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TECHNICAL INSPECTION REP[redacted]T

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By Authority of Joint Chiefs of Staff (Action 15 Apr 49)
By John Biggs Capt Date 1 May 51
AFSWP

U.S.S. SKATE (SS305)

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BUREAU OF SHIPS GROUP

TECHNICAL INSPECTION REPORT

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By Authority of Joint Chiefs of Staff (Action 15 Apr 49)
By John Beggs Capt Date 1 May 51
AFSWP

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USS SKATE (SS305)

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Page 1 of 93 Pages

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ATOMIC ENERGY ACT 1946

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AA-CR-549-664-11. SKATE lying to in vicinity of flagship during inspection by Vice Admiral W.H.P. BLANDY.

AA-CR-517-2396-9. SKATE underway for test of machinery.

AA-CR-1749-8. General view looking forward from forward gun foundation. Note low salvage fitting for forward battery compartment.

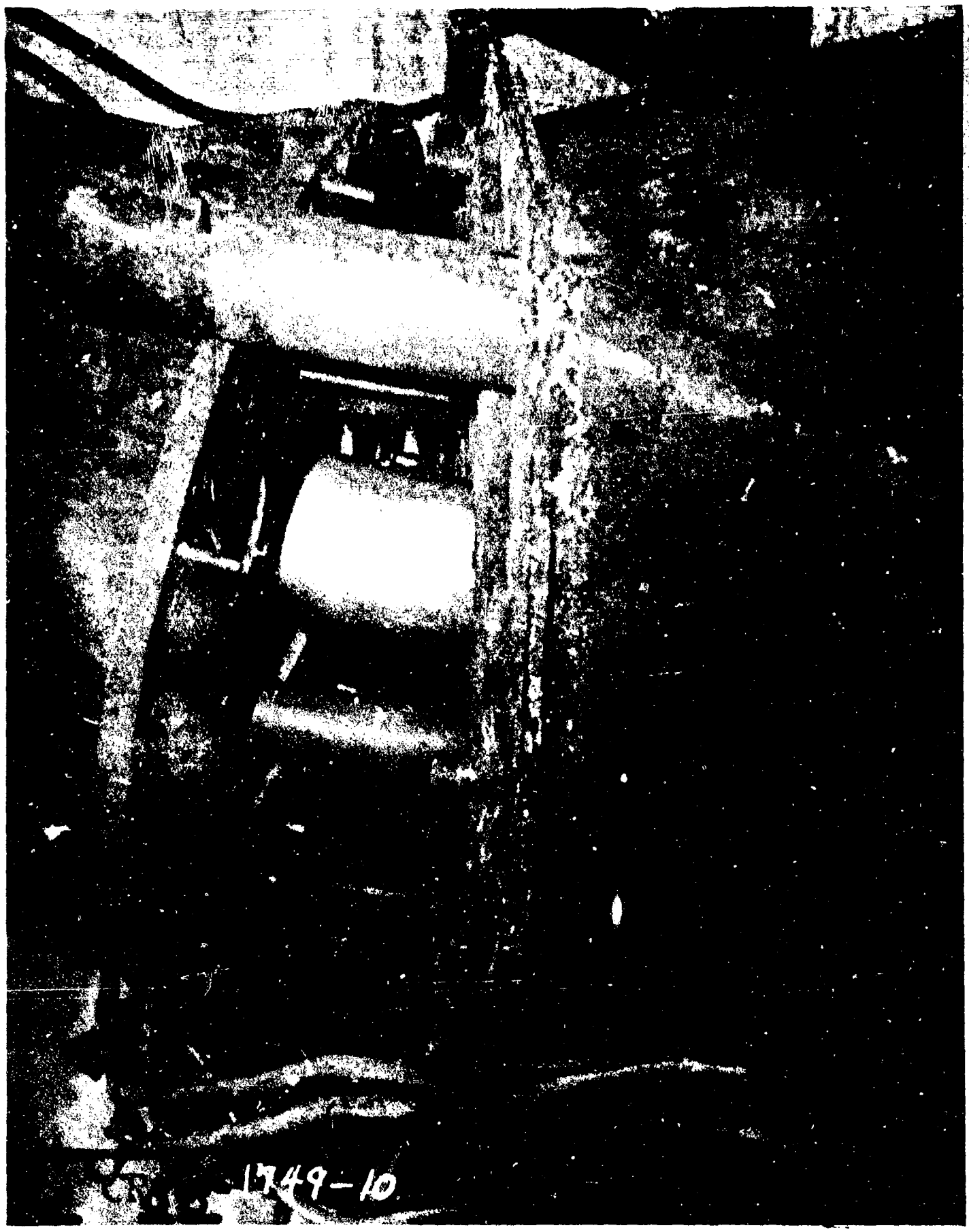
AA-CR-68-1749-12. General view looking aft from periscope shears.

AA-CR-68-1749-3. General view looking aft from port side of bow.

Previous page was blank, therefore not filmed.

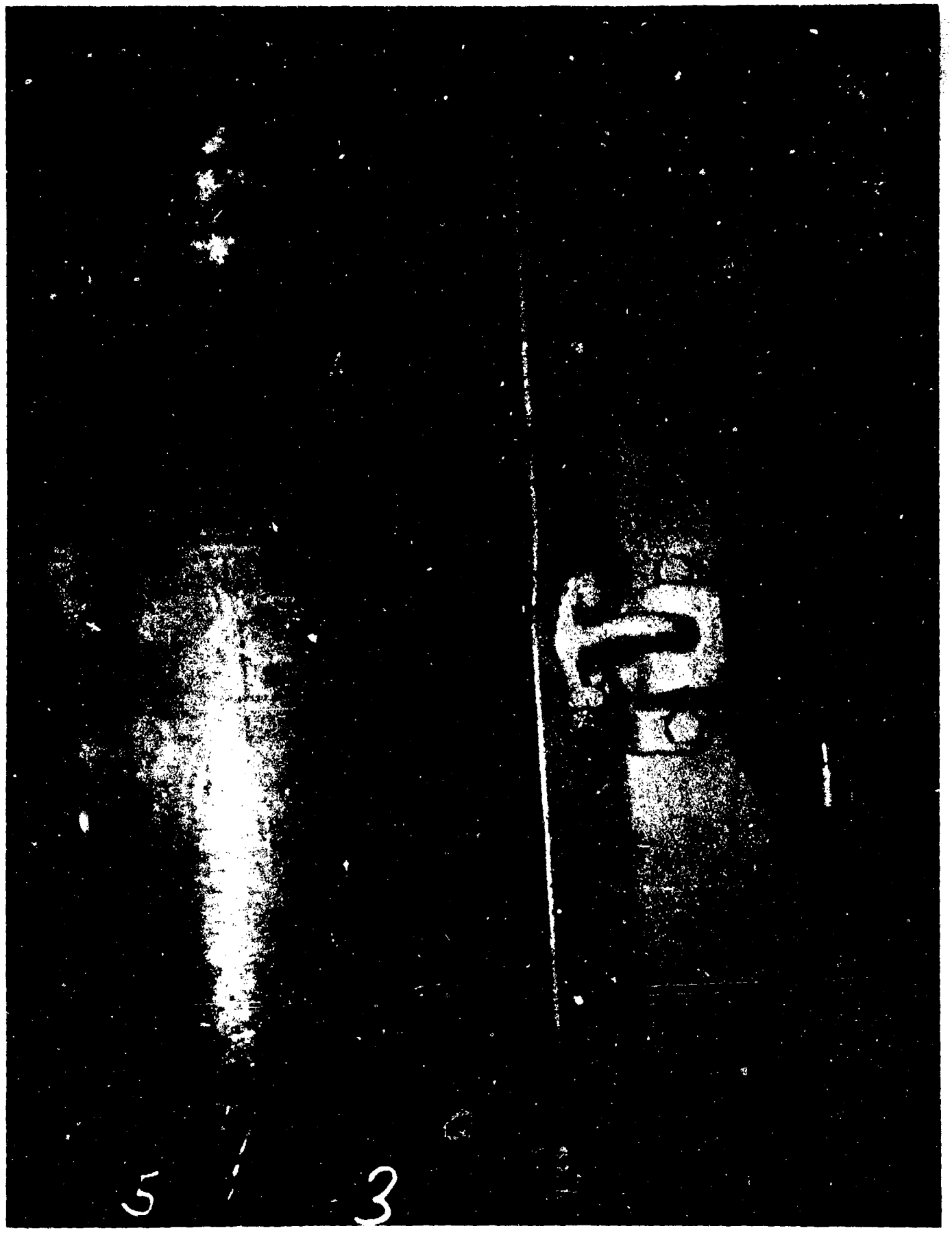
AA-CR-68-1752-4. General view of bridge looking forward room periscope shears. Note cracked CRS weld. Wings of bridge folded forward.

AA-CR-68-1749-' General view of bridge looking aft from forward gun foundation. Note collapsed 40MM gun.

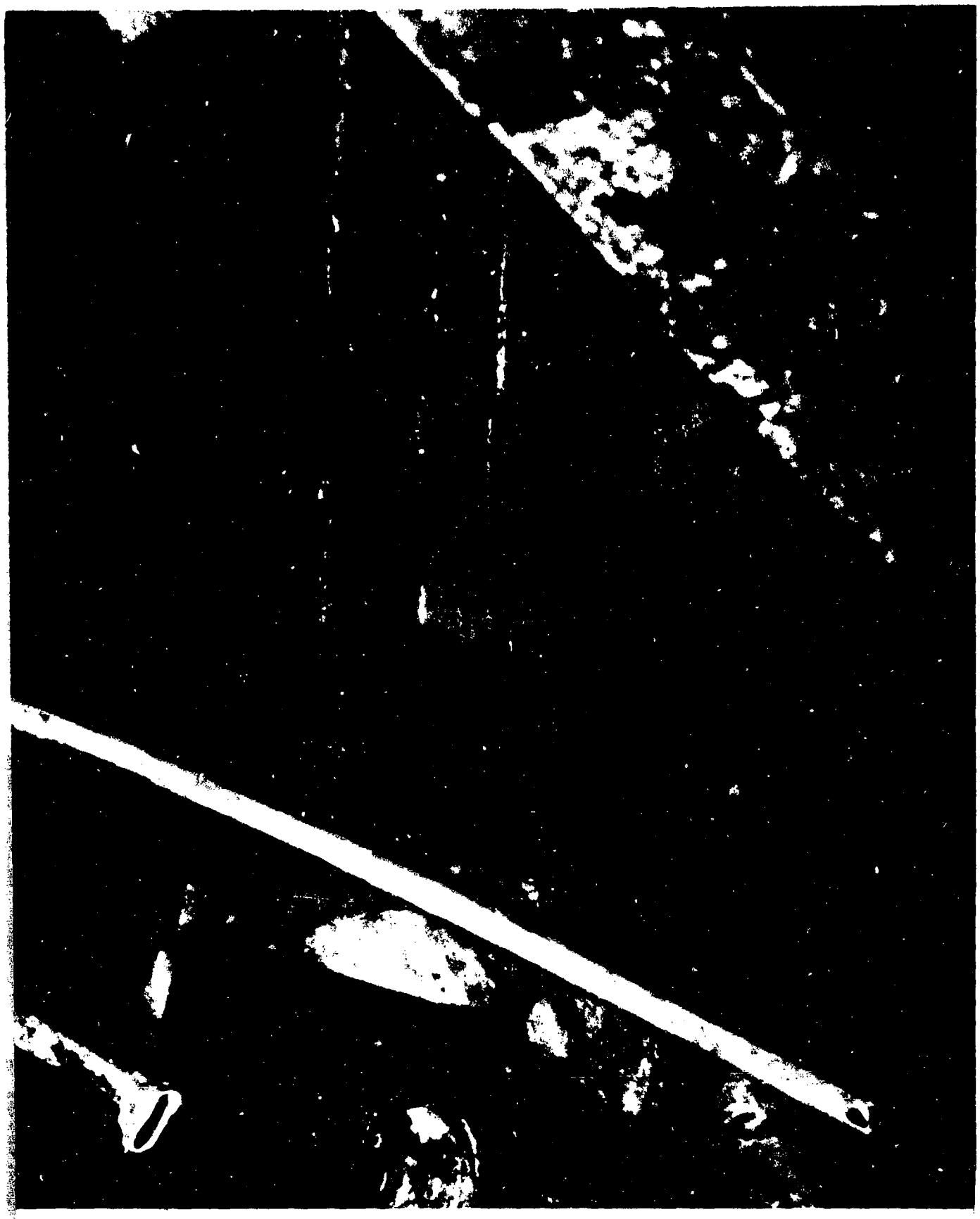


AA-CR-68-1749-10. Failure of flange connection at foot of periscope shears looking forward.

AA-CR-68-1751-11. Failure of SD radar mast shears just above flange.

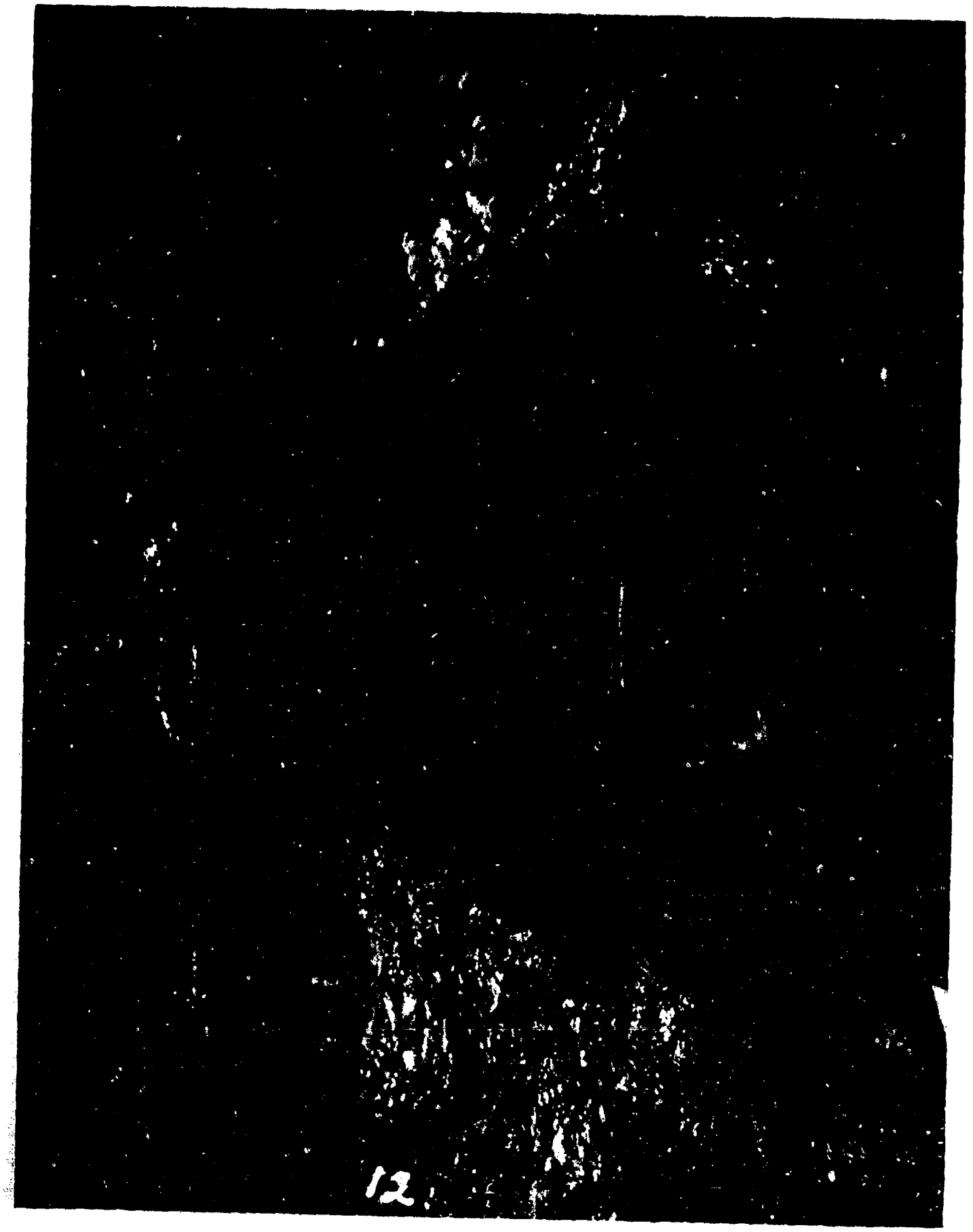


AA-CR-59-2055-3. Stowage cradle for #7 torpedo tube showing bend in side plate.



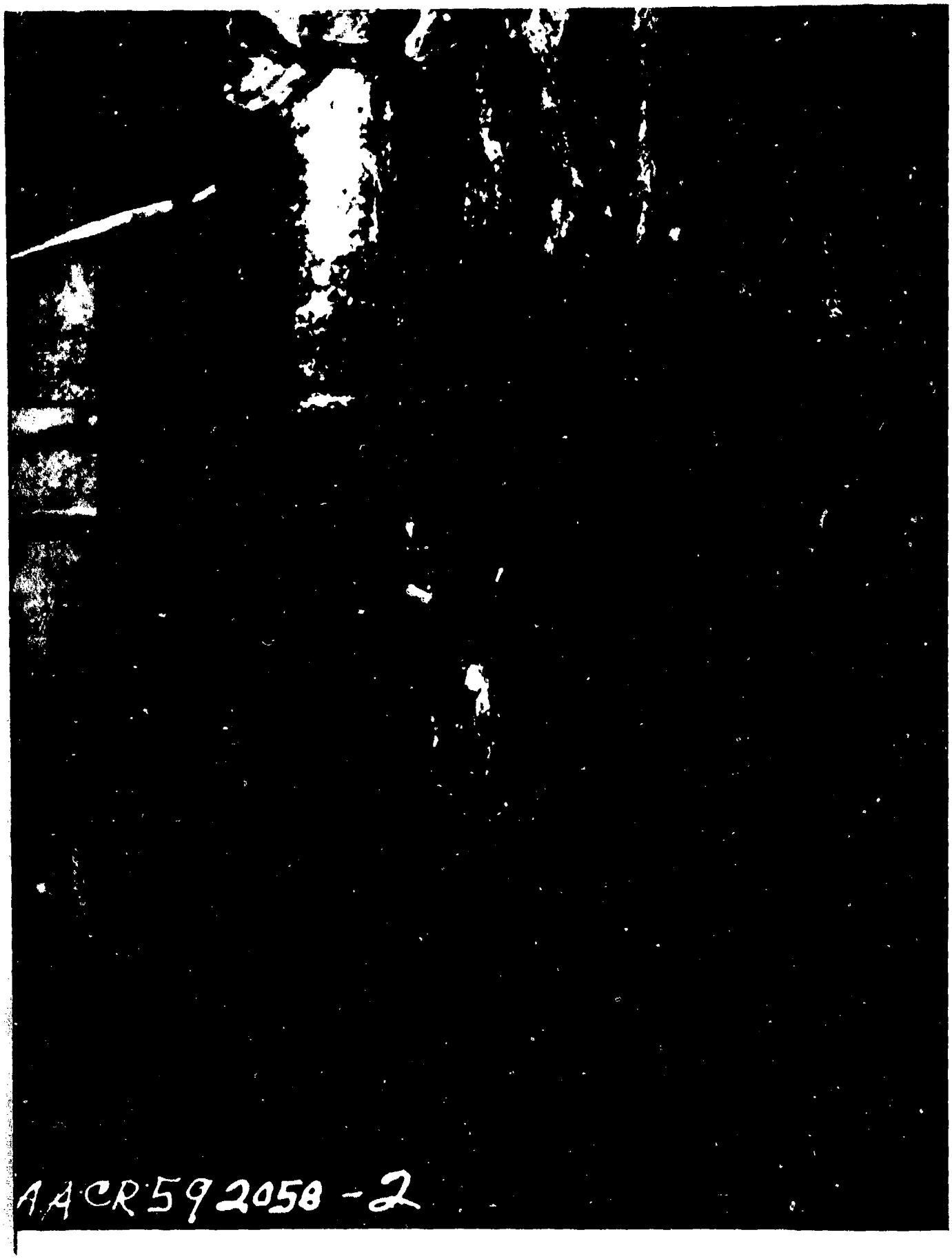
AA-CR-59-2011-9. Frame 55 port looking forward. Fillet weld attacking flange of frame to hull plating, chipped away in way of crack. Note blanked off salvage connection to M.B.T. 2D.

