THIRD ENGINEER (OR FOURTH ENGINEER) - RESPONSIBILITIES

Index No.	Name of Unit
S-46	Auxiliary condensers, auxiliary air ejectors, auxiliary condensate pumps, auxiliary circulators.
S-47	F.W. pumps, bilge pumps, ballast pumps.
S-48	In engine room: S.W. piping, fire main, condensate traps and all auxiliary steam.
S-58	Evaporators (in engine room).
S-61	Generator turbines, gears and diesel engines.
S-93	Engine room fire fighting gear.

Daily:

1. Inspect all assigned equipment, perform any minor work necessary to proper operation: adjust packing of pumps, check pump sumps for water, jack over idle equipment, preserve rods of pumps not in use, check oil level in sump tanks.
2. Observe freedom lubrication and cleanliness of generator governor mechanism.
3. Change over and clean generator lube oil strainers.
4. On diesel driven generators, switch over duplex filters on fuel and lubricating system when fitted.

Weekly:

*1. Change over all duplicate machinery.
*2. Test operate all idle machinery.
*3. Test all safety devices: relief valves, where practicable, and generator trips where changing over.
4. Test lube oil coolers on generators for leaks.
5. Inspect all pumps for loose parts, coupling bolts and/or governor mechanism.
6. Oil all gear type couplings - per mfr. instructions.
7. Add packing to pump glands as necessary.
8. Inspect all engine room fire fighting equipment for compliance with USCG regulations.
9. Operate the valves that are not normally moved throughout the week, lubricate stems and threads.
*10. Hand actuate overspeed trips and low lube oil pressure trip on generator and pumps, where installed, soon after starting up and weekly as operation permits.
11. Check condensers for steam and water leaks.
12. Lift all relief valves by hand.
13. Test fire pump output pressure and relief valve.

*Log entry required.

THIRD ENGINEER (OR FOURTH ENGINEER) - RESPONSIBILITIES Cont'd

Monthly:

1. Check and record amount of and play of pumps.
2. Check and record speed of pumps under operating conditions.
3. Check operation of all discharge check valves.
*4. Test all overspeed trips by over speeding unit.

Quarterly:

1. Examine reduction gears and oil sprays of generator sets.
2. Check thrust position of generator rotor.
   Record float _____.
   Nozzle clearance _____.
   Bearing weardown _____.
   Bull gear float _____.
3. Remove, clean and examine the nozzles in the auxiliary air ejectors.
4. Open, clean and paint out the water boxes of the auxiliary condensers. Renew zincs, if necessary.
5. Open, clean and paint the watersides of the generator lube oil coolers. Renew zincs, if necessary.
6. The shaft packing in pump stuffing boxes shall be examined and if found to be hard, renew to avoid scoring of the shaft.

Semi-annually:

1. Remove, clean and examine generator carbon packing.
2. Clean all oiling systems and renew oil or grease.
3. Open and inspect all generator shaft bearings.
4. Open generator turbine thrust bearing for inspection.
5. Inspect auxiliary air ejectors, condensate lines, valves and condenser shell joints for leaks.
6. Open and clean auxiliary air ejector nozzles and check nozzles for wire drawing.
7. On reciprocating pumps, inspect steam valve gear for wear. Remove steam valve and valve gear and clean with kerosene. Check pump stroke with stroke indicator and adjust as necessary. Inspect liquid end valves, valve stems and springs. Replace worn springs, correct excessively worn valve discs. On salt water service, remove all foreign matter. Check plunger and rod packing and renew, if necessary. Check relief valve setting.
8. Test all pressure and vacuum gages on assigned equipment for accuracy.

*Log entry required.

THIRD ENGINEER (OR FOURTH ENGINEER) - RESPONSIBILITIES Cont'd.

Annually:

1. Open all pumps and speed reducers, inspect and clean. Check clearance of all wearing parts, rotors, liners, casing throat bushings, worn wheels, impeller, casing wearing rings, etc. Renew parts as necessary.

2. On diesel-driven ship, service generators at each annual overhaul. One third of the cylinders will be opened for thorough examination: heads lifted, pistons jumped, liners removed, connecting rods and main bearings examined and measured. This work shall be scheduled so that at three-year intervals all running gear of the main engine is examined and clearances noted.

3. Thrust bearing will be opened annually, thoroughly examined and clearances measured.

4. Valve gear will be examined to the extent possible without complete dismantling annually and dismantled at least once every three years for a thorough examination. Similarly, scavenger pumps and/or super chargers will be so examined.

