

UNCLASSIFIED

**AD NUMBER**

AD367485

**CLASSIFICATION CHANGES**

**TO:** unclassified

**FROM:** confidential

**LIMITATION CHANGES**

**TO:**

Approved for public release, distribution unlimited

**FROM:**

Distribution: USGO: others to Director, Defense Atomic Support Agency, Washington, D. C. 20301.

**AUTHORITY**

DSWA ltr., 18 Apr 1997; DSWA ltr., 18 Apr 1997

**THIS PAGE IS UNCLASSIFIED**

XRD  
129

LIBRARY COPY NO. <sup>C-3</sup>

# BUREAU OF SHIPS GROUP TECHNICAL INSPECTION REPORT

**CONFIDENTIAL**

Classification (Cancelled) (Changed to \_\_\_\_\_)  
By Authority of Joint Chiefs of Staff Action of 11 April 1959  
By J. Almond R. Bunker Date 24 Apr 51  
PS USAFSWP

367485

## OPERATION CROSSROADS. U.S.S. DAWSON (APA79). TEST BAKER [U].

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

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

11 1947  
12 44 p.

14 XRD-129

~~DIRECTOR OF SPECIAL MATERIAL~~

DDC

**CONFIDENTIAL**

~~JOINT FORCE ONE~~

TECHNICAL LIBRARY  
of the  
ARMED FORCES  
SPECIAL WEAPONS PROJECT

DEC 2 1965  
REG. NO. E

GROUP 3 1 JAN 1965  
Downgraded at 12 - year intervals;  
Not automatically declassified.

BUREAU OF SHIPS GROUP  
TECHNICAL INSPECTION REPORT

Classification (~~Cancelled~~) (Changed to **CONFIDENTIAL**)  
By Authority of JOINT CHIEFS OF STAFF ACTION OF 15 April 1947  
J. H. ... Date 9-4-51  
1st Lt. HFSWP

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

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

**CONFIDENTIAL**  
This document contains information affecting the national  
defense of the United States within the meaning of the  
Espionage Laws, Title 18, U. S. C., Section 793 and 794.  
Its transmission or the revelation of its contents in any  
manner to an unauthorized person is prohibited by law.

APPROVED:  
**CONFIDENTIAL**  
F.X. Forest,  
Captain, U.S.N.

GROUP 3  
Downgraded at 12 year intervals  
Not automatically declassified.  
1 JAN 1965

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)- - - -	20
Electrical Technical Inspection Report (Section III) - - -	26
Photographic Section (Section IV) - - - - -	33
Commanding Officers Report (Appendix) - - - - -	43

SECRET

USS DAWSON (APA79)

U.S.S. DAWSON (APA 79)

SHIP CHARACTERISTICS

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

Commissioned: 4 February 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. 11 feet 6 inches.

Aft. 16 feet 8 inches.

Limiting displacement: 7,080 tons.

Displacement at time of test: 6,148 tons.

MAIN PROPULSION PLANT

Main Engines: Two sets of Westinghouse steam turbines, directly connected to Westinghouse main generators. Two main shaft motors.

Main Condensers: Two are installed in ship.

Boilers: Two Babcock and Wilcox boilers are installed in ship. 450 psi gauge - 750° F.

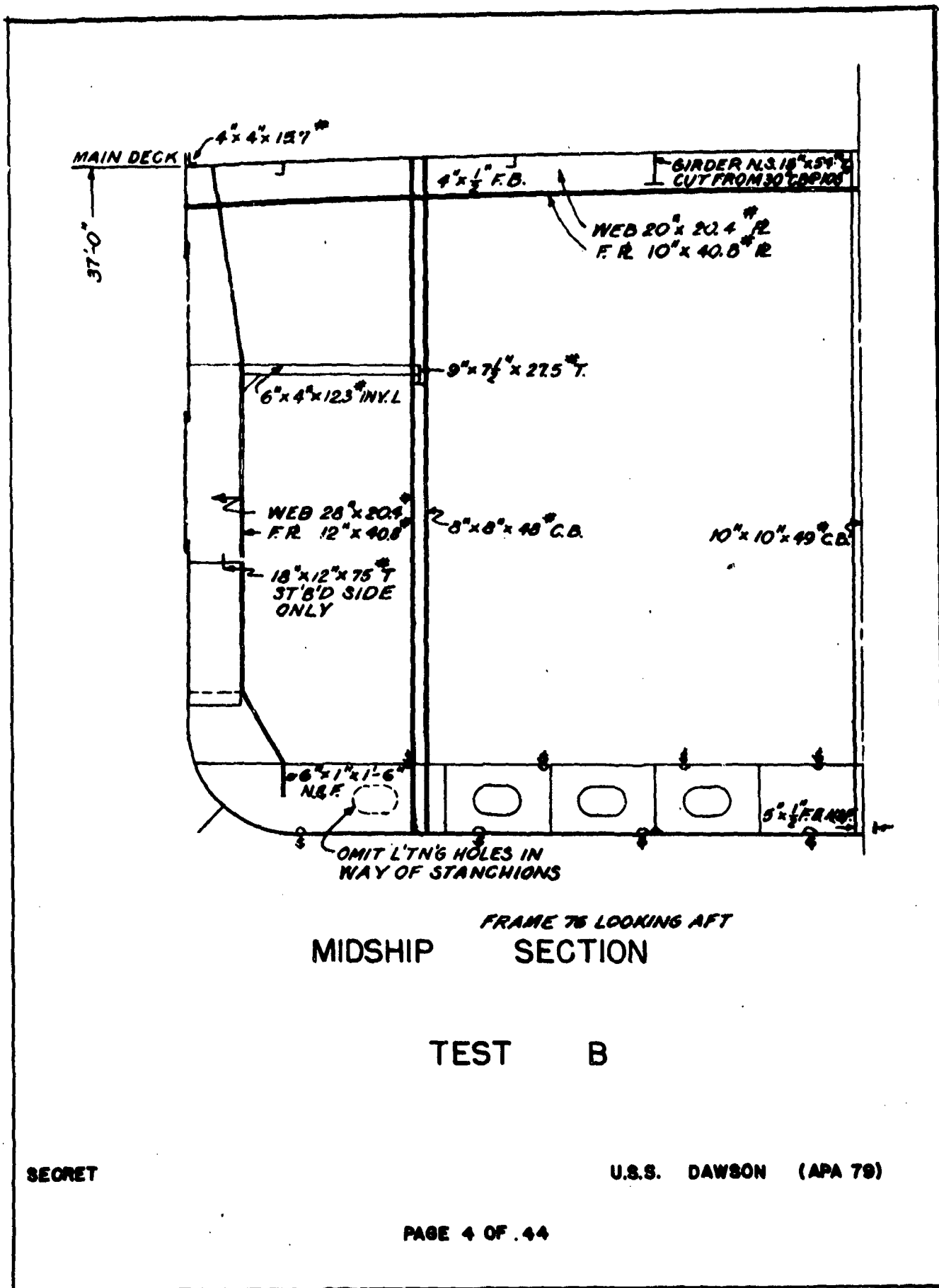
Propellers: Two are installed.