AA-CR-59-2011-8. View of stern and No. 7 and 8 torpedo tube shutters.

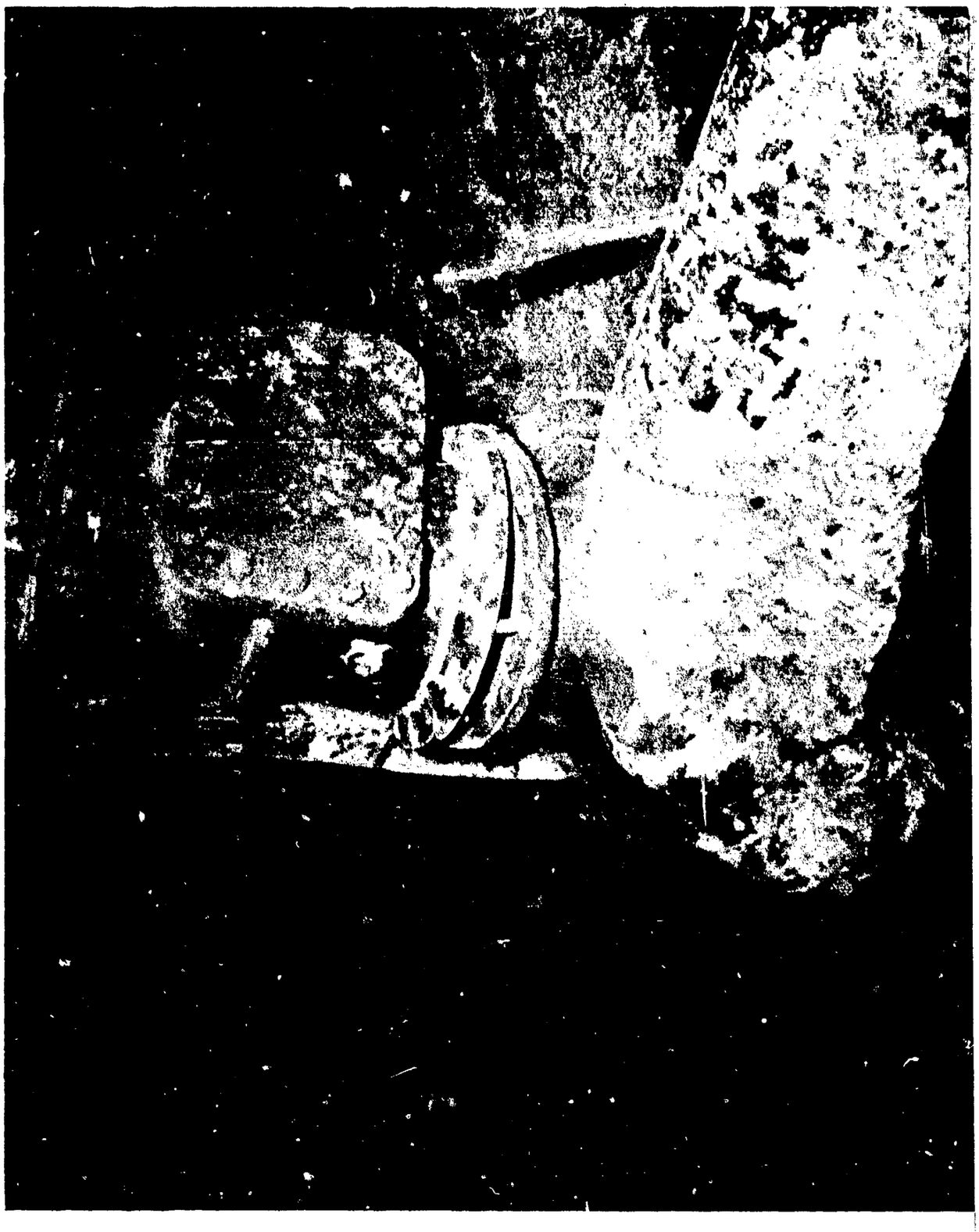


AA-CR-59-2057-12. Stern, showing offset aft of frame 132. Note slight clockwise rotation of damaged section.

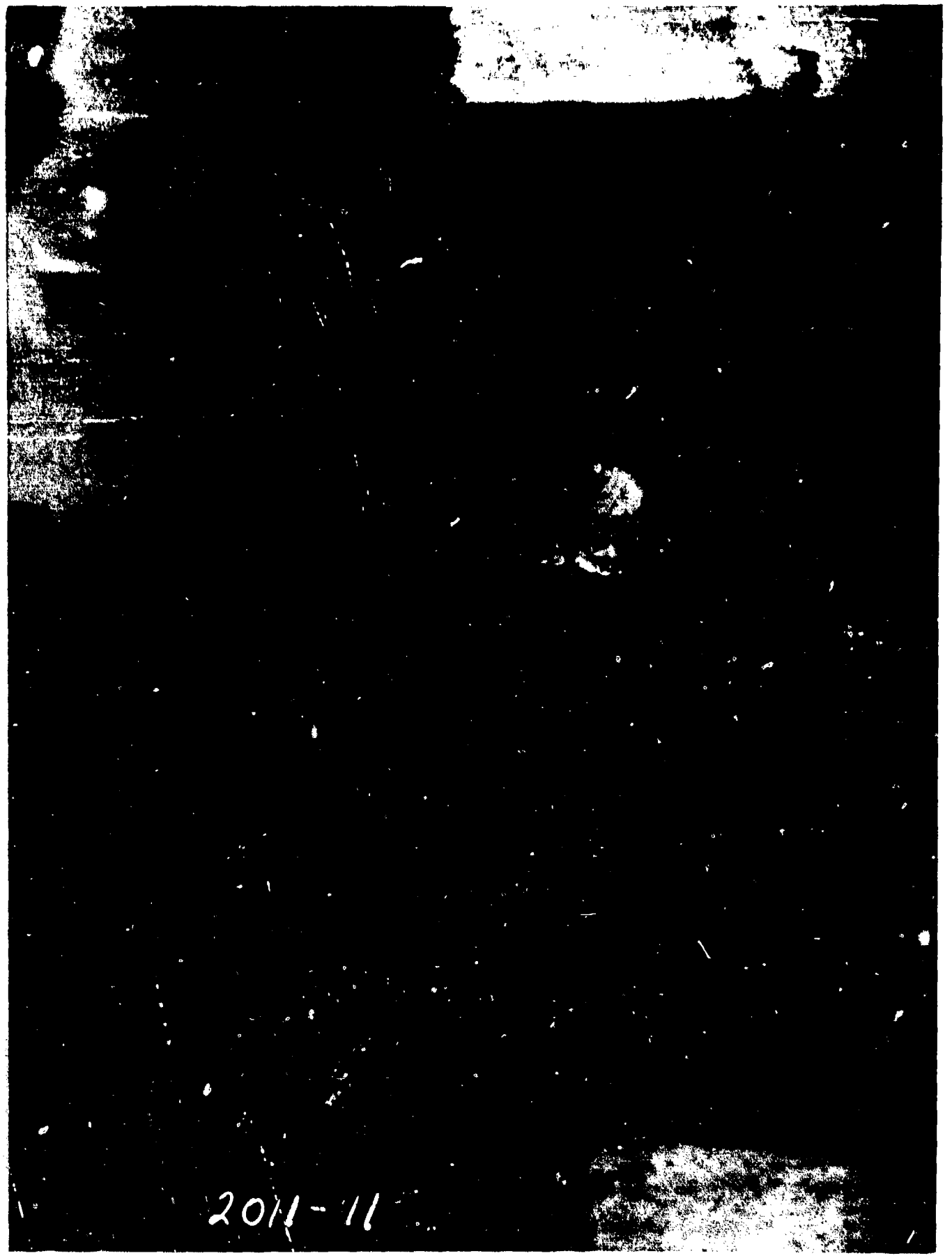
AA-CR-59-2058-1. Stern, showing offset of stern and No. 8 shutter forced in against centerline girder.



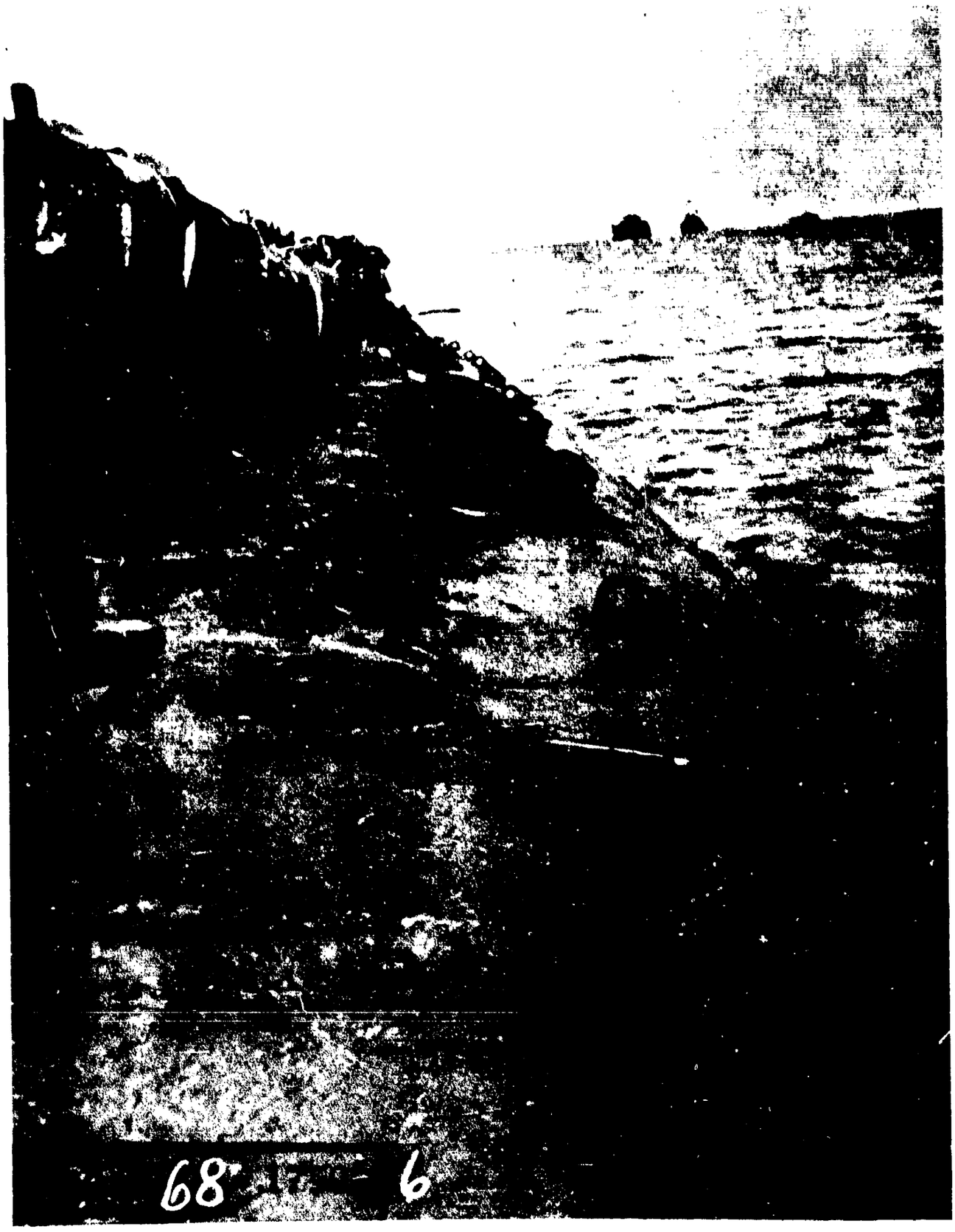
AA-CR-59-2058-2. Stern, showing offset and No. 7 shutter forced in and distorted.



AA-CR-59-2057-8. Base of antenna trunk showing failure of flanged connection. Note also deformed vent riser and intact welds.



AA-CR-59-2011-11. View of inboard end of tie-rod forward battery tank starboard. Nut has snapped off.



AA-CR-59-1750-6. Looking aft at bent in tank top between frame 75 and 80.

AA-CR-59-1751-9. No. 7 main vent valve and after capstan head.

AA-CR-59-2057-2. After capstan head and No. 7 main vent valve looking forward.

AA-CR-59-2057-3. After capstan head and No. 7 main vent valve looking forward and to starboard.

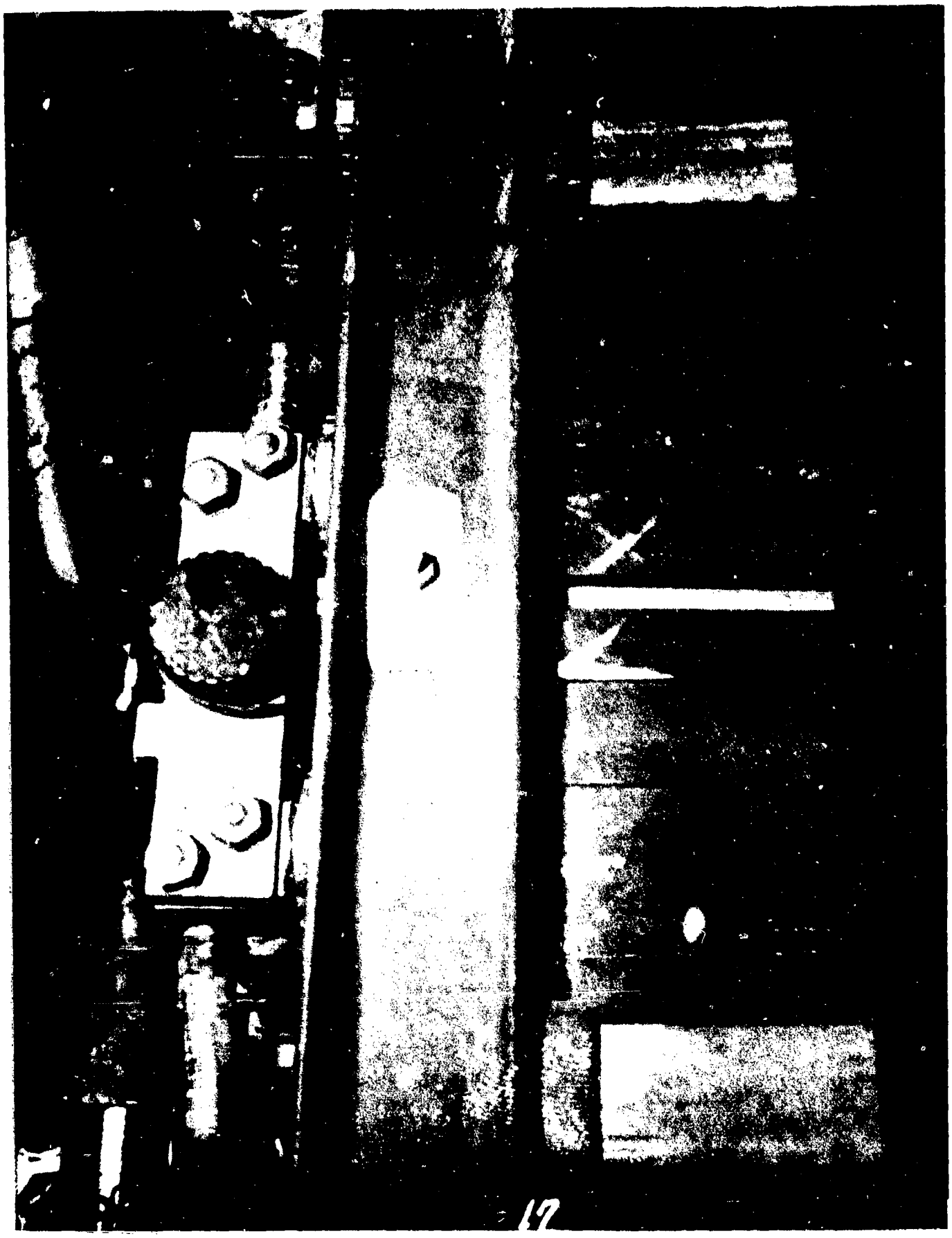
AA-CR-59-2011-1. Main induction valve showing failure of stem of casing. Looking aft and to port from starboard side.

AA-CR-59-2011-2. Main induction valve showing failure of stem casing. Looking aft and to port from port side.

AA-CR-68-1749-11. Looking down on main induction valve, showing damage and displacement of entire valve to port.

