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# BUREAU OF SHIPS GROUP 1 TECHNICAL INSPECTION REPORT

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By Authority of JOINT CHIEFS OF STAFF JCS 1795/36 DATED 15 APRIL 1949  
By *John H. Gayelle* Date 24 SEP 1953

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## U.S.S. CATRON (APA 71)

### TEST ABLE [U].⑧

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FROM U.S. GOVERNMENT PRINTING OFFICE: 1953 O-500000

Defense Atomic Support Agency  
Washington, D. C. 20301

⑥ OPERATION CROSSROADS

DIRECTOR OF SHIP MATERIAL  
JOINT TASK FORCE ONE

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GROUP 3 1 JAN 1965  
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REG. NO. *50*

**CONFIDENTIAL**

BUREAU OF SHIPS GROUP  
TECHNICAL INSPECTION REPORT

U. S. OFFICE OF NAVAL INSPECTION, BUREAU OF SHIPS GROUP, WASHINGTON, D. C. 20301  
FROM: [REDACTED] TO: [REDACTED]

Support Agency  
Washington, D. C. 20301

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APPROVED:

F. X. Forest,  
Captain, U.S.N.

USS CATRON (APA71)

Page 1 of 47 Pages

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1 JAN 1965

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TABLE OF CONTENTS

	PAGE NO.
Ship Characteristics Sheet . . . . .	3
Midship Section . . . . .	4
Overall Summary of Damage . . . . .	5
Hull Technical Inspection Report (Section I) . . . . .	12
Machinery Technical Inspection Report (Section II) . . . . .	19
Electrical Technical Inspection Report (Section III) . . . . .	26
Photographic Section (Section IV) . . . . .	34
Commanding Officer's Report (Appendix) . . . . .	44



USS CATRON (APA71)

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U.S.S. CATRON (APA 71)

SHIP CHARACTERISTICS

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

Commissioned: 28 November 1944.

HULL

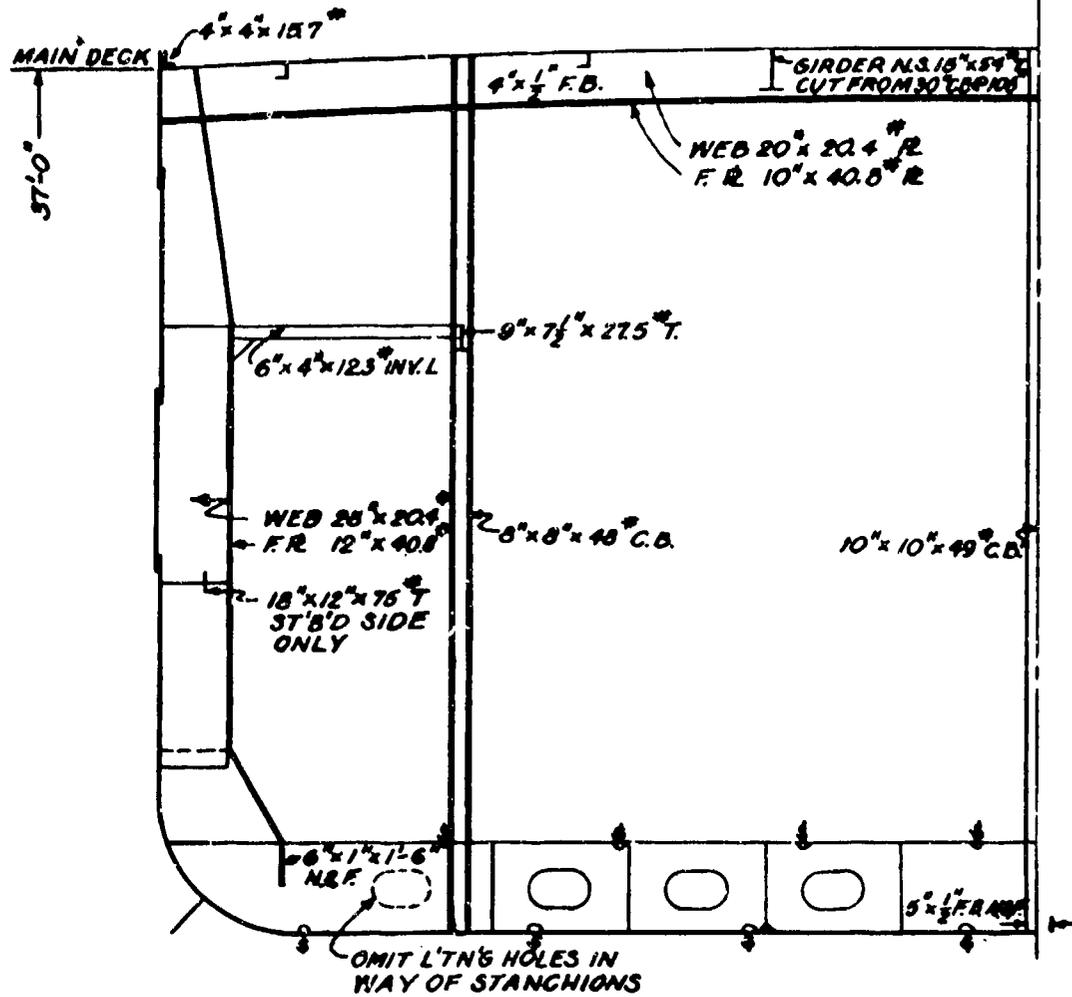
Length Overall: 426 feet 0 inches.  
Length on Waterline: 400 feet 0 inches.  
Beam (extreme): 58 feet 0 inches.  
Depth (molded to upper deck): 37 feet 0 inches.  
Drafts at time of test: Fwd. 9 feet 6 inches.  
Aft. 17 feet 0 inches.  
Limiting displacement: 7,080 tons.  
Displacement at time of test: 5,718 tons.