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., and Two 100 KW. - 120/240 V. - D.C.

SECRET

USS DAWSON (APA79)



SECRET

U.S.S. DAWSON (APA 79)

TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition after Test.

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

No flooding occurred, hence there is no change in drafts or list.

Two inches of highly radioactive water was found in the forward hold and in the after machinery space. This water apparently came in through the forward cargo hatch and down the after stack.

(b) Structural damage.

HULL

There is no structural damage.

MACHINERY

No comment.

ELECTRICAL

None observed.

(c) Other damage.

HULL

Not observed.

MACHINERY

No damage to machinery could be found by visual inspection. Machinery of this vessel was not operated after Test B 1 cause

SECRET

U.S.S. DAWSON (APA 79)

of radiological hazard.

### ELECTRICAL

The only electrical damage to this vessel as a result of the underwater bomb explosion was the destruction of one cargo light by fragments, damaging of the anchor windlass controller master switch by fragments, and the breaking of the voice coil leads on one announcing system reproducer.

#### II. Forces Evidenced and Effects Noted.

##### (a) Heat.

#### HULL

None.

#### MACHINERY

No evidence.

#### ELECTRICAL

There was no evidence of heat.

##### (b) Fires and explosions.

#### HULL

None.

#### MACHINERY

No evidence.

#### ELECTRICAL

There was no evidence of fires or explosions.

SECRET

U.S.S. DAWSON (APA 79)

blast or falling water since jury rigged wooden hatch covers were blown down into the hold.

(e) Effect apparently peculiar to the Atom Bomb.

#### HULL

The only effect peculiar to the Atom Bomb is a high degree of radioactive contamination of topside structure.

#### MACHINERY

None.

#### ELECTRICAL

There were no effects noted that are considered peculiar to the Atomic Bomb other than radioactivity.

### III. Effects of Damage.

(a) Machinery, electrical, and ship control equipment.

#### HULL

Not observed.

#### MACHINERY

None, insofar as can be determined by visual inspection.

#### ELECTRICAL

The effects on electrical equipment and ship control were negligible. The most serious effect was the damage to the anchor windlass control. Emergency repairs which would permit the anchor windlass to be used a few times could have been made by the ship's force within a few minutes.

SECRET

U.S.S. DAWSON (APA79)

(c) Shock.

#### HULL

Shock effect is negligible. Dislodging of a loudspeaker in the pilot house may be attributed to shock. The radar screen on the main topmast, which was knocked askew in Test A, has now fallen off. Dislodging of this screen probably is due to the combined effects of shock and rolling. No other equipment is known to have been affected by shock. Rolling is the apparent cause of overturned lockers and broken dishes in the interior.

#### MACHINERY

No evidence.

#### ELECTRICAL

The only evidence of shock observed was the displacement of 1MC announcing system reproducer from its mounting on the bulkhead in the pilot house. This shock was not considered to be very severe since the reproducer was not properly secured prior to the test. Other electrical damage was caused by the impact of fragments striking the electrical equipment.

(d) Pressure.

#### HULL

Temporary closures over both cargo hatches were demolished by pressure or falling water. There are no other effects of pressure.

#### MACHINERY

No evidence.

#### ELECTRICAL

There was no evidence of pressure affecting electric equipment. There was evidence that the vessel received pressure from air

SECRET

U.S.S. DAWSON (APA 79)

(b) Gunnery and fire control.

HULL

Not observed.

MACHINERY

No comment.

ELECTRICAL

Electrically, there was no effect on gunnery or fire control.

(c) Watertight integrity and stability.

HULL

No effect.

MACHINERY

No comment.

ELECTRICAL

None.

(d) Personnel and habitability.

HULL

Personnel would have been seriously affected by radio-activity.

Habitability of the berthing spaces in way of the cargo hatches is affected by the entrance of radioactive water through the hatches. Personnel in the after machinery space would have been jeopardized by the presence of radioactive water which came down

SECRET

U.S.S. DAWSON (APA 79)

the stack. Temporary inconvenience resulted from debris in the cargo hatch areas, broken dishes, and disarranged lockers.

#### MACHINERY

None, except for radioactivity.

#### ELECTRICAL

There would have been no effect on personnel other than possible casualties from radioactivity and possible casualties from personnel being hit by fragments. The extent of the radiological casualties is unknown, however, it is considered that casualties due to fragments would have been light. There was no effect on habitability other than radioactivity.

(e) Total effect on fighting efficiency.

#### HULL

Except for the effects of radioactivity, the fighting efficiency of the ship is not affected.

#### MACHINERY

None, except for possible effects of radioactivity.

#### ELECTRICAL

Providing there were no personnel casualties from radiological effects, it is considered that there would have been no effect on the fighting efficiency of the vessel.

#### IV. General Summary.

#### HULL

At the distance of this ship from an underwater atomic bomb explosion, the principal effect to be expected is that of a high

SECRET

U.S.S. DAWSON (APA 79)

degree of radioactive contamination of topside structure.

#### MACHINERY

The DAWSON was outside the effective range of physical damage from the explosion in Test B.

#### ELECTRICAL

The damage to this vessel as a result of Test B was due principally to fragments which came from some source other than this vessel. It is considered that this vessel was too far from the center of the blast to experience serious damage in this test.

#### V. Preliminary Recommendations.

#### HULL

Personnel in exposed locations such as gunnery and fire control stations could be housed in protective shields to prevent contact with radioactive mist or water. Consideration should be given to means of quickly decontaminating topside structure.

#### MACHINERY

None.

#### ELECTRICAL

It is recommended that the use of wedge slots to hold equipment to the bulkhead be avoided since this method of mounting is apt to result in casualties due to careless tightening of mounting screws or bolts.

TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

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

No flooding occurred, hence there is no change in drafts or list.

Two inches of highly radioactive water was found in the forward hold and in the after machinery space. This water apparently came in through the forward cargo hatch and down the after stack.

(b) Structural Damage.

There is no structural damage.

(c) Other Damage.

Not observed.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires or Explosions.

None.