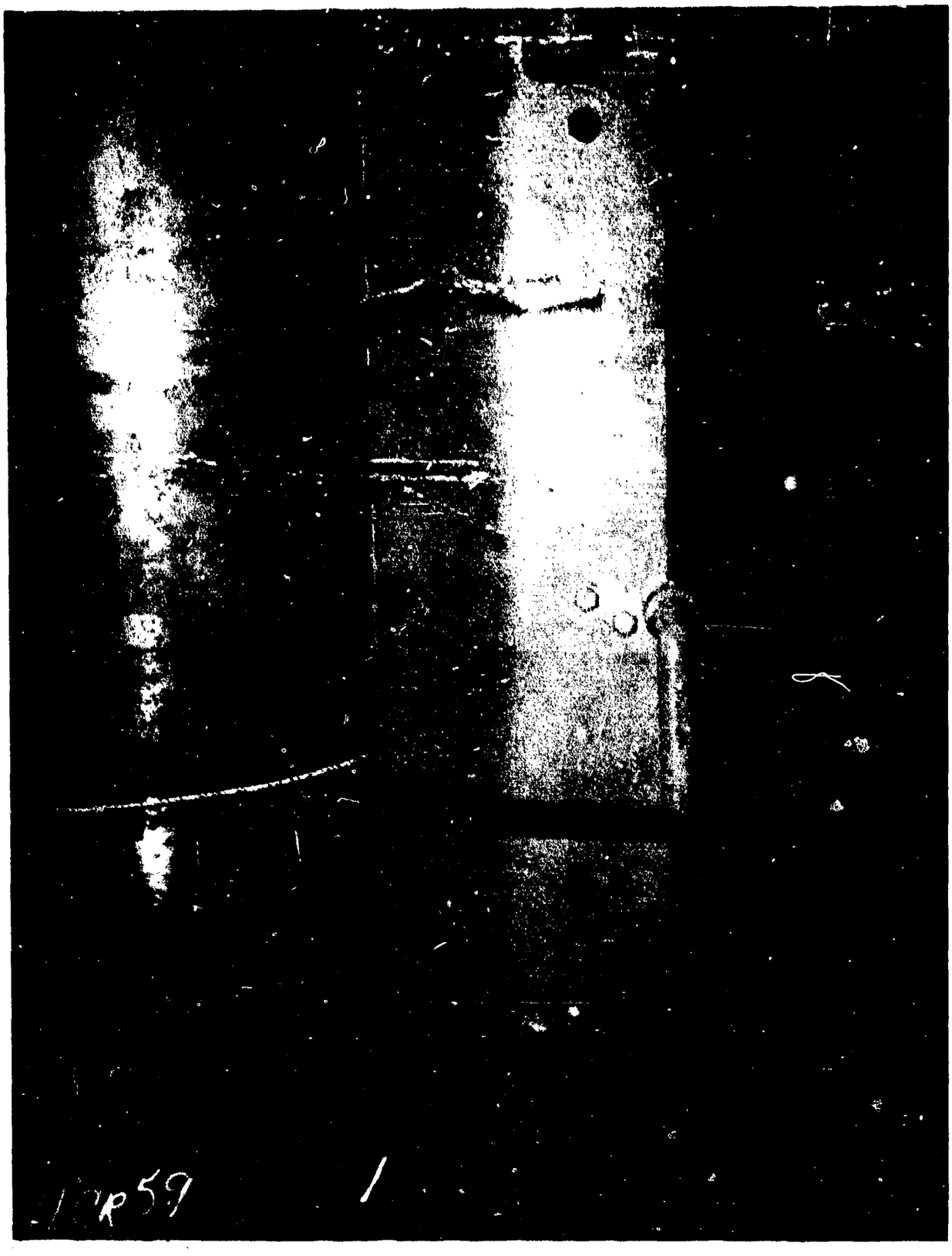
AA-CR-68-1750-1. Top of main induction valve looking forward and to starboard.

AA-CR-68-1750-5. Port main induction pipe to forward engine room. All supports are torn away and pipe is displaced up and to starboard.



AA-CR-59-2011-12. Forward battery tank after starboard corner. Note fracture ventilation duct at top of picture.

AA-CR-59-2055-4. Portable section of cross track bar in after end of after torpedo room showing stowage position.



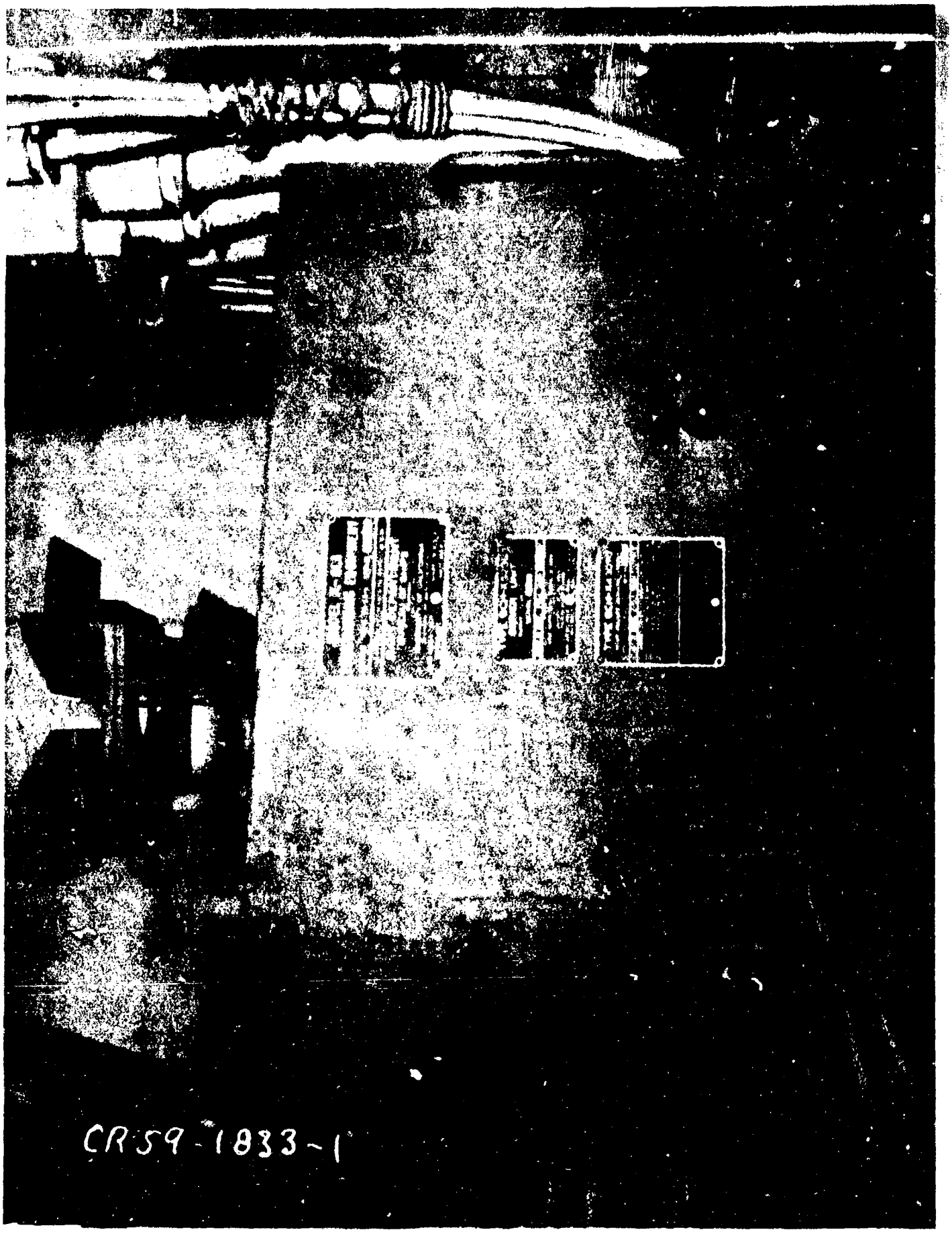
AA-CR-59-2055-1. Dent in warhead of torpedo stowed in lower starboard rack, after torpedo room.

AA-CR-59-1752-12. Forward port cover of bridge splinter protection. Note intact condition of pressure proof indicator.

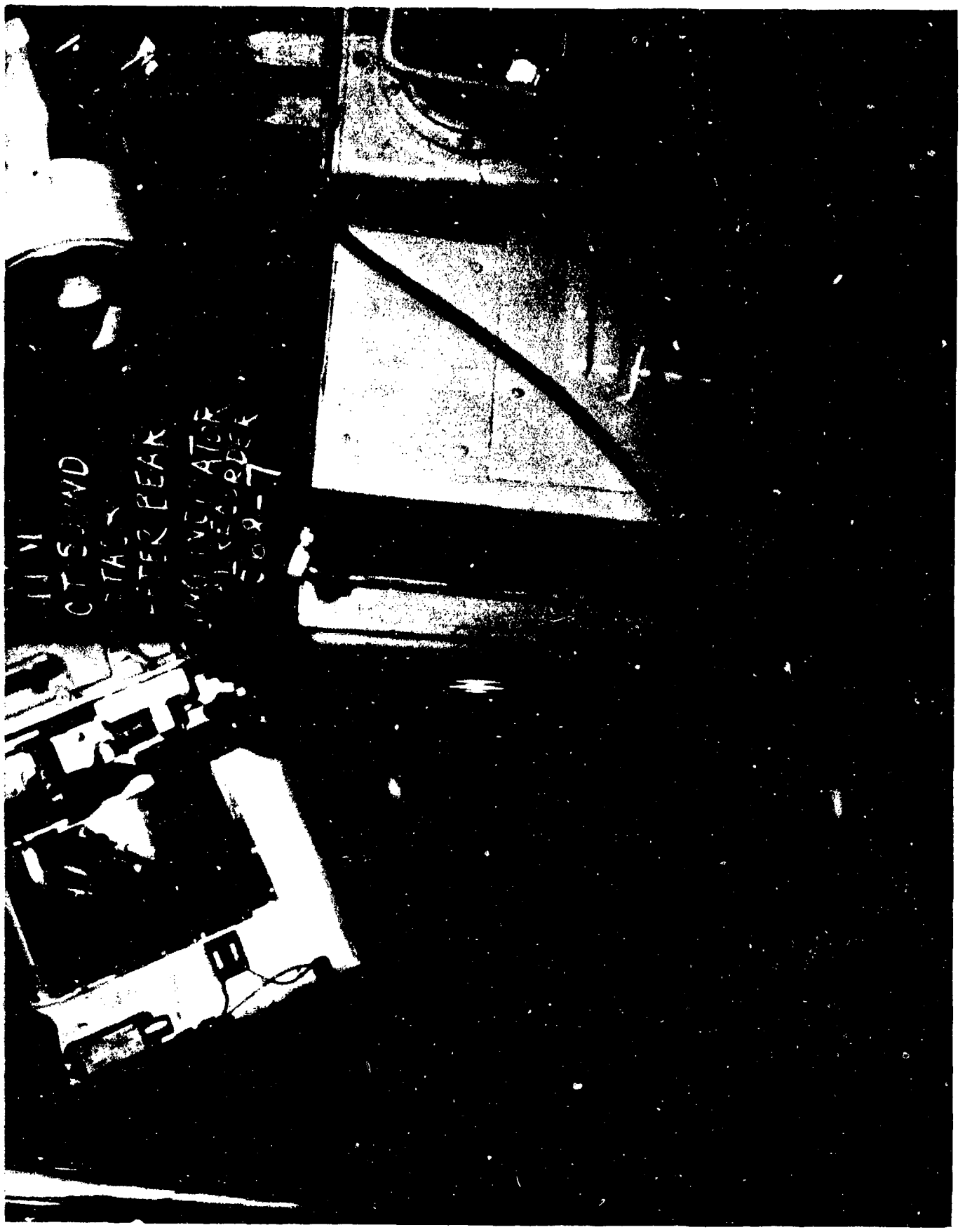
AA-CR-68-2057-5. View of No. 2 M.E. valve box showing deformation of welding construction and failure of brazed and welded joints.

AA-CR-68-2057-6. Silver brazed and arc welded joints on No. 2 outboard exhaust, looking aft.

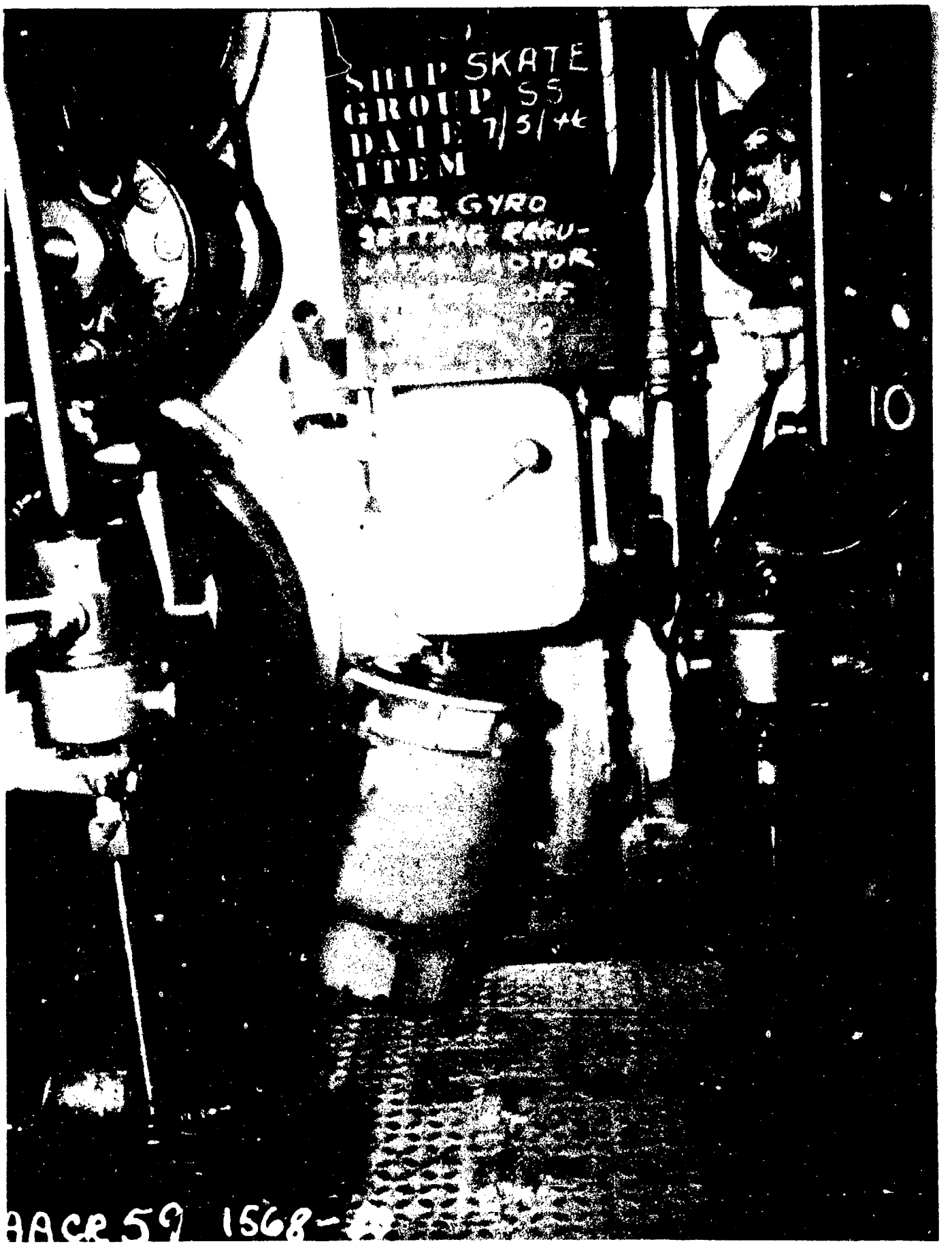
AA-CR-68-2057-9. Main induction valve stem casing. Failure of casing adjacent to welds, looking aft.



AA-CR-59-1833-1. View in forward torpedo room of QLA sound stack showing damaged upper shock mounts.



AA-CR-59-1568-7. View in conning tower of sound stack showing after bearing indicator jarred out of supporting bearings and door for TDM recorder jarred open.



AA-CR-59-1568-10. View in after torpedo room looking aft between torpedo tubes showing gyro setting regulator motor dropped off.

