTMK1MOD3	15	4	42	15	2	1		J	4	42	7	3	1		J	P	1	300	1
1630		GUN IN STANDBY MT51	16	5	51	10	1	1		D	4	41	3	2	1		A	P	1	10	
1640		GUN FIRED MT51	16	5	51	10	1	2		D	4	41	3	2	2		A	P	1	10	
1650		GUN READY TO FIRE MT51	16	5	51	10	1	3		D	4	41	3	2	3		A	P	1	10	
1651		MOUNT SYNCH MT51	16	5	51	10	1	4		D	4	41	3	2	4		A	P	1	10	
0720		SONAR TGT SIMULATOR INPUT	17	5	51	12	1	1		P	4	41	6	1	1		P	P	1	40	50
1711		GUN ELEVATION POSITION MT51	18	5	51	11	1	1		J	4	41	4	1	1		J	P	1	300	1
1712		GUN ELEVATION POSITION MT51	18	5	51	11	2	1		J	4	41	4	2	1		J	P	1	300	1
1721		GUN TRAIN POSITION MT51	18	5	51	11	3	1		J	4	41	4	3	1		J	P	1	300	1
1722		GUN TRAIN POSITION MT51	18	5	51	11	4	1		J	4	41	4	4	1		J	P	1	300	1
1913E1		GUN ELEVATION ORDER MT52	19	7	71	13	1	1	M	J	4	42	7	4	1		J	P	1	300	1
1914E2		GUN ELEVATION ORDER MT52	19	7	71	13	2	1	M	J	4	42	9	1	1		J	P	1	300	1
1933G1		GUN TRAIN ORDER MT52	19	7	71	13	3	1	M	J	4	42	9	2	1		J	P	1	300	1
1934G2		GUN TRAIN ORDER MT52	19	7	71	13	4	1	M	J	4	42	9	3	1		J	P	1	300	1
1975		TGT-2 DESIGNATED RANGE	19	7	71	14	1	1		J	4	42	9	4	1		J	P	1	300	1
1976		TGT-2 DESIGNATED RANGE	19	7	71	14	2	1		J	4	42	11	1	1		J	P	1	300	1
194141	C	GUN ELEVATION POSITION MT52	20	2	22	11	1	1		J	5	52	1	3	1	M	J	P	1	300	1
1942H2	C	GUN ELEVATION POSITION MT52	20	2	22	11	2	1		J	5	52	1	4	1	M	J	P	1	300	1
195111	C	GUN TRAIN POSITION MT52	20	2	22	11	3	1		J	5	52	1	1	1		J	P	1	300	1
195212	C	GUN TRAIN POSITION MT52	20	2	22	11	4	1		J	5	52	1	2	1		J	P	1	300	1
1480		AMMO SELECT ACC MT51	21	4	41	11	3	1		D	5	51	1	1	1		A	P	1	10	
1490		AMMO SELECT APP MT51	21	4	41	11	3	2		D	5	51	1	1	2		A	P	1	10	
1500		AMMO SELECT COM MT51	21	4	41	11	3	3		D	5	51	1	1	3		A	P	1	10	
1510		AMMO SELECT CVT MT51	21	4	41	11	3	4		D	5	51	1	1	4		A	P	1	10	
1520		AMMO SELECT ILL MT51	21	4	41	11	4	1		D	5	51	1	2	1		A	P	1	10	
1530		AMMO SELECT PD MT51	21	4	41	11	4	2		D	5	51	1	2	2		A	P	1	10	
1540		AMMO SELECT RAP MT51	21	4	41	11	4	3		D	5	51	1	2	3		A	P	1	10	
1550		AMMO SELECT RED CHG MT51	21	4	41	11	4	4		D	5	51	1	2	4		A	P	1	10	
1560		AMMO SELECT STD CHG MT51	21	4	41	12	1	1		D	5	51	1	3	1		A	P	1	10	
1570		AMMO SELECT VT MT51	21	4	41	12	1	2		D	5	51	1	3	2		A	P	1	10	
1580		AMMO SELECT WP MT51	21	4	41	12	1	3		D	5	51	1	3	3		A	P	1	10	

