

UNCLASSIFIED

AD NUMBER

AD366755

CLASSIFICATION CHANGES

TO: unclassified

FROM: confidential

LIMITATION CHANGES

TO:

Approved for public release, distribution unlimited

FROM:

Notice: Release only to U. S. Government Agencies is authorized. Other certified requesters shall obtain release approval from Director, Defense Atomic Support Agency, Washington, D. C. 20301.

AUTHORITY

DSWA ltr., 10 Apr 97; DSWA ltr., 10 Apr 97

THIS PAGE IS UNCLASSIFIED

XRD
77

(14) XRD-72
CONFIDENTIAL

CONFIDENTIAL
Security Information

(9) BUREAU OF SHIPS GROUP

TECHNICAL INSPECTION REPORT

366755
362993

Classification (Cancelled) (Changed to ~~CONFIDENTIAL~~ Security Information)
By Authority of JOINT CHIEFS OF STAFF JCS 1795/36 DATED 16 APRIL 1949.
By *John H. Deyette* Date 22 SEP 1953

(6) OPERATION CROSSROADS.
U.S.S. GASCONADE (APA85).

TEST ABLE [U].

U. S. GOVERNMENT AGENCIES MAY OBTAIN COPIES OF THIS REPORT DIRECTLY FROM DDC. OTHER COMPLETED DDS USERS SHALL REQUEST THROUGH

Director
Defense Atomic Support Agency
Washington, D. C. 20301

(11) 1947,

OPERATION CROSSROADS

CONFIDENTIAL
Security Information

(12) 46p.

DIRECTOR OF SHIP MATERIAL

JOINT TASK FORCE ONE

SECRET

CONFIDENTIAL

elf

DDC
NOV 22 1955
REG. NO. 50
TISIA E

GROUP 1 JAN 1965
Downgraded at 12 year intervals;
Not automatically declassified.

CONFIDENTIAL

TABLE OF CONTENTS

	PAGE NO.
Ships Characteristics Sheet - - - - -	3
Midship Section - - - - -	4
Overall Summary of Damage - - - - -	5
Hull Technical Inspection Report (Section I) - - - - -	12
Machinery Technical Inspection Report (Section II) - - -	18
Electrical Technical Inspection Report (Section III) - -	24
Photographic Section (Section IV) - - - - -	30
Ship Measurement Diagram (Appendix) - - - - -	36
Commanding Officers Report (Appendix) - - - - -	39

SECRET

USS GASCONADE (APA85)

CONFIDENTIAL

CONFIDENTIAL

U.S.S. GASCONADE (APA 85)

SHIP CHARACTERISTICS

Building Yard: Consolidated Steel Corp.; Wilmington,
California.

Commissioned: 11 March 1945.

HULL

Length Overall: 426 feet 0 inches.
Length on Waterline: 400 feet 0 inches.
Beam (extreme): 58 feet 0 inches.
Depth (molded to upper deck): 37 feet 0 inches.
Drafts at time of test: Fwd: 9 feet 0 inches.
Aft: 18 feet 4 inches.
Limiting displacement: 7,080 tons.
Displacement at time of test: 5,959 tons.