SECRET

USS DAWSON (APA79)

(c) Shock.

Shock effect is negligible. Dislodging of a loud-speaker in the pilot house may be attributed to shock. The radar screen on the main topmast, which was knocked askew in Test A, has now fallen off. Dislodging of this screen probably is due to the combined effects of shock and rolling. No other equipment is known to have been affected by shock. An inclinometer recorded a roll of 41 degrees to port and 17 degrees to starboard. Rolling is the apparent cause of overturned lockers and broken dishes in the interior.

(d) Pressure.

Temporary closures over both cargo hatches were demolished by pressure or falling water. There are no other effects of pressure.

(e) Effects apparently peculiar to the Atom Bomb.

The only effect peculiar to the Atom bomb is a high degree of radioactive contamination of topside structure.

III. Effects of damage.

(a) Machinery, electrical, and ship control equipment.

Not observed.

(b) Gunnery and fire control.

Not observed.

(c) Watertight integrity and stability.

No effect.

(d) Personnel and Habitability.

Personnel would have been seriously affected by radio-activity.

SECRET

USS DAWSON (APA79)

Habitability of the berthing spaces in way of the cargo hatches is affected by the entrance of radioactive water through the hatches. Personnel in the after machinery space would have been jeopardized by the presence of radioactive water which came down the stack. Temporary inconvenience resulted from debris in the cargo hatch areas, broken dishes, and disarranged lockers.

(e) Total effect on fighting efficiency.

Except for the effects of radioactivity, the fighting efficiency of the ship is not affected.

IV. General Summary.

At the distance of this ship from an underwater atomic bomb explosion, the principal effect to be expected is that of a high degree of radioactive contamination of topside structure.

V. Preliminary Recommendations.

Personnel in exposed locations such as gunnery and fire control stations could be housed in protective shields to prevent contact with radioactive mist or water. Consideration should be given to means of quickly decontaminating topside structure.

VI. Instructions for loading the vessel specified the following:

ITEM	LOADING
Fuel oil	50%
Diesel oil	50%
Ammunition	50%
Potable and reserve feed water	Full load
Salt water ballast	620 tons

SECRET

USS DAWSON (APA79)

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 in the Bureau of Ships Crossroads Files.

SECRET

USS DAWSON (APA79)

Page 15 of 44 Pages

## DETAILED DESCRIPTION OF HULL DAMAGE

### A. General Description of Hull Damage.

There is no structural damage of any significance to the superstructure or to the hull as a result of Test B. Jury rigged covers placed over the forward and after hatches were demolished by falling water. (Photos 2176-10, 11, pages 39 and 38).

Inclinometer readings indicate that the ship rolled 41 degrees to port and 17 degrees to starboard. Rolling of the ship caused lockers to be overturned in crews spaces and dishes to be broken in the scullery.

No flooding occurred. Two inches of highly radioactive water was found in the forward hold and in the machinery space bilges. This water apparently came in through the forward cargo hatch and down the after stack.

Photos, pages 34 to 37 are general exterior views before and after Test B.

### B. Superstructure.

The superstructure is undamaged except for dents caused by falling fragments. There is no evidence of fire.

The air search radar screen on the main topmast, knocked askew in Test A, was dislodged and landed on the starboard 40mm director tub located on the after deckhouse top (Photos 2153-2, 1702-7, pages 40 and 41).

A cargo floodlight located on the starboard wing of the navigating bridge was destroyed by a fragment.

A loudspeaker in the pilot house fell to the deck and was rendered inoperable. This speaker had not been properly attached to the ship's structure.

SECRET

USS DAWSON (APA79)

C. Guns and Directors.

Guns and directors are undamaged.

D. Torpedo Mounts, Depth Charge Gear.

Not applicable.

E. Weather Deck.

The forward and after cargo hatches had jury-rigged covers replacing the hatch battens dislodged and distorted in Test A. These covers consisted of 2" x 12" planks covered with heavy canvas. All of the planks over the forward hatch were dislodged or splintered and fell to the main deck or into the hold (photo 2176-11, page 38.) Approximately half of the planks over the after hatch were dislodged and landed on the main deck pontoon covers (photo 2176-10, page 39.)

The anchor windlass controller located on the upper deck forward, was struck by a fragment, damaging the cover and rendering the windlass temporarily inoperable (photo 2176-12, page 42). Emergency electrical repairs to the equipment could have been made in a few minutes.

F. Exterior Hull (above w.l.).

No damage.

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

Lockers in crews spaces are overturned and dishes in the scullery are broken as a result of heavy rolling of the ship. Essentially no other damage in interior spaces occurred.

Habitability and utility of cargo hatch areas are affected temporarily by debris from the jury-rigged cargo hatch covers. The forward cargo hold and the after machinery space are contaminated by radioactive water.

SECRET

USS DAWSON (APA79)

H. Armor Decks.

Not applicable.

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

No damage was observed below the waterline. There was no flooding. Some radioactive water came through the forward cargo hatch and down the after stack.

J. Underwater Hull.

There is no known damage to the underwater hull, shafts, propellers, struts, or rudder. Buoyancy, operability, and maneuverability are not affected.

K. Tanks.

No damage.

L. Flooding.

None.

M. Ventilation.

The ventilation system is unaffected. There is no evidence that the system conducted blast, fire, or smoke below decks.

N. Ship Control.

Except for the effect of radioactivity, ship control stations are not affected.

O. Fire Control.

Fire control stations were showered with highly radioactive water and subjected to air blast. Otherwise these stations are unaffected. Topside control stations require specially designed housings for protection of personnel.

SECRET

USS DAWSON (APA79)

P. Ammunition Behavior.

Normal.

Q. Ammunition Handling.

There is no evidence that ammunition handling devices contributed to passing of heat, fire, blast, or water.

R. Strength.

There is no evidence that the strength of the ship is reduced.

S. Miscellaneous.

No comment.

SECRET

USS DAWSON (APA79)

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.

No damage to machinery could be found by visual inspection. Machinery of this vessel was not operated after Test B because of radiological hazard.

II. Forces Evidenced and Effects Noted.

(a) Heat.

No evidence.

(b) Fires and explosions.

No evidence.

(c) Shock.

No evidence.

(d) Pressure.

No evidence.

SECRET

USS DAWSON (APA79)

Page 20 of 44 Pages

(e) Effect apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery and ship control.

None, insòfar as can be determined by visual inspection.

(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, except for radioactivity.

(e) Total effect on fighting efficiency.

None, except for possible effects of radioactivity.

IV. General Summary.

The DAWSON was outside the effective range of physical damage from the explosion in Test B.