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1590		DIRECT CONTROL REQUEST MT51	21	4	41	12	1	4		D	5	51	1	3	4		A	P	1	10	
1600		FUZE SETTER RUN MT51	21	4	41	12	2	1		D	5	51	1	4	1		A	P	1	10	
1610		FUZE SETTER SAFE MT51	21	4	41	12	2	2		D	5	51	1	4	2		A	P	1	10	
1620		LOAD ORDER SINGLE MT51	21	4	41	12	2	3		D	5	51	1	4	3		A	P	1	10	
1621		LOAD ORDER CONTINUOUS MT51	21	4	41	12	2	4		D	5	51	1	4	4		A	P	1	10	
0841		OSH TO AN/SQS-53 SONAR(ICSS)	21	4	42	15	3	1		J	5	51	5	3	1		J	P	1	10	1
0842		OSH TO AN/SQS-53 SONAR(ICSS)	21	4	42	15	4	1		J	5	51	5	4	1		J	P	1	10	1
0941D1		ROLL TO SQS-53 SONAR (ICSS)	21	4	42	16	1	1		J	5	51	7	1	1		J	P	1	10	1
0942D2		ROLL TO SQS-53 SONAR (ICSS)	21	4	42	16	2	1		J	5	51	7	2	1		J	P	1	10	1
0971		PITCH TO SQS-53 SONAR (ICSS)	21	4	42	16	3	1		J	5	51	7	3	1		J	P	1	10	1
0972		PITCH TO SQS-53 SONAR (ICSS)	21	4	42	16	4	1		J	5	51	7	4	1		J	P	1	10	1
0730		SONAR TGT SIMULATOR OUTPUT	22	4	41	15	1	1		P	5	51	9	1	1		P	P	1	40	50
1680		ELEVATION RATE ORDER MT51	23	4	41	8	1	1		C	5	51	2	1	1		C	P	1	300	1
1700		TRAIN RATE ORDER MT51	23	4	41	8	2	1		C	5	51	2	2	1		C	P	1	300	1
1661		FUZE SET ORDER MT51	23	4	41	13	1	1		J	5	51	3	1	1		J	P	1	300	1
1662		FUZE SET ORDER MT51	23	4	41	13	2	1		J	5	51	3	2	1		J	P	1	300	1
1671		GUN ELEVATION ORDER MT51	23	4	41	13	3	1		J	5	51	3	3	1		J	P	1	300	1
1672		GUN ELEVATION ORDER MT51	23	4	41	13	4	1		J	5	51	3	4	1		J	P	1	300	1
1691		GUN TRAIN ORDER MT51	23	4	41	14	1	1		J	5	51	5	1	1		J	P	1	300	1
1692		GUN TRAIN ORDER MT51	23	4	41	14	2	1		J	5	51	5	2	1		J	P	1	300	1
1941F1	D	GUN ELEVATION POSITION MT52	24	5	52	5	3	1	M	J	5	52	1	3	1		J	P	1	300	1
1942F2	D	GUN ELEVATION POSITION MT52	24	5	52	5	4	1	M	J	5	52	1	4	1		J	P	1	300	1
1951J1	D	GUN TRAIN POSITION MT52	24	5	52	6	1	1		J	5	52	1	1	1	M	J	P	1	300	1
1952J2	D	GUN TRAIN POSITION MT52	24	5	52	6	2	1		J	5	52	1	2	1	M	J	P	1	300	1
0740		I/O DISPLAY GP AN/UYA-6 IN	25	6	61	11	1	1		P	5	52	3	1	1		P	P	1	40	50
0781A1		OSH INDICATOR #1 CIC	26	1	11	5	1	1	M	J	6	61	4	1	1		J	P	1	10	1
0791A1		OSH INDICATOR #2 CIC	26	1	11	5	1	1	M	J	6	61	4	2	1		J	P	1	10	1
0821A1		OSH TO SONAR CONTROL (CIC)	26	1	11	5	1	1	M	J	6	61	4	3	1		J	P	1	10	1
0811A1		OSH TO VERT PLOT BRD (CIC)	26	1	11	5	1	1	M	J	6	61	6	1	1		LT	P	1	10	1
1121X1		HI LEVEL FILL-AUDIBLE ALARM	27	5	51	10	3	1	M	D	6	61	3	1	1		G	P	1	10	
1161X2		LO DOME WATER PR-AUDIBLE AL	27	5	51	10	3	2	M	D	6	61	3	1	2		G	P	1	10	
1171X3		LO DOME WATER PR-VISUAL AL	27	5	51	10	3	3	M	D	6	61	3	1	3		G	P	1	10	
1181X4		HI DOME WATER PR-AUDIBLE AL	27	5	51	10	3	4	M	D	6	61	3	1	4		G	P	1	10	
1191X5		HI DOME WATER PR-VISUAL AL	27	5	51	10	4	1	M	D	6	61	3	2	1		G	P	1	10	
1211X6		LO PRESS AIR-AUDIBLE ALARM	27	5	51	10	4	2	M	D	6	61	3	2	2		G	P	1	10	
1220		FLOW SWITCH - WATER ON	27	5	51	10	2	1		D	6	61	3	2	3		G	P	1	10	
1230		FLOW SWITCH - WATER OFF	27	5	51	10	2	2		D	6	61	3	2	4		G	P	1	10	
0750		I/O DISPLAY GP AN/UYA-6 OUT	28	5	62	7	1	1		P	6	61	8	1	1		P	P	1	40	50
1040		TACAN EMERG SHUTDN INDICATOR	29	7	71	12	1	1		D	6	61	1	1	1		A	P	1	10	
1050		TRANSPONDER ON INDICATOR	29	7	71	12	1	2		D	6	61	1	1	2		A	P	1	10	
1060		TRANSPONDER STANDBY	29	7	71	12	1	3		D	6	61	1	1	3		A	P	1	10	
1070		MONITOR ALARM	29	7	71	12	1	4		D	6	61	1	1	4		A	P	1	10	
1080		SYSTEM NORMAL	29	7	71	12	2	1		D	6	61	2	1	1		D	P	1	10	
1350		28VAC RADIATE/RECEIVER TEST	29	7	71	12	2	2		D	6	61	3	3	1		G	P	1	10	
1400		ANTENNA INTERLOCK/OPERATE	29	7	71	12	2	3		D	6	61	3	3	2		G	P	1	10	
0931C1		OSH TO TDT #2 (VIA ICSS)	30	4	42	13	1	1	M	J	7	71	7	1	1		LT	P	1	10	1