MAIN PROPULSION PLANT

Main Engines: Two sets of Westinghouse steam tur-  
bines, directly connected to Westinghouse main gen-  
erators. Two main shaft motors.  
Main Condensers: Two are installed in ship.  
Boilers: Two Babcock and Wilcox boilers are in-  
stalled in ship. 450 psi gauge - 750° F.  
Propellers: Two are installed  
Main Shafts: Two are installed in ship.  
Ships Service Generators: Five are installed in  
ship.  
Two - 250 KW. - 450 V. - A.C.  
One - 150 KW. - 450 V. - A.C.  
Two - 100 KW. - 120/240 V. - D.C.

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USS CATRON (APA 71)



FRAME 76 LOOKING AFT

MIDSHIP SECTION  
TEST A

U.S.S. GATRON (APA-71)

TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

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

There is no flooding, hence no change in drafts or list.

(b) Structural Damage.

HULL

Damage is superficial, and is confined generally to exposed plating under 10# in weight. Cargo hatch covers were displaced in both hatches and fell to the deck below. No battens were distorted.

MACHINERY

The outer casing of the after stack was slightly dented.

ELECTRICAL

Not observed.

(c) Other Damage.

HULL

Not observed.

MACHINERY

There is no damage to machinery of this vessel, all of which has been operated since Test A.

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USS CATRON (APA71)

## ELECTRICAL

Damage to electrical equipment was negligible.

### II. Forces Evidenced and Effects Noted.

#### (a) Heat.

##### HULL

Paint on exposed vertical surfaces is blistered slightly and generally scorched. Exposed cordage is somewhat scorched. Lumber on the fantail is badly charred. The heat seems to have emanated from a relative bearing of 190 degrees and an elevation of 6 degrees.

##### MACHINERY

Except for scorched paint on exposed machinery, there is no evidence of heat.

## ELECTRICAL

Heat from the blast caused moderate scorching of paint on surfaces exposed, and caused one minor fabric fire.

#### (b) Fires and Explosions.

##### HULL

Fire was confined to the burning of one rubberized cloth foul weather jacket on the port searchlight platform. There were no explosions.

##### MACHINERY

No evidence.

SECRET

USS CATRON (APA71)

ELECTRICAL

There was one minor fabric fire. There were no explosions.

(c) Shock.

HULL

None.

MACHINERY

No evidence.

ELECTRICAL

A few broken service lamps and broken lamps in two 12" searchlights were the only indications of shock found in electrical equipment.

(d) Pressure.

HULL

The blast wave emanated from about 190° relative. Plating under 10# in weight, directly exposed to the blast, is generally affected.

MACHINERY

The outer casing of the after stack was slightly dented.

ELECTRICAL

No indications of pressure were found in any electrical equipment.

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USS CATRON (APA71)

(e) Effects peculiar to the Atomic Bomb.

HULL

None.

MACHINERY

None.

ELECTRICAL

Slight radiant heat damage on electrical cables was the only effect peculiar to the atom bomb found in electrical gear.

III. Results of test on target.

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

HULL

Not affected as a result of hull damage.

MACHINERY

The test had no effect on the machinery of the CATRON.

ELECTRICAL

Electrical damage had no effect on electric propulsion and ship control.

(b) Effect on gunnery and fire control.

HULL

Not affected as a result of hull damage.

SECRET

USS CATRON (APA71)

MACHINERY

No comment.

ELECTRICAL

Electrical damage had no effect on gunnery or on fire control.

(c) Effect on watertight integrity and stability.

HULL

None.

MACHINERY

No comment.

ELECTRICAL

Electrical damage had no effect on watertight integrity nor on stability.

(d) Effect on personnel and habitability.

HULL

It is probable that many personnel directly exposed to the bomb would have suffered flash burns and radiation injury. The habitability of the ship is not affected.

MACHINERY

None.

ELECTRICAL

Electrical damage had no effect on the vessel's personnel nor would it have had any effect on habitability of the vessel.

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USS CATRON (APA71)

(e) Effect on fighting efficiency.

HULL

Not affected as a result of hull damage.

MACHINERY

None.

ELECTRICAL

Damage to electrical equipment would have no effect on the fighting efficiency of the vessel.

IV. General Summary of Observers' Impressions and Conclusions.

HULL

No comment.

MACHINERY

The CATRON was outside the effective range of the explosion in Test A.

ELECTRICAL

The vessel suffered minor heat and shock damage. There was no damage indicative of any general weakness in electrical equipment.

V. Any preliminary general or specific recommendations of the inspecting group.

HULL

None.

MACHINERY

None.

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USS CATRON (APA71)

## ELECTRICAL

Although the damage is light, it indicates that wherever possible equipment should not be exposed directly to heat blast, and the areas of exposed light equipment should be reduced as much as practicable.

SECRET

USS CATRON (APA71)

Page 11 of 47 Pages

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 is no flooding, hence no change in drafts or list.

(b) Structural damage.

Damage is superficial, and is confined generally to exposed plating under 10# in weight. Cargo hatch covers were displaced in both hatches and fell to the deck below. No battens were distorted.

(c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

(a) Heat.

Paint on exposed vertical surfaces is blistered slightly and generally scorched. Exposed cordage is somewhat scorched. Lumber on the fantail is badly charred. The heat seems to have emanated from a relative bearing of 190° and an elevation of 6°.

(b) Fires and explosions.

Fire was confined to the burning of one rubberized cloth foul weather jacket on the port searchlight platform. There were no explosions.

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USS CATRON (APA71)

(c) Shock.

None.

(d) Pressure.

The blast wave emanated from about 190° relative. Plating under 10# weight, directly exposed to the blast, is generally affected.

(e) Effects apparently peculiar to the atom bomb.

None.

### III. Effects of Damage.

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

Not affected as a result of hull damage.

(b) Effect on gunnery and fire control.

Not affected as a result of hull damage.

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

None.

(d) Effect on personnel and habitability.

It is probable that many personnel directly exposed to the bomb would have suffered flash burns and radiation injury. The habitability of the ship is not affected.

(e) Effect on fighting efficiency.

Not affected as a result of hull damage.