MAIN PROPULSION PLANT

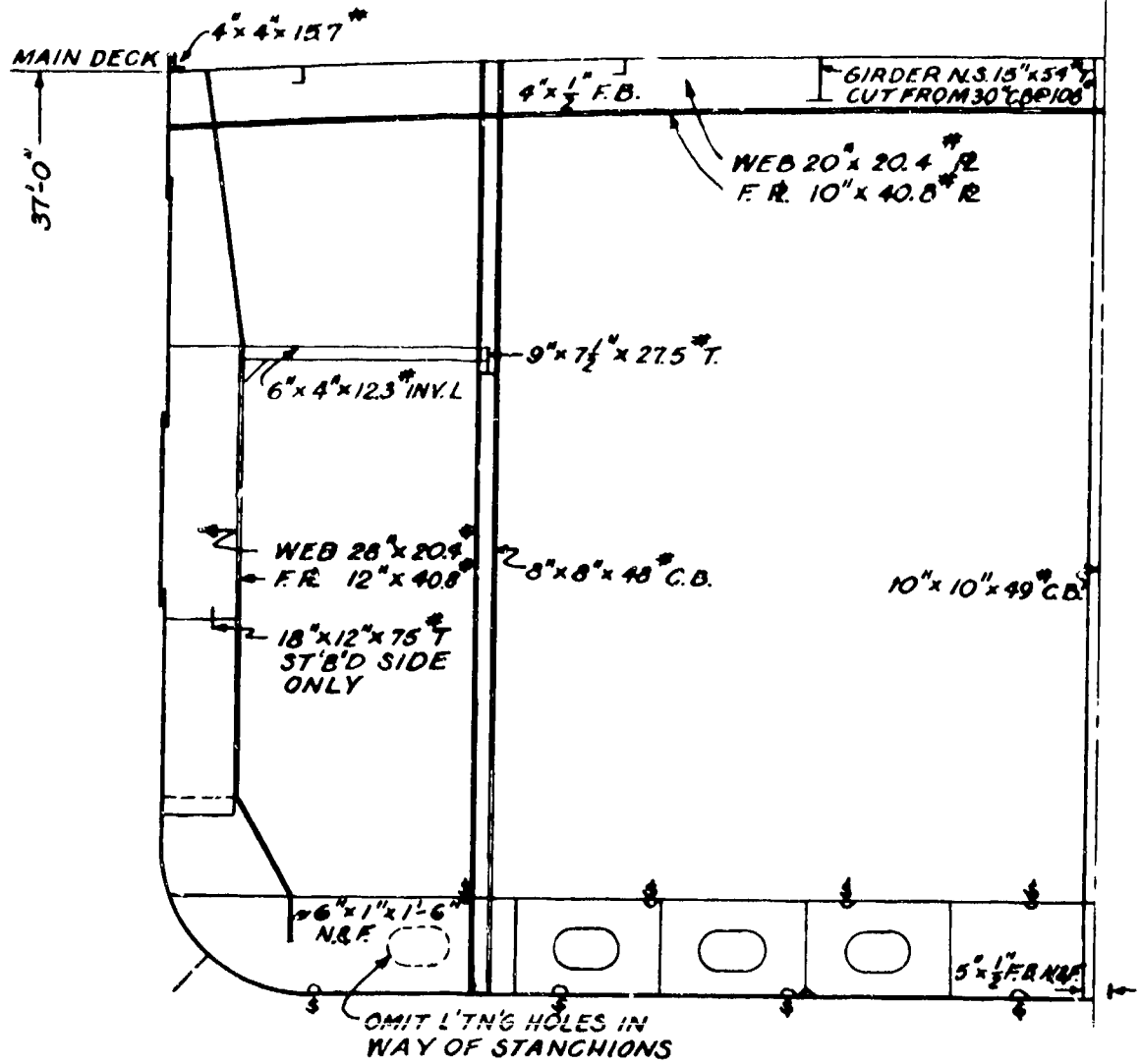
Main Engines: Two sets of Westinghouse steam turbines, directly connected to Westinghouse main generators. Two main propulsion motors.
Main Condensers: Two are installed in ship.
Boilers: Two Babcock and Wilcox boilers are installed in ship. 465 psi gauge - 750° F.
Propellers: Two are installed
Main Shafts: Two are installed in ship.
Ships Service Generators: Five units are installed.
Three - 250 KW. - 450 V. - A.C., and Two - 100 KW. 120/240 V. - D.C.

SECRET

USS GASCONADE (APA85)

Page 3 of 46 Pages

CONFIDENTIAL



FRAME 76 LOOKING AFT
 MIDSHIP SECTION
 TEST A

SECRET

U.S.S. GASCONADE (APA 85)

TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

There was no flooding and consequently no change in drafts or list.

(b) Structural Damage.

HULL

About forty percent of the upper deck hatch pontoons for cargo hatch No. 1 and about twenty percent for hatch No. 2 lifted and fell to the deck below without damage. There is a slight dishing and distortion of a gear locker installed by the ship's force under the 20mm gun foundations at frame 133. A sheet metal locker on the port bridge wing and the port flag bag are slightly dished on the exposed face. A gear locker on the starboard side of the signal bridge has sprung doors and the top is bulged. A plywood motion picture projection booth installed by the Ship's Force has suffered a failure in a screwed joint at about mid-height on the port side.

MACHINERY

No comment.

ELECTRICAL

None observed.

SECRET

USS GASCONADE (APA85)

(c) Damage.

HULL

No damage.

MACHINERY

There was no damage to machinery of this vessel from Test A.

ELECTRICAL

No electrical equipment was damaged or rendered inoperable as a result of the test.

II. Forces Evidenced and Effects Noted.

(a) Heat.

HULL

There is very little evidence of heat damage. Paint on the exterior hull forward on the port side is lightly scorched. There are faint traces of paint scorching on cylindrical surfaces normal to the radiation source. These traces indicate that heat emanated from a point about 300 degrees relative. Exposed manila lines are lightly scorched.

MACHINERY

No evidence.

ELECTRICAL

There was slight evidence of radiant heat along the port side forward. This heat was of insufficient intensity to cause any damage to electrical equipment.

SECRET

USS GASCONADE (APA85)

(b) Fires and explosions.

HULL

There were no explosions. Three small fires, probably caused a canvas belly gripe cover.

MACHINERY

No evidence.

ELECTRICAL

There was no evidence of fires or explosions affecting electrical equipment.

(c) Shock.

HULL

There is no evidence of shock damage.

MACHINERY

No evidence.

ELECTRICAL

There was no evidence of shock to electrical equipment.

(d) Pressure.

HULL

The origin of the air blast wave was from a point bearing approximately 300 degrees relative. Pressure damage is very minor, and is limited to slight distortion of exposed sheet metal structures.

SECRET

USS GASCONADE (APA85)

MACHINERY

There is no evidence of pressure on any part of the machinery installation. The stacks were carefully inspected and have no deformation.

ELECTRICAL

There was no evidence of pressure on electrical equipment.

(e) Any effects apparently peculiar to the Atom Bomb.

HULL

Other than radiation, no peculiar effects were observed.

MACHINERY

None.

ELECTRICAL

There were no effects noted that are considered peculiar to the atomic bomb other than radioactivity and the intensity of the heat wave.

III. Effects of damage.

(a) Effect on machinery, electrical and ship control.

HULL

No damage.

MACHINERY

None.