LICENSED JUNIOR ENGINEER (OR ENGINE UTILITYMAN) - RESPONSIBILITIES

Index No.	Name of Unit
S-16	Access openings: W.T. doors to engine spaces.
S-20	Winches and capstans.
S-22	Steering unit.
S-26	Windlass
S-34	Commissary: galley range (oil burning), food mixing equipment, vegetable peelers, dough mixers, dishwashing machines
S-35	Laundry equipment (main laundry).
S-47	Pumps (diesel fire pumps).
S-55	Stowage of diesel oil for operation of emergency generators and fire pumps.
S-61	Emergency generator.
S-82	Lifeboats, lifeboat davits and boat winches.
S-83	Elevators and dumbwaiters.

Daily:

1. Inspect steering engine and telemotor and lubricate all parts - per mfr. chart and lubrication schedule.
2. Inspect all laundry equipment for proper operation; confer with laundry foreman.
3. Inspect all mechanical galley equipment for proper operation. Confer with chief cook and chief baker (fill galley tank as necessary).
*4. Observe proper operation at all watertight doors throughout engine spaces during closure drill (passenger ships).
5. Inspect emergency generator and diesel fire pump rooms.
*6. Test each motor boat engine for one minute.
7. Inspect rudder stock bearing for sufficient lubrication. Adjust rudder stock packing gland as necessary.
8. Check all cargo winches daily when in use and prior to arrival in port.
9. Drain air receivers outside engine spaces.

Weekly:

*1. Test operate diesel generator in conjunction with chief electrician for 30 minutes. Lubricate governor links.
*2. Test operate diesel fire pumps for 30 minutes under load. Lubricate governor links.
3. Lubricate motor boat and lifeboat davits in conjunction with ship's carpenter.
4. Lubricate all hand operated remote control gear on W.T. door mechanism. Clean and lubricate W.T. door lands (engine room only).

*Log entry required.

LICENSED JUNIOR ENGINEER (OR ENGINE UTILITYMAN) RESPONSIBILITIES Cont'd.

5. Change over steering engine motors when directed by the chief engineer.

6. Test operate remote steering stations in conjunction with the first engineer, second officer and the ship's carpenter. Lubricate parts of remote gear in steering engine room.

7. Oil all couplings on steering engine motors and other equipment listed under responsibilities.

*8. Observe the operation and testing of all safety devices on laundry equipment in conjunction with laundry foreman.

*9. Observe the operation and testing of all safety devices on dumbwaiters, freight and passenger elevators in conjunction with the chief electrician. Lubricate all links and pins as necessary.

10. Lubricate and test operate all cowl or movable type ventilators to all engine spaces.

11. Lubricate, free up and test the foot brake mechanism on all deck winches.

12. Perform weekly lubrication on steering engine - per mfr. chart. Check hydraulic system for leaks, adjust glands.

13. Operate and lubricate all valves not normally used, clean valve stems and threads as necessary.

14. Furnish assistance to cooks to properly clean all range soot traps and base of Charlie Noble. Inspect each range fire box for condition of refractory.

15. Furnish assistance to cooks and bakers to remove vent filters from over ranges, fry kettles and ovens to facilitate cleaning (only if tools are required.).

16. Observe that required lubrication is being conducted on galley equipment and laundry equipment. Provide assistance to the chief cook and laundryman if required.

17. Operate all cargo winches in conjunction with the chief electrician.

18. Sound diesel generator fuel tank, replenish when necessary.

19. Inspect telemotor system for leaks, adjust glands both sending and receiving. Check with deck department as to degree of response.

Monthly:

1. Inspect oil level of all splash gear lubricated deck machinery and add oil if necessary.

2. Inspect all air compressors outside of engine room and perform manufacturers' recommended maintenance.

3. Perform monthly maintenance and lubrication on elevators and dumbwaiters - per mfr. instruction books.

4. Sound main diesel oil storage tank and give report to chief engineer.

*Log entry required.

LICENSED JUNIOR ENGINEER (OR ENGINE UTILITYMAN) RESPONSIBILITIES Cont'd.

Quarterly:

1. Change lube oil in diesel generator and diesel fire pump.
2. Open air compressors outside engine room for interior examination and maintenance. Change oil.
3. Change oil in lifeboat motors.
4. Take small sample of hydraulic steering gear oil and inspect it for sign of deterioration, i.e., dirt or discoloration.

ENGINE UTILITYMAN (OIL KING) - RESPONSIBILITIES
(P-2 Ships Only)

Index No.	Name of Unit
S-48	Ballast system. Fuel oil filling and suction system. Fuel oil heating coils, steam supply and drains. Remote control valves.
S-55	Fuel oil transfer pump. Fuel oil vents. Fuel oil transfer pump suction strainers.

