

UNCLASSIFIED



AD NUMBER

0367 488

CLASSIFICATION CHANGES

TO

UNCLASSIFIED

FROM

CONFIDENTIAL

AUTHORITY

RITA M. METRO, DSWA-OPSSI MAY 22, 1997.

19990604289

THIS PAGE IS UNCLASSIFIED

UNCLASSIFIED



AD NUMBER

AD-367 488

NEW LIMITATION CHANGE

TO

DISTRIBUTION STATEMENT: A

Approved for public release; Distribution is unlimited.

LIMITATION CODE: 1

FROM

DISTRIBUTION STATEMENT: F

LIMITATION CODE: 5

AUTHORITY

Rita M. Metro, Chief, Info Scty, DSWA-OPSSI; May 22, 1997

THIS PAGE IS UNCLASSIFIED



Defense Special Weapons Agency
6801 Telegraph Road
Alexandria, Virginia 22310-3388

ERRATA

AD-367 488

OPSSI

MAY 22 1997

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Declassification Review of Operation CROSSROADS
Test Reports

The following reports concerning the atmospheric nuclear tests conducted during Operation CROSSROADS in 1946 have been declassified and cleared for open publication/public release:

XRD-1 through XRD-214. (This includes XRD 212-1, -2, -3, -A1, -A2, -A3, -A4).

This memorandum may be cited as the authority to declassify copies of any of the reports listed above.

John H. Metro
JOHN H. METRO

Chief, Information Security

ERRATA

XRD
132

9

~~CONFIDENTIAL~~
1948

Security Information

BUREAU OF SHIPS GROUP

TECHNICAL INSPECTION REPORT

~~CONFIDENTIAL~~

Classification (Cancelled) (Changed to Security Information)
By Authority of JOINT CHIEFS OF STAFF JCS 1795/36 DATED 15 APRIL 1949
By *John H. Byetta* 22 SEP 1953

367488

6 OPERATION CROSSROADS.
U.S.S. FILLMORE (APA83)

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 47p.

14 XRD-132

OPERATION CROSSROADS

DDC

DIRECTOR OF SHIP MATERIAL

JOINT TASK FORCE ONE

DEC 2 1965

JISIA E1 JAN 1965

~~CONFIDENTIAL~~
Security Information

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

REG. NO.

6952

~~CONFIDENTIAL~~
1948

SECURITY

MARKING

The classified or limited status of this report applies to each page, unless otherwise marked.

Separate page printouts MUST be marked accordingly.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18, U.S.C., SECTIONS 793 AND 794. THE TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

SECRET

~~CONFIDENTIAL~~

BUREAU OF SHIPS GROUP
TECHNICAL INSPECTION REPORT

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

APPROVED:

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

USS FILLMORE (APA83)

SECRET

Page 1 of 47 Pages

~~CONFIDENTIAL~~

GROUP 3
Downgraded at 12 year intervals,
Not automatically declassified.

~~SECRET~~
TABLE OF CONTENTS

	PAGE NO.
Ship Characteristics Sheet - - - - -	3
Midship Section - - - - -	4
Overall Summary - - - - -	5
Hull Technical Inspection Report (Section I) - - - - -	11
Machinery Technical Inspection Report (Section II) - - - - -	16
Electrical Technical Inspection Report (Section III) - - - - -	22
Ships Measurement Diagram (Appendix) - - - - -	29
Photographic Section (Section IV)- - - - -	32
Commanding Officers Report (Appendix) - - - - -	35

~~SECRET~~

USS FILLMORE (APA83)

U.S.S. FILLMORE (APA-83)

SHIP CHARACTERISTICS

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

Commissioned: 25 February 1945.

HULL

Length Overall: 426 feet 0 inches.

Length on Waterline: 400 feet 0 inches.

Beam (extreme): 58 feet 0 inches.

Depth (molded at upper deck): 37 feet 0 inches.

Drafts at time of test: Fwd. 11 feet 6 inches.

Aft. 16 feet 10 inches.

Limiting displacement: 6,190 tons.

Displacement at time of test: 5,947 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 - 705° F.