SECRET

USS GASCONADE (APA85)

ELECTRICAL

None.

(b) Effect on gunnery and fire control.

HULL

No damage.

MACHINERY

No comment.

ELECTRICAL

None.

(c) Effect on watertight integrity and stability.

HULL

No damage.

MACHINERY

No comment.

ELECTRICAL

None.

(d) Effect on personnel and habitability.

HULL

The habitability of the vessel is unimpaired.

SECRET

USS GASCONADE (APA85)

MACHINERY

The test had no effect on habitability and would have had no effect on personnel below decks.

ELECTRICAL

There would have been no effect on personnel other than possible casualties from radioactivity and from the heat of the blast. Extent of radioactivity is unknown. It is considered that casualties from the heat of the blast would have been light. There was no effect on habitability other than radioactivity.

(e) Total effect on fighting efficiency.

HULL

None. There is no impairment of structural strength or seaworthiness.

MACHINERY

None.

ELECTRICAL

Since it is considered that injury to personnel would not have been sufficient to prevent them from performing their duties, it is probable that there would have been no effect on the fighting efficiency of the vessel.

IV. General Summary of Observers' Impressions and Conclusions.

HULL

Damage is superficial. While some injuries might have been sustained by exposed topside personnel, the vessel would have been able to fulfill its mission.

SECRET

USS GASCONADE (APA85)

MACHINERY

The GASCONADE was outside the effective range of the explosion during Test A.

ELECTRICAL

It is considered that this vessel was too far from the center of the blast to experience damage in this test.

V. Any preliminary General or Specific Recommendations.

HULL

Light sheet metal structures such as flag bags and gear lockers should be eliminated and the facilities built into the deckhouse proper.

MACHINERY

None.

ELECTRICAL

None.

SECRET

USS GASCONADE (APA85)

TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

There was no flooding and consequently no change in drafts or list.

(b) Structural damage.

Damage is negligible. About forty percent of the upper deck hatch pontoons for cargo hatch No. 1 and about twenty percent for hatch No. 2 lifted and fell to the deck below without damage. There is a slight dishing and distortion of a gear locker installed by the ship's force under the 20mm gun foundations at frame 133. A sheet metal locker on the port bridge wing and the port flag bag are slightly dished on the exposed face. A gear locker on the starboard side of the signal bridge has sprung doors and the top is bulged. A plywood movie projection booth installed by the Ship's Force has suffered a failure in a screwed joint at about mid-height on the port side.

(c) Other damage.

No damage.

II. Forces Evidenced and Effects Noted.

(a) Heat.

There is very little evidence of heat damage. Paint on the exterior hull forward on the port side is lightly scorched. There are faint traces of paint scorching on cylindrical surfaces normal to radiation source. These traces indicate that heat emanated from a point about 300° relative. Exposed manila lines are lightly scorched.

SECRET

USS GASCONADE (APA85)

(b) Fires and explosions.

There were no explosions. Three small fires, probably caused by heat radiation, burned two cocoa matting fenders and a canvas belly gripe cover.

(c) Shock.

There is no evidence of shock damage.

(d) Pressure.

The origin of the air blast wave was from a point bearing approximately 300 degrees relative. Pressure damage is very minor, and is limited to slight distortion of exposed sheet metal structures.

(e) Effects apparently peculiar to the atom bomb.

Other than radiation, no peculiar effects were observed.

III. Effects of Damage.

(a) Effect on machinery, electrical and ship control.

No damage.

(b) Effect on gunnery and fire control.

No damage.

(c) Effect on water-tight integrity and stability.

No damage.

(d) Effect on personnel and habitability.

The habitability of the vessel is unimpaired.

SECRET

USS GASCONADE (APA85)

(e) Effect on fighting efficiency.

None. There is no impairment of structural strength or seaworthiness.

IV. General Summary of Observers' Impressions and Conclusions.

Damage is superficial. While some injuries might have been sustained by exposed topside personnel, the vessel would have been able to fulfill its mission.

V. Preliminary General or Specific Recommendations of Inspection Group.

Light sheet metal structures such as flag bags and gear lockers should be eliminated and the facilities built into the deckhouse proper.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Fuel Oil	95%
Ammunition	100%
Potable and reserve feed water	95%
Salt water ballast	None.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

SECRET

USS GASCONADE (APA85)

DETAILED DESCRIPTION OF HULL DAMAGE

A. General Description of Hull Damage.

There is no structural damage. Exposed painted surfaces normal to the radiation source are very slightly scorched. Light dishing of exposed sheet metal structures occurred. Three minor fires were ignited. Photos pages 31 and 32 show general exterior views of the ship before and after the test.

B. Superstructure.

(a) Description of damage.

1. One signal halyard burned away, starboard side of signal bridge, outboard.
2. A deck locker door, starboard side of signal bridge is dished. The top of this locker is bulged.
3. Canvas weathering lashed to starboard rail of signal bridge carried away.
4. Port side of port flag bag lightly dished.
5. Sheet metal bulkheads of gear lockers, built beneath 20 mm gun tub supports at frame 140 on the after deckhouse are deformed and tack welds are broken (photo 1821-12, page 33). The port side gear locker is dished and the starboard locker is bulged.
6. Two cocoa matting fenders lashed to the superstructure deck railing at frames 61 and 137 are burned. Two swabs on the navigating deck also burned.