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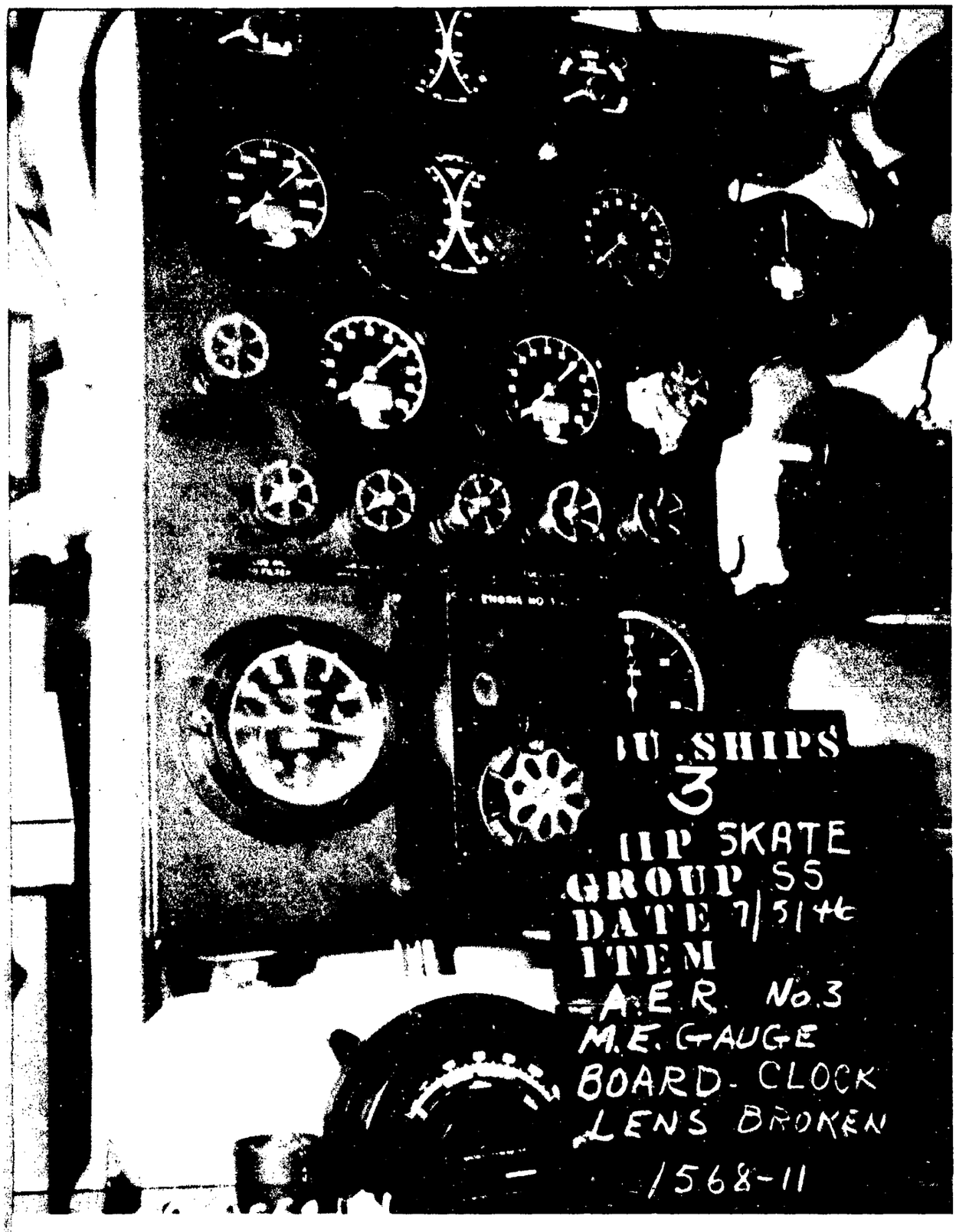
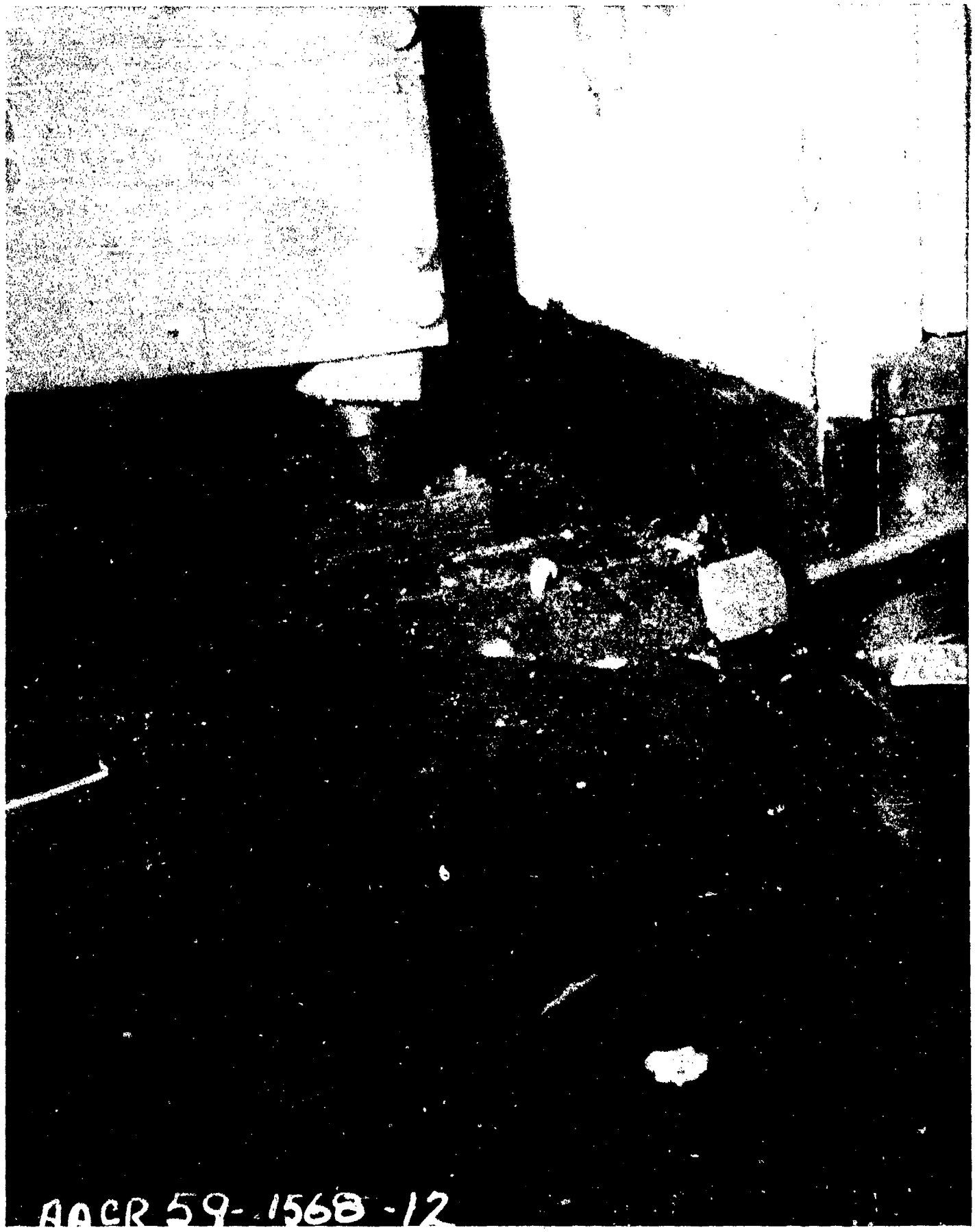
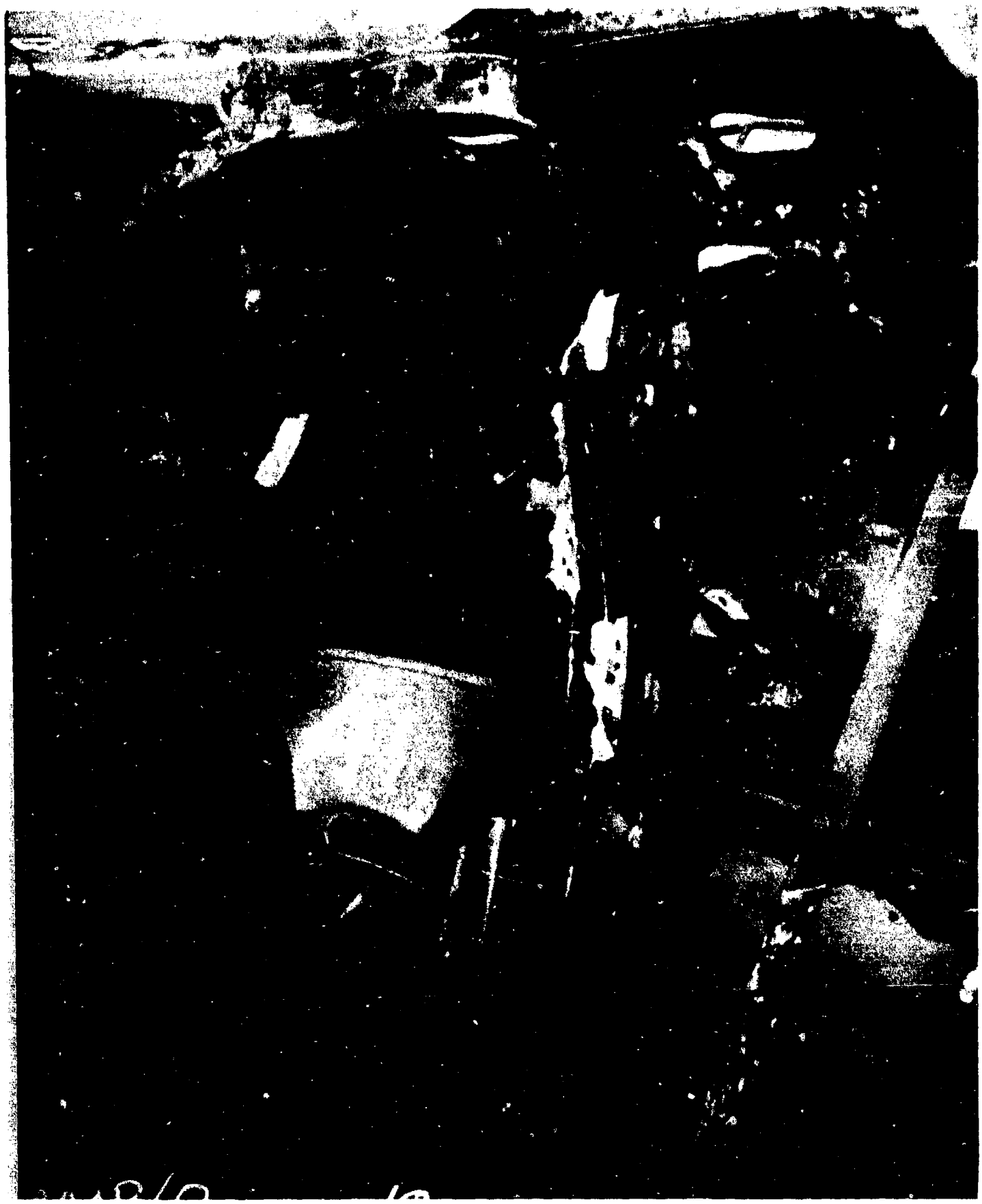


AA-CR-59-1568-11. View in after engine room of gauge panel for No. 3 main engine showing glass lens in clocks shattered.



AA-CR-59-1568-12. View in forward torpedo room showing damaged lower shock mounts of QLA sound stack.

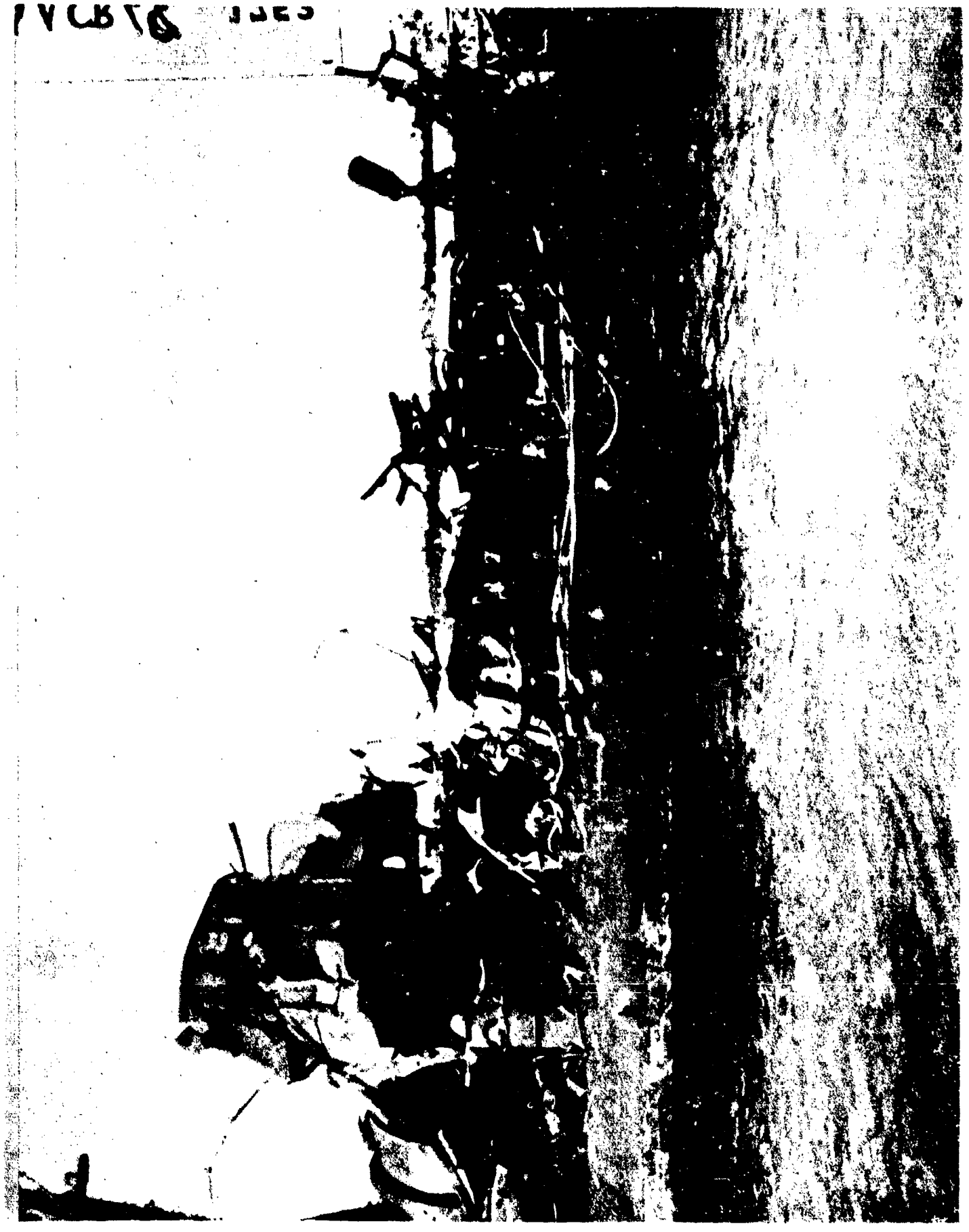


AA-CR-1752-10. View of 50 gallon drum and beer can blast gauges in forward superstructure showing crushing effect of pressure

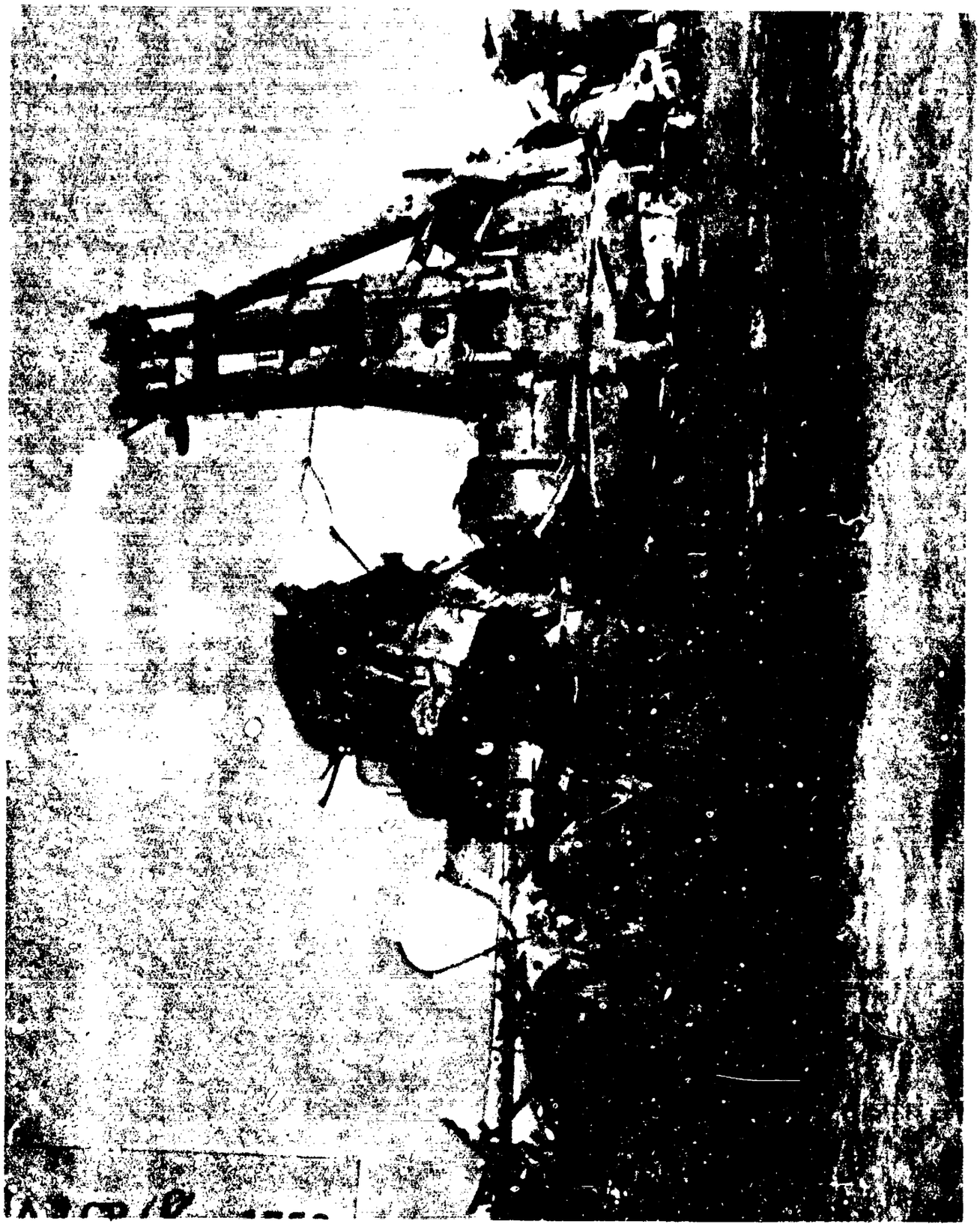
AA-CR-68-1748-12. View of JT sound gear hull flange showing how shaft and outboard support was carried away. Note lead-in cable.

AA-CR-68-1753-1. General view of port side from boat.

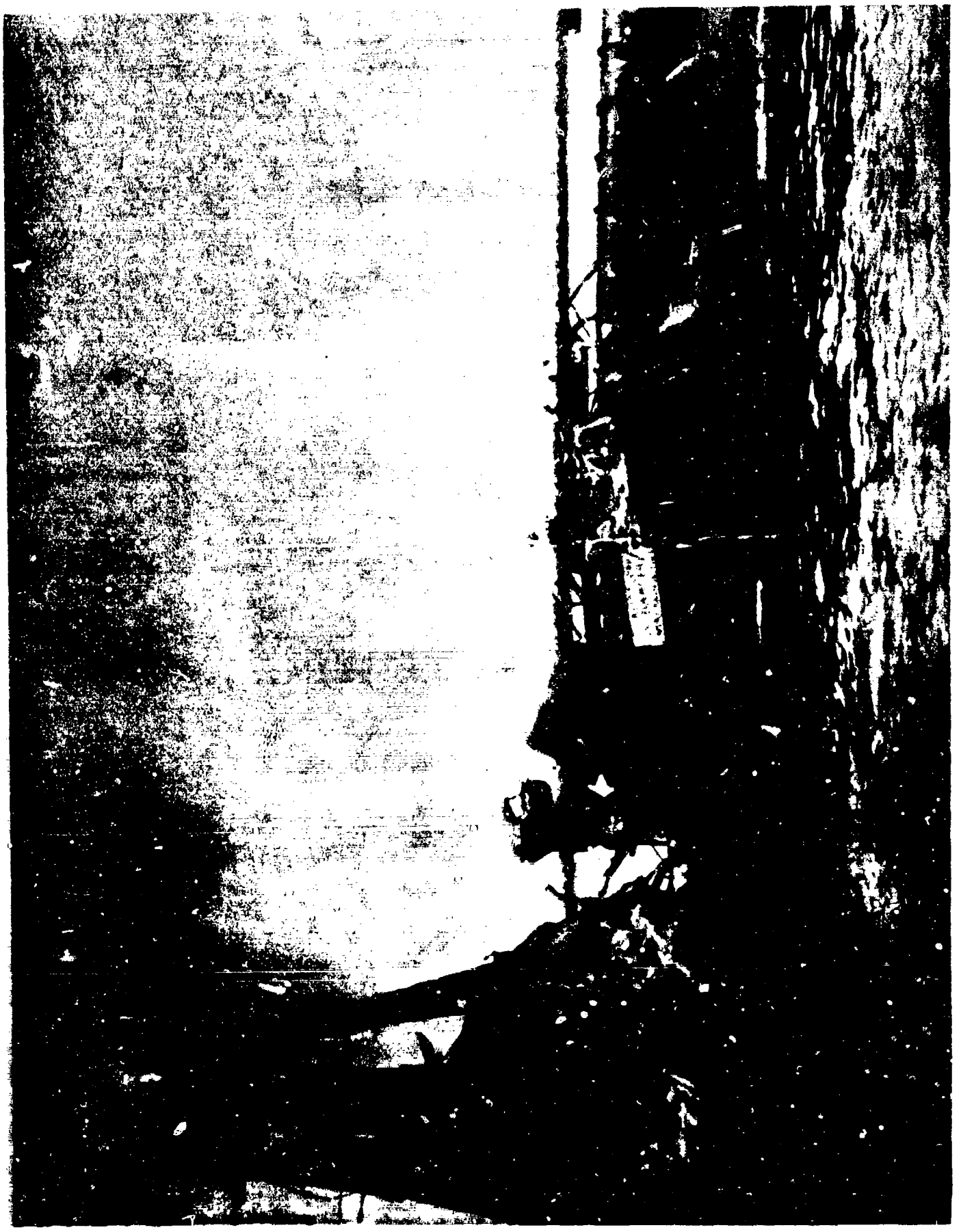
AA-CR-68-1753-2. General view of port side from boat.