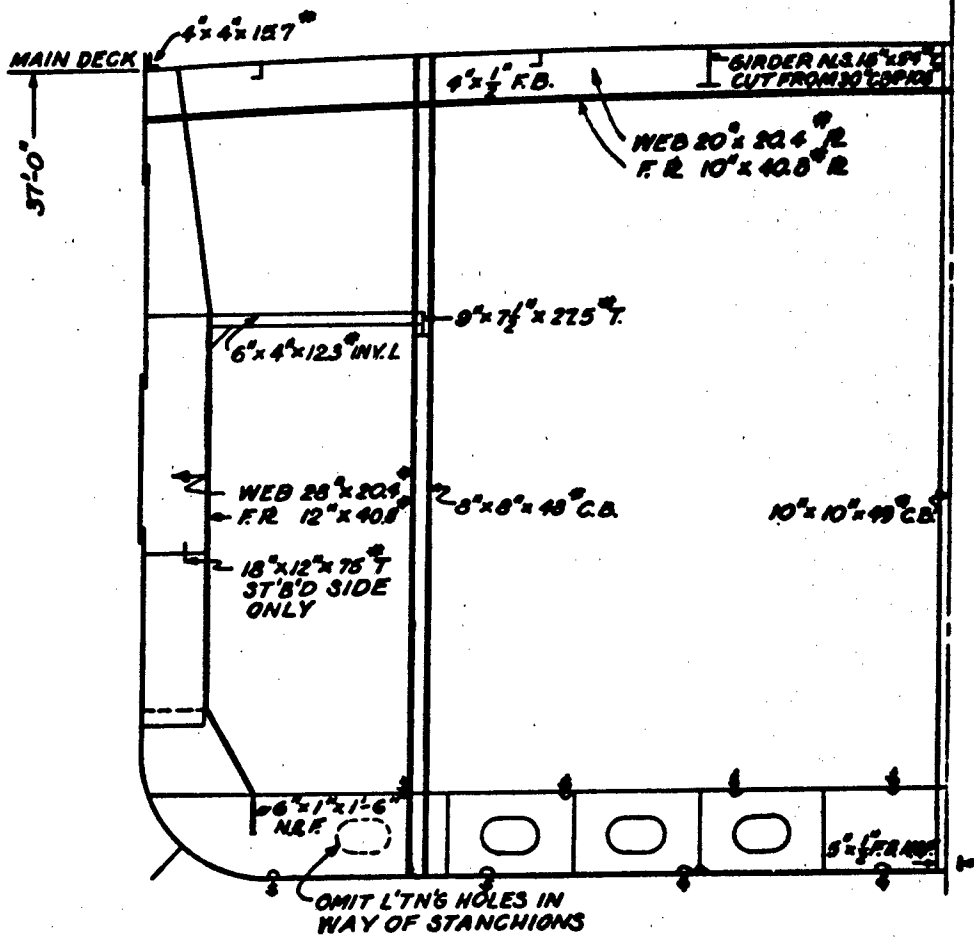
Propellers: Two are installed.

Main Shafts: Two are installed in ship.

Ships Service Generators: Five are installed in ship. Three 250 KW. - 450 V. - A.C. Two - 100 KW. - 120/240 V. - D.C.

SECRET

USS FILLMORE (APA-83)



FRAME 76 LOOKING AFT

MIDSHIP SECTION

TEST B

SECRET

U.S.S. FILLMORE APA 63

PAGE 4 OF 47

6952

TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

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

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

(b) Structural damage.

HULL

None.

MACHINERY

No comment.

ELECTRICAL

There was no apparent structural damage.

(c) Other Damage.

HULL

Not observed.

MACHINERY

The machinery of this vessel was not damaged by Test B.

ELECTRICAL

The electric plant and electrical elements of ship control, fire control and gunnery were undamaged and operable.

SECRET

USS FILLMORE (APA83)

II. Forces Evidenced and Effects Noted.

(a) Heat.

HULL

None.

MACHINERY

No evidence.

ELECTRICAL

None evidenced.

(b) Fires and Explosions.

HULL

None.

MACHINERY

No evidence.

ELECTRICAL

None evidenced.

(c) Shock.

HULL

None.

MACHINERY

The ship apparently received a slight shock. The only evidence of this is the fact that leads left in the forward bearing of

SECRET

USS FILLMORE (APA83)

#1 main turbo-generator indicate a slight motion of the rotor, not over .003 inch.

ELECTRICAL

There was no damage to electrical equipment as a result of shock.

(d) Pressure.

HULL

None.

MACHINERY

No evidence.

ELECTRICAL

There was no evidence of damage to any electrical equipment as a result of pressure.

(e) Effects peculiar to the Atom Bomb.

HULL

None.

MACHINERY

None.

ELECTRICAL

Radioactivity was the only effect noted peculiar to the atom bomb.

SECRET

USS FILLMORE (APA83)

III. Results of Test on Target.

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

HULL

None.

MACHINERY

None.

ELECTRICAL

No effect.

(b) Effect on gunnery and fire control.

HULL

None.