C. Turrets, Guns and Directors.

No damage.

SECRET

USS GASCONADE (APA85)

D. Torpedo Mounts, Depth Charge Gear.

Not Applicable.

E. Weather Deck.

(a) General condition of deck and causes of damage.

The general condition is good. All equipment is operable. There is slight damage due to fires. Graphite grease on running rigging is dried to caked carbon, reducing flexibility. The boat gripe on Welin Davit No. 4 burned down to the bare wire (photos 2100-2, 1737-8; pages 35, 34). The gripe on davit No. 2 is scorched. The hatch pontoons on hatches 1 and 2 have been lifted from the strongbacks under the canvas cover. About forty percent of the boards on No. 2 hatch and twenty percent of the boards on No. 2 hatch fell to the main deck level. An eight inch hawser on the fantail is scorched. Locations and recordings of deck deflection scratch gages are tabulated in Appendix.

F. Exterior Hull.

No damage. Paint lightly scorched on port side, forward.

G. Interior Compartments (above w.l.).

No damage.

H. Armor Decks and Miscellaneous Armor.

Not applicable.

I. Interior Compartments (below w.l.).

No damage.

J. Underwater Hull.

No damage.

SECRET

USS GASCONADE (APA85)

K. Tanks.
No damage.

L. Flooding.
None.

M. Ventilation.
No damage.

N. Ship Control.
No damage.

O. Fire Control.
No damage.

P. Ammunition Behavior.
No damage.

Q. Ammunition Handling.
No damage.

R. Strength.
No damage.

S. Miscellaneous.
No comment.

SECRET

USS GASCONADE (APA85)

TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

(b) Structural damage.

No comment.

(c) Other damage.

There was no damage to machinery of this vessel from Test A.

II. Forces Evidenced and Effects Noted.

(a) Heat.

No evidence.

(b) Fires and explosions.

No evidence.

(c) Shock.

No evidence.

(d) Pressure.

There is no evidence of pressure on any part of the machinery installation. The stacks were carefully inspected and have no deformation.

SECRET

USS GASCONADE (APA85)

(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery and ship control.

None.

(b) Effect on gunnery and fire control.

No comment.

(c) Effect on water-tight integrity and stability.

No comment.

(d) Effect on personnel and habitability.

The test had no effect on habitability and would have had no effect on personnel below decks.

(e) Total effect on fighting efficiency.

None.

IV. General Summary.

The GASCONADE was outside the effective range of the explosion during Test A.

V. Preliminary Recommendation.

None.

SECRET

USS GASCONADE (APA85)

DETAILED DESCRIPTION OF MACHINERY DAMAGE

A. General Description of Machinery Damage.

(a) Overall condition.

The overall condition of the machinery was not changed by Test A.

(b) Areas of major damage.

None.

(c) Primary cause of damage in each area of major damage.

Not applicable.

(d) Effect of target test on overall operation of machinery plant.

The operation of the machinery plant was not affected by Test A.

B. Boilers.

Undamaged. Both boilers have been steamed since Test A and functioned normally.

A hydrostatic pressure was left on #2 boiler during Test A. Pressure dropped from 450 lbs/sq. in. to 10 lbs/sq. in. in between 30 June 1946 at 1330 and 2 July at 1130. Steam pressure was left on #1 boiler during Test A. Pressure dropped from 450 lbs/sq. in. to 0 between 30 June at 1330 and 2 July at 1130.

Boiler #2 was tested hydrostatically before and after Test A with the following results:

SECRET

USS GASCONADE (APA85)

	Before Test A	After Test A
Initial Pressure	450 lbs/sq. in.	450 lbs/sq. in.
Time required to drop 100 lbs.	11 minutes	11 minutes
Time required to drop 200 lbs.	38 minutes	38 minutes
Pressure at end of 12 hours	60 lbs/sq. in.	50 lbs/sq. in.
Pressure at end of 24 hours	50 lbs/sq. in.	25 lbs/sq. in.

C. Blowers.

Undamaged. All forced draft blowers were operated by steam at normal speed and pressure after Test A.

D. Fuel Oil Equipment.

Undamaged. All fuel oil equipment was operated under normal working conditions after Test A.

E. Boiler Feedwater Equipment.

Undamaged. All boiler feedwater equipment was operated under normal working conditions after Test A.

F. Main Propulsion Machinery.

Undamaged. Both main generators and motors were operated satisfactorily, both ahead and astern after Test A. The ship changed berths under her own power using speeds up to 10 knots after Test A.

G. Reduction Gears.

Not applicable.

H. Shafting and Bearings.

Undamaged. Both shafts were operated ahead and astern after Test A. Neither the shafts nor the bearings showed any defects.

SECRET

USS GASCONADE (APA85)

I. Lubrication System.

Undamaged. The lubrication system was operated under normal working conditions after Test A.

J. Condensers and Air Ejectors.

No damage. Both main and auxiliary condensers were operated at normal working conditions after Test A.

K. Pumps.

Undamaged. All pumps were operated at normal working speeds and pressure after Test A.

L. Auxiliary Generators (Turbines and Gears).

Undamaged. All auxiliary generators were operated under load after Test A.

M. Propellers.

Undamaged. The propellers were not inspected. No vibration was noted while main machinery was in operation during shifting of anchorage after Test A.