AA-CR-68-1753-3. General view of port side from boat.



AA-CR-68-1753-4. General view of port side from boat.

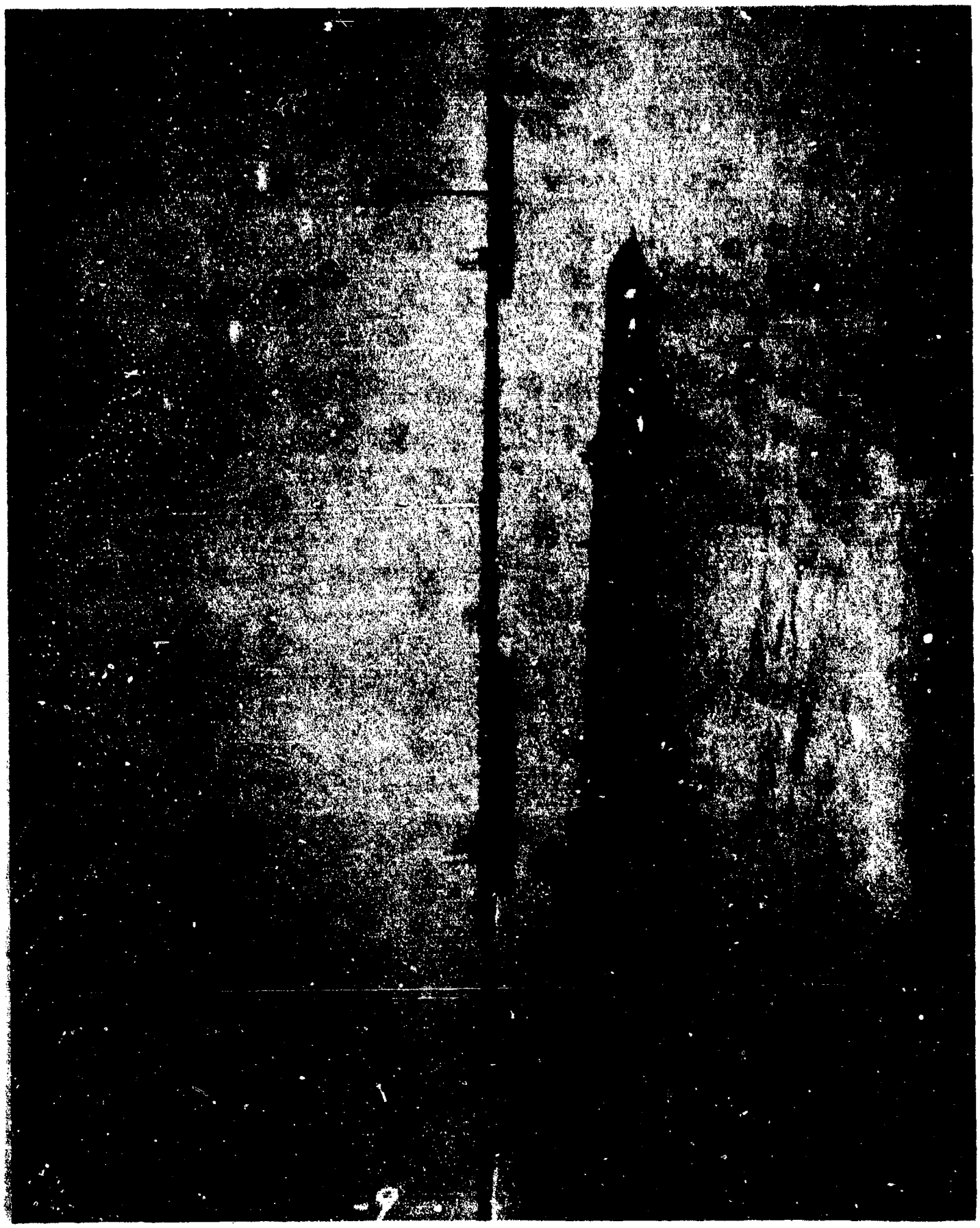


AA-CR-68-1753-5. General view of port side from boat.

AA-CR-68-1753-6. General view of port side from boat.

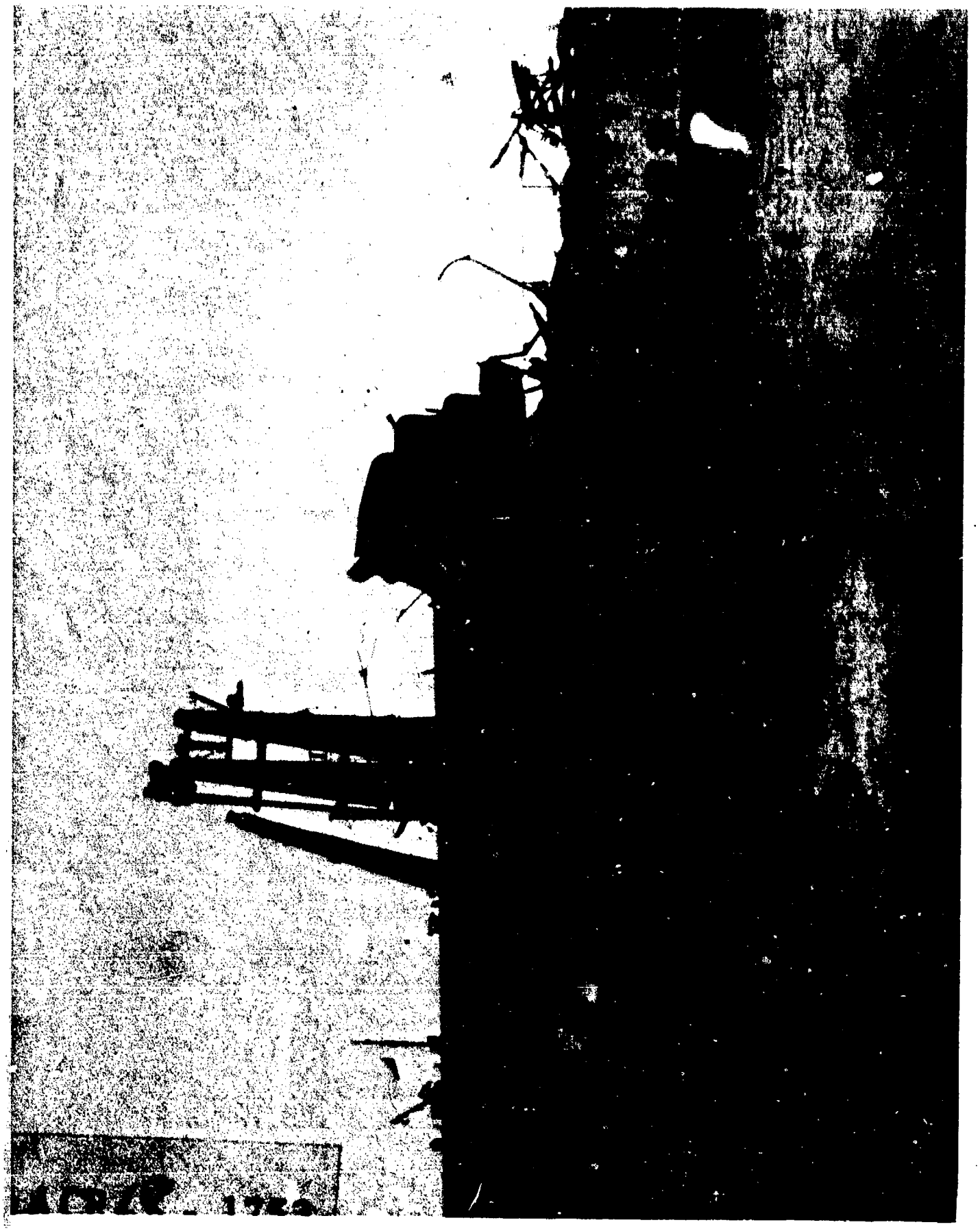
AA-CR-68-1753-7. General view of port side from boat.

AA-CR-68-1753-8. General view of port side from boat.



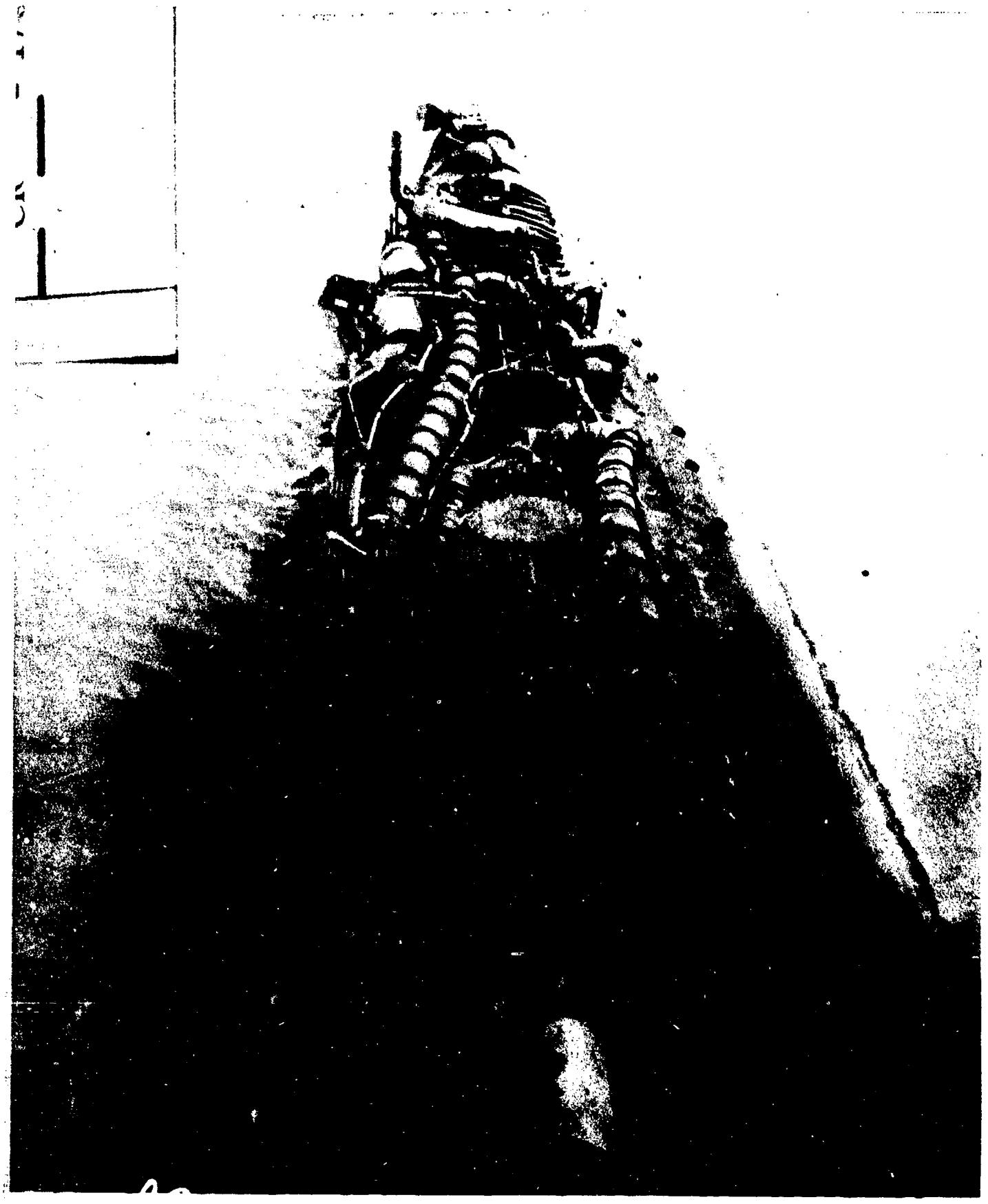
AA-CR-68-1753-9. General view of port side from boat.

AA-CR-68-1753-10. General view of starboard side from boat.

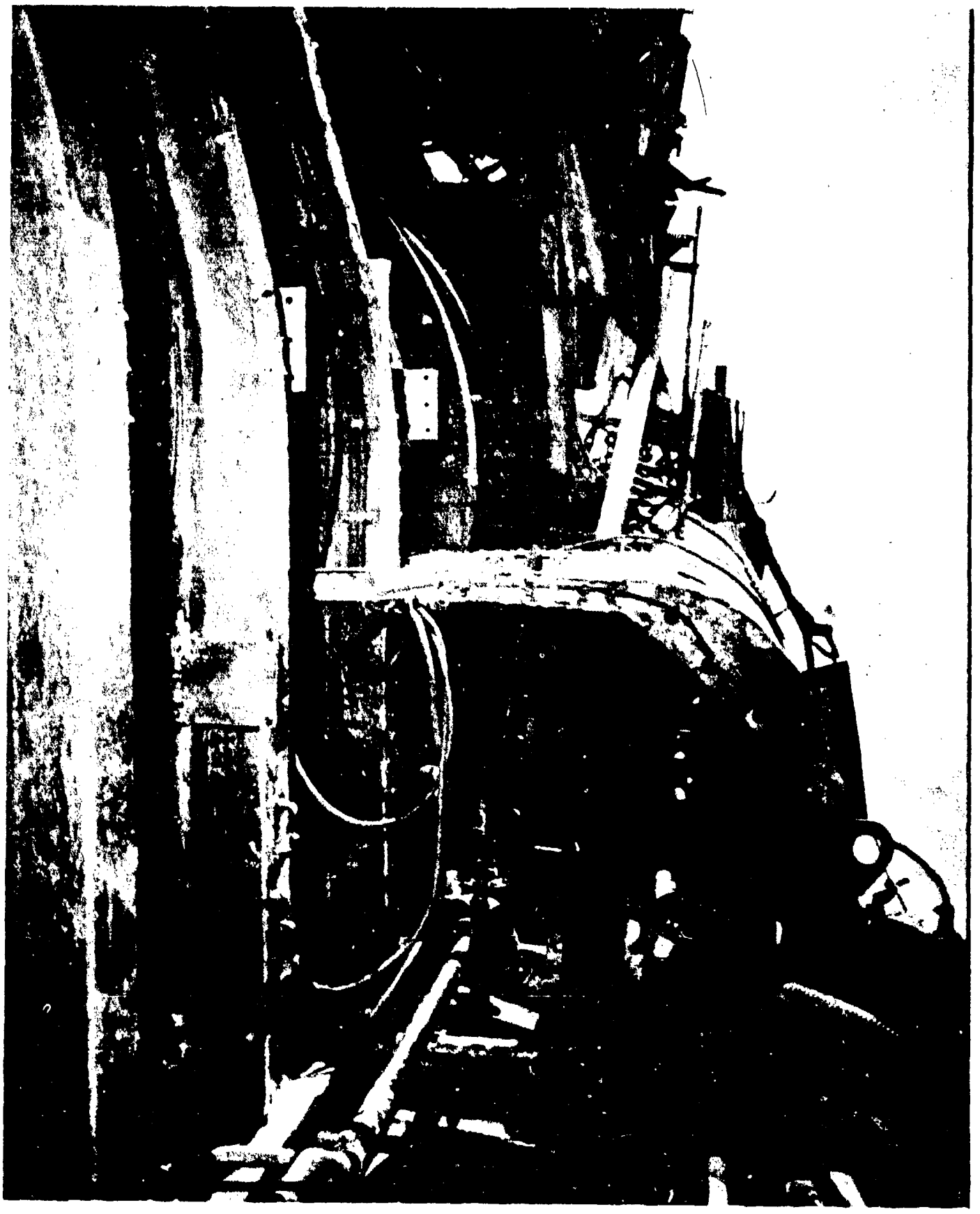


AA-CR-68-1753-12. General view of starboard side at bridge and conning tower from boat.

