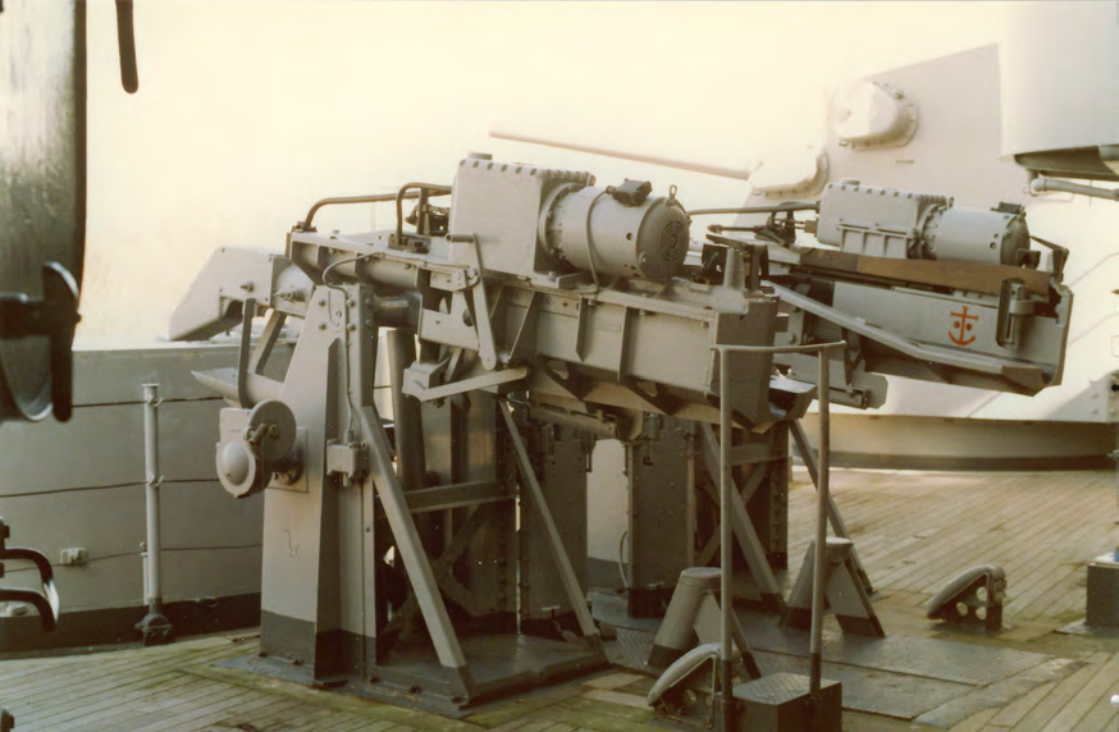
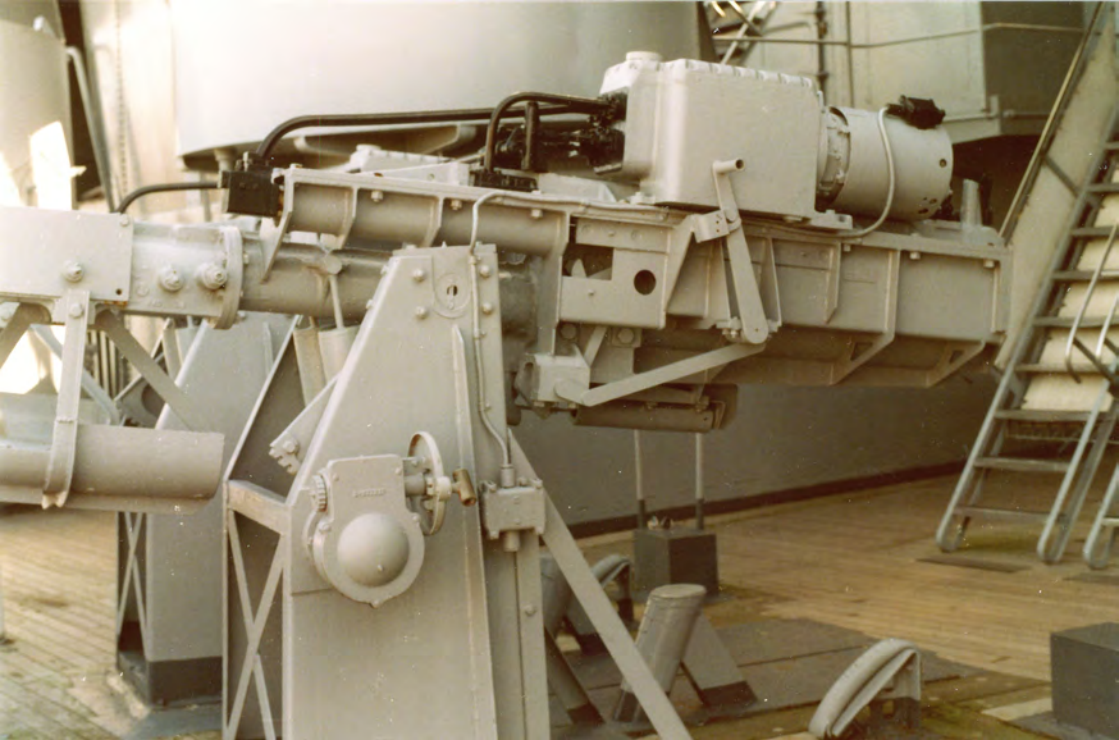
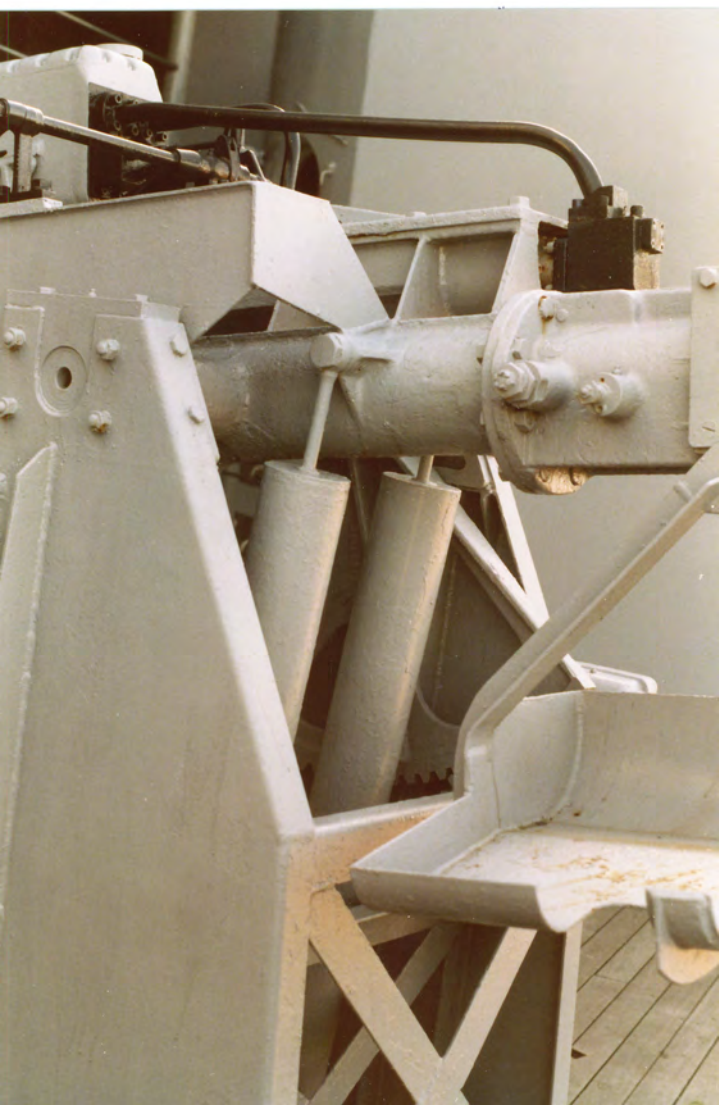


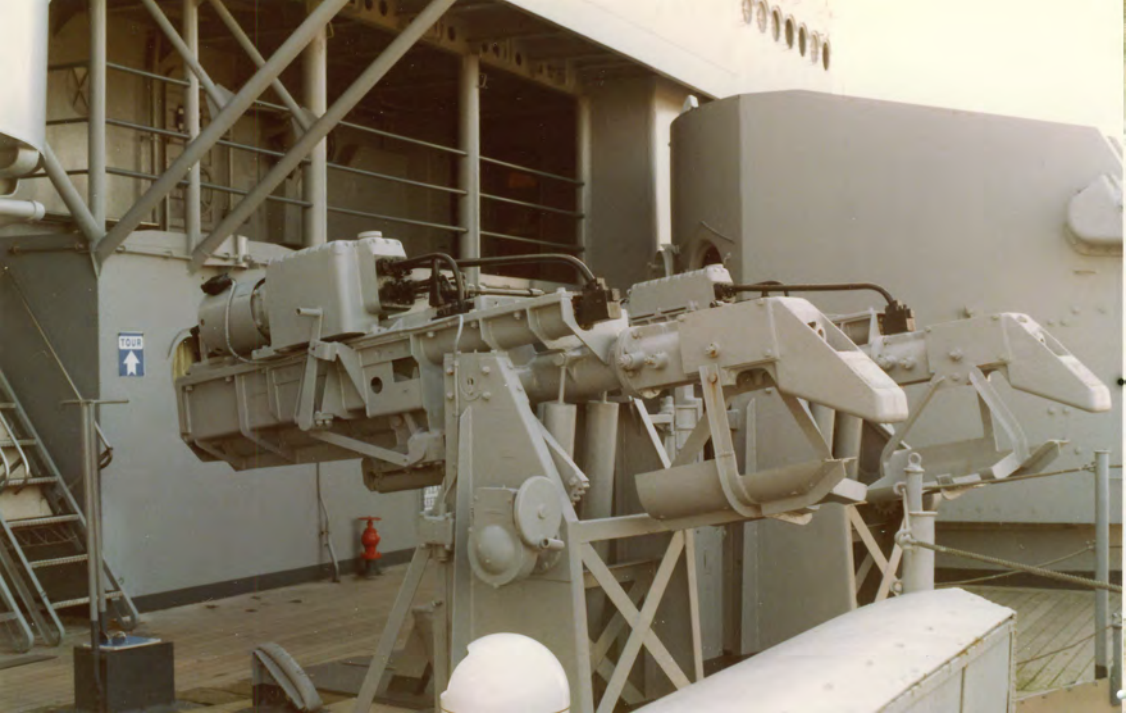
Figure 14. 5-inch Mount Mk 28 Mods. Working Circle.



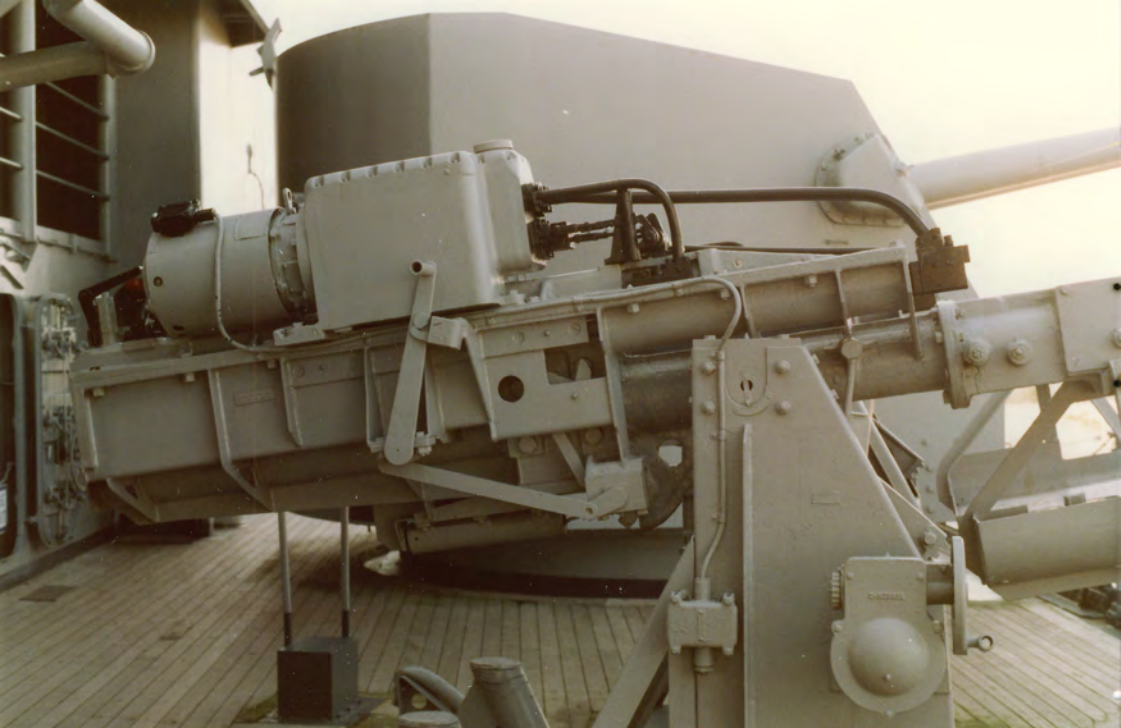


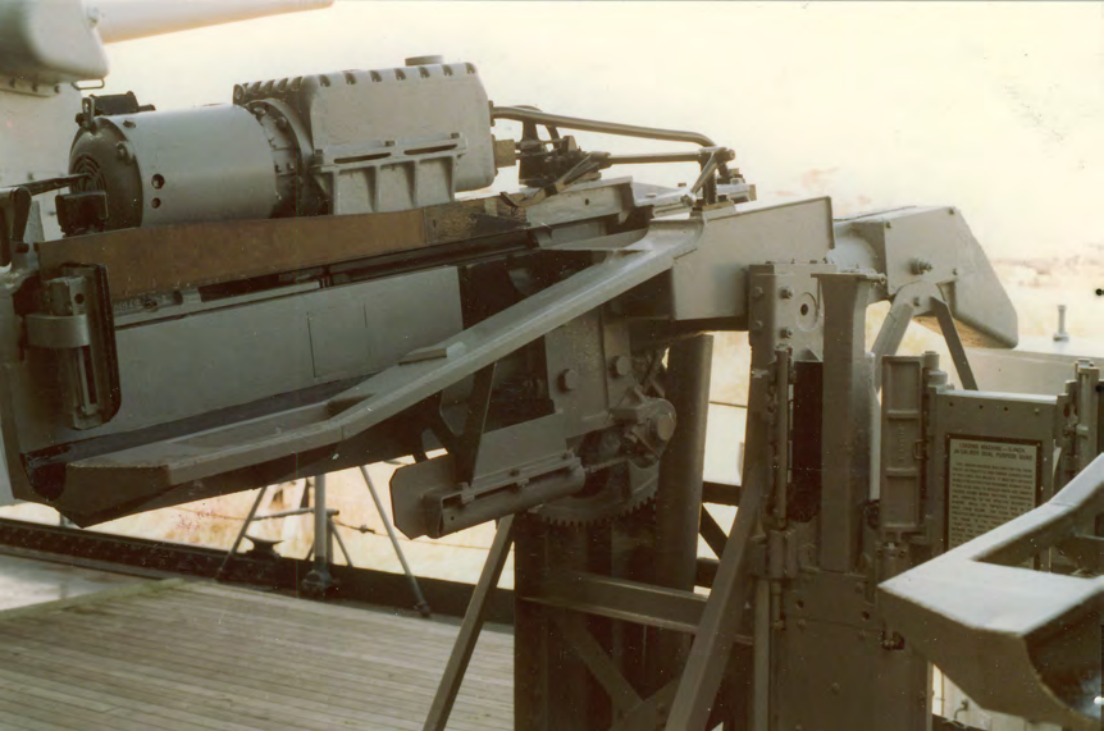






TOUR  
↑

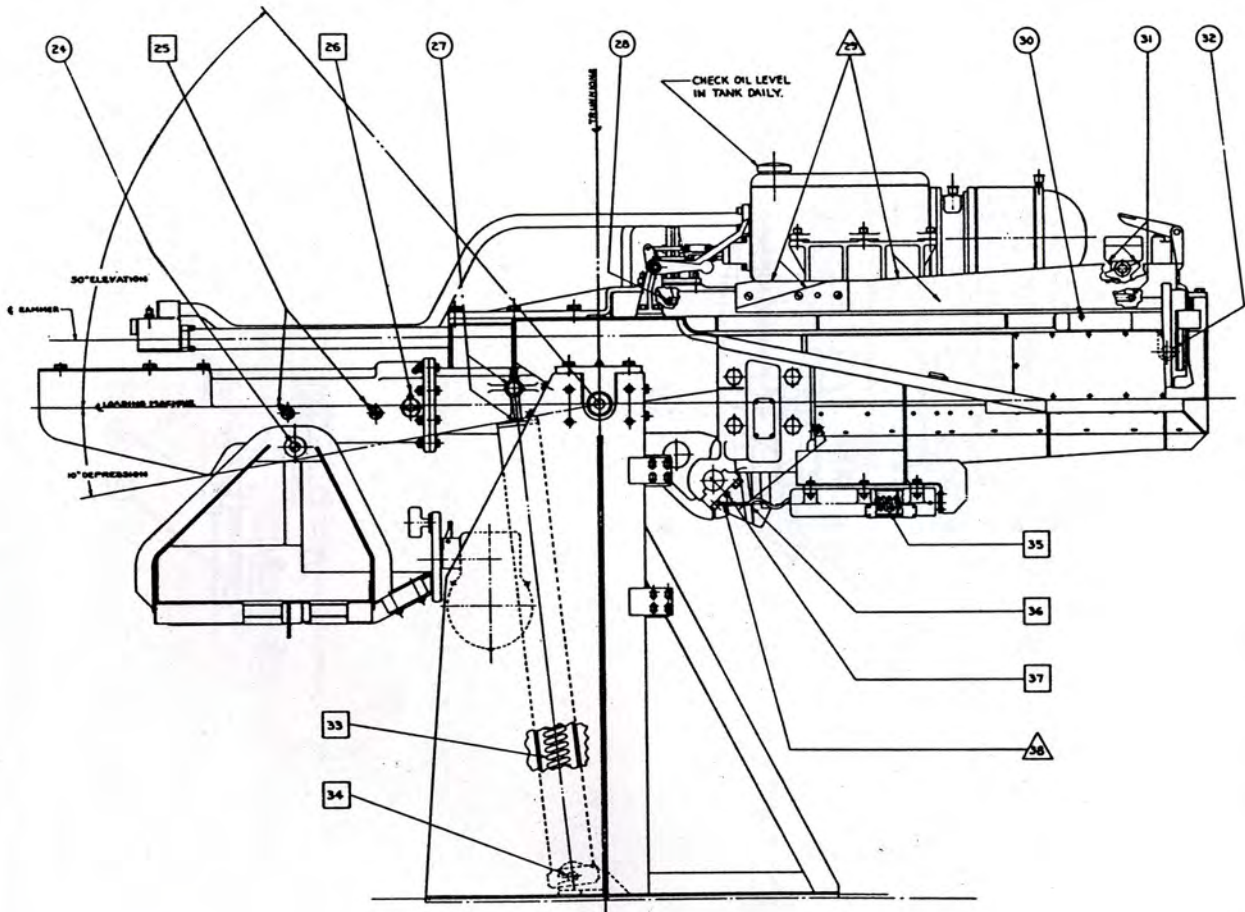




SEARCH LIGHT - LAMP  
SEARCH LIGHT - POWER UNIT

SEARCH LIGHT - LAMP  
SEARCH LIGHT - POWER UNIT





- DAILY**
- 29 CAM PLATE (RAMMER SYSTEM)
  - 36 BREECH BLOCK CAM
- WEEKLY**
- 24 PIVOT PIN (PROJECTILE TRAY)
  - 27 SPRING ROD (EQUILIBRATOR)
  - 26, 31 OPERATING LEVERS (RAMMER SYSTEM)
  - 30, 32 CROSS HEAD (RAMMER SYSTEM)
  - 37 BREECH BLOCK OPERATING MECHANISM
  - 38 OPERATING SPRING CHAIN (BREECH BLOCK MECHANISM)
- MONTHLY**
- 25 GUIDES (PROJECTILE DEFLECTOR)
  - 26 BRAKE (PROJECTILE DEFLECTOR)
  - 34 CYLINDER TRUNNION (EQUILIBRATOR)
- SEMI-ANNUALLY**
- 33 SPRING (EQUILIBRATOR)
  - 35 OPERATING SPRING (BREECH BLOCK MECHANISM)

**NOTE:-**  
 THE FREQUENCY OF LUBRICATION IS DEPENDENT UPON THE USE OF THE MECHANISM. THE SCHEDULE GIVEN IS REQUIRED WHEN THE OUTFIT IS USED DAILY. LUBRICATION MAY BE LESS FREQUENT FOR LESS FREQUENT USE OF THE OUTFIT, BUT IN NO CASE SHALL THE MAXIMUM PERIOD BETWEEN REGULAR INSPECTIONS OF THE PARTS FOR PROPER LUBRICATION, ON SHIPS IN COMMISSION, EXCEED ONE MONTH.  
 EXERCISE THE PARTS AFTER LUBRICATING.

- INDICATES LIGHT MINERAL OIL FOR LUBRICATION.
- INDICATES CUP GREASE FOR LUBRICATION.
- △ INDICATES EXTRA HEAVY MINERAL OIL FOR LUBRICATION.

20



THIS OUTFIT AND FOR	
5" LOADING MACHINE MK. XXII MOD. 2 (30 CAL.)	
<b>LUBRICATION CHART</b> LEFT SIDE ELEVATION SCALE: 1/2"	
NAVY DEPARTMENT BUREAU OF ORDNANCE WASHINGTON, D. C.	
272232	
ROCK ISLAND ARSENAL	

9

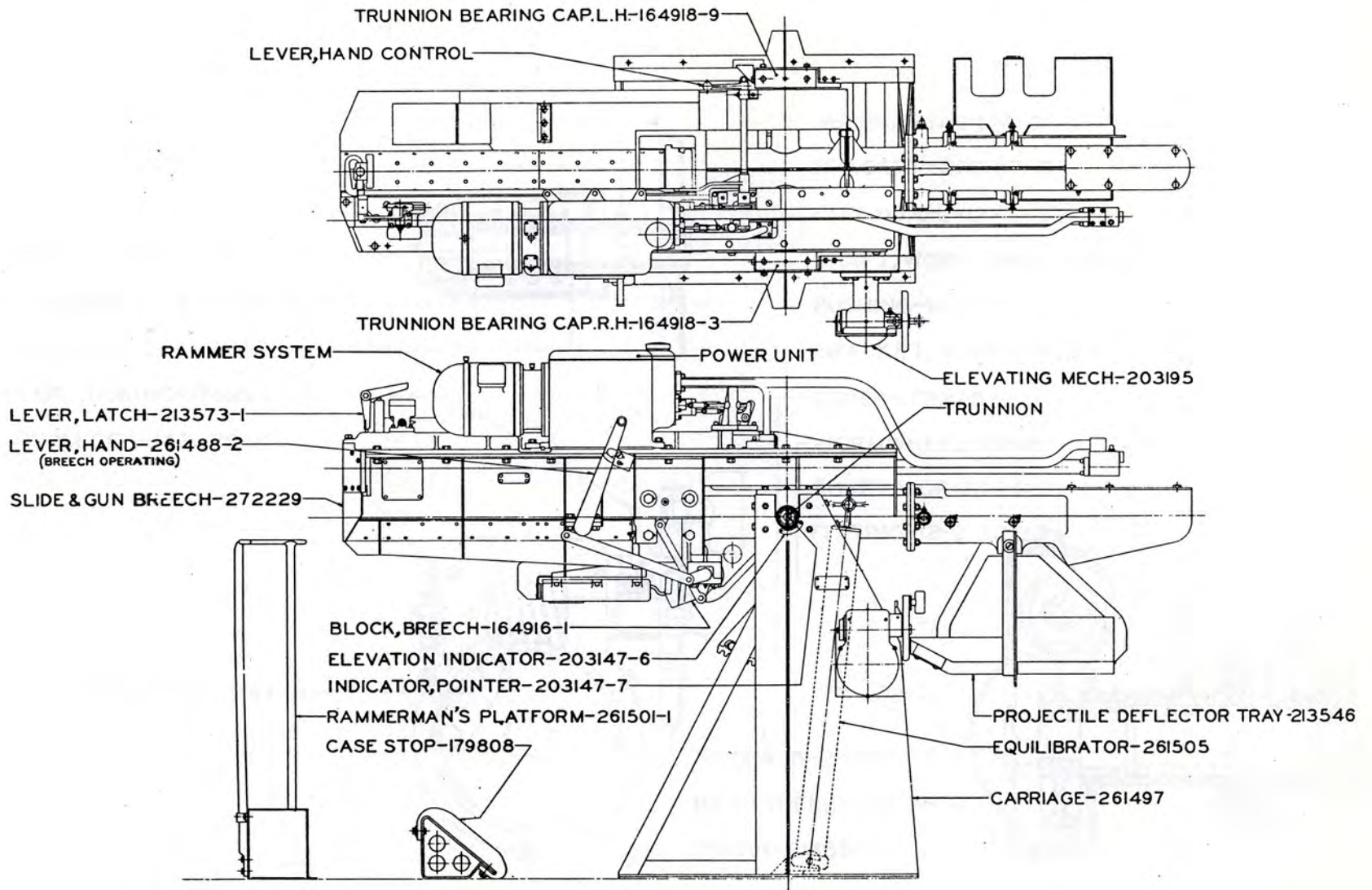
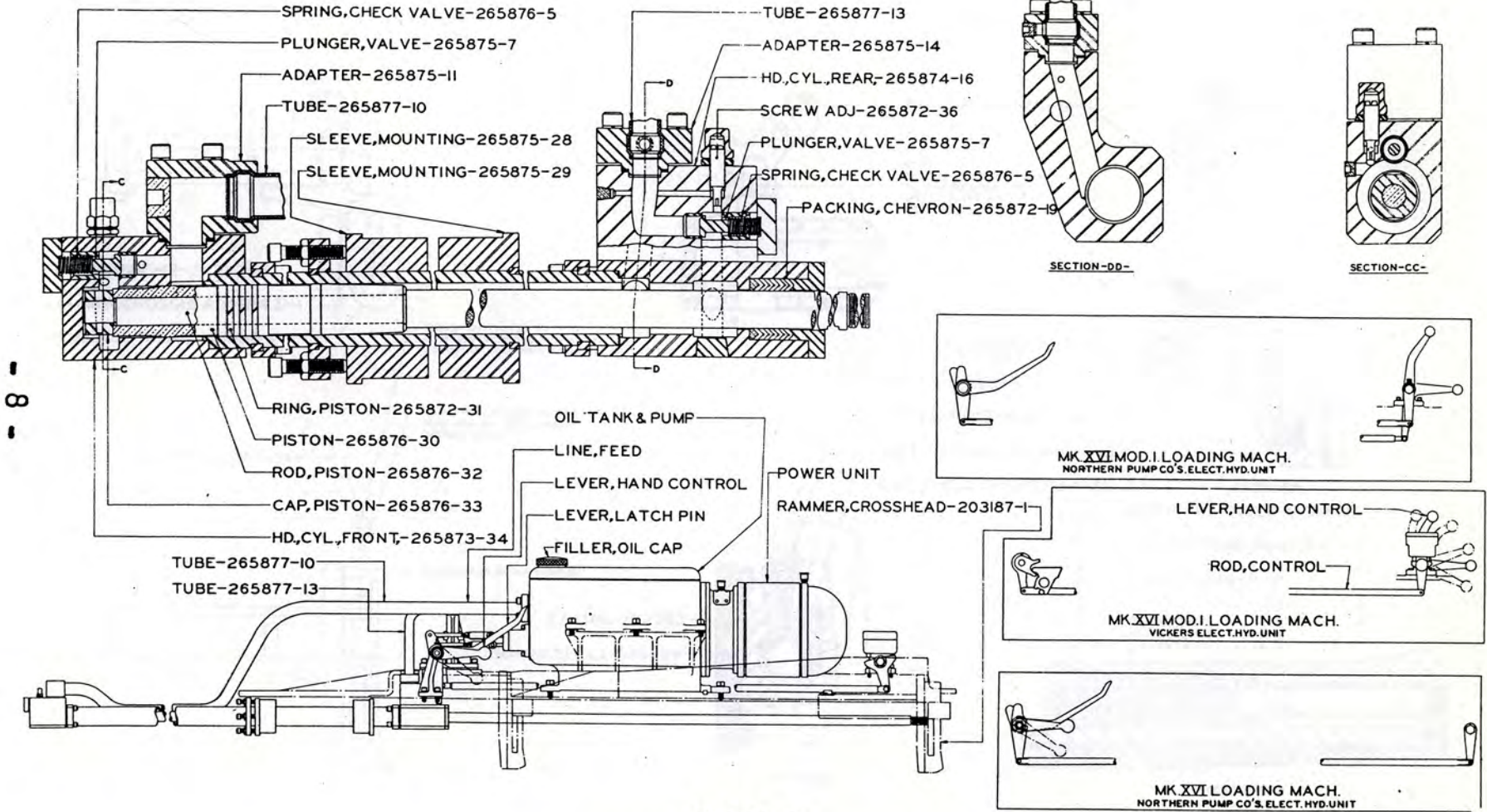


PLATE-A  
5<sup>TH</sup> LOADING MACHINE (38 CAL.) MK. XVI MOD. 2  
PLAN AND ELEVATION



- 8 -

PLATE-C  
 5<sup>th</sup> LOADING MACHINE (38 CAL.)  
 MK. XVI MK. XVII MOD. I MK. XVI MOD. 2  
 RAMMER SYSTEM

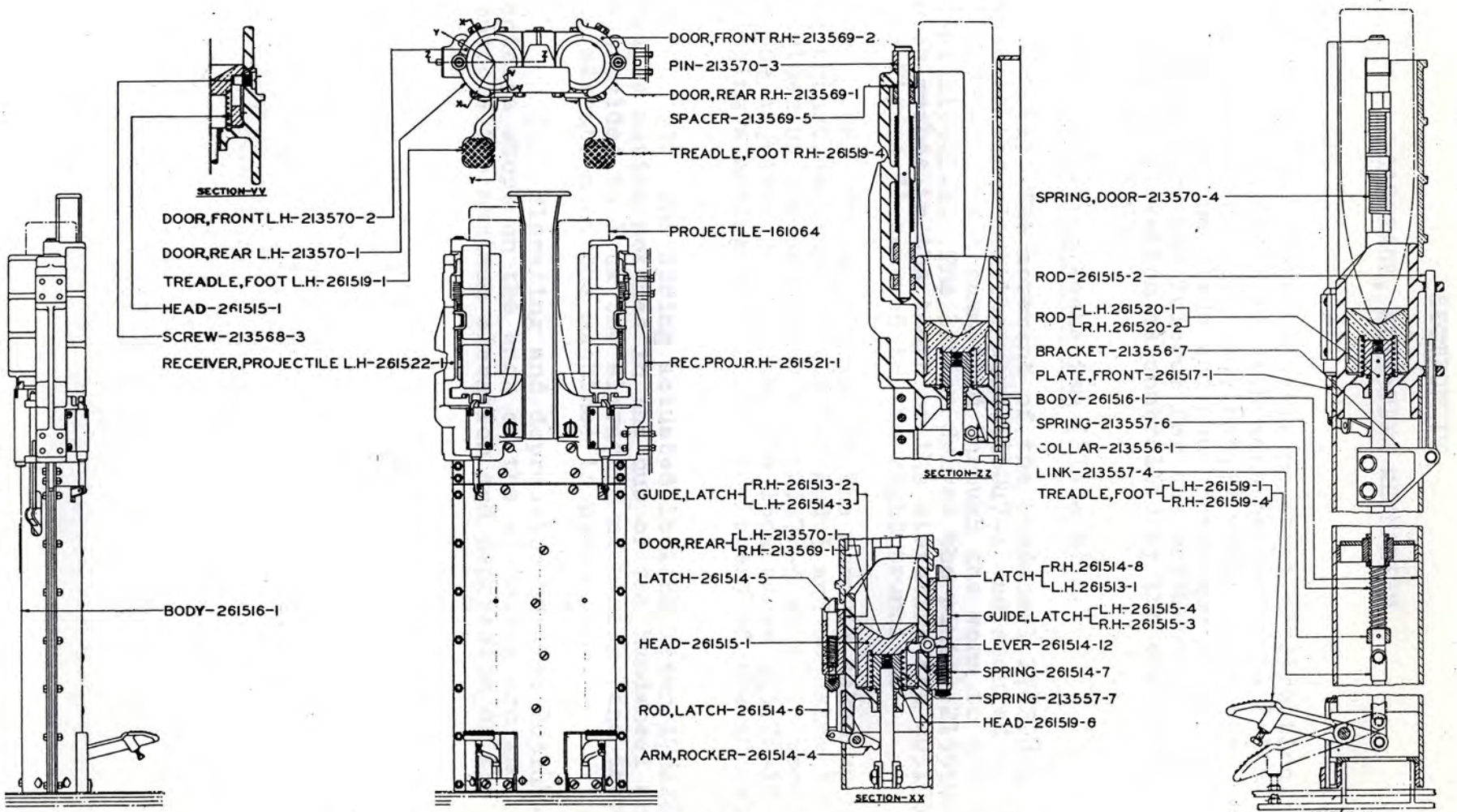
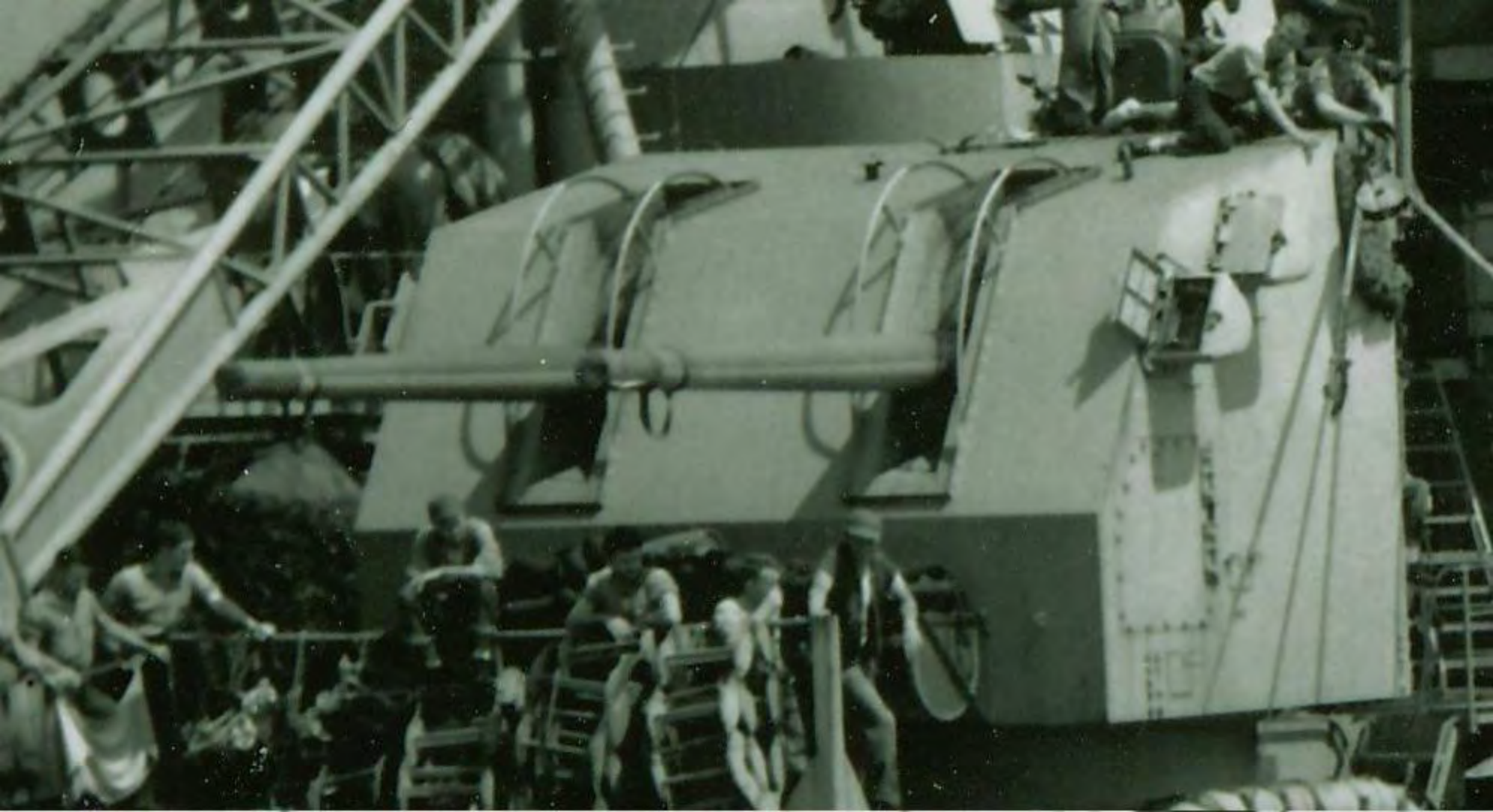


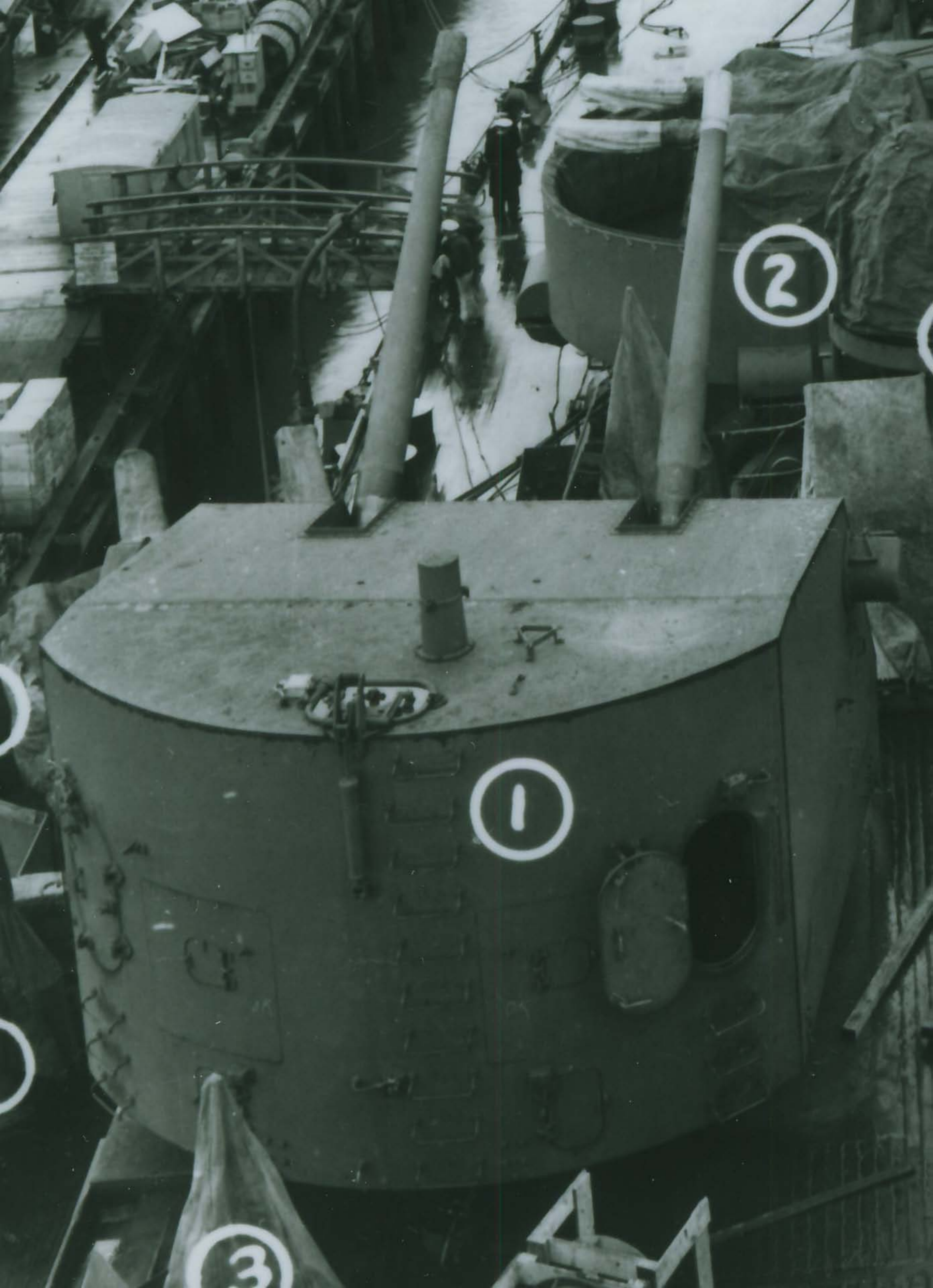
PLATE-F

5<sup>th</sup> PROJECTILE HOIST TOP MK.II MOD.2







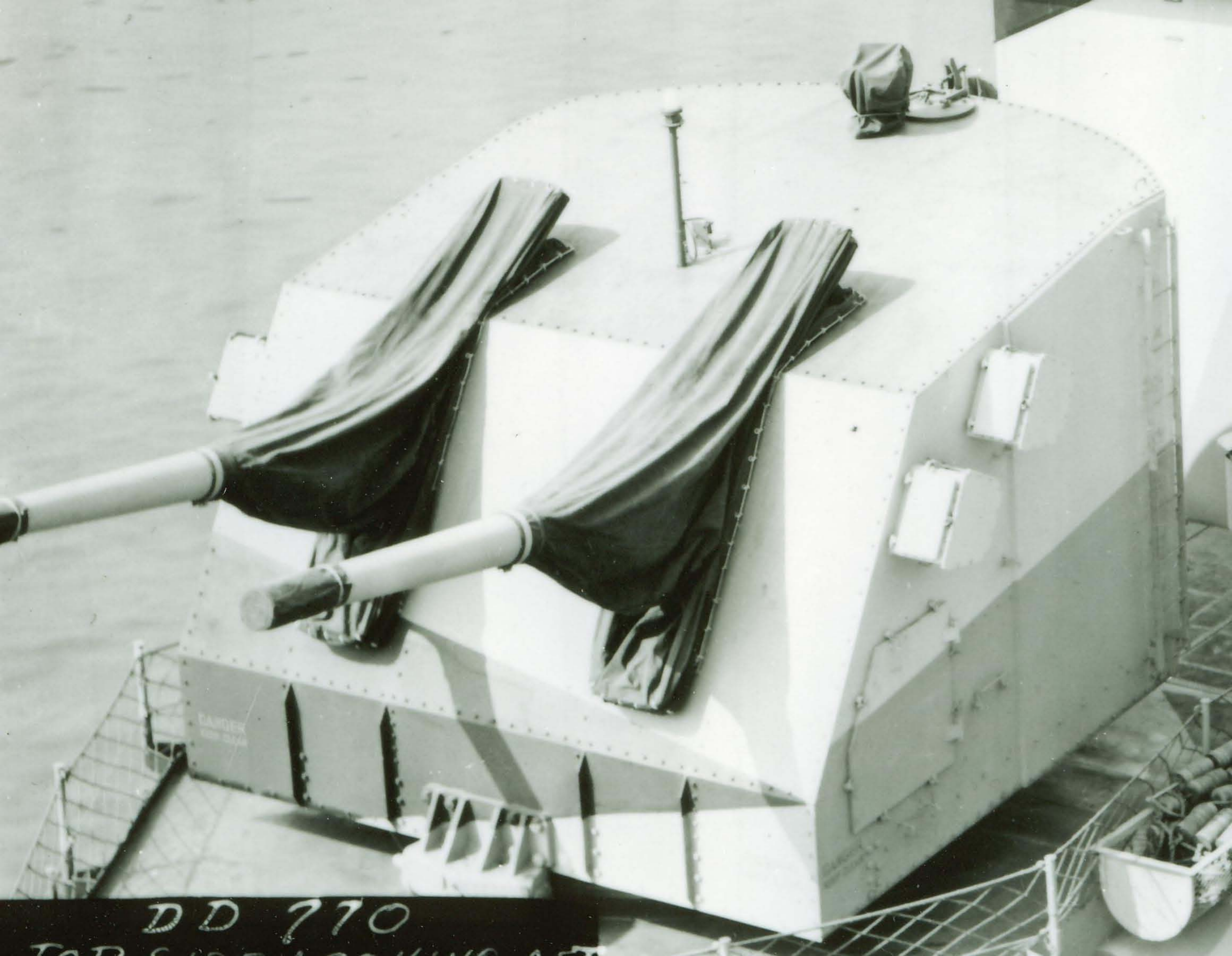


2

1

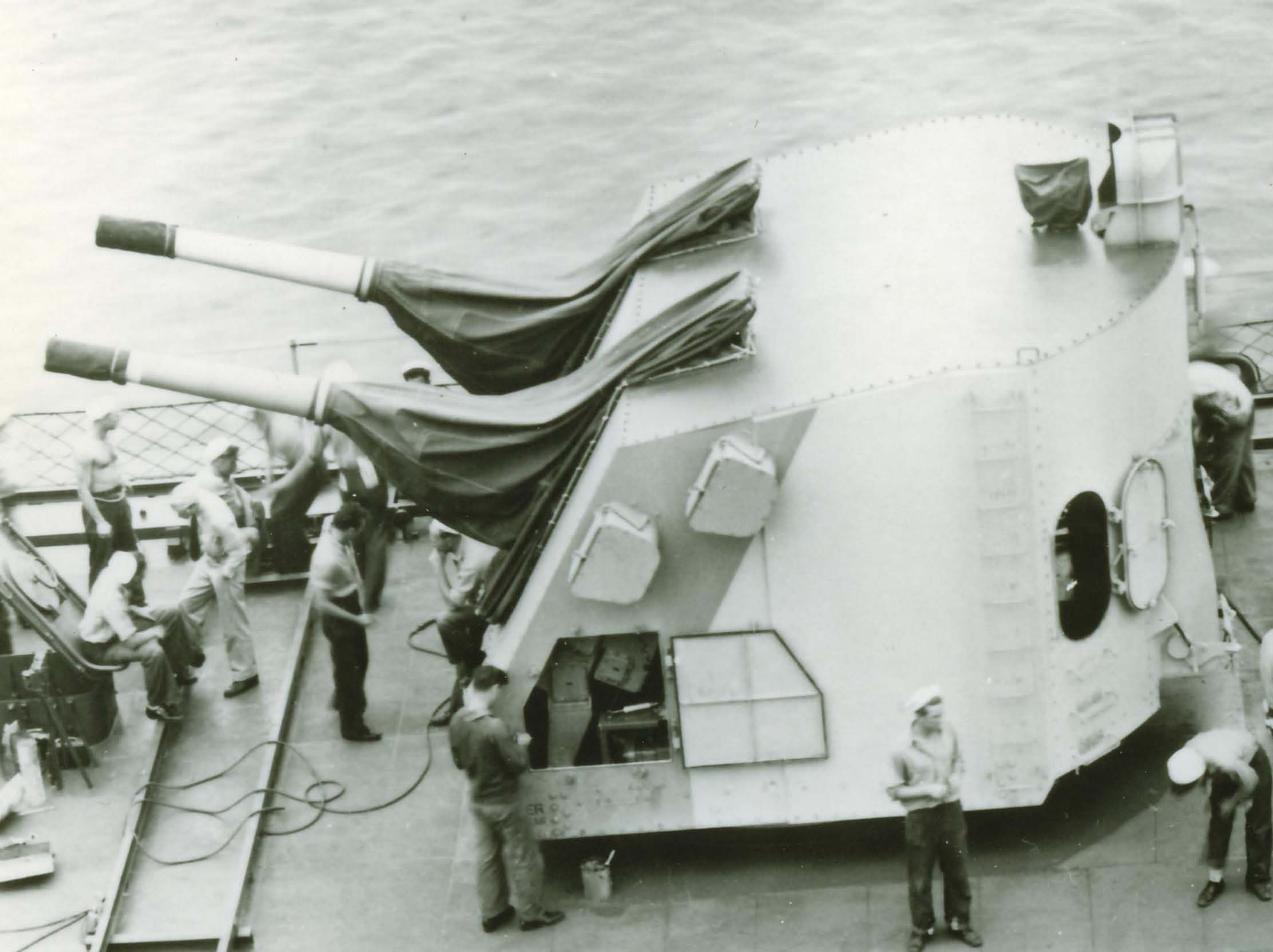
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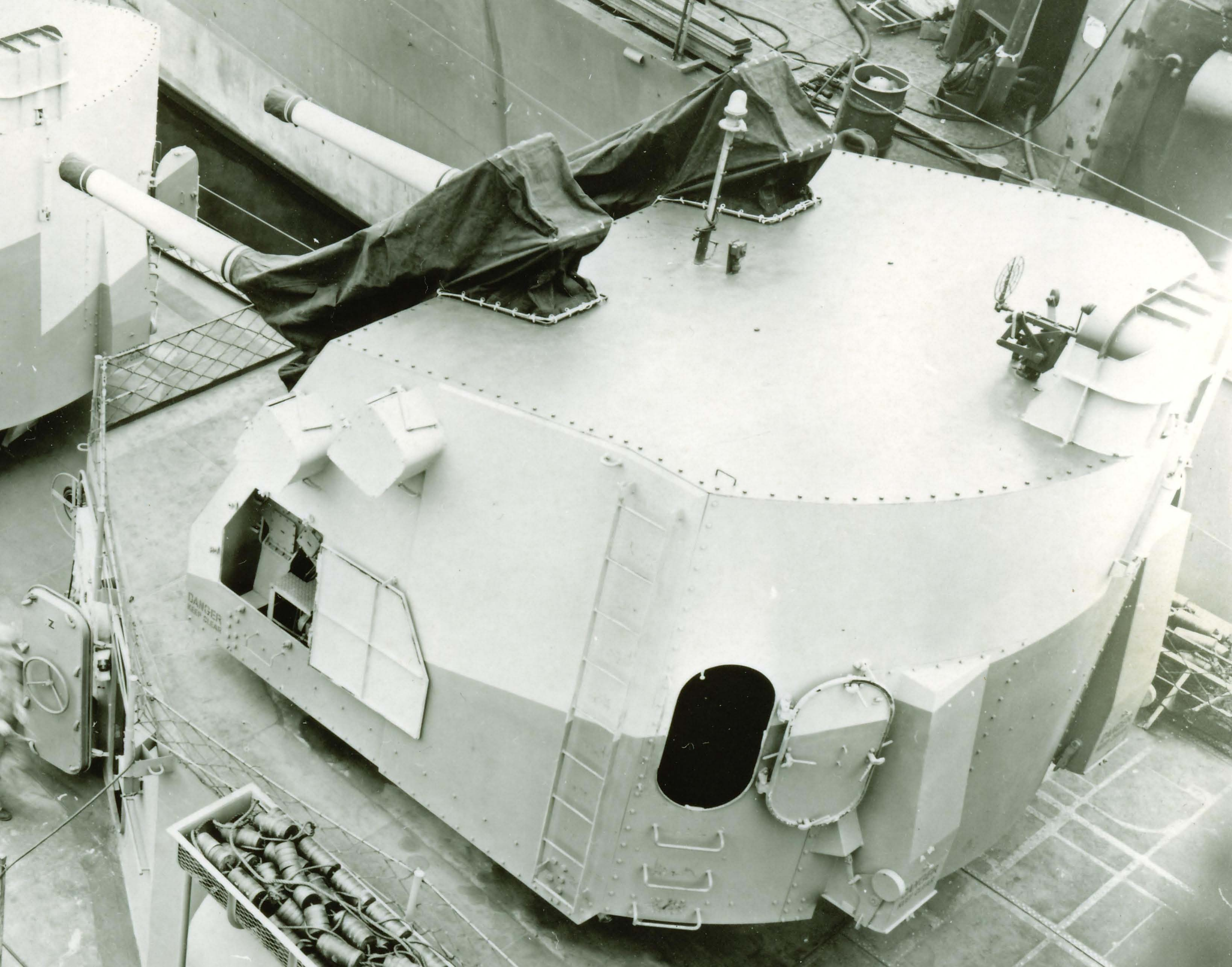




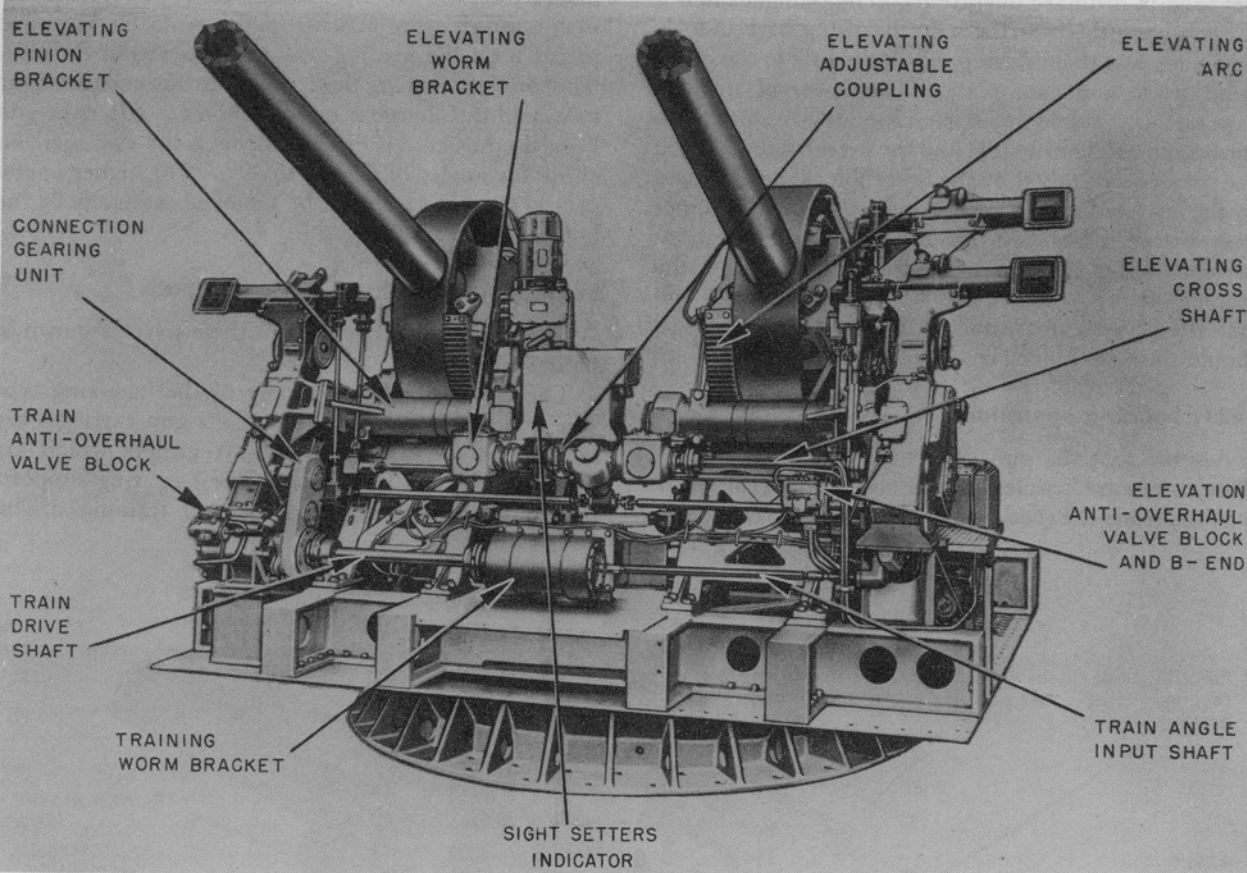
DD 770

TORpedo





DANGER  
KEEP CLEAR



ELEVATING  
PINION  
BRACKET

ELEVATING  
WORM  
BRACKET

ELEVATING  
ADJUSTABLE  
COUPLING

ELEVATING  
ARC

CONNECTION  
GEARING  
UNIT

ELEVATING  
CROSS  
SHAFT

TRAIN  
ANTI-OVERHAUL  
VALVE BLOCK

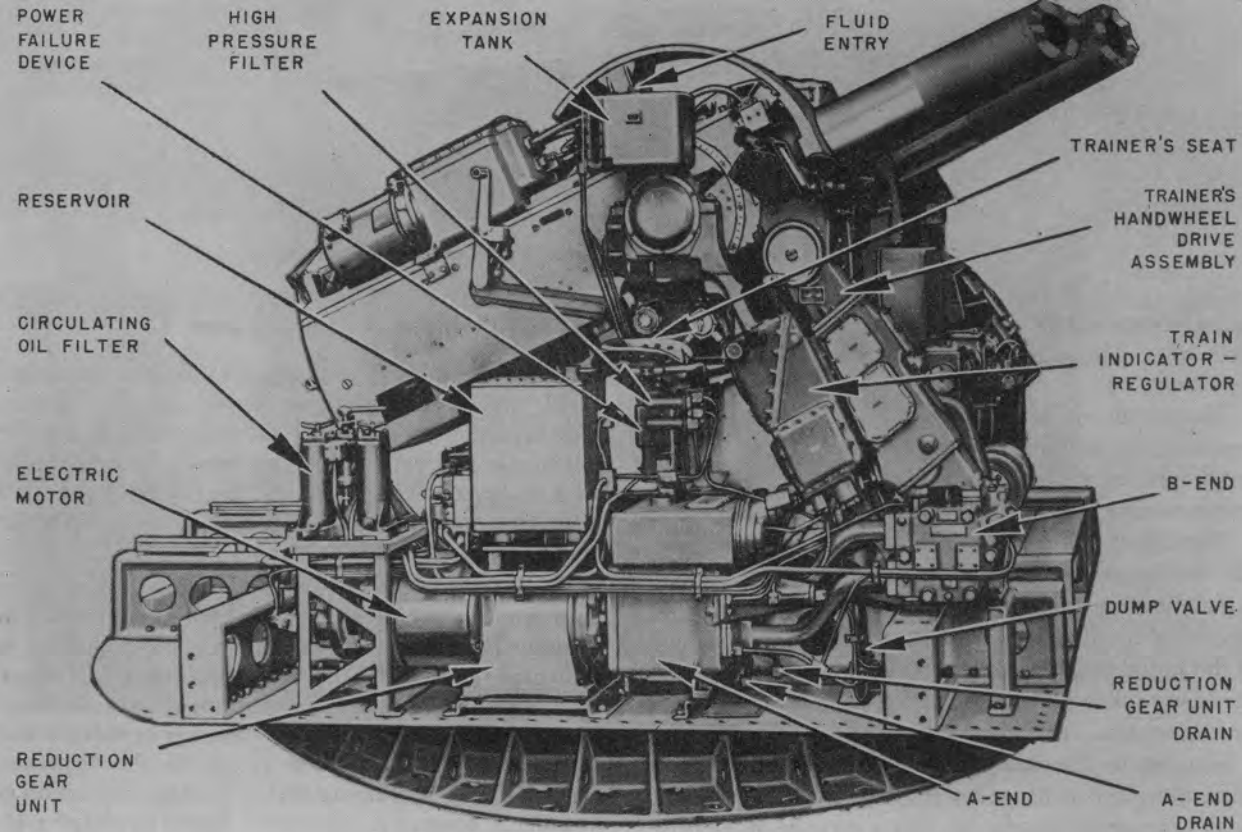
ELEVATION  
ANTI-OVERHAUL  
VALVE BLOCK  
AND B-END