N. Distilling Plant.

Undamaged. Both distilling units have been operated since Test A.

O. Refrigeration Plant.

Undamaged. The refrigerating plant has been operated since Test A.

P. Winches, Windlasses, and Capstans.

Undamaged. All winches, windlasses, and capstans were operated after Test A and functioned normally.

SECRET

USS GASCONADE (APA85)

Q. Steering Engine.

Undamaged. The steering engine was used in service with the ship underway after Test A and functioned normally.

R. Elevators, Ammunition Hoists, etc.

Undamaged. The gasoline elevator and ammunition hoists have been operated since Test A.

S. Ventilation (Machinery).

Undamaged. All ventilation machinery has been operated since Test A.

T. Compressed Air Plant.

Undamaged. Both air compressors have been operated since Test A.

U. Diesels (Generators and Boats).

Undamaged. The emergency diesel generator and diesel fire pump have been operated since Test A.

No boats were aboard during the test.

V. Piping Systems.

Undamaged. All piping systems have been tested at normal working pressure since Test A.

W. Miscellaneous.

Undamaged. Laundry equipment, galley equipment and machine shop equipment have been operated since Test A and functioned normally.

SECRET

USS GASCONADE (APA85)

TECHNICAL INSPECTION REPORT

SECTION III

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

None observed.

- (c) Other Damage.

No electrical equipment was damaged or rendered inoperable as a result of the test.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

There was slight evidence of radiant heat along the port side forward. This heat was of insufficient intensity to cause any damage to electrical equipment.

- (b) Fires and explosions.

There was no evidence of fires or explosions affecting electrical equipment.

- (c) Shock.

There was no evidence of shock to electrical equipment.

SECRET

USS GASCONADE (APA85)

(d) Pressure.

There was no evidence of pressure on electrical equipment.

(e) Any effects apparently peculiar to the Atom Bomb.

There were no effects noted that are considered peculiar to the atomic bomb other than radioactivity and the intensity of the heat wave.

III. Effects of Damage.

(a) Effect on electrical equipment and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

There would have been no effect on personnel other than possible casualties from radioactivity and from the heat of the blast. Extent of radioactivity is unknown. It is considered that casualties from the heat of the blast would have been light. There was no effect on habitability other than radioactivity.

(e) Total effect on fighting efficiency.

Since it is considered that injury to personnel would not have been sufficient to prevent them from performing their duties, it is considered that there would have been no effect on the fighting efficiency of the vessel.

SECRET

USS GASCONADE (APA85)

IV. General Summary of Observer's Impressions and Conclusions.

It is considered that this vessel was too far from the center of the blast to experience damage in this test.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

SECRET

USS GASCONADE (APA85)

DETAILED DESCRIPTION OF ELECTRICAL DAMAGE .

A. General Description of Electrical Damage.

(a) Overall condition.

No damage from Test A.

(b) Areas of major damage.

No damage.

(c) Primary cause of damage in each major area.

No damage.

(d) The effects of the target test on the overall operation of the electric plant.

All electrical equipment was operable.

(e) Types of equipment most affected.

No damage.

B. Electric Propulsion Rotating Equipment.

No damage.

C. Electric Propulsion Control Equipment.

No damage.

D. Ship's Service Generators.

No damage.

SECRET

USS GASCONADE (APA85)

E. Emergency Generators.

No damage.

F. Switchboards and Distribution Panels.

No damage.

G. Wiring, Wiring Equipment and Wireways.

No damage.

H. Transformers.

No damage.

I. Submarine Propelling Batteries.

Not applicable.

J. Portable Batteries.

No damage.

K. Motors, Motor-Generator Sets and Controllers.

No damage.

L. Lighting Equipment.

No damage.

M. Searchlights.

No damage.

N. Degaussing Equipment.

No damage.

SECRET

USS GASCONADE (APA85)

O. Gyro Compass Equipment.

No damage.

P. Sound Powered Telephones.

No damage.

Q. Ship's Service Telephones.

Not applicable.

R. Announcing Systems.

No damage.

S. Telegraphs.

No damage.

T. Indicating Systems.

No damage.

U. I.C. and A.C.O. Switchboards.

No damage.

V. F.C. Switchboards.

No damage.

SECRET

USS GASCONADE (APA85)

SECTION IV

PHOTOGRAPHS

TEST ABLE

SECRET

USS GASCONADE (APA85)