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USS CATRON (APA71)

IV. General Summary of Observers' Impressions and Conclusions.

No comment.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Fuel Oil	50%
Diesel Oil	50%
Ammunition	50%
Potable and reserve feed water	95%
Salt water ballast	620 tons

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.

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USS CATRON (APA71)

## DETAILED DESCRIPTION OF HULL DAMAGE

### A. General Description of Hull Damage.

Damage is confined generally to exposed plating under 10 pounds in weight. Cover battens on both cargo hatches were displaced and fell to the deck below. Heat radiation caused paint to blister slightly and to scorch rather generally all exposed vertical surfaces. There is some scorching of exposed cordage and rather severe charring of exposed lumber on the fantail. Photos pages 35 and 36 are general exterior views of the ship after Test A.

### B. Superstructure.

#### (a) Description of damage.

The outer casings of both stacks are dished about two inches on the after three feet of both sides. The vent covers (28" x 42") on the sides of the stacks are dished 1/2 inch.

Bulkhead 106 on the superstructure deck is dished about 1 inch. The centerline stiffener shows no deflection. Bulkhead 102 on the navigating deck is dished about 1/2 inch.

The after sides of the port and starboard flag bags are dished about 4 inches and are distorted slightly. (Photo 1731-3: page 37). The 16 gauge bulkhead, installed by the ship's force, around the pipe foundation of the 20MM gun on top of the after deck house at frame 140 starboard failed. The after and inboard sections dished about 3 inches. The outboard section bulged 2 inches. The expanded metal sections of the after bulkhead the potato locker, frame 23, upper deck were pushed in.

Canvas wind screens, 04 level, frame 66 to 74, starboard, bent the 1/2 inch pipe to which it was secured at the lower edge. Lines securing two canvas screens on the 04 level are broken. Photos 1731-1, 2; pages 38 and 39: show typical examples of scorched paint.

SECRET

USS CATRON (APA71)

(b) Causes of damage in each area.

Damage was caused by the blast.

(c) Evidences of fire in the superstructure.

Fire was confined to the burning of one rubberized cloth foul weather jacket on the port searchlight platform.

(d) Estimate of relative effectiveness against heat and blast.

Insufficient evidence for comparison.

(e) Constructive criticism of superstructure design or construction, including important fittings and equipment.

No comment.

C. Turrets, Guns and Directors.

No damage.

D. Torpedo Mounts, Depth Charge Gear.

Not Applicable.

E. Weather Deck.

Cargo hatch battens were displaced and fell to the deck below or scattered on the upper deck. (Photo 1812-5, 6, 8, and 9; pages 40 , 41 , 42 , and 43 .)

F. Exterior Hull.

No damage.

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

No damage.

SECRET

USS CATRON (APA71)

H. Armor Decks and Miscellaneous Armor.

Not Applicable.

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

No damage.

J. Underwater Hull.

No damage.

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.

SECRET

USS CATRON (APA71)

R. Strength.

No damage.

S. Miscellaneous.

No comment.

T. Coverings.

Heat radiation caused paint to blister slightly  
and to scorch rather generally on exposed vertical surfaces.  
(Photo 1731-1 § 2; pages 38 and 39 .)

SECRET

USS CATRON (APA71)

Page 18 of 47 Pages

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 comment.

(b) Structural damage.

The outer casing of the after stack was slightly dented.

(c) Other damage.

There is no damage to machinery of this vessel, all of which has been operated since Test A.

II. Forces Evidenced and Effects Noted.

(a) Heat.

Except for scorched paint on exposed machinery, there is no evidence of heat.

(b) Fires and explosions.

No evidence.

(c) Shock.

No evidence.

(d) Pressure.

The outer casing of the after stack was slightly dented.

SECRET

USS CATRON (APA71)

(e) Effects apparently peculiar to the atom bomb.

None.

### III. Effects of Damage.

(a) Effect on machinery and ship control.

The test had no effect on the machinery of the CATRON.

(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.

None.

(e) Total effect on fighting efficiency.

None.

### IV. General Summary.

The CATRON was outside the effective range of the explosion in Test A.

### V. Preliminary Recommendations.

None.

SECRET

USS CATRON (APA71)

## DETAILED DESCRIPTION OF MACHINERY DAMAGE

### A. General Description of Machinery Damage.

#### (a) Overall condition.

The overall condition of the machinery was not affected 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.

Test A had no effect on the overall operation of this vessel. All machinery was operated after Test A, and functioned normally.

### B. Boilers.

Undamaged. Both boilers were steamed after Test A. Performance was normal. Hydrostatic tests indicate no change in the tightness of the boilers.

Boiler #1 was left under steam pressure of 450 lbs/sq inch and boiler #2 under hydrostatic pressure of 450 lbs/sq inch when the ship was abandoned at 0930, 30 June. Upon return of the crew at 1200, 2 July, boiler #1 had no pressure, boiler #2 had 50 lbs/sq in pressure remaining.

The outer casing of the after stack was slightly dented. This has no effect on operation.

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USS CATRON (APA71)

## HYDROSTATIC TESTS OF BOILER #2.

I	Before Test A.	After Test A.
Initial pressure	450 lb/sq.in.	450 lb/sq.in.
Pressure remaining after		
1 hour	350 lb/sq.in.	345 lb/sq.in.
2 hours	310 lb/sq.in.	310 lb/sq.in.
6 hours	220 lb/sq.in.	220 lb/sq.in.
12 hours	165 lb/sq.in.	165 lb/sq.in.
24 hours	100 lb/sq.in.	100 lb/sq.in.

### C. Blowers.

Undamaged. All blowers were operated after Test A, and functioned normally.

### D. Fuel Oil Equipment.

Undamaged. All equipment was operated after Test A, and functioned normally.

### E. Boiler Feedwater Equipment.

Undamaged. All equipment was used in normal operation after Test A.

### F. Main Propulsion Machinery.

Undamaged. Both main turbines were tested for 1 1/2 hours, turning over the shafts in both directions. Performance was normal.