V. Preliminary Recommendations.

None.

SECRET

USS DAWSON (APA79)

## DETAILED DESCRIPTION OF MACHINERY DAMAGE

### A. General Description of Machinery Damage.

#### (a) Overall condition.

The machinery plant appeared to be capable of full operation, except for the turbo-generator in the after machinery space, which has loose foundation bolts, no sign of damage was found from a visual inspection of the plant. It is believed that the machinery plant could have continued operating without reduction in speed.

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

There are no areas of major damage.

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

None.

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

The test had no effect on overall operation of the machinery plant insofar as can be determined by visual inspection.

NOTE: No machinery was operated on this vessel after Test B.

### B. Boilers.

No apparent damage.

### C. Blowers.

No apparent damage.

### D. Fuel Oil Equipment.

No apparent damage.

SECRET

USS DAWSON (APA79)

E. Boiler Feedwater Equipment.

No apparent damage.

F. Main Propulsion Machinery.

No apparent damage.

G. Reduction Gears.

Not Applicable.

H. Shafting and Bearings.

No apparent damage.

I. Lubrication System.

No apparent damage.

J. Condensers and Air Ejectors.

No apparent damage.

K. Pumps.

No apparent damage.

L. Auxiliary Generators (Turbines and Gears).

The foundation bolts of #2 main turbo-generator are loose and paint is cracked. The unit had apparently jumped a few thousandths of an inch, but returned to its original position. The remaining turbo-generators appear to be undamaged. None of the units were tested.

M. Propellers,

The propellers were inspected from the surface of the water and appear to be undamaged.

SECRET

USS DAWSON (APA79)

N. Distilling Plant.

No apparent damage.

O. Refrigeration Plant.

No apparent damage.

P. Winches, Windlasses, and Capstans.

The anchor windlass control box and switch box covers were slightly dented in by falling objects, otherwise this unit appears to be undamaged.

The boat winches appear to be undamaged.

The cargo winches appear to be undamaged.

Q. Steering Engine.

No apparent damage.

R. Elevators, Ammunition Hoists, Etc..

No apparent damage.

S. Ventilation (Machinery).

No apparent damage.

T. Compressed Air Plant.

No apparent damage.

U. Diesels (Generators and Boats).\*

No apparent damage.

SECRET

USS DAWSON (APA79)

V. Piping Systems.

No apparent damage.

W. Miscellaneous.

No apparent damage.

SECRET

USS DAWSON (APA79)

Page 25 of 44 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.

Not observed.

- (b) Structural damage.

None observed.

- (c) Other damage.

The only electrical damage to this vessel as a result of the underwater bomb explosion was the destruction of one cargo light by fragments, damaging of the anchor windlass controller master switch by fragments, and the breaking of the voice coil leads on one announcing system reproducer.

##### II. Forces Evidenced and Effects Noted.

- (a) Heat.

There was no evidence of heat.

- (b) Fires and explosions.

There was no evidence of fires or explosions.

- (c) Shock.

The only evidence of shock observed was the displacement of 1MC announcing system reproducer from its mounting on the bulkhead in the pilot house. This shock was not considered to be very

SECRET

U. S. S. DAWSON (APA79)

severe since the reproducer was not properly secured prior to the test. Other electrical damage was caused by the impact of fragments striking the electrical equipment.

(d) Pressure.

There was no evidence of pressure affecting electric equipment. There was evidence that the vessel received pressure from air blast or falling water since jury rigged wooden hatch covers were blown down into the hold.

(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.

III. Effects of Damage.

(a) Effect on electrical equipment and ship control.

The effects on electrical equipment and ship control were negligible. The most serious effect was the damage to the anchor windlass control. Emergency repairs which would permit the anchor windlass to be used a few times could have been made by the ship's force within a few minutes.

b) Effect on gunnery and fire control.

Electrically there was no effect on gunnery or fire control.

c) Effect on watertight 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 possible casualties from personnel being hit by fragments. The extent of the radio-

SECRET

U. S. S. DAWSON (APA79)

logical casualties is unknown, however, it is considered that casualties due to fragments would have been light. There was no effect on habitability other than radioactivity.

(e) Total effect on the fighting efficiency.

Providing there were no personnel casualties from radiological effects, it is considered that there would have been no effect on the fighting efficiency of the vessel.

#### IV. General Summary of Observers' Impressions and Conclusions.

The damage to this vessel as a result of test "B" was due principally to fragments which came from some source other than this vessel. It is considered that this vessel was too far from the center of the blast to experience serious damage in this test.

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

It is recommended that the use of wedge slots to hold equipment to the bulkhead be avoided since this method of mounting is apt to result in casualties due to careless tightening of mounting screws or bolts.

SECRET

U. S. S. DAWSON (APA79)

## DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

### A. General Description of Electrical Damage.

#### (a) Overall condition.

The only electrical damage to this vessel as a result of the underwater bomb explosion was the destruction of one cargo light, damaging of the anchor windlass controller master switch by fragments, and the breaking of the voice coil leads on one announcing system reproducer.

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

The areas that received electrical damage on this vessel were exposed locations, forward on the topside.

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

The causes of damage to electrical equipment on this vessel were fragments and improper mounting of equipment.

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

The effect on the overall operation of the electric plant was negligible. The most serious effect on the operation of the electric plant was the damage to the anchor windlass control. Emergency repairs which would permit the controller to be used a few times could have been made by the ship's force within a few minutes.

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

Since the principle damage was caused by fragments the types of equipment most affected were those which happened to be hit by the fragments.

### B. Electric Propulsion Rotating Equipment.

No damage.

SECRET

U. S. S. DAWSON (APA79)

C. Electric Propulsion Control Equipment.

No damage.

D. Ship's Service Generators.

No damage.

E. Emergency Generators.

No damage. Ran at least 16 minutes after the burst as shown by the recording fathometer record. Probably continued to run until fuel was expended.

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 Motor Controllers.

The watertight anchor windlass control switch located on the 01 deck forward was struck by a fragment. The enclosure cover was distorted and the internal phenolic strips were broken. See photograph 2176-12, page 42, showing a top view of the control switch with the cover open. The controller was rendered inoperable by this damage.

SECRET

U. S. S. DAWSON (APA79)

however, it is considered that emergency repairs could be made by the ship's force to permit hoisting of the anchor. Replacement of the internal mechanism of the control switch required for proper operation of the anchor windlass.

L. Lighting Equipment.

The cargo floodlight located on the starboard wing of the navigation bridge was demolished when struck by a fragment.

M. Searchlights.

No damage.