Page 30 of 46 Pages



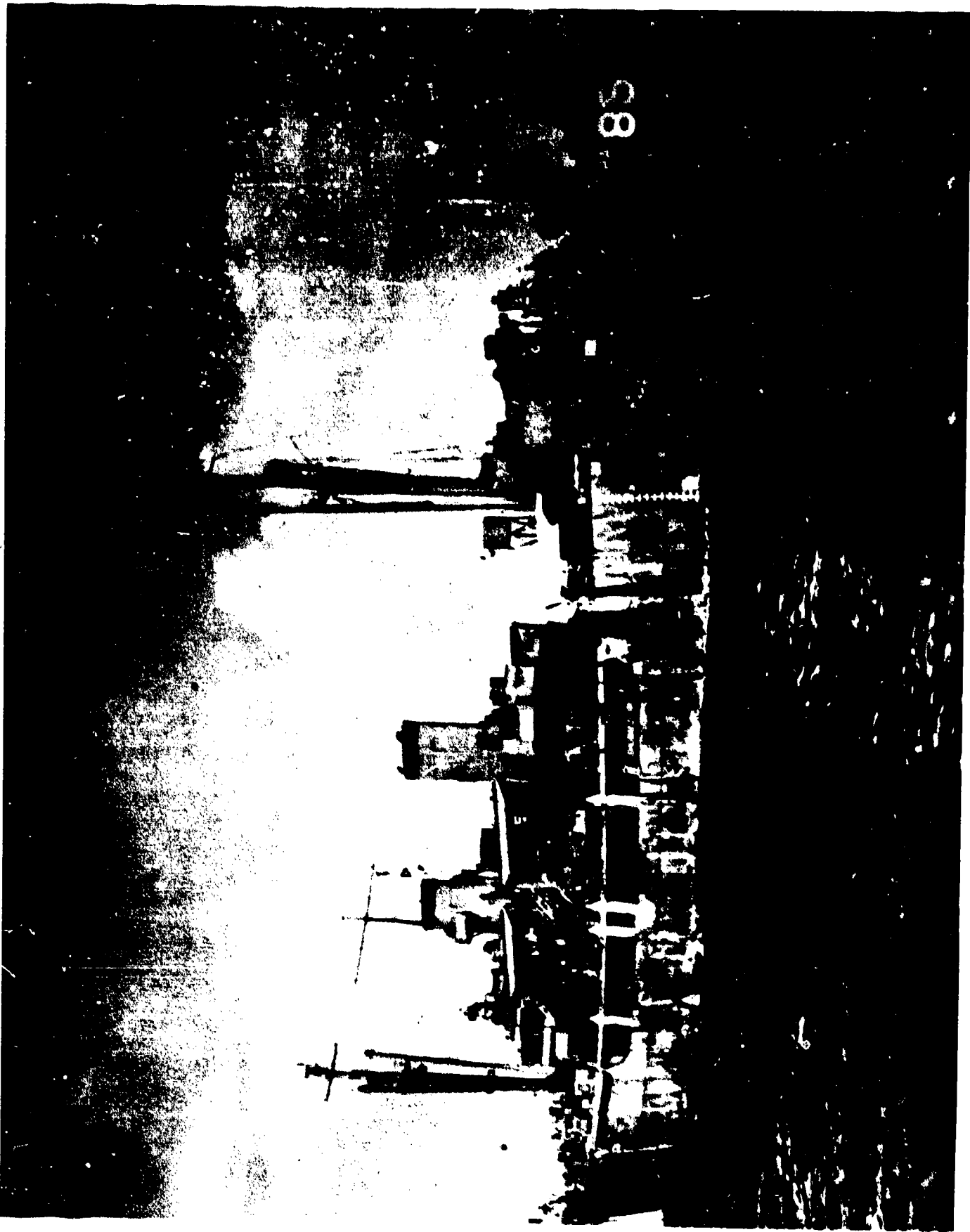
AA-CR-227-50-68. View from off starboard bow after Test A.

SECRET

Page 31 of 46 Pages

USS GASCONADE (APA85)

8048



AA-CR-227-50-64. View from off port quarter after Test A.

SECRET

Page 32 of 46 Pages

USS GASCONADE (APA85)

8048



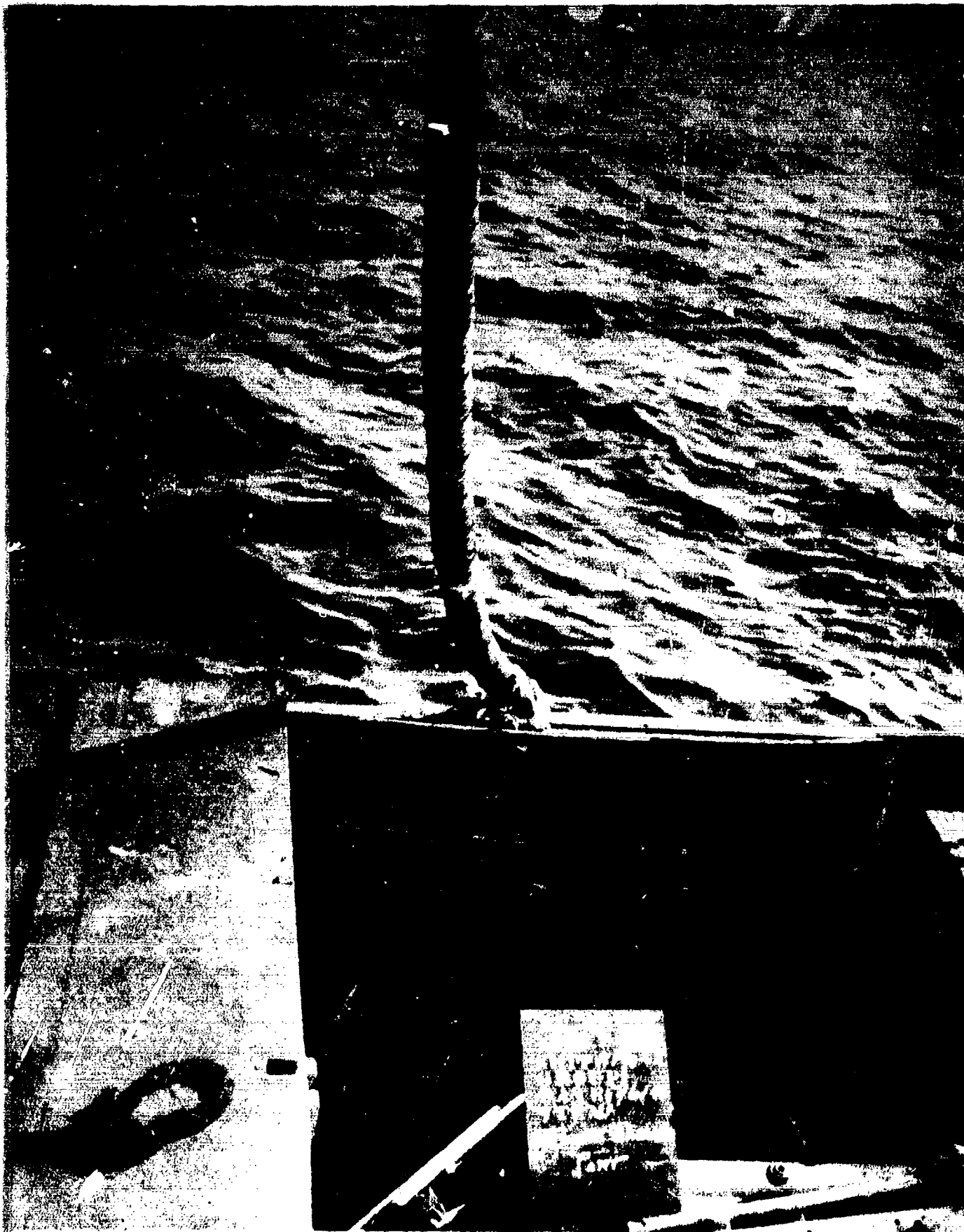
AA-CR-82-1821-12. Looking forward on starboard side of after deck house top at frame 136 showing damage to sheathing of 20MM gun tub foundation.