### G. Reduction Gears.

Not applicable.

SECRET

USS CATRON (APA71)

H. Shafting and Bearings.

Undamaged. Shafting and bearings were inspected while the shafting was being turned over. Performance was normal.

I. Lubrication System.

Undamaged. The lubrication system was used under normal working conditions. Performance was normal.

J. Condensers and Air Ejectors.

Undamaged. All condensers were used in normal operation. Performance was normal with vacuum of 28 inches.

K. Pumps.

Undamaged. All pumps have been tested at normal operating loads and found to operate satisfactorily.

L. Auxiliary Generators (Turbines and Gears).

Undamaged. All turbo-generators were operated under load. Performance was normal.

M. Propellers.

Undamaged. Propellers were inspected from the surface of the water and turned over by power after Test A. No defects were apparent.

N. Distilling Plant.

Undamaged. The evaporating plant was placed in service immediately after Test A. Performance was normal.

O. Refrigeration Plant.

Undamaged. The refrigeration equipment was placed in service immediately after Test A. Performance was normal.

SECRET

USS CATRON (APA71)

P. Winches, Windlasses, and Capstans.

Undamaged. All equipment was operated after Test A, and functioned normally.

Q. Steering Engine.

Undamaged. Both steering units have been operated through full throw of the rudder from all stations.

R. Elevators, Ammunition Hoists, Etc.

Undamaged. The gasoline hoist and two ammunition hoists were tested and found normal.

S. Ventilation (Machinery).

Undamaged. All ventilation machinery was operated after Test A, and functioned normally.

T. Compressed Air Plant.

Undamaged. The air compressor was operated after Test A, and functioned normally.

U. Diesels (Generators and Boats).

Undamaged. Both diesel fire pumps were run at 80 lbs/sq.in. for four hours. Performance was normal.

The emergency diesel generator was operated for six hours at full load. Performance was normal.

V. Piping Systems.

Undamaged. All piping was tested and no defects were found.

SECRET

USS CATRON (APA71)

W. . Miscellaneous.

Undamaged. Laundry, galley and machine shop equipment were placed in service immediately after Test A. Performance was normal.

SECRET

USS CATRON (APA71)

Page 25 of 47 Pages

TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

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

Drafts and lists were not observed. There was no flooding.

(b) Structural damage.

Not observed.

(c) Other damage.

Damage to electrical equipment was negligible.

II. Forces Evidenced and Effects Noted.

(a) Heat.

Heat from the blast caused moderate scorching of paint on surfaces exposed, and caused one minor fabric fire.

(b) Fires and explosions.

There was one minor fabric fire. There were no explosions.

(c) Shock.

A few broken service lamps and broken lamps in two 12" searchlights were the only indications of shock found in electrical equipment.

SECRET

USS CATRON (APA71)

(d) Pressure.

No indications of pressure were found in any electrical equipment.

(e) Any effects apparently peculiar to the atom bomb.

Slight radiant heat damage on electrical cables was the only effect peculiar to the atom bomb found in electrical gear.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

Electrical damage had no effect on electric propulsion and ship control.

(b) Effect on gunnery and fire control.

Electrical damage had no effect on gunnery or on fire control.

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

Electrical damage had no effect on water-tight integrity or on stability.

(d) Effect on personnel and habitability.

Electrical damage had no effect on the vessel's personnel nor would it have had any effect on habitability of the vessel.

(e) Total effect on fighting efficiency.

Damage to electrical equipment would have no effect on the fighting efficiency of the vessel.

SECRET

USS CATRON (APA71)

IV. General Summary of Observers' Impressions and Conclusions.

The vessel suffered minor heat and shock damage. There was no damage indicative of any general weakness in electrical equipment.

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

Although the damage is light, it indicates that wherever possible equipment should not be exposed directly to blast heat, and the areas of exposed light equipment should be reduced as much as practicable.

SECRET

USS CATRON (APA71)

## DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

### A. General Description of Electrical Damage.

#### (a) Overall condition.

The overall condition of the ship's electrical equipment was practically unchanged.

#### (b) Areas of major damage.

There was no major damage.

#### (c) Primary causes of damage in each area of major damage.

Very minor damage only was caused by shock.

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

1. Ship's service generator plant - no change.
2. Engine and boiler auxiliary - no change.
3. Electrical propulsion - no change.
4. Communications - broken lamps in two 12" signal searchlights were the only damage.
5. Fire control circuits - no change.
6. Ventilation - no change.
7. Lighting - a few lamps and two fixtures were broken.

#### (e) Types of equipment most affected.

A few broken lamps and a very small amount of lightly scorched cable is the only damage equipment on the vessel.

SECRET

USS CATRON (APA71)

B. Electric Propulsion Rotating Equipment.

Propulsion motors and generators were inspected and given insulation tests. No damage was found. The machines were tested in all combinations up to one-third speed ahead and one-third speed astern, and operated satisfactorily.

C. Electric Propulsion Rotating Equipment.

The propulsion controls were inspected and operated for dock trials. No damage was found.

D. Generators - Ships Service.

The two main and the one auxiliary and two D.C. ship's service generator sets were inspected and given insulation tests. No damage was found. All machines have carried ship's load satisfactorily.

E. Generators - Emergency.

The Diesel emergency generator was inspected and given an insulation test. No damage was found. The machine carried the ship's load for about five hours before the main plant was in operation.

F. Switchboards, Distribution and Transfer Panels.

Switchboards were inspected and given insulation tests. No damage was found. Some circuits out from the board were given insulation tests and none were found damaged. Distribution panels showed no damage on inspection.

G. Wiring, Wiring Equipment and Wireways.

The only damage found in wiring systems occurred in a single cable on the after side of the main mast. This cable was unpainted and the blast heat caused the sheath to exude slightly through the armor and to char slightly.

SECRET

USS CATRON (APA71)

H. Transformers.

No damage to transformers was found by inspection. The transformers carried normal load satisfactorily.

I. Submarine Propelling Batteries.

This item does not apply to the vessel.