MACHINERY

No comment.

ELECTRICAL

No effect.

(c) Effect on watertight integrity and stability.

HULL

None.

MACHINERY

No comment.

SECRET

USS FILLMORE (APA83)

ELECTRICAL

No effect.

(d) Effect on personnel and habitability.

HULL

None.

MACHINERY

None.

ELECTRICAL

1. Other than the effects from radioactivity, it is believed that there would have been no personnel casualties.

2. There was no material damage which would affect the habitability of this vessel.

(e) Effect on fighting efficiency.

HULL

None.

MACHINERY

None.

ELECTRICAL

Slight effect if any would have been noted in the fighting efficiency of this vessel.

SECRET

USS FILLMORE (APA83)

IV. General Summary of Observers' Impressions and Conclusions.

HULL

No comment.

MACHINERY

The FILLMORE was outside the effective range of the explosion during Test B.

ELECTRICAL

The material condition of this vessel is such as to indicate its position in the target array was outside the effective radius of the bomb. Other than radioactivity there was no evidence of this ship having been subjected to any unusual forces. Some compartments, particularly those below waterline and in vicinity of underwater shell plating are radioactive.

V. Any preliminary general or specific recommendations of the Inspecting Group.

HULL

None.

MACHINERY

None.

ELECTRICAL

None.

SECRET

USS FILLMORE (APA83)

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, hence no change in drafts
or list.

- (b) Structural damage.

None.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

SECRET

USS FILLMORE (APA83)

(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical 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.

None.

(e) Effect on fighting efficiency.

None.

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%

SECRET

USS FILLMORE (APA83)

ITEM	LOADING
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.

SECRET

USS FILLMORE (APA83)

Page 13 of 47 Pages

DETAILED DESCRIPTION OF HULL DAMAGE

A. General Description of Hull Damage.

No damage. General exterior views of the ship after Test B are on pages 33 and 34.

B. Superstructure.

No damage.

C. Turrets, Guns and Directors.

No damage.

D. Torpedo Mounts, Depth Charge Gear.

Not Applicable.

E. Weather Deck.

Several hatch boards on both hatches became dislodged and fell undamaged to the deck below. The location and recordings of six deflection scratch gages installed between the main and upper decks are on page 30 and 31.

F. Exterior Hull.

No damage.

G. Interior Compartments (above w.l.)

No damage.

H. Armor Decks and Miscellaneous Armor.

Not Applicable.

I. Interior Compartments (below w.l.)

No damage.

SECRET

USS FILLMORE (APA83)

- 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.
- R. Strength.
No damage.
- S. Miscellaneous.
No comment.

SECRET

USS FILLMORE (APA83)

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.

The machinery of this vessel was not damaged by Test B.

II. Forces Evidenced and Effects Noted.

(a) Heat.

No evidence.

(b) Fires and explosions.

No evidence.

(c) Shock.

The ship apparently received a slight shock. The only evidence of this is the fact that leads left in the forward bearing of #1 main turbo-generator indicate a slight motion of the rotor, not over .003 inch.

SECRET

USS FILLMORE (APA83)

(d) Pressure.

No evidence.

(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.

None.

(e) Total effect on fighting efficiency.

None.

IV. General Summary.

The FILLMORE was outside the effective range of the explosion during Test B.

V. Preliminary Recommendations.

None.

SECRET

USS FILLMORE (APA83)

DETAILED DESCRIPTION OF MACHINERY DAMAGE

A. General Description of Machinery Damage.

(a) Overall condition.

Undamaged.

(b) Areas of major damage.

There were no areas of major damage.

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

This ship received no damage from Test B.

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

Test B had no effect on the overall operation of the machinery plant. Operation was resumed immediately after the test. All machinery has been operated. The ship was steamed at 15 knots. (131 R.P.M.).

B. Boilers.

Undamaged. The boilers were steamed at normal load. The ship made a 24 hour run at speeds up to 15 knots. Hydrostatic tests indicate no change in the tightness of the boilers.

HYDROSTATIC TEST ON #2 BOILER

	Before Test B	After Test B
Initial pressure	450 lbs/sq in.	450 lbs/sq in.
Pressure remaining after		
5 hours	350 lbs/sq. in	350 lbs/sq. in.
18 hours	275 lbs/sq.in.	278 lbs/sq. in.
21 hours	270 lbs/sq.in.	262 lbs/sq.in.
24 hours	260 lbs/ sq.in.	246 lbs/sq.in.

SECRET

USS FILLMORE (APA83)

C. Blowers.

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

D. Fuel Oil Equipment.

Undamaged. All fuel oil equipment was operated after Test B, and functioned normally.