TRAIN  
DRIVE  
SHAFT

TRAIN ANGLE  
INPUT SHAFT

TRAINING  
WORM BRACKET

SIGHT SETTERS  
INDICATOR



POWER FAILURE DEVICE

HIGH PRESSURE FILTER

EXPANSION TANK

FLUID ENTRY

RESERVOIR

TRAINER'S SEAT

TRAINER'S HANDWHEEL DRIVE ASSEMBLY

CIRCULATING OIL FILTER

TRAIN INDICATOR - REGULATOR

ELECTRIC MOTOR

B-END

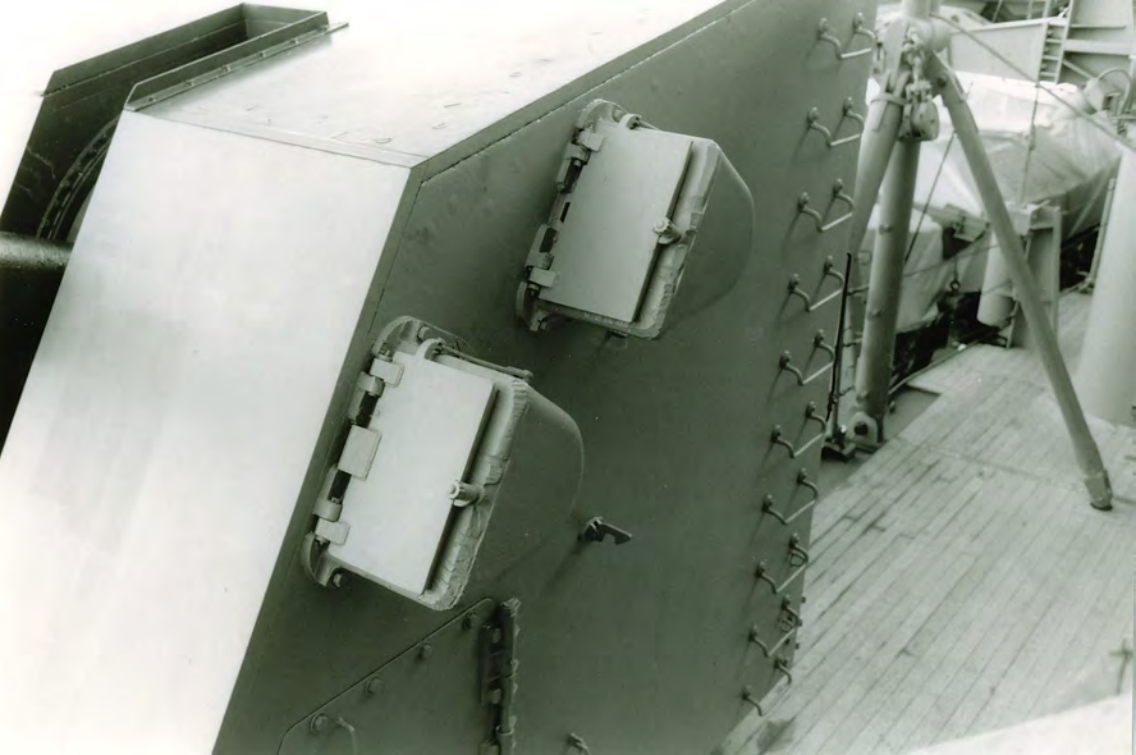
REDUCTION GEAR UNIT

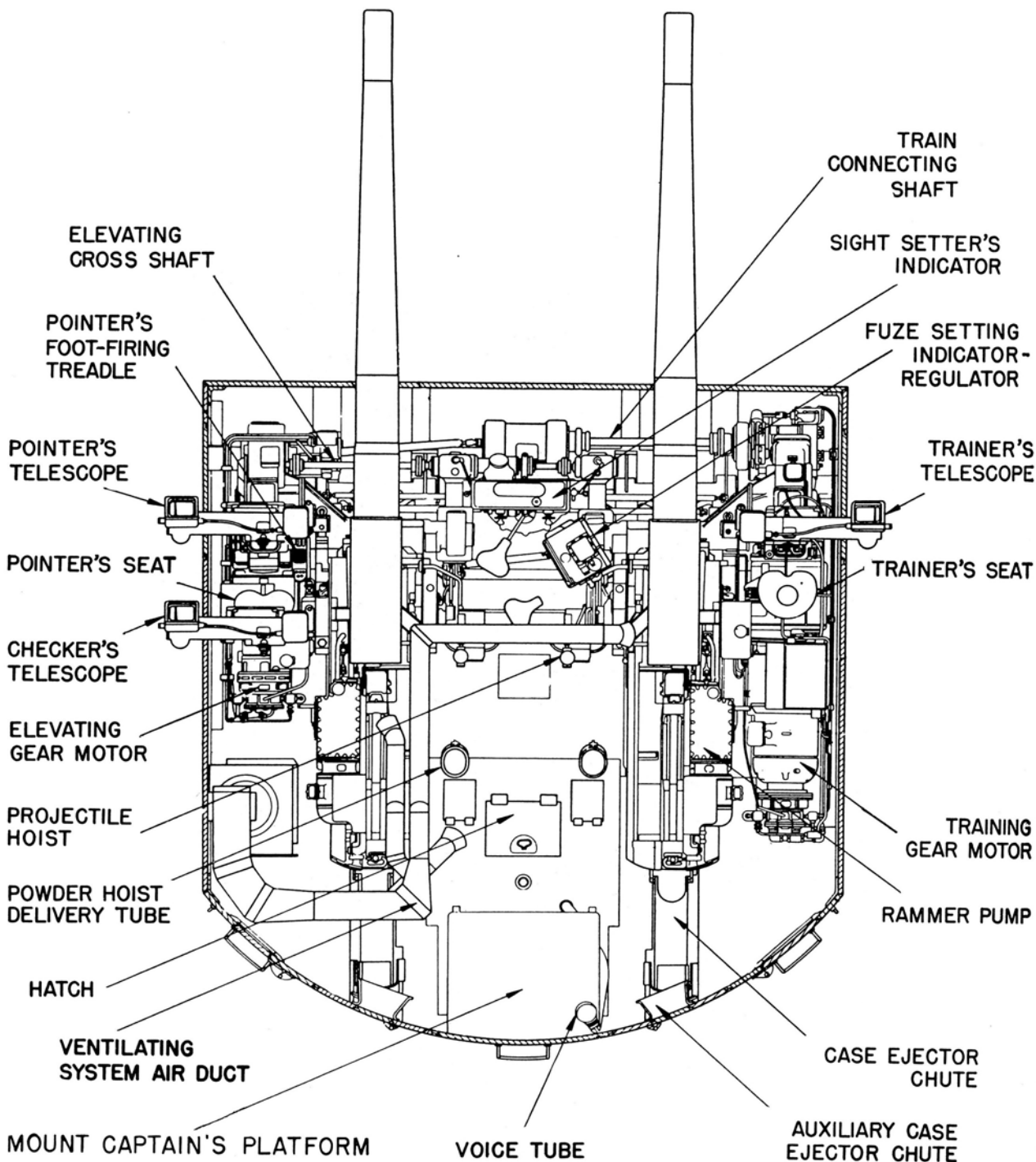
DUMP VALVE

REDUCTION GEAR UNIT DRAIN

A-END

A-END DRAIN





ELEVATING  
CROSS SHAFT

POINTER'S  
FOOT-FIRING  
TREADLE

POINTER'S  
TELESCOPE

POINTER'S SEAT

CHECKER'S  
TELESCOPE

ELEVATING  
GEAR MOTOR

PROJECTILE  
HOIST

POWDER HOIST  
DELIVERY TUBE

HATCH

VENTILATING  
SYSTEM AIR DUCT

MOUNT CAPTAIN'S PLATFORM

VOICE TUBE

TRAIN  
CONNECTING  
SHAFT

SIGHT SETTER'S  
INDICATOR

FUZE SETTING  
INDICATOR-  
REGULATOR

TRAINER'S  
TELESCOPE

TRAINER'S SEAT

TRAINING  
GEAR MOTOR

RAMMER PUMP

CASE EJECTOR  
CHUTE

AUXILIARY CASE  
EJECTOR CHUTE

TRAINER'S TELESCOPE

SIGHT SETTER'S INDICATOR

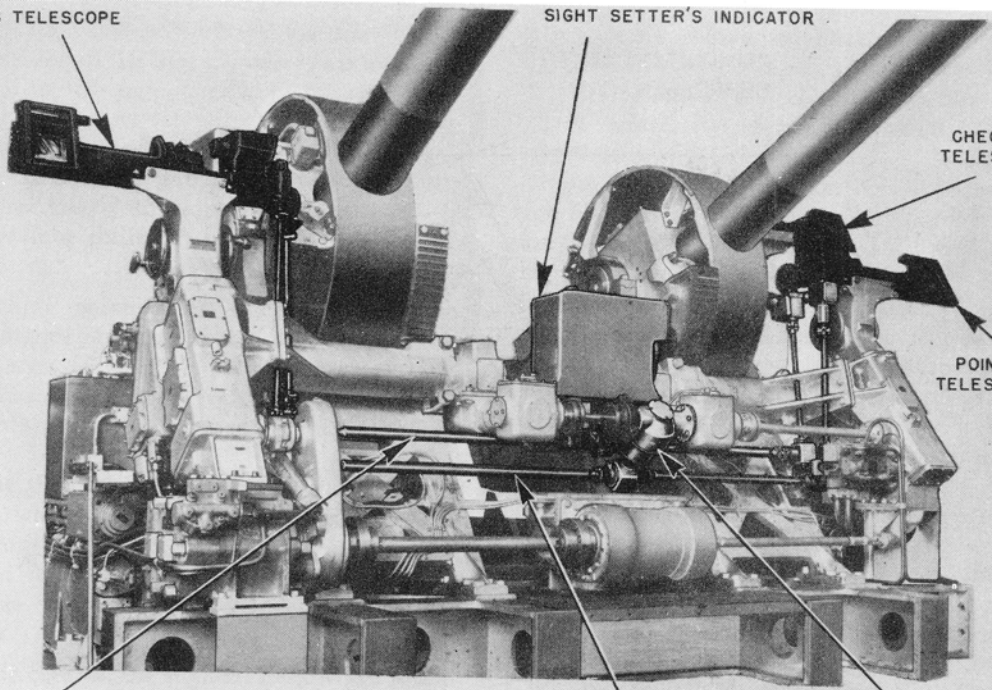
CHECKER'S TELESCOPE

POINTER'S TELESCOPE

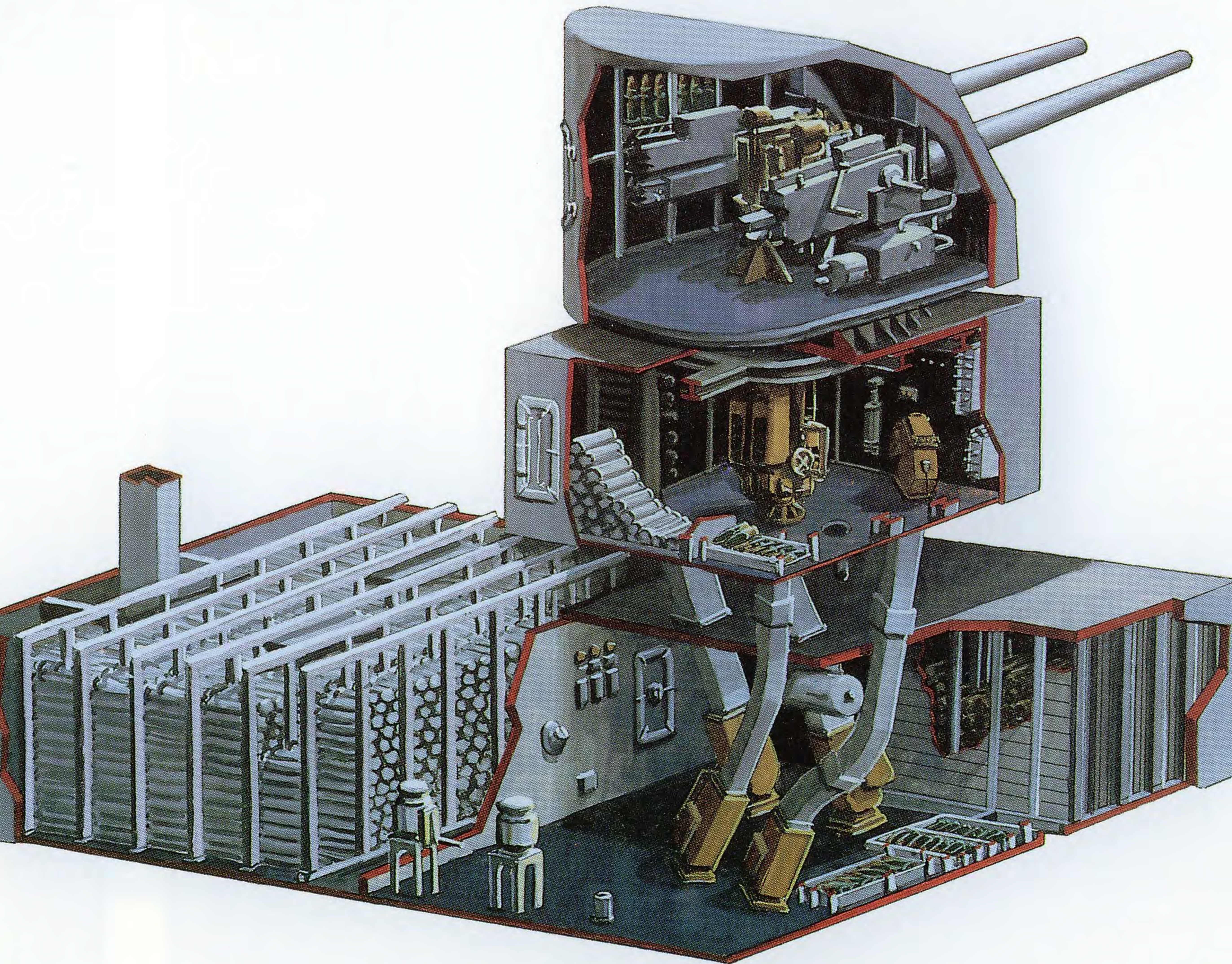
DEFLECTION CROSS SHAFT

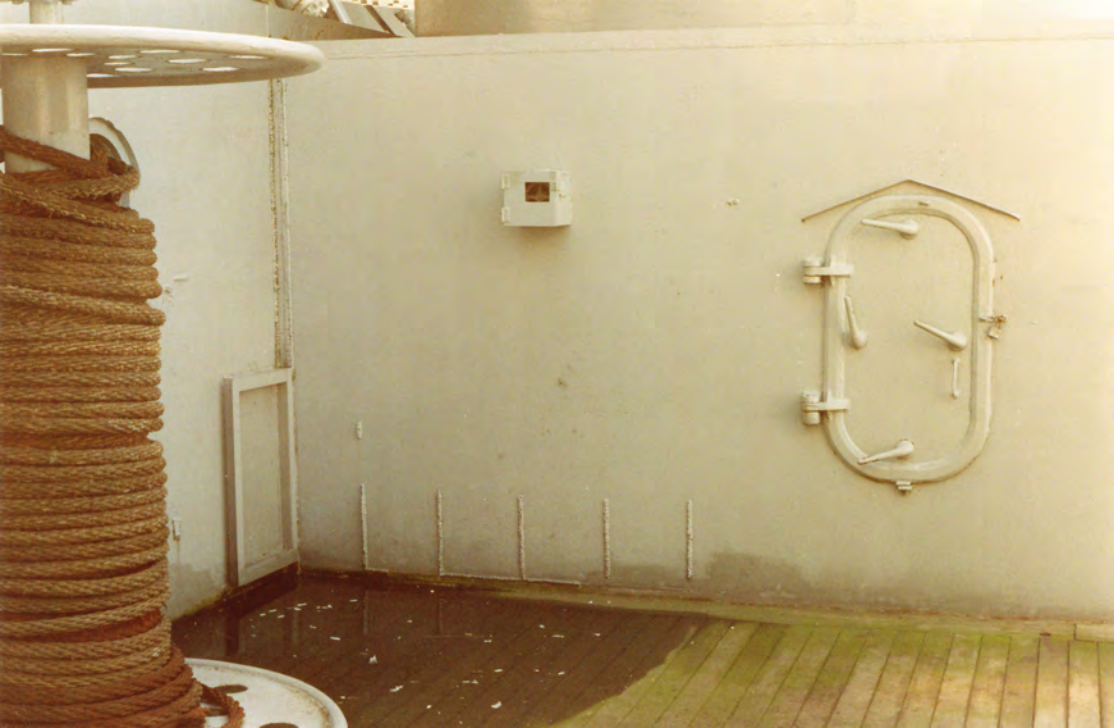
SIGHT ANGLE CROSS SHAFT

DIFFERENTIAL HOUSING





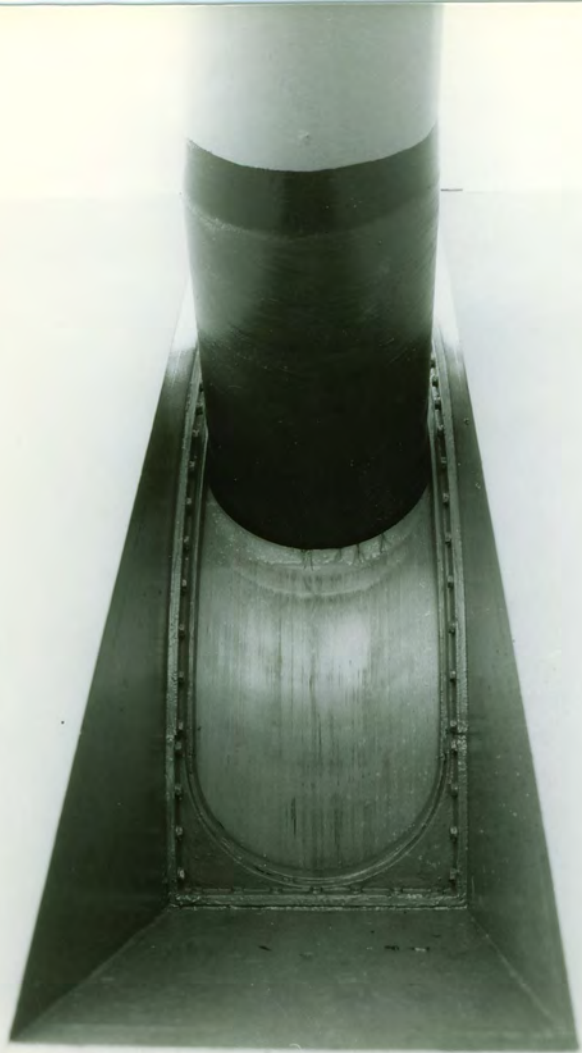




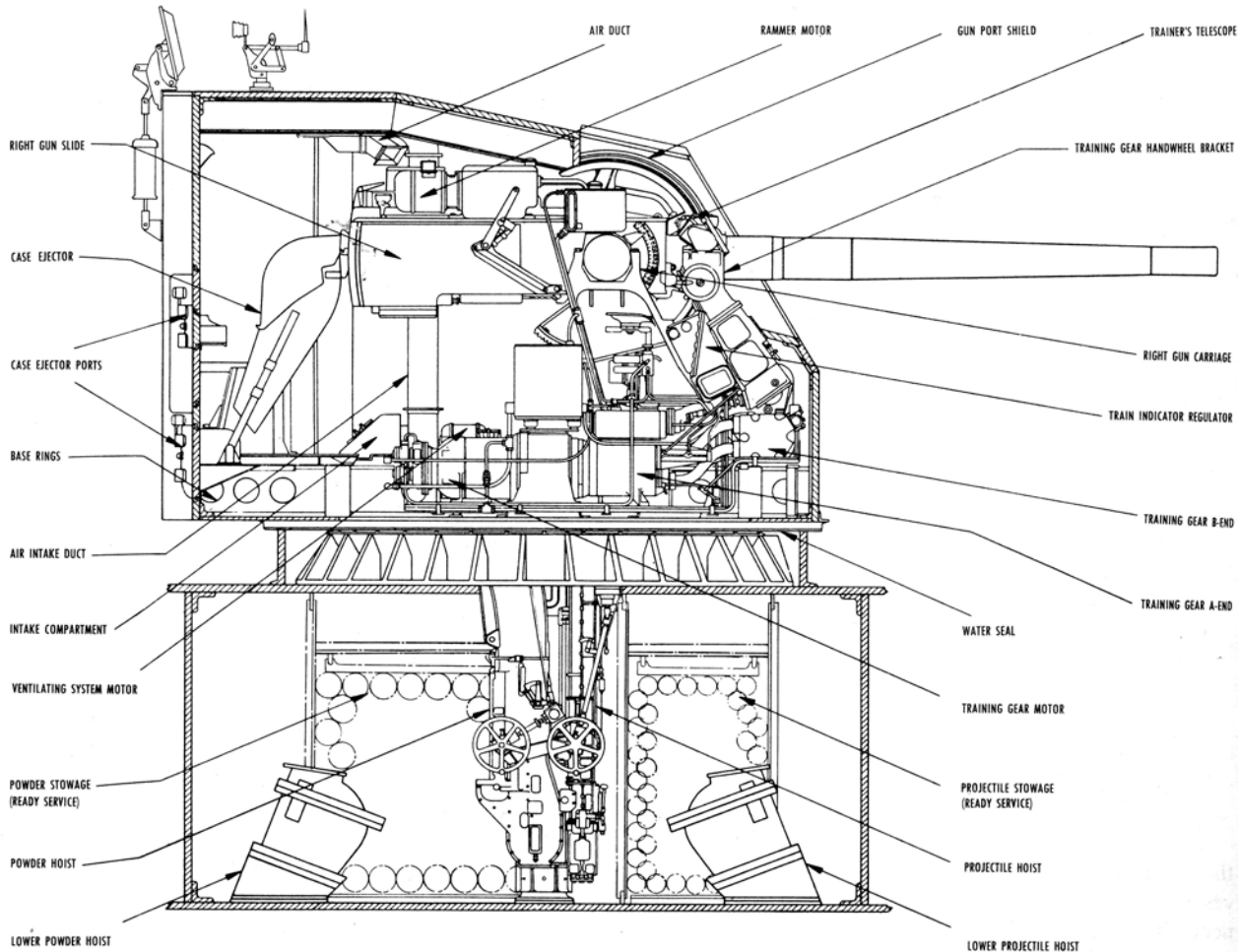












AIR DUCT

RAMMER MOTOR

GUN PORT SHIELD

TRAINER'S TELESCOPE

RIGHT GUN SLIDE

TRAINING GEAR HANDWHEEL BRACKET

CASE EJECTOR

CASE EJECTOR PORTS

BASE RINGS

AIR INTAKE DUCT

INTAKE COMPARTMENT

VENTILATING SYSTEM MOTOR

POWDER STOWAGE  
(READY SERVICE)

POWDER HOIST

LOWER POWDER HOIST

RIGHT GUN CARRIAGE

TRAIN INDICATOR REGULATOR

TRAINING GEAR B-END

TRAINING GEAR A-END

WATER SEAL

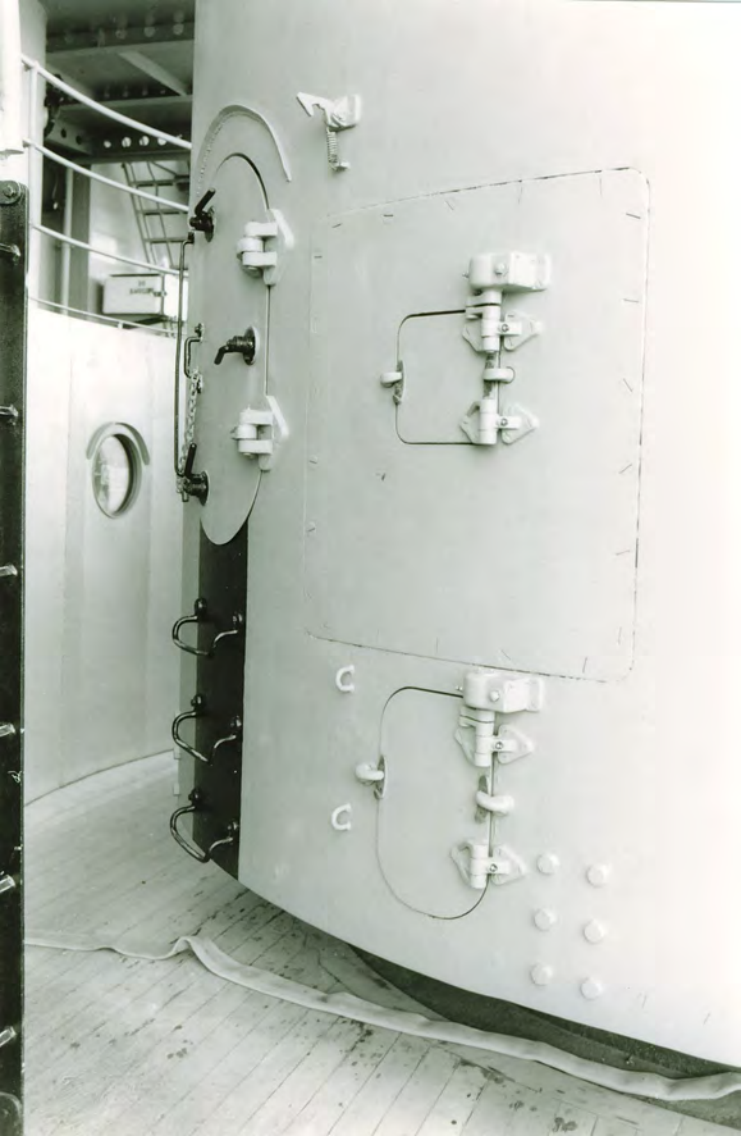
TRAINING GEAR MOTOR

PROJECTILE STOWAGE  
(READY SERVICE)

PROJECTILE HOIST

LOWER PROJECTILE HOIST

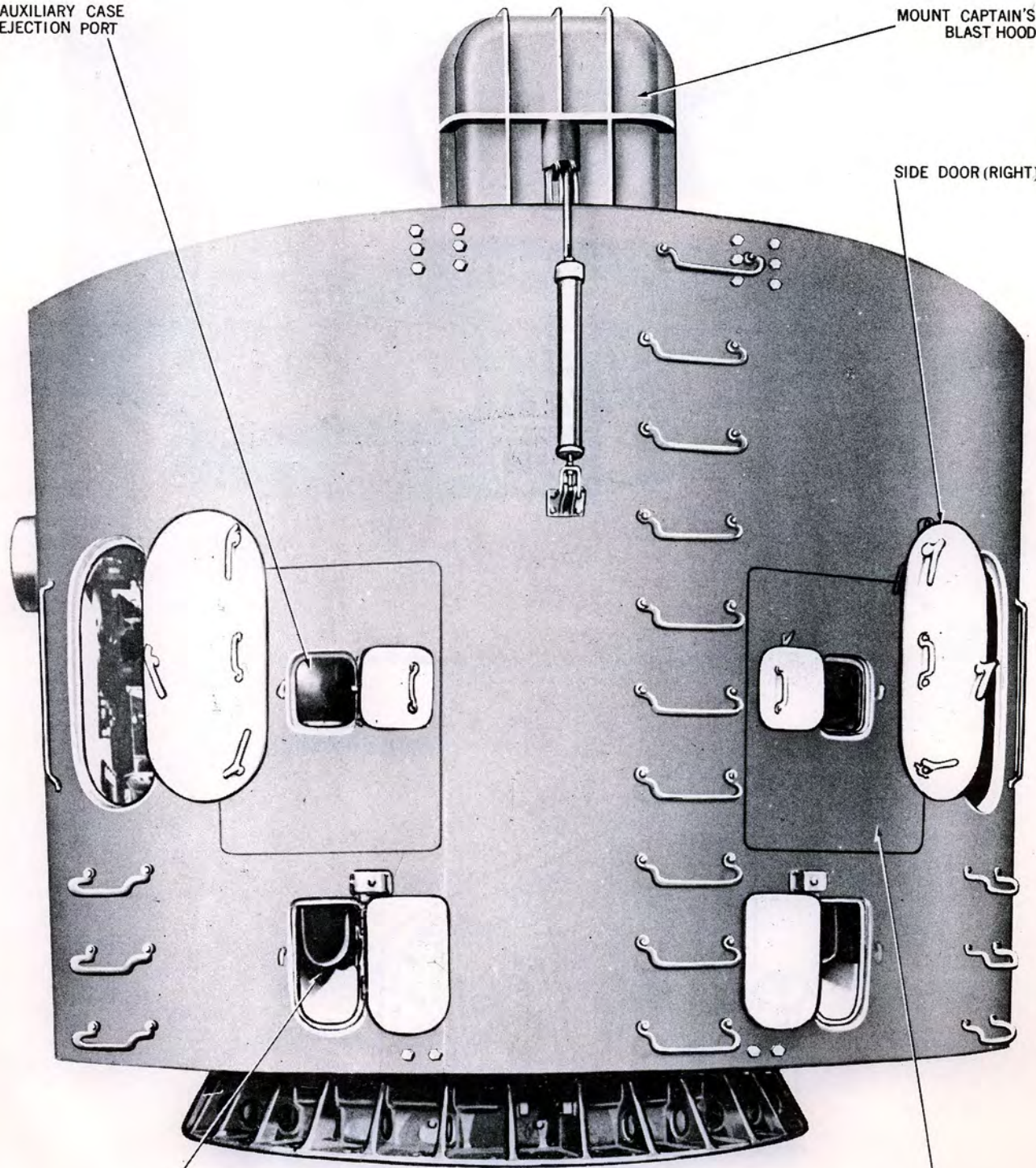




AUXILIARY CASE  
EJECTION PORT

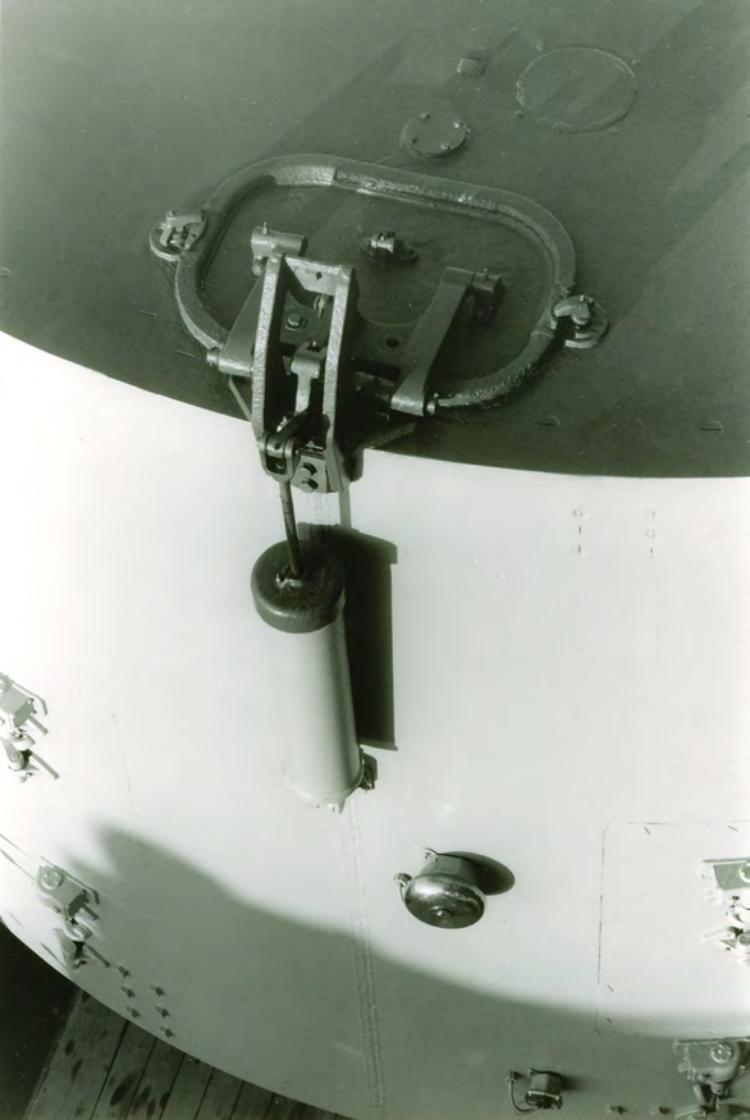
MOUNT CAPTAIN'S  
BLAST HOOD

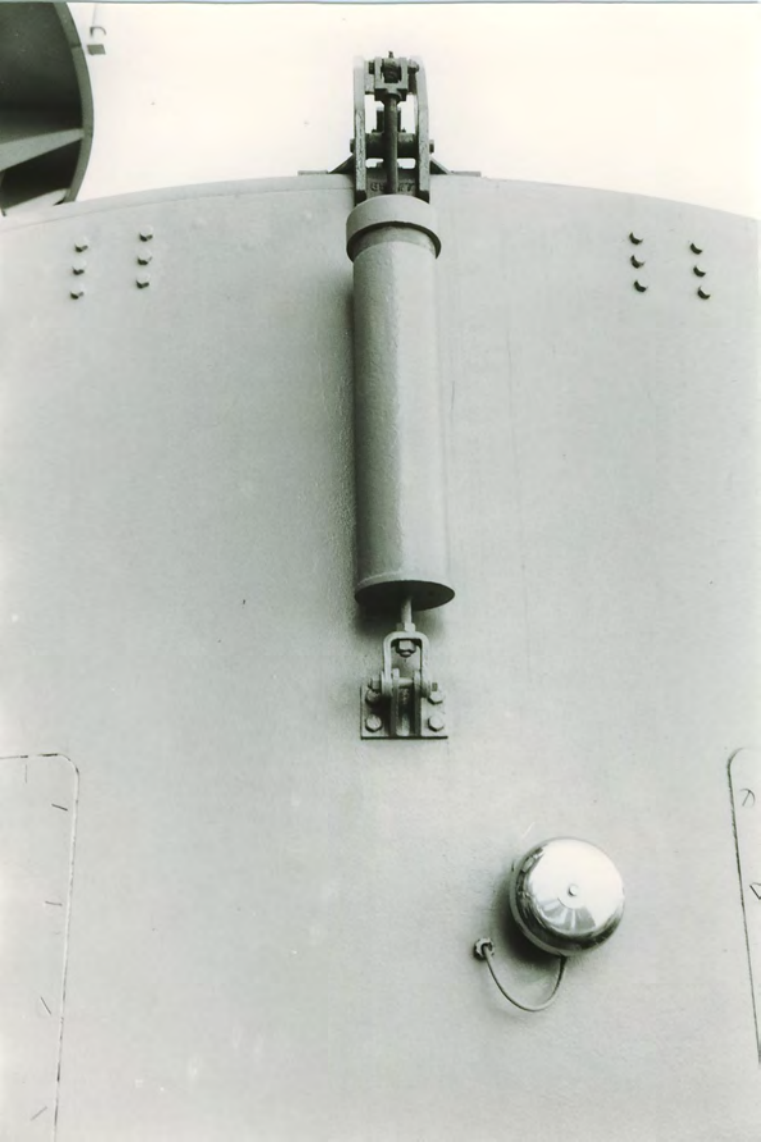
SIDE DOOR (RIGHT)

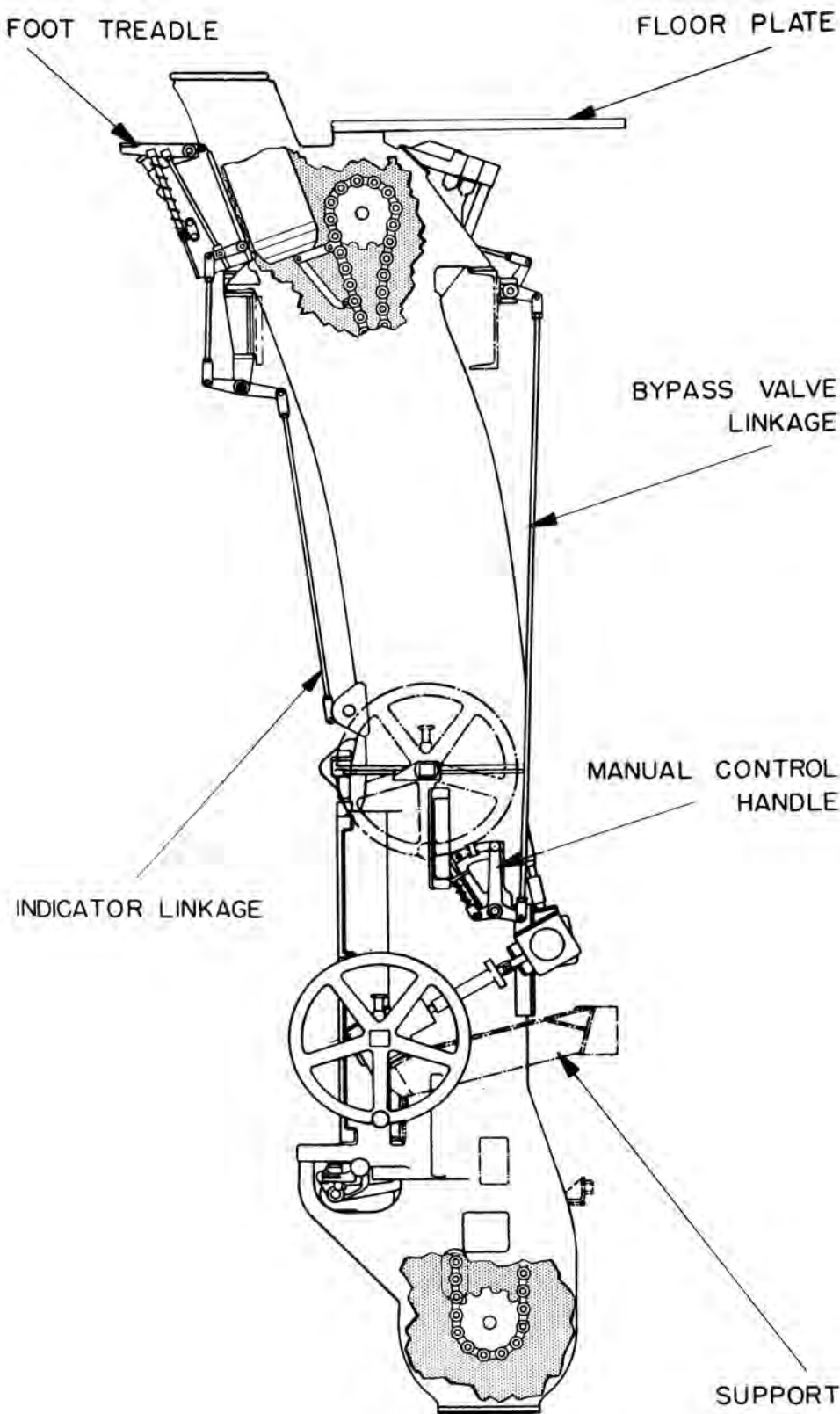


CASE EJECTION  
CHUTE PORT

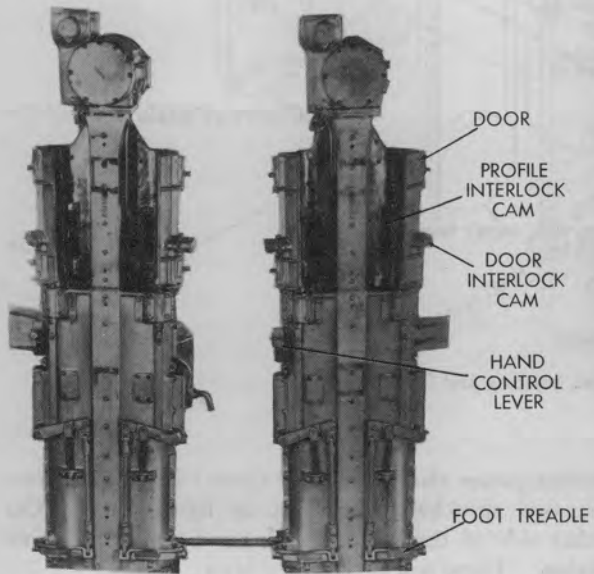
REMOVABLE  
ACCESS PLATE.