N. Degaussing Equipment.

No damage.

O. Gyro Compass Equipment.

No damage.

P. Sound Powered Telephones.

No damage.

Q. Ship's Service Telephones.

Not applicable.

R. Announcing Systems.

One type MI-2917, L and S reproducer located in the pilot house was jarred from its case and fell to the deck. In falling, the reproducers voice coil leads were broken, however, the reproducer appeared to be operable if reconnected.

Recommendation: This type reproducer is secured to its case by means of screws which fit through slots on the flange of the reproducer and which is then turned and the screws tightened. There

SECRET

U. S. S. DAWSON (APA79)

were numerous cases in both tests A and B where this type reproducer was ejected from its case. While this type installation is convenient it is recommended that it be discontinued to provide much greater resistance to shock. On present installations, washers could be used to prevent the screw heads from going through the flange in any position, and on new construction a hole large enough for the shank of the screw only should be used.

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

U. S. S. DAWSON (APA79)

SECTION IV

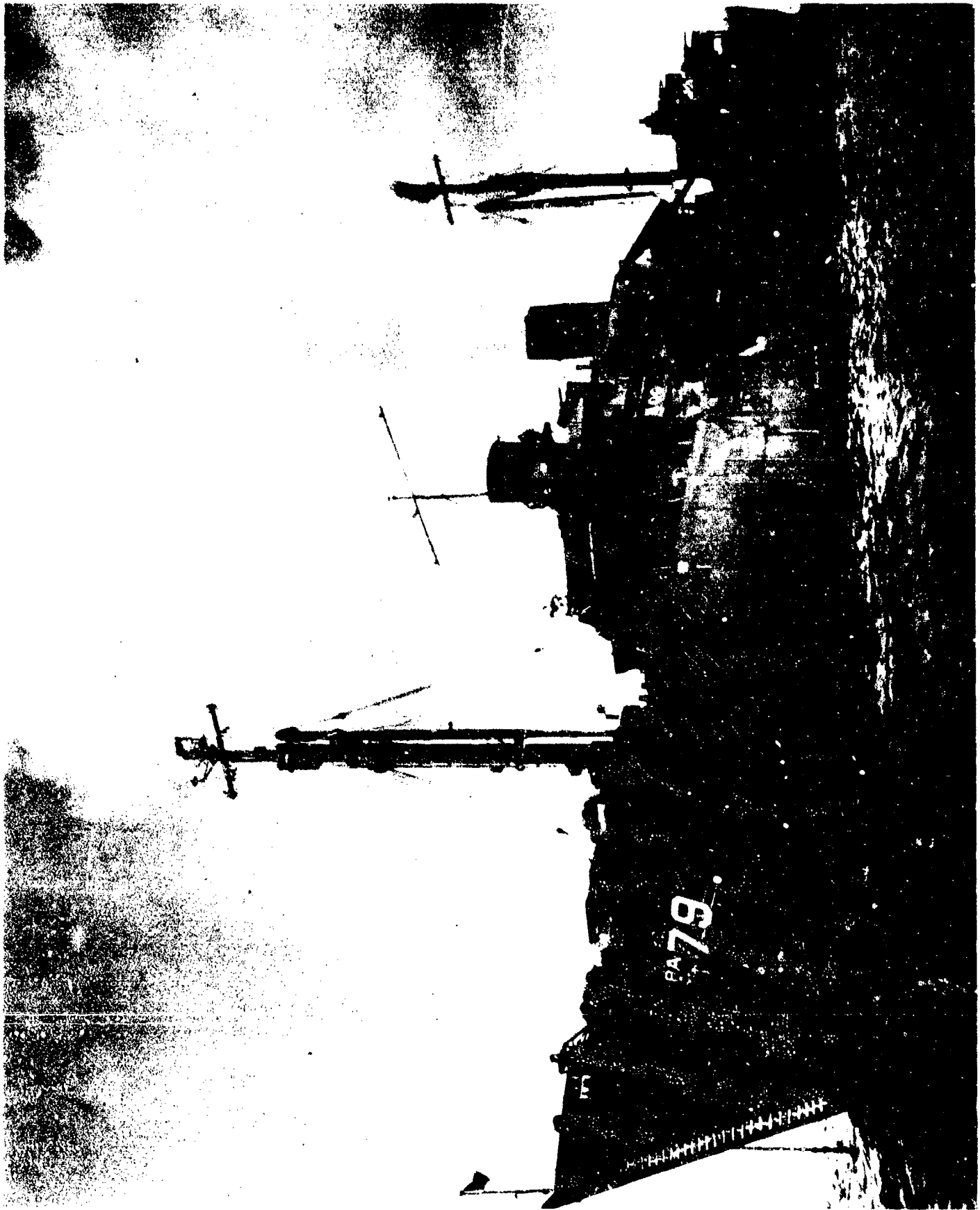
PHOTOGRAPHS

TEST BAKER

SECRET

USS DAWSON (APA79)