E. Boiler Feedwater Equipment.

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

F. Main Propulsion Machinery.

Undamaged. Both main turbo-generators were operated at speeds up to 15 knots after Test B. Conditions were normal.

Leads left in the forward bearing of #1 main turbo-generator indicate very slight motion of the rotor, not over .003 inch.

Forward lead	Before Test B	After Test B	Difference
Port	.008	.006	.002
Top	.0095	.009	.0005
Stb'd	.007	.006	.001
After lead			
Port	.009	.007	.002
Top	.011	.008	.003
Stb'd	.009	.009	.000

G. Reduction Gears.

Not Applicable.

SECRET

USS FILLMORE (APA83)

H. Shafting and Gearings.

Undamaged. Shafting and bearings were checked while the ship was underway, and functioned normally.

I. Lubrication System.

Undamaged. The lubrication system was checked while the ship was underway, and functioned normally.

J. Condensers and Air Ejectors.

Undamaged. The main and auxiliary condensers have been operated under service conditions, and functioned normally.

K. Pumps.

Undamaged. All the pumps have been operated at normal working pressures. Performance was normal.

L. Auxiliary Generators (Turbines and Gears).

Undamaged. All turbo-generators have been operated since Test B. Performance was normal.

M. Propellers.

Undamaged. The propellers functioned normally while the ship was underway at speeds up to 15 knots.

N. Distilling Plant.

Undamaged. The distilling plant was placed in operation immediately after Test B, and functioned normally.

O. Refrigeration Plant.

Undamaged. The refrigerating plant was placed in operation immediately after Test B, and functioned normally.

SECRET

USS FILLMORE (APA83)

P. Winches, Windlasses, and Capstans.

Undamaged. All equipment under this heading was operated after Test B, and functioned normally.

Q. Steering Engine.

Undamaged. Both steering units have been operated from all stations, and functioned normally.

R. Elevators, Ammunition Hoists, Etc..

Undamaged. The ammunition hoists and gasoline hoist were operated. Conditions were found normal.

S. Ventilation (Machinery).

Undamaged. The ventilation machinery was placed in operation immediately after Test B, and functioned normally.

T. Compressed Air Plant.

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

U. Diesels (Generators and Boats).

Undamaged. The emergency diesel generator and the diesel fire pumps were operated for 5-1/2 hrs. after Test B, and functioned normally.

V. Piping Systems.

Undamaged. All the piping systems were operated at normal working pressures. Conditions were found to be normal.

W. Miscellaneous.

Undamaged. All galley, laundry, and machine shop equipment has been operated since Test B. Performance was normal.

SECRET

USS FILLMORE (APA83)

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.

1. Drafts after test.

Not observed.

2. List.

Not observed.

3. Flooding.

None.

(b) Structural damage.

There was no apparent structural damage.

(c) Other damage.

The electric plant and electrical elements of ship control, fire control and gunnery were undamaged and operable.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None evidenced.

(b) Fires and explosions.

None evidenced.

SECRET

USS FILLMORE (APA83)

(c) Shock.

There was no damage to electrical equipment as a result of shock.

(d) Pressure.

There was no evidence of damage to any electrical equipment as a result of pressure.

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

Radioactivity was the only effects noted apparently peculiar to the atom bomb.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

No effect.

(b) Effect on gunnery and fire control.

No effect.

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

No effect.

(d) Effect on personnel and habitability.

1. Other than the effect from radioactivity, it is believed that there would have been no personnel casualties.

2. There was no material damage which would affect the habitability of this vessel.

SECRET

USS FILLMORE (APA83)

(e) Total effect on fighting efficiency.

Slight effect if any would have been noted in the fighting efficiency of this vessel.

IV. General Summary of Observers' Impressions and Conclusions.

The material condition of this vessel is such as to indicate its position in the target array was outside the effective radius of the bomb. Other than radioactivity there was no evidence of this ship having been subjected to any unusual forces. Some compartments particularly below waterline and in vicinity of underwater shell plating are radioactive.

V. Recommendations.

None.

SECRET

USS FILLMORE (APA83)

DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

A. General Description of Electrical Damage.

(a) Overall condition.

The overall condition of the electrical plant, electrical elements of ship control, fire control and gunnery were undamaged and operated satisfactorily.

(b) Areas of major damage.

None.

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

No damage.

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

1. Ship's service generator plant.

Undamaged. Operated satisfactorily.

2. Engine and boiler auxiliaries.

Undamaged. Operated satisfactorily.

3. Electrical propulsion.

Undamaged. Operated satisfactorily.

