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BUREAU OF SHIPS GROUP
TECHNICAL INSPECTION REPORT

Classification (Confidential) (Changed to Confidential)

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

SUBMITTED:

C. L. GAASTERLAND,
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APPROVED:

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

USS PILOTFISH (SS386)

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U.S.S. PILOTFISH (SS386)

SHIP CHARACTERISTICS

Building Yard: Portsmouth Naval Shipyard.

Commissioned: 16 December 1943.

HULL

Heavy Hull Construction.
Length Overall: 311 feet 9 inches.
Length (between perpendiculars): 307 feet 0 inches.
Beam (extreme): 27 feet 3 inches.
Beam (molded): 27 feet 1 3/4 inches.
Drafts (at time of test): Submerged.
Standard Displacement: 1525 tons.
Displacement (at time of test): 2405 tons.

MAIN PROPULSION PLANT

Main Engines: Four Fairbanks-Morse, 10 cylinder,
Type 38D8.
Auxiliary Engine: Fairbanks-Morse, 7 cylinder,
Type 38D5.
Main Motors and Generators: Elliott.
Main Storage Battery: Exide.
Main Controls: Westinghouse.
Reduction Gears: Westinghouse.
Diesel Electric Drive.
TYPICAL SECT. AT FR. 69
LOOKING AFT

TYPICAL SECT. AT FR. 53
LOOKING FORD.

TEST B

SECRET

U.S.S. PILOTFISH SS 386

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

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

Shin is resting on bottom with an indeterminate amount of flooding. The hull is covered to about three quarters height with silt and coral.

(b) Structural damage.

In way of the after torpedo room the plating between frames is dished to a depth of about six inches. The superstructure and tank tops are dished in several locations and the superstructure plating has numerous tears and holes. See photograph on page 9. Complete examination is not possible. Superstructure has shifted to starboard about six inches amidships and one inch at the stern. This shift makes salvage connections inaccessible unless part of the deck is cut away.

(c) Other damage.

Unknown.

II. Forces Evidenced and Effects Noted.

(a) Heat.

No evidence.

(b) Fires and explosions.

No evidence.

(c) Shock.

Unknown.
(d) Pressure.

The "Coordinator's Report on Air Blast and Water Shock for tests Able and Baker" of 27 September indicates that the peak water pressures were over 7000 lbs. per square inch.

III. Results of Test on Target.

(a) Effect on propulsion and ship control.

Unknown.

(b) Effect on gunnery and fire control.

Unknown.

(c) Effect on watertight integrity and stability.

Unknown.

(d) Effect on personnel and habitability.

Unknown.

(e) Total effect on fighting efficiency.

Unknown.

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

The PILOTFISH was submerged for test Baker in 28 fathoms of water to a keel depth of approximately 56 feet, at a range of approximately 300 yards from the center of the burst. After test Baker she was found on the bottom with a starboard list of approximately 30 - 40 degrees. The deck is covered with silt to a depth of 3 - 18 inches. A few pieces of loose coral are resting on the deck. All information has been obtained from exploratory divers' reports. No further information is available. Based on damage observed by divers on SKIPJACK and APOGON, which were farther from the blast, it is considered likely...

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that all or nearly all compartments are flooded and that the tops of the ballast tanks are no longer tight. It is believed that a comparatively lengthy operation would be required to salvage this ship. See the photographic Section pages 9 to 16 for views of portions of the deck and superstructure taken by underwater photography.

V. Preliminary Recommendations.

None.
PHOTOGRAPHS

TEST BAKER

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S-36-9. Section near after escape hatch showing caved-in decking and crack running thwartsips from salvage fitting to edge of deck.
S-36-8. Plating at edge of deck looking aft showing angle of submarine relative to ocean floor.
S-39-5. Port side vicinity frame #46 looking thru railing of bridge
deck at gun point.
S-39-10. Forward portion of bridge showing netting and amplifier.
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  XRD-203-Section 12
AD-366589  XRD-200-Section 9
AD-366590  XRD-204-Section 13
AD-366591  XRD-183
✓ AD-366586  XRD-201-Section 10
✓ AD-367487  XRD-131-Volume 2
✓ AD-367516  XRD-143
✓ AD-367493  XRD-142
AD-801410L  XRD-138
AD-376831L  XRD-83
AD-366759L  XRD-80
✓ AD-376830L  XRD-79
✓ AD-376828L  XRD-76
✓ AD-367464  XRD-106
AD-801404L  XRD-105-Volume 1
✓ AD-367459  XRD-100
TRC 18 April 1997

Subject: Declassification of Reports

✓ AD-367491 XRD-134-Volume 2
✓ AD-367479 XRD-123
✓ AD-367478 XRD-122
✓ AD-367481 XRD-125
AD-367500 XRD-159-Volume 2
✓ AD-367499 XRD-160-Volume 3
✓ AD-367498 XRD-161-Volume 4
AD-367512 XRD-147
AD-367511 XRD-148
✓ AD-367465 XRD-107
✓ AD-366733 XRD-43
✓ AD-367477 XRD-121
✓ AD-367476 XRD-120
✓ AD-367467 XRD-109-Volume 1
✓ AD-367475 XRD-119
✓ AD-367474 XRD-118
AD-367473 XRD-117
AD-367472 XRD-116
AD-367471 XRD-115
✓ AD-367466 XRD-108
AD-801405 L XRD-113
✓ AD-367470 XRD-112
✓ AD-367469 XRD-111
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.

ARDITH JARRETT
Chief, Technical Resource Center