Page 33 of 44 Pages



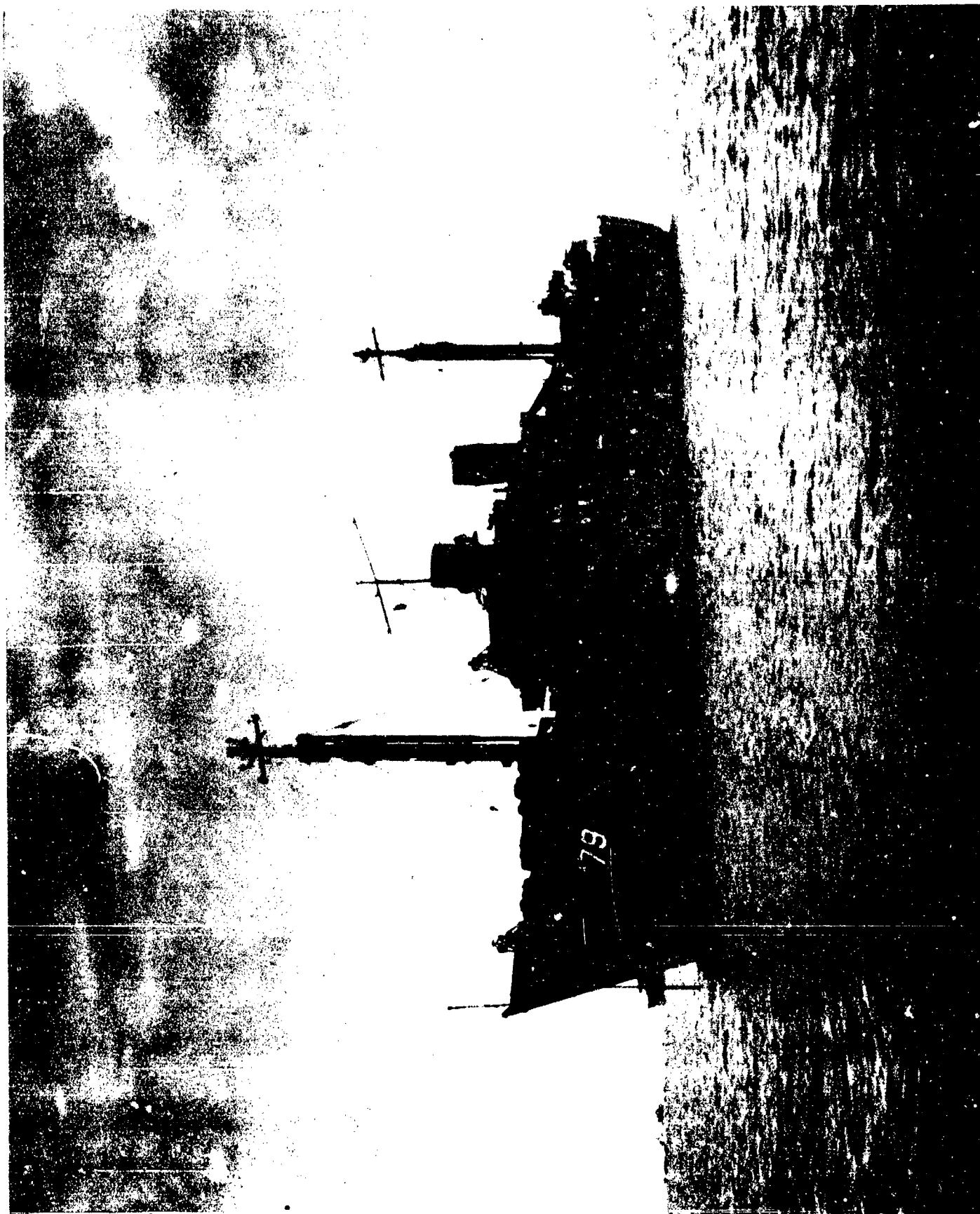
BB-CR-227-513-85. View from off port bow.

SECRET

Page 34 of 44 Pages

USS DAWSON (APA 79)

8044



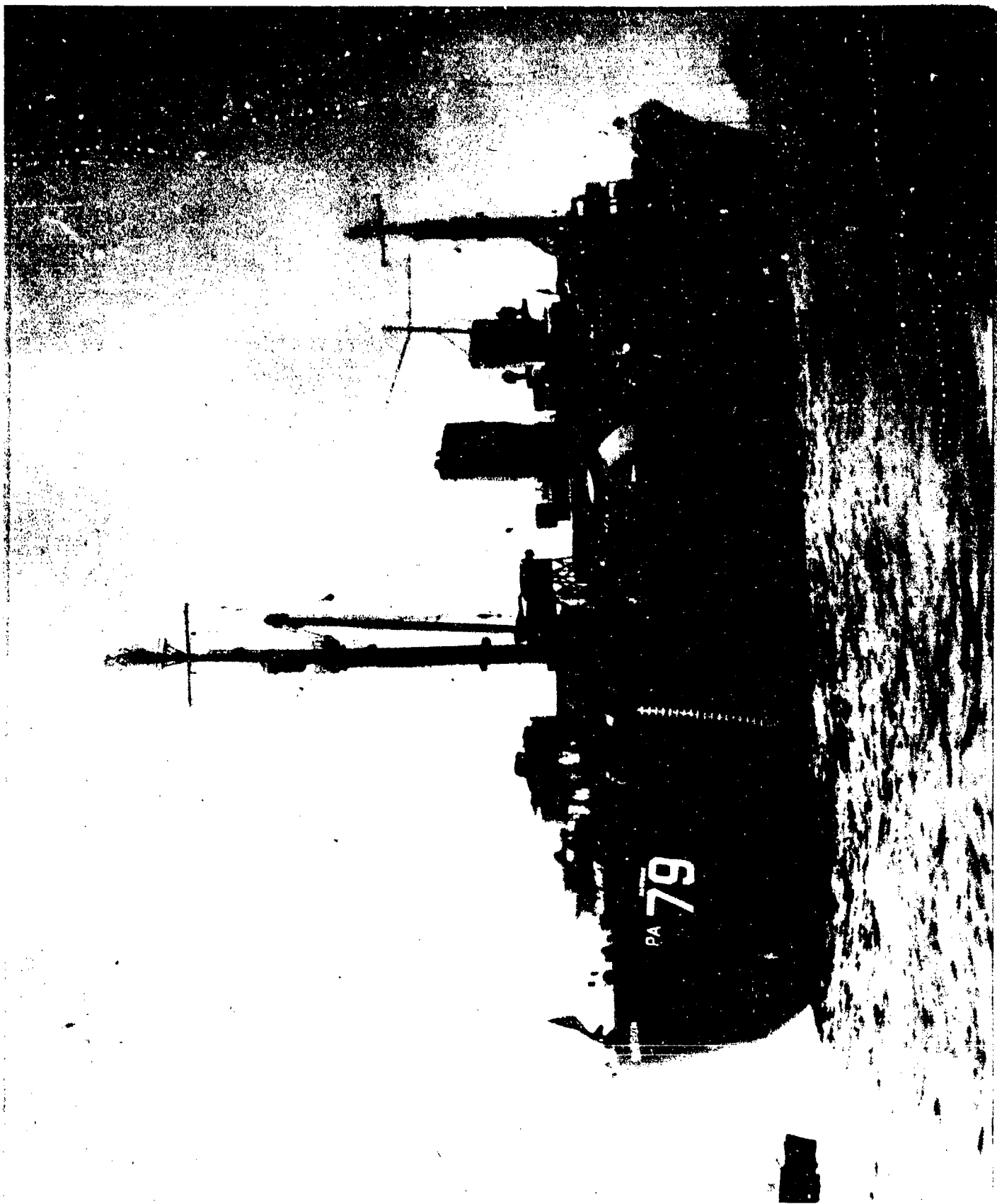
AB-CR-227-243-52. View from off port bow.