4. Communications.

Undamaged. Operated satisfactorily.

5. Fire control circuits.

Undamaged. Operated satisfactorily.

SECRET

USS FILLMORE (APA83)

6. Ventilation.

Undamaged. Operated satisfactorily.

7. Lighting.

Undamaged. Operated satisfactorily.

(e) Types of equipment most affected.

None.

B. Electric Propulsion Rotating Equipment.

Undamaged. Operated satisfactorily.

C. Electric Propulsion Control Equipment.

Undamaged. Operated satisfactorily.

D. Generators - Ships Service.

Undamaged. Operated satisfactorily.

E. Generators - Emergency.

Undamaged. Operated satisfactorily.

F. Switchboards, Distribution and Transfer Panels.

Undamaged. Operated satisfactorily.

G. Wiring, Wiring Equipment and Wireways.

Undamaged. Operated satisfactorily.

H. Transformers.

Undamaged. Operated satisfactorily.

SECRET

USS FILLMORE (APA83)

I. Submarine Propelling Batteries.

Not Applicable.

J. Portable Batteries.

Undamaged. Operated satisfactorily.

K. Motors, Motor Generator Sets and Motor Controllers.

Undamaged. Operated satisfactorily.

L. Lighting Equipment.

Undamaged. Operated satisfactorily.

M. Searchlights.

Undamaged. Operated satisfactorily.

N. Degaussing Equipment.

Undamaged. Operated satisfactorily.

O. Gyro Compass Equipment.

Undamaged. Operated satisfactorily.

P. Sound Powered Telephones.

Undamaged. Operated satisfactorily.

Q. Ship's Service Telephones.

Not Applicable.

R. Announcing Systems.

Undamaged. Operated satisfactorily.

SECRET

USS FILLMORE (APA83)

S. Telegraphs.

Undamaged. Operated satisfactorily.

T. Indicating Systems.

Undamaged. Operated satisfactorily.

U. L.C. and A.C.O. Switchboards.

Undamaged. Operated satisfactorily.

V. F.C. Switchboard.

Undamaged. Operated satisfactorily.

W. Miscellaneous.

No comment.

SECRET

USS FILLMORE (APA83)

APPENDIX

SHIPS MEASUREMENT DIAGRAM

TEST BAKER

SECRET

USS FILLMORE (APA 83)

Page 29 of 47 Pages

DECK DEFLECTION GAGES

TEST B

SHIP U.S.S. FILLMORE (APA-83)

LOCATION		FR. NO.	DECK	DIST. OFF	MAXIMUM COMP.	MAXIMUM EXP.	PERMANENT SET DISTANCE	EXP/COMP.	REMARKS
MAIN	STBD.								
53	MAIN			STBD. 9' 4 1/2"	0-0-1/8	NONE	NONE	NONE	NONE
53	"			PORT 9' 5 1/2"	NONE	"	"	"	"
116	"			PORT 9' 7 1/2"	"	"	"	"	"
116	"			STBD. 9' 7 1/2"	"	"	"	"	"
129 1/2	"			STBD. 9' 0"	"	"	"	"	"
129 1/2	"			PORT 9' 0"	"	"	"	"	"

SECRET

U.S.S. FILLMORE (APA_83)