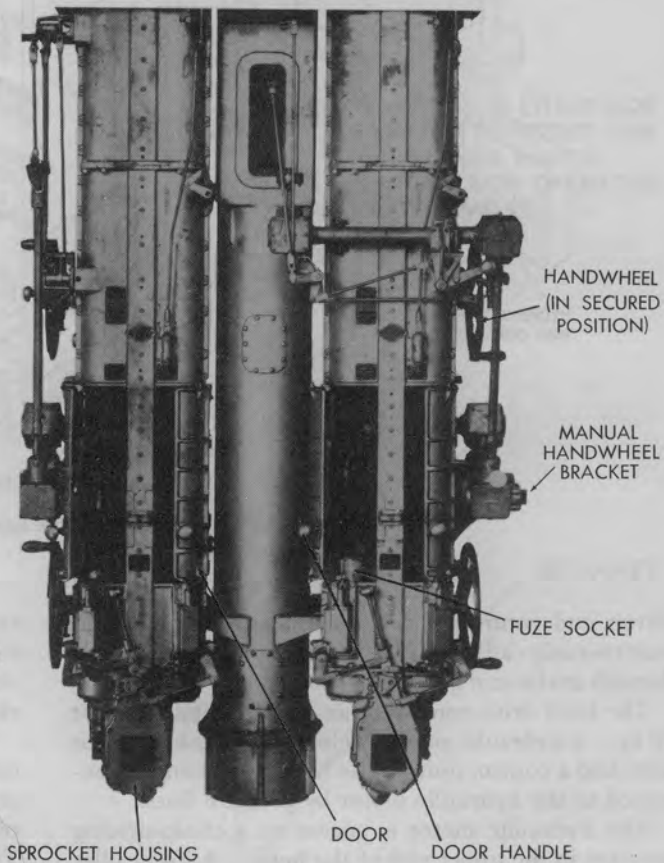


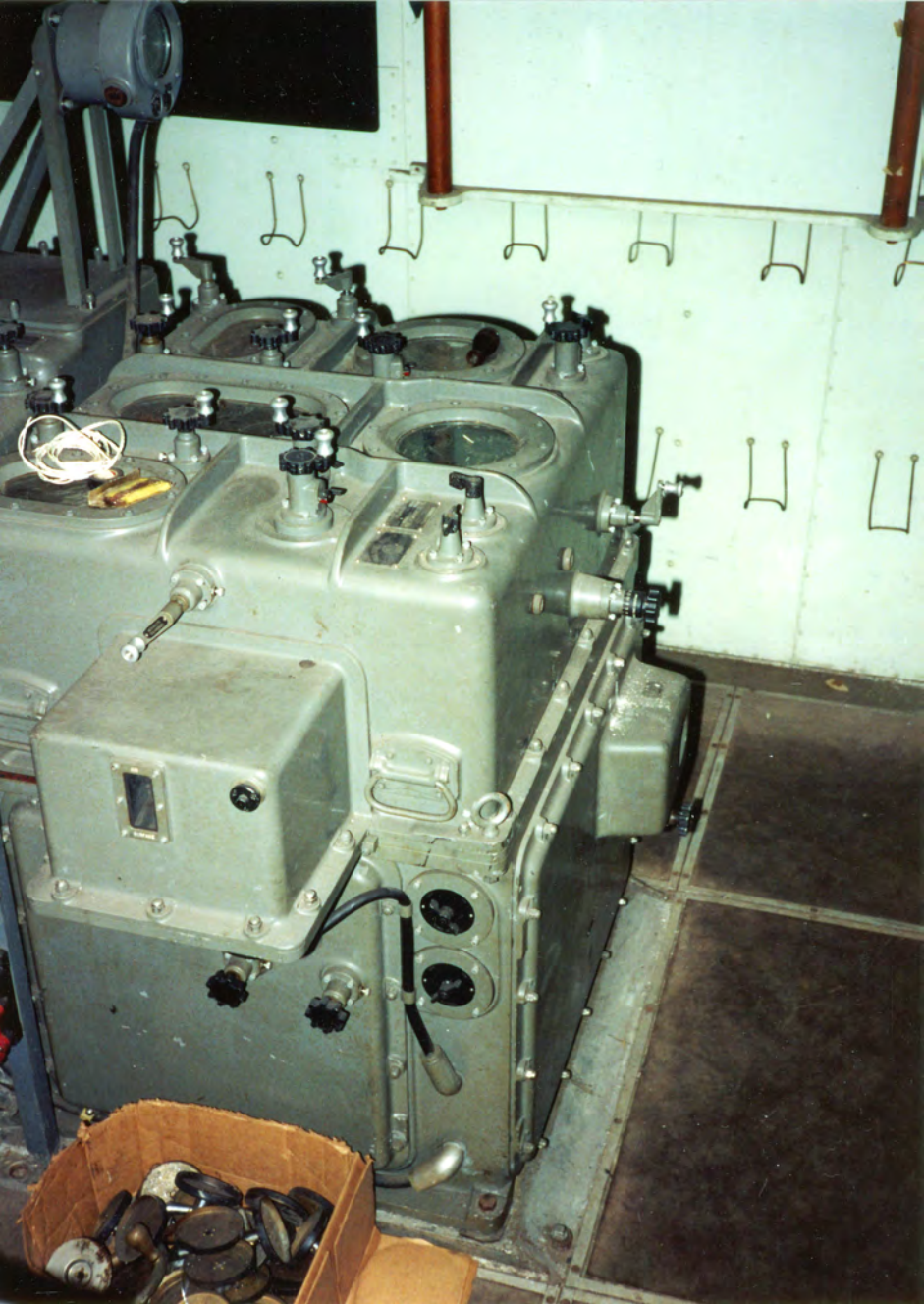


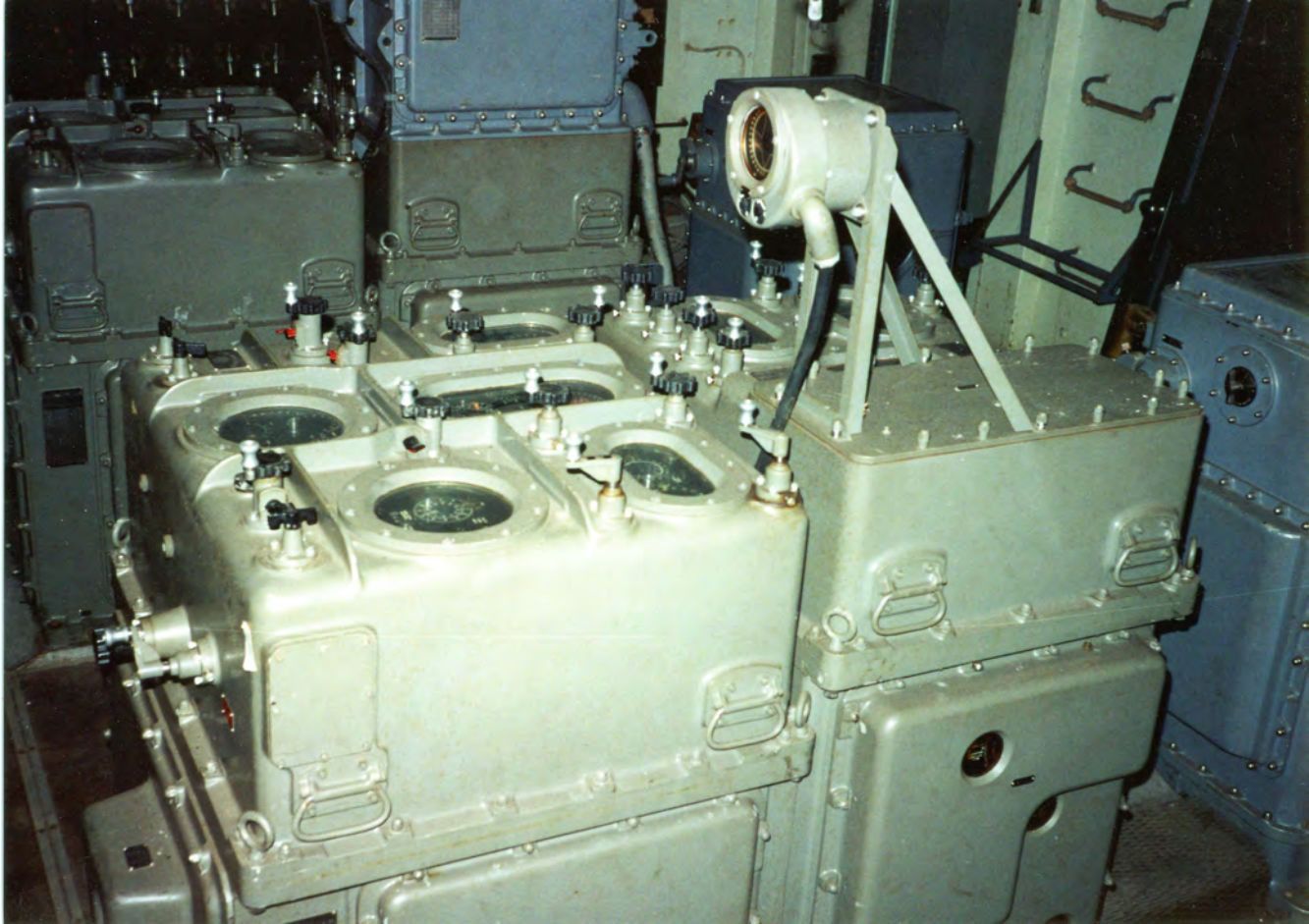
UPPER SECTION



LOWER SECTION









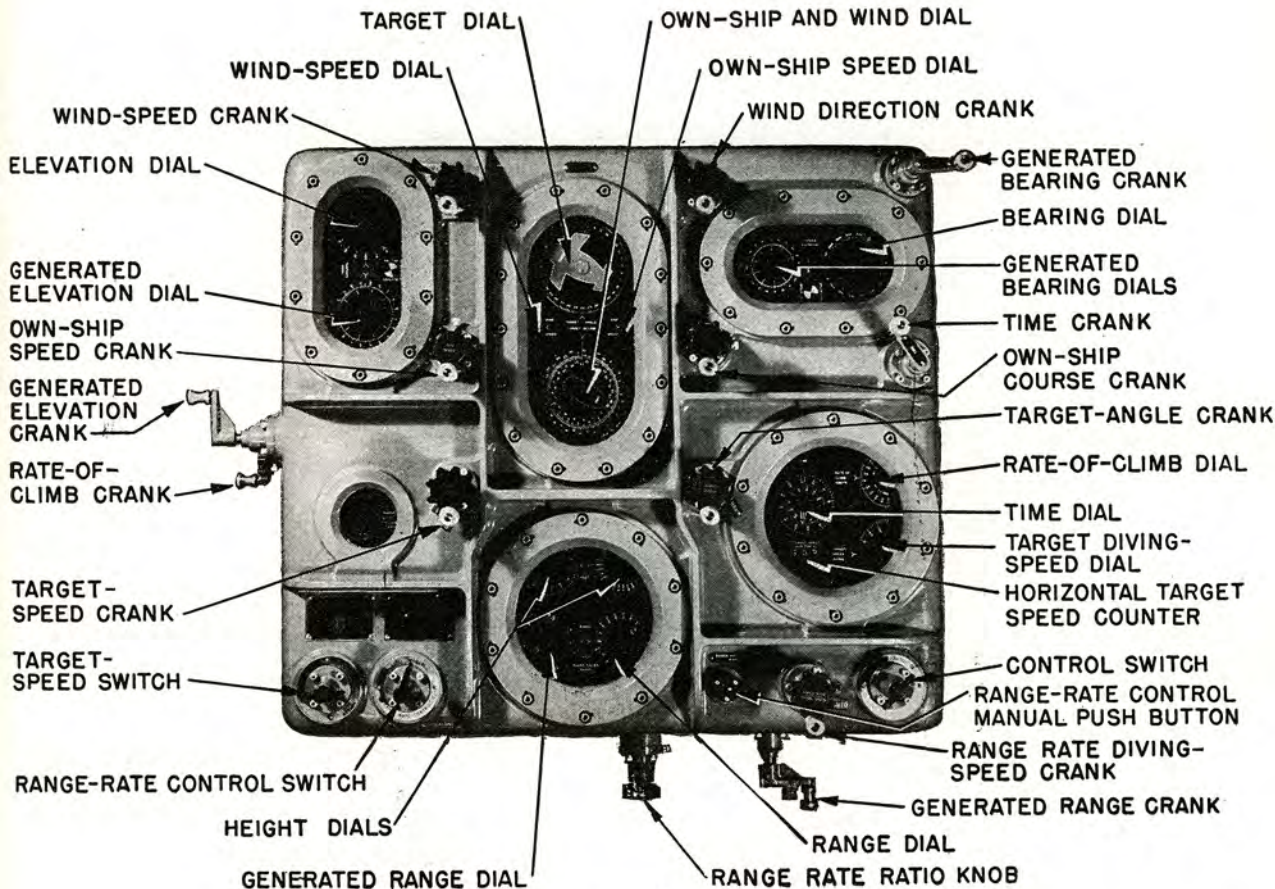
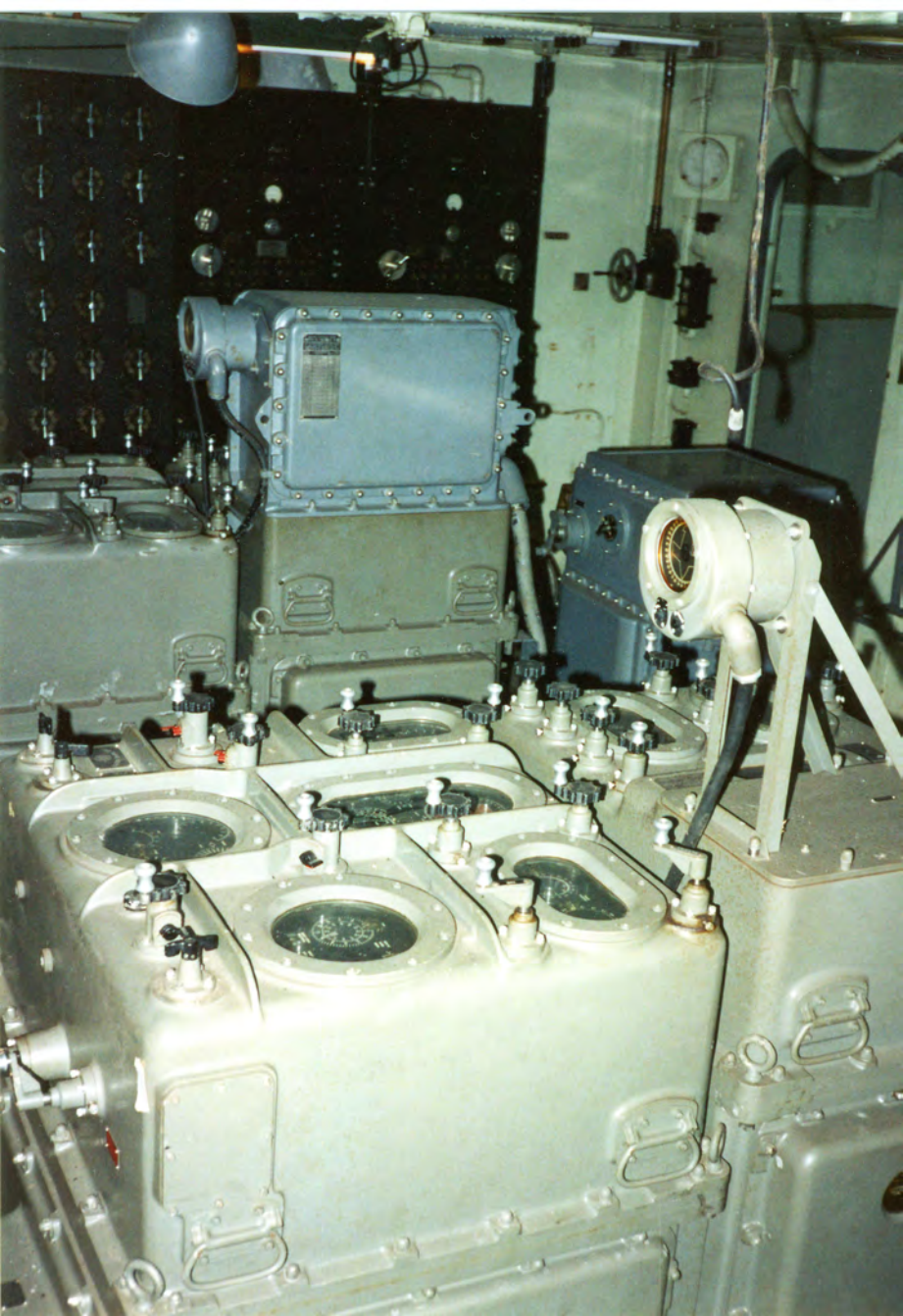
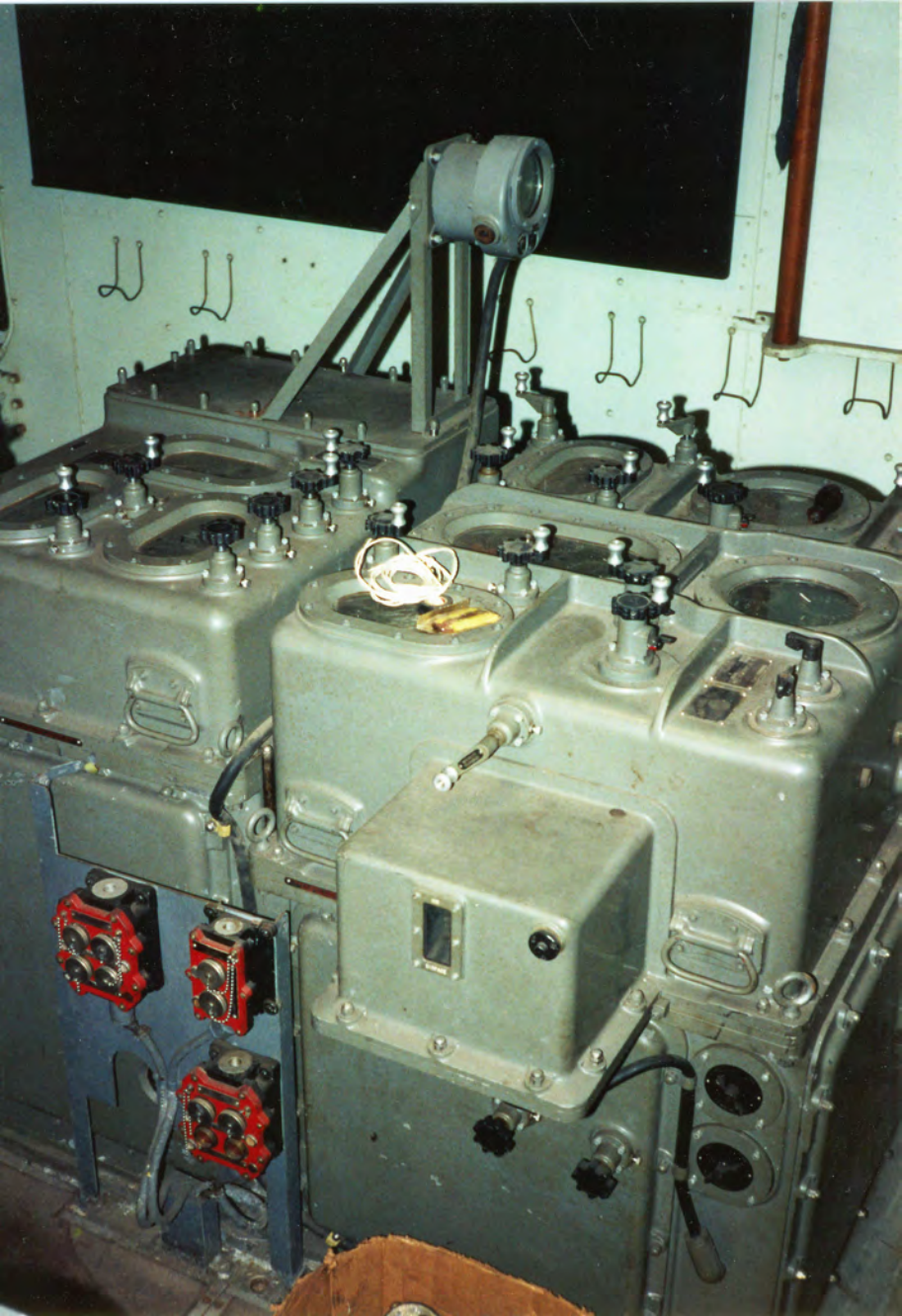
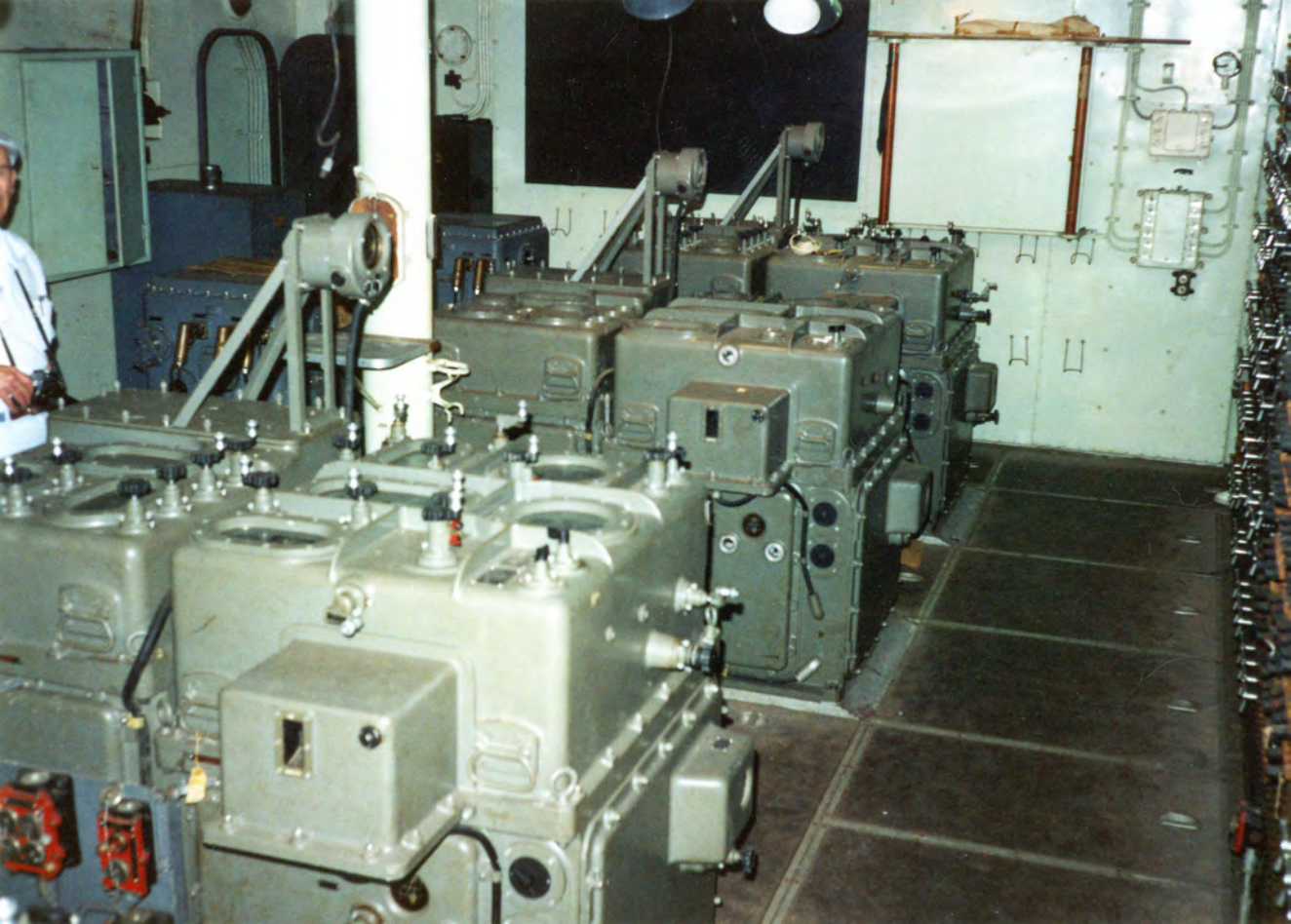


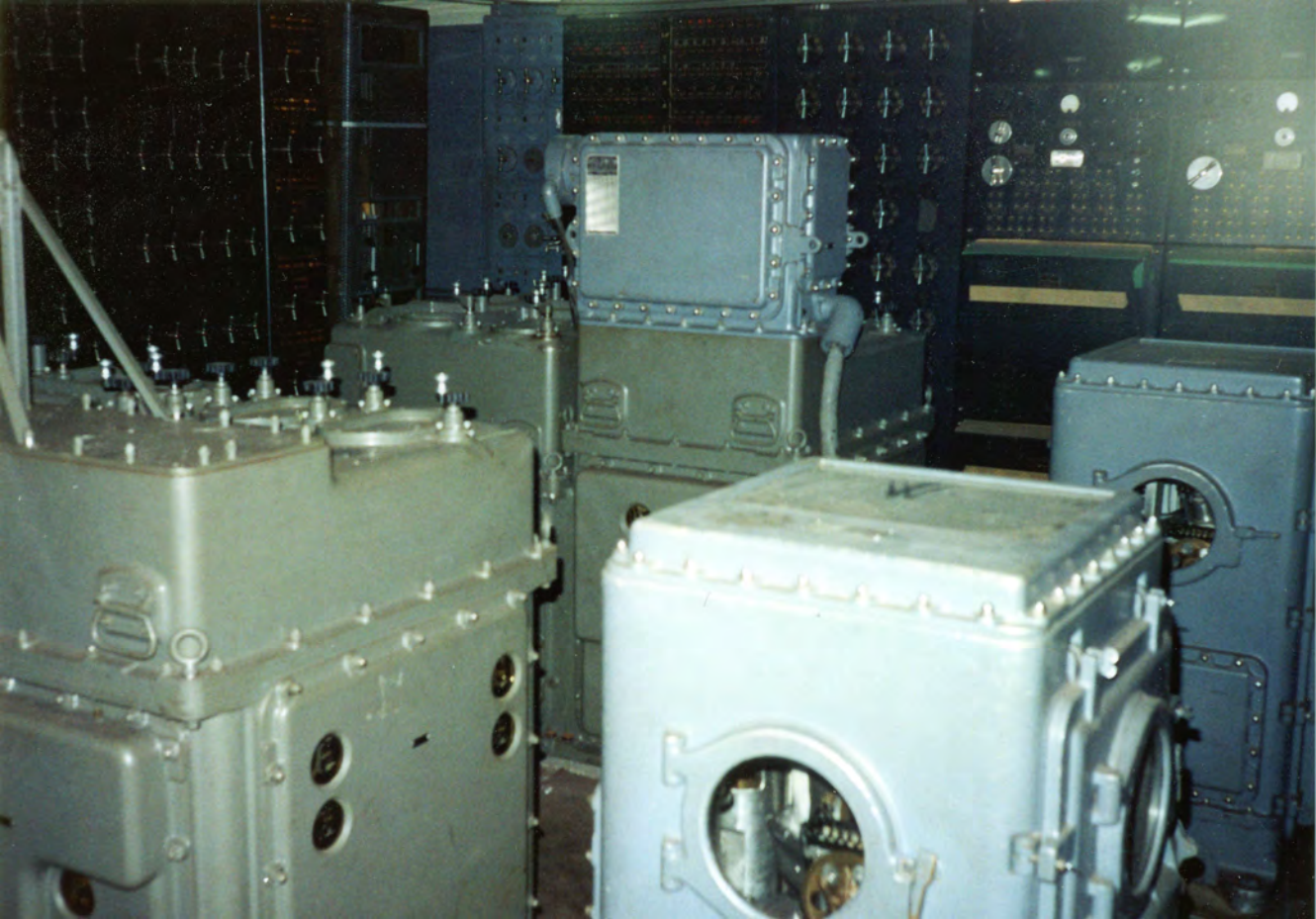
FIGURE 17D2. Control section, Mark 1 computer; top view.

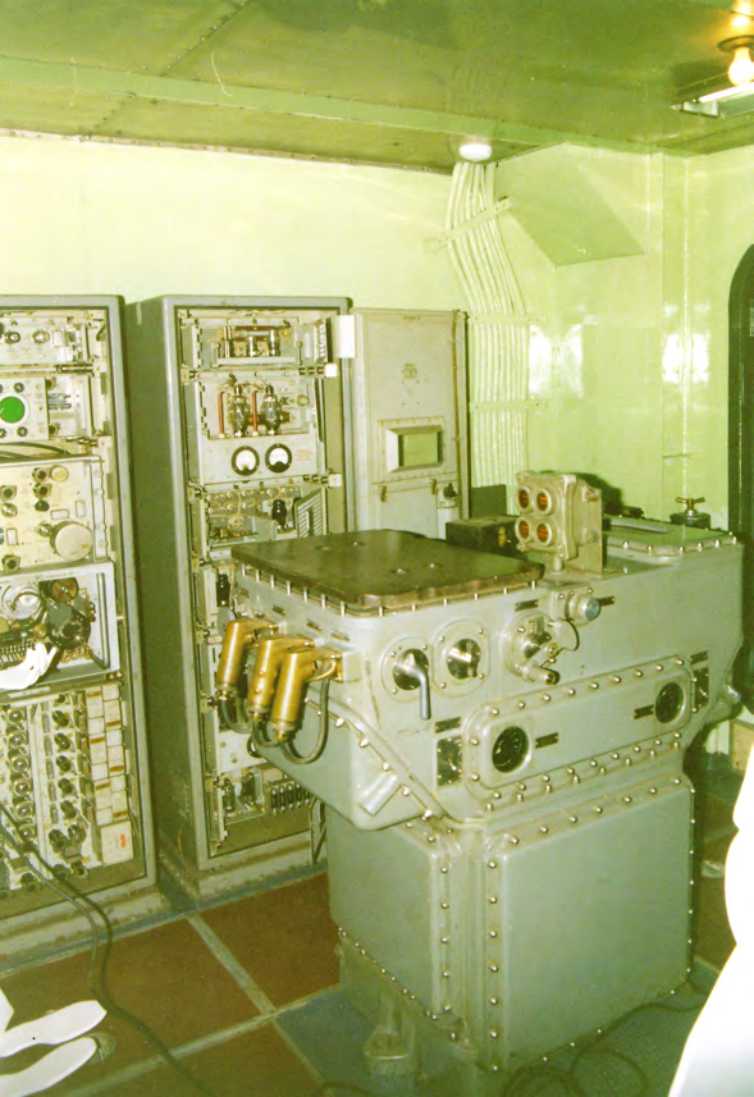


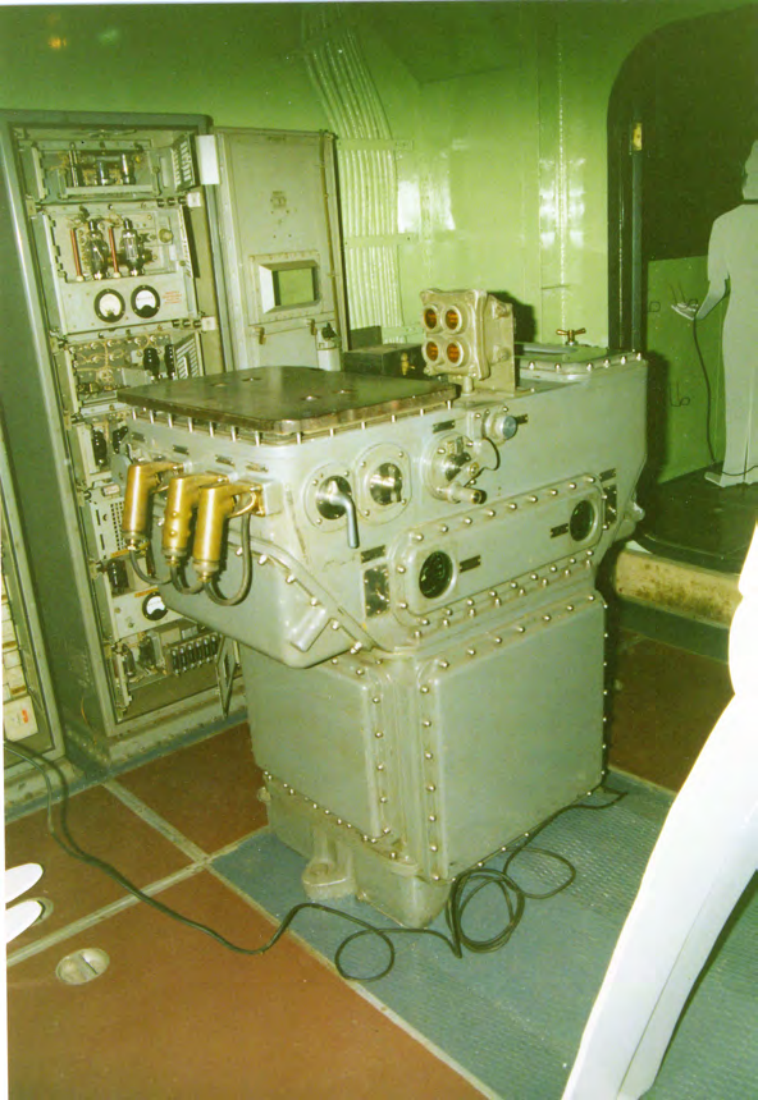




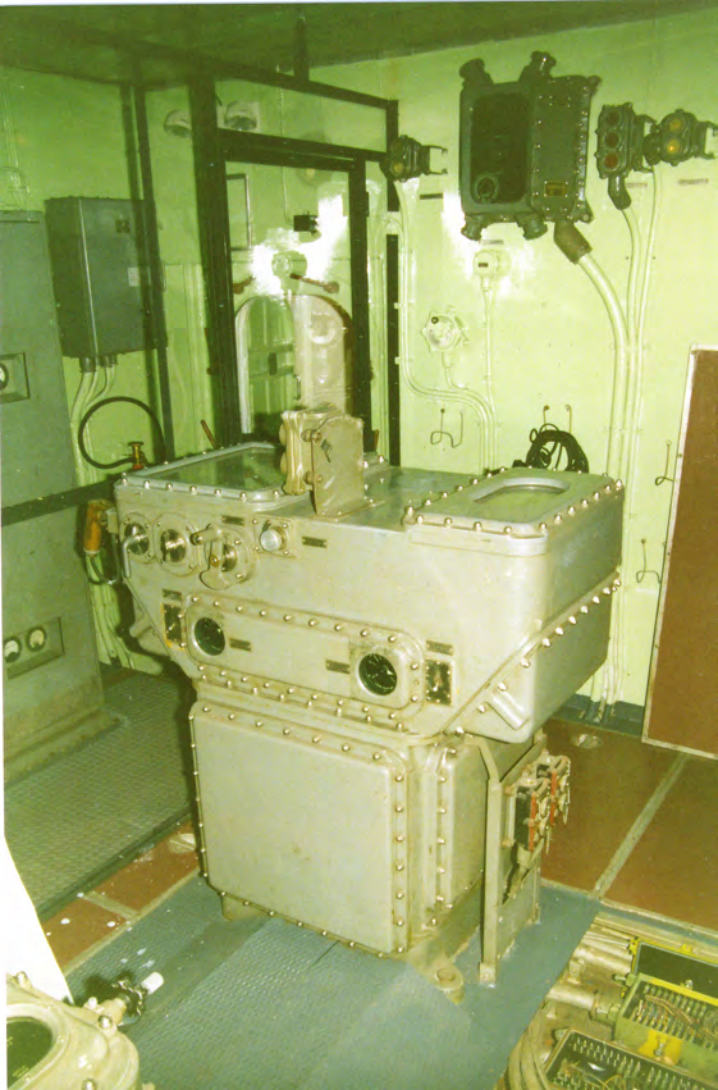


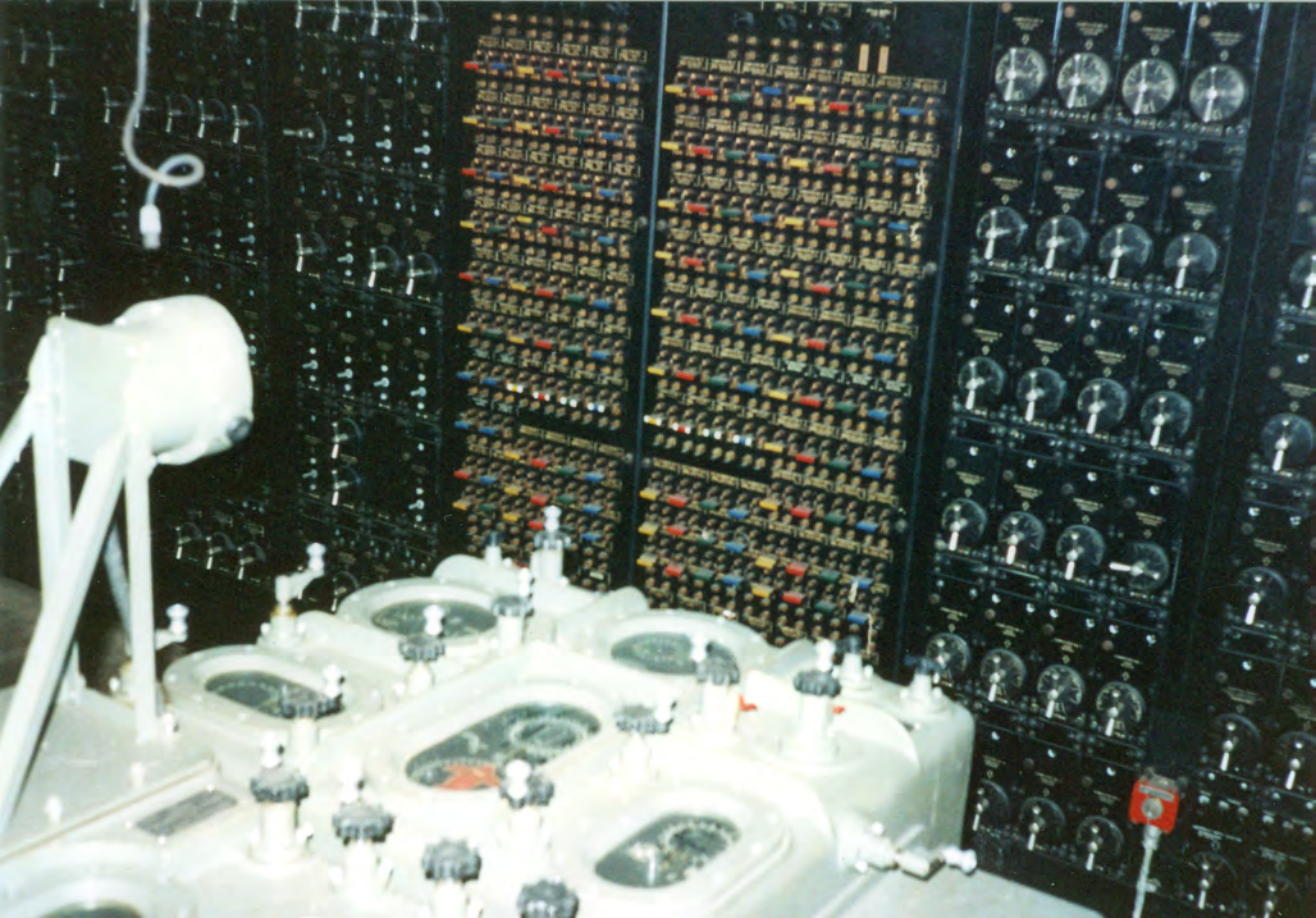




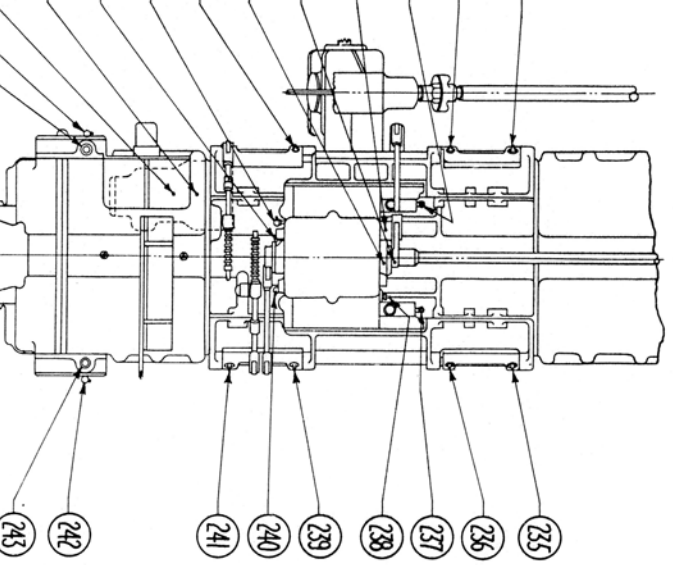
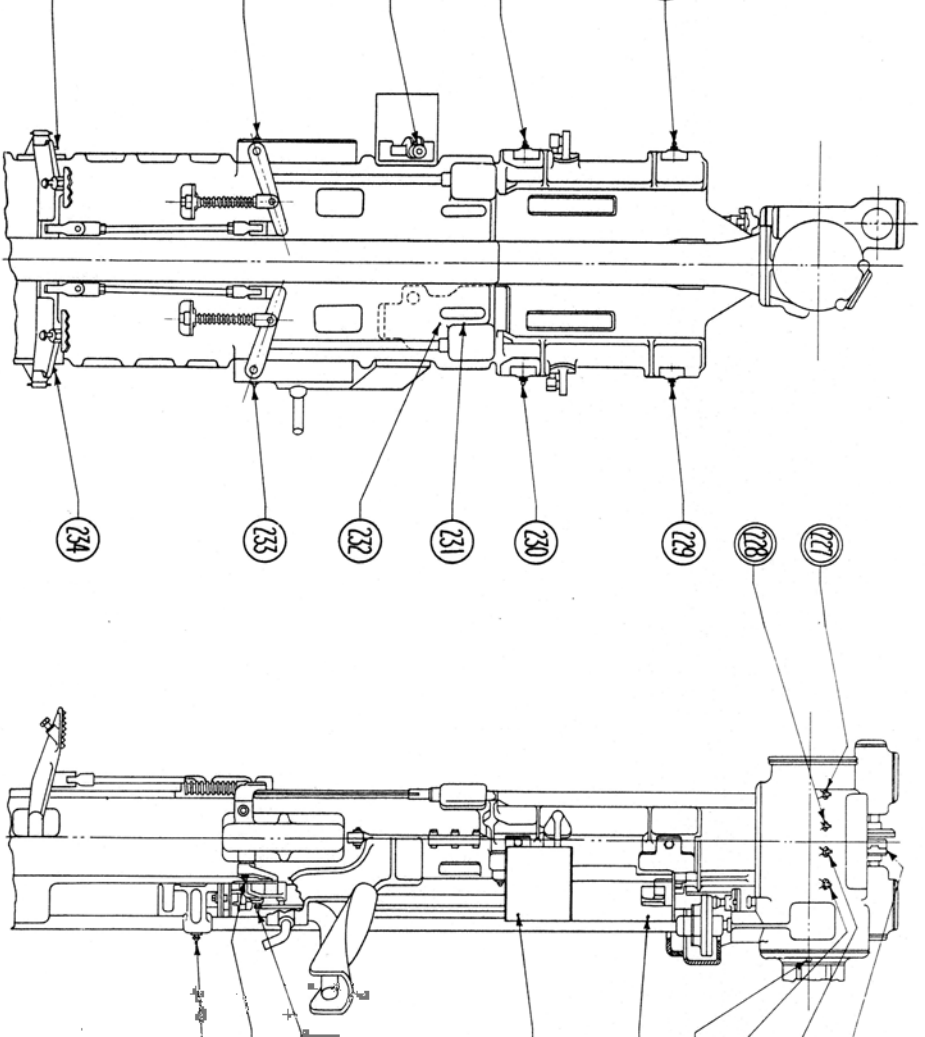




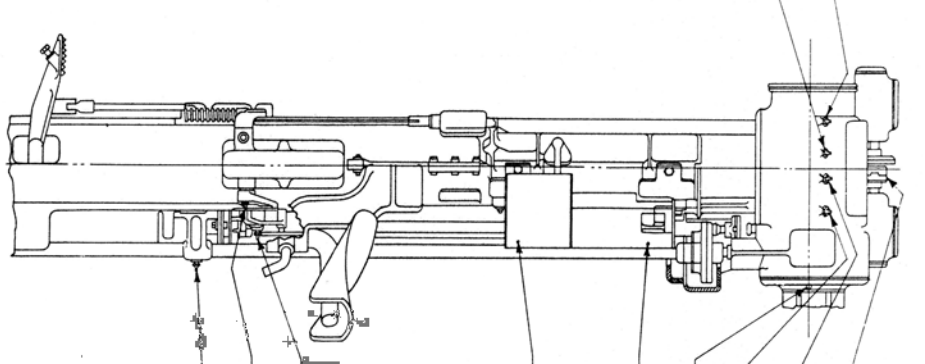




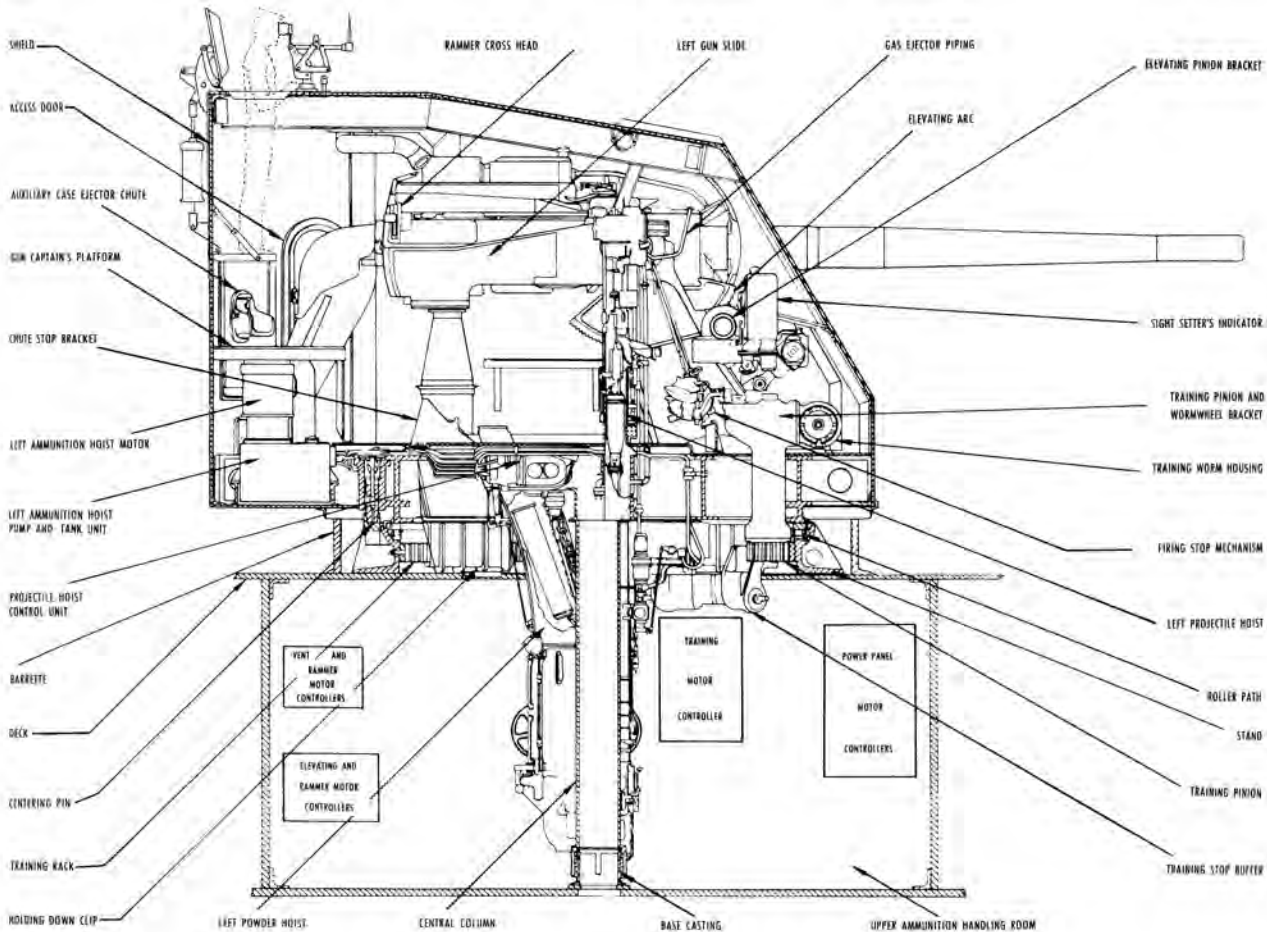


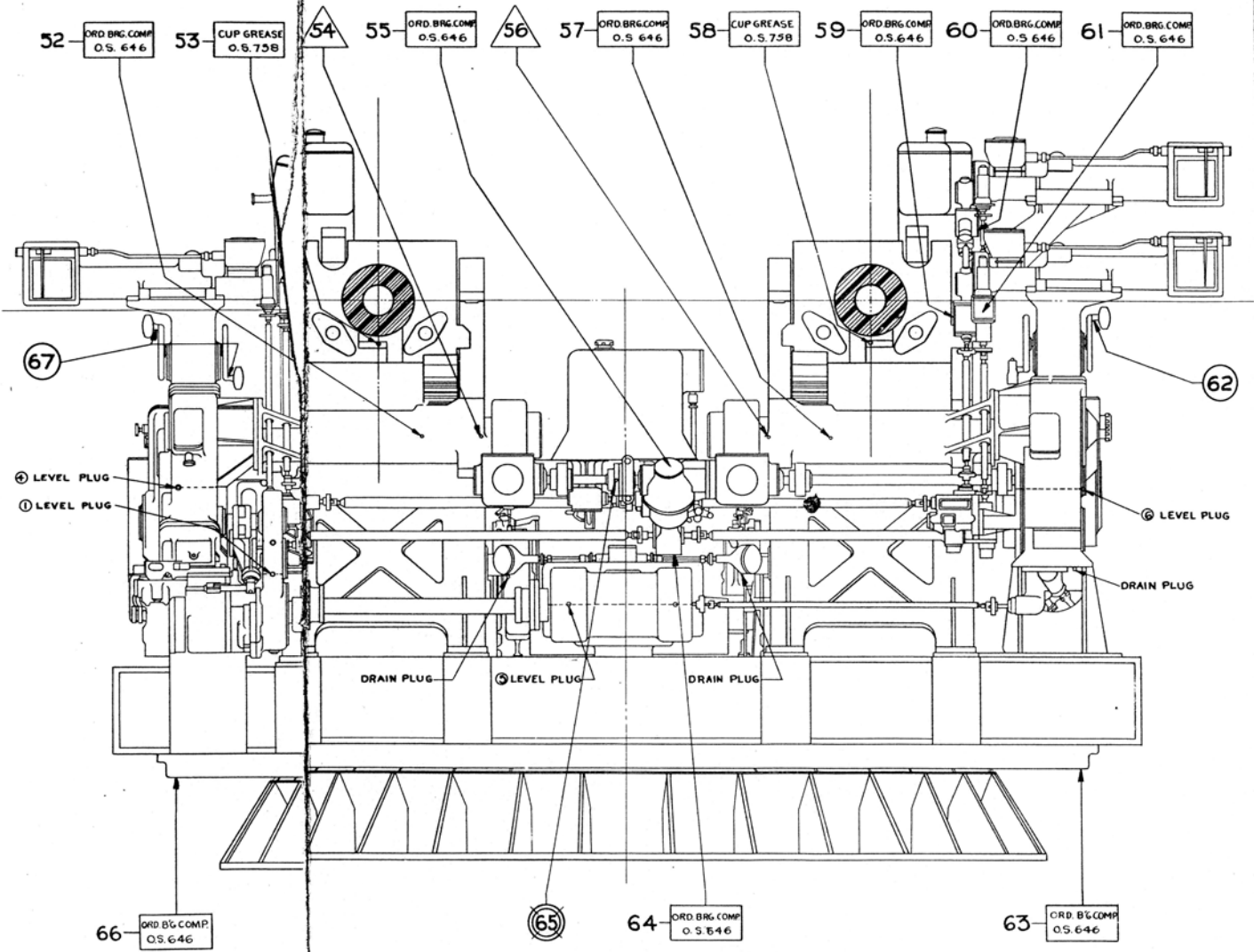


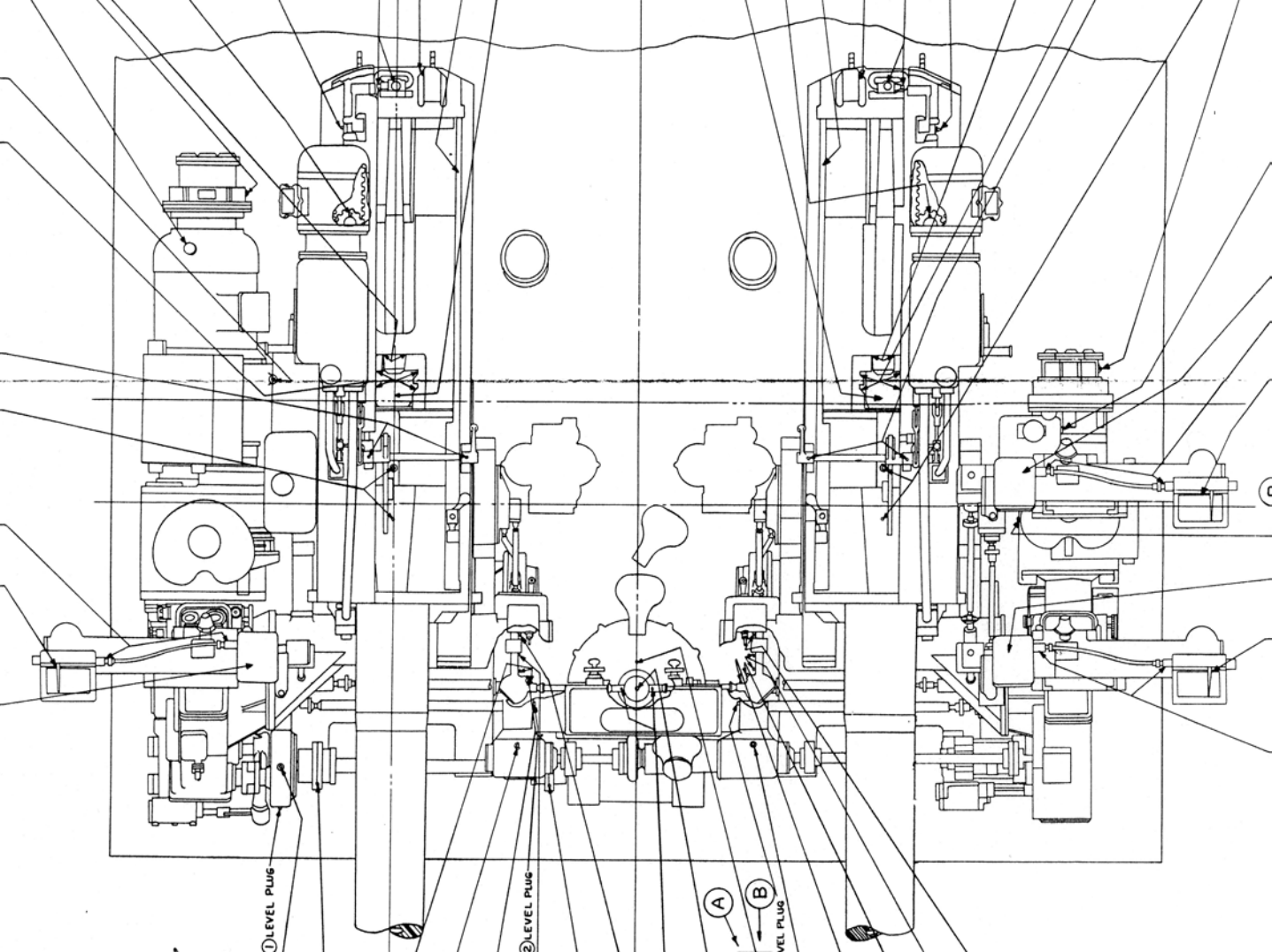
REAR VIEW OF LEFT  
HAND HOIST



RIGHT SIDE OF LEFT  
HAND HOIST







TERMINAL BLOCK  
ACCESS COVER

HOUSING

DEFLECTION  
DIALS

LIGHTWELL

SIGHT ANGLE  
DIALS

RANGE  
DIAL

DEFLECTION  
MILS

SIGHT ANGLE

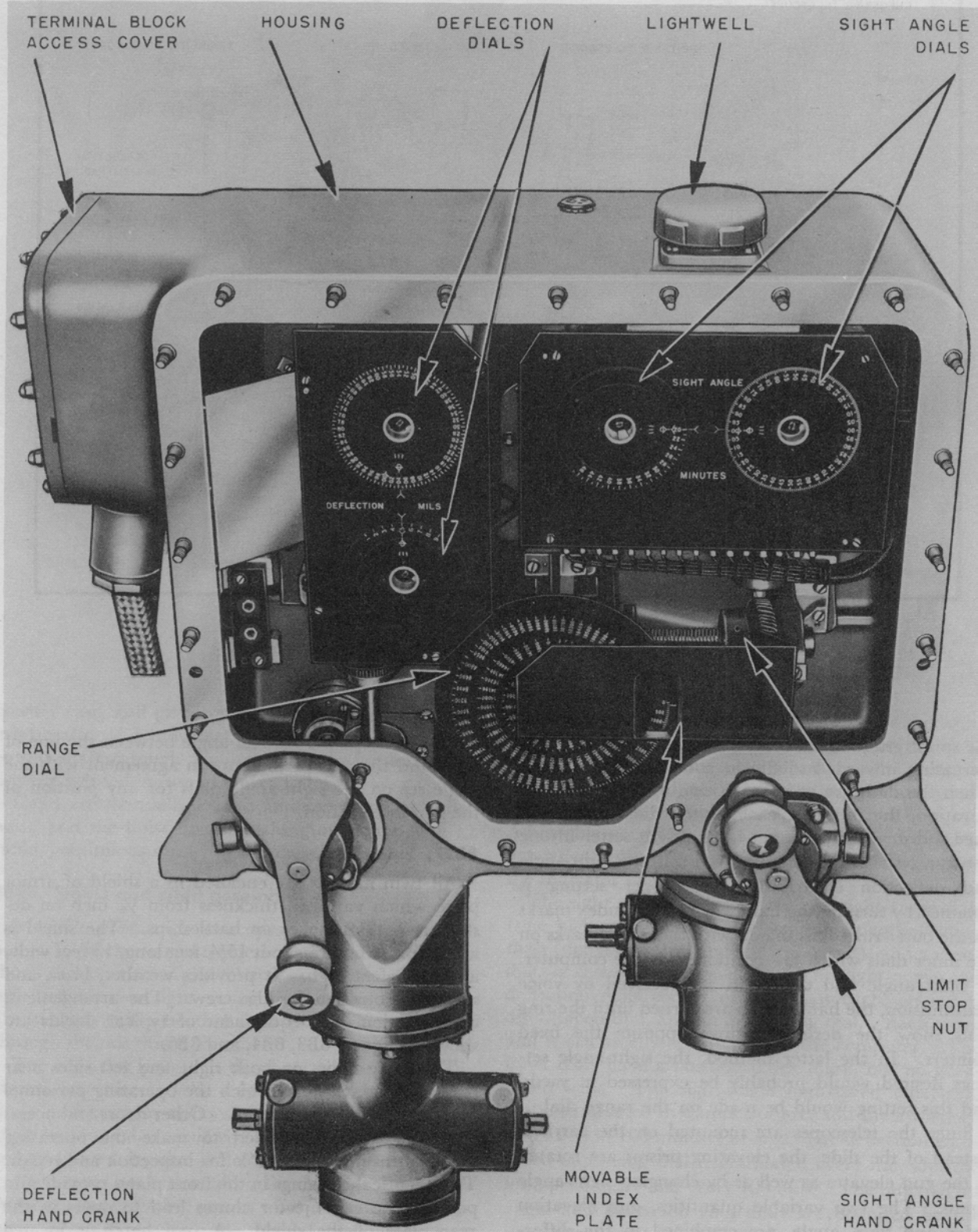
MINUTES

DEFLECTION  
HAND CRANK

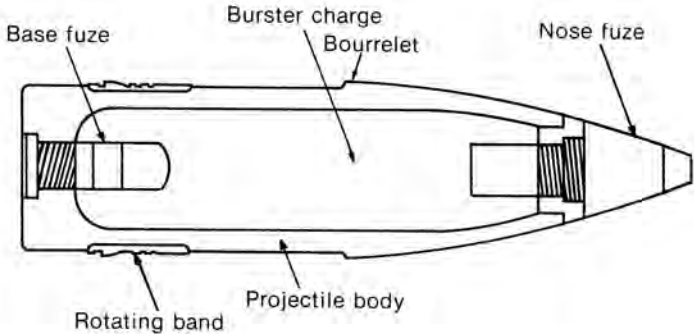
MOVABLE  
INDEX  
PLATE

LIMIT  
STOP  
NUT

SIGHT ANGLE  
HAND CRANK







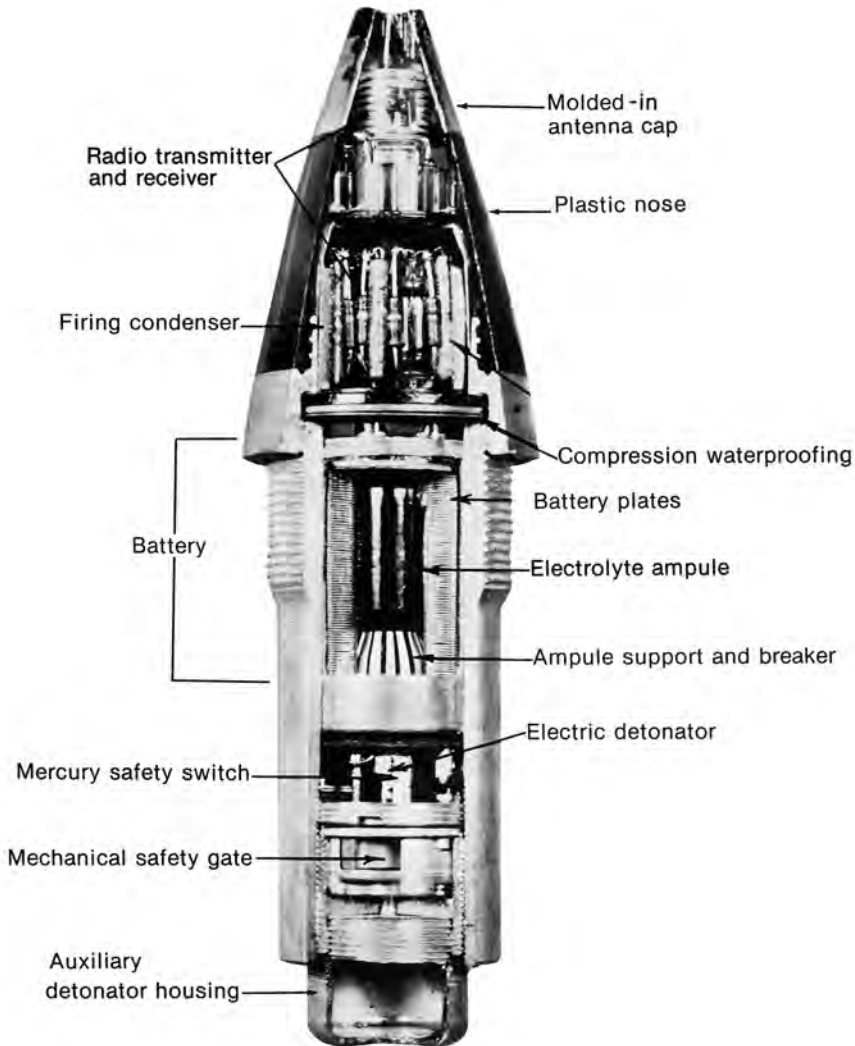
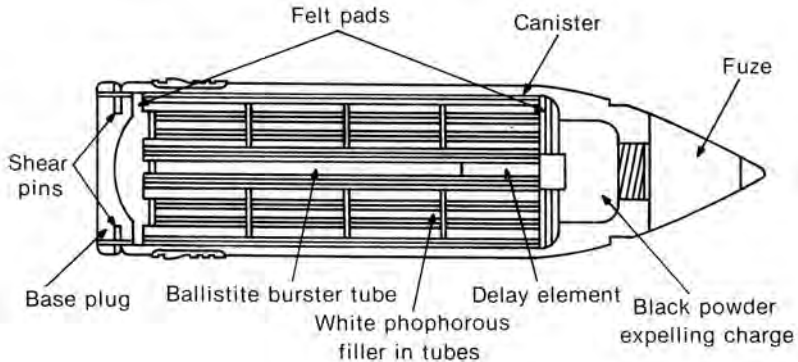
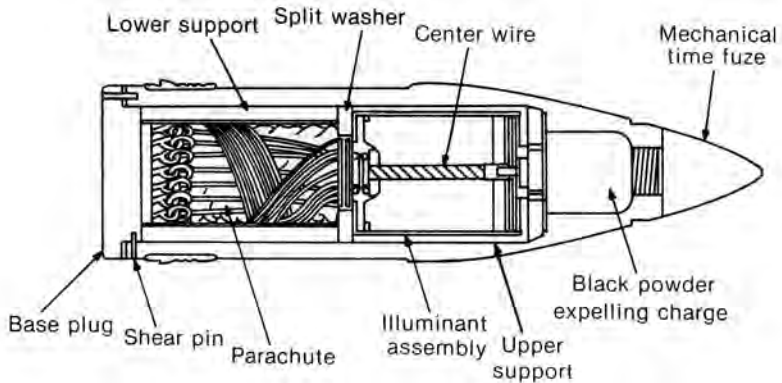
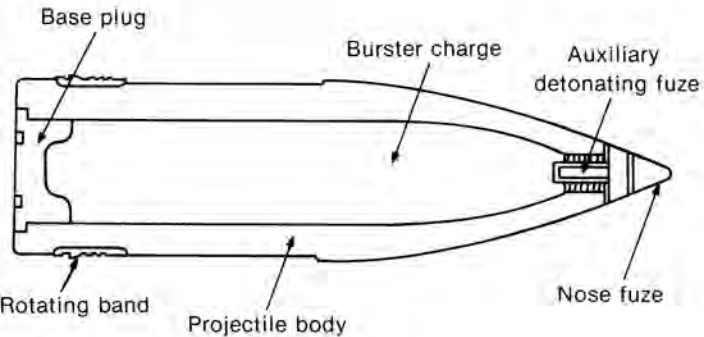
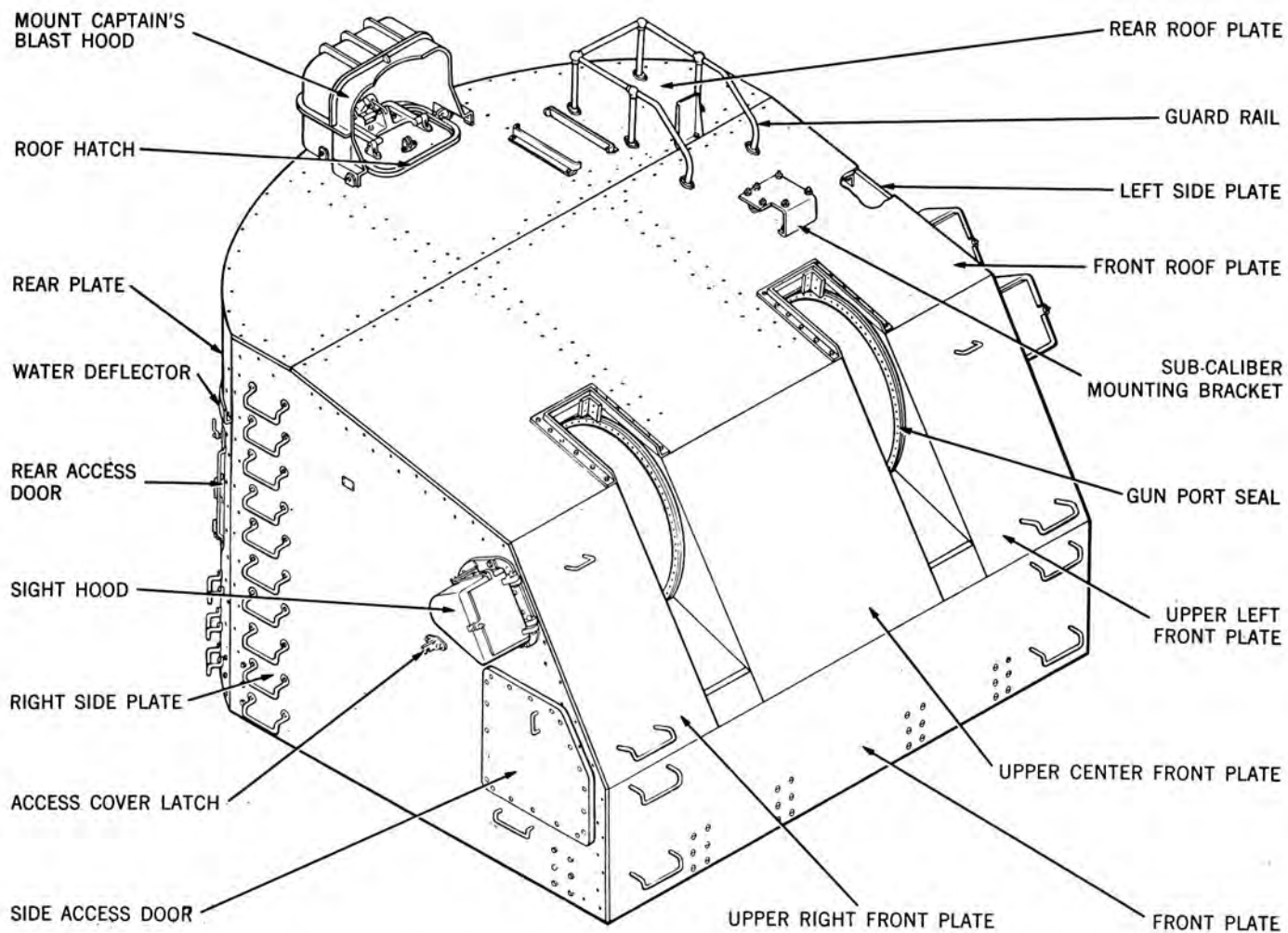


Fig. 15-6. Cross-section of a depth charge (not to scale). (Courtesy of the U.S. Navy.)