SECRET

Page 35 of 44 Pages

USS DAWSON (APA79)

8044



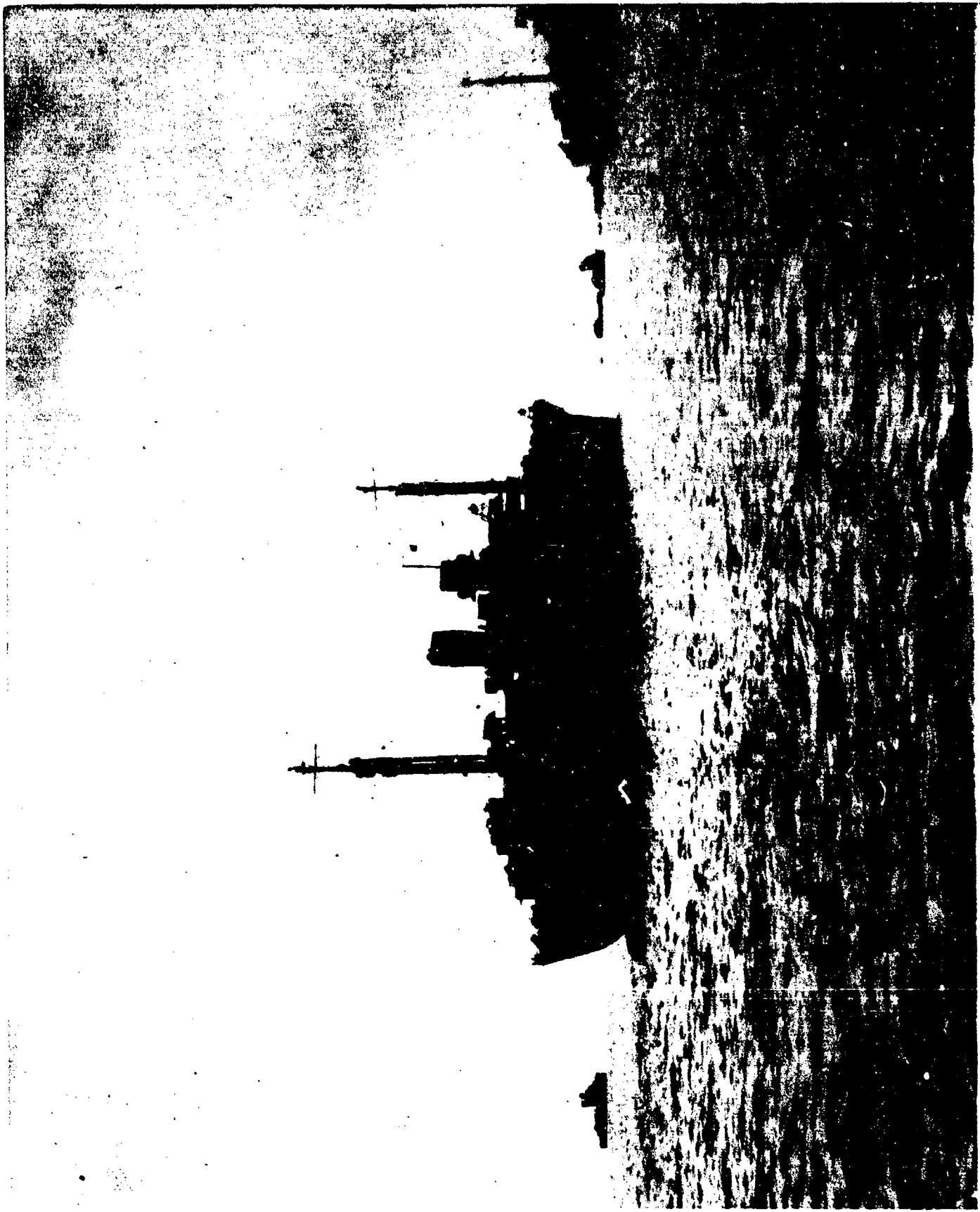
BB-CR-227-513-81. View from off starboard quarter.

SECRET

Page 36 of 44 Pages

USS DAWSON (APA79)

8000



AB-CR-227-243-56. View from off starboard quarter.

SECRET

Page 37 of 44 Pages

USS DAWSON (APA79)

8044



AB-CR-62-2176-11. Looking down and aft into forward cargo hold showing debris on main deck from upper deck jury rigged hatch cover. (The pontoon cover was bent in Test A; holes in the port longitudinal bulkhead were made by falling strongbacks in Test A.)  
SECRET

USS DAWSON (APA 79)



AB-CR-62-2176-10. Looking aft on main deck in after cargo hatch area showing debris from upper deck jury rigged hatch cover.

SECRET

Page 39 of 44 Pages

USS DAWSON (APA79)

8044



AB-CR-68-2153-2. View from off starboard quarter, bow to mainmast.

SECRET

Page 40 of 44 Pages

USS DAWSON (APA 79)

8044



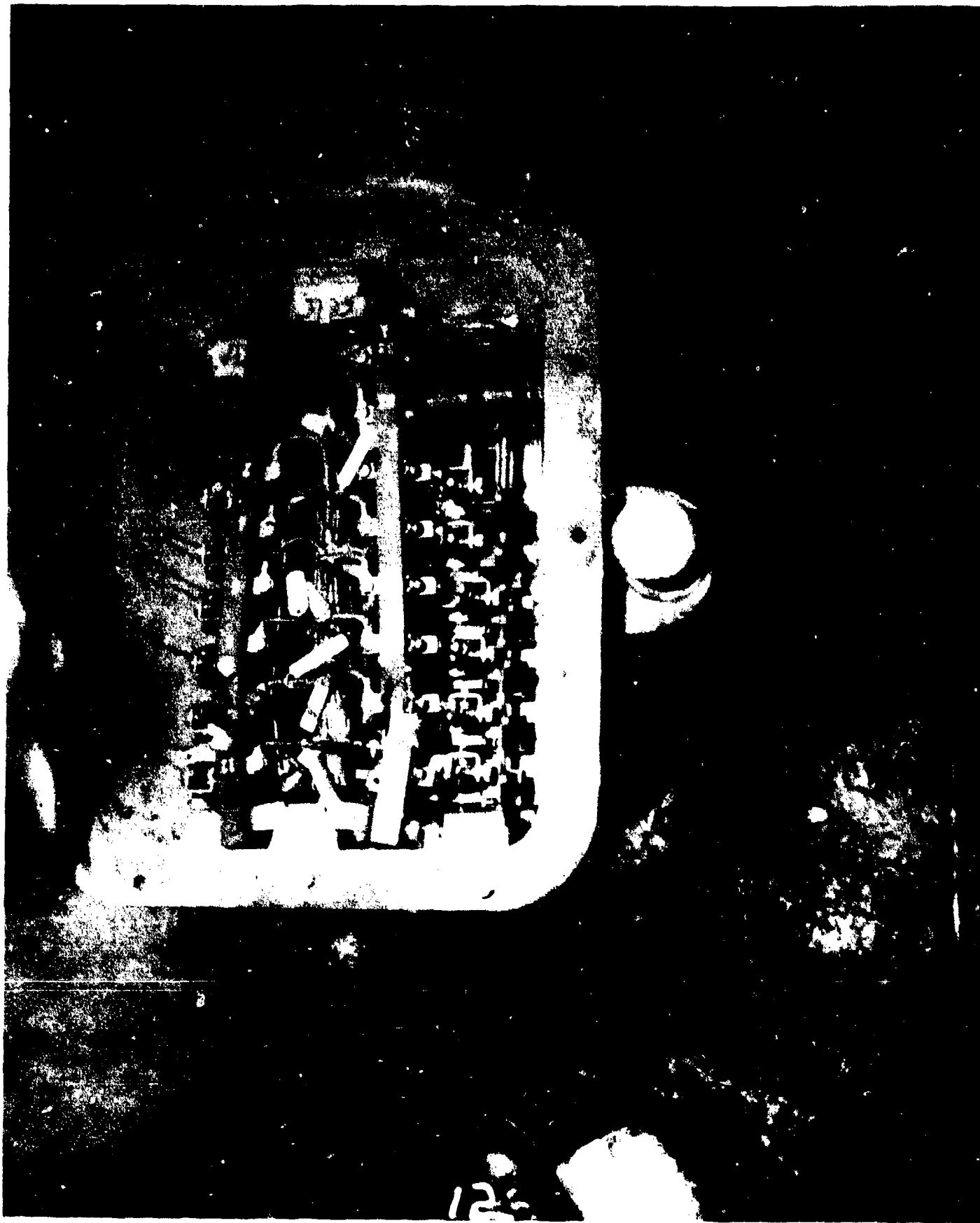
AB-CR-62-1702-7. View of airplane wing, looking aft on upper deck along starboard side of after cargo hatch.