Daily:

1. Transfer fuel oil to settling tanks.
2. Ballast tanks in accordance with the chief engineers orders.
3. Inspect and adjust packing glands on transfer pump and fuel oil tank heating system.
4. Clean all transfer pump drip pans.

CHIEF ELECTRICIAN - RESPONSIBILITIES

Index No.	Name of Unit
S-16	Elevators: W.T. doors, electrically operated and F.S. magnetic doors.
S-20	Winches and capstans
S-22	Steering gear
S-24	Ship control: gyro batteries and change-over switches, navigation lights, radar m.g. set, loran m.g. set, whistle and control gear.
S-26	Mooring equipment, anchor windlass.
S-33	Living and berthing spaces: switches and lighting bed lamps.
S-34	Commissary equipment: bake ovens, deep fat fryers, toasters, mixers, galley range motor and solenoids, potato peelers.
S-35	Laundry equipment: all motor controllers and safety switches, passenger and crew laundry machines.
S-38	Ventilation and heating
S-41	Main propulsion.
S-42	Reduction gears, jacking motor.
S-45	Lube oil: Lube oil pump, purifier.
S-46	Condensers and air ejectors: circulator motor, gland seal exhauster, condensate motors.
S-47	Pumps: all pumps not a part of the specific system - bilge pump, fire pump, submersible bilge pump, portable submersible pump.
S-49	Compressed air plants: air compressor motors, controllers, pressure switches.
S-51	Boilers: temperature recorders, smoke indicators, F.O. solenoids (air), F.O. solenoid (pump).
S-53	Blowers: motors and controllers, portable blowers.
S-55	Fuel oil: F.O. pumps, controllers, tank indicators, telephones and signals.
S-58	Distilling plants: motors and controllers.
S-59	Refrigeration: motors and controllers, reach-in boxes, reefer alarms, drink water pumps, pressure switches.
S-61	Electric generators: ship's service generators, emergency generator.
S-62	Power distribution: main, auxiliary and emergency switchboards; batteries and charging panels.

CHIEF ELECTRICIAN - RESPONSIBILITIES Cont'd.

S-63 . . . . . Electric motors and controllers not in other sections.

S-64 ..... Lightings: general, hand lanterns, all portable lighting, cargo flood lights (mast), emergency, debarkation lights.

S-65 . . . . . Interior communications: interior communication motor generator, ship's service telephone, salinity indicators, sound powered telephones, special alarm circuits, rpm shaft indicator, motor alarm circuit (P2-E), general alarm circuit.

S-66 ..... Search lights, signal lights.

S-69 . . . . . Electrical measuring and test instruments.

S-81 ..... Mine protection: degaussing equipment.

S-82 . . . . . Lifeboats and davits: limit switches, controllers.

S-88 ..... Damage control: portable sound powered phones.

S-91 . . . . . Work shop equipment: carpenter shop, machine shop.

S-93 ..... Fire fighting: zonit detector, CO_2 smoke detector, firescreen doors, ventilation master switches (bridge and outside engine room), diesel fire pumps.

ELECTRICIAN - RESPONSIBILITIES

Daily:

1. Take gravity readings and temperatures of all batteries (except radios).
2. Check battery room ventilation.
3. Check charging rate of batteries.
4. Check oil level and condition of oil rings in all oil ring lubricated bearings, (on electrical equipment).
5. Inspect areas surrounding motors and electrical equipment for dripping water, oil, steam and excessive dirt, dust, chips and any loose gear that might interfere with the ventilation or jamming of parts and take action required.
6. Observe all running motors for vibration, unusual or excessive noise and operating temperatures. Examine all commutators and brushes for proper commutation. Examine all running equipment motors and controllers for loose or missing parts.
7. Use canvas buffer daily to clean commutators or generators and large motors.
8. Make visual inspection behind main switchboard and of all large controllers, observing for loose parts or unusual conditions, take appropriate action.
9. Inspect all passenger laundry machines and crew laundry machines for proper operation.
10. Inspect and test operate all deck electrical machinery prior to arrival.
11. Inspect all exterior deck electrical equipment for water tightness prior to departure for sea, use heaters as required.

Weekly:

*1. Test operate all safety devices on elevators or dumb waiters.
*2. Test run degaussing coils for four hours, in conjunction with the second officer.
3. Remove plugs from all watertight electrical fittings and test for condensation or moisture. Take appropriate action.
4. Inspect all paint lockers, battery rooms and pump rooms, observe that fixtures are explosion