SECTION IV

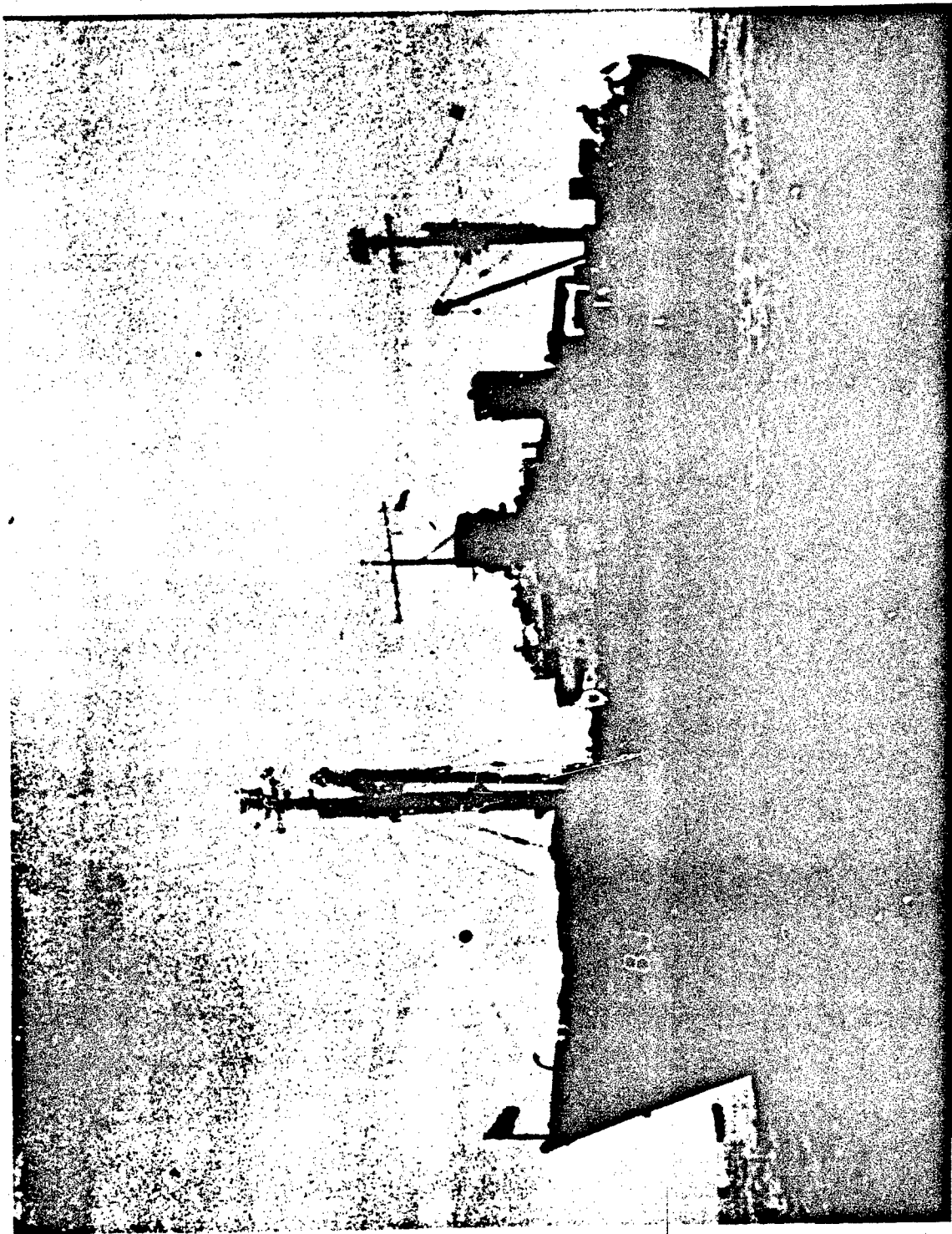
PHOTOGRAPHS

TEST BAKER

SECRET

USS FILLMORE (APA83)