J. Portable Batteries.

Temporary retainer bars were put over all portable batteries except the Diesel starting batteries before the test. The Diesel starting batteries were tightly wedged on their shelves. No damage or shifting of any battery was found on inspection.

K. Motors, Motor Generator Sets and Motor Controllers.

All motors, motor generators and motor controllers operated satisfactorily following the test. No damage was apparent.

L. Lighting Equipment.

A few lamps were broken by the test. These included a few rough service lamps located near to the collapsing No. 2 cargo hatch. One 50 watt and one 100 watt steel ceiling fixtures with reflector and baffle were broken, but the manner of breakage was not recorded by ship's force.

M. Searchlights.

The two 24" signal searchlights located on either side of the forward stack were not damaged by the test. The two 12" signal searchlights on the wings of the signal bridge had lamp filaments broken by the blast.

N. Degaussing Equipment.

No damage was found in the ship's degaussing system. The degaussing coils had a normal insulation resistance. The system operated properly.

SECRET

USS CATRON (APA71)

O. Gyro Compass Equipment.

No visible damage was found in the gyro compass and its equipment. The compass operated satisfactorily settling out on the meridian in normal time. All repeaters followed the master.

P. Sound Powered Telephones.

Sound powered telephone sets exposed on the top side were all in proper stowage boxes during the test. Representative sets when tested showed no damage.

Q. Ship's Service Telephones.

The sound powered telephones are the only telephones on the vessel.

R. Announcing Systems.

The one MC announcing circuit was inspected and tested after the test. All speakers and other parts of the system were satisfactory. The Commanding Officer's report, Report No. 11, indicated that a ground had been found in the announcing system but no further information was obtained.

The PAB "Beachmaster" set on the flying bridge had no damage except a bent extension leg. This set could not be tested.

S. Telegraphs.

No apparent damage was found in telegraphs on the vessel.

T. Indicating Systems.

No damage to indicating system was found on inspection after the test.

SECRET

USS CATRON (APA71)

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

The combined I.C. and A.C.O. switchboard was examined and each circuit was operated after the test. No damage was found.

V. F.C. Switchboard.

This item does not apply to the vessel.

SECRET

USS CATRON (APA71)

SECTION IV

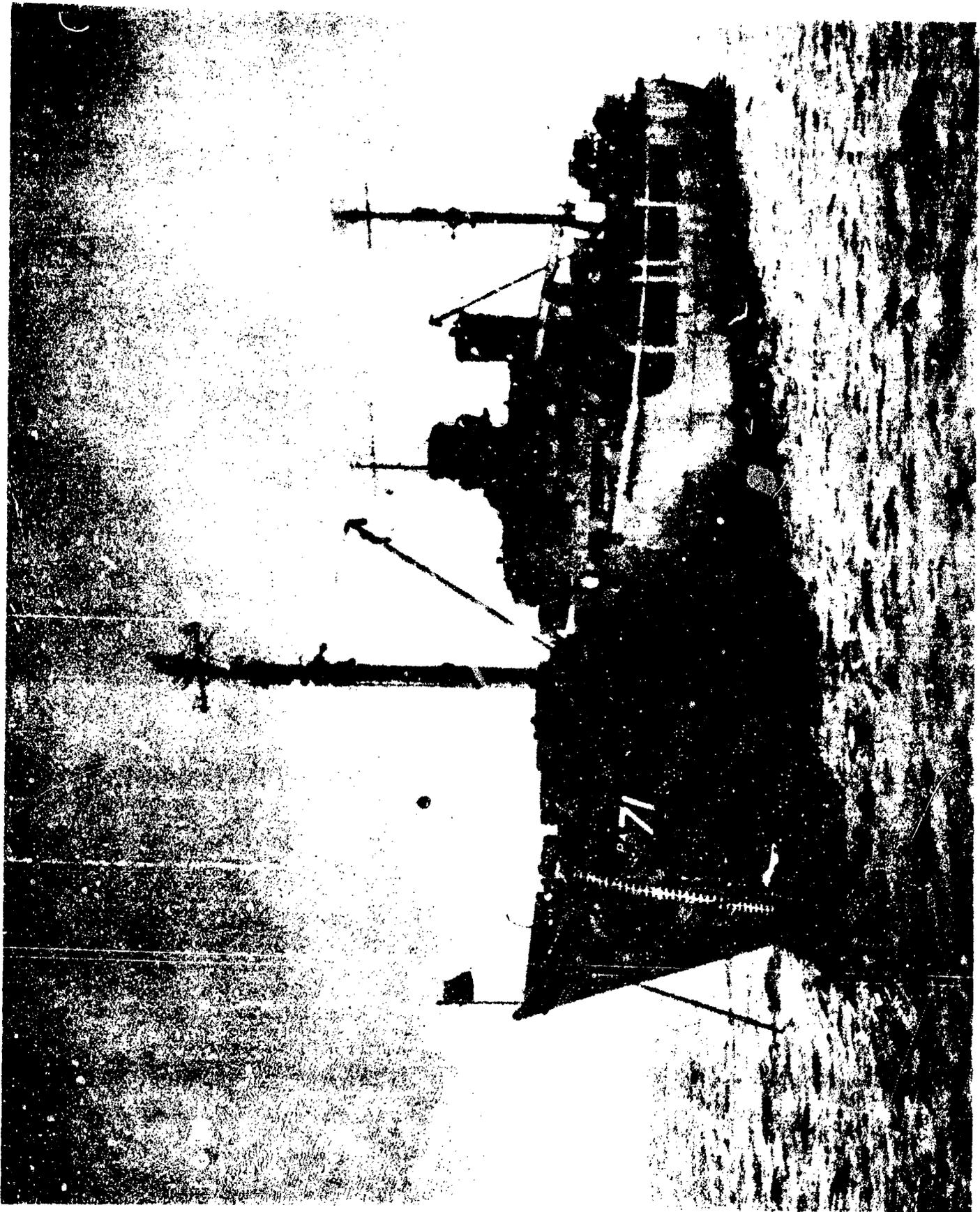
PHOTOGRAPHS

TEST ABLE

SECRET

USS CATPON (APA 71)