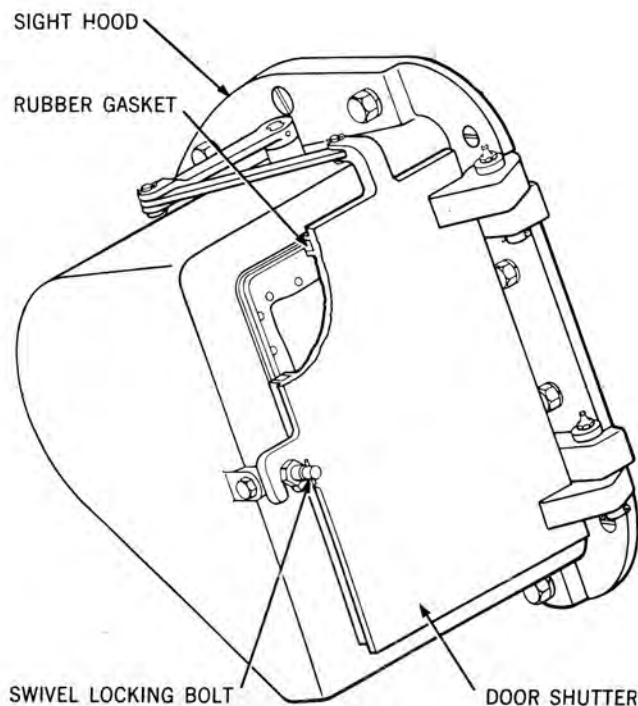
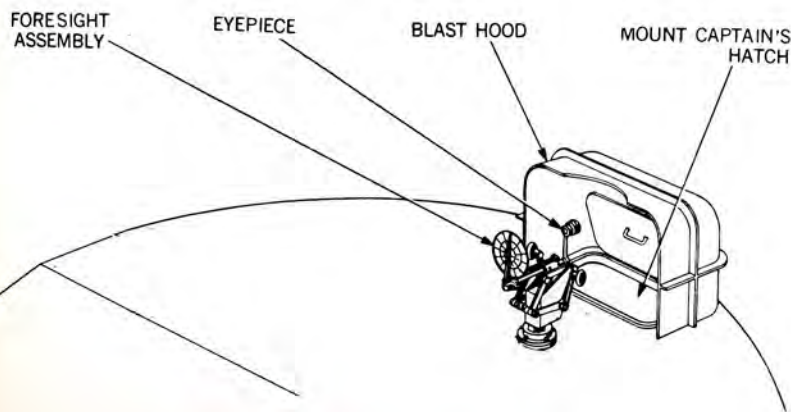


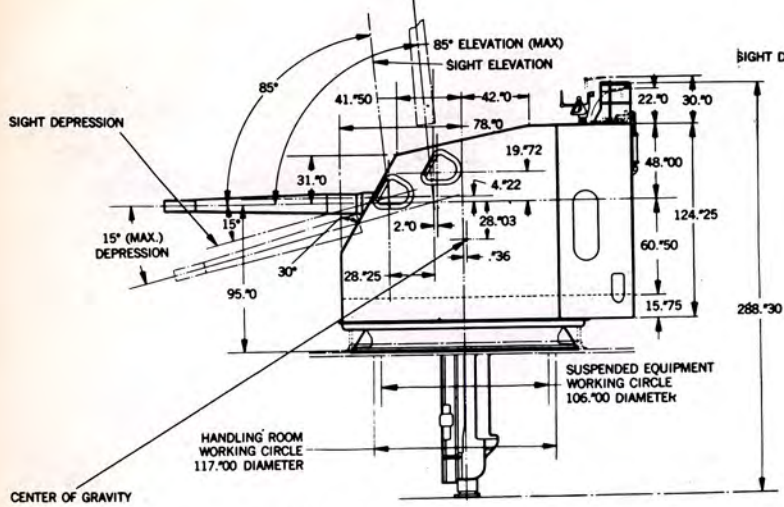




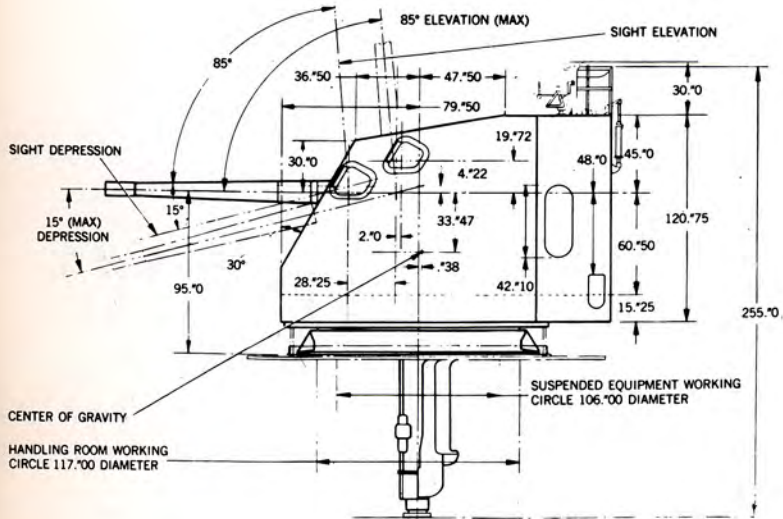
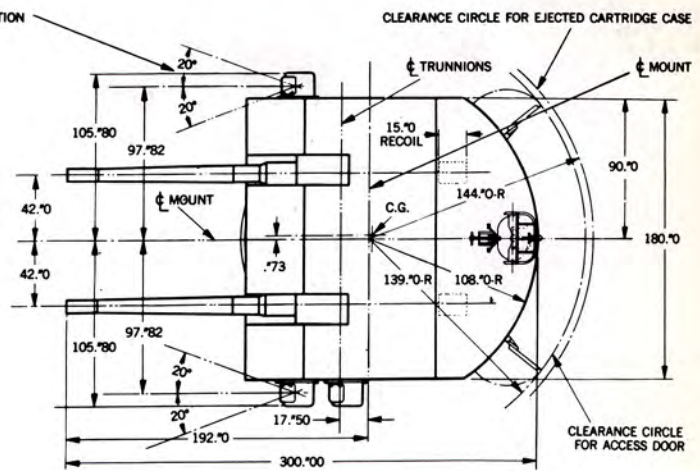


**5-Inch Shield Mk 31. Right Front View. General Arrangement. Exterior.**

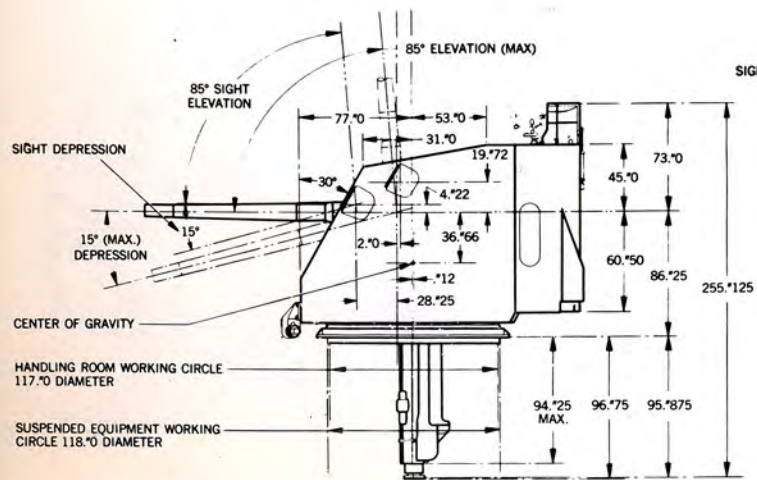
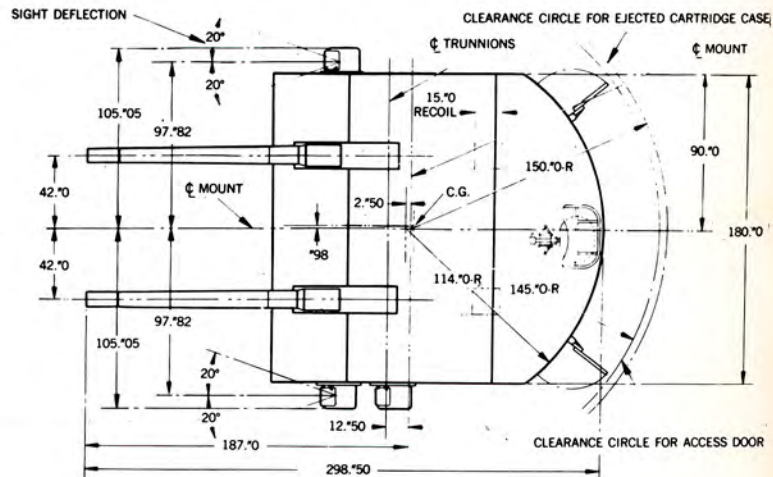




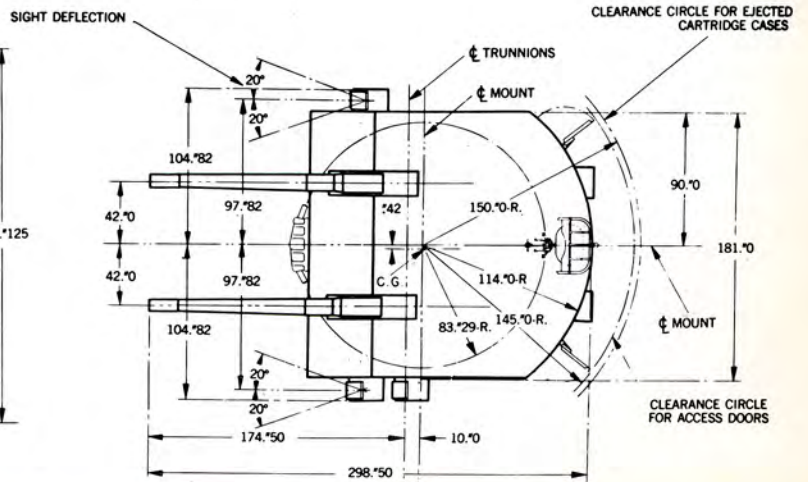
5-inch Mount Mk 28 Mods. Working Circle.

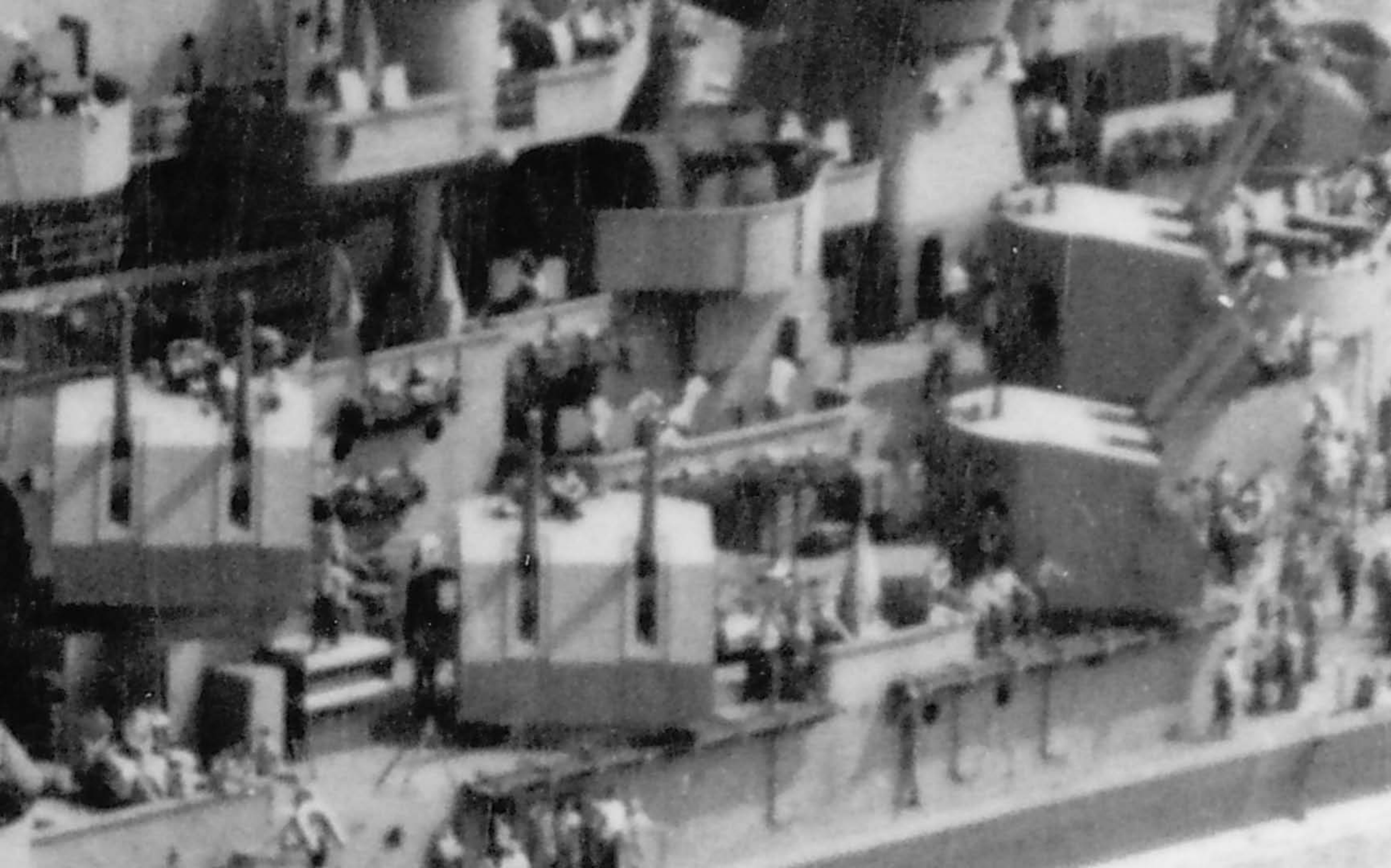


5-inch Mount Mk 32 Mods. Working Circle.

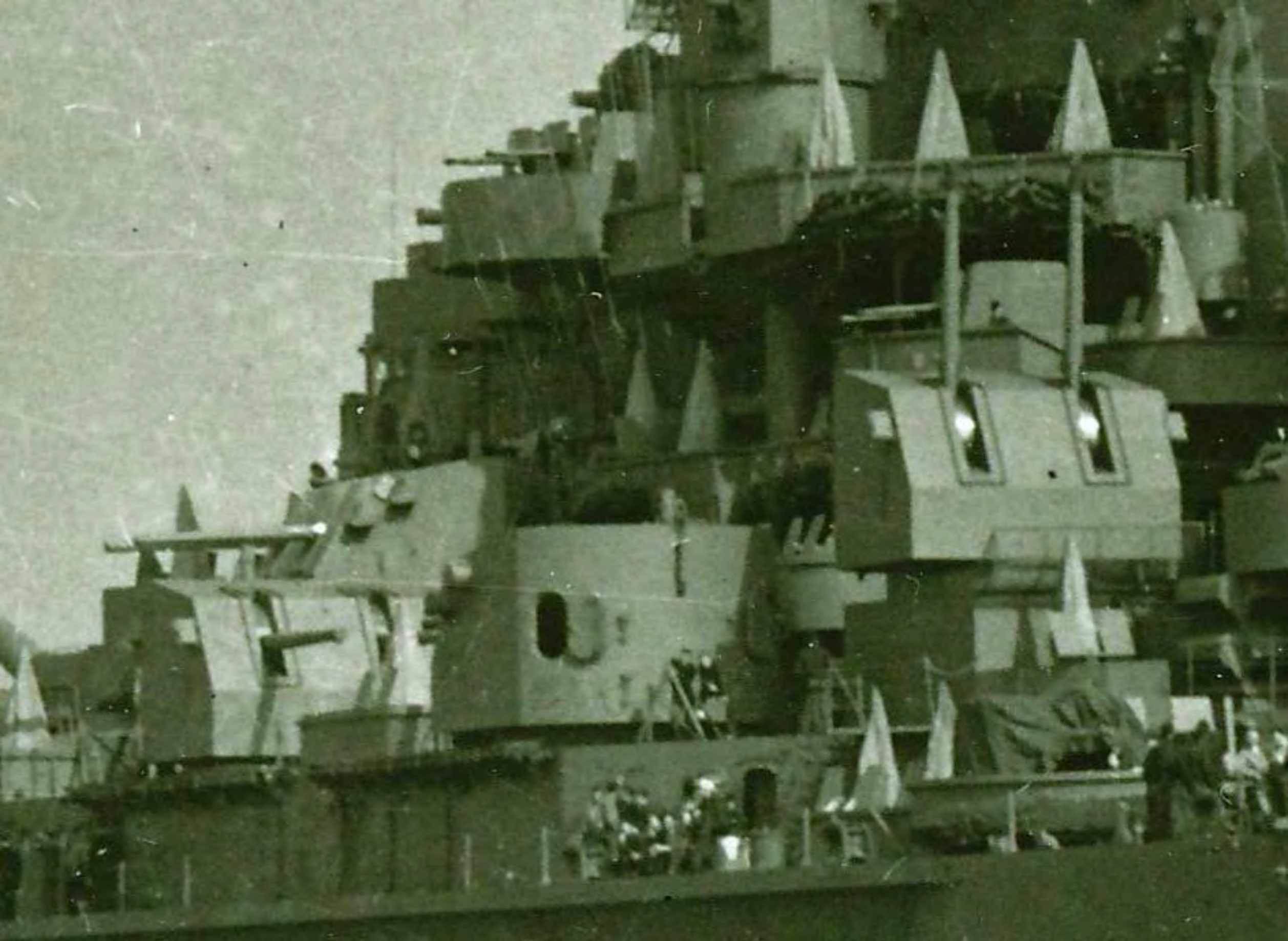


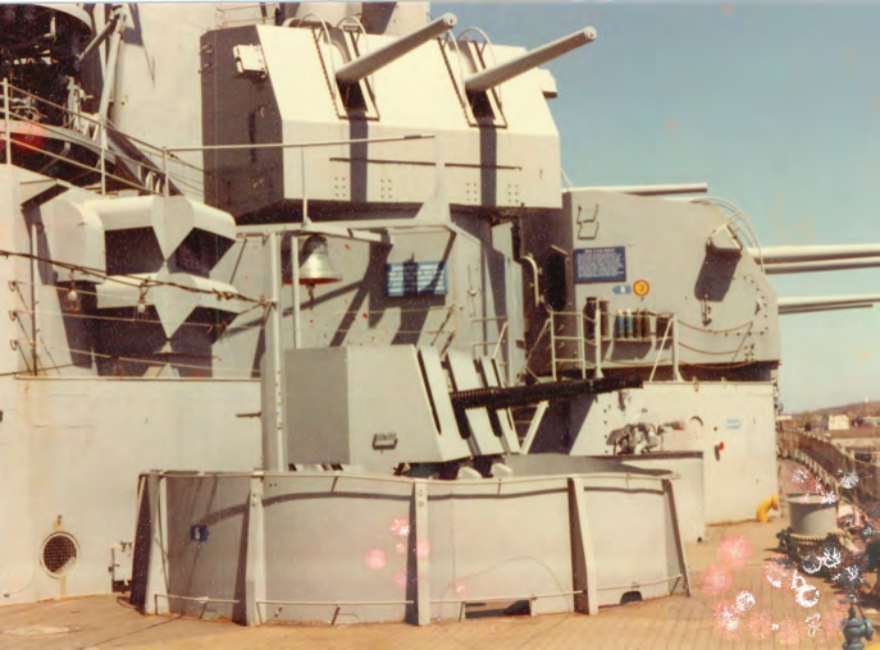
5-inch Mount Mk 38 Mods. Working Circle.













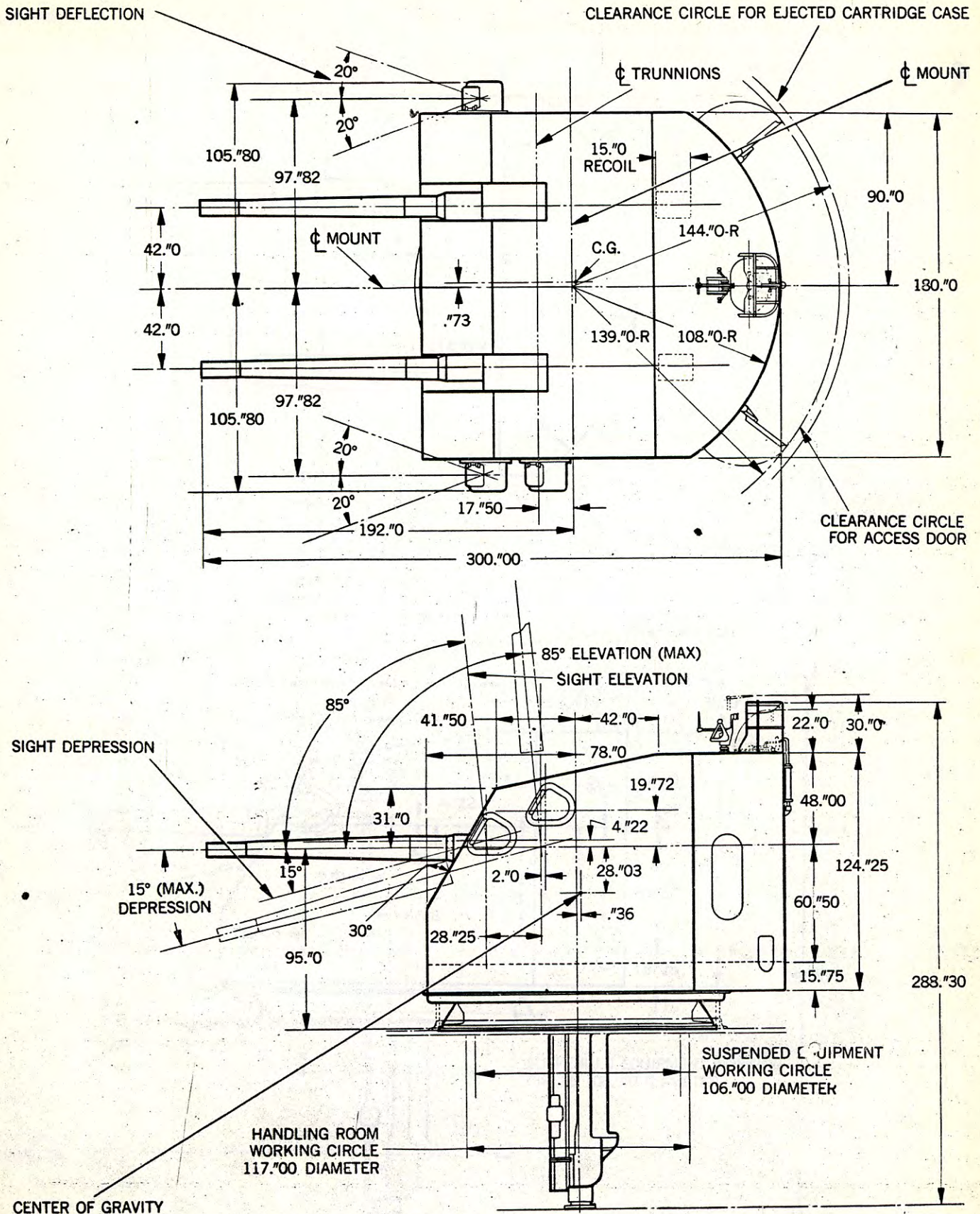
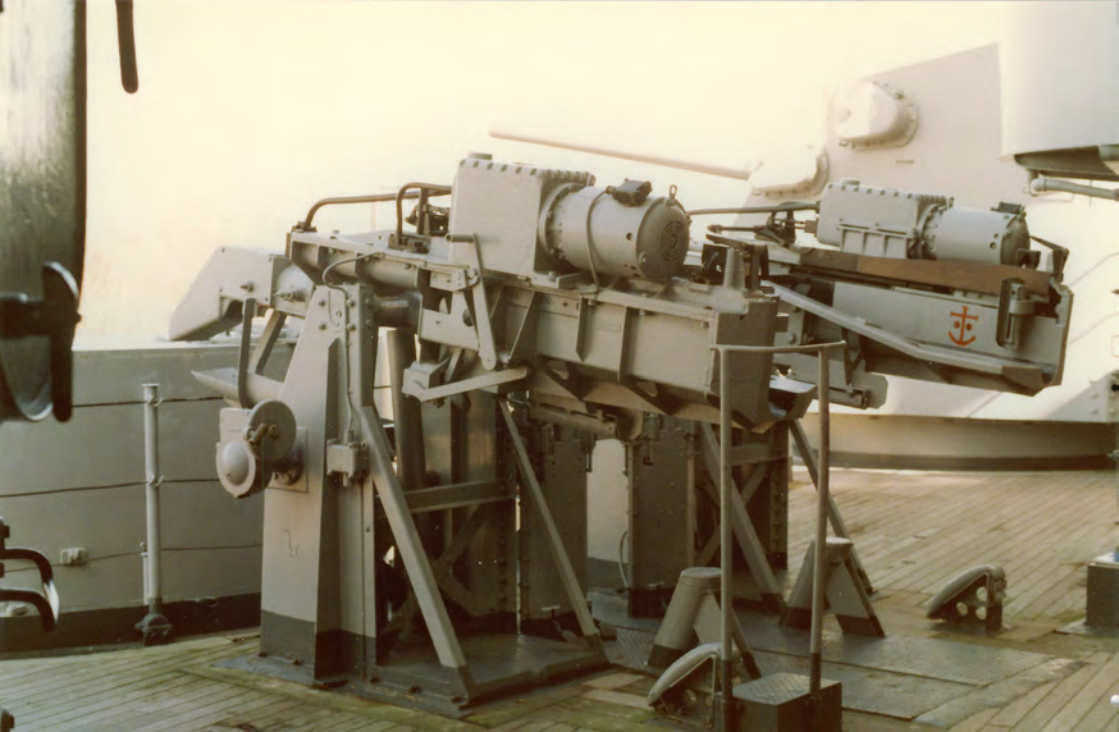
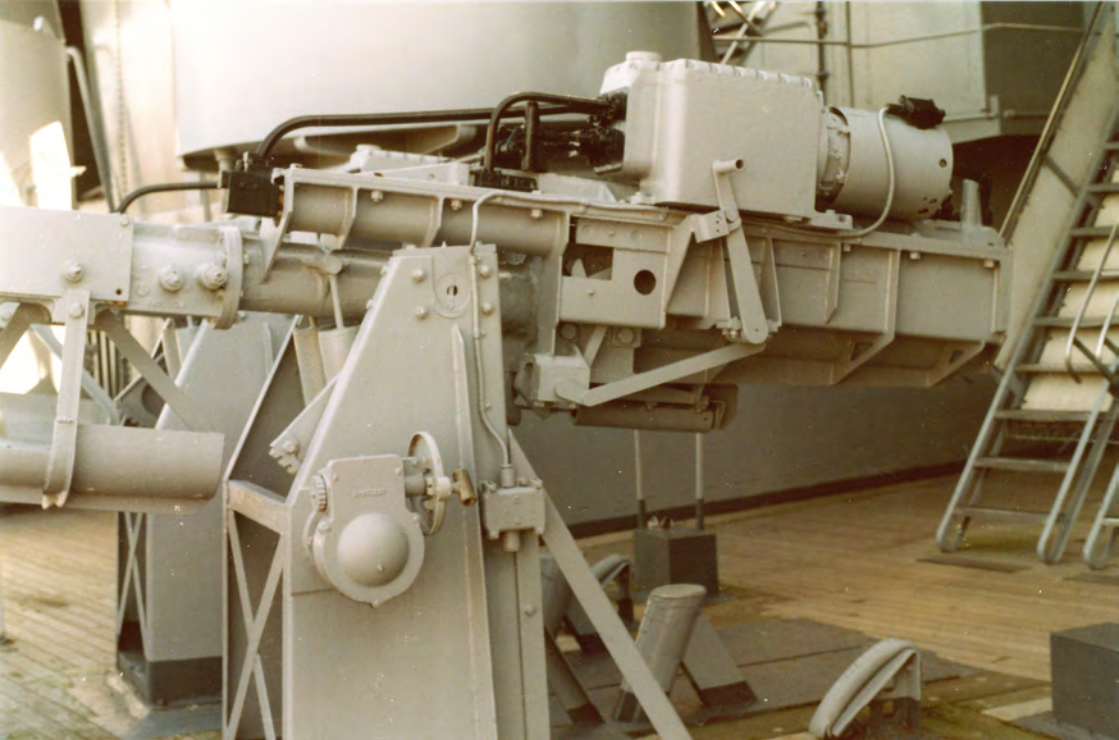
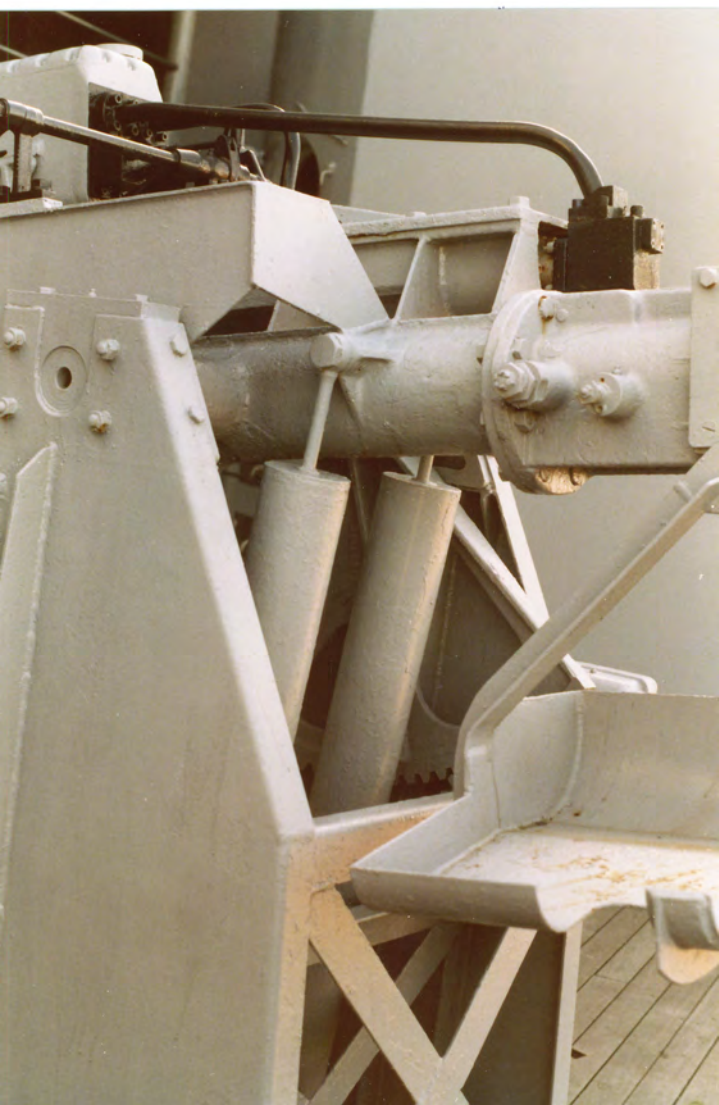


Figure 14. 5-inch Mount Mk 28 Mods. Working Circle.

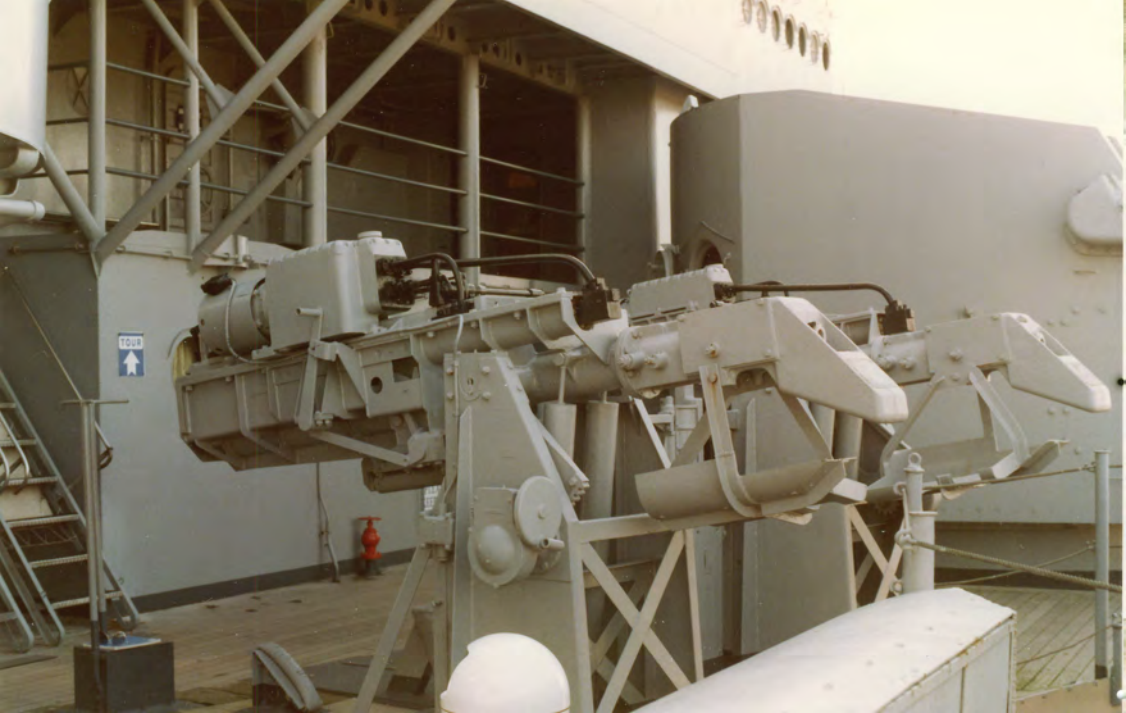




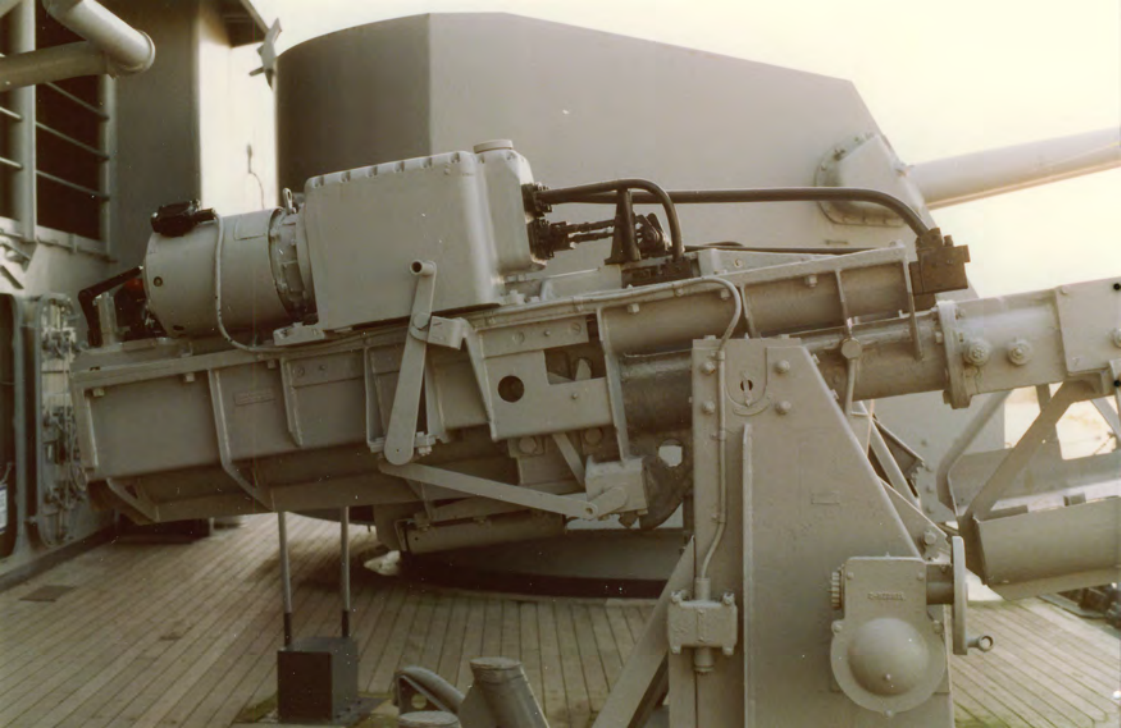


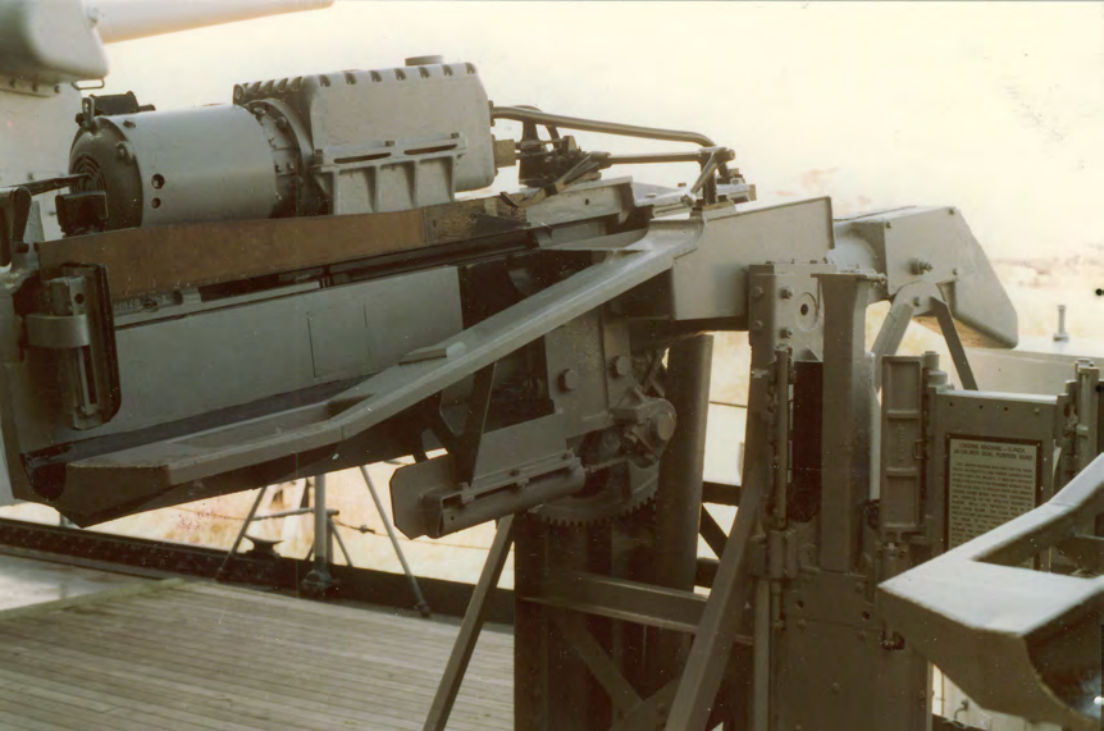






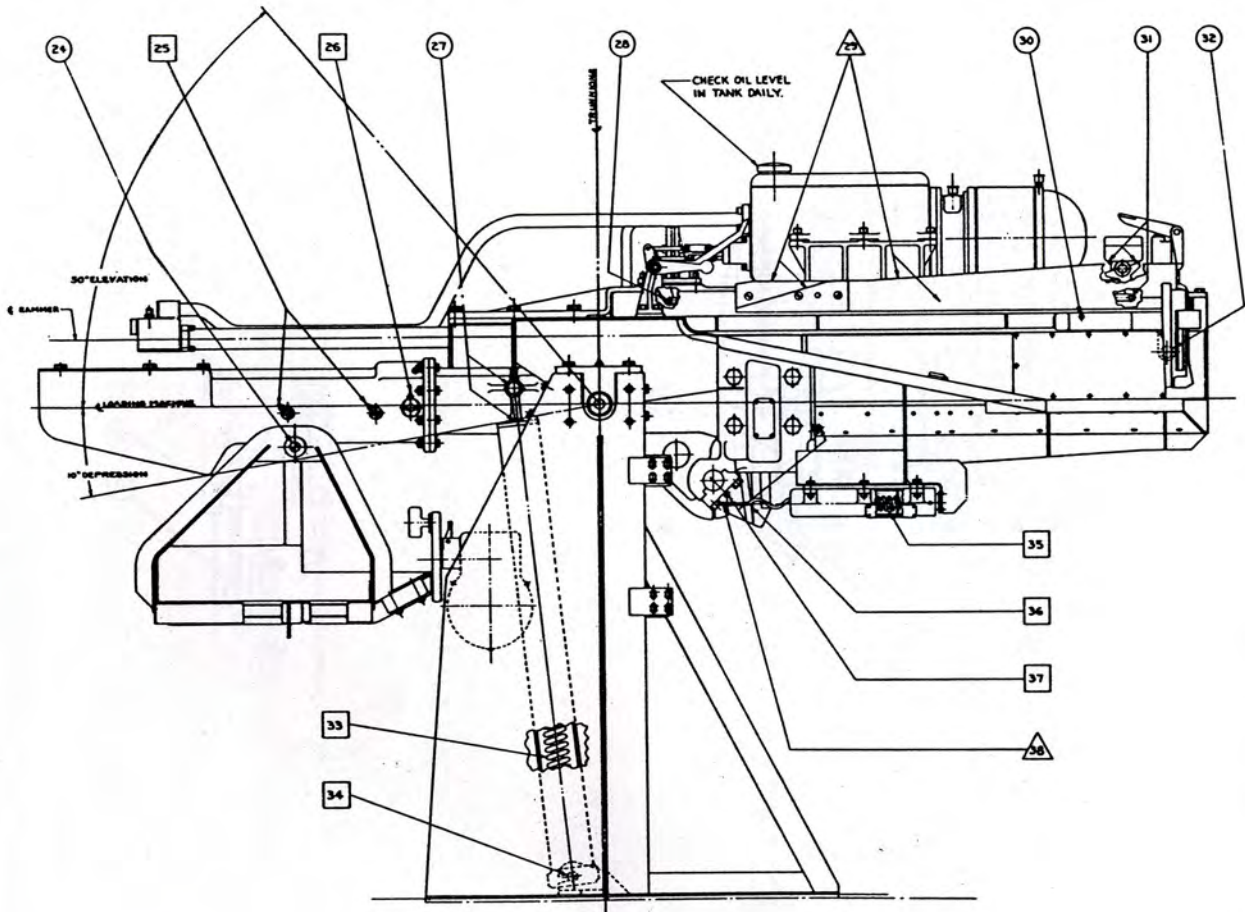
TOUR  
↑





SEARCHLIGHT - LAMP  
SEARCHLIGHT - POWER UNIT

SEARCHLIGHT - LAMP  
SEARCHLIGHT - POWER UNIT



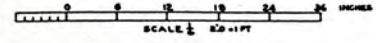
- DAILY**
- 29 CAM PLATE (RAMMER SYSTEM)
  - 36 BREECH BLOCK CAM
- WEEKLY**
- 24 PIVOT PIN (PROJECTILE TRAY)
  - 27 SPRING ROD (EQUILIBRATOR)
  - 26, 31 OPERATING LEVERS (RAMMER SYSTEM)
  - 30, 32 CROSS HEAD (RAMMER SYSTEM)
  - 37 BREECH BLOCK OPERATING MECHANISM
  - 38 OPERATING SPRING CHAIN (BREECH BLOCK MECHANISM)
- MONTHLY**
- 25 GUIDES (PROJECTILE DEFLECTOR)
  - 26 BRAKE (PROJECTILE DEFLECTOR)
  - 34 CYLINDER TRUNNION (EQUILIBRATOR)
- SEMI-ANNUALLY**
- 33 SPRING (EQUILIBRATOR)
  - 35 OPERATING SPRING (BREECH BLOCK MECHANISM)

NOTE:-  
 THE FREQUENCY OF LUBRICATION IS DEPENDENT UPON THE USE OF THE MECHANISM. THE SCHEDULE GIVEN IS REQUIRED WHEN THE OUTFIT IS USED DAILY. LUBRICATION MAY BE LESS FREQUENT FOR LESS FREQUENT USE OF THE OUTFIT, BUT IN NO CASE SHALL THE MAXIMUM PERIOD BETWEEN REGULAR INSPECTIONS OF THE PARTS FOR PROPER LUBRICATION, ON SHIPS IN COMMISSION, EXCEED ONE MONTH.  
 EXERCISE THE PARTS AFTER LUBRICATING.

- INDICATES LIGHT MINERAL OIL FOR LUBRICATION.
- INDICATES CUP GREASE FOR LUBRICATION.
- △ INDICATES EXTRA HEAVY MINERAL OIL FOR LUBRICATION.

20

THIS COPY IS FOR	
5" LOADING MACHINE MK. XXII MOD. 2 (30 CAL.)	
LUBRICATION CHART LEFT SIDE ELEVATION SCALE: 1/2"	
NAVY DEPARTMENT BUREAU OF ORDNANCE WASHINGTON, D. C.	
272232	
ROCK ISLAND ARSENAL	



9

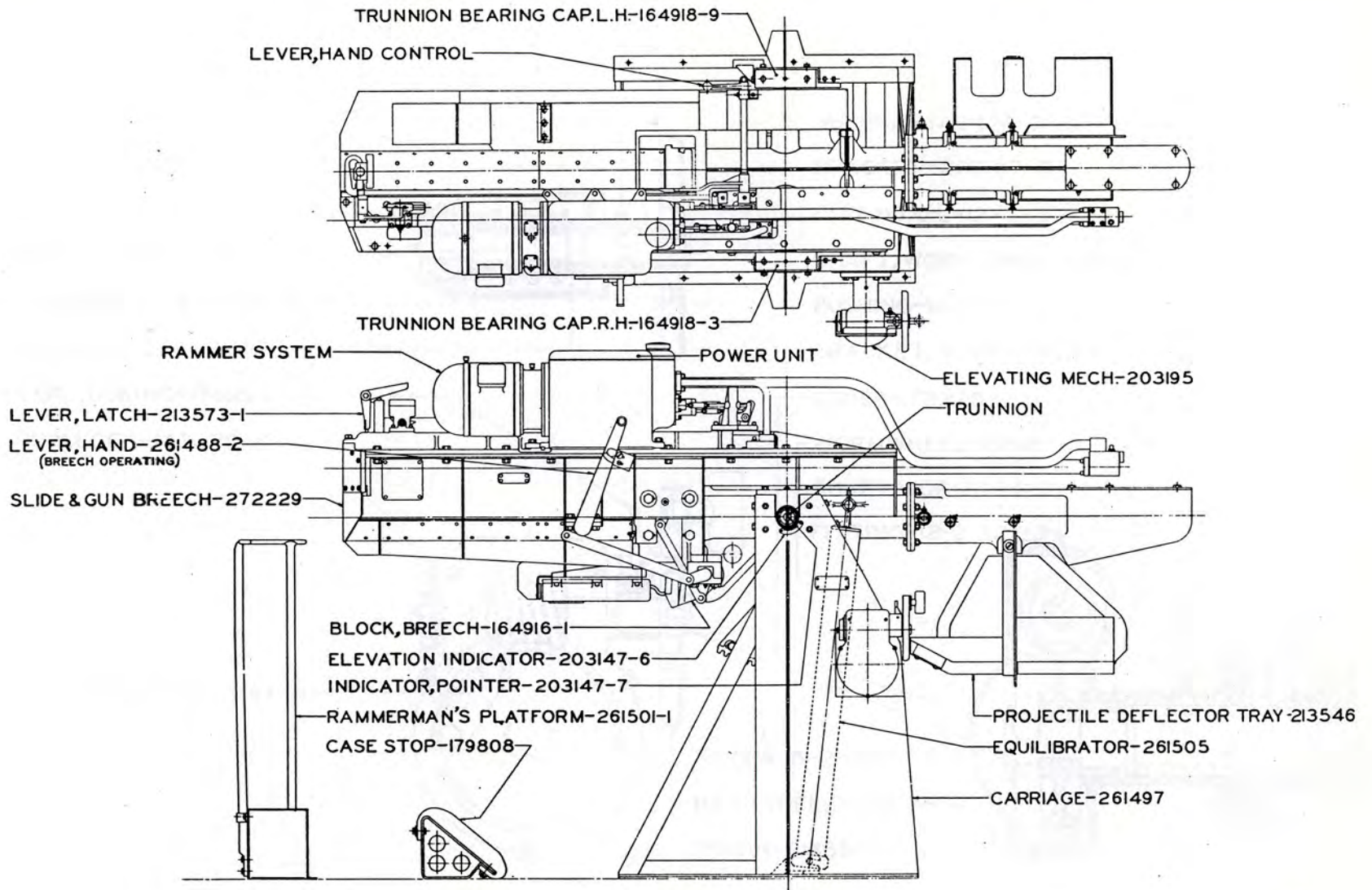
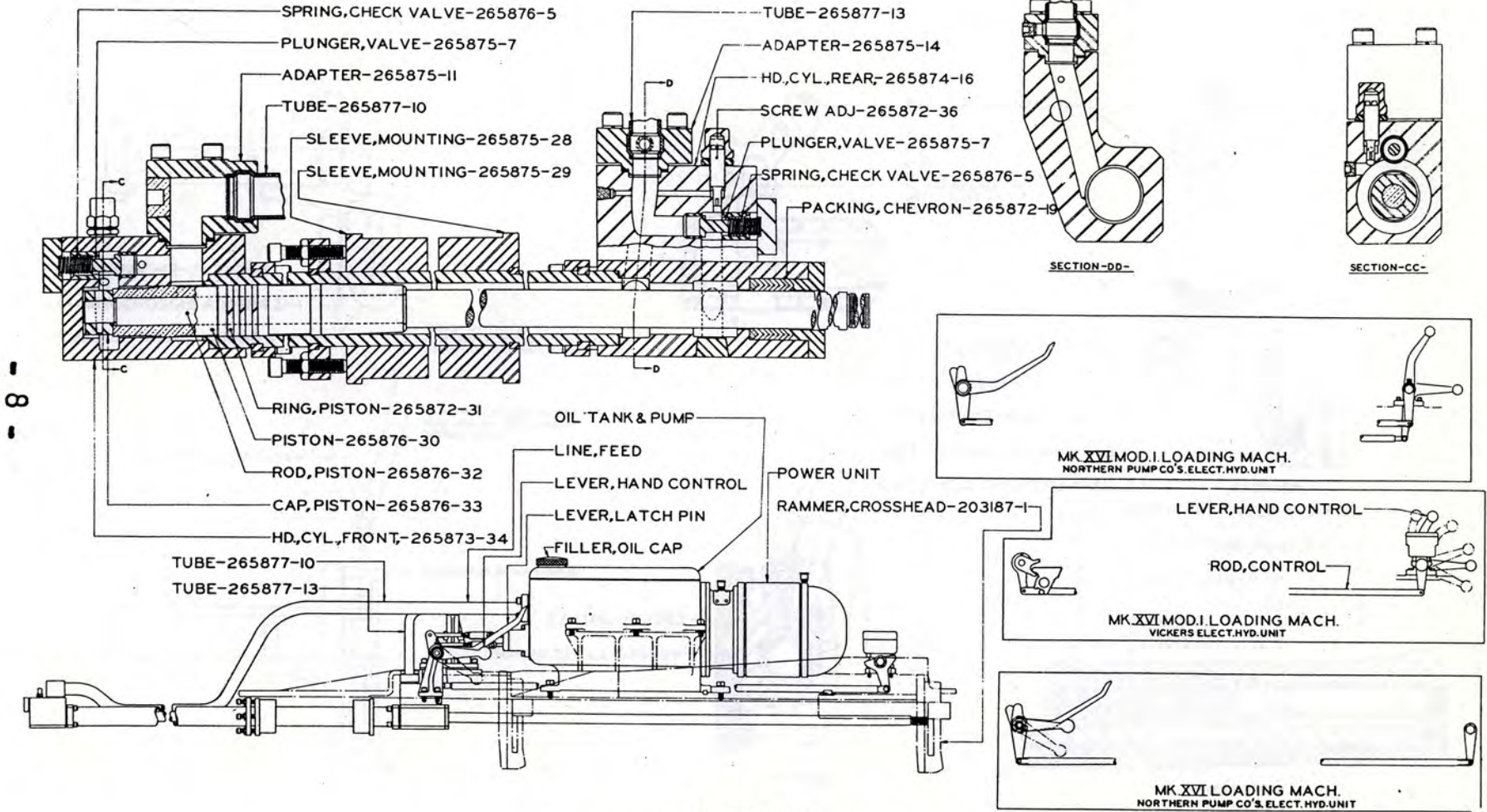