SECRET

Page 33 of 46 Pages

USS GASCONADE (APA85)

8048



AA-CR-65-1737-8. Detail of scorched gripe on No. 2 Welin davit.

SECRET

Page 34 of 46 Pages

USS GASCONADE (APA85)

8048



AA-CR-88-2100-2. Looking down, aft, and to port showing burned gripe of stowed LCVP.

SECRET

Page 35 of 46 Pages

USS GASCONADE (APA85)

8048

APPENDIX

SHIPS MEASUREMENT DIAGRAM

TEST ABLE

SECRET

USS GASCONADE (APA85)

APPENDIX

Ship Measurement Data.

Six deck deflection scratch gages were installed to record relative movement between the upper and main decks. Two of the gages recorded slight elastic deflection. No permanent set was recorded. A tabulation of readings is on page 38.

SECRET

USS GASCONADE (APA85)

Page 37 of 46 Pages

DECK DEFLECTION GAGES

TEST A

SHIP U.S.S. GASCONADE APA 85

FR. NO.	LOCATION		DIST. OFF ϵ	MAXIMUM COMP.	MAXIMUM EXP.	PERMANENT DISTANCE	SET EXP./COMP.	REMARKS
	DECK							
53	MAIN		PORT	NONE	NONE	NONE	NONE	NONE
53	"		STBD	3/16"	"	"	"	"
116	"		PORT	NONE	"	"	"	"
116	"		STBD	7/16"	"	"	"	"
129 1/2	"		PORT	NONE	"	"	"	"
129 1/2	"		STBD	"	"	"	"	"

APPENDIX

COMMANDING OFFICERS REPORT

TEST ABLE

SECRET

USS GASCONADE (APA85)

Page 39 of 46 Pages

TECHNICAL INSPECTION REPORT

PART A - GENERAL SUMMARY

I. Target Condition After Test.

- (a) Damage from test A was negligible. There was no flooding or structural damage. Machinery, electrical, and electronic equipment, ship control, fire control, and ordnance was found to be operable, and no effect from the detonation was noted. There was some evidence of intense heat. It is believed that personnel not fully clothed would have suffered flash burns.

II. Forces Evidenced And Effects Noted.

- (a) Great heat was evidenced by the blistering of paint on the port side. The heat seemed to have been most intense close to the water line, and toward the stern. There was no indication that the heat penetrated beyond the shell plating.
- (b) The remains of fires on weather decks, port side, were noticed. There were no effects noted from pressure or shock, as well as no peculiar effects from the atomic explosion.

III. Results Of Test On Target.

- (a) Main propulsion machinery, and ship control equipment was tested, and no casualties were noted. There were no effects on gunnery or fire control, watertight equipment, or stability.
- (b) The effect on personnel and habitability was considered inconsequential. Within four hours after reboarding, power was restored, all facilities were operating, and normal routine restored.

SECRET

U.S.S. GASCONADE (APA85)

- (c) Fighting efficiency, and the ability of this ship to carry out its function as an attack transport would be only slightly impaired.

IV. General Summary Of Impressions And Conclusions.

- (a) It is the opinion of the Commanding Officer that the effects of the atomic bomb on this vessel were negligible; however, it is believed that the function as an attack transport was impaired in that personnel not protected by being fully clothed would have suffered flash burns. Such fires as were started could have been easily extinguished if personnel had been on board.