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
0951D1		ROLL TO TACAN	30	4	42	16	1	1	M	J	7	71	9	1	1		LT	P	1	10	1
0861C1		OSH TO TACAN	30	4	42	13	1	1	M	J	7	71	3	1	1		LT	P	1	300	1
0882C2		OSH TO TACAN	30	4	42	13	2	1	M	J	7	71	5	1	1		LT	P	1	300	1
1020		TACAN EMERGENCY NORMAL	31	6	61	9	1	1		A	7	71	1	1	1		D	P	1	10	
1030		TACAN EMERGENCY SHUTDOWN	31	6	61	9	1	2		A	7	71	1	1	2		D	P	1	10	
1280		CABINET INTERLOCK 28VAC	31	6	61	10	1	1		D	7	71	2	1	1		G	P	1	10	
1290		STANDBY INDICATOR	31	6	61	10	1	2		D	7	71	2	1	2		G	P	1	10	
1300		28VAC CABINET RADIATE REMOTE	31	6	61	10	1	3		D	7	71	2	1	3		G	P	1	10	
1310		COOLANT FLOW ALARM INDICATOR	31	6	61	10	1	4		D	7	71	2	1	4		G	P	1	10	
1320		LFOM ANTENNA SPD CHANGE IND	31	6	61	10	2	1		D	7	71	2	2	1		G	P	1	10	
1330		LOCAL INDICATOR	31	6	61	10	2	2		D	7	71	2	2	2		G	P	1	10	
1340		RADIATE INDICATOR	31	6	61	10	2	3		D	7	71	2	2	3		G	P	1	10	
1360		READY INDICATOR	31	6	61	10	2	4		D	7	71	2	2	4		G	P	1	10	
1370		PRESTANDBY REMOTE	31	6	61	10	3	1		D	7	71	2	3	1		G	P	1	10	
1380		REMOTE LFOM/LRM POWER IND	31	6	61	10	3	2		D	7	71	2	3	2		G	P	1	10	
1390		STANDBY RECEIVER TEST	31	6	61	10	3	3		D	7	71	2	3	3		G	P	1	10	
1410		ANTENNA OPERATE INDICATOR	31	6	61	10	3	4		D	7	71	2	3	4		G	P	1	10	
1420		DUMMY LOAD INDICATOR	31	6	61	10	4	1		D	7	71	2	4	1		G	P	1	10	
1421		STANDBY/RADIATE	31	6	61	10	4	2		D	7	71	2	4	2		G	P	1	10	
1430		CABINET OVERHEAT ALARM IND	31	6	61	10	4	3		D	7	71	2	4	3		G	P	1	10	
1440		AIR PRESSURE ALARM INDICATOR	31	6	61	10	4	4		D	7	71	2	4	4		G	P	1	10	
1980		AIR COND PLT 1 SUMMARY FAULT	32	1	11	4	1	1		D	8	81	1	1	1		A	P	1	10	
1990		AIR COND PLT 2 SUMMARY FAULT	32	1	11	4	1	2		D	8	81	1	1	2		A	P	1	10	
2000		EDUCTOR SUPPLY VALVE OPEN	32	1	11	4	1	3		D	8	81	6	1	1		G	P	1	10	
2010		EDUCTOR SUPPLY VALVE CLOSED	32	1	11	4	1	4		D	8	81	6	1	2		G	P	1	10	