PLATE-A  
 5<sup>TH</sup> LOADING MACHINE (38 CAL.) MK. XVI MOD. 2  
 PLAN AND ELEVATION



- 8 -

PLATE-C  
 5<sup>th</sup> LOADING MACHINE (38 CAL.)  
 MK. XVI MK. XVII MOD. I MK. XVI MOD. 2  
 RAMMER SYSTEM

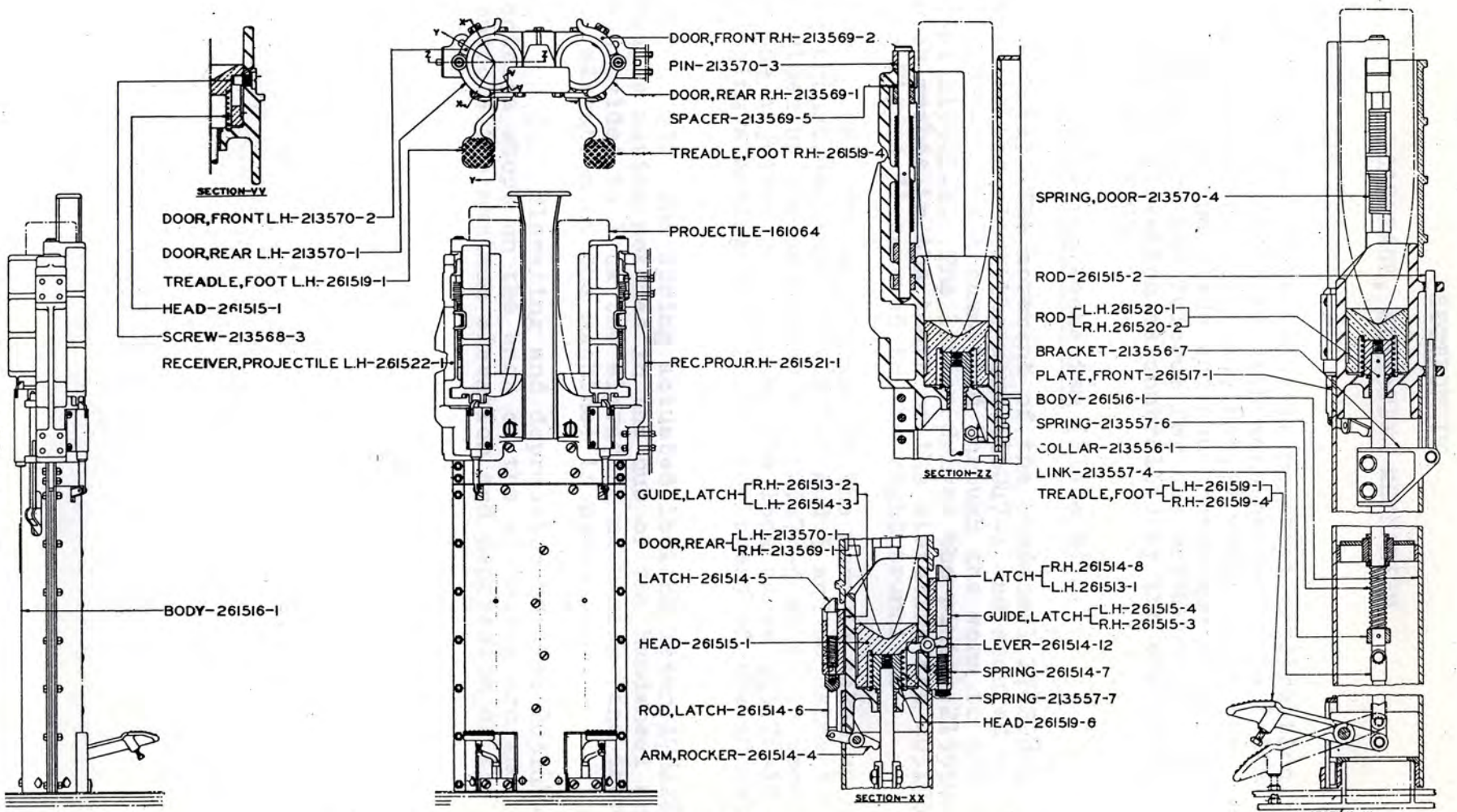


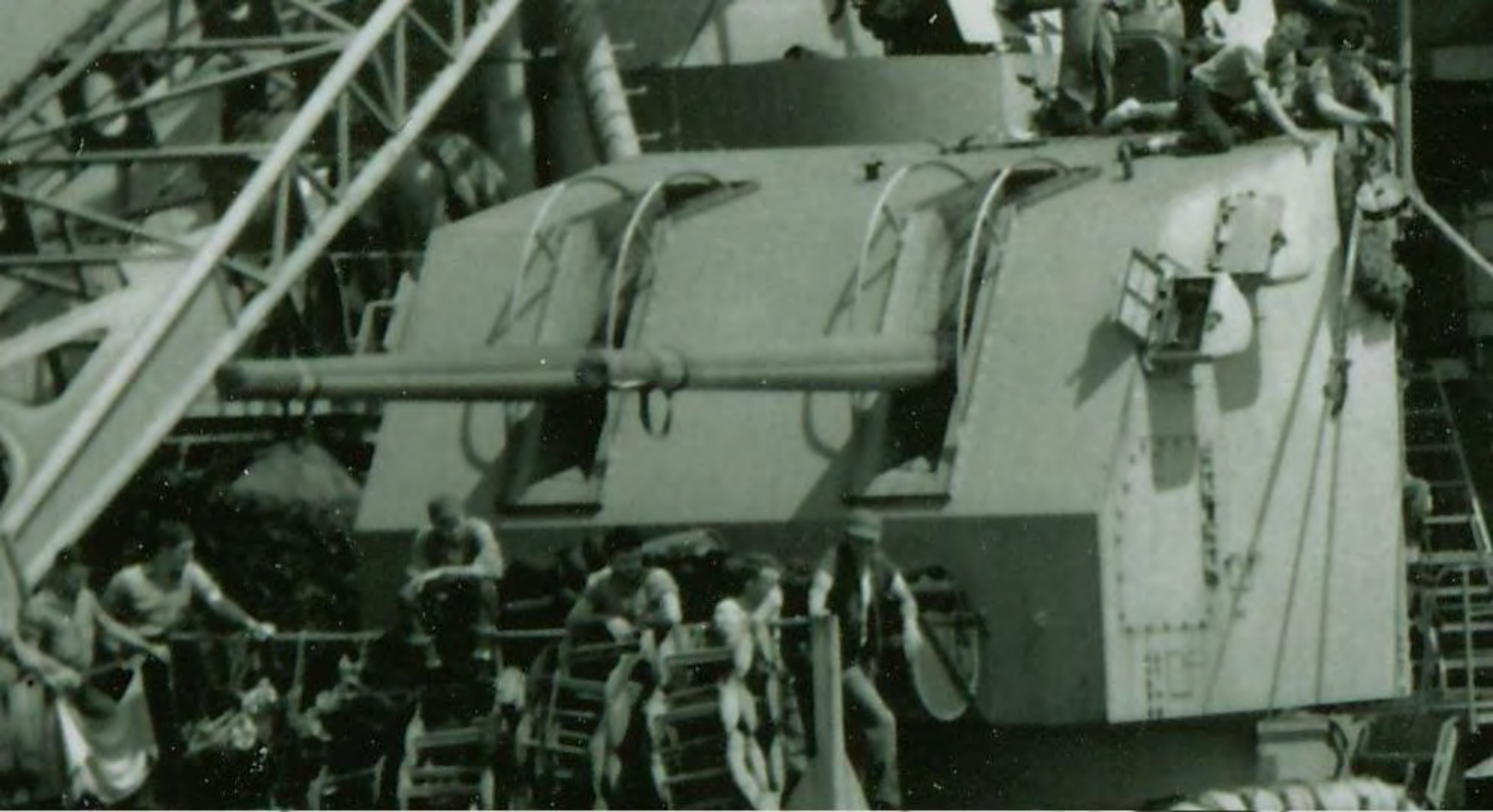
PLATE-F

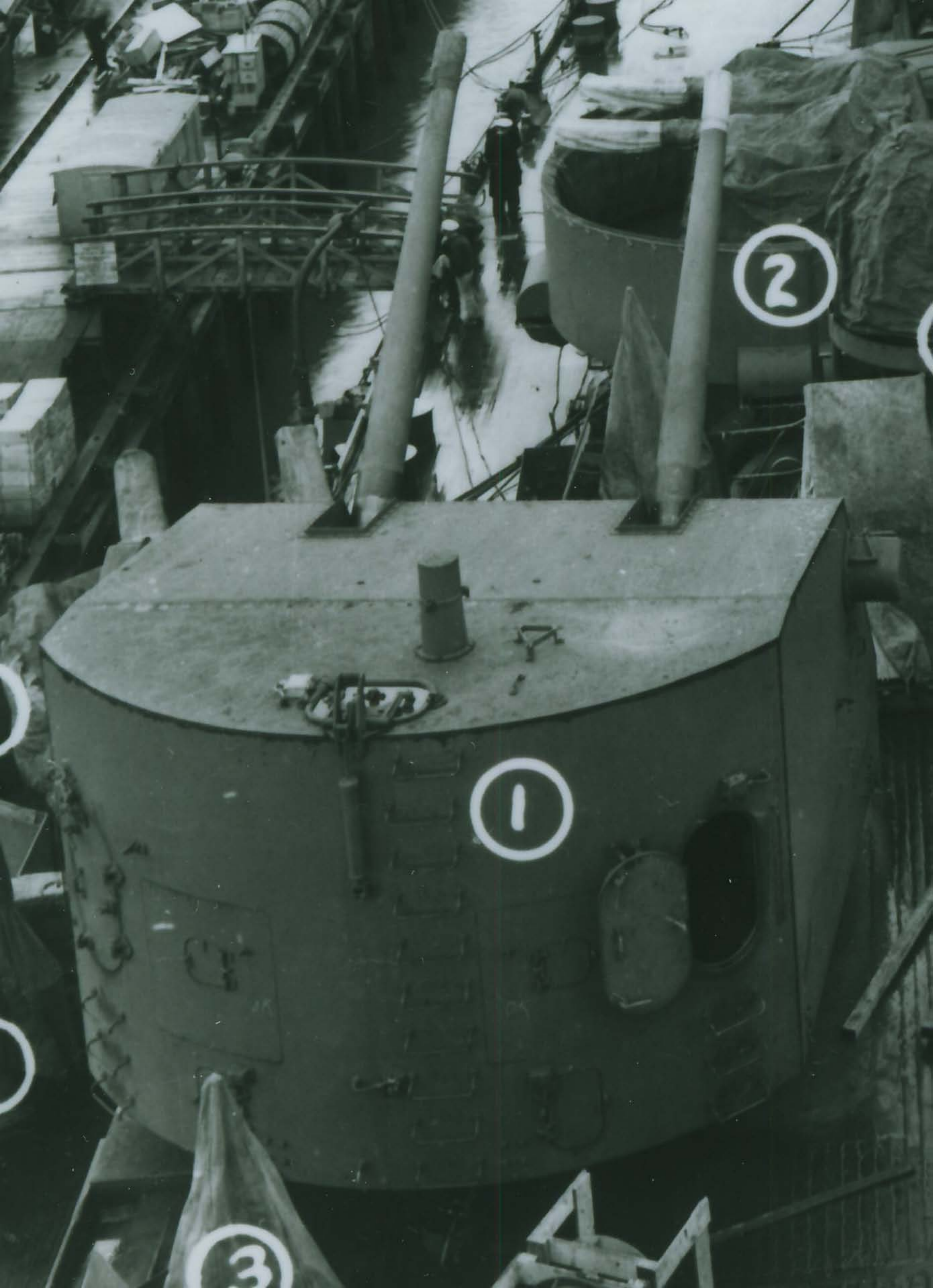
5<sup>th</sup> PROJECTILE HOIST TOP MK.II MOD.2







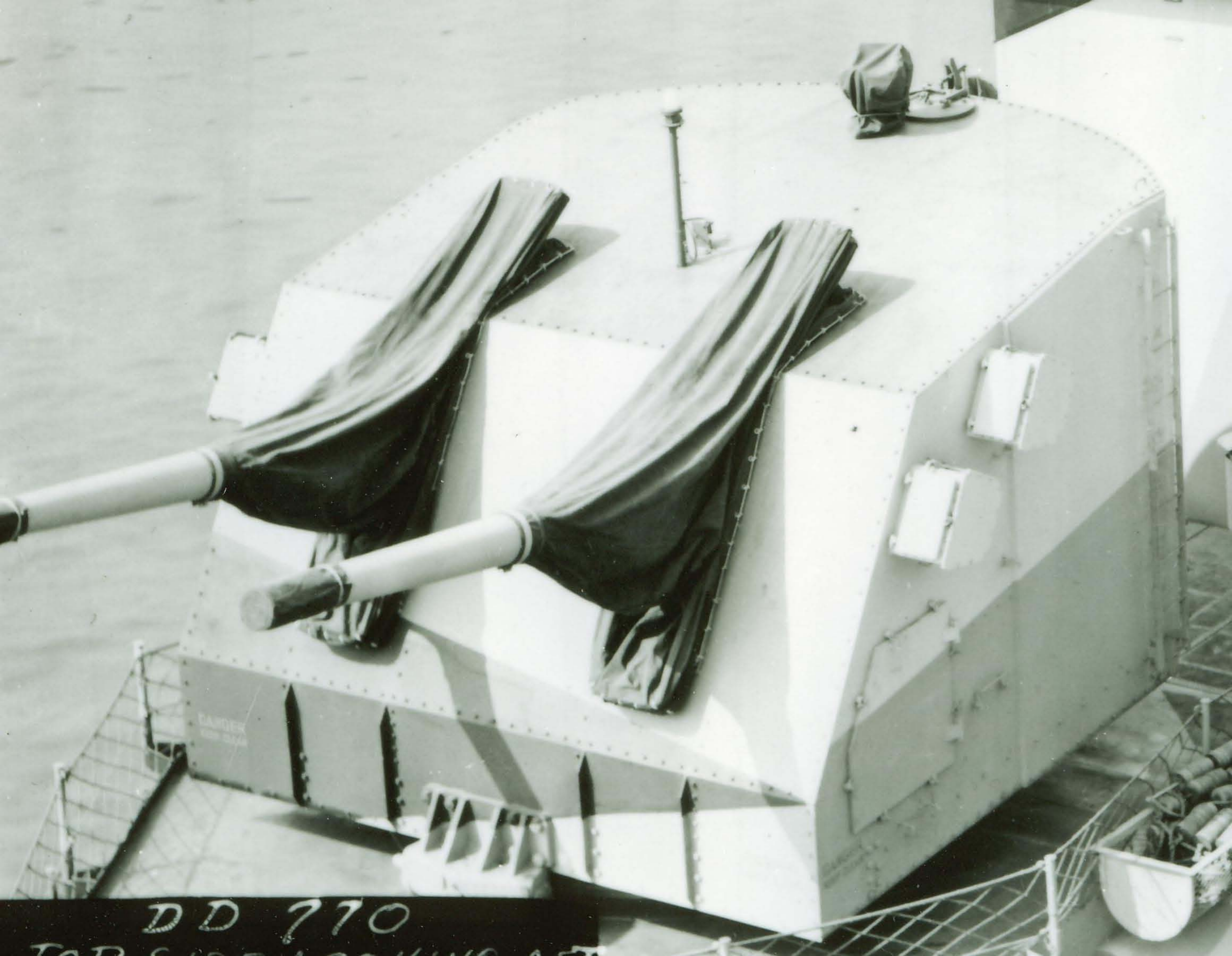




2

1

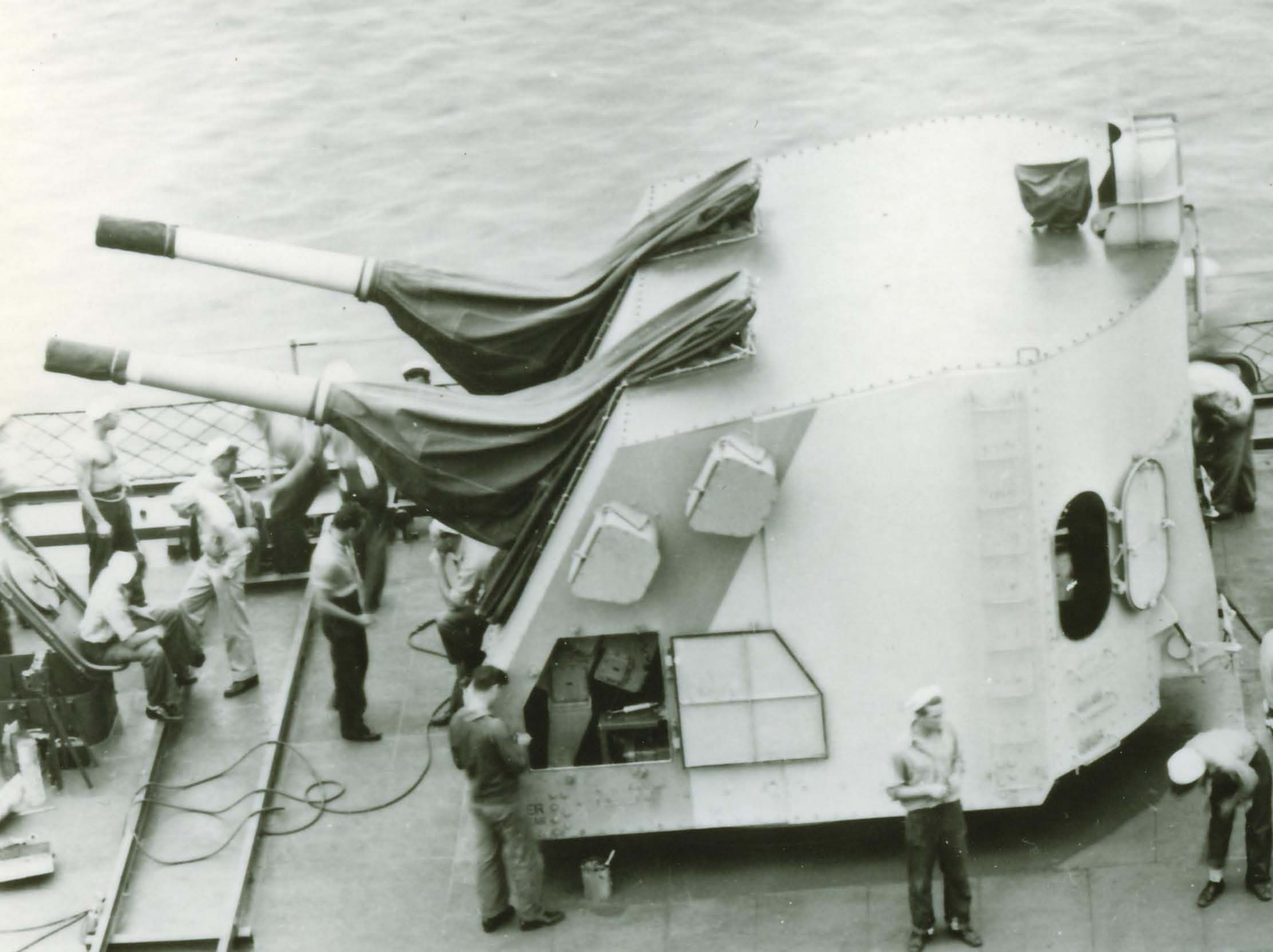
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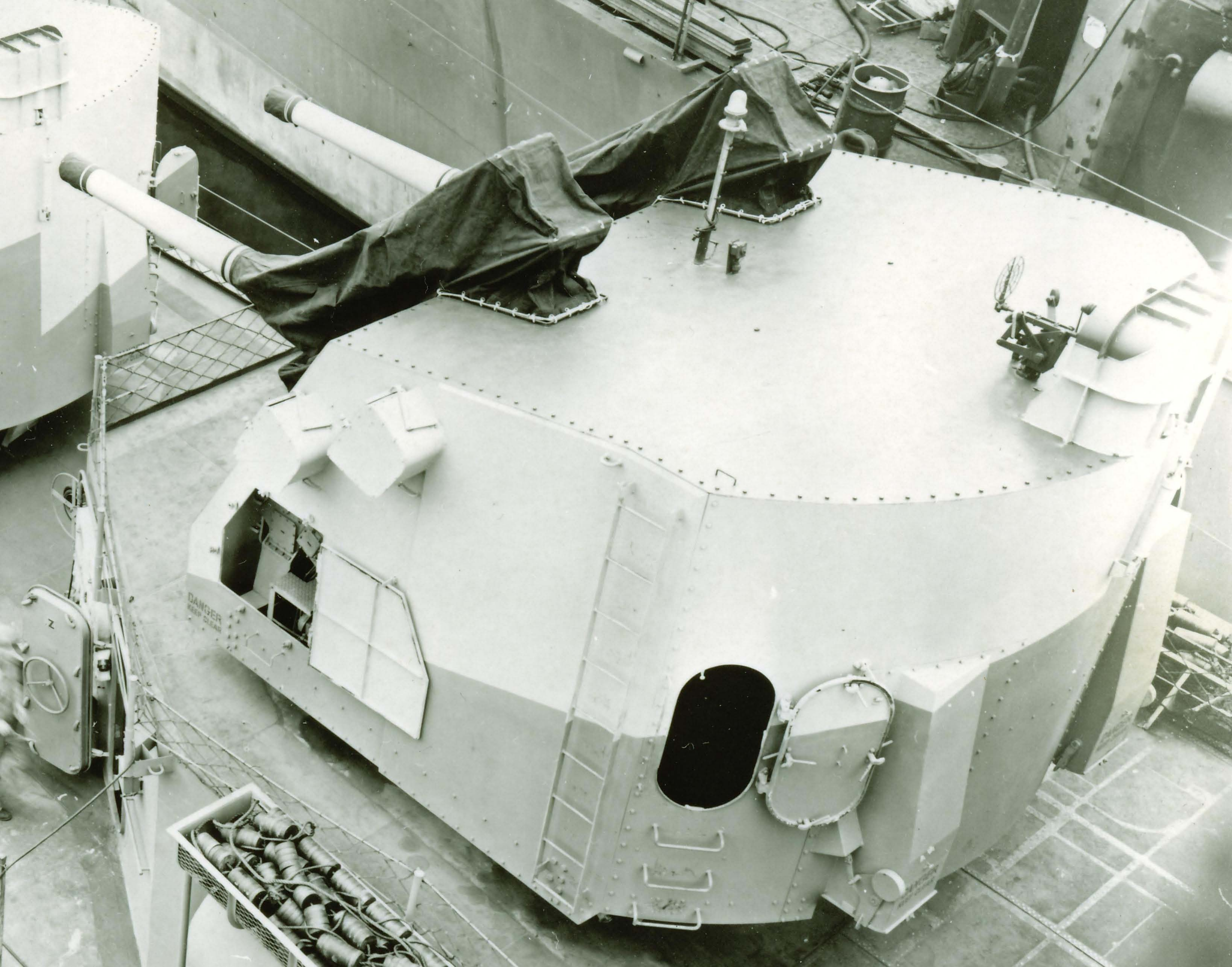


DANGER  
NO OIL

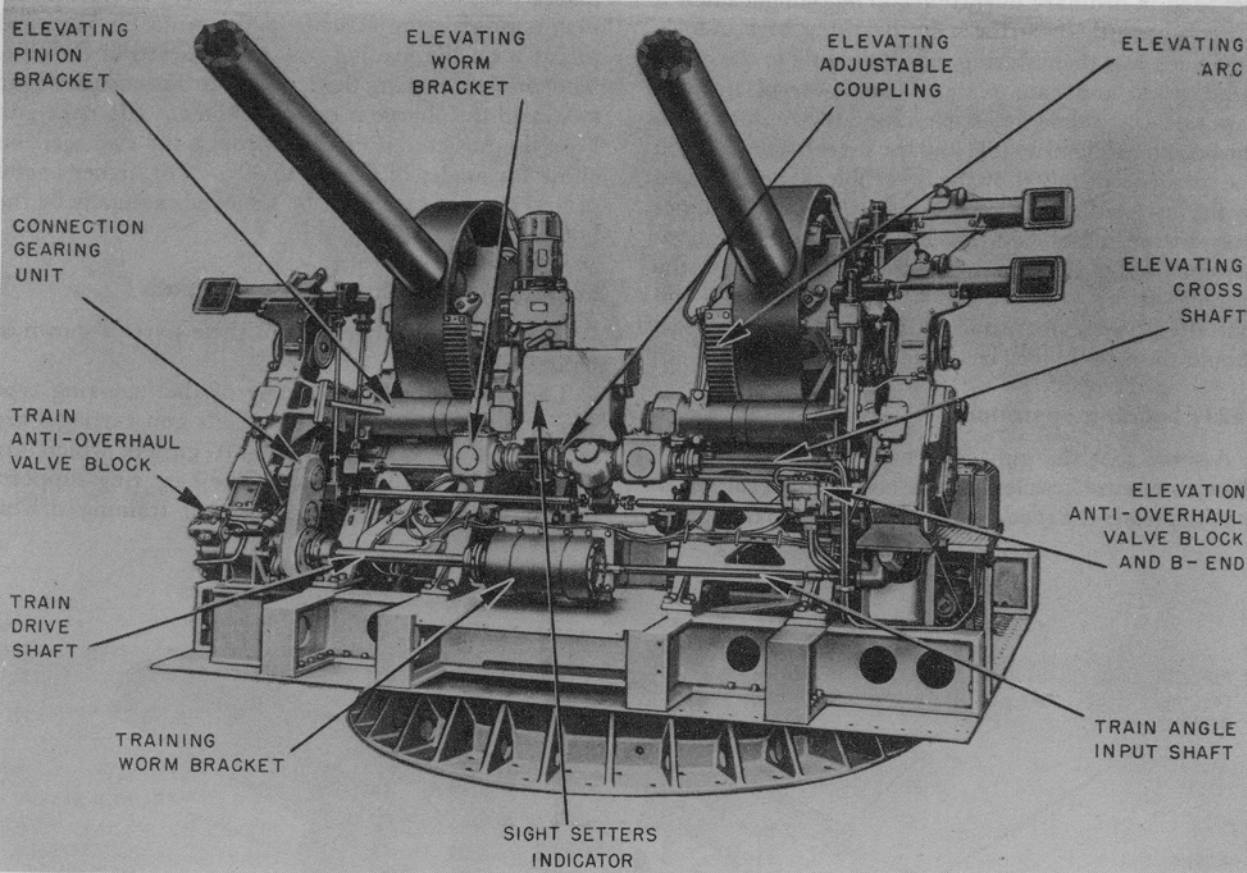
DD 770

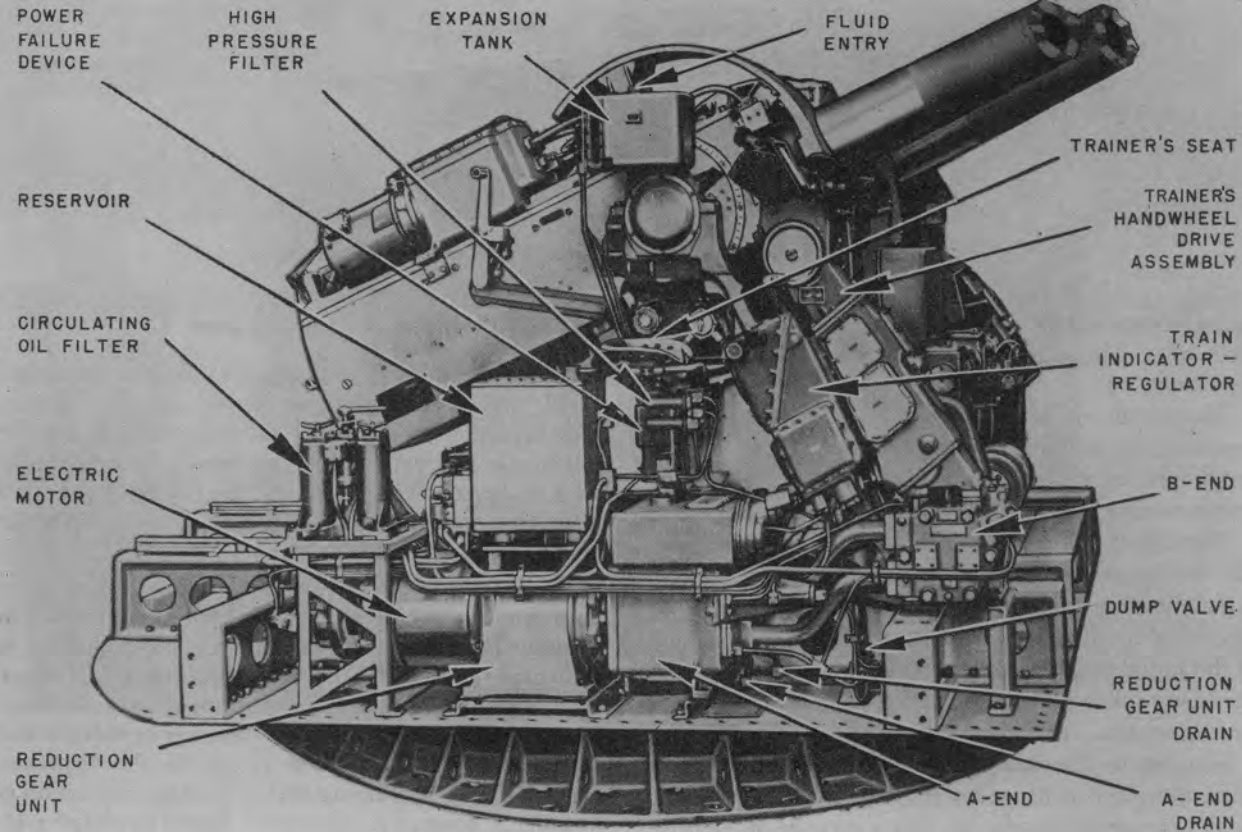
TORpedo



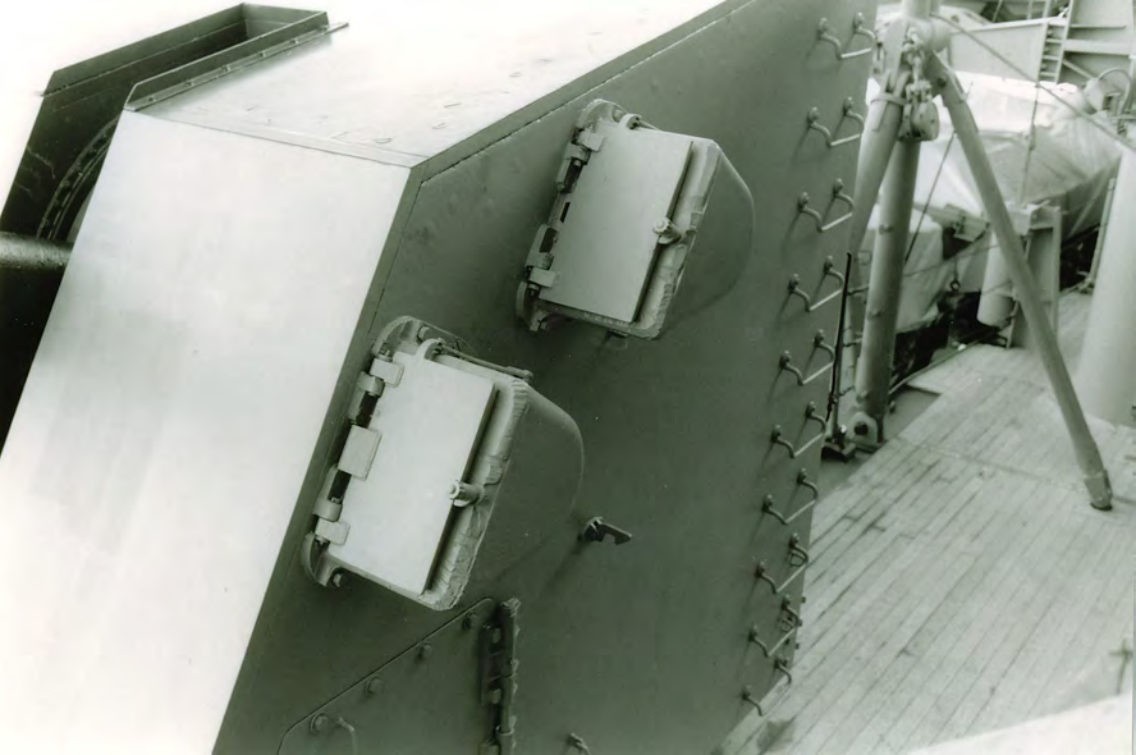


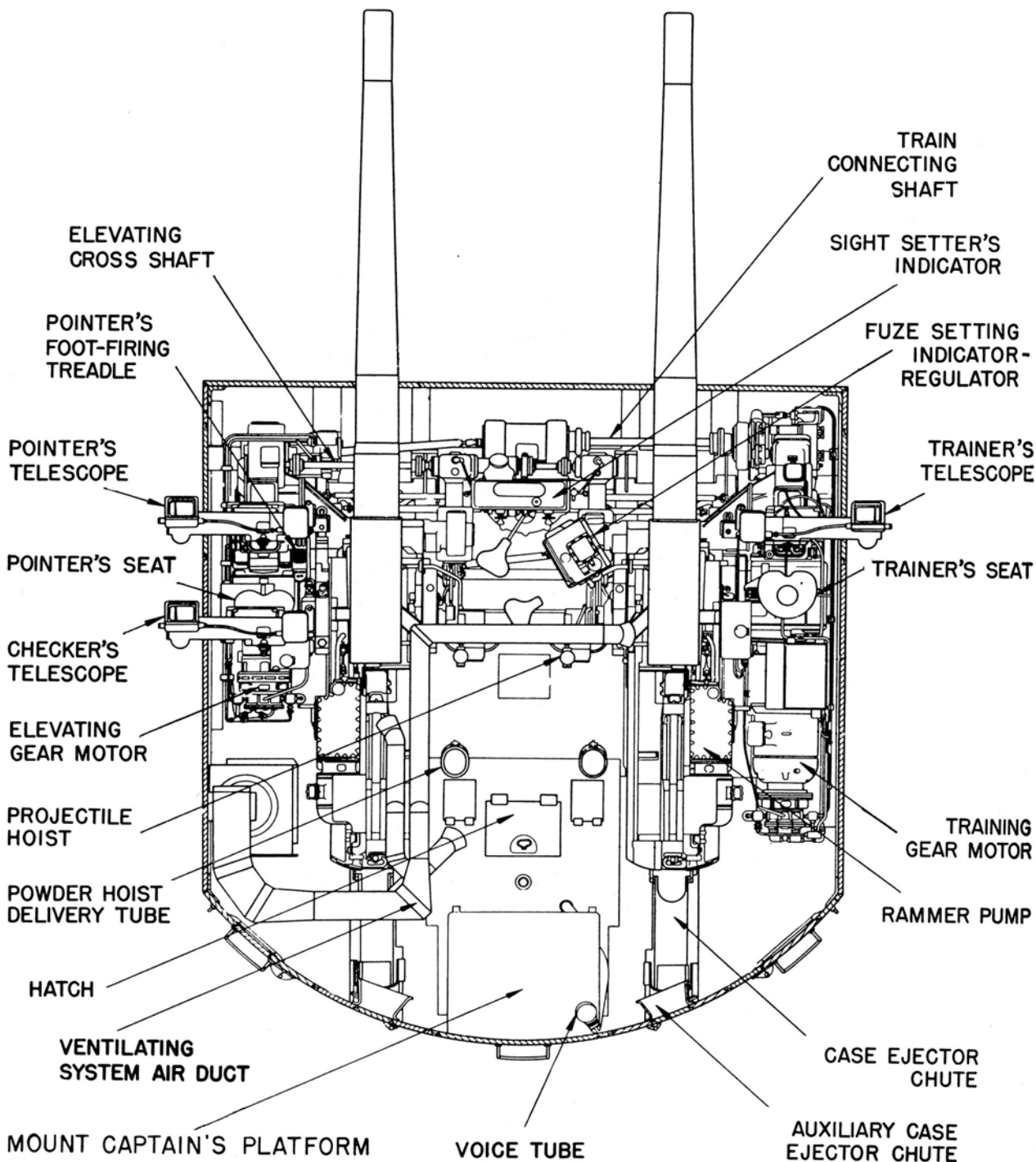
DANGER  
KEEP CLEAR











TRAINER'S TELESCOPE

SIGHT SETTER'S INDICATOR

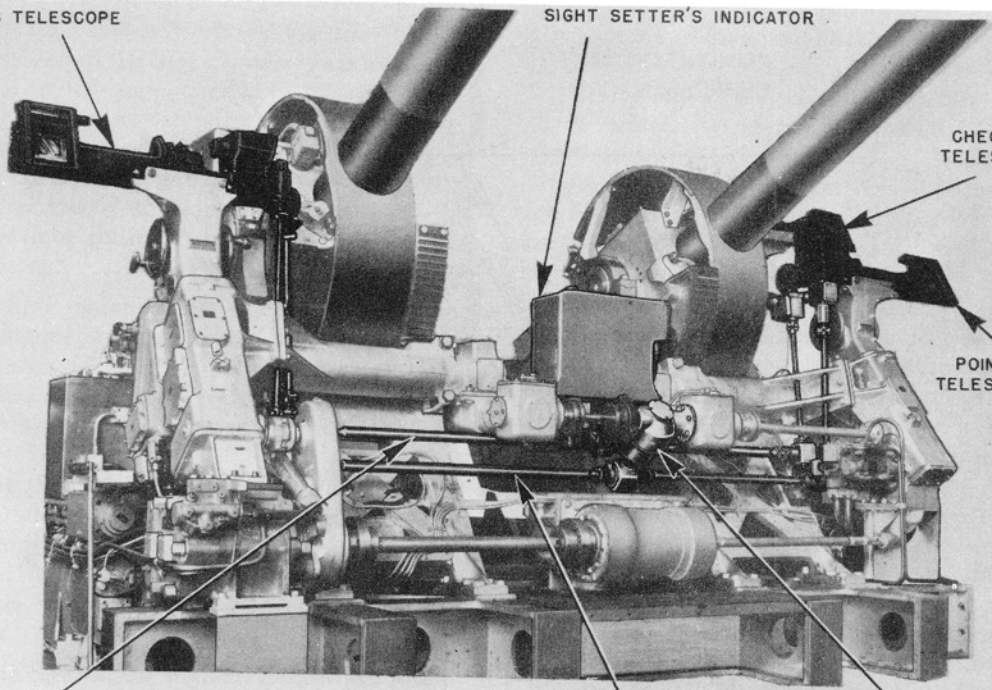
CHECKER'S TELESCOPE

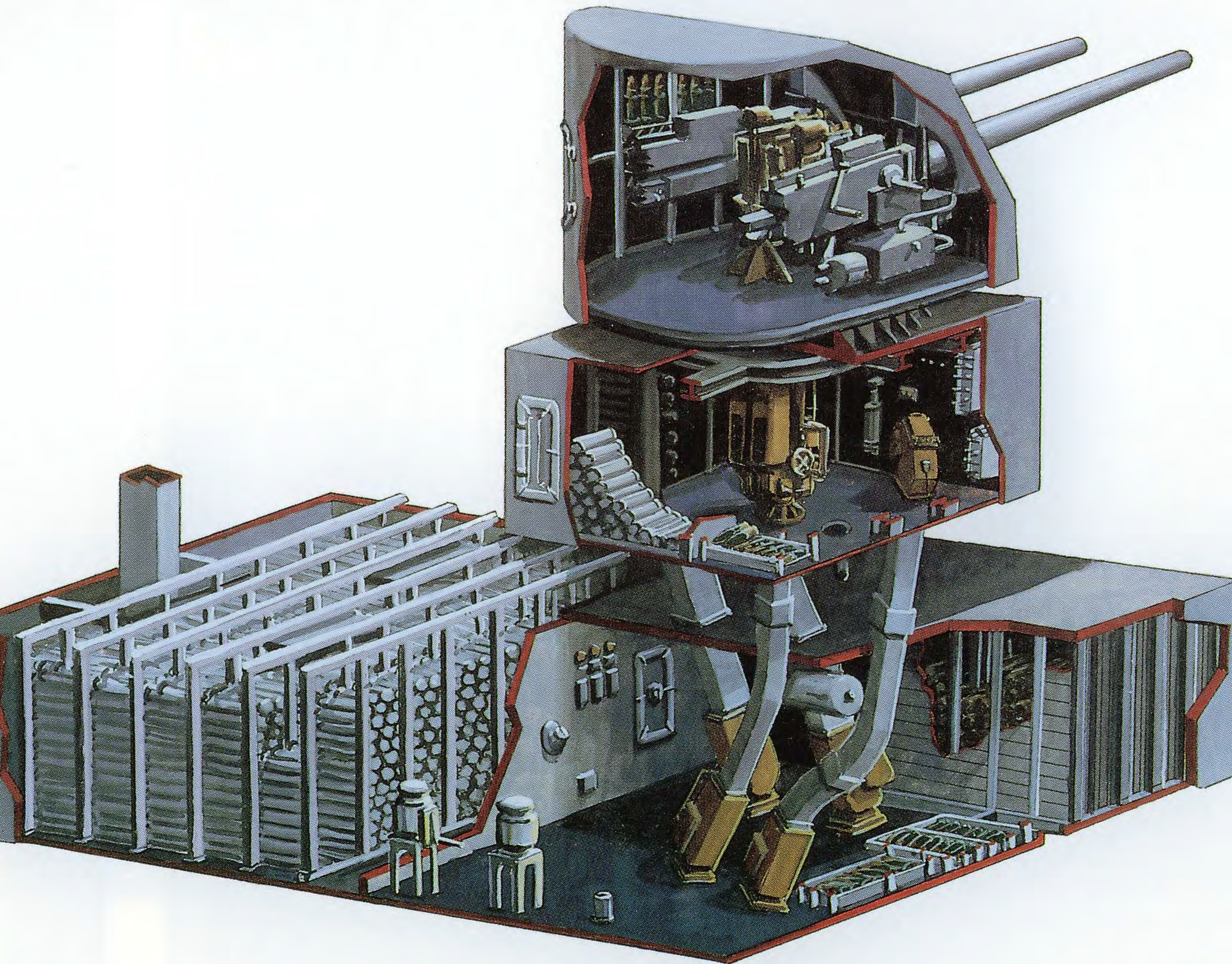
POINTER'S TELESCOPE

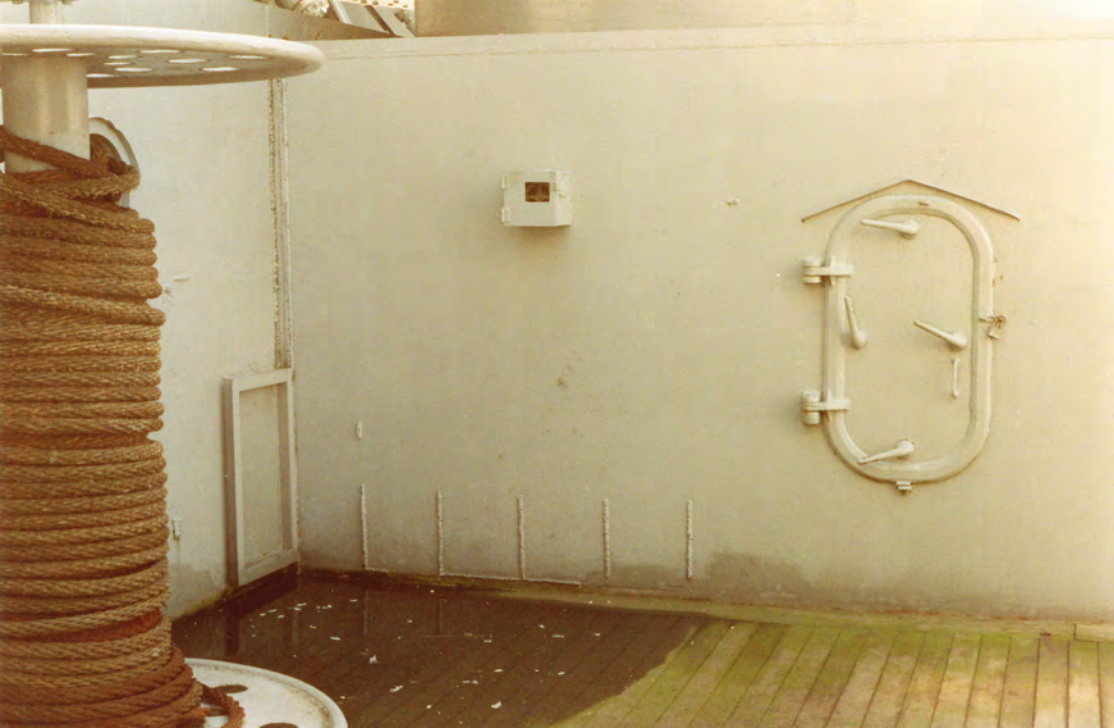
DEFLECTION CROSS SHAFT

SIGHT ANGLE CROSS SHAFT

DIFFERENTIAL HOUSING





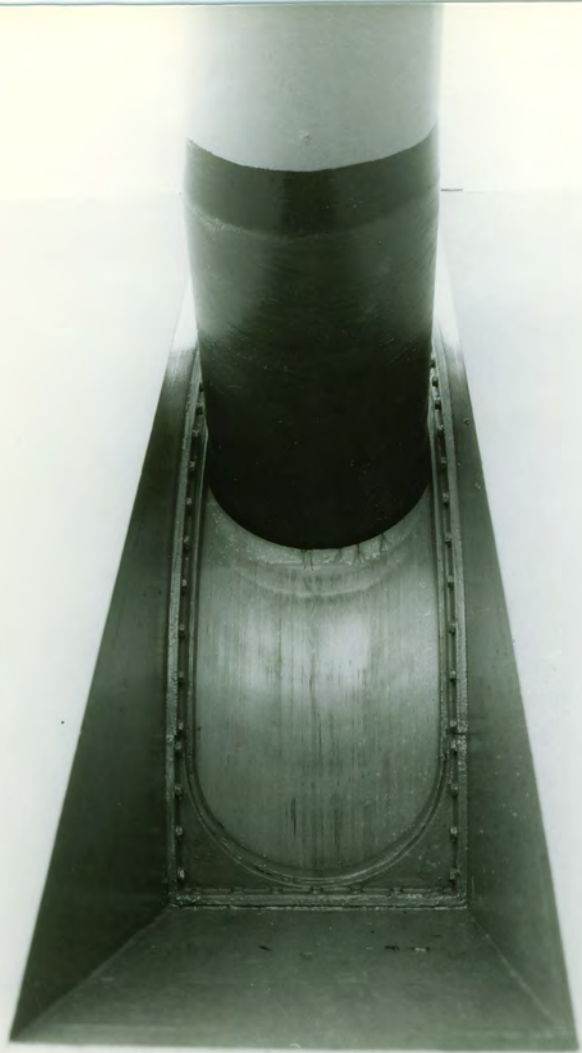




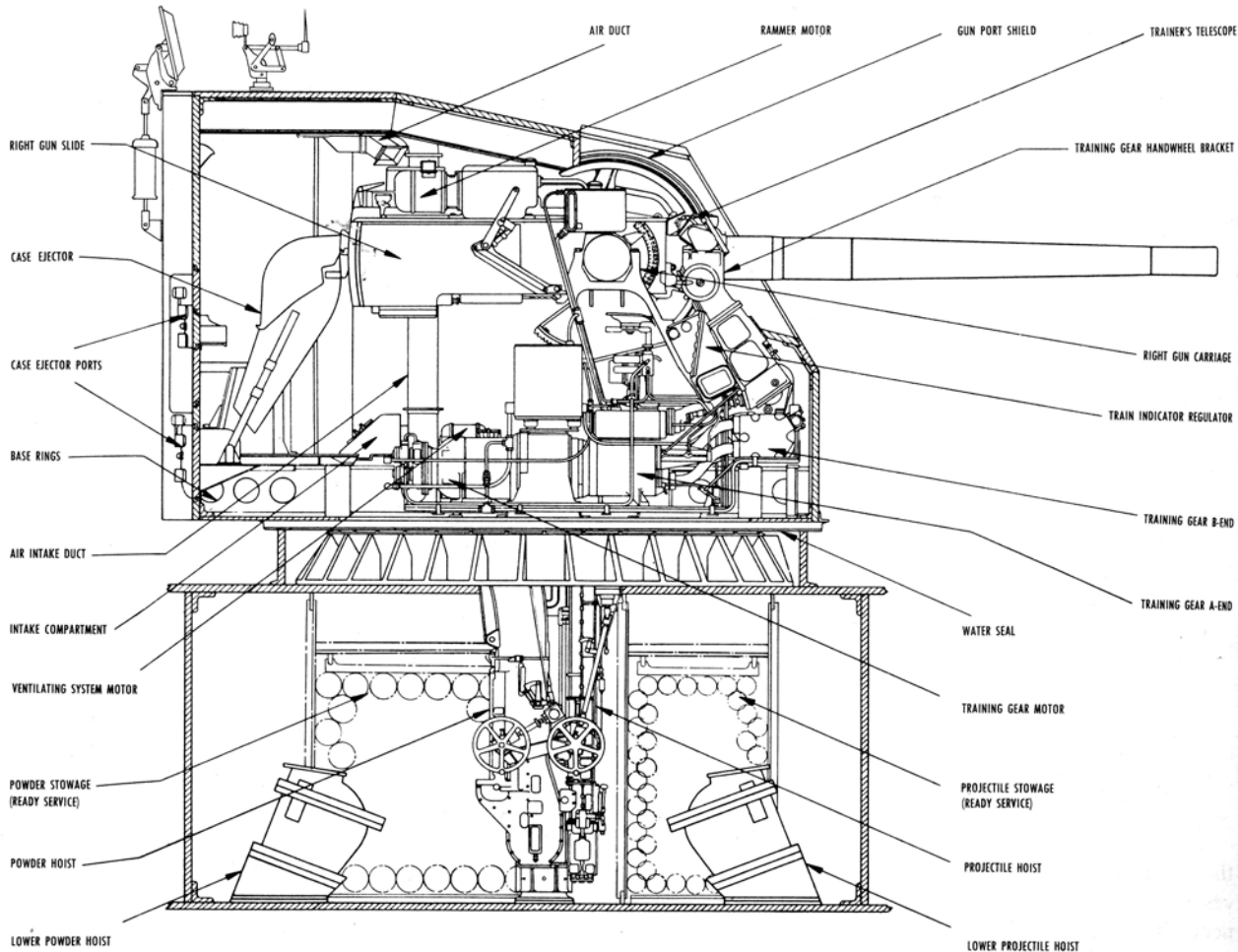












AIR DUCT

RAMMER MOTOR

GUN PORT SHIELD

TRAINER'S TELESCOPE

RIGHT GUN SLIDE

TRAINING GEAR HANDWHEEL BRACKET

CASE EJECTOR

CASE EJECTOR PORTS

BASE RINGS

AIR INTAKE DUCT

INTAKE COMPARTMENT

VENTILATING SYSTEM MOTOR

POWDER STOWAGE  
(READY SERVICE)

POWDER HOIST

LOWER POWDER HOIST

RIGHT GUN CARRIAGE

TRAIN INDICATOR REGULATOR

TRAINING GEAR B-END

TRAINING GEAR A-END

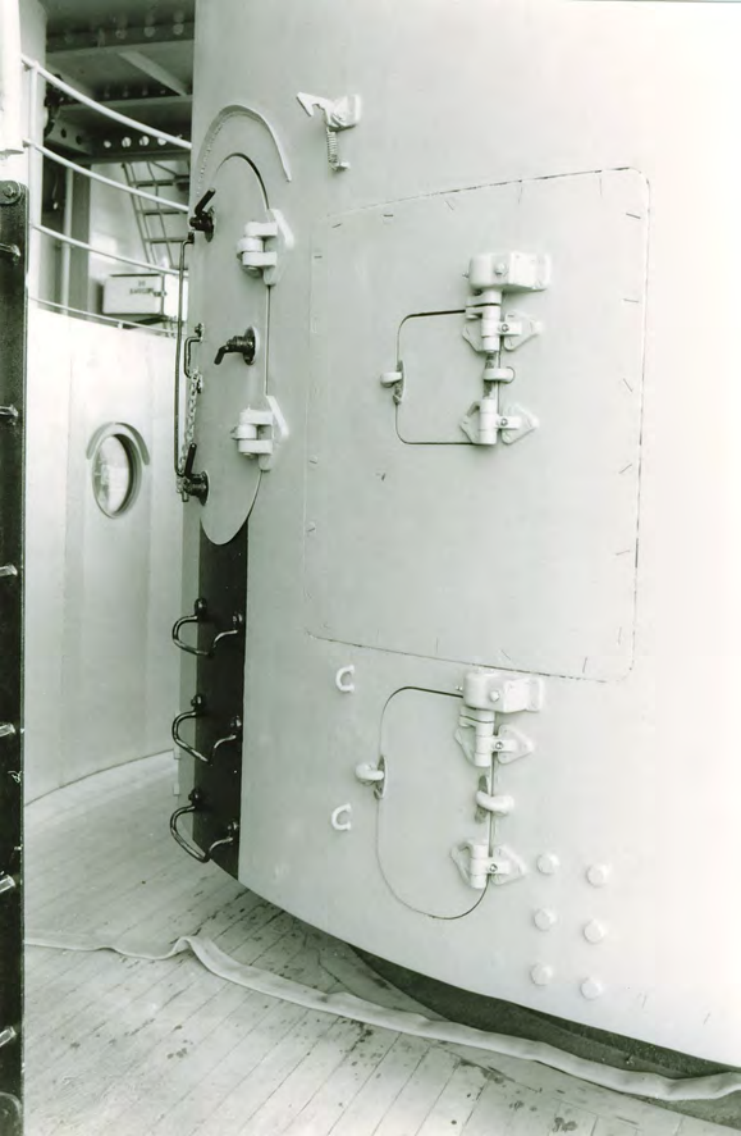
WATER SEAL

TRAINING GEAR MOTOR

PROJECTILE STOWAGE  
(READY SERVICE)

PROJECTILE HOIST

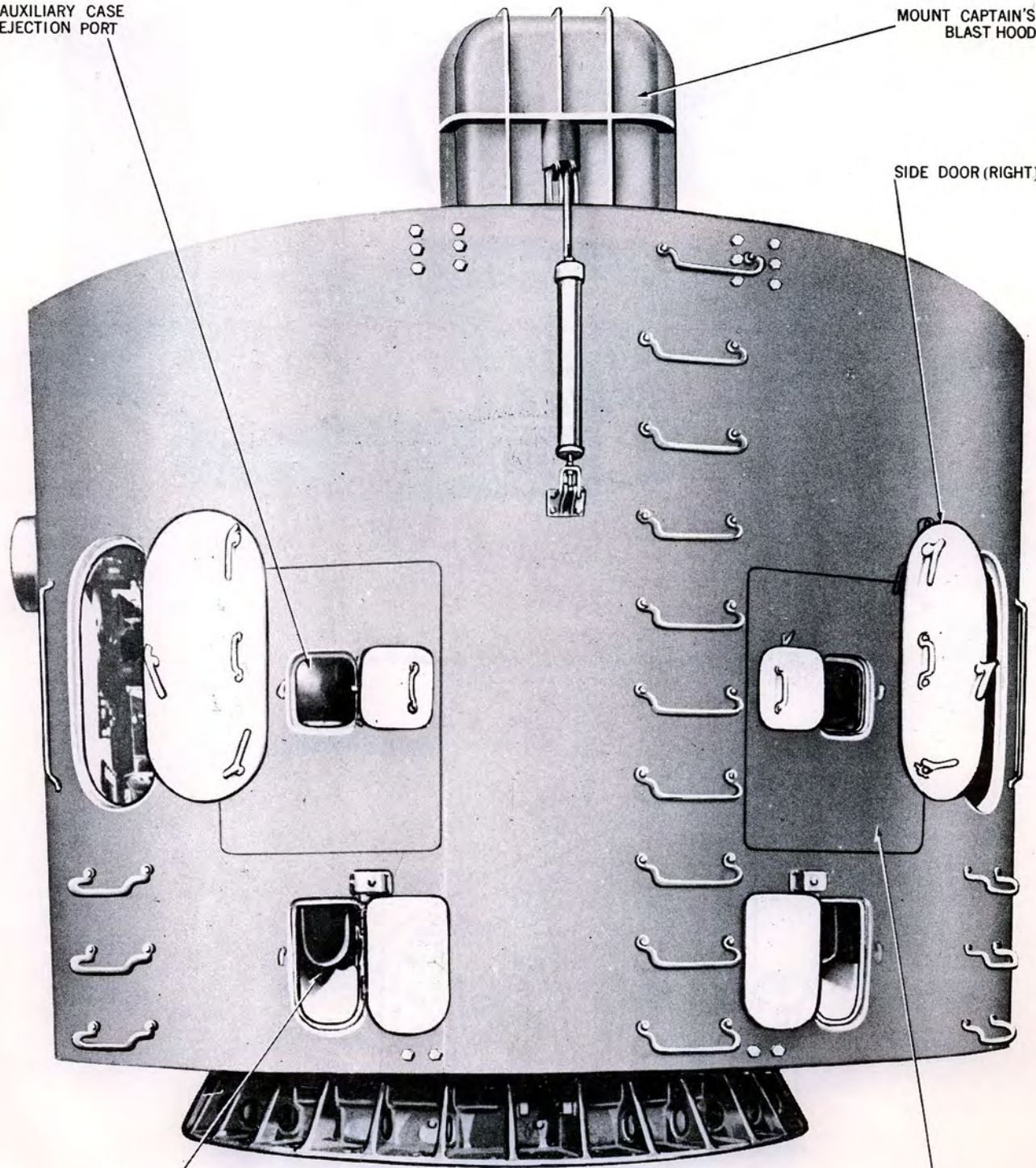
LOWER PROJECTILE HOIST



AUXILIARY CASE  
EJECTION PORT

MOUNT CAPTAIN'S  
BLAST HOOD

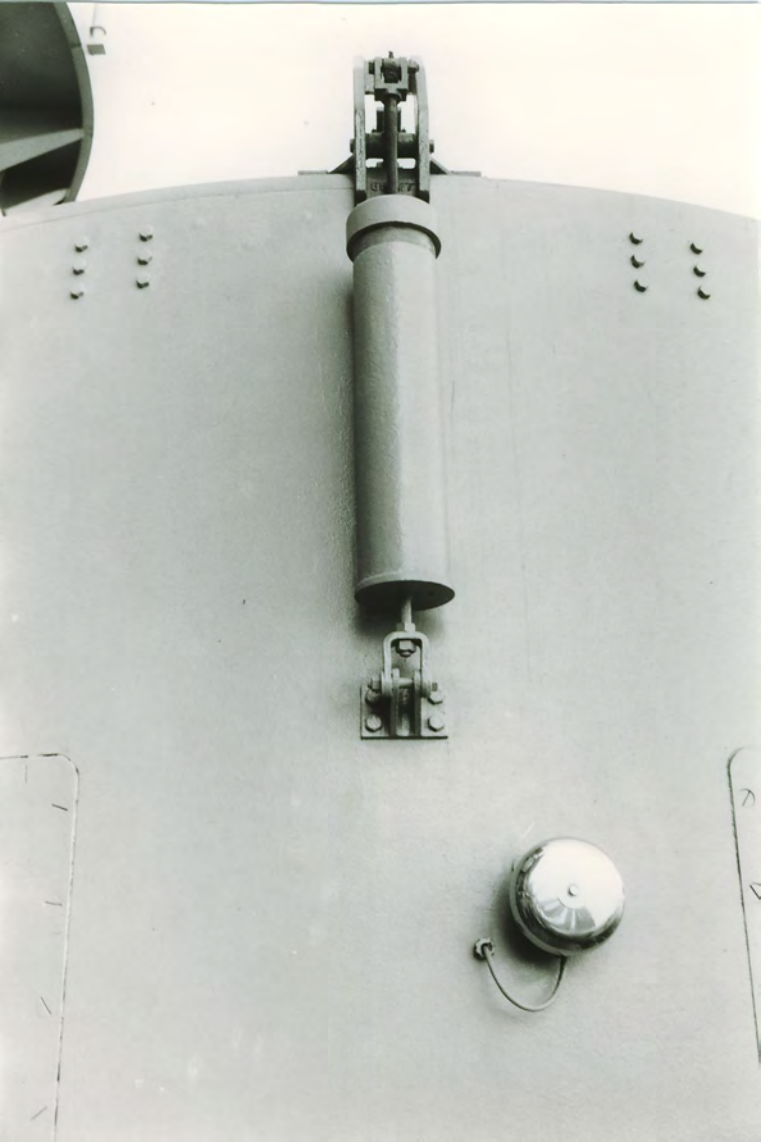
SIDE DOOR (RIGHT)

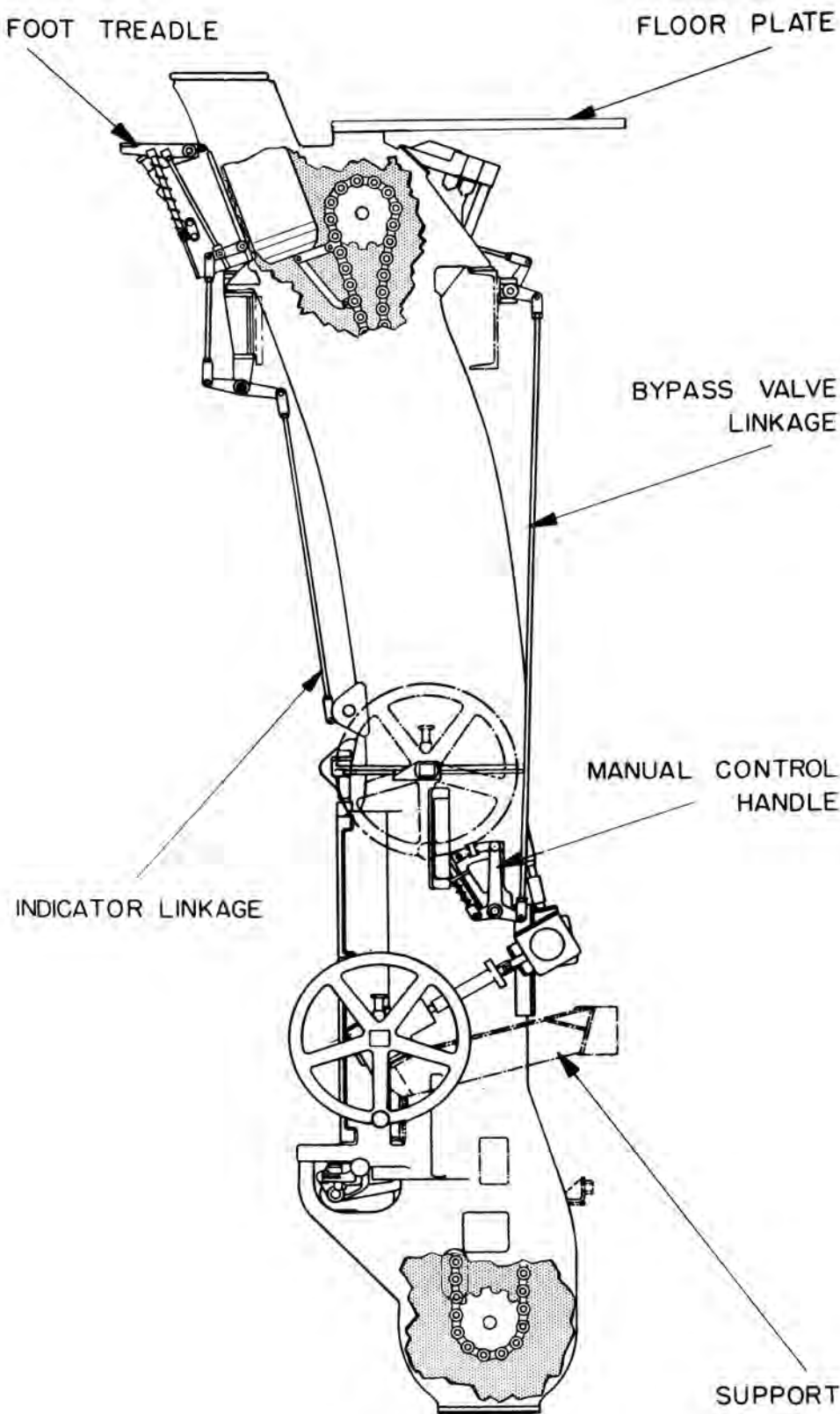


CASE EJECTION  
CHUTE PORT

REMOVABLE  
ACCESS PLATE.