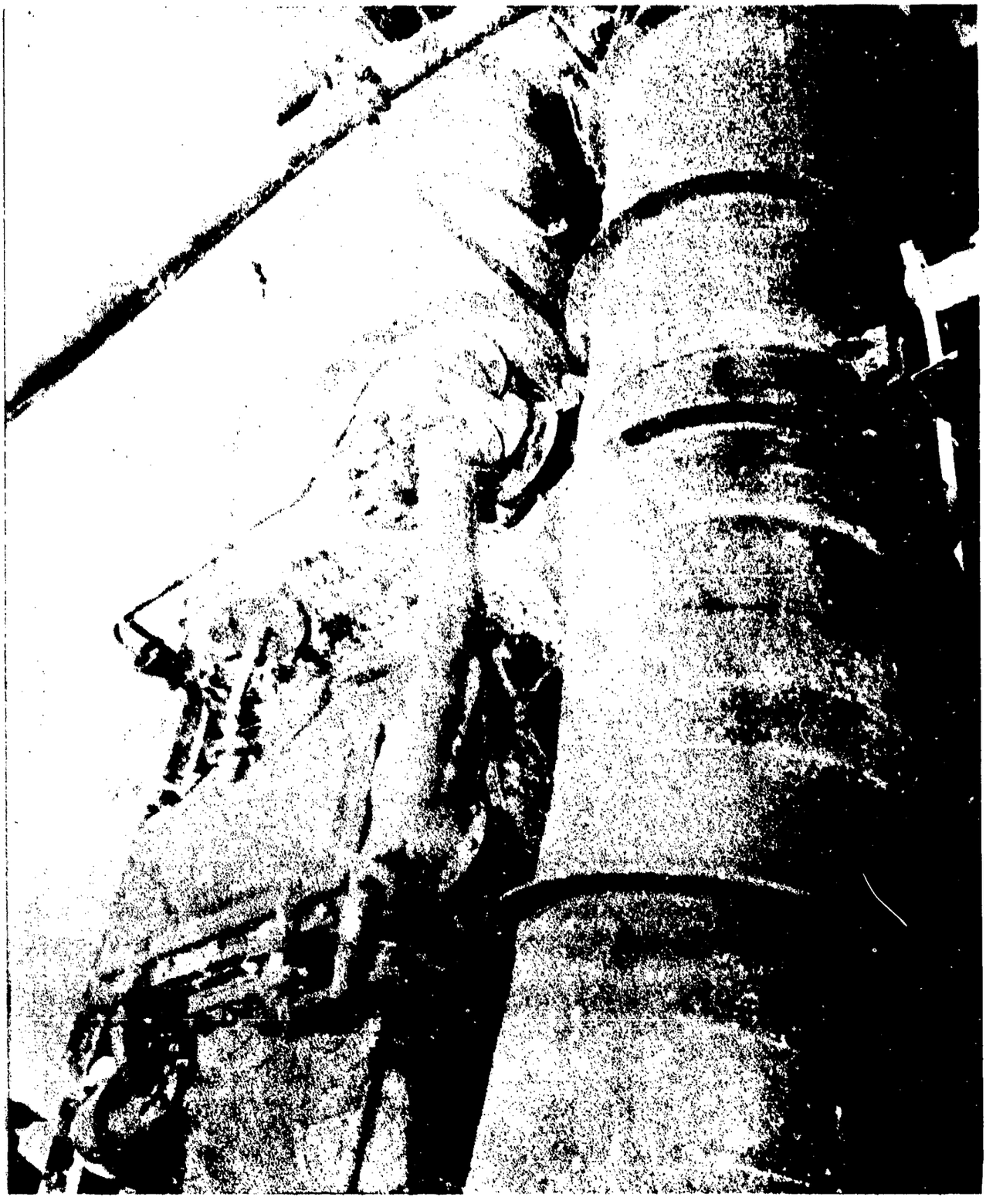
AA-CR-68-1752-1. General view of damage looking forward from top of periscope shears.



AA-CR-68-1752-2. General view of damage looking aft from top of periscope shears.



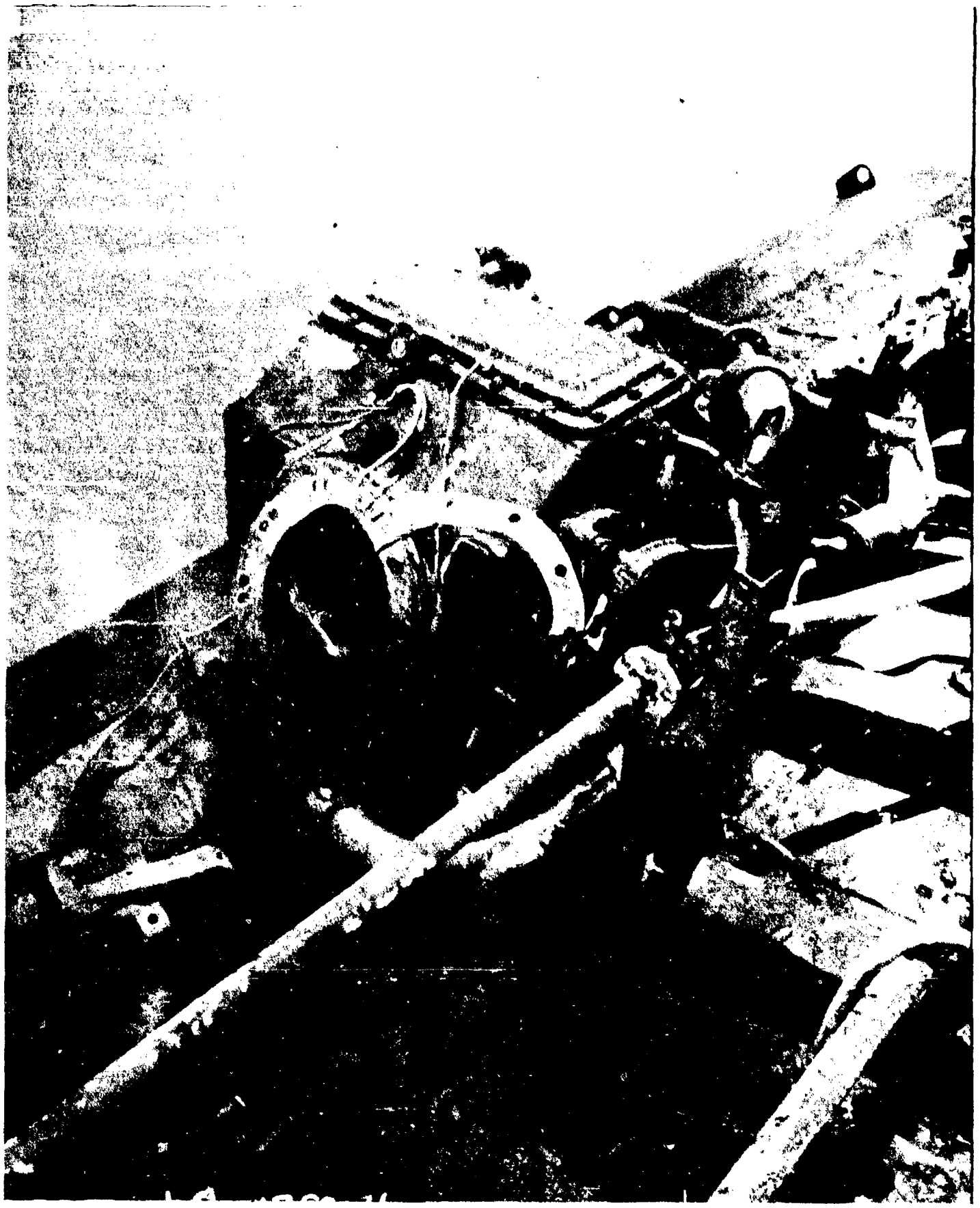
AA-CR-68-1750-2. Picture taken from frame 50 starboard side looking forward showing flexible fueling hose and 10# blow piping to main ballast tanks 2A and 2C (undamaged). Note also sheared and displaced electric cables.



AA-CR-68-1750-12. No. 1 Main engine outboard exhaust valve box with muffler and associated piping (undamaged).

AA-CR-68-1750-9. View of crushed and twisted salt water cooling pipe to No. 2 main engine external exhaust trunk.

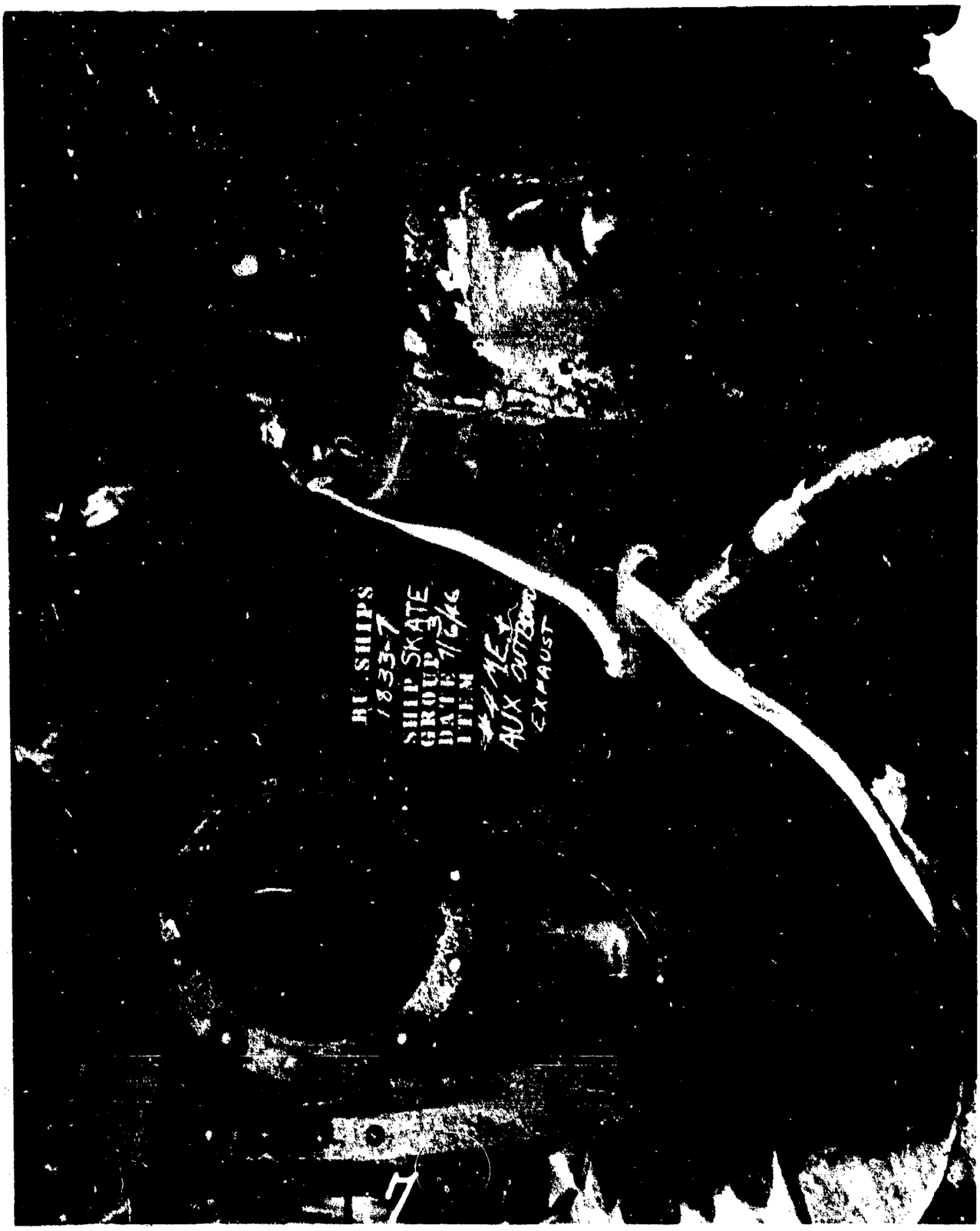
AA-CR-68-1750-10. No. 2 Main engine outboard exhaust valve box.



AA-CR-68-1750-11. No. 2 Main engine outboard exhaust valve box.

AA-CR-68-1751-1. View of No. 3 Main engine outboard exhaust valve box and muffler. Undamaged.

AA-CR-59-1833-4. View of No. 4 Main engine outboard exhaust valve, muffler missing, with engine running.



AA-CR-59-1833-7. View of No. 4 Main engine outboard exhaust valve and auxiliary engine outboard exhaust valve.

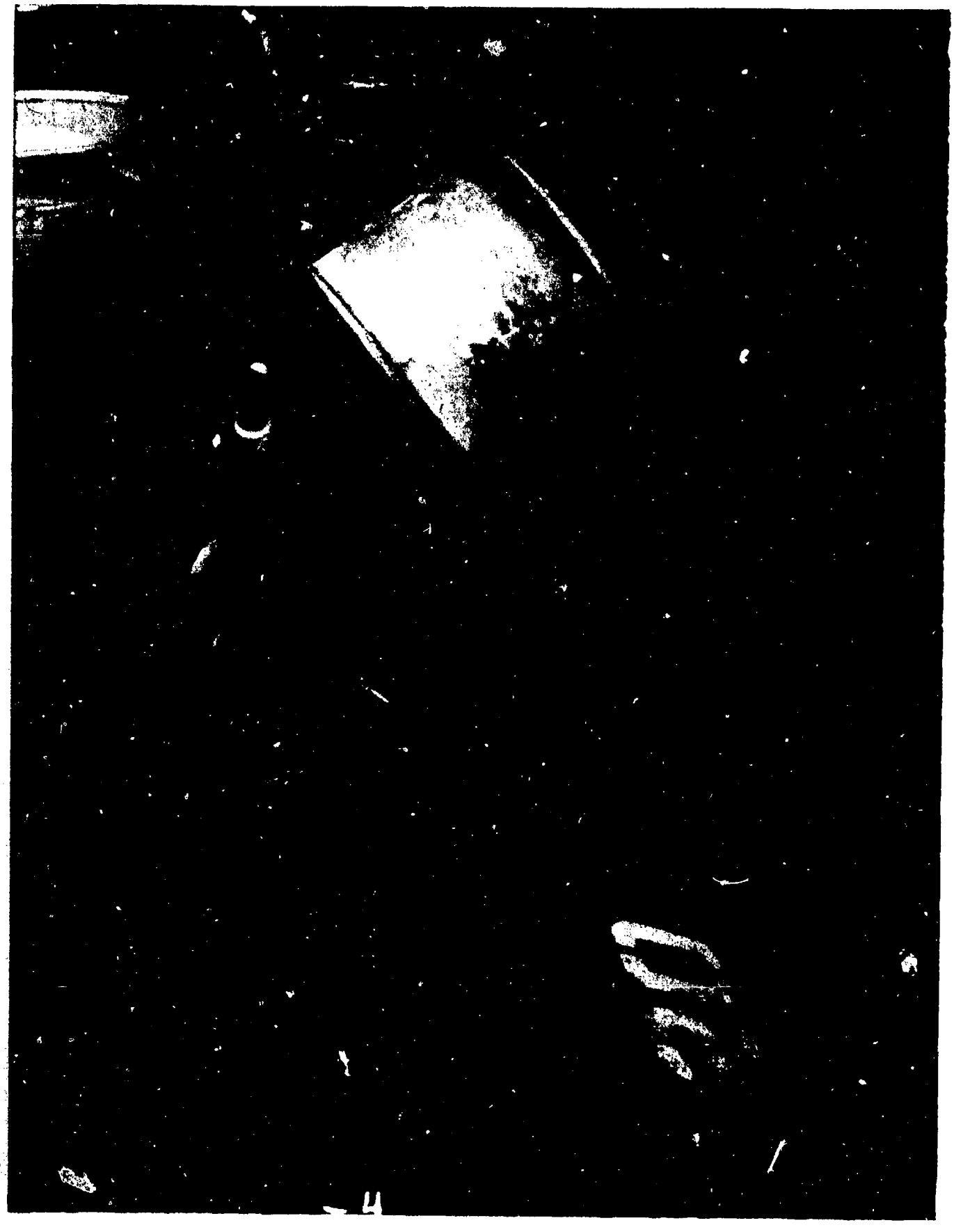
AA-CR-68-2057-4. View of No. 4 M.E. exhaust valve box from forward port side showing deformation of welded construction and failure of brazed joint in piping.

AA-CR-68-1751-2. View of auxiliary engine muffler astride after engine room hatch as found immediately after test.

AA-CR-68-1751-3. View of auxiliary engine muffler forward end, outboard exhaust valve and part of No. 4 Main engine outboard exhaust valve.

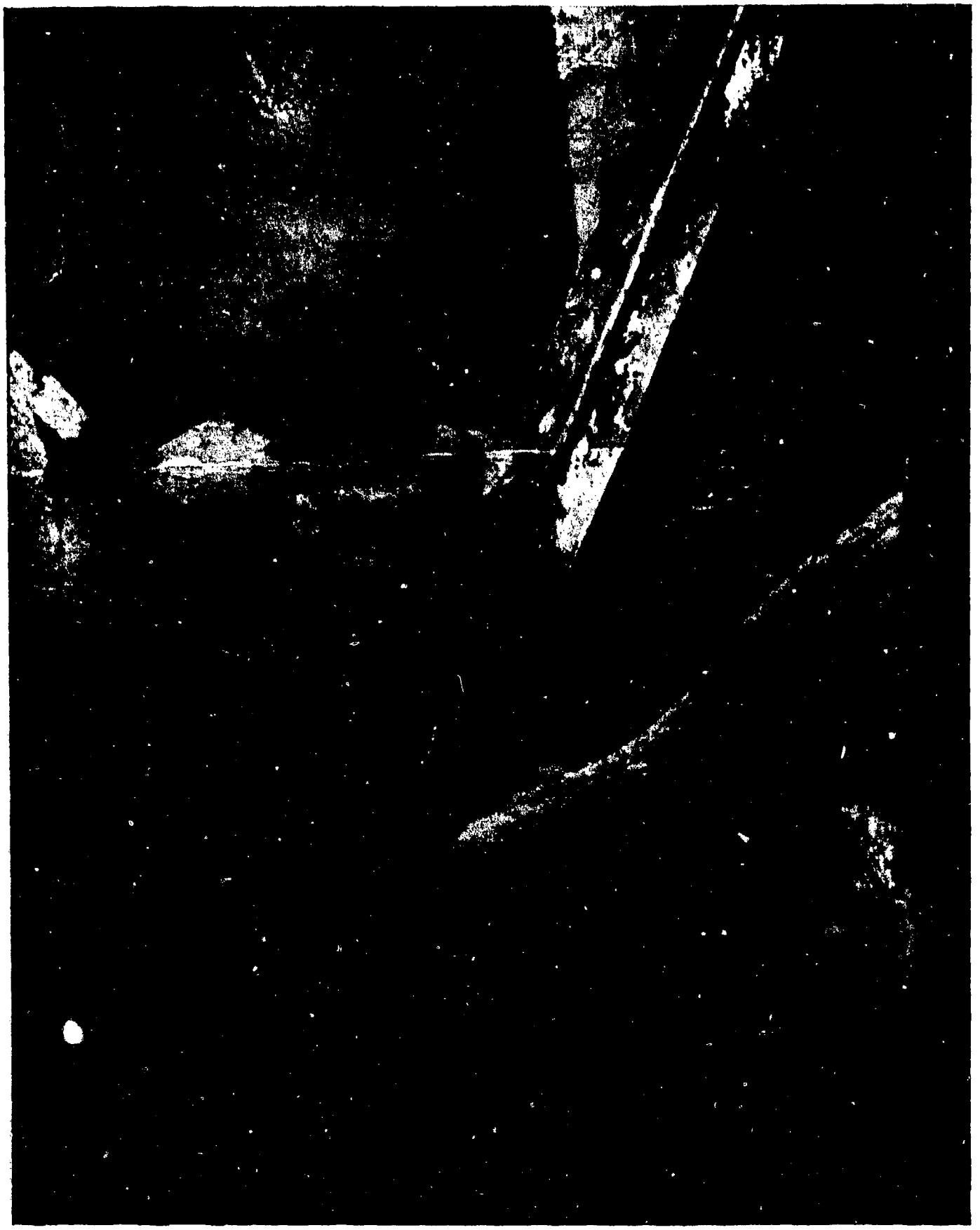
AA-CR-2111-5. View of area around engine room hatch showing damage to port main exhaust valves and to auxiliary engine muffler and exhaust piping.