2020		EDUCTOR SUCTION VALVE OPEN	32	1	11	4	2	1		D	8	81	6	1	3		G	P	1	10	
2030		EDUCTOR SUCTION VALVE CLOSED	32	1	11	4	2	2		D	8	81	6	1	4		G	P	1	10	
2040		EDUCTOR DISCHARGE VALVE OPEN	32	1	11	4	2	3		D	8	81	6	2	1		G	P	1	10	
2050		EDUCTOR DISCHGE VALVE CLOSED	32	1	11	4	2	4		D	8	81	6	2	2		G	P	1	10	
2060		SEAWATER PUMP 2 SUC VAL OPEN	32	1	11	4	3	1		D	8	81	6	2	3		G	P	1	10	
2070		SEAWATER PUMP 2 SUC VAL CLSD	32	1	11	4	3	2		D	8	81	6	2	4		G	P	1	10	
2080		SEAWATER ISOLATION VAL OPEN	32	1	11	4	3	3		D	8	81	6	3	1		G	P	1	10	
2090		SEAWATER ISOLATION VAL CLSD	32	1	11	4	3	4		D	8	81	6	3	2		G	P	1	10	
2100		BHD 300 ISOLATION VAL OPEN	32	1	11	4	4	1		D	8	81	6	3	3		G	P	1	10	
2110		BHD 300 ISOLATION VAL CLSD	32	1	11	4	4	2		D	8	81	6	3	4		G	P	1	10	
0160		HEATER ON, GEN #3 MON/IND	33	2	22	10	2	1		D	8	81	1	2	1		A	P	1	10	
0170		GEN OPEN (TRIP'D) STATUS SIG	33	2	22	10	2	2		D	8	81	1	2	2		A	P	1	10	
0180		GEN CLOSED STATUS SIGNAL	33	2	22	10	2	3		D	8	81	1	2	3		A	P	1	10	
0060		TURBINE INLET TEMP HI ALARM	33	2	23	5	1	1		D	8	81	1	3	1		A	P	1	10	
0070		LUBO FILTER DELTA P HIGH	33	2	23	5	1	2		D	8	81	1	3	2		A	P	1	10	
0080		FUEL OIL FILTER DELTA P HIGH	33	2	23	5	1	3		D	8	81	1	3	3		A	P	1	10	
0090		LUBO TEMPERATURE HIGH ALARM	33	2	23	5	1	4		D	8	81	1	3	4		A	P	1	10	
0100		ENCLOSURE TEMP HIGH ALARM	33	2	23	5	2	1		D	8	81	1	4	1		A	P	1	10	
0110		GENERATOR STATOR TEMP HIGH	33	2	23	5	2	2		D	8	81	1	4	2		A	P	1	10	
0120		AIR TEMPERATURE HIGH ALARM	33	2	23	5	2	3		D	8	81	1	4	3		A	P	1	10	
0130		REAR BEARING TEMP HIGH ALARM	33	2	23	5	2	4		D	8	81	1	4	4		A	P	1	10	
0140		FRT BEARING TEMP HIGH ALARM	33	2	23	5	3	1		D	8	81	2	1	1		A	P	1	10	
0150		LUBO PRESSURE LOW ALARM	33	2	23	5	3	2		D	8	81	2	1	2		A	P	1	10	
1240		ASROC COOLING ALARM	34	4	41	7	1	1		B	8	81	3	1	1		B	P	1	40	
1250		SONAR COOLING ALARM	34	4	41	7	1	2		B	8	81	3	1	2		B	P	1	40	