Page 34 of 47 Pages



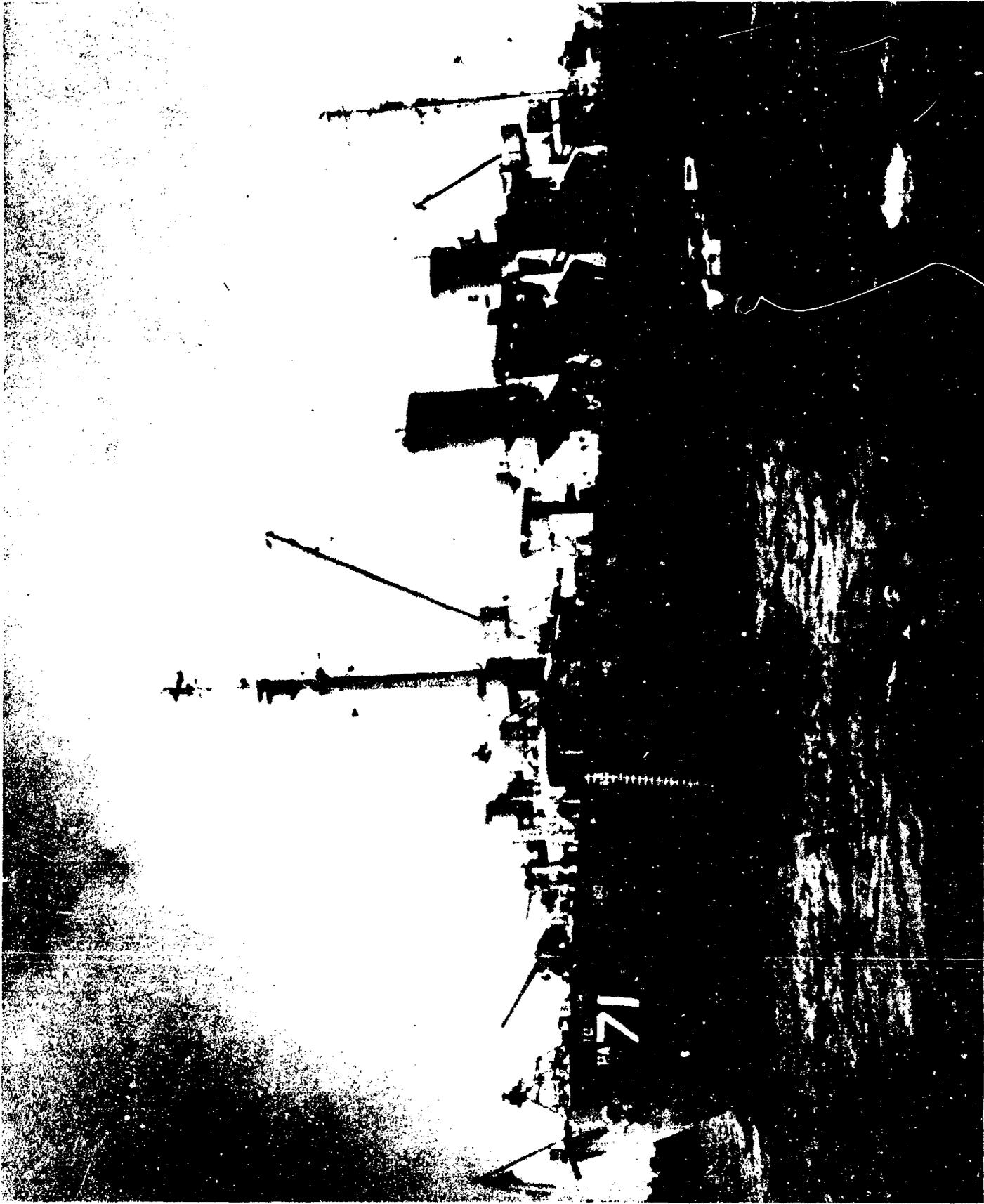
AA-CR-227-49-18. View from off port bow after Test A.

SECRET

Page 35 of 47 Pages

USS CATRON (APA71)

6946



AA-CR-227-50-89. Starboard quarter after Test A.

SECRET

Page 36 of 47 Pages

USS CATRON (APA71)

6946



AA-CR-65-1731-3. After side of port flag bag showing distortion and scorched paint.

SECRET

Page 37 of 47 Pages

USS CATRON (APA71)