Page 32 of 47 Pages



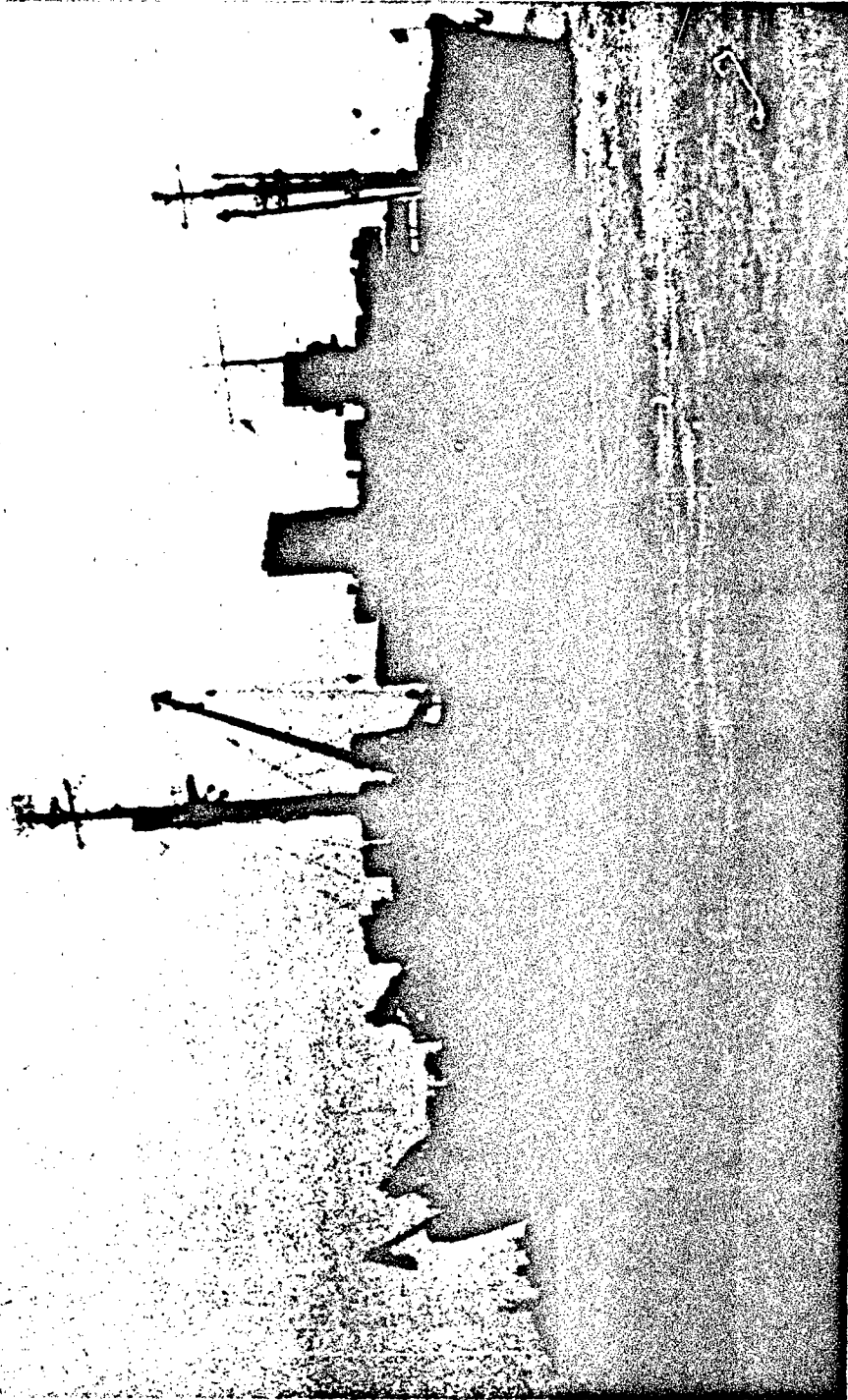
AB-CR-227-289-20. Port bow after test B.

SECRET

Page 33 of 47 Pages

USS FILLMORE (APA83)

6952



AB-CR-227-289-24. Starboard quarter after Test B.

SECRET

Page 34 of 47 Pages

USS FILLMORE (APA83)

6952

APPENDIX

COMMANDING OFFICERS REPORT

TEST BAKER

SECRET

USS FILLMORE (APA 83)

Page 35 of 47 Pages

REPORT #11

COMMANDING OFFICERS REPORT

PART A - GENERAL SUMMARY

I. Target Condition After Test.

(a) Draft was the same as before test; forward 11' - 00", aft 16' - 06", mean 13' - 09". There was no list; there was no flooding.

(b) No apparent structural damage was done to this vessel.

(c) No apparent damage was done to machinery, electrical, ship control, fire control, gunnery or electronic equipment. Operability of above machinery and equipment has not been impaired.

(d) No apparent effect was produced by heat. There were no fires. It is estimated that not more than ten (10) percent of the exposed personnel would have become casualties; personnel below decks - none.

II. Forces evidenced and effects noted.

(a) No effect of heat was noted. Heat did not penetrate hull structure.

(b) There were no fires; there were no explosions.

(c) No effect of shock was noted.

(d) No effect of pressure was noted except as listed in Para. R. Section 1 of Part C below.

(e) No effect apparently peculiar to the Atom Bomb was noted.

III. Results of Baker Test on Target.

(a) Ship propulsion and ship control was not impaired.

SECRET

U. S. S. FILLMORE (APA83)

(b) Gunnery and fire control equipment was not impaired.

(c) Water tight integrity and stability was not damaged or impaired.

(d) It is estimated that not more than ten (10) percent of the exposed personnel would have been casualties. Ship was livable.

(e) Except for loss of exposed personnel, fighting efficiency of the ship would not be reduced.

IV. General Summary.

Damage to this vessel as a result of the 'Baker' Atom Bomb was zero. Personnel casualties would not have been serious. Fighting efficiency of the ship would have been reduced but slightly as a result of personnel casualties.

V. Recommendations.

All exposed personnel could be protected to a certain extent by the installation of metal shields and by the wearing of white coveralls plus face masks.

SECRET

U. S. S. FILLMORE (APA83)

PART C - INSPECTION REPORT

SECTION A - HULL

A. General Description of Hull Damage.

No damage.

B. Superstructure and Weather Decks.

No damage.

C. Turrets, Guns and Directors.

No damage.

D. Torpedo Tubes and Appurtenances.

There are no torpedo mounts or depth charge gear.