SIGNAL ID	SW CL	SIGNAL NAME	MESSAGE NO.	INPUT RM	INPUT IOU	INPUT SLOT	INPUT CH	INPUT SBC	INPUT M	INPUT TYPE	OUTPUT RM	OUTPUT IOU	OUTPUT SLOT	OUTPUT CH	OUTPUT SBC	OUTPUT M	OUTPUT TYPE	UPDATE MODE	P R	RATE	WORDS
1120x1		HI LEVEL FILL-AUDIBLE ALARM	35	5	51	10	3	1		D	8	81	6	4	1		G	P	1	10	
1160x2		LO DOME WATER PR-AUDIBLE AL	35	5	51	10	3	2		D	8	81	6	4	2		G	P	1	10	
1170x3		LO DOME WATER PR-VISUAL AL	35	5	51	10	3	3		D	8	81	6	4	3		G	P	1	10	
1180x4		HI DOME WATER PR-AUDIBLE AL	35	5	51	10	3	4		D	8	81	6	4	4		G	P	1	10	
1190x5		HI DOME WATER PR-VISUAL AL	35	5	51	10	4	1		D	8	81	7	1	1		G	P	1	10	
1210x6		LO PRESS AIR-AUDIBLE ALARM	35	5	51	10	4	2		D	8	81	7	1	2		G	P	1	10	
2121		MT52 SELECT MK-86	36	6	61	9	2	1		A	8	81	8	1	1		S	P	1	10	
2122		MT52 SELECT TDT #2	36	6	61	9	2	2		A	8	81	8	2	1		S	P	1	10	
2131		POSITION SELECT SDC	36	6	61	9	2	3		A	8	81	8	3	1		S	P	1	10	
2132		POSITION SELECT EAT	36	6	61	9	2	4		A	8	81	8	4	1		S	P	1	10	
1090		HI TEMP DET-B (AV STORE RM)	37	7	71	11	1	1		B	8	81	3	2	1		B	P	1	40	
1091		HI TEMP DET-A (RDY TORP LKR)	37	7	71	11	1	2		B	8	81	3	2	2		B	P	1	40	
1092		HI TEMP DET-C (HELO HANGER)	37	7	71	11	2	1		B	8	81	3	3	1		B	P	1	40	
1260		ELEX HI TEMP ALARM (AL LP 1)	37	7	71	11	2	2		B	8	81	3	3	2		B	P	1	40	
1270		ELEX HI TEMP ALARM (AL LP 2)	37	7	71	11	3	1		B	8	81	3	4	1		B	P	1	40	
0050		OIL LEVEL SWITCH STBD HUB	38	8	81	9	3	1		D	8	82	1	1	1		A	P	1	10	
0010		TANK TEMPERATURE SW 1	38	8	82	4	2	1		D	8	82	1	2	1		A	P	1	10	
0020		TANK TEMPERATURE SW 2	38	8	82	4	2	2		D	8	82	1	2	2		A	P	1	10	
1100		BILGE LEVEL 6-338-2-F	38	8	82	2	1	1		B	8	81	4	1	1		B	P	1	40	
1101		BILGE LEVEL 4-464-0-T	38	8	82	2	1	2		B	8	81	4	1	2		B	P	1	40	
1102		BILGE LEVEL 6-464-3-Q	38	8	82	2	2	1		B	8	81	4	2	1		B	P	1	40	
1103		BILGE LEVEL 6-382-4-V	38	8	82	2	2	2		B	8	81	4	2	2		B	P	1	40	
1104		BILGE LEVEL 6-506-0-F	38	8	82	2	3	1		B	8	81	4	3	1		B	P	1	40	
1105		BILGE LEVEL 3-426-1-E	38	8	82	2	3	2		B	8	81	4	3	2		B	P	1	40	
1106		BILGE LEVEL 3-398-0-Q	38	8	82	2	4	1		B	8	81	4	4	1		B	P	1	40	
1107		BILGE LEVEL 2-518-1-V	38	8	82	2	4	2		B	8	81	4	4	2		B	P	1	40	
1110		BILGE LEVEL 5-174-0-E	38	8	82	3	1	1		B	8	81	5	1	1		B	P	1	40	
1111		BILGE LEVEL 5-220-01-E	38	8	82	3	1	2		B	8	81	5	1	2		B	P	1	40	
1112		BILGE LEVEL 5-260-01-E	38	8	82	3	2	1		B	8	81	5	2	1		B	P	1	40	
1113		BILGE LEVEL 5-300-0-E	38	8	82	3	2	2		B	8	81	5	2	2		B	P	1	40	
1114		BILGE LEVEL 6-382-3-V	38	8	82	3	3	1		B	8	81	5	3	1		B	P	1	40	
1115		BILGE LEVEL PORT SHAFT ALLEY	38	8	82	3	3	2		B	8	81	5	3	2		B	P	1	40	
1116		BILGE LEVEL STBD SHAFT ALLEY	38	8	82	3	4	1		B	8	81	5	4	1		B	P	1	40	
1117		BILGE LEVEL SEWAGE PLANT	38	8	82	3	4	2		B	8	81	5	4	2		B	P	1	40	