6946



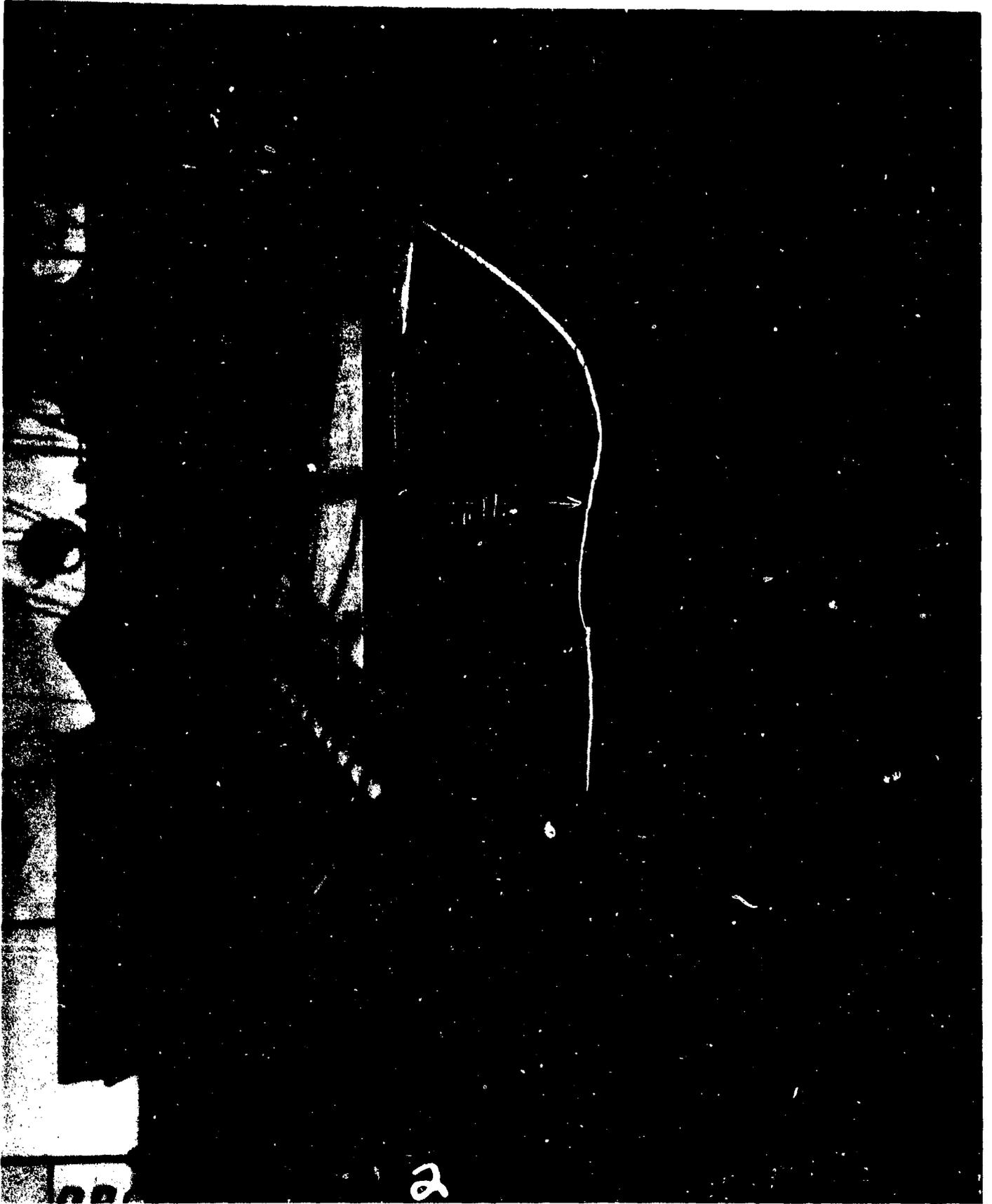
AA-CR-65-1731-1. Blistered paint on port side of forward stack.

SECRET

Page 38 of 47 Pages

USS CATRON (APA71)

6946



AA-CR-65-1731-2. Inner side of gun bulwark, top of house, port side, showing extent of scorched paint and shadow caused by rest of bulwark.

SECRET

Page 39 of 47 Pages

USS CATRON (APA71)

6946



AA-CR-79-1812-5. Displaced panels of after cargo hatch cover, main deck.

SECRET

Page 40 of 47 Pages

USS CATRON (APA71)

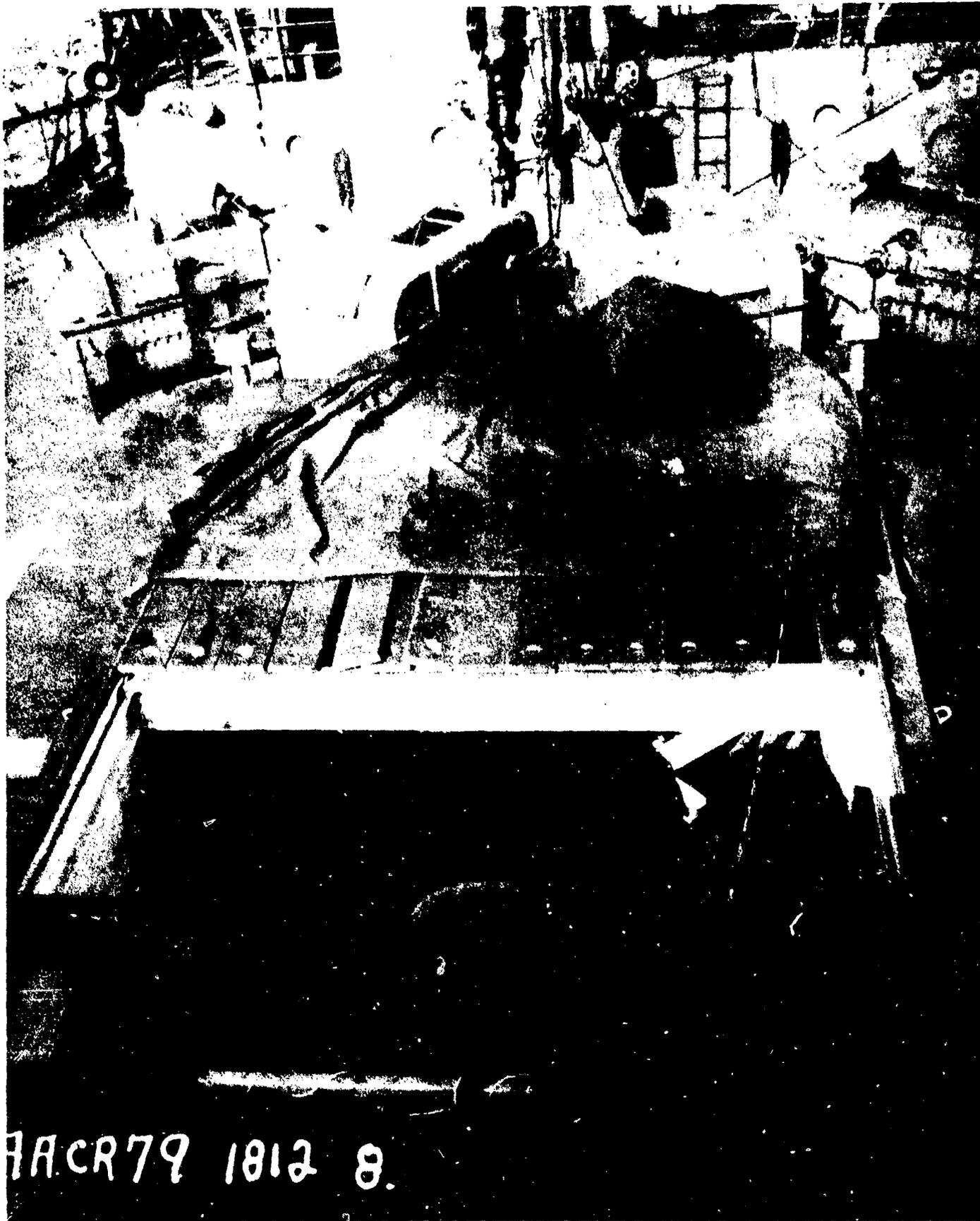
6946



AA-CR-79-1812-6. Displaced panels of after cargo hatch cover, upper deck.