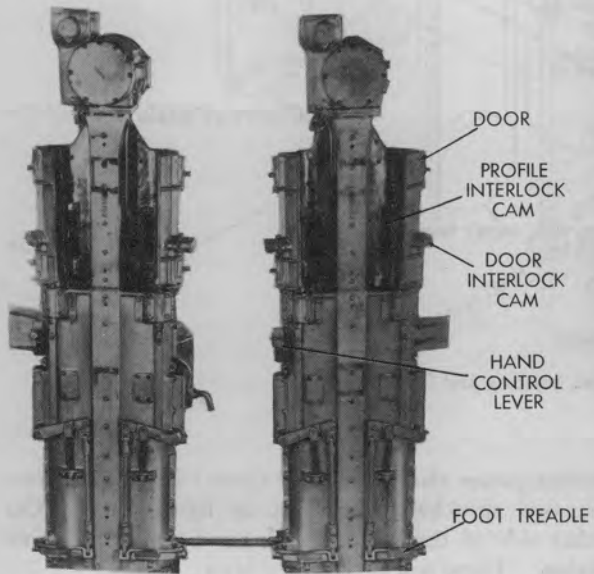




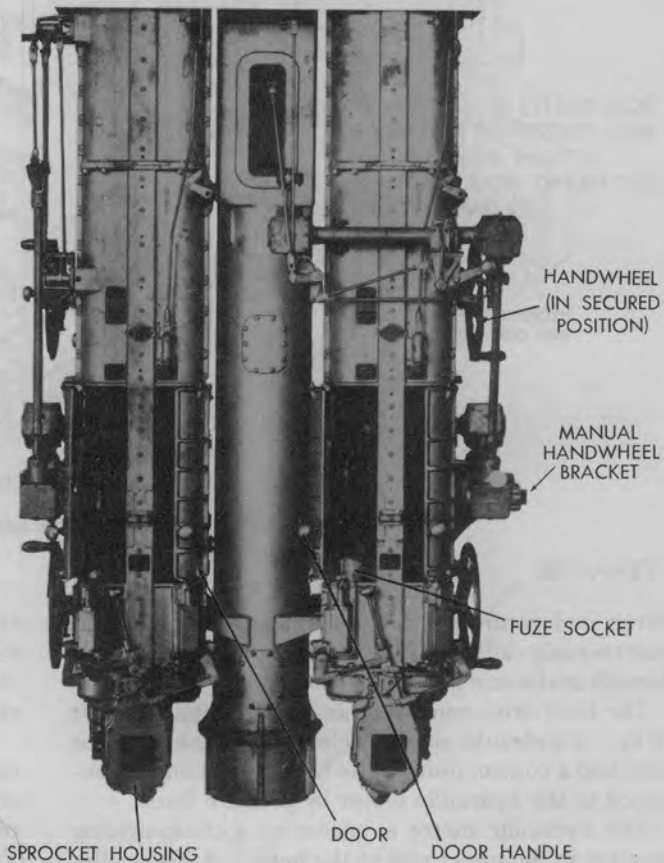


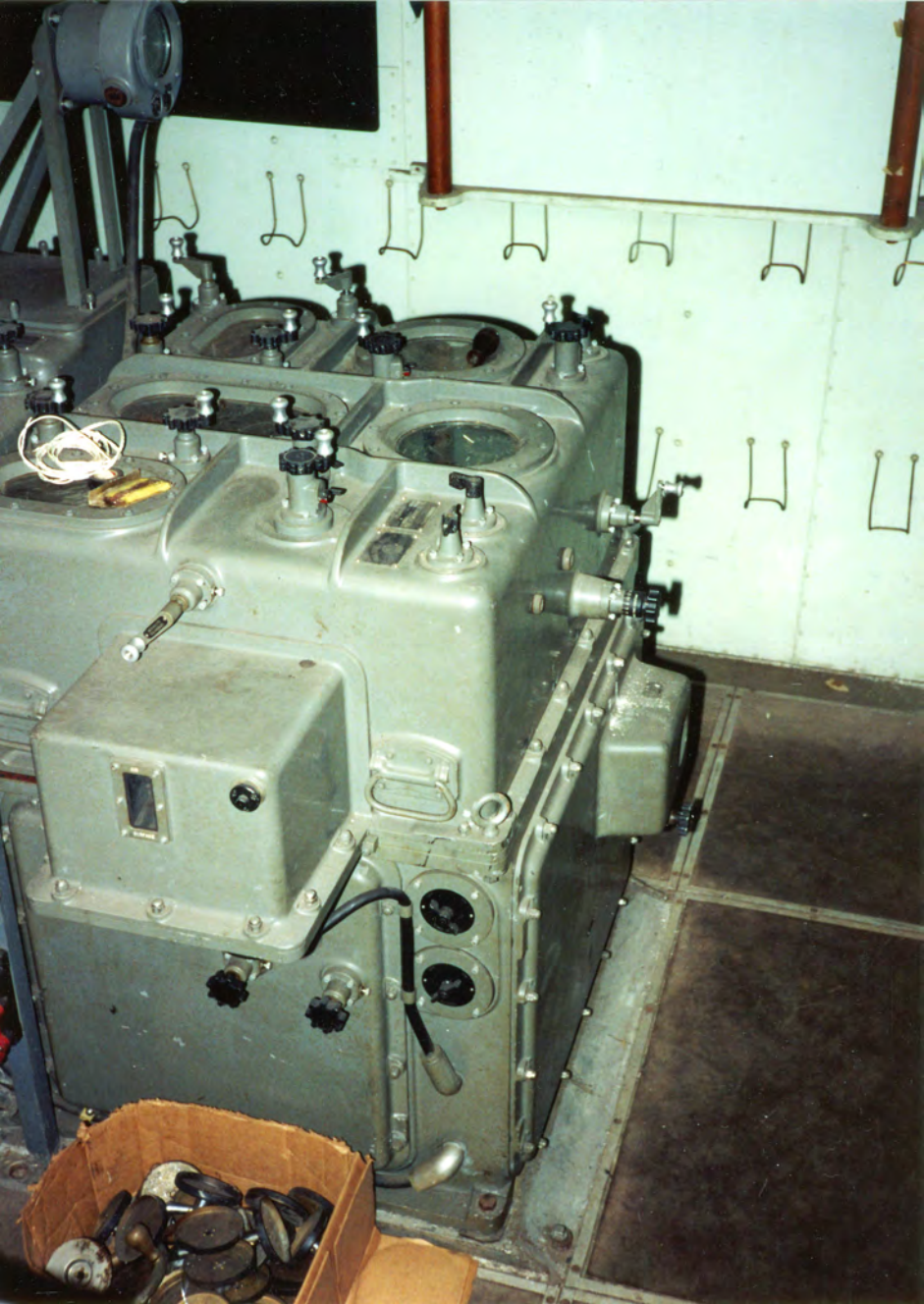


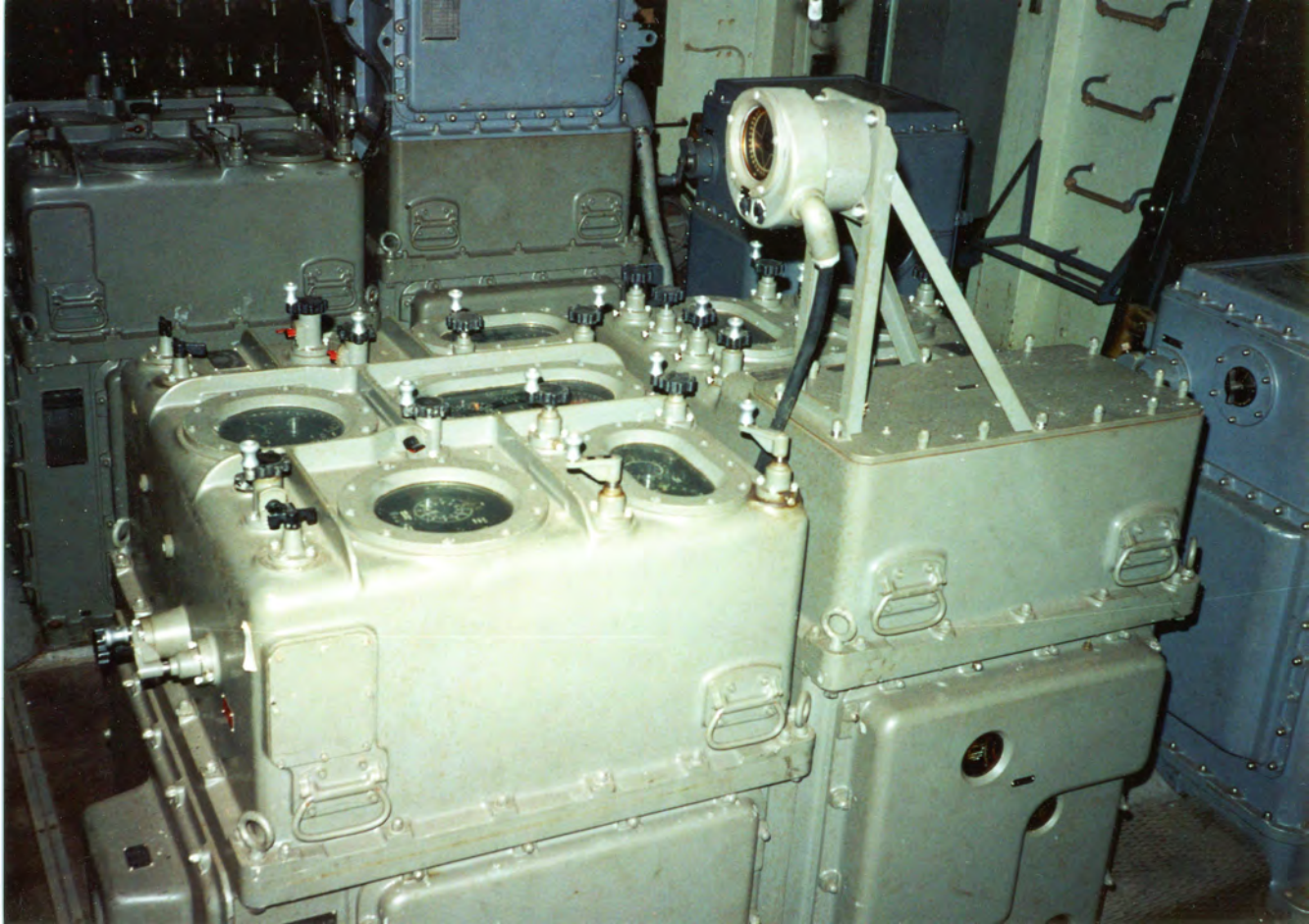
UPPER SECTION



LOWER SECTION







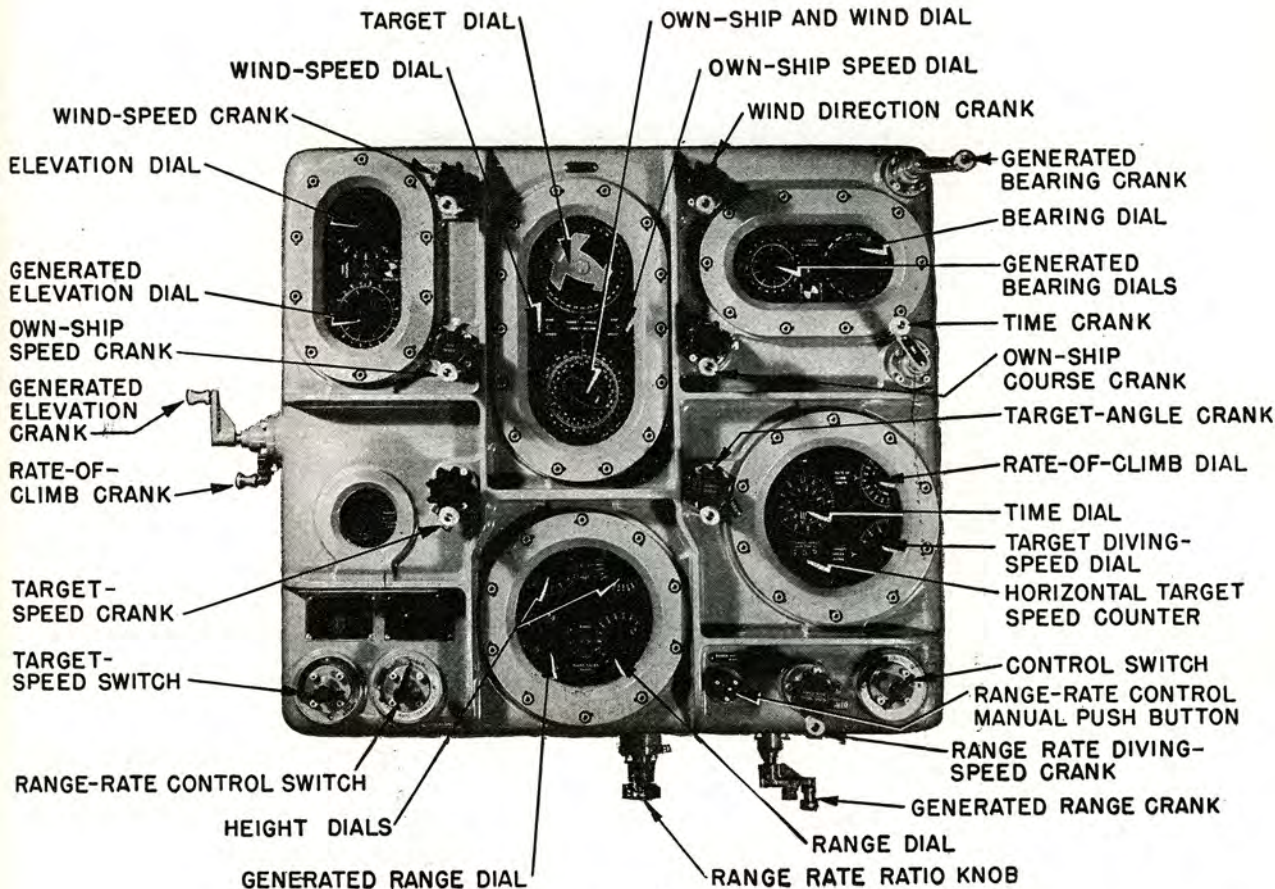


FIGURE 17D2. Control section, Mark 1 computer; top view.

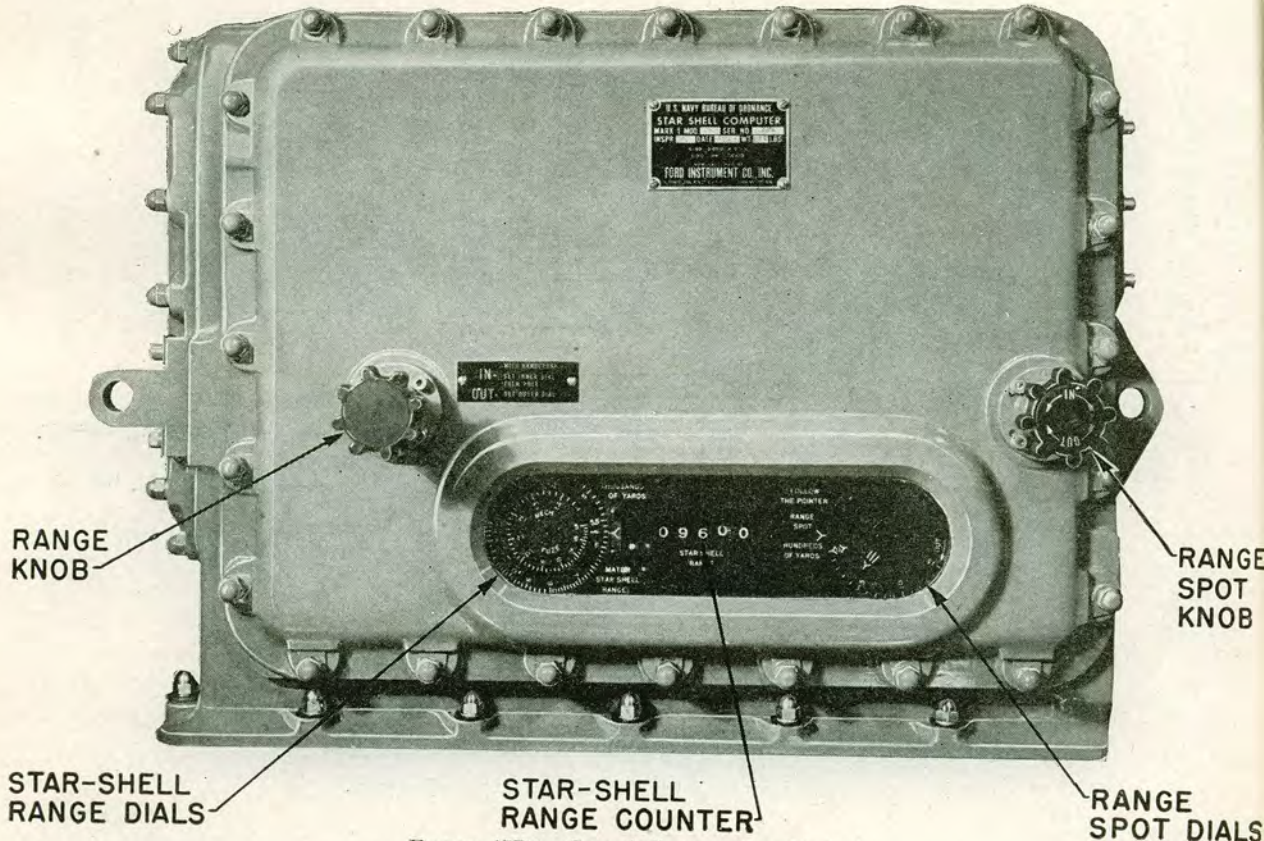
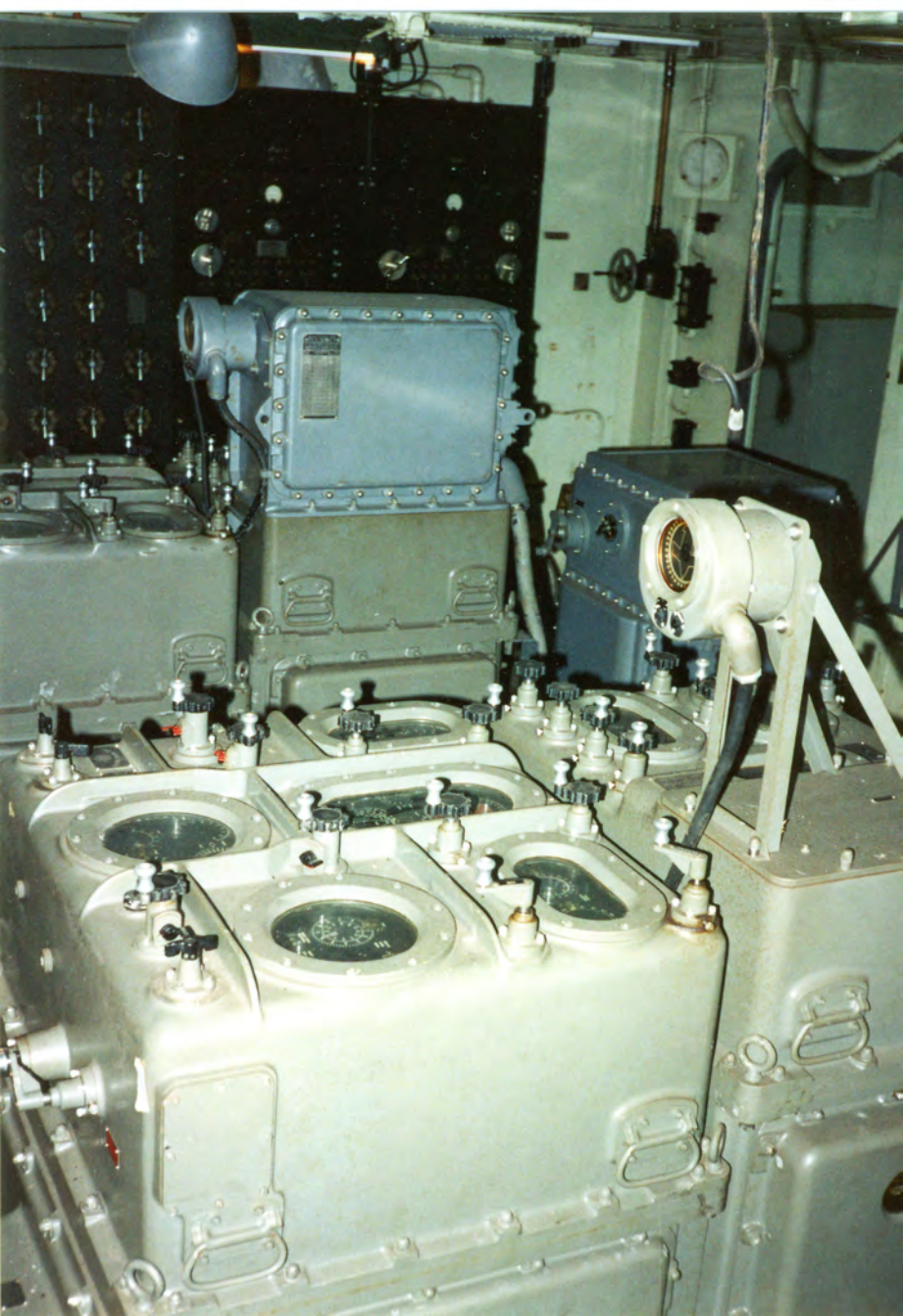
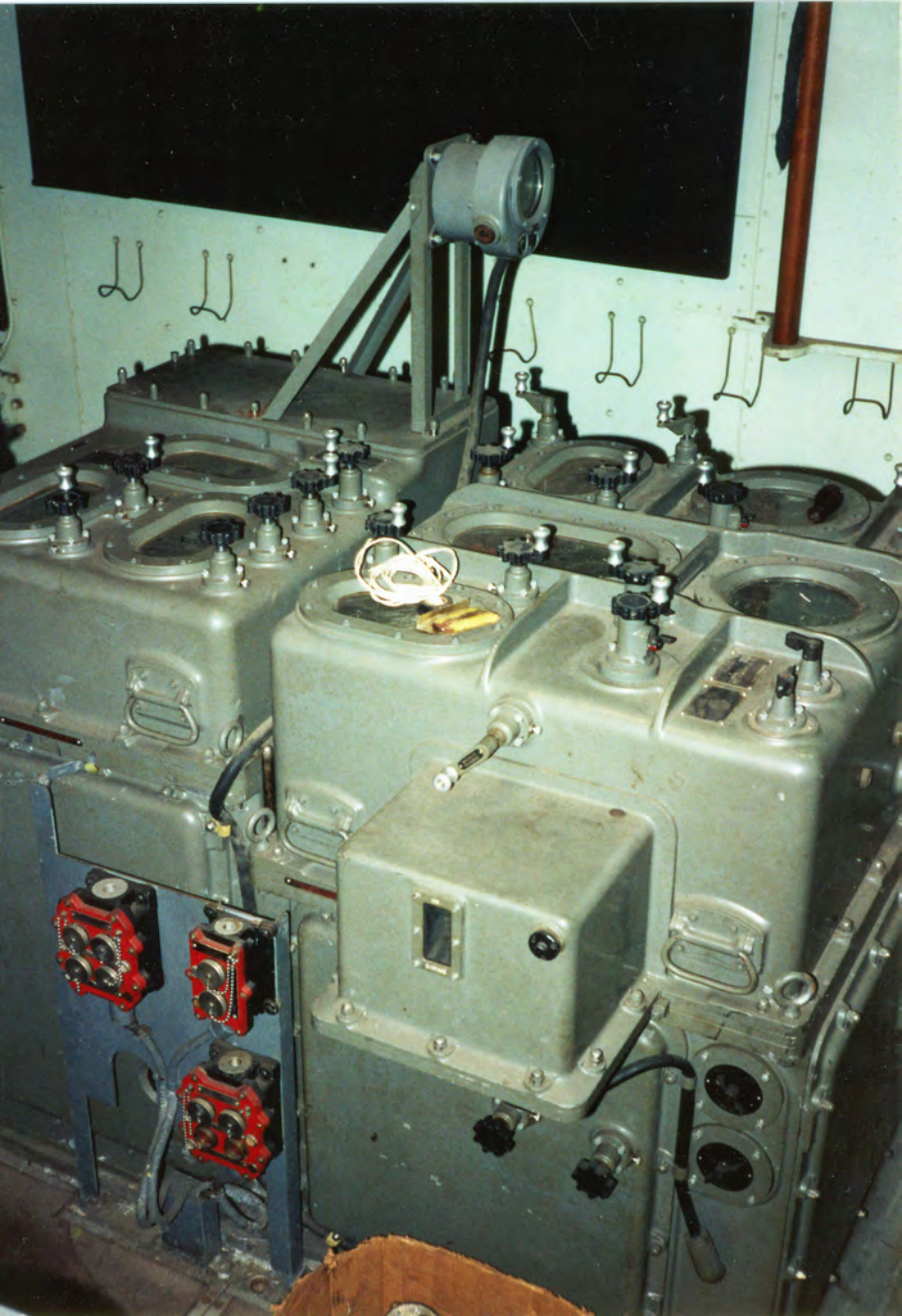
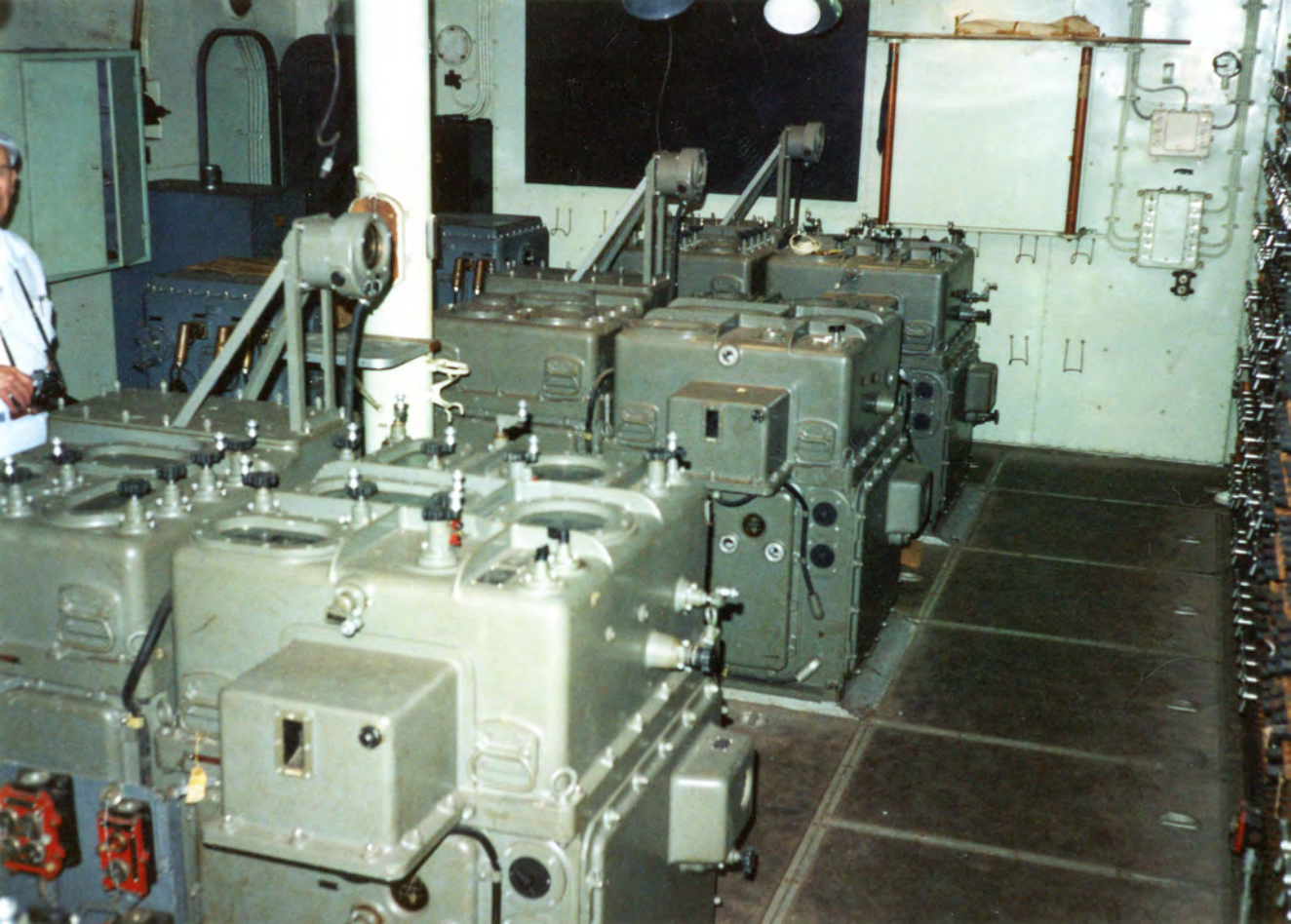


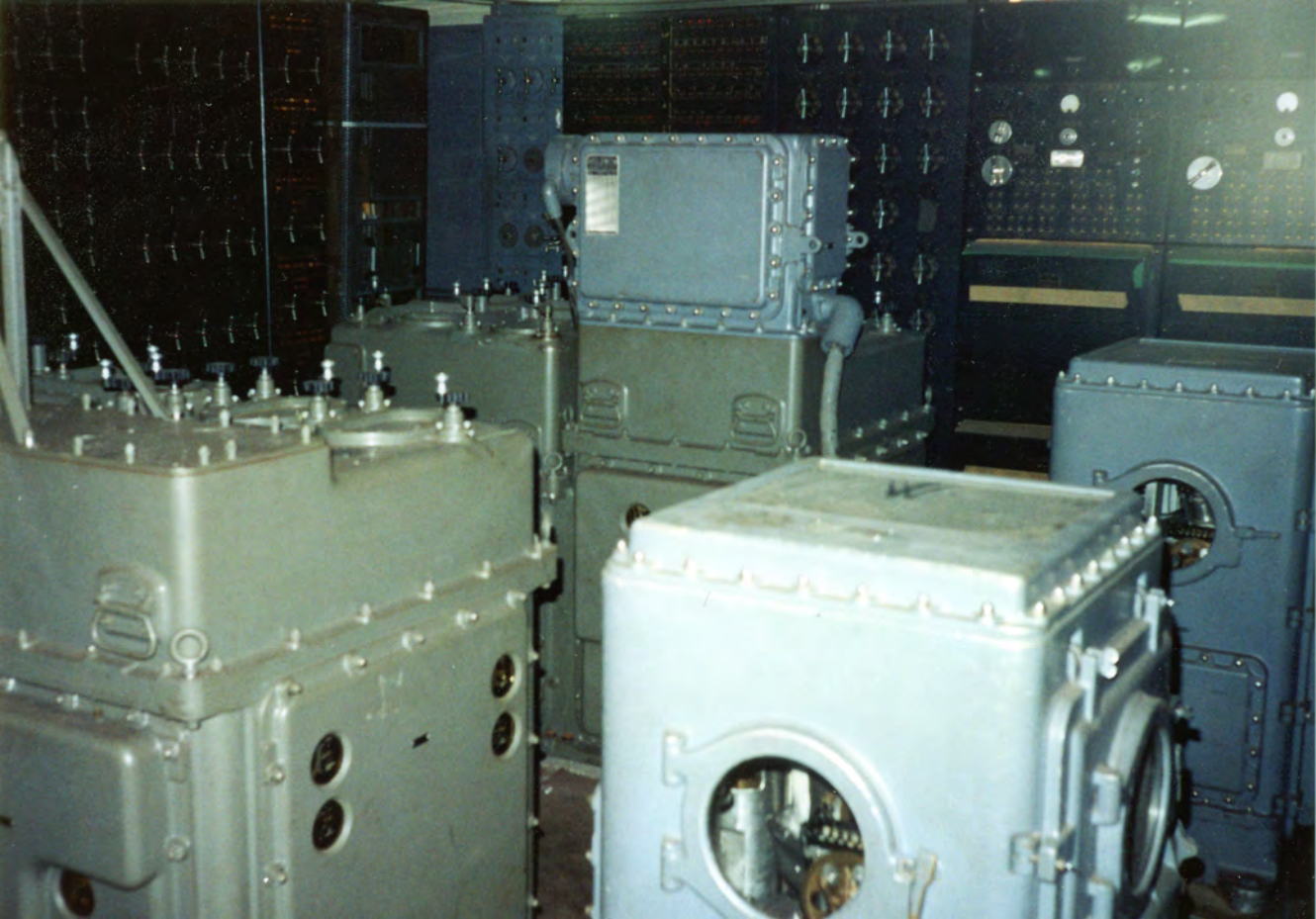
FIGURE 17D6. Star-shell computer, Mark 1.

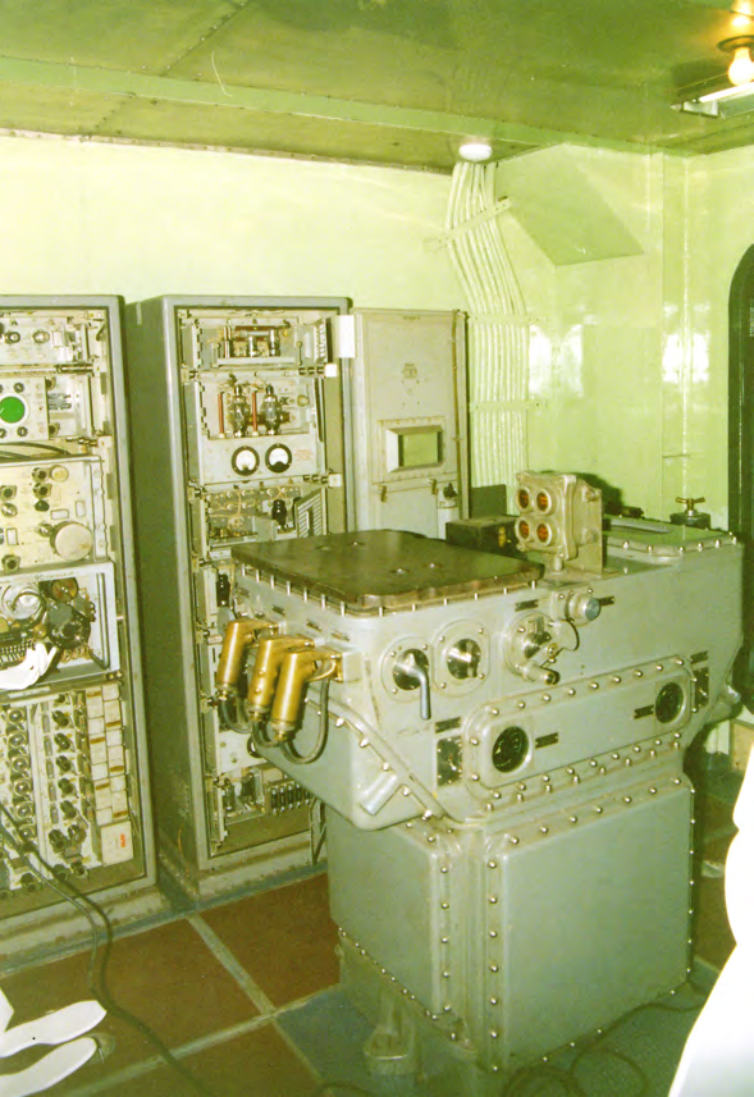


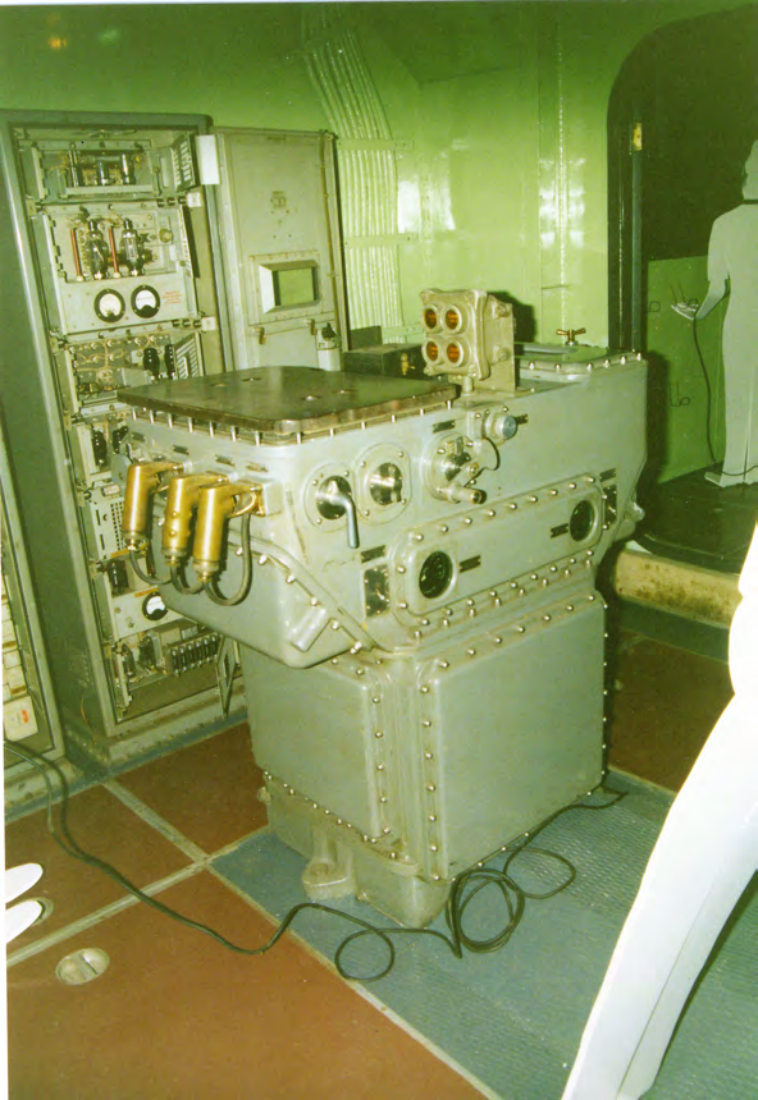


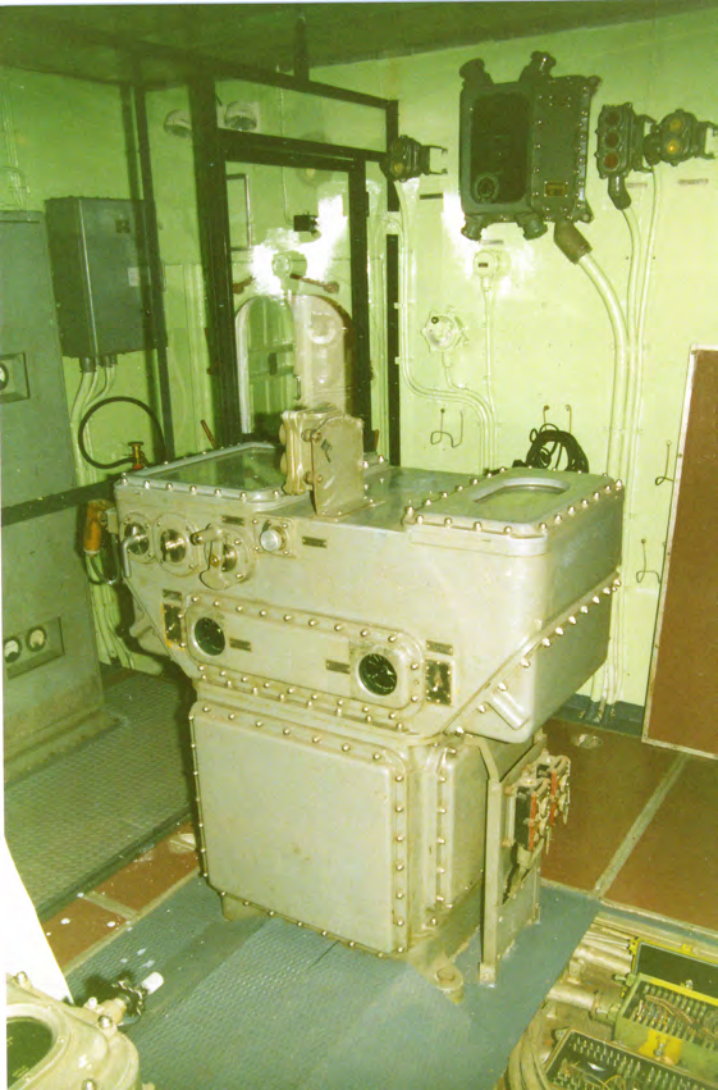


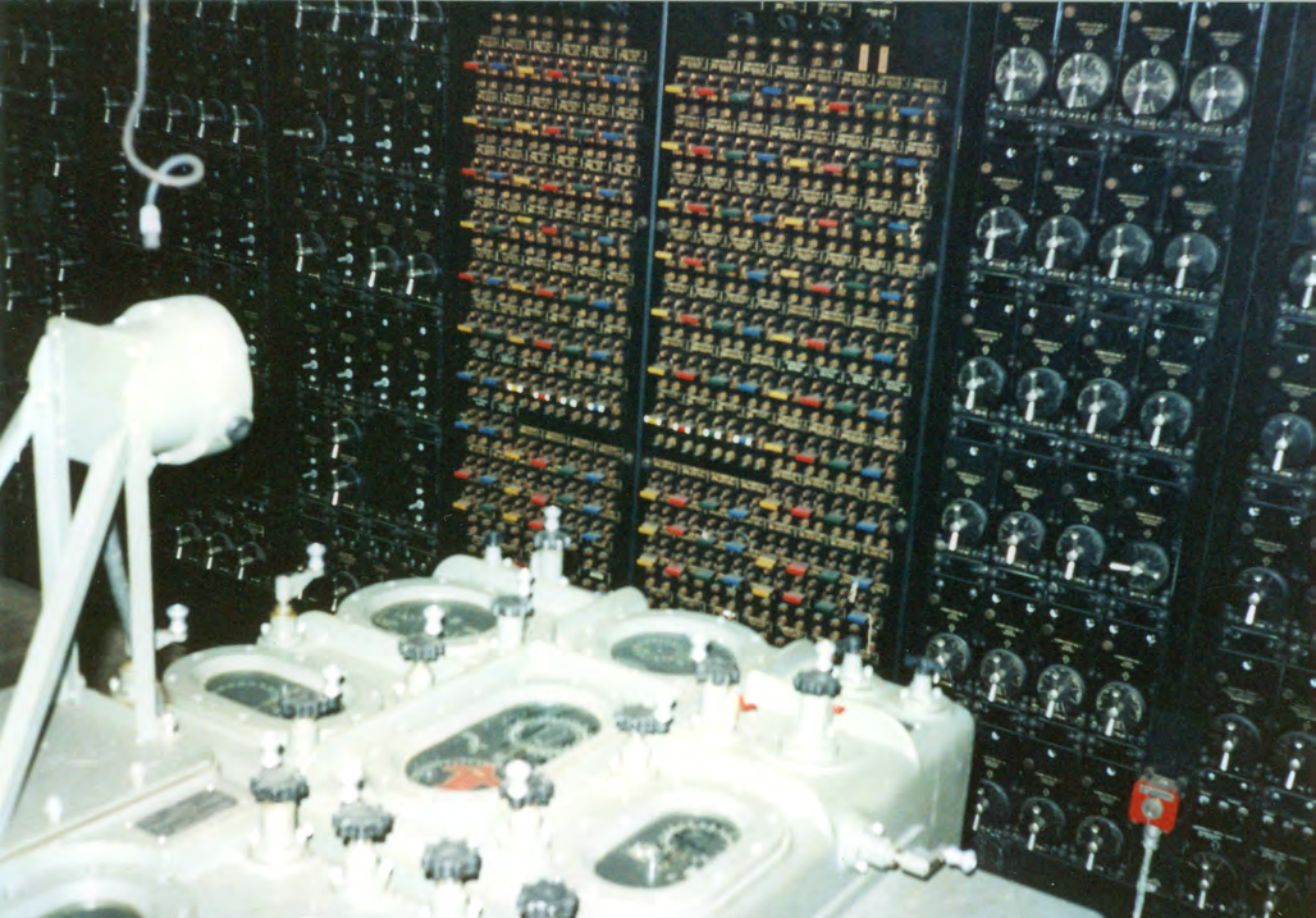




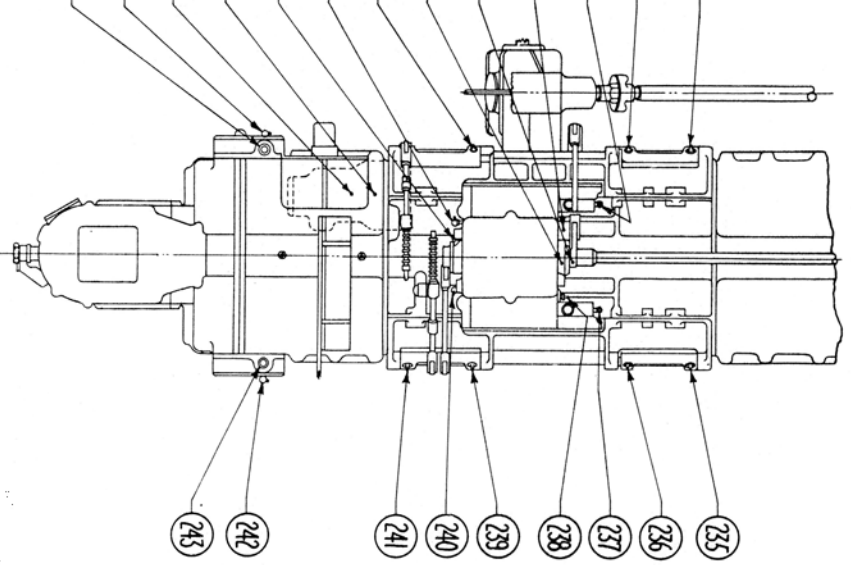
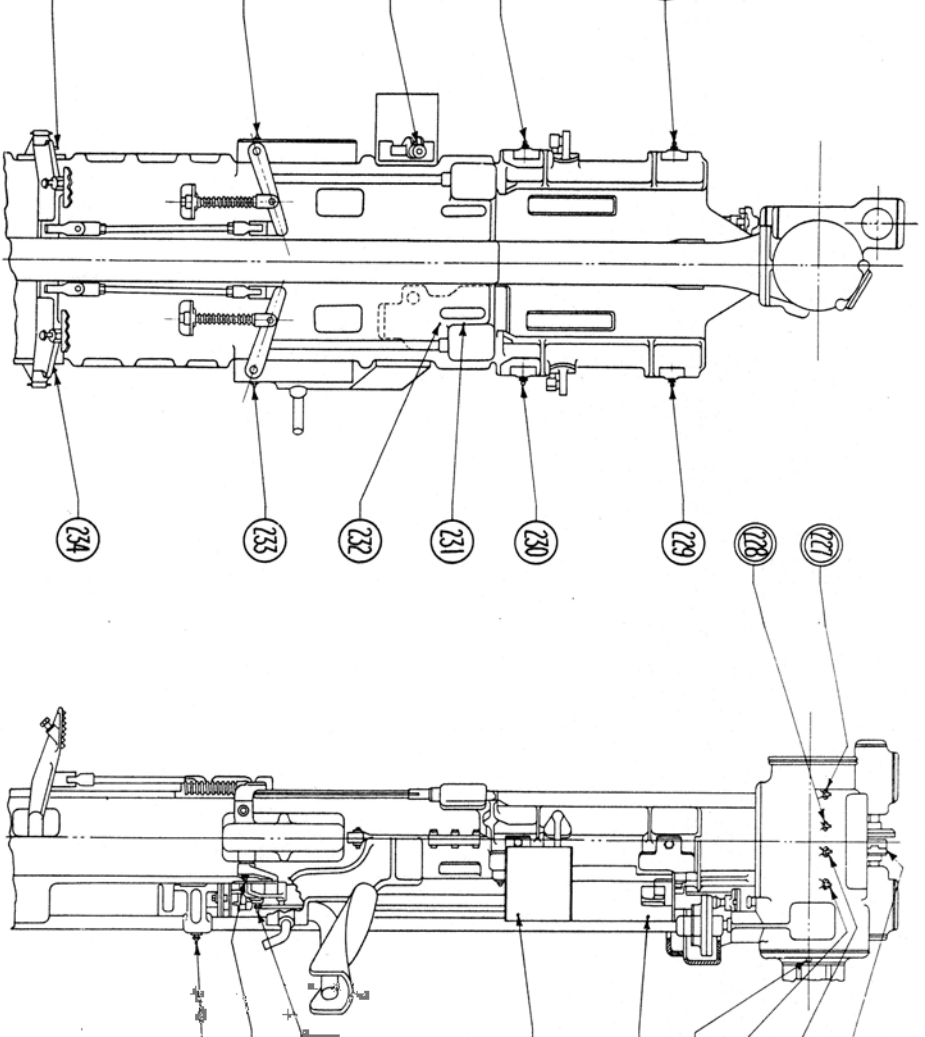