APPENDIX P: SYSTEM SUMMARY DATA

SYSTEM SUMMARY 10/29/79 PAGE 17

NUMBER OF RM'S	8
NUMBER OF PROM'S	74
NUMBER OF IOU'S	13
NUMBER OF INPUT SIGNALS	275
NUMBER OF OUTPUT SIGNALS	275
NUMBER OF MESSAGES	38
MESSAGE RATE, HZ	4070.
DATA RATE, BPS	473120.
TOTAL INPUT MODULES	39
TOTAL OUTPUT MODULES	55
TOTAL MODULES	94
TOTAL SLOTS USED	120

SYSTEM SUMMARY (CONTINUED) 10/29/79 PAGE 18

INPUT_MODULE_TYPES		NUMBER	SPARE_CAPACITY
A	DISCRETE INPUT, SWITCH CLOSURE	1	10
B	TRI-LEVEL DISCRETE INPUT	4	9
C	DC ANALOG INPUT, LOW RESOLUTION	2	12
D	DISCRETE INPUT, ISOLATED, VOLTAGE LEVEL	14	66
J	SYNCHRO INPUT, 4 CHANNEL	14	9
P	PARALLEL DATA INPUT, NTDS SLOW	4	0

SYSTEM SUMMARY (CONTINUED) 10/23/79 PAGE 19

OUTPUT_MODULE_TYPES		NUMBER	SPARE_CAPACITY
A	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,DC	13	89
B	TRI-LEVEL DISCRETE OUTPUT	3	1
C	DC ANALOG OUTPUT, LOW RESOLUTION	2	12
D	DISCRETE OUTPUT, VOLTAGE LEVEL	2	29
G	DISCRETE OUTPUT, ISOL.,SWITCH CLOSURE,AC	4	20
J	SYNCHRO OUTPUT, DUAL/SINGLE SPEED,400 HZ	19	15
LT	SYNCHRO OUTPUT, TORQUE DEVICES, 60 HZ	7	0
P	PARALLEL DATA OUTPUT, NTDS SLOW	4	0
S	SWITCHING CONTROL MODULE	1	12

OUTPUT TYPE	NO. SIGNALS
A	119
P	4
M1	32
M2	29
J	6
LT	2
L1	3
L2	2
D	3
B	23
G	44
C	4
SD	4
	275

END

DTIC

9-86