SECRET

U.S.S. GASCONADE (APA85)

Page 41 of 46 Pages

INSPECTION REPORT

PART C

SECTION I - HULL

- A. Hull damage, none.
- B. Superstructure (exclusive of guns and mounts).
 - (a) Bridge Area.
 - 1. One signal halyard burned away, starboard side, outboard.
 - 2. Deck locker door, starboard side of signal bridge, dished in.
 - 3. Canvass shield, lashed to starboard rail of signal bridge, carried away.
 - (b) Amidships Deckhouse.
 - 1. Soot, blown down "Charlie Noble", where it was deposited in galley ranges, and also in the hospital area, where a gasket was blown out of a flange joint.
- C. Guns and Directors.
 - (a) Unprotected mounts; one twin mount 40mm and four 20mm mounts.
 - 1. Gun covers on two 20mm mounts, port side, frames 60 and 120, partially burned. These covers had been treated with fire retardant solution.
 - 2. All guns operable but not test fired.
 - (b) Directors, rangefinders, and power drives, all in good condition and operable.
- D. Not applicable.
- E. Weather Decks.
 - (a) General condition good; slight damage due to fires; all equipment operable.

SECRET

U.S.S. GASCONADE (APA85)

1. Graphite grease on running rigging dried to caked carbon, reducing flexibility.
2. Boat gripe davit 4, burned down to bare wire; gripe on davit 2, scorched.
3. Hatch covers on hatches 1 and 2 were dislodged from position on strongback beneath canvass cover and fell through to main deck.
4. Cover on motor instrument panel of LCVP, griped down on the port side of #2 hatch, was dislodged.
5. A 26" coco-mat fender, lashed to the port side of the after deck house was burned away, scorching paint on outside of 40mm clipping room. Inside of clipping room registered normal temperatures.
6. Hawser, 8", faked down on fantail, centerline, was scorched.
7. Sheet metal bulkheads of gear lockers, built beneath 20mm gun tub supports, at frame 120, were deformed, and tack welds broken. The locker on the port side was dished in; the locker on the starboard side was bulged out.
8. Fire hoses scorched as follows:
 - (A) port side 01 deck frame 30
 - (B) port side 01 deck frame 70
 - (C) port side 02 deck frame 72
 - (D) port side 03 deck frame 75

F. Exterior Hull (above water line)

- (a) No damage. Paint on vertical surfaces on the port side only were scorched and blistered in an irregular pattern.

G. Interior of Compartments.

- (a) No change.

SECRET

U.S.S. GASCONADE (APA85)

PART C

SECTION II - MACHINERY

A. No damage noted.

SECRET

U.S.S. GASCONADE (APA85)

Page 44 of 46 Pages

PART C
SECTION III - ELECTRICAL

A. No damage ncted.

SECRET

U.S.S. GASCONADE (APA85)

Page 45 of 46 Pages

PART C

CONFIDENTIAL

SECTION IV - ELECTRONICS

- A. Three, six foot whip antennae, installed on port and starboard side of #1 stack, and on the port signal yardarm, were broken off just above the base.

SECRET

U.S.S. GASCONADE (APA85)

Page 46 of 43 Pages

CONFIDENTIAL



TRC

Defense Special Weapons Agency
6801 Telegraph Road
Alexandria, Virginia 22310-3398

10 April 1997

MEMORANDUM FOR DEFENSE TECHNICAL INFORMATION CENTER
ATTENTION: OMI/Mr. William Bush

SUBJECT: Declassification of Reports

The Defense Special Weapons Agency (formerly Defense Nuclear Agency) Security Office has reviewed and declassified the following reports:

AD-366718✓	XRD-32-Volume 3	
AD-366726✓	XRD-12-Volume 2	
AD-366703✓	XRD-16-Volume 1	
AD-366702✓	XRD-14-Volume 2	
AD-376819L✓	XRD-17-Volume 2	
AD-366704✓	XRD-18	
AD-367451✓	XRD-19-Volume 1	
AD-3667005✓	XRD-20-Volume 2	AD-366705
AD-376028L✓	XRD-4	
AD-366694✓	XRD-1	
AD-473912✓	XRD-193	
AD-473891✓	XRD-171	
AD-473899✓	XRD-163	
AD-473887✓	XRD-166	
AD-473888✓	XRD-167	ST-A 28 JAN 80 made target
AD-473889✓	XRD-168	

TRC

10 April 1997

SUBJECT: Declassification of Reports

AD-B197749	XRD-174
AD-473905-	XRD-182
AD-366719-	XRD-33 Volume 4
AD-366700-	XRD-10
AD-366712-	XRD-25 Volume 1
AD-376827L-	XRD-75
AD-366756-	XRD-73
AD-366757-	XRD-74
AD-366755-	XRD-72
AD-366754-	XRD-71
AD-366710-	XRD-23 Volume 1
AD-366711-	XRD-24 Volume 2
AD-366753-	XRD-70
AD-366749-	XRD-66
AD-366701-	XRD-11
AD-366745-	XRD-62.

All of the cited reports are now **approved for public release; distribution statement "A" applies.**

Ar dith Jarrett
ARDITH JARRETT
Chief, Technical Resource Center

copy furn: FC/DSWA (DASIAC)
KSC

Completed

R.W