AA-CR-68-1751-4. View from aft of auxiliary engine muffler astride engine room hatch as found after test.



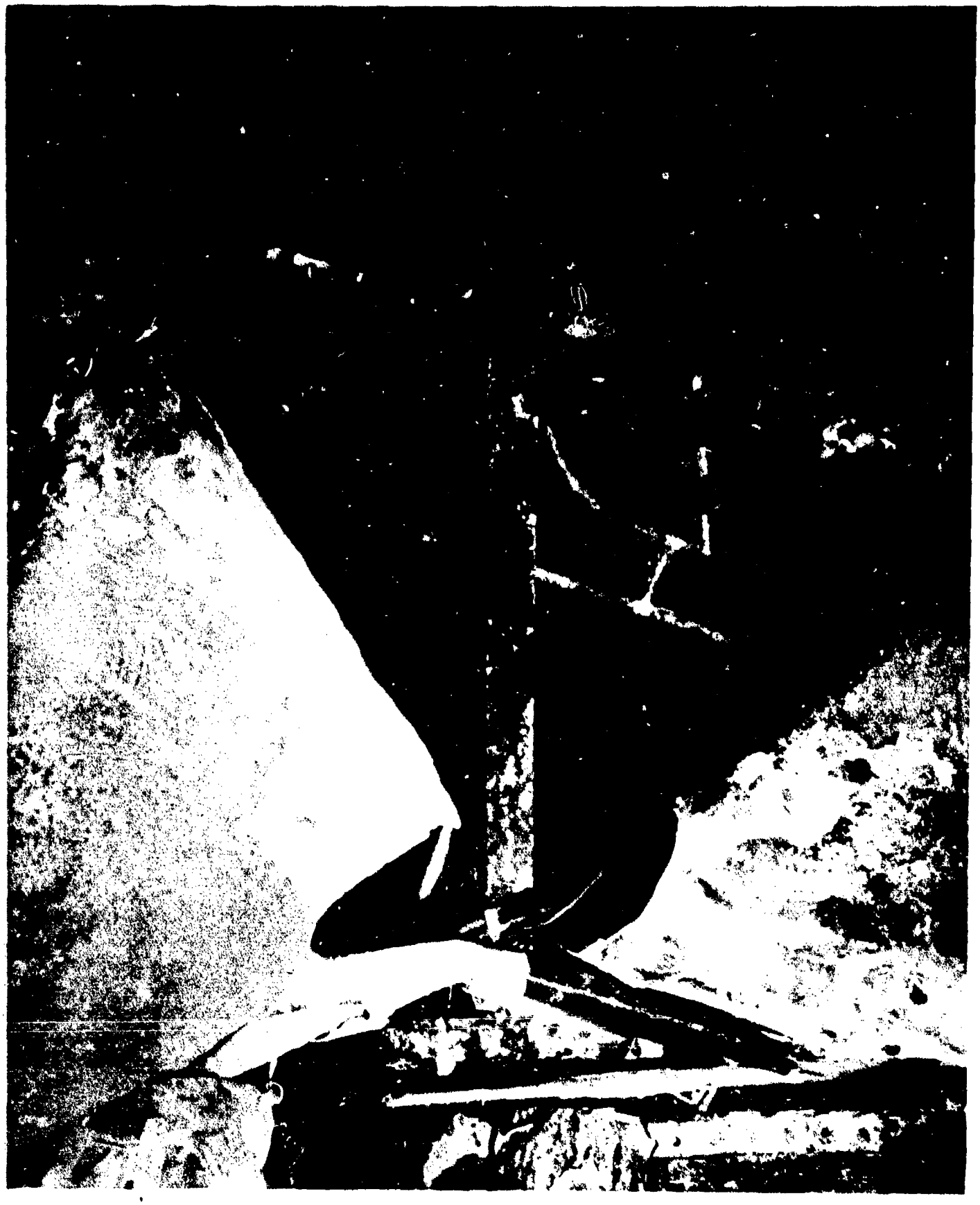
AA-CR-68-2111-4. Viewof damage to after capstan and #7 Main ballast tank main vent valve.

AA-CR-68-1751-10. View of after capstan and No. 7 Main ballast tank main vent valve.

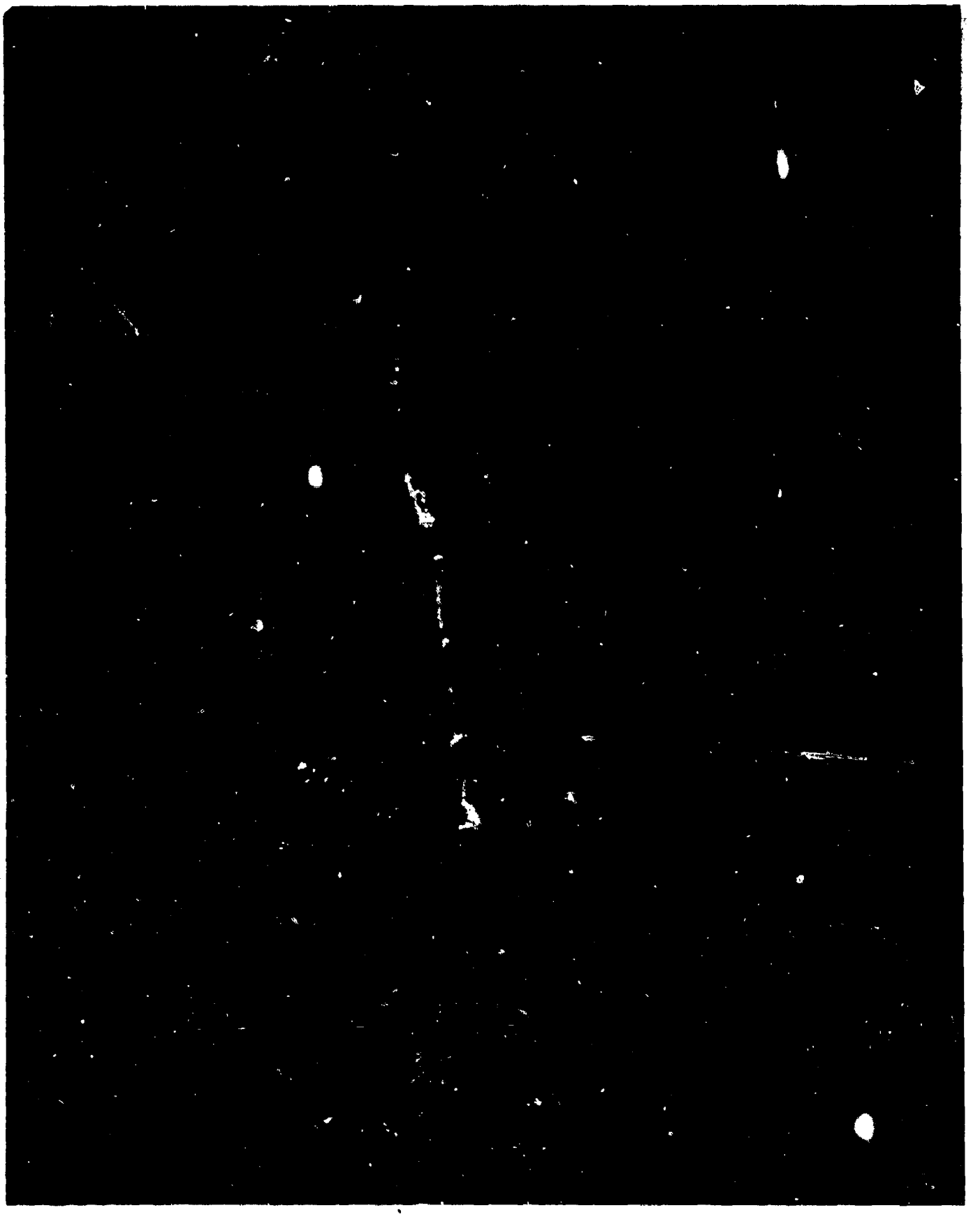


AA-CR-68-1752-8. Closeup of dislocation of No. 6 torpedo tube impulse air flash showing rupture in pipe at flange.

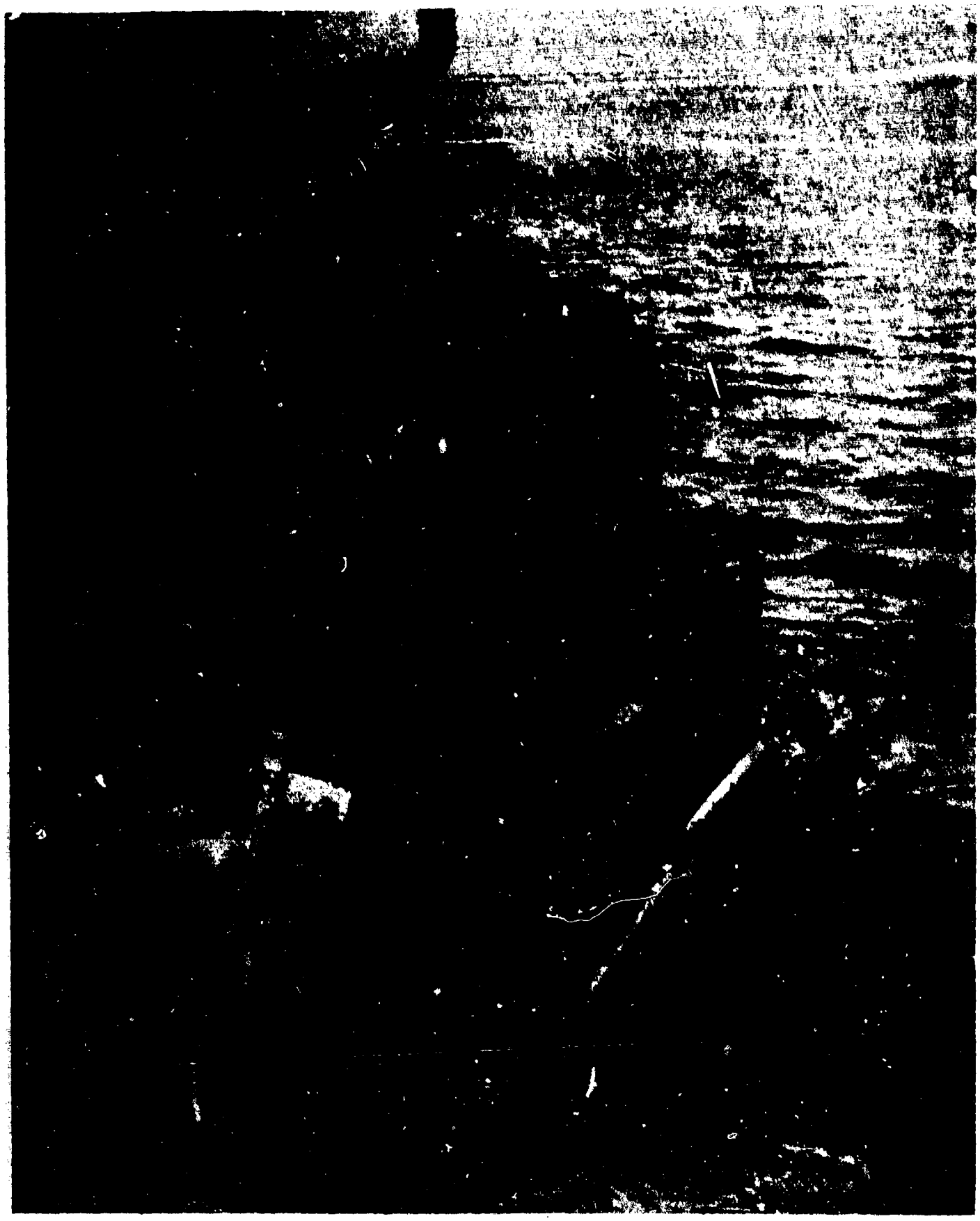
AA-CR-59-2055-10. View alongside conning tower port side showing damage to 10# blow piping to main ballast tanks 2B and 2D.



AA-CR-68-1748-8. Radio entering trunk hull flange and 10lb. blow pipe to main ballast tank 2D.

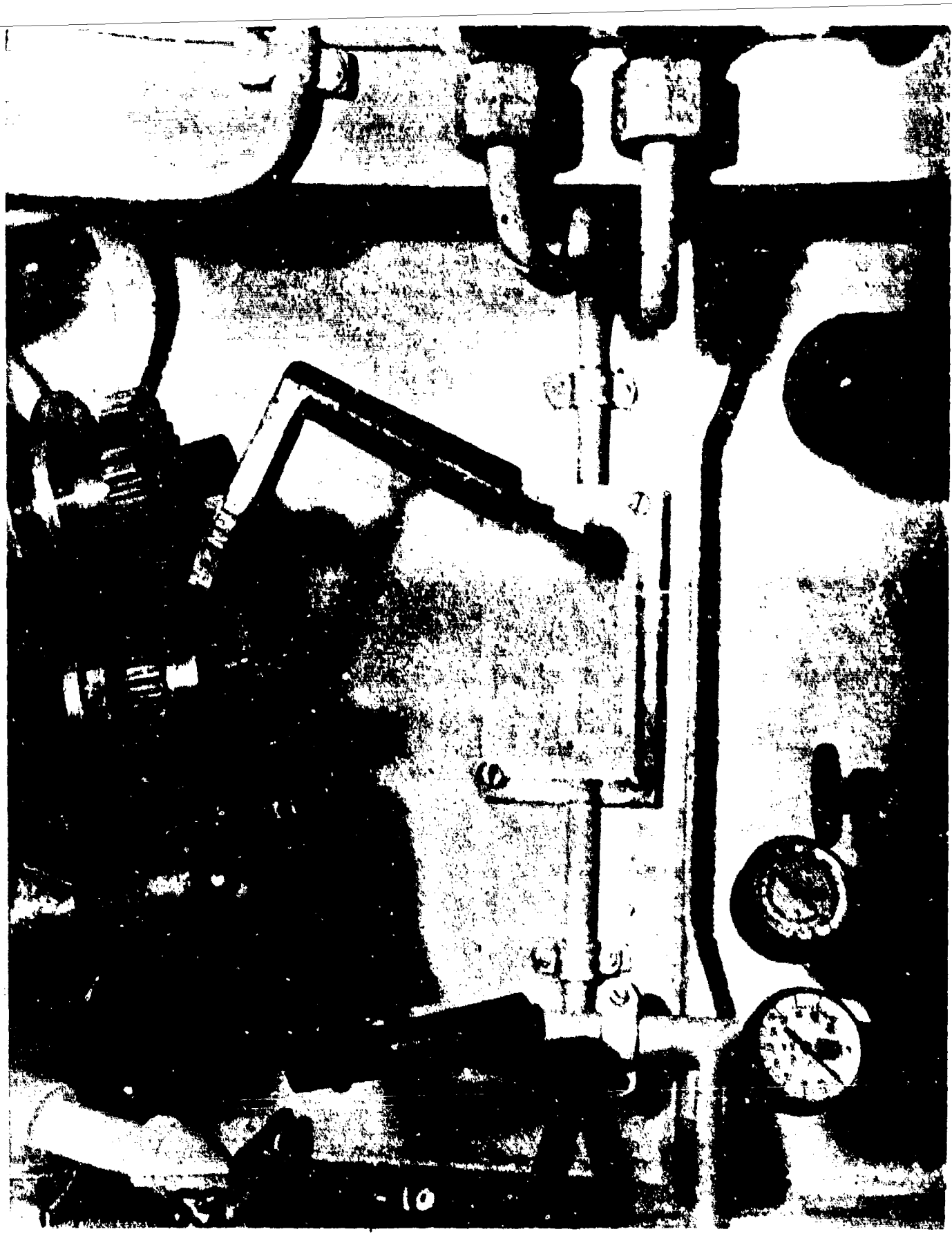


AA-CR-2111-2. View of topside starboard side looking forward from after torpedo room hatch showing damage to 10# blow piping to #7 Main ballast tanks and maneuvering room low salvage connection.

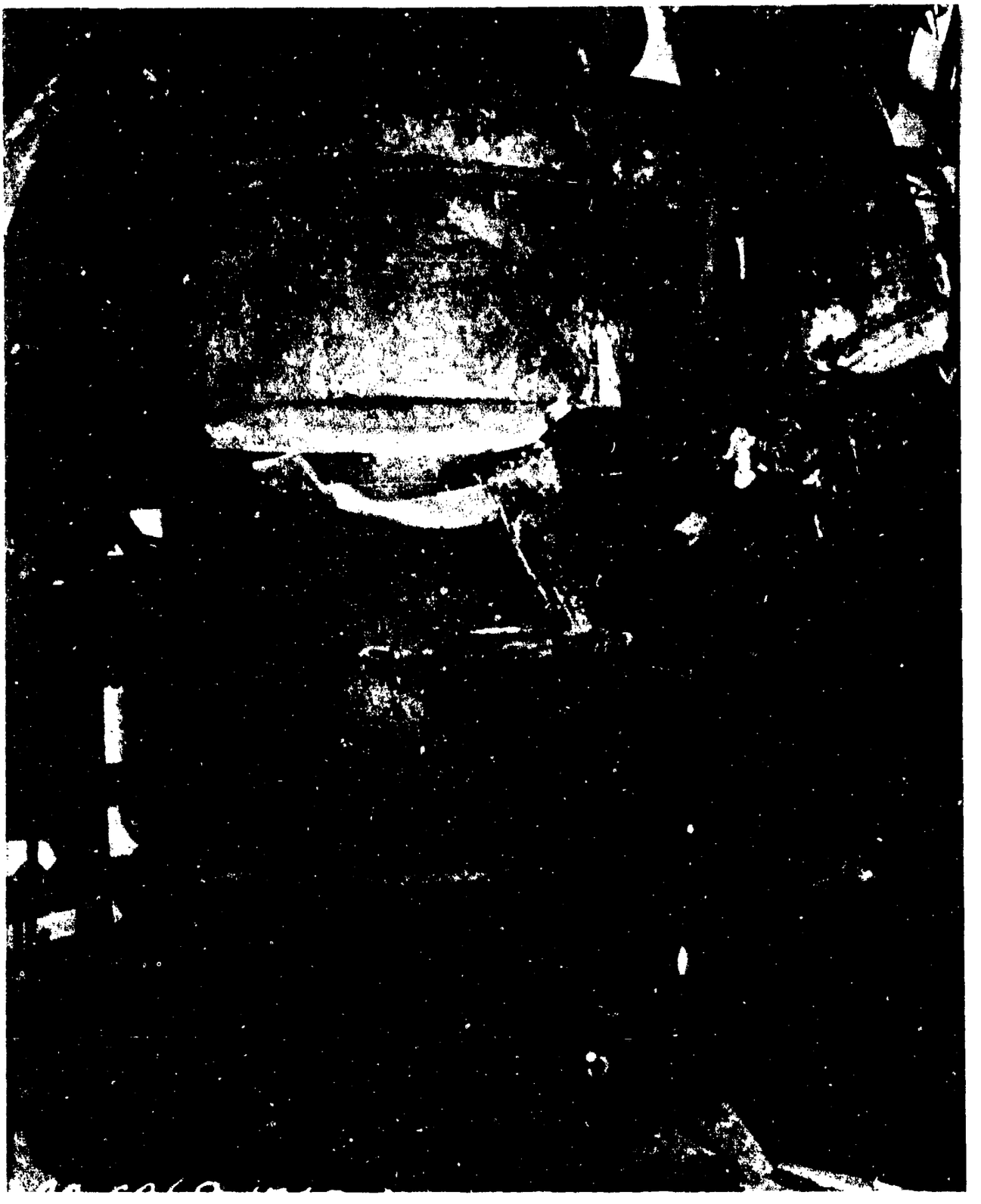


AA-CR-68-1751-5. View of maneuvering room salvage air fitting(low),

AA-CR-68-1749-2. QLA sound head and shaft.