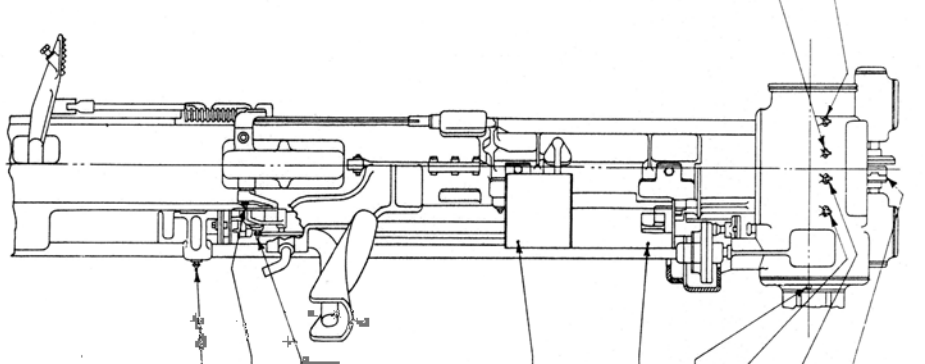




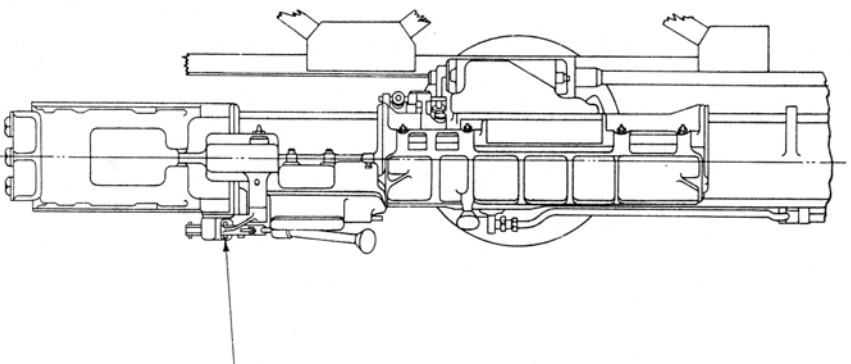


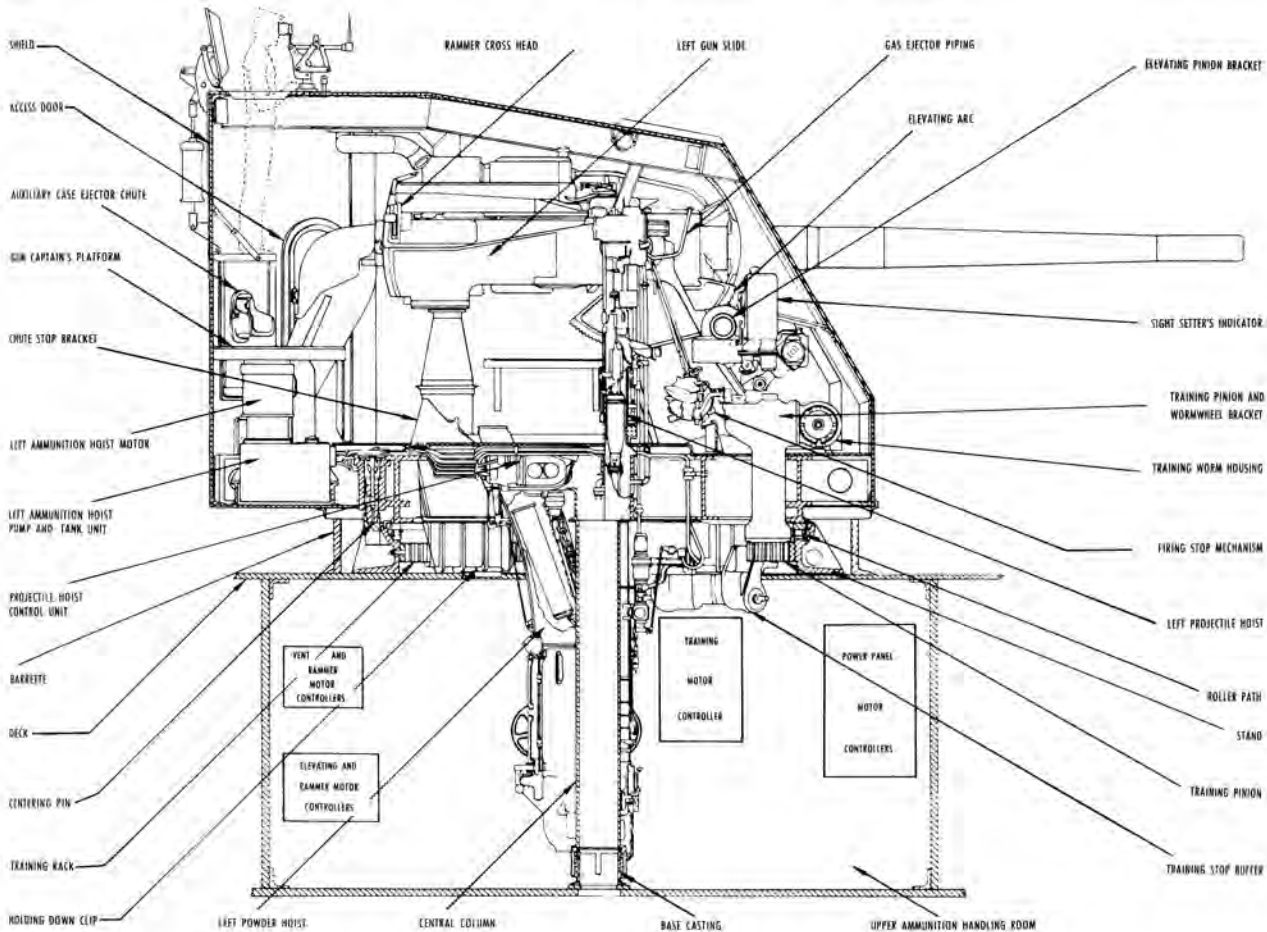


REAR VIEW OF LEFT  
HAND HOIST

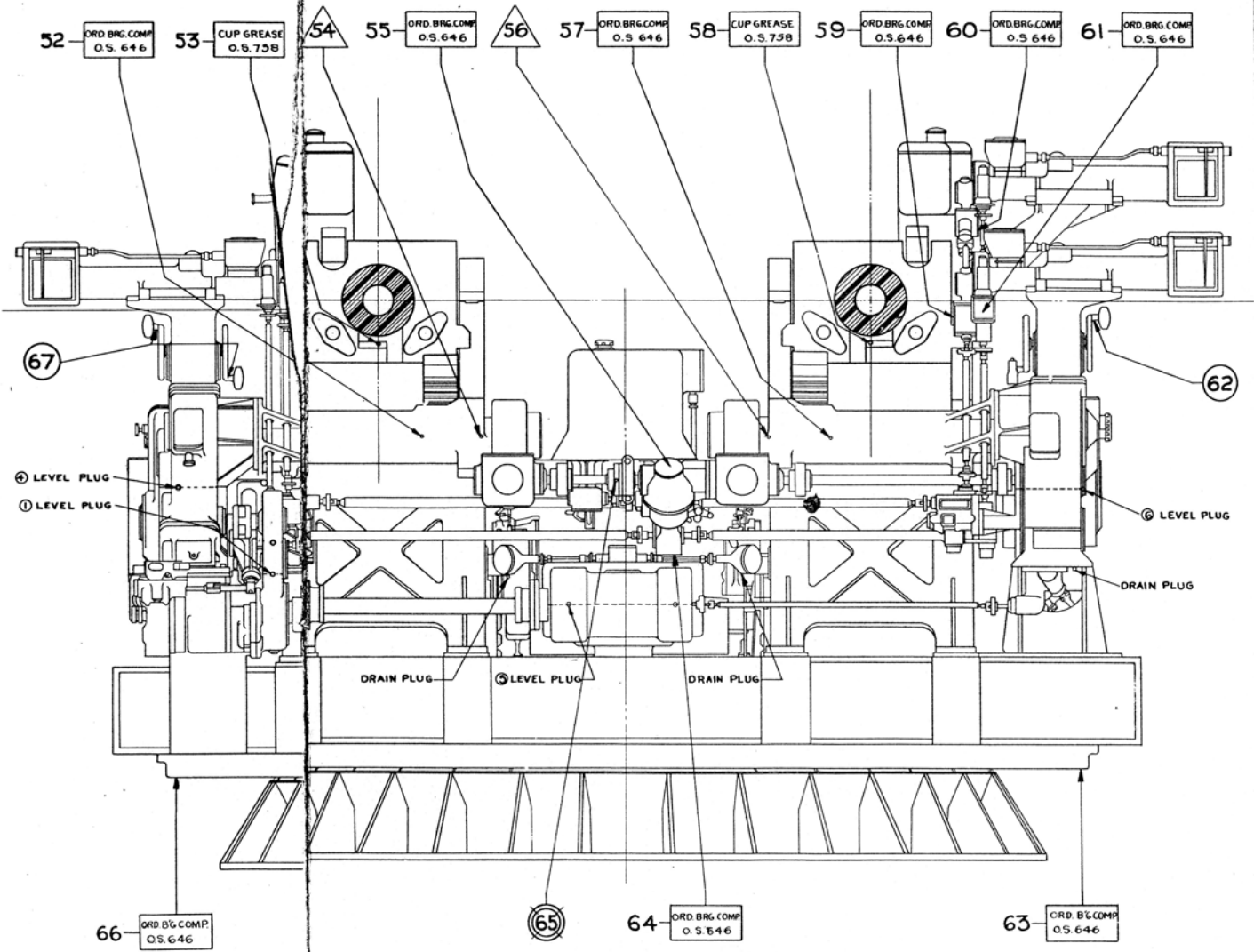


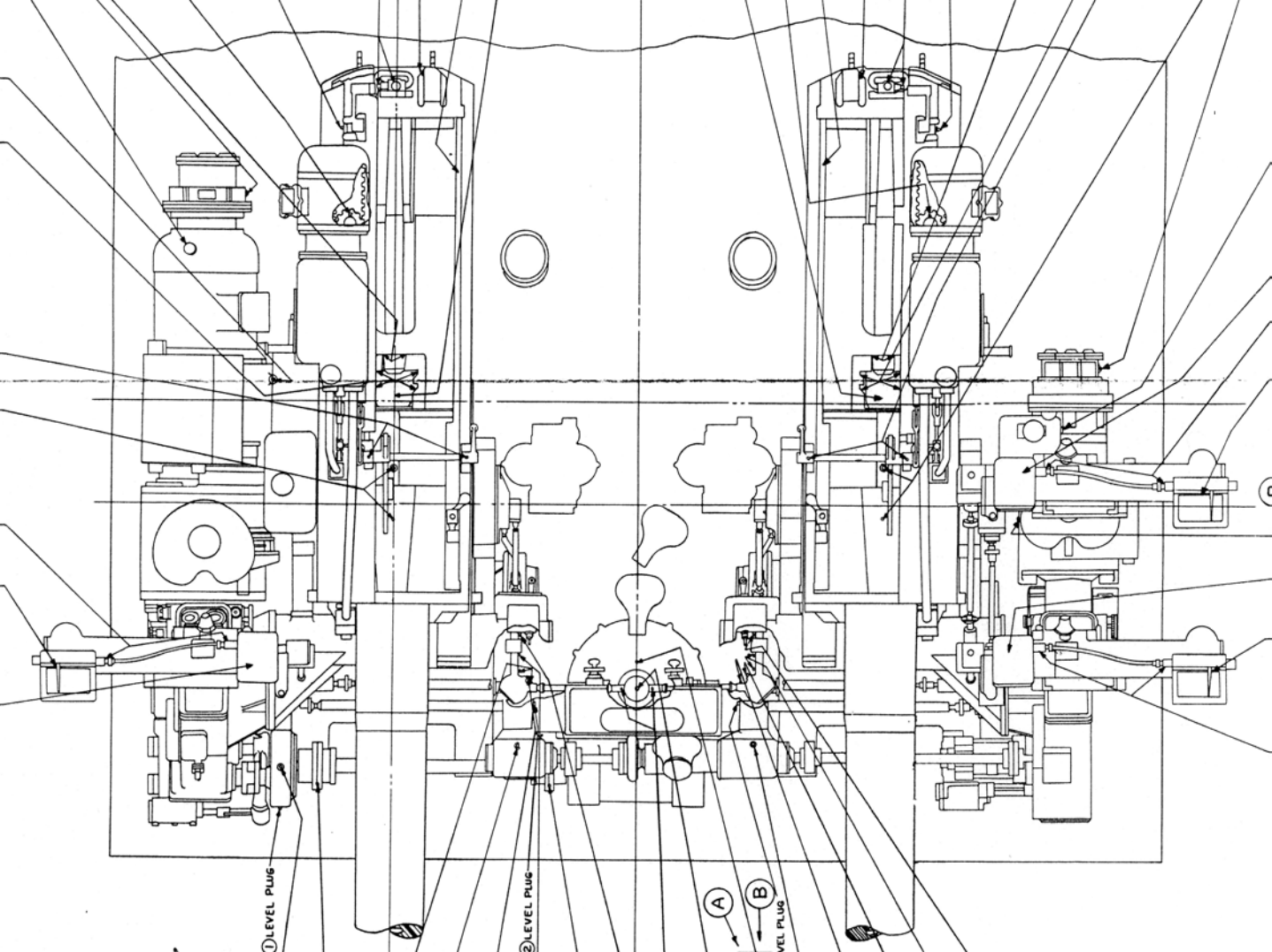
RIGHT SIDE OF LEFT  
HAND HOIST











TERMINAL BLOCK  
ACCESS COVER

HOUSING

DEFLECTION  
DIALS

LIGHTWELL

SIGHT ANGLE  
DIALS

RANGE  
DIAL

DEFLECTION  
MILS

SIGHT ANGLE

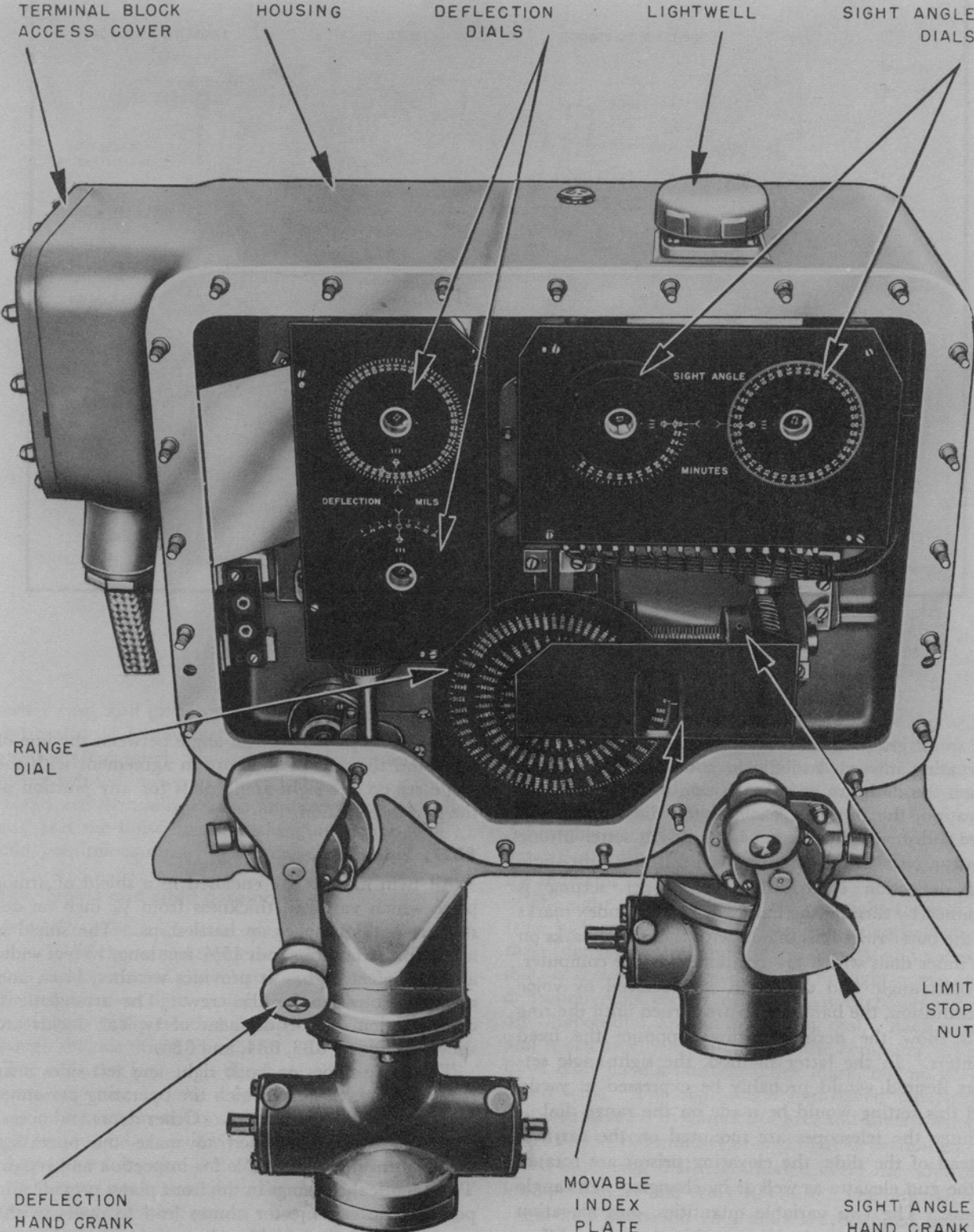
MINUTES

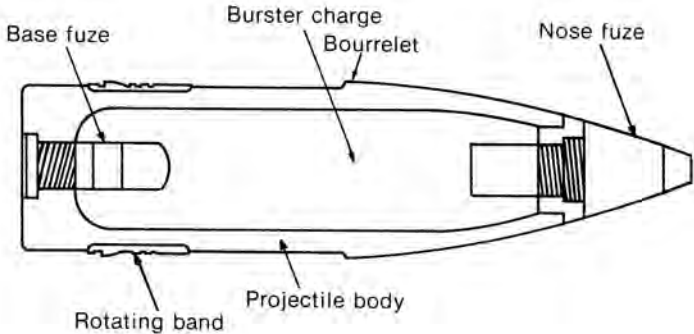
DEFLECTION  
HAND CRANK

MOVABLE  
INDEX  
PLATE

LIMIT  
STOP  
NUT

SIGHT ANGLE  
HAND CRANK





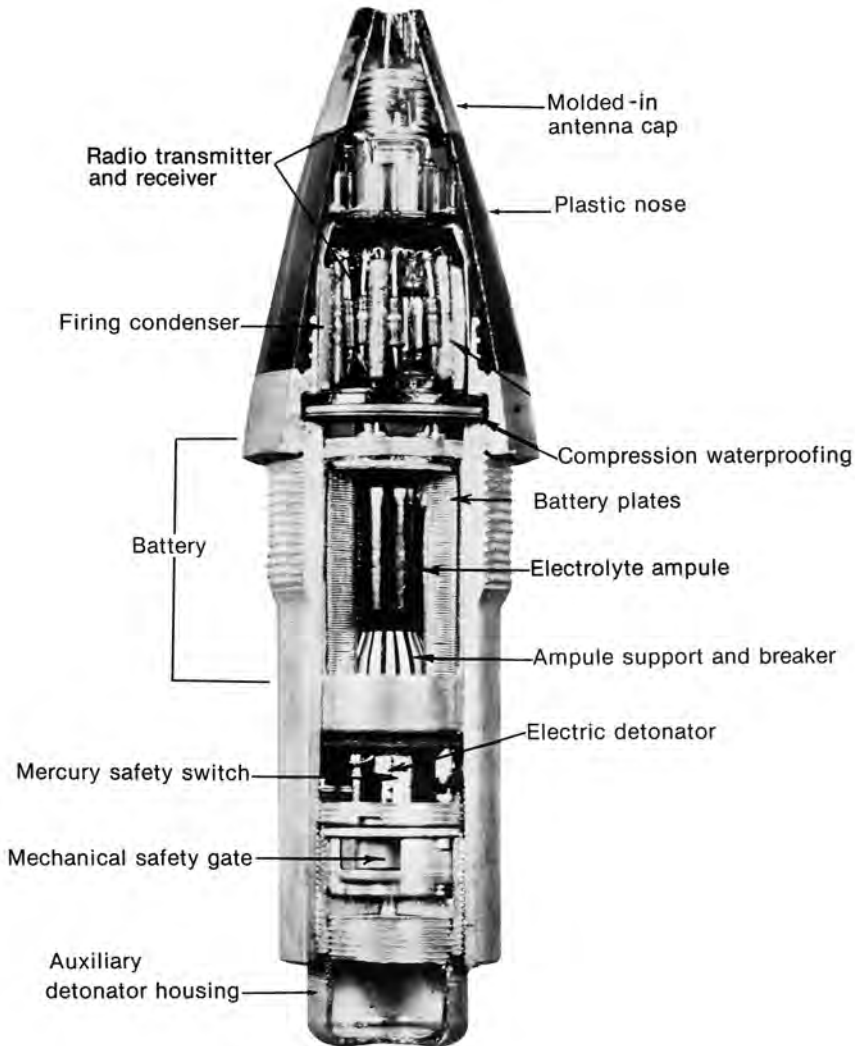
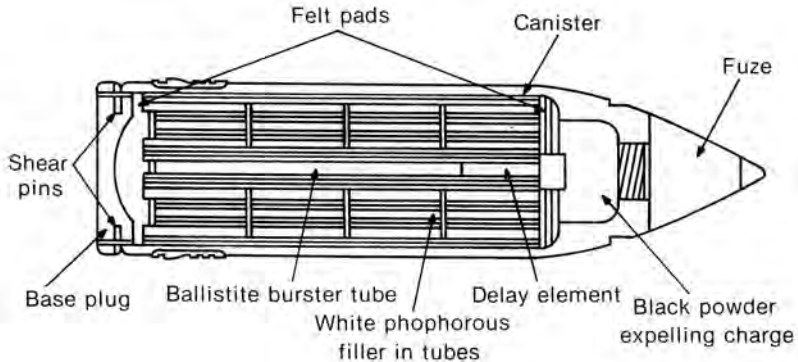
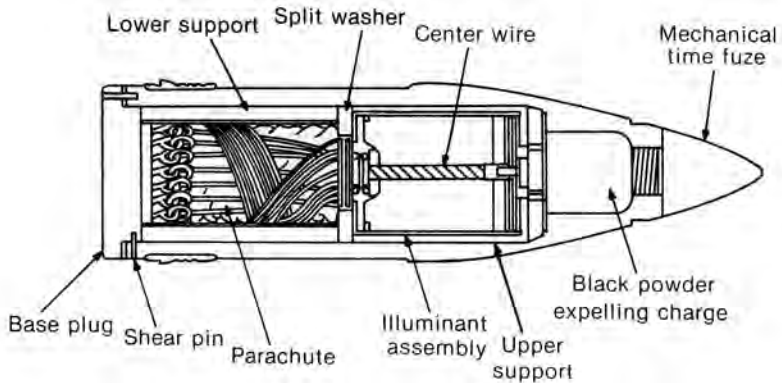
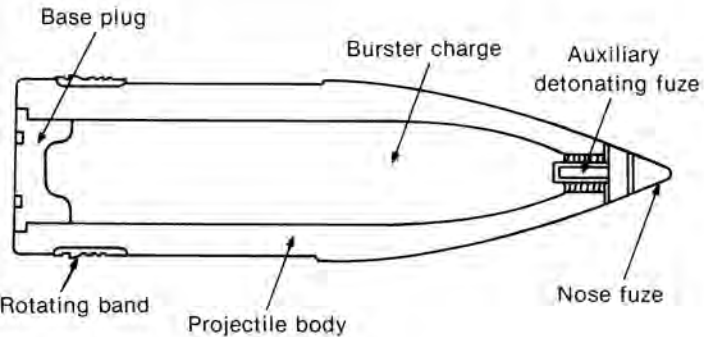


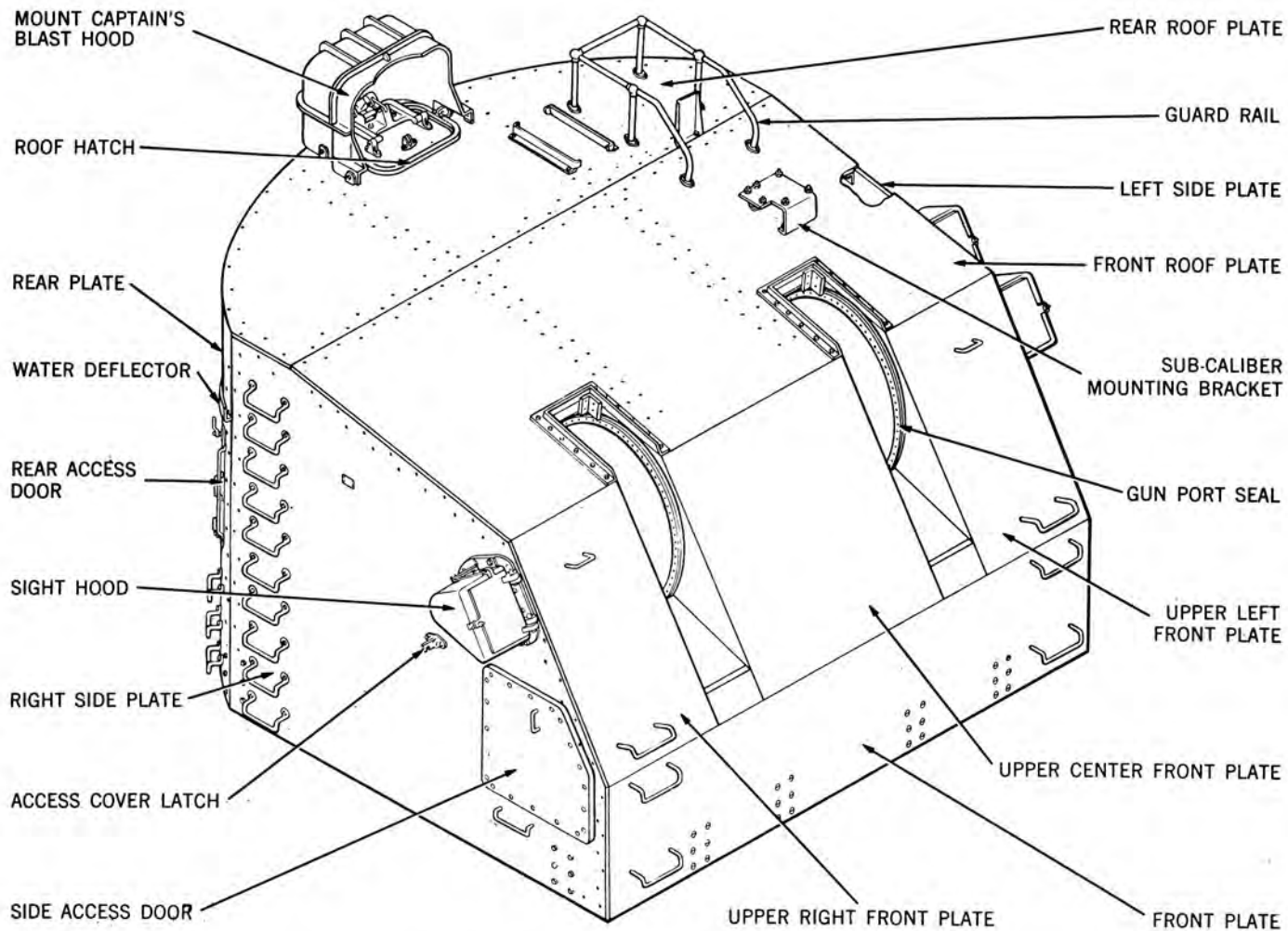
Fig. 15-6. Construction of a depth charge (not to scale). (Courtesy of the U.S. Navy.)



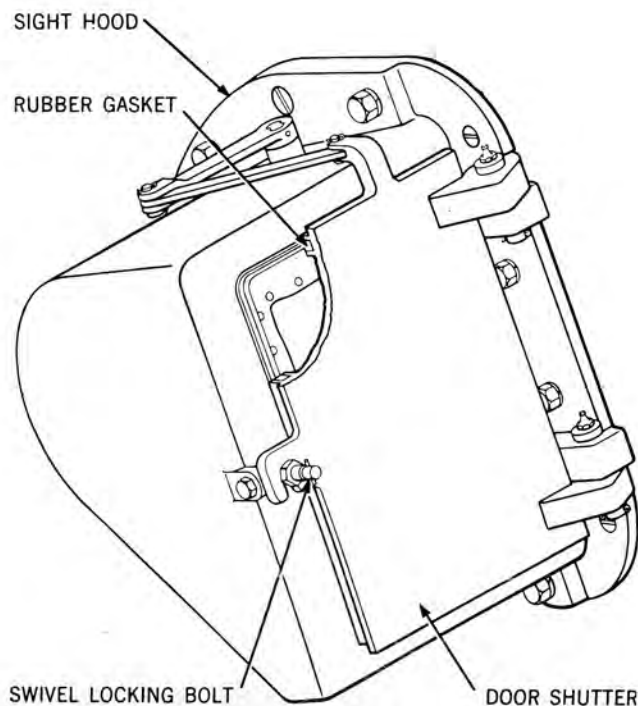
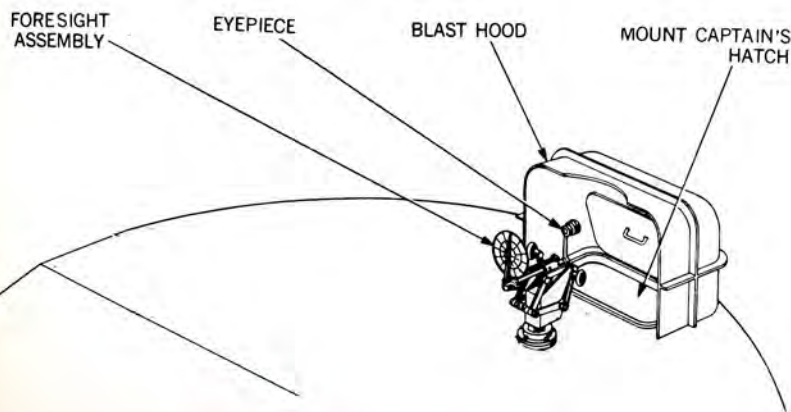




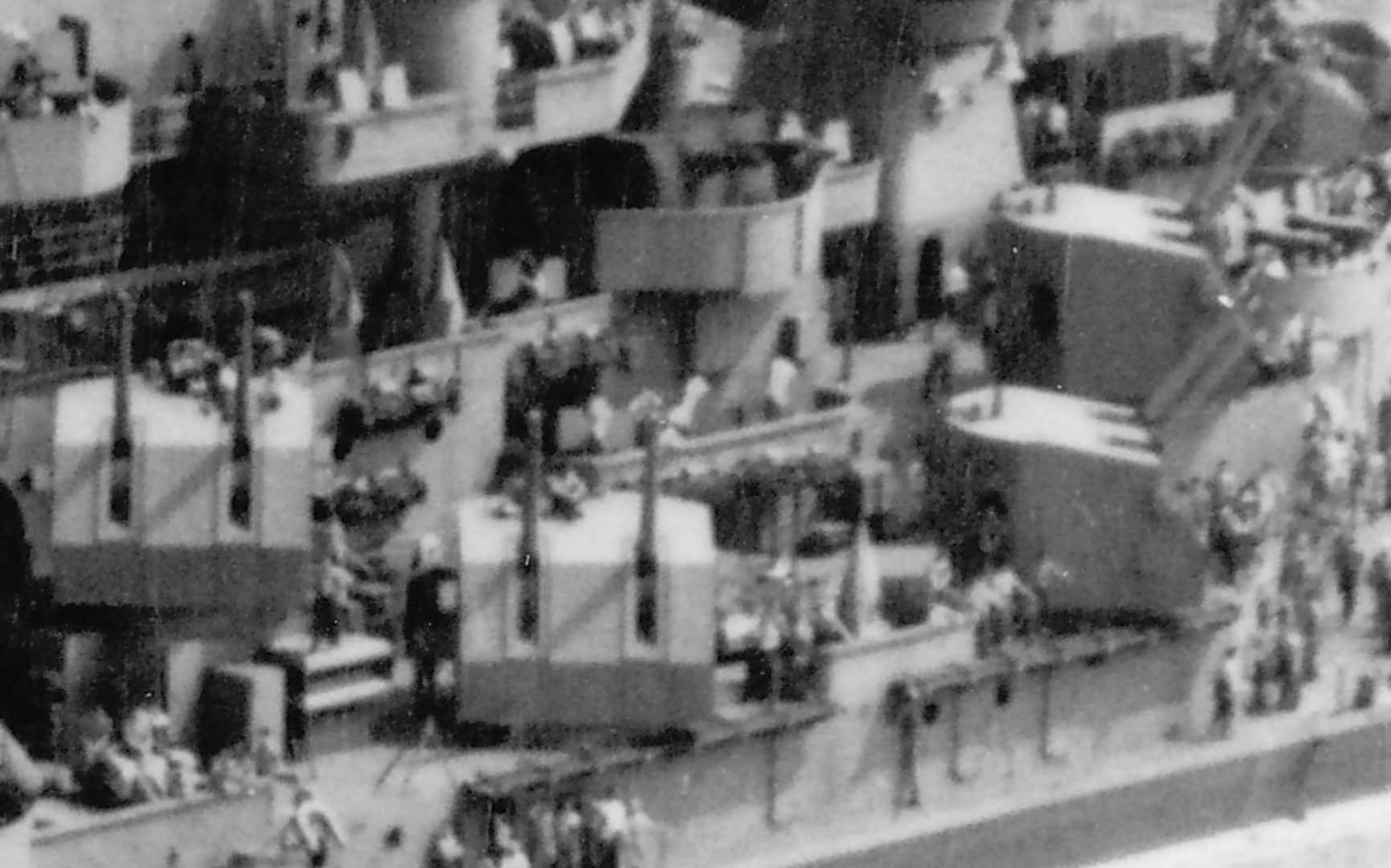


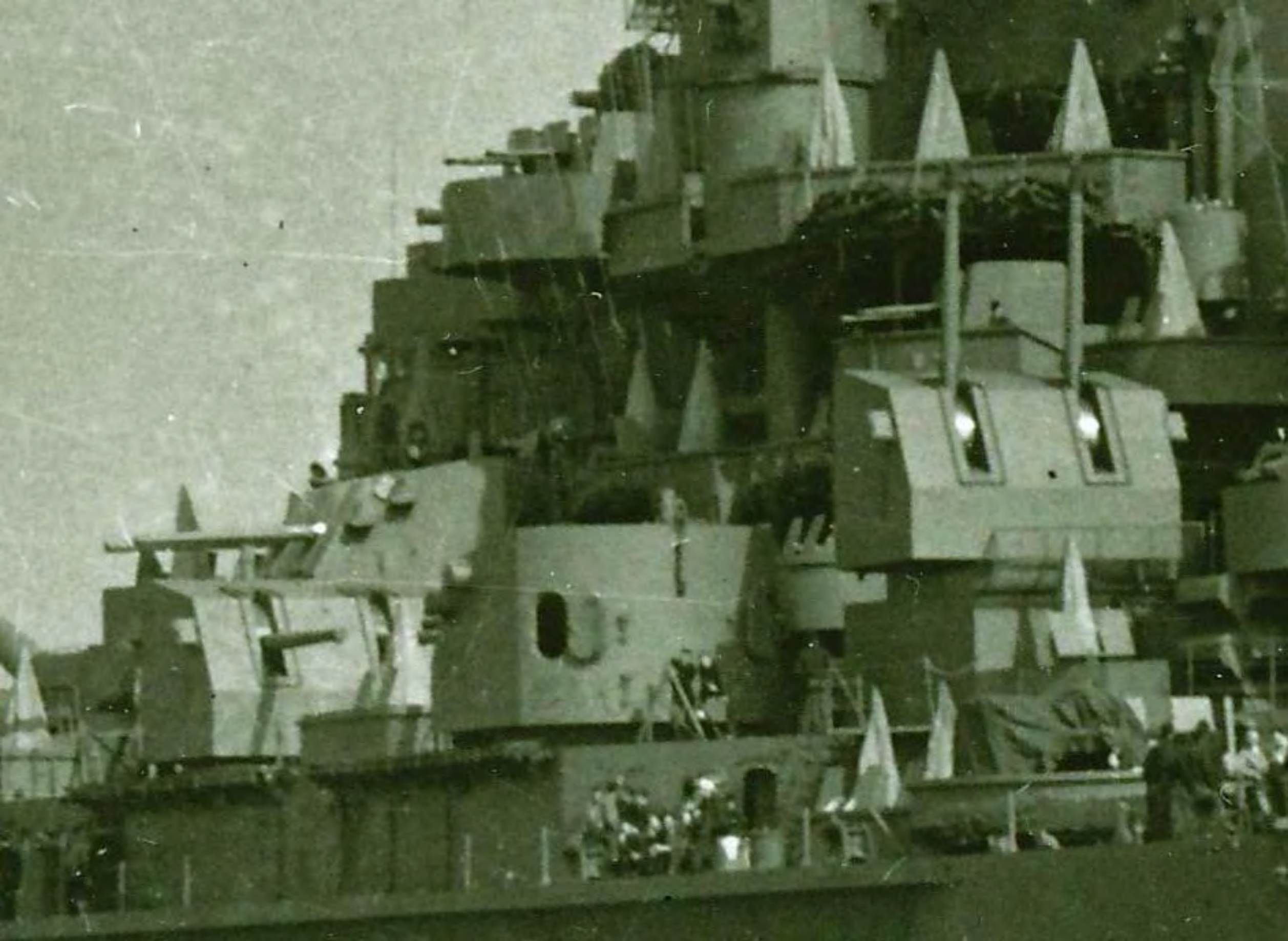


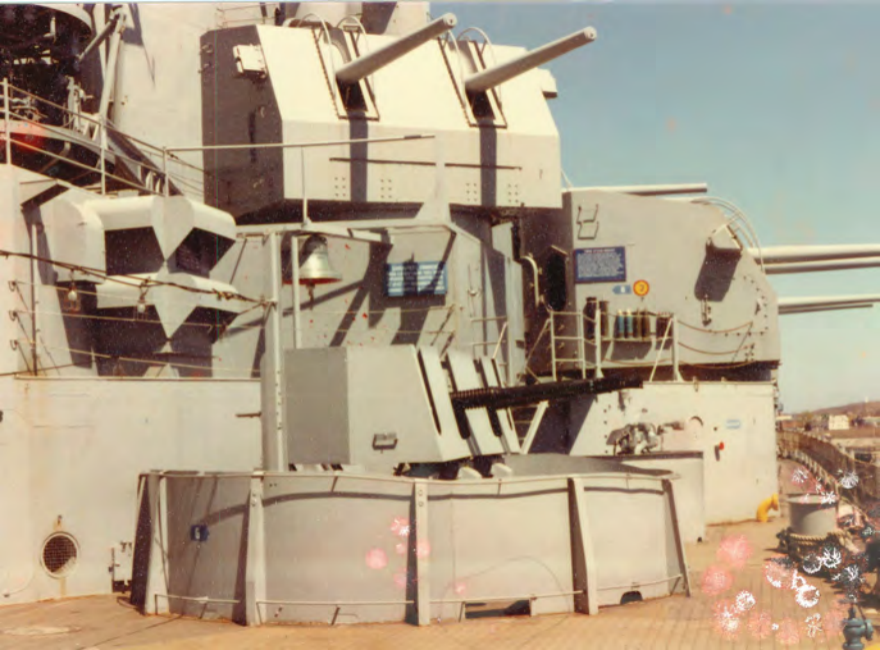
**5-Inch Shield Mk 31. Right Front View. General Arrangement. Exterior.**



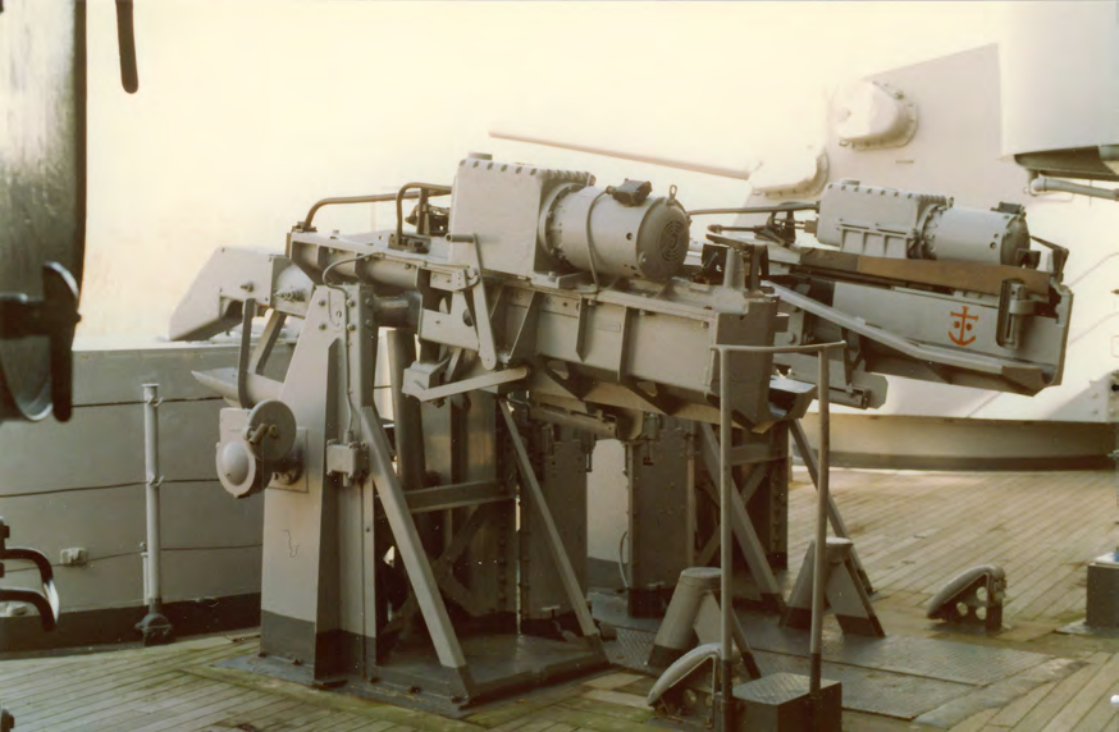


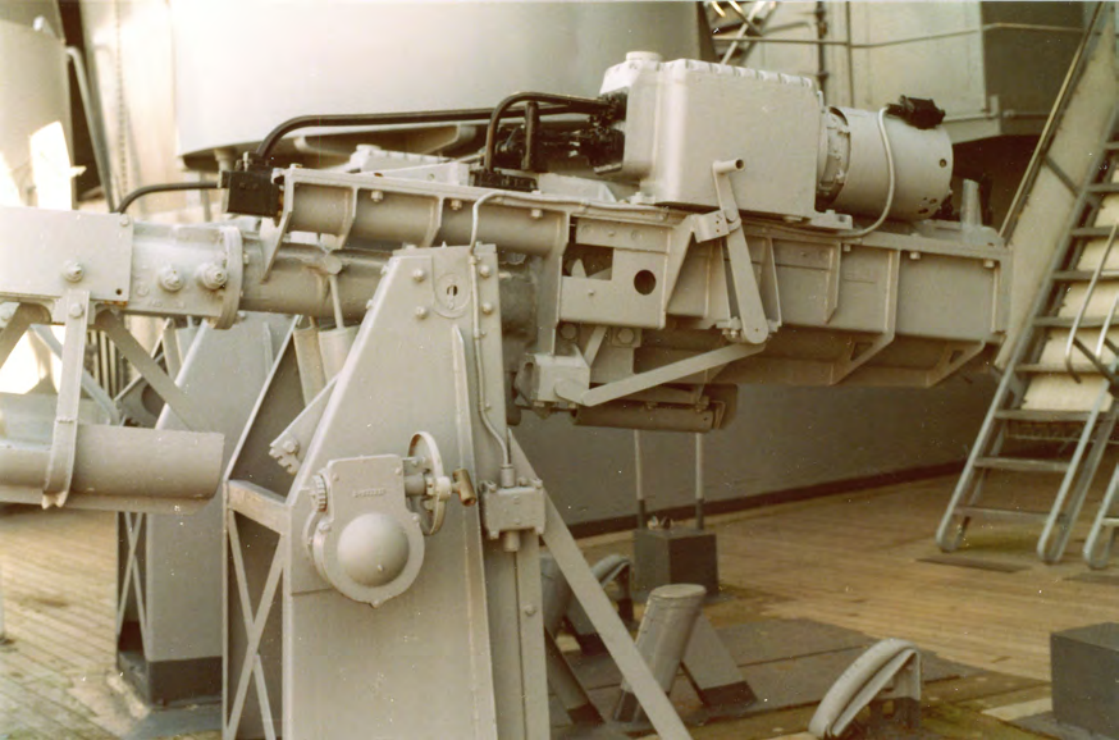




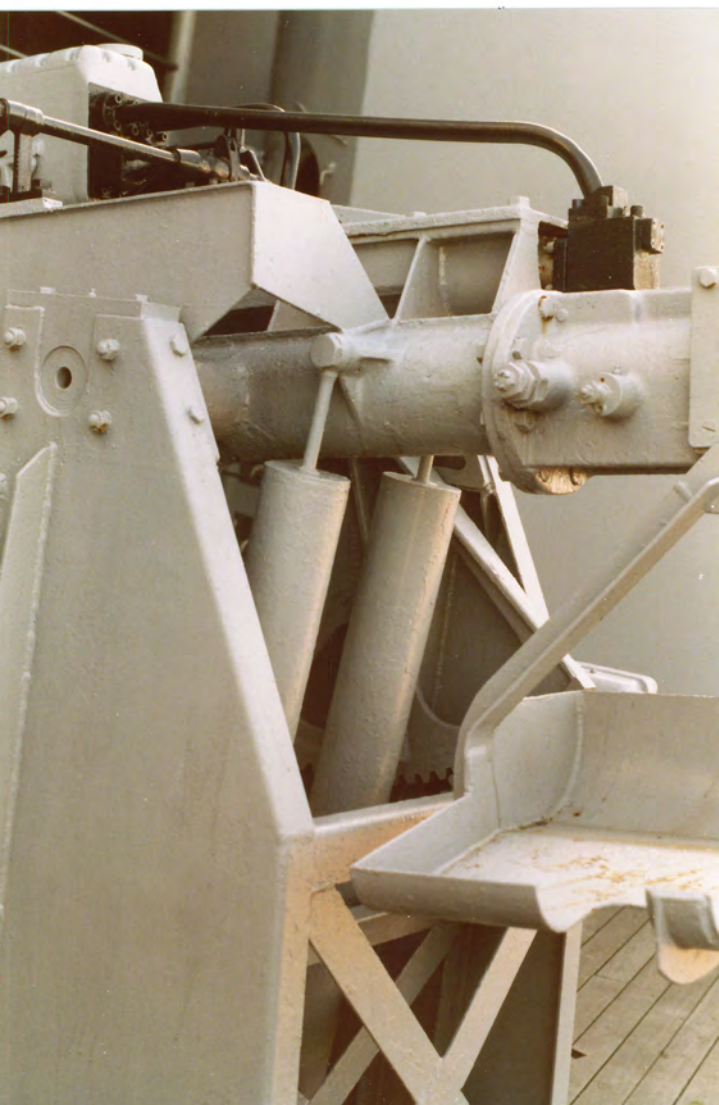


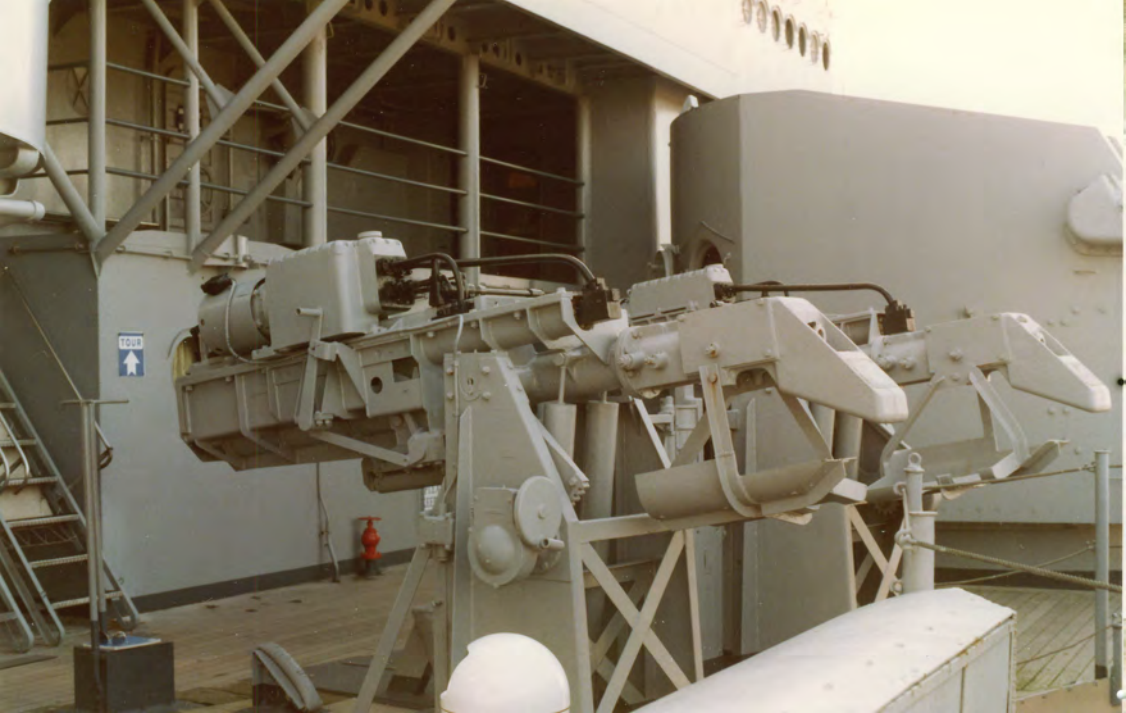




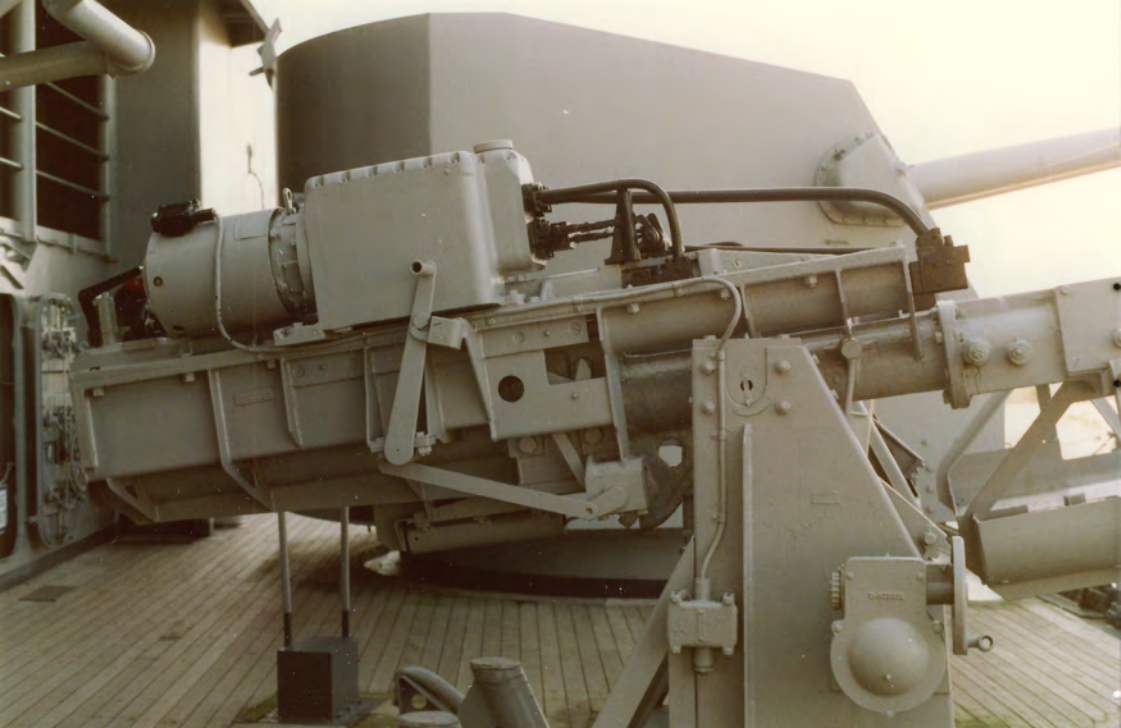


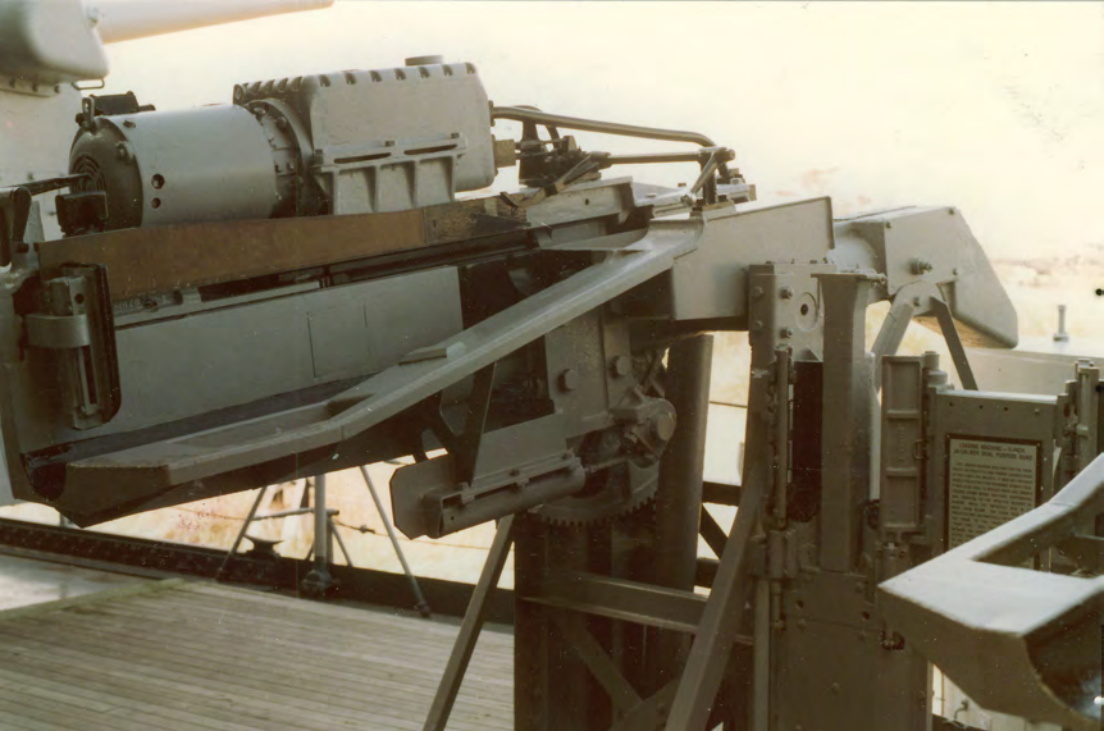






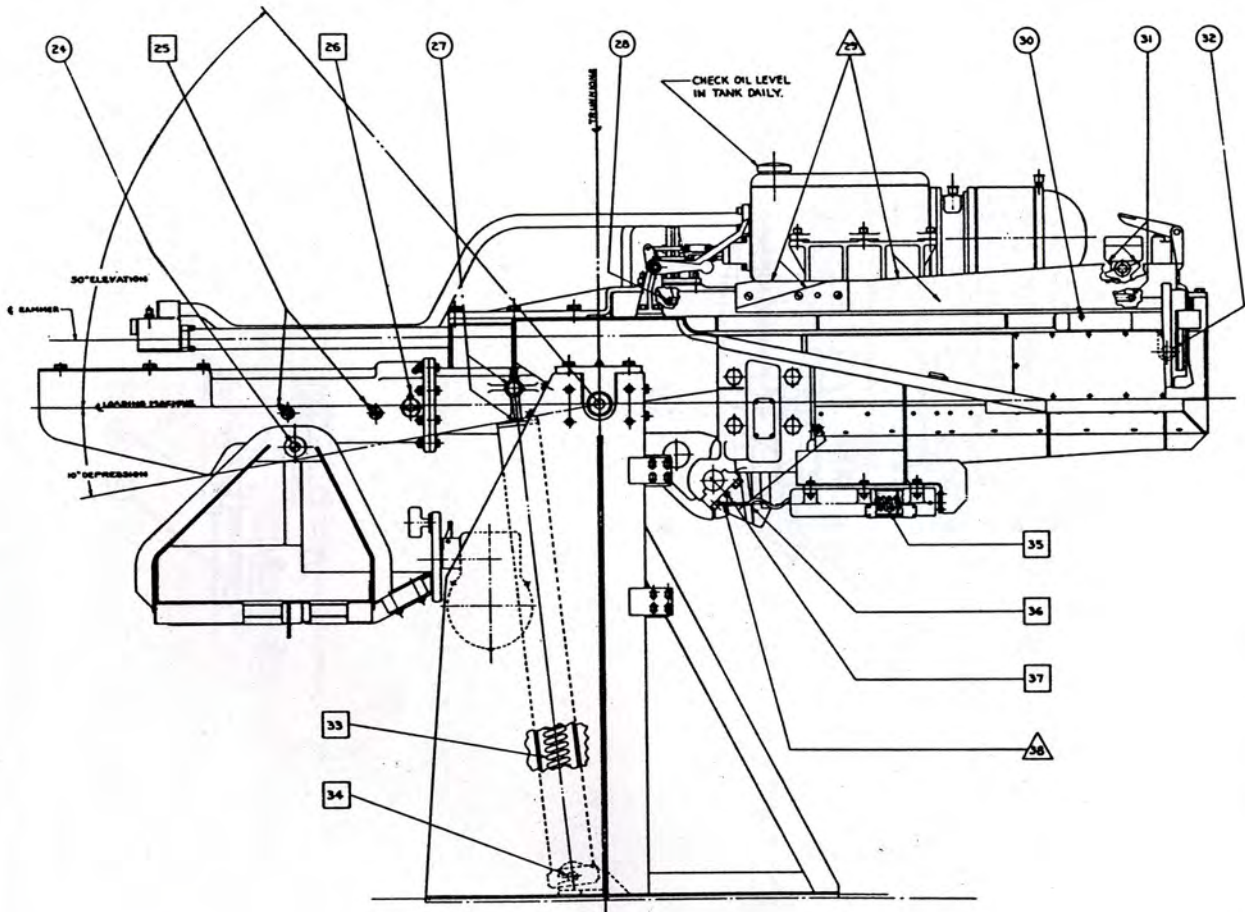
TOUR  
↑





SEARCHLIGHT - LAMP  
SEARCHLIGHT - FURNING UNIT

SEARCHLIGHT - LAMP  
SEARCHLIGHT - FURNING UNIT



- DAILY**
- 29 CAM PLATE (RAMMER SYSTEM)
  - 36 BREECH BLOCK CAM
- WEEKLY**
- 24 PIVOT PIN (PROJECTILE TRAY)
  - 27 SPRING ROD (EQUILIBRATOR)
  - 26, 31 OPERATING LEVERS (RAMMER SYSTEM)
  - 30, 32 CROSS HEAD (RAMMER SYSTEM)
  - 37 BREECH BLOCK OPERATING MECHANISM
  - 38 OPERATING SPRING CHAIN (BREECH BLOCK MECHANISM)
- MONTHLY**
- 25 GUIDES (PROJECTILE DEFLECTOR)
  - 26 BRAKE (PROJECTILE DEFLECTOR)
  - 34 CYLINDER TRUNNION (EQUILIBRATOR)
- SEMI-ANNUALLY**
- 33 SPRING (EQUILIBRATOR)
  - 35 OPERATING SPRING (BREECH BLOCK MECHANISM)

**NOTE:-**  
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 EXERCISE THE PARTS AFTER LUBRICATING.

- INDICATES LIGHT MINERAL OIL FOR LUBRICATION.
- INDICATES CUP GREASE FOR LUBRICATION.
- △ INDICATES EXTRA HEAVY MINERAL OIL FOR LUBRICATION.