SECRET

USS CATRON (APA71)



AA-CR-79-1812-8. Displaced cover panels over after cargo hatch, upper deck.

SECRET

USS CATRON (APA71)

Page 42 of 47 Pages

6946



AA-CR-79-1812-9. Displaced cover panels over forward cargo hatch, upper deck.

SECRET

Page 43 of 47 Pages

USS CATRON (APA71)

6946

APPENDIX

COMMANDING OFFICERS REPORT

TEST ABLE

SECRET

USS CATRON (APA71)

Page 44 of 47 Pages

REPORT #11

COMMANDING OFFICERS REPORT

SECTION I

U.S.S. CATRON; Attack Transport, merchant type, APA 71.

GILLIAM Class, (APA 57).

On berth 226 in target array.

At the time of the test, no machinery was operating but all equipment was operable.

This vessel was evacuated, leaving all openings in hull and superstructure secured tightly.

No ordnance materials or ammunition were disturbed.

Fire retardent canvas weather cloths were not singed or burned.

Paint was blistered in a few small scattered areas topside.

Ship's stores of Oxygen, Acetylene, Paint, Gasoline, Alcohol, stowed in usual places were not disturbed by the bomb's explosion.

U.S.S. CATRON (APA71)

REPORT #11

COMMANDING OFFICERS REPORT

SECTION II

A general summary of the damage sustained follows:

Slight dishing of both stacks, both sides aft. Flag bags after end of flying bridge dished in. Weather cloth jack stays bent, lashings of 12 thread holding and weather cloths of fire retardent canvas not tearing. Hatch covers, both hatches, fell inward, and lower deck pontoons lifted out of place. One tarpaulin torn. Radars, radio, and sounding gear were operable. Two bulbs in 12 inch searchlights were broken but not lenses or reflectors. Public Address system was grounded. Paintwork scorched and blistered in widely distributed small areas, shadows indicating the heat came from slightly on the port quarter.

Damage was superficial and the vessel would have been able to remain in action without any impairment to its efficiency by the physical aspects of the bomb's explosion.

There was no damage of any kind to boilers or power plants.

~~SECRET~~

U.S.S. CATRON (APA71)

REPORT #11

COMMANDING OFFICERS REPORT

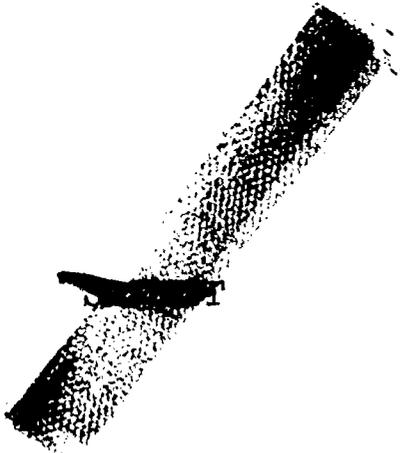
SECTION III

This Commanding Officer's comments and observations on the effects of Test Able follow:

Special materials on board had no influence on results of test on this vessel.

As none of the larger animals aboard was a casualty of any kind up to the time when they were removed apparently, the most part of the ship's personnel would have survived at least temporarily. These animals were placed fully exposed to blast and heat aft and protected from blast and heat in wheel house and other inside locations. Undoubtedly, those humans on open decks and unprotected would have become casualties due to mechanical forces. The radioactivity factor is not being commented upon.

This Commanding Officer has no recommendations regarding design or arrangement features for this type vessel as a result of observations obtained since Able day except that lower deck pontoon covers could be secured very easily, upper deck hatch covers could be battened more heavily and these battens placed closer together to prevent dislodgement.



U.S.S. CATRON (APA 71)

**CONFIDENTIAL**  
Security Information

**[REDACTED]**

**CONFIDENTIAL**  
Security Information

**[REDACTED]**



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

TRC

9 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:

*+ ST-A*

AD-366748 -	XRD-65
AD-366747 -	XRD-64
AD-366746 -	XRD-63
AD-376826 -	XRD-60
AD-376824 -	XRD-58
AD-376825 -	XRD-59
AD-376823 -	XRD-57
AD-376822 -	XRD-56
AD-376821 -	XRD-55
AD-366743 -	XRD-54
AD-376820 -	XRD-53
AD-366742 -	XRD-52
AD-366741 -	XRD-51
AD-366740 -	XRD-50-Volume-2
AD-366739 -	XRD-49-Volume-1
AD-366738 -	XRD-48
AD-366737 -	XRD-47

TRC

9 April 1997

SUBJECT: Declassification of Reports

AD-366736 -	XRD-46
AD-366735 -	XRD-45
AD-366723 -	XRD-37
AD-366721 -	XRD-35
AD-366717 -	XRD-31-Volume-2
AD-366716 -	XRD-30-Volume-1
AD-366751 -	XRD-68-Volume-2
AD-366750 -	XRD-67-Volume-1
AD-366752 -	XRD-69
AD-366744 -	XRD-61.

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

*Arduith Jarrett*  
ARDITH JARRETT  
Chief, Technical Resource Center

*Completed  
1 mar 2000  
B.W.*