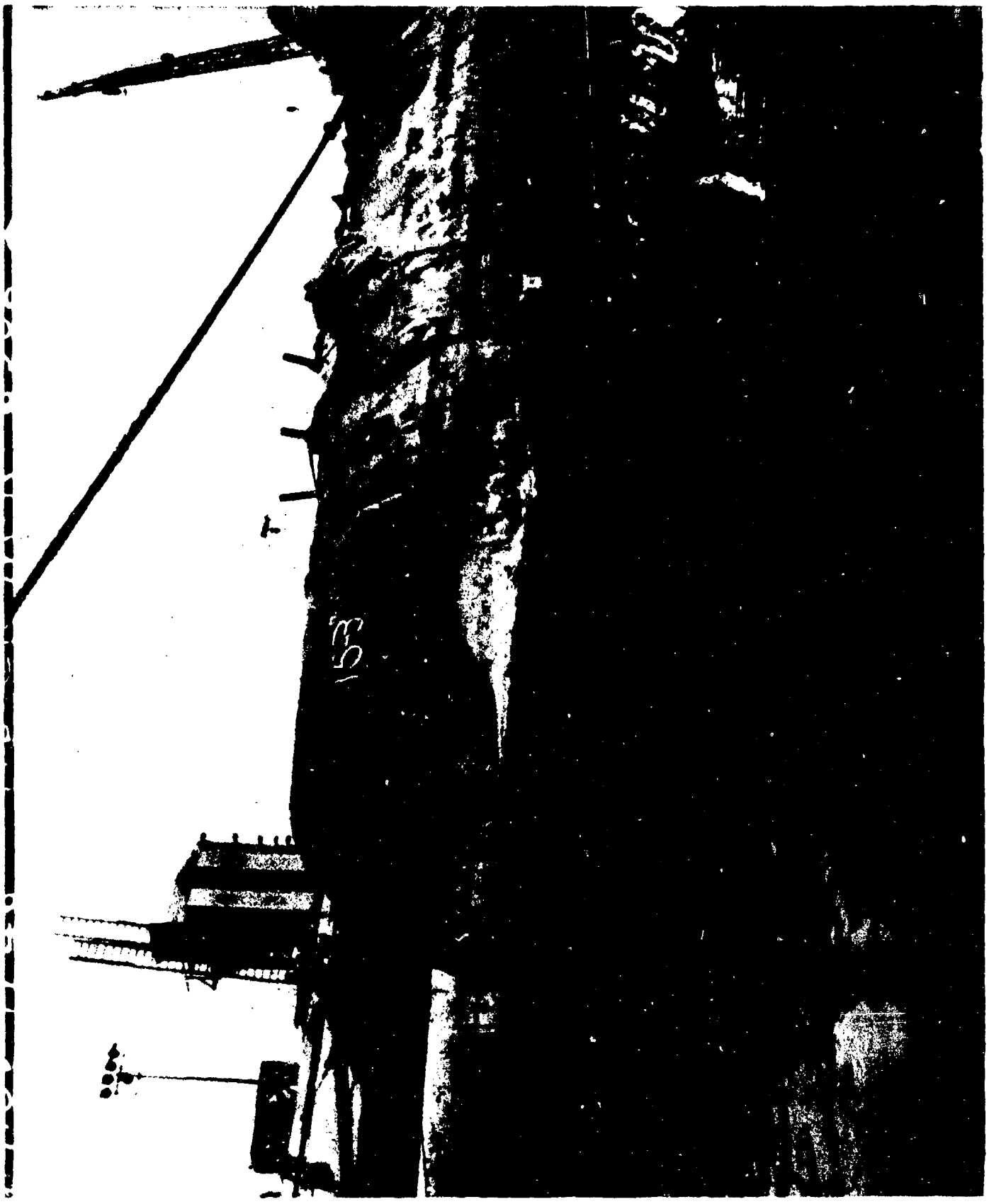
AA-CR-59-2011-10. Control room submerged signal ejector showing operating shaft pushed in and bent operating handle gears not meshed.



AA-CR-68-1748-10. Submerged signal ejector (control room) external view showing how outer board and outer door were carried away.

AA-CR-68-1748-9. Frame 49 starboard forward end of conning tower showing sheared electric cables.

ABCR-MIK-6502-1. View of stern showing distortion of stern structure and shutters.

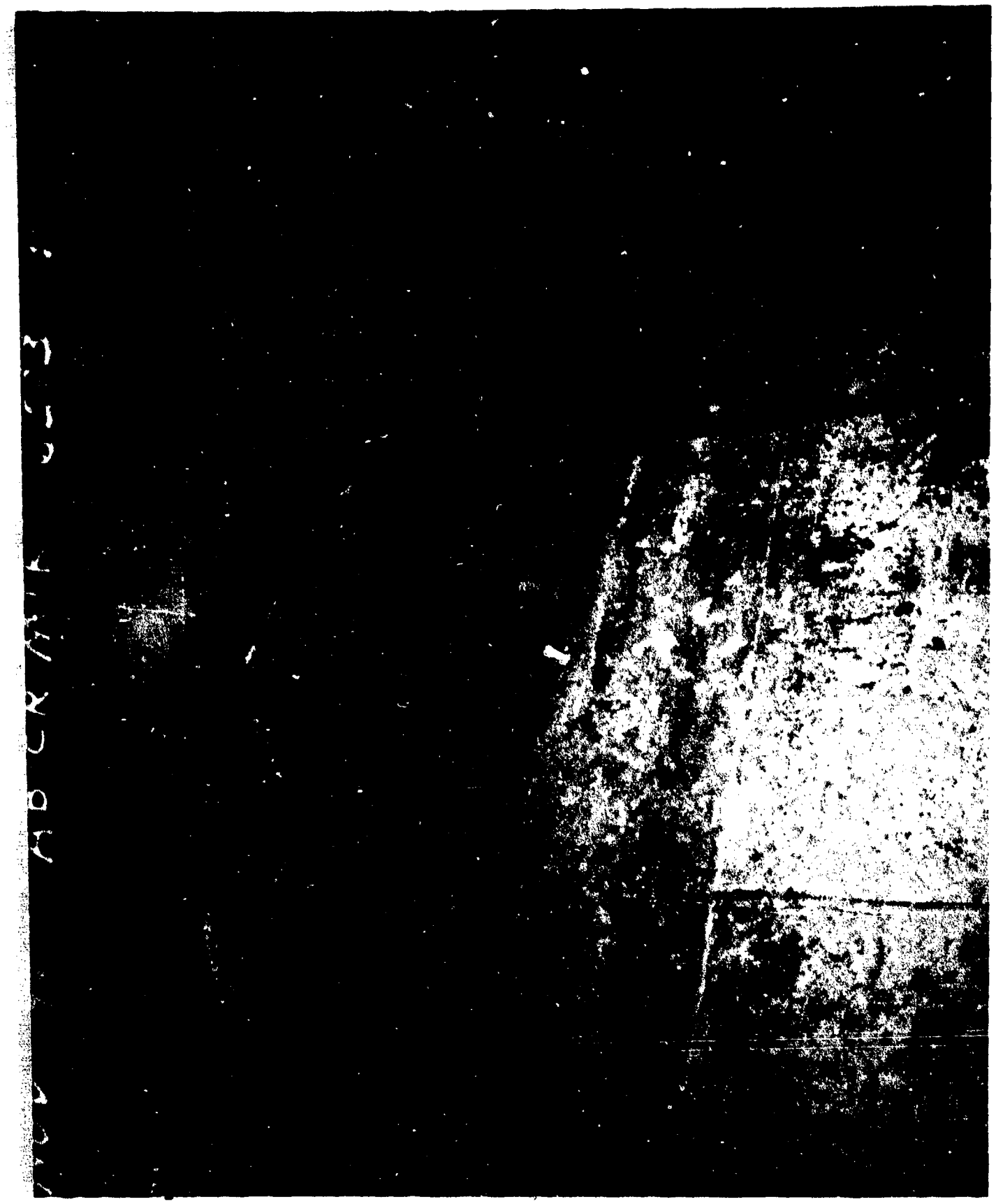


ABCR-MIK-6502-2. Starboard side of stern showing offset of top structure and distortion of shutters.

ABCR-MIK-6502-3. Starboard side looking aft showing offset of structure above the lower shutter.

ABCR-MIK-6502-5. View of stern from port quarter showing distorted structure and crumpled #8 torpedo tube shutter.

ABCR -MIK-6503-2. Starboard quarter hull plating between #7 and #9 shutters at forward end. Note compression failure of plate. Flat bar bracket on outside is part of experimental structure installed for purposes other than Crossroads.

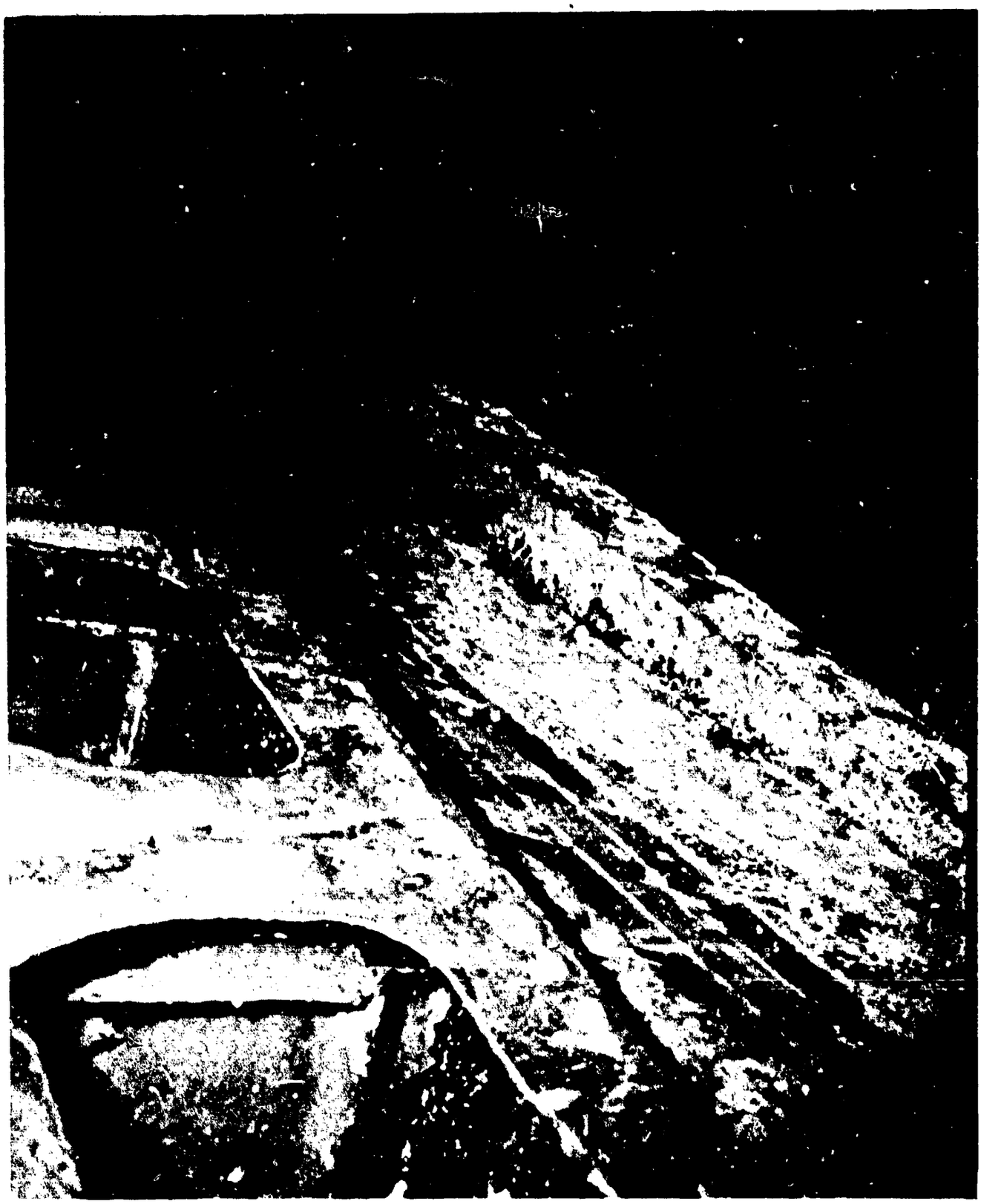


ABCR -MIK-6503-9. Distortion of top of stern structure to starboard above forward end of #7 torpedo tube structure.

ABCR-MIK-6504-3. View in way of number 8 torpedo tube from port side aft showing distortion in fore and aft bulkhead.

AB-CR-MIK-6504-4. #8 torpedo tube port side looking aft showing distortion in frames.

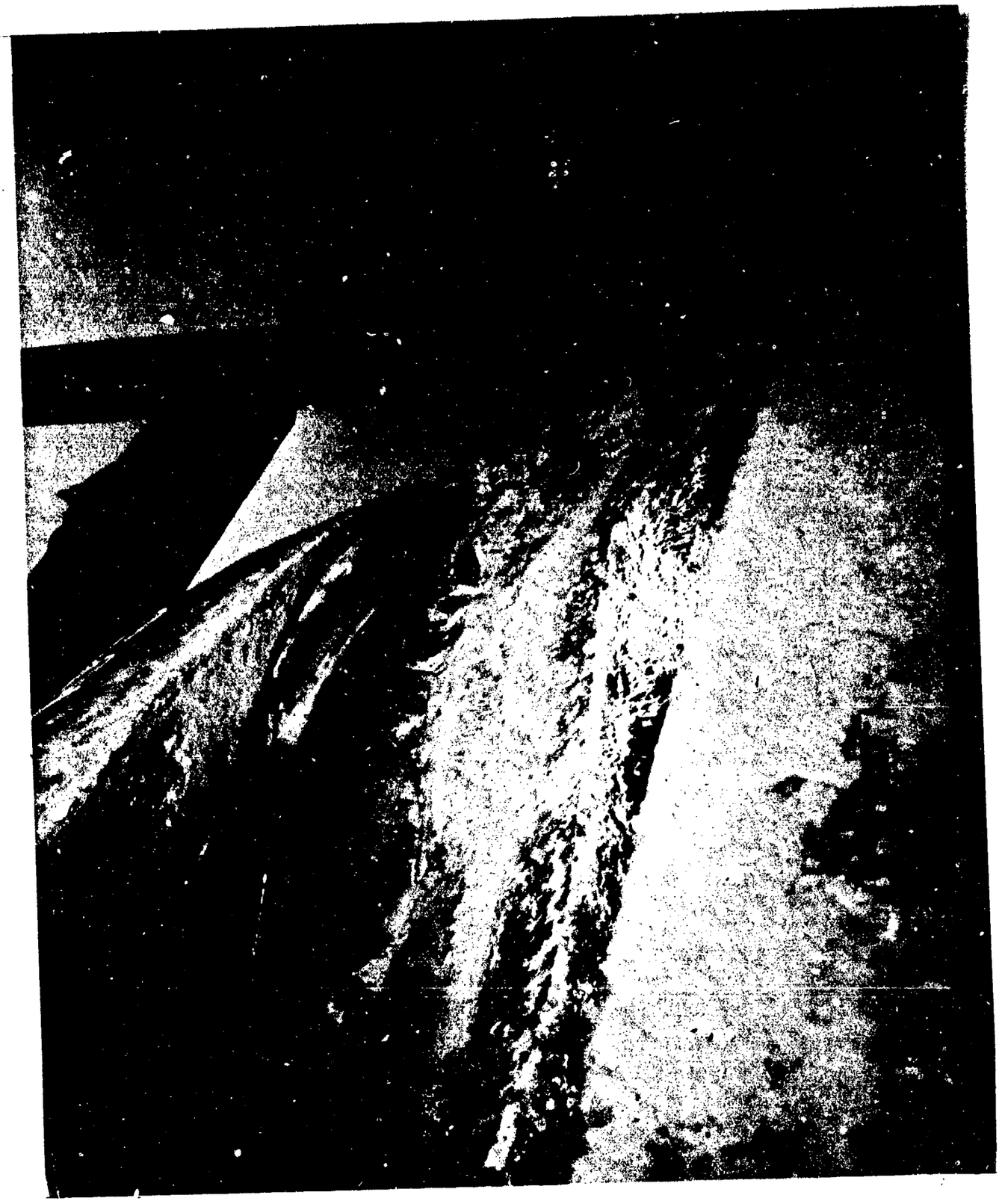
AB-CR-MIK-6503-3. View showing distortion of No. 2 torpedo tube shutter.



AB-CR-MIK-6503-4. View showing distortion of No. 2 torpedo tube shutter from above.

AB-CR-MIK-6503-8. View showing lower roller of track #7 torpedo tube shutter.

AB-CR-MIK-6503-7. View showing lower rollers on #8 torpedo tube shutter.



AB-CR-MIK-6503-5. View showing distortion of #8 torpedo tube shutter.

AB-CR-MIK-6503-6. View showing distortion of #8 torpedo tube shutter as seen from below and outboard.

CONFIDENTIAL

0161

Classification ([redacted]) (Changed to CONFIDENTIAL)
By Authority of Joint Chiefs of Staff (Action 15 Apr 49)
By John Beggs East Date 1 May 51
AFSWP

CONFIDENTIAL

[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.

Ardith Jarrett
ARDITH JARRETT
Chief, Technical Resource Center

Completed
1 mar 2000
B.W