SECRET

Page 41 of 44 Pages

USS DAWSON (APA79)

8044



AB-CR-62-2176-12. Anchor windlass controller hit by missile, located on the forecastle.

SECRET

Page 42 of 44 Pages

USS DAWSON (APA 79)

8044

APPENDIX

COMMANDING OFFICERS REPORT

TEST BAKER

SECRET

USS DAWSON (1 PA79)

Page 43 of 44 Pages

# COMMANDING OFFICERS REPORT

## REPORT # 5

### SECTION I

This vessel was reboarded for two (2) hours on 13 August 1946 for quick reopening and inspection by select members of ship's company and DSM representatives, accompanied by monitor.

This vessel was found to have a topside tolerance of two (2) hours, except vicinity of No. 2 hatch, Carpenter Shop and standing water on decks, which was thirty (30) minutes. The below decks and engineering spaces had a six (6) hour tolerance.

The topside was littered with shrapnel of various sizes, which dented and punctured decks and superstructure.

The forward section of the pilot house was dished in about four (4) inches.

Number one hatch was completely caved in and number two hatch was partially caved in. Two (2) inches of radio active water was found in number one hold.

Both engine rooms were apparently undamaged. Due to lack of time it was impossible to check alignment. About two (2) inches of water was present in after engine room, apparently entered via stack.

The anchor windlass is inoperative due to shrapnel imbedded in controller panel.

After steering undamaged.

The inclinometer indicated a 41° port roll and 17° starboard roll.

Ordnance material and gun ammunition was undamaged and unchanged except for water and moisture in telescopes and Mk. 14 sights.

The overall damage to this vessel is superficial except for the anchor windlass and radio-activity.

SECRET

USS DAWSON(APA-79)

Classification (~~Canceled~~) (Changed to **CONFIDENTIAL**)  
By Authority of JOINT CHIEFS OF STAFF ACTION OF 15 APRIL 1949  
~~by~~ Herbert R. Brandt Date 9 Apr 51  
12th Lt. AFJWP

**REFUSED DATA**  
1946

**CONFIDENTIAL**



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

TRC

18 April 1997

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

SUBJECT: Declassification of Reports

The Defense Special Weapons Agency has declassified the following reports:

✓AD-366588 <del>4</del>	XRD-203-Section 12✓
AD-366589 <del>L</del>	XRD-200-Section 9
AD-366590 <del>L</del>	XRD-204-Section 13
AD-366591 <del>L</del>	XRD-183
✓AD-366586 <del>X</del>	XRD-201-Section 10✓
✓AD-367487 <del>4</del>	XRD-131-Volume 2 <del>-</del>
✓AD-367516 <del>4</del>	XRD- <del>1</del> 143✓
✓AD-367493 <del>4</del>	XRD-142✓
AD-801410L✓	XRD-138
AD-376831L✓	XRD-83
AD-366759 <del>L</del>	XRD-80
✓AD-376830L <del>4</del>	XRD-79✓
✓AD-376828L <del>4</del>	XRD-76✓
✓AD-367464 <del>X</del>	XRD-106✓
AD-801404L✓	XRD-105-Volume 1
✓AD-367459 <del>X</del>	XRD-100✓

TRC

18 April 1997

Subject: Declassification of Reports

✓ AD-367517 ✕	XRD-141 ✓
AD-366762 ✓	XRD-84
AD-366760 ✓	XRD-81
AD-366761 ✓	XRD-82
AD-367501 ✓	XRD-158-Volume 1
AD-367507L ✓	XRD-152-Volume 4
✓ AD-367495 ✕	XRD-184 ✓
AD-367485 ✕	XRD-129 ✓
AD-367484 ✕	XRD-128 ✓
AD-367483 ✕	XRD-127 ✓
AD-367482 ✕	XRD-126 ✓
AD-367488 ✓	XRD-132
AD-367480 ✕	XRD-124 ✓
AD-801409L ✓	XRD-135
AD-367490 ✕	XRD-136 ✓
AD-367492 ✕	XRD-137 ✓
AD-801411L ✓	XRD-139
AD-367518 ✕	XRD-140 ✓
AD-367515 ✓	XRD-144
AD-367514 ✓	XRD-145
AD-367468 ✕	XRD-110-Volume 2 ✓
AD-367513 ✓	XRD-146
AD-367497 ✕	XRD-162 ✓

TRC

18 April 1997

Subject: Declassification of Reports

AD-801406L ✓ XRD-114.

In addition, all of the cited reports are now **approved for public release; distribution statement "A" now applies.**

*Arduith Jarrett*  
ARDITH JARRETT  
Chief, Technical Resource Center