E. Weather Decks.

No damage.

F. Exterior Hull Above Waterline.

No damage.

G. Compartments.

No damage.

H. Armor Decks.

No armor deck is fitted.

I. Interior Compartments (below waterline).

No damage.

SECRET

U. S. S. FILLMORE (APASS)

J. Underwater Hull.

No damage.

K. Tanks.

No damage.

L. Flooding.

There was no flooding.

M. Ventilation.

No damage.

N. Ship Control and Fire Control Stations.

No damage.

O. Fire Control.

No damage.

P. Ammunition Stowage.

No damage.

Q. Ammunition Handling.

No damage.

R. Strength.

No damage.

Depression Gauges Recorded as Follows:

SECRET

U. S. S. FILLMORE (APA83)

	<u>UP</u>	<u>DOWN</u>	<u>GAUGE</u>	<u>HOG SAG</u>
Gauge at Fr. 53 9 feet to port	Yes	No	2/32"	No
Gauge at Fr. 53 9 feet to stbd.	Yes	No	5/32"	No
Gauge at Fr. 116, 9 feet to port.	No	No	-----	No
Gauge at Fr. 116, 9 feet to stbd.	Yes	No	5/32"	No
Gauge at Fr. 129 1/2, 9 feet to port.	No	No	-----	No
Gauge at Fr. 129 1/2, 9 feet to stbd.	No	No	-----	No

SECRET

U. S. S. FILLMORE (APA83)

Page 40 of 47 Pages

PART C - INSPECTION REPORT

SECTION B - MACHINERY

A. General Description of Machinery Damage.

No damage.

B. Boilers.

No damage.

C. Blowers.

No damage.

D. Fuel Oil Equipment.

No damage.

E. Boiler Feedwater Equipment.

No damage.

F. Main Propulsion Machinery.

No damage.

G. Reduction Gears.

No damage.

H. Shafting and Bearings.

No damage.

I. Lubrication System.

No damage.

SECRET

U. S. S. FILLMORE (APA83)

J. Condensers and Air Ejectors.

No damage.

K. Pumps.

No damage.

L. Auxiliary Generator.

No damage.

M. Propellers.

No damage.

N. Distilling Plant.

No damage.

O. Refrigerating and Air Conditioning Plants.

No damage.

P. Winches, Windlasses, and Capstans.

No damage.

Q. Steering and Diving.

No damage.

R. Elevators, Ammunition Hoists, etc.

No damage.

S. Ventilation (Machinery).

No damage.

~~SECRET~~ U. S. S. FILLMORE (APA83)

T. Compressed Air Plant.

No damage.

U. Diesels.


No damage.

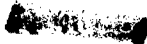
V. Piping Systems.

No damage.

AA. Miscellaneous.

None.

 U. S. S. FILLMORE (APA83) 5

Page 43 of 47 Pages 

PART C - INSPECTION REPORT

SECTION C - ELECTRICAL

A. General Description of Electrical Damage.

No damage.

B. Electric Propulsion Rotating Equipment.

No damage.

C. Electric Propulsion Control Equipment.

No damage.

D. Generators - Ships Service.

No damage.

E. Generators - Emergency.

No damage.

F. Switchboards, Distribution and Transfer Panels.

No damage.

G. Wiring, Wiring Equipment, and Wireways.

No damage.

H. Transformers.

No damage.

I. Submarine Propelling Batteries.

Submarine propelling batteries are not installed.

U. S. S. FILLMORE (APA83)

J. Portable Batteries.

No damage.

K. Motors, Motor Generator Sets and Motor Controllers.

No damage.

L. Lighting Equipment.

No damage.

M. Searchlights.

No damage.

N. Degaussing Equipment.

No damage.

O. Gyro Compass Equipment.

No damage.

P. Sound Powered Telephones.

No damage.

Q. Ship Service Telephones.

Ship's service telephones are not installed.

R. Announcing Systems.

No damage.

S. Telegraphs.

No damage.

 U. S. S. FILLMORE (APA83)

T. Indicating Systems.

No damage.

U. L. C. and A. C. O. Switchboards.

No damage.

V. F. C. Switchboards.

No damage.

SECRET

U. S. S. FILLMORE (APA83)

~~CONFIDENTIAL~~

PART C - INSPECTION REPORT

SECTION D - ELECTRONICS

A. General Description of Electronics Damage.

No damage.

B. Fire Control Radar.

SECRET

U. S. S. FILLMORE (APA83)

Page 47 of 47 Pages

~~CONFIDENTIAL~~

END

DATE
FILMED

1 - 66