20



THIS COPY IS FOR	
5" LOADING MACHINE MK. XXII MOD. 2 (30 CAL.)	
<b>LUBRICATION CHART</b> LEFT SIDE ELEVATION SCALE: 1/2"	
NAVY DEPARTMENT BUREAU OF ORDNANCE WASHINGTON, D. C.	
272232 ROCK ISLAND ARSENAL	

9

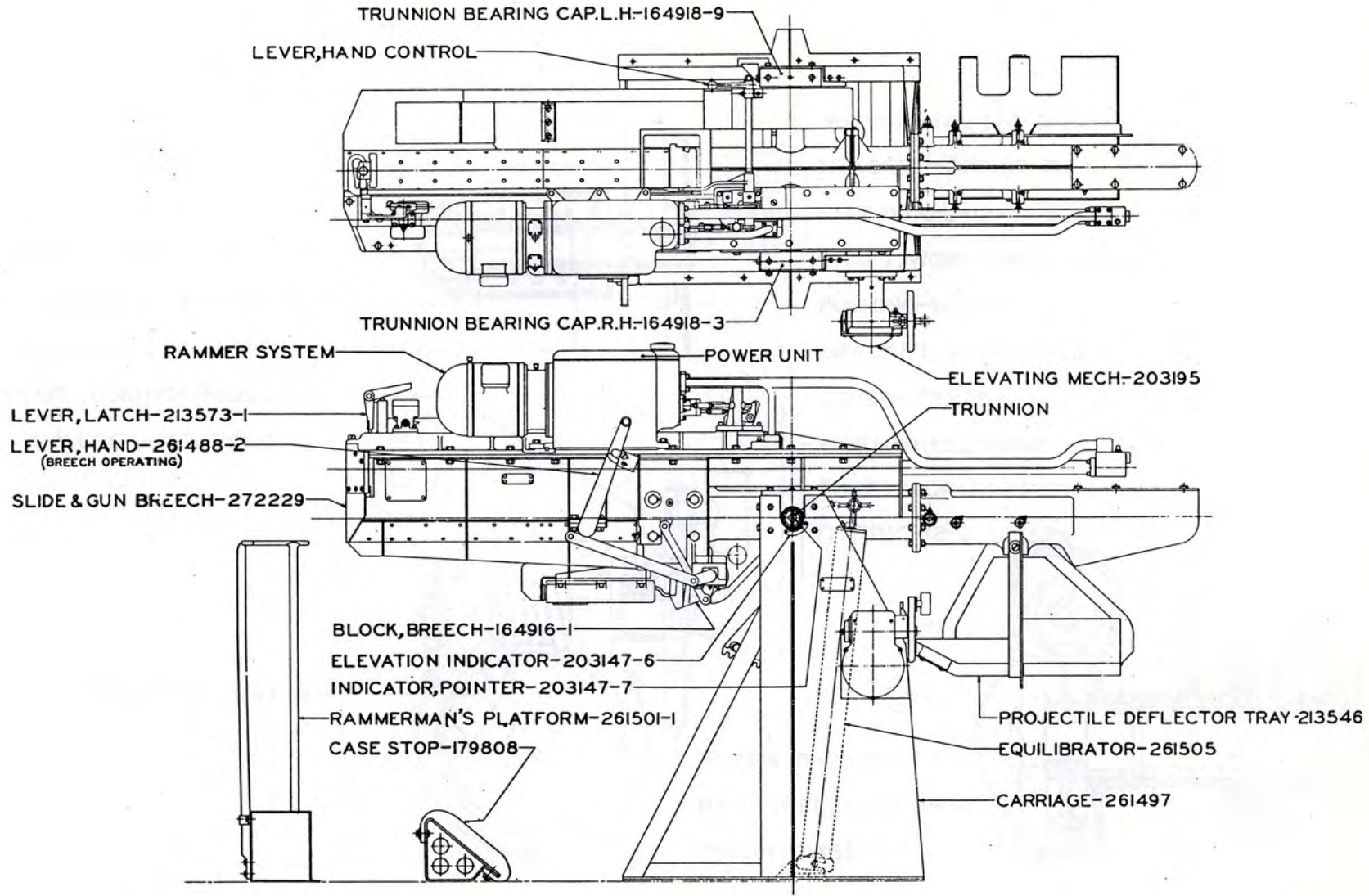
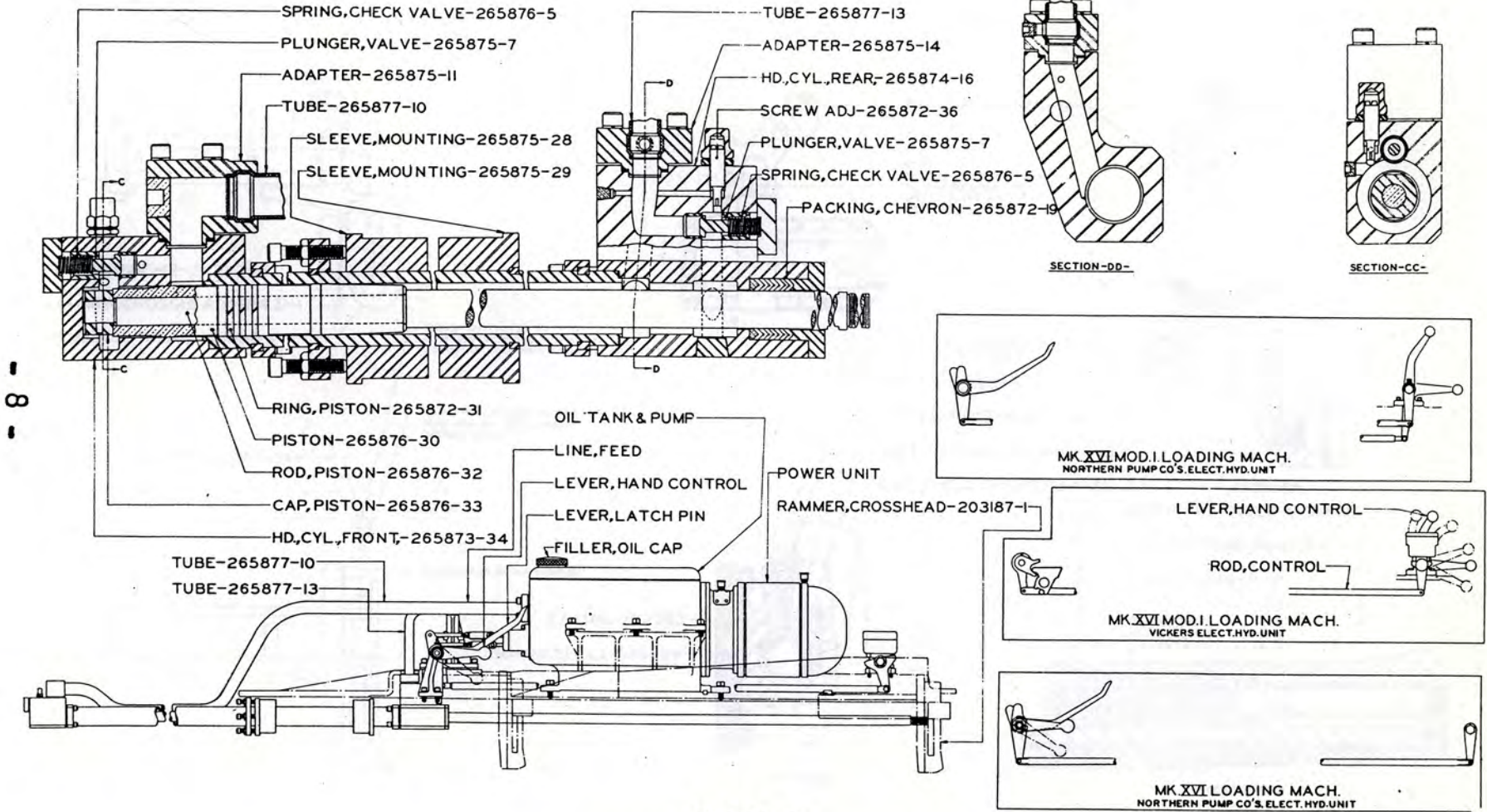


PLATE-A  
 5<sup>TH</sup> LOADING MACHINE (38 CAL.) MK. XVI MOD. 2  
 PLAN AND ELEVATION



- 8 -

PLATE-C  
 5<sup>th</sup> LOADING MACHINE (38 CAL.)  
 MK. XVI MK. XVII MOD. I MK. XVI MOD. 2  
 RAMMER SYSTEM

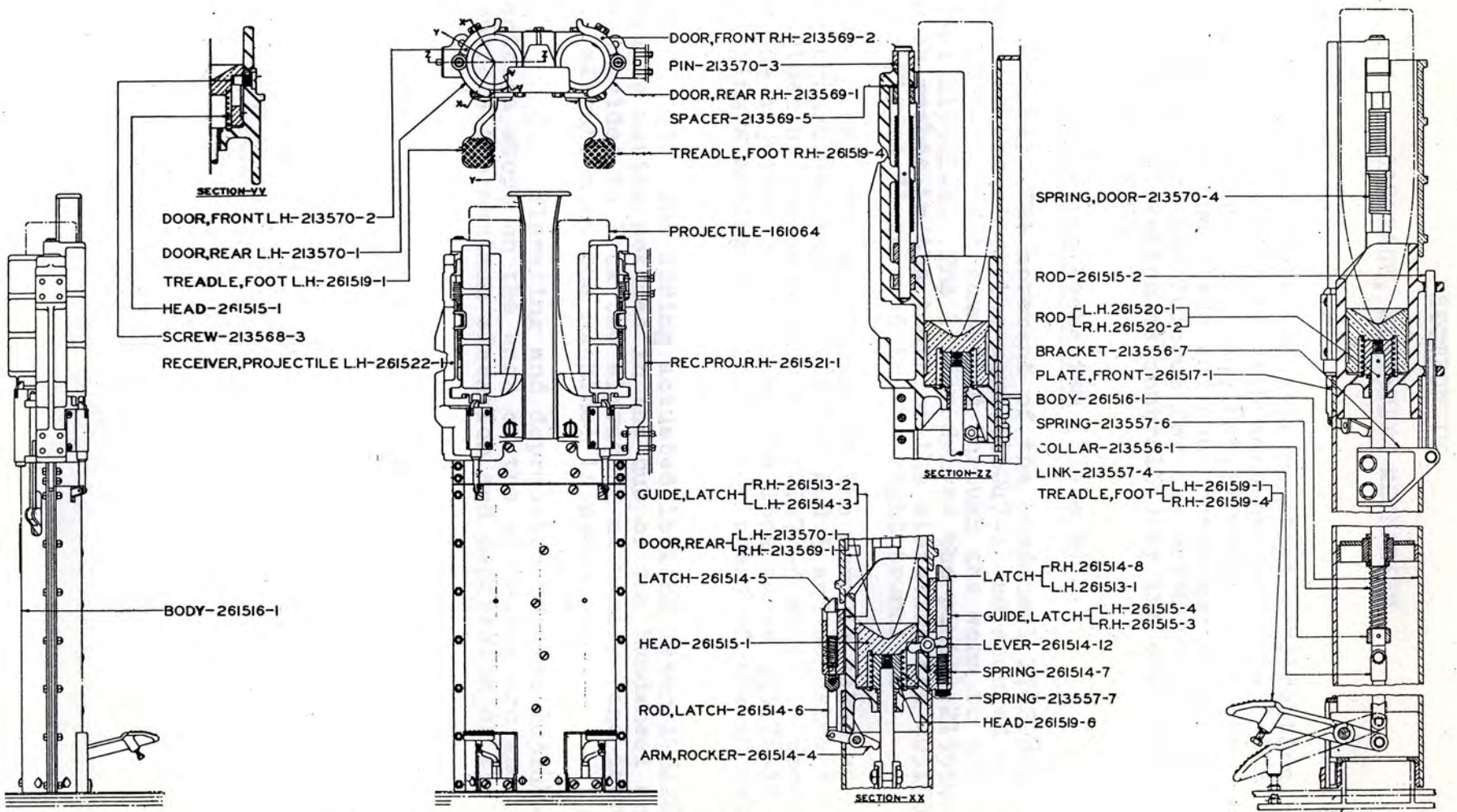
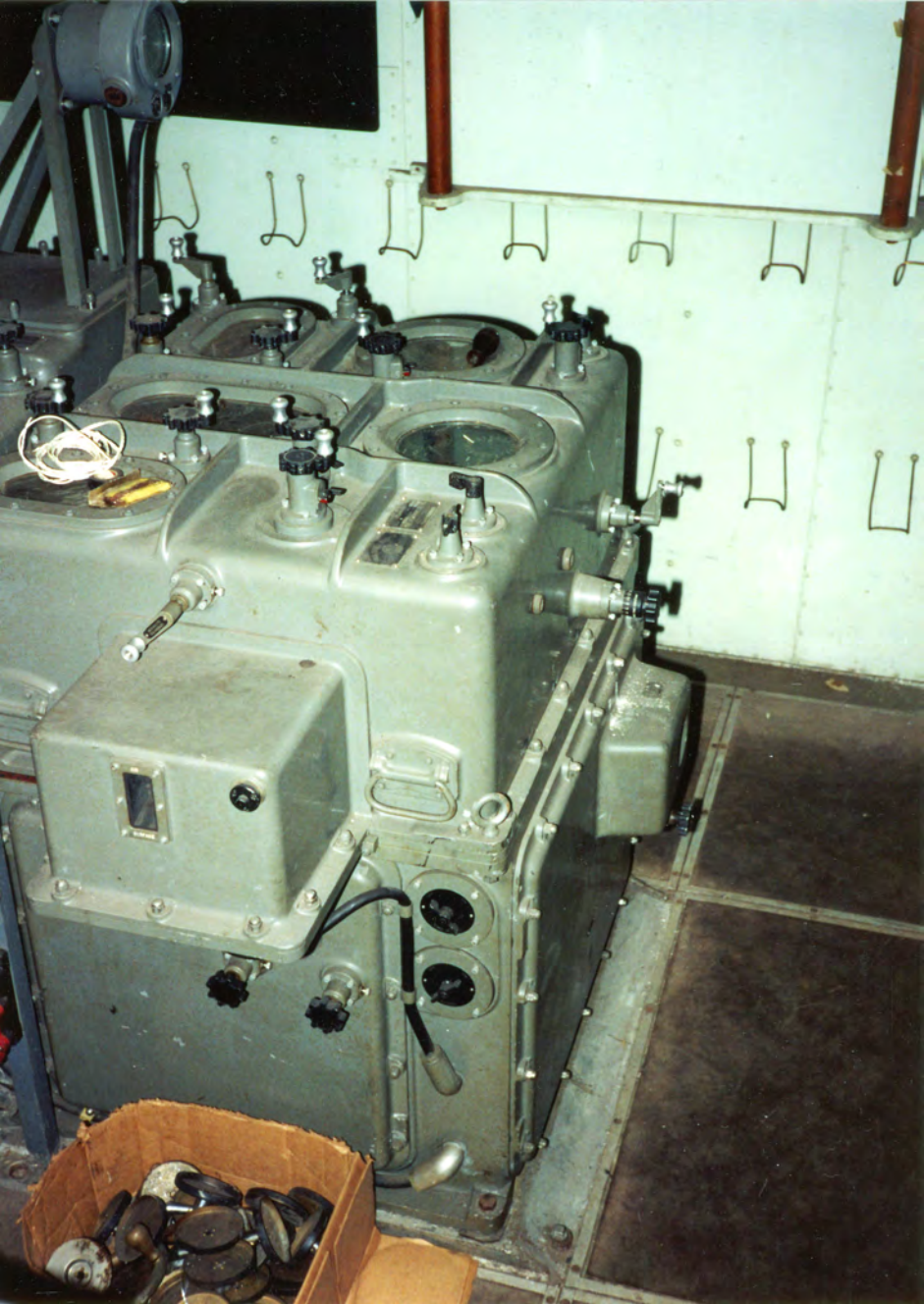
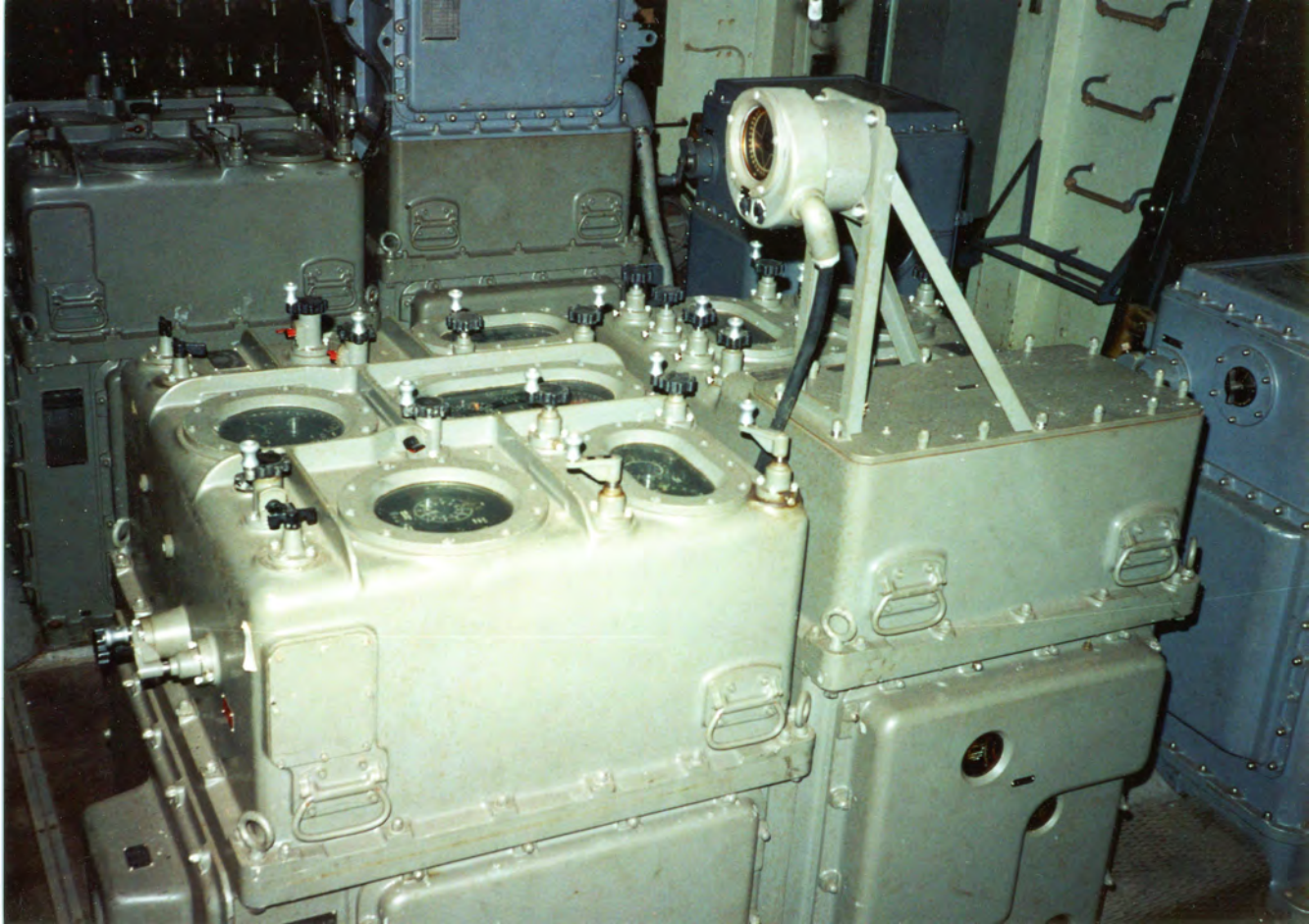


PLATE-F

5<sup>th</sup> PROJECTILE HOIST TOP MK.II MOD.2







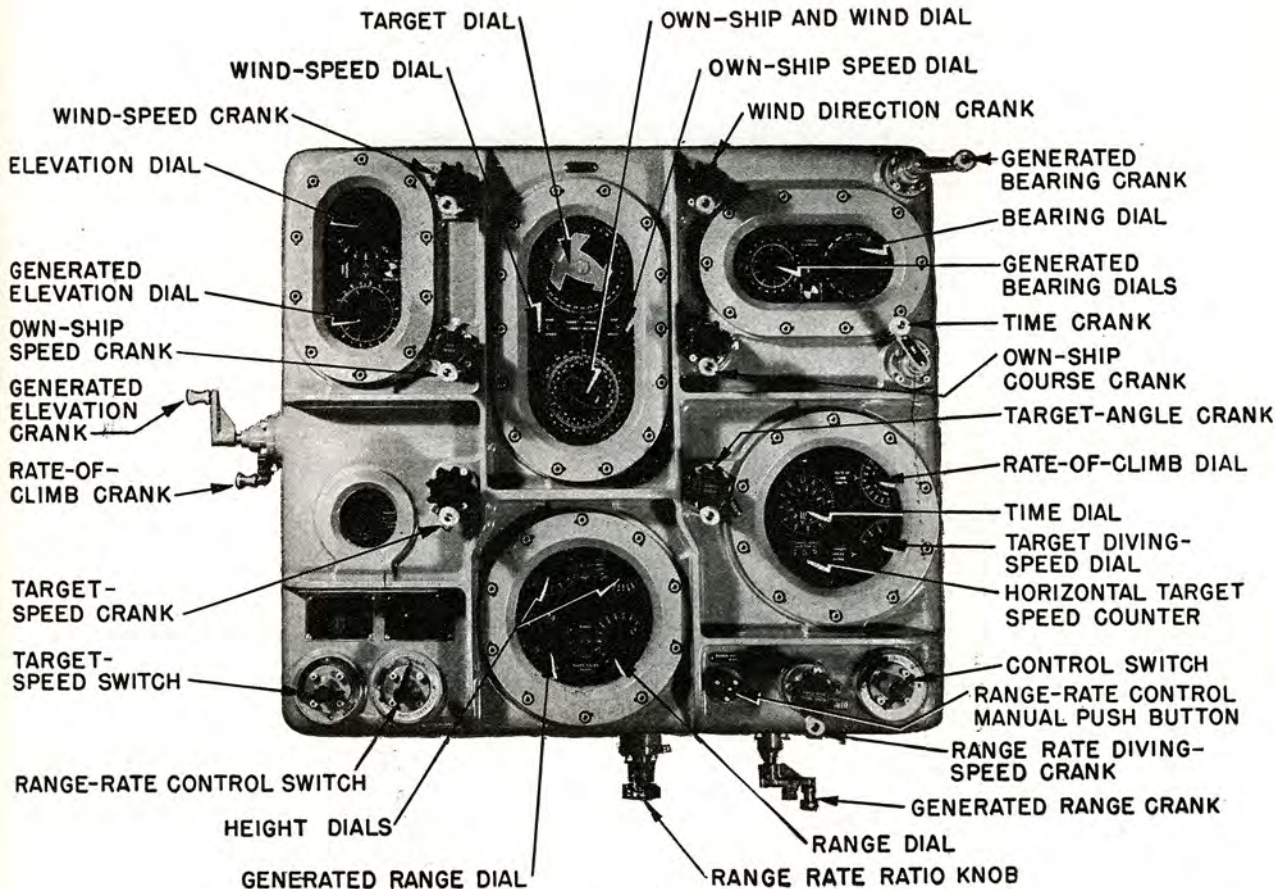
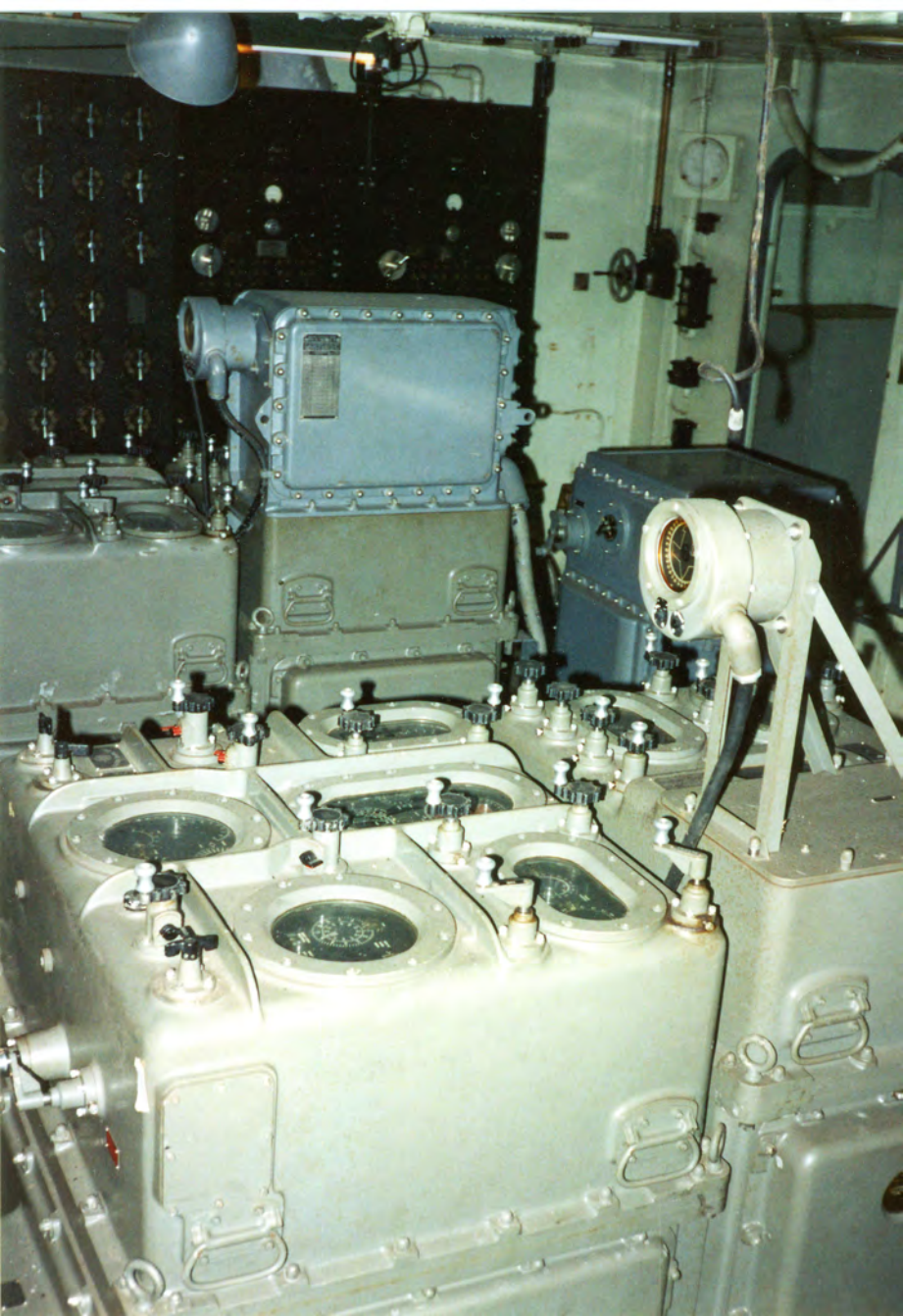
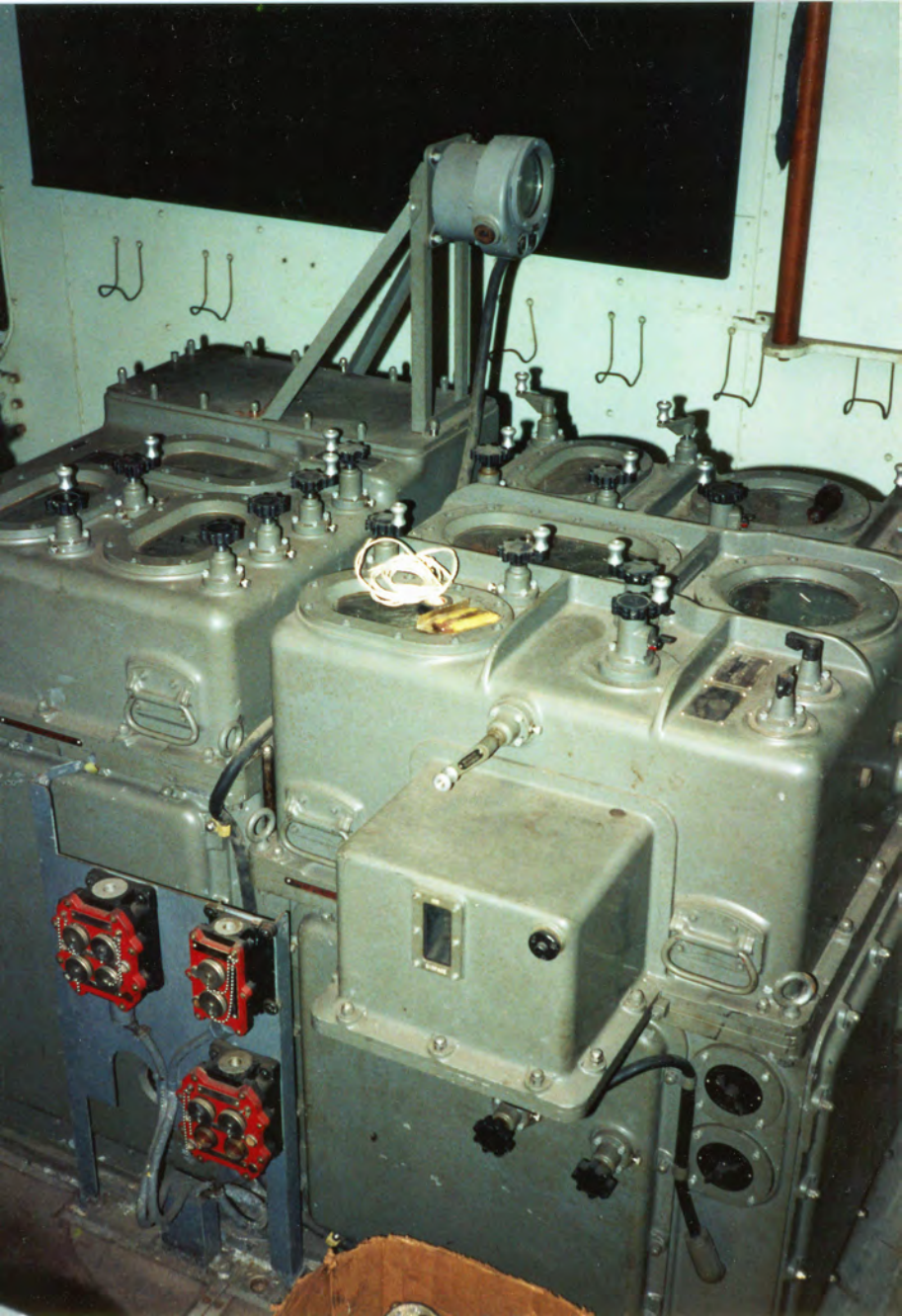
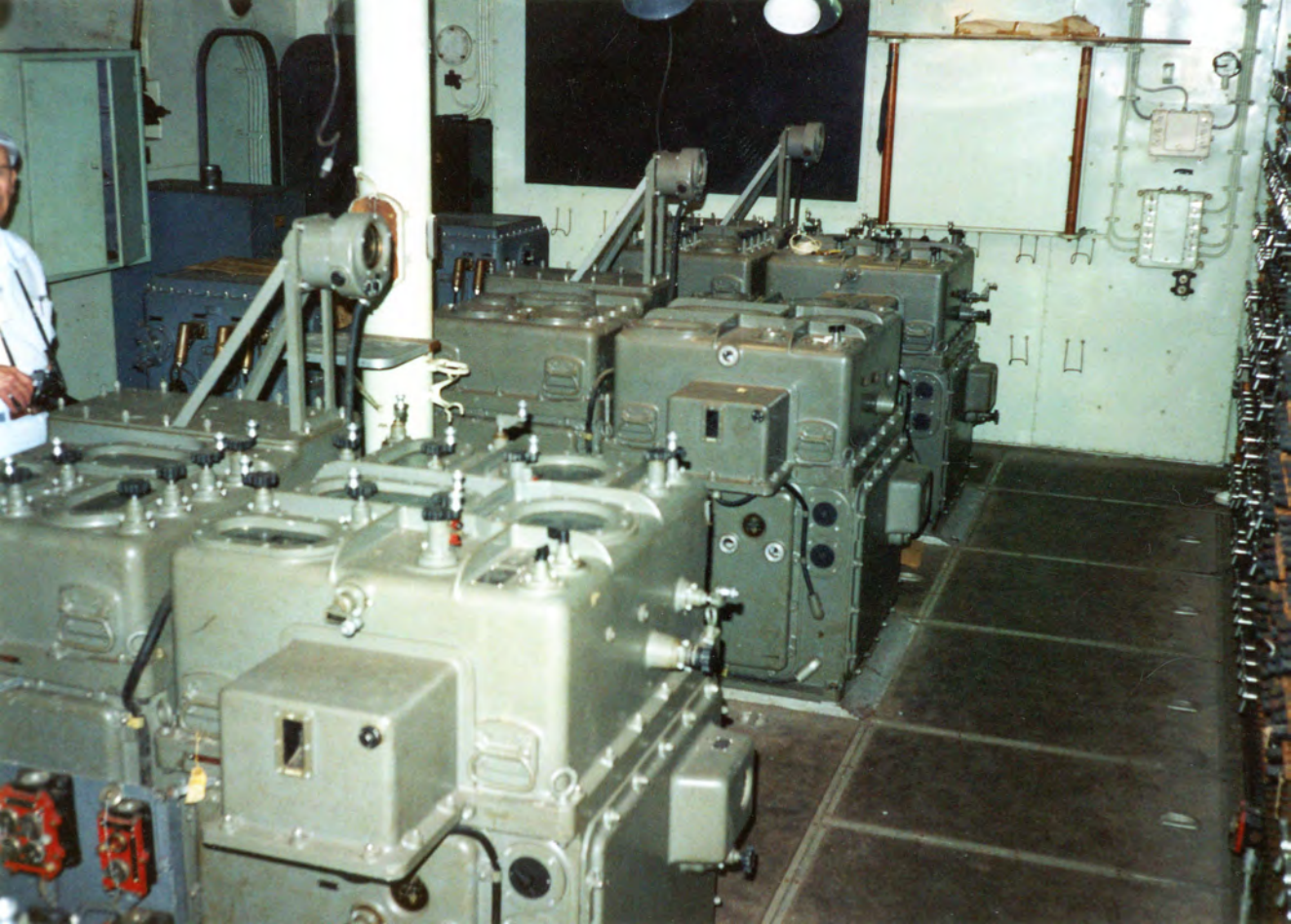


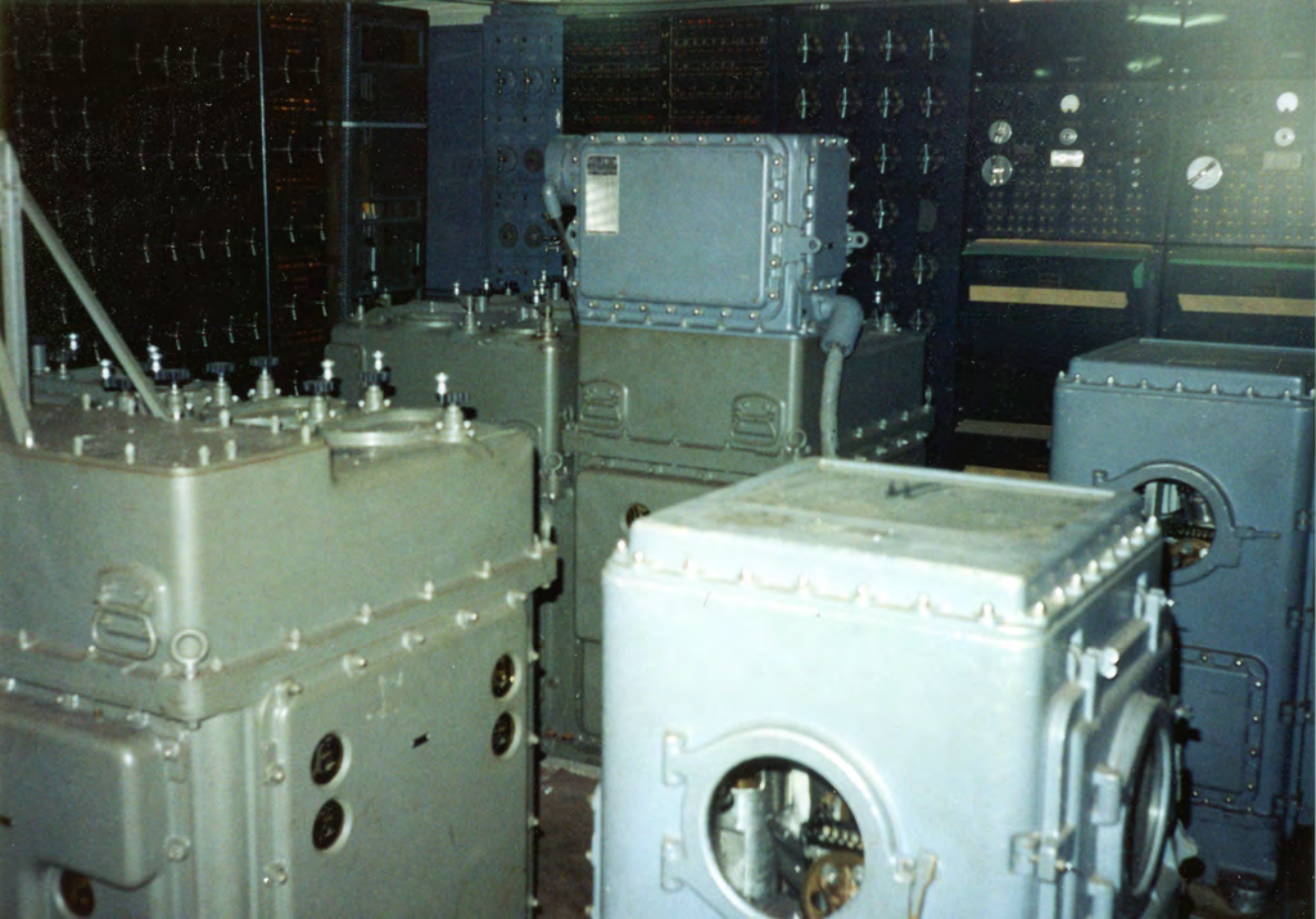
FIGURE 17D2. Control section, Mark 1 computer; top view.



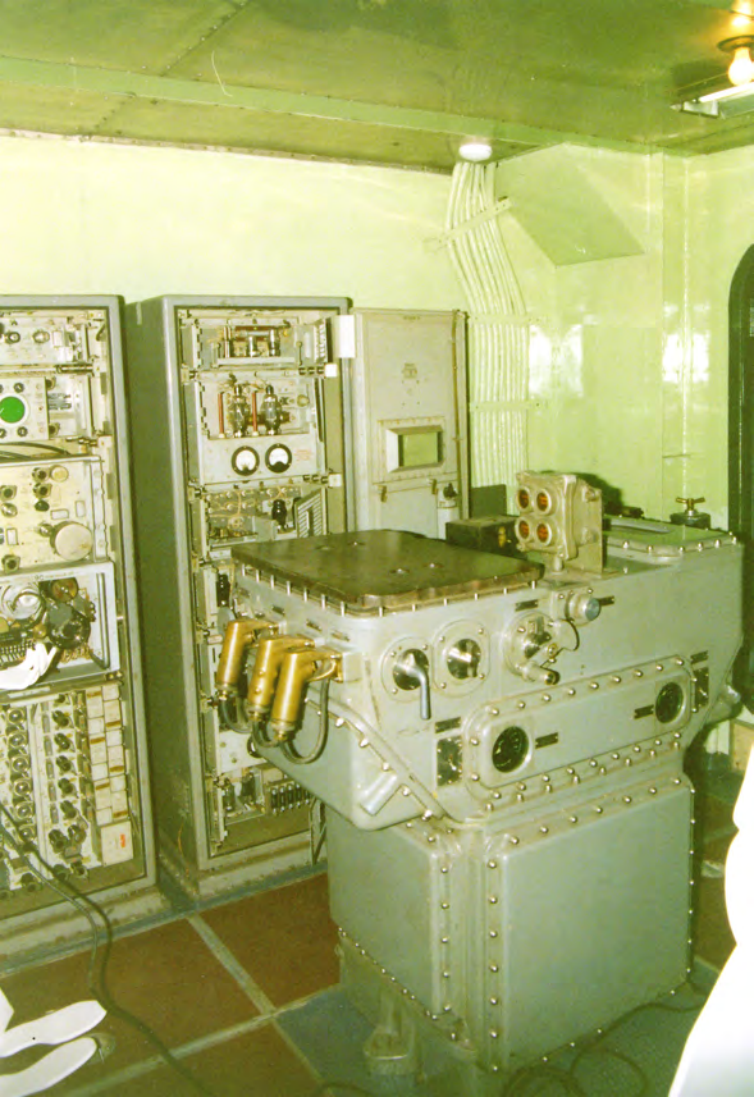


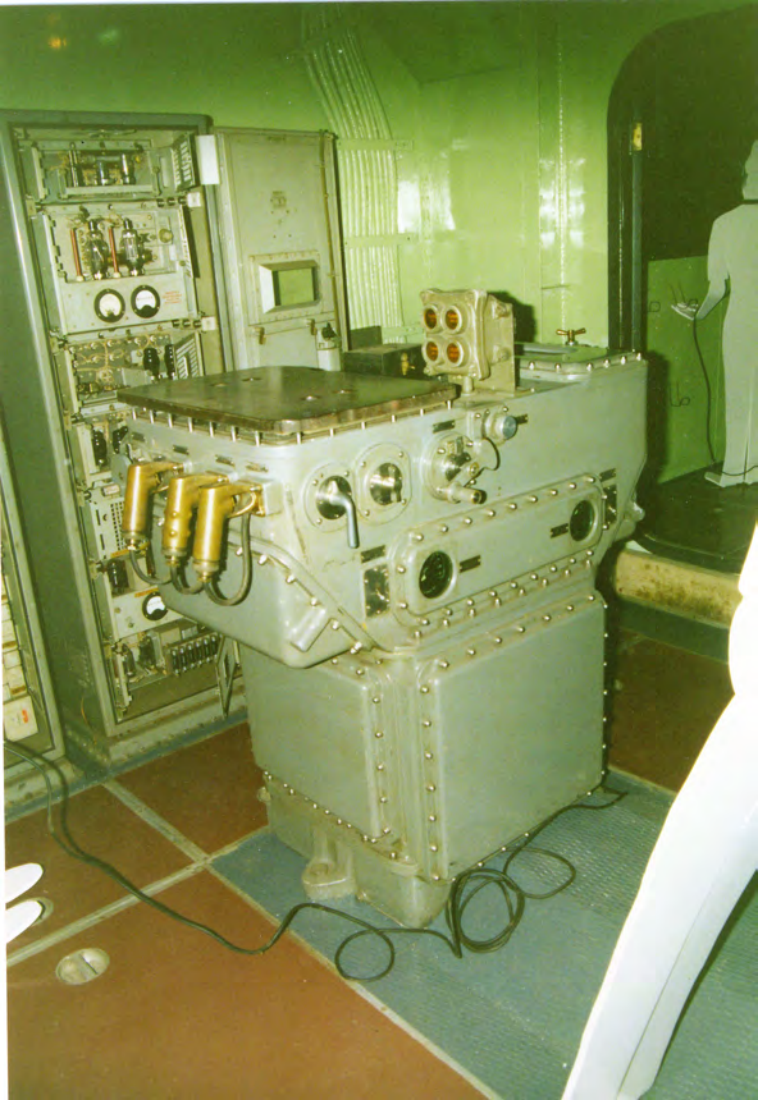


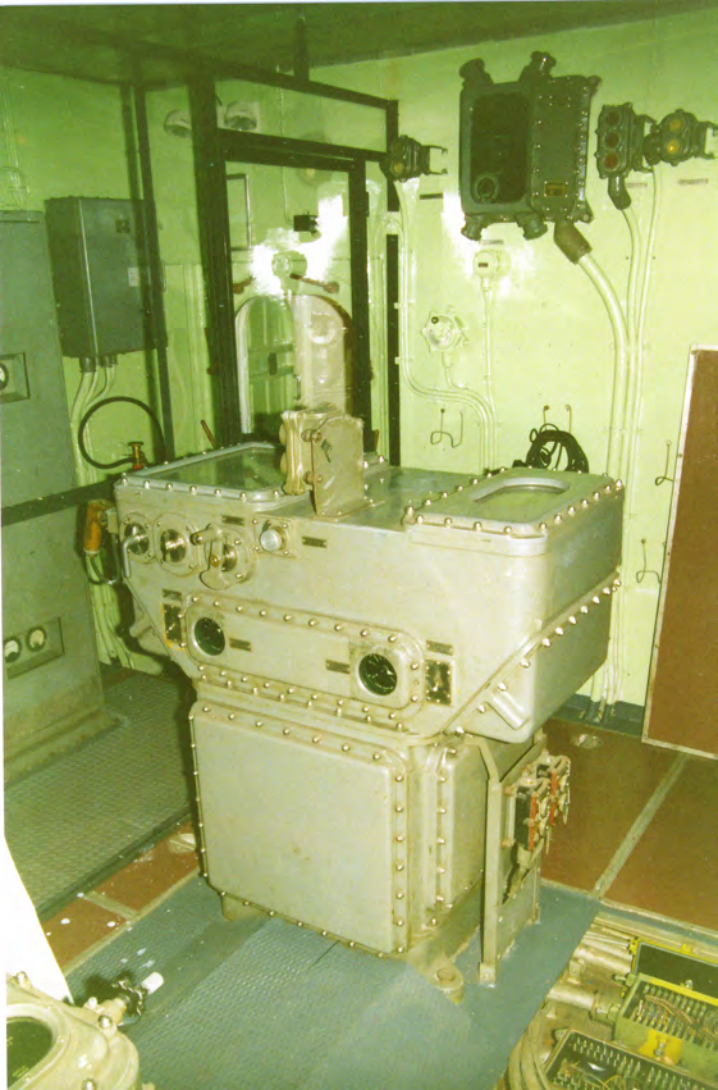


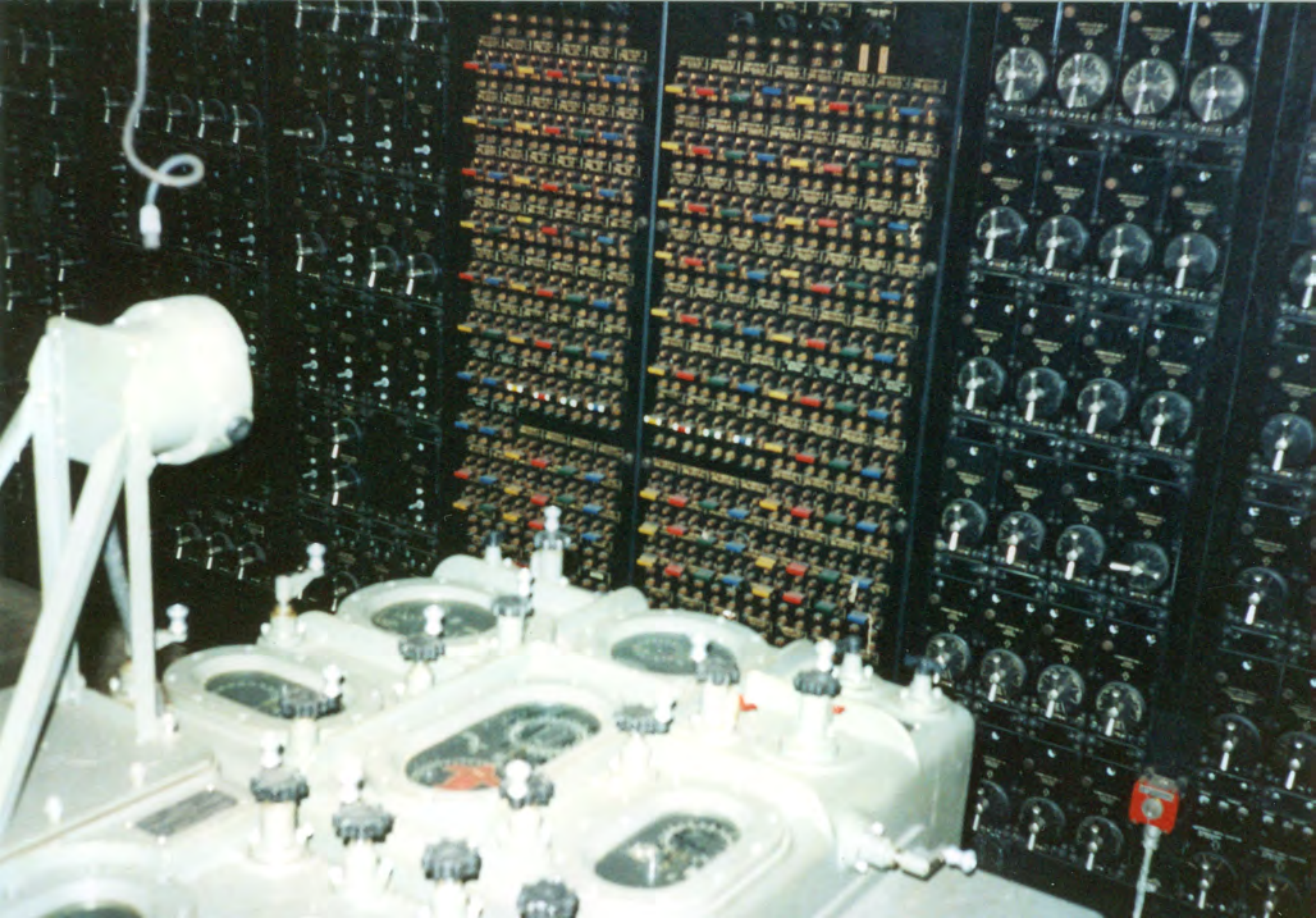




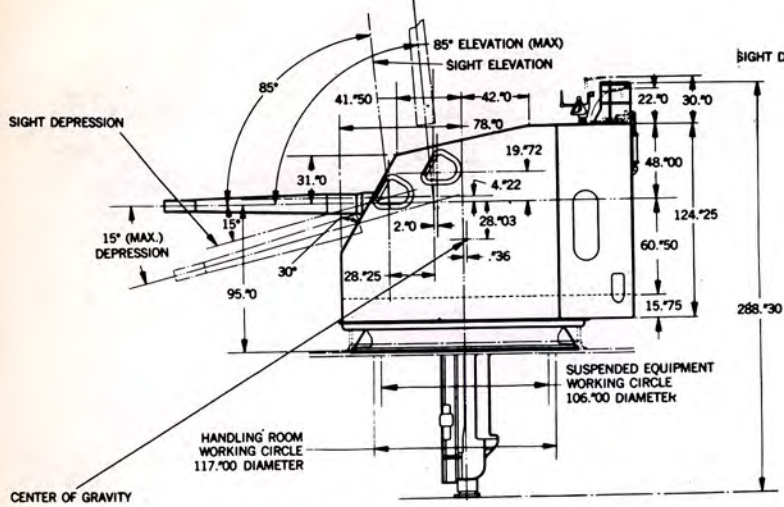




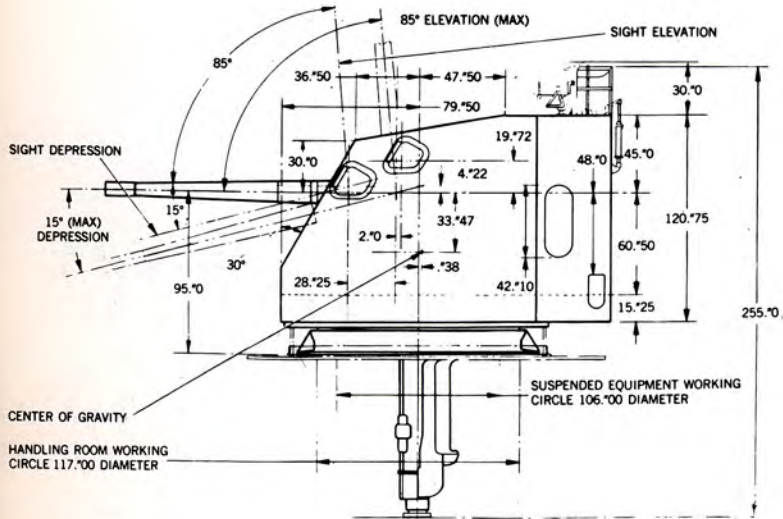
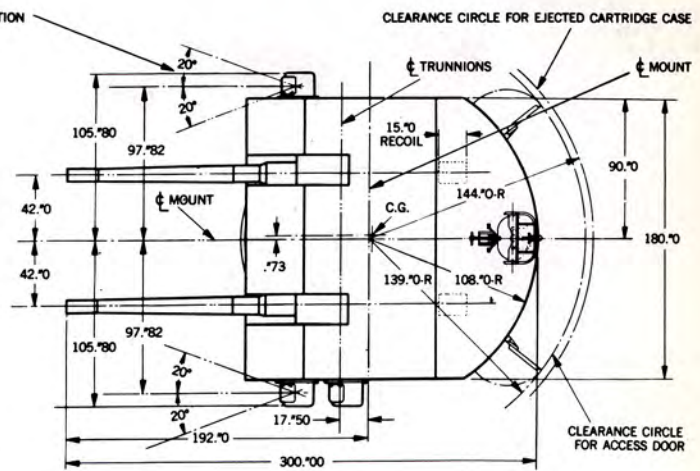




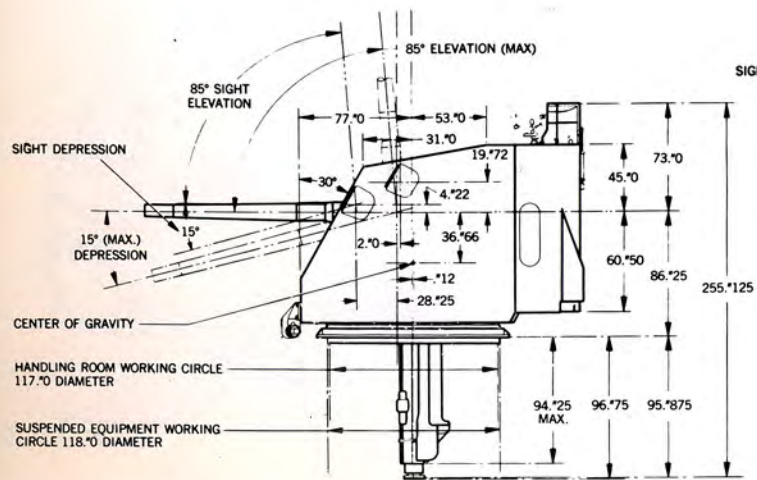
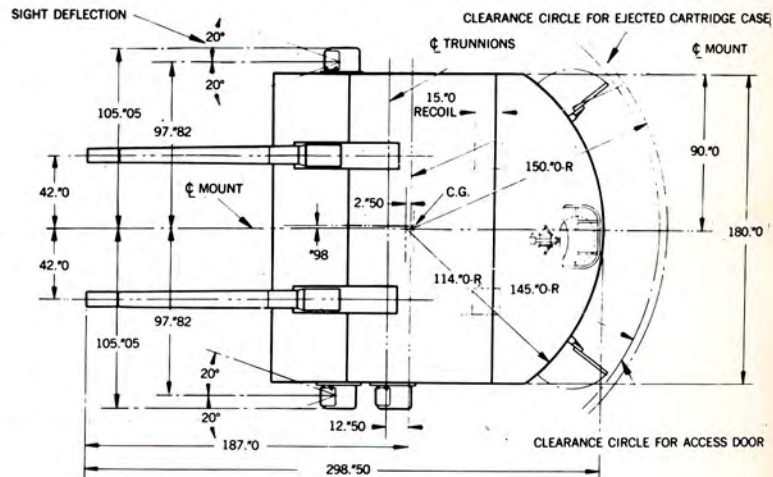




5-inch Mount Mk 28 Mods. Working Circle.



5-inch Mount Mk 32 Mods. Working Circle.



5-inch Mount Mk 38 Mods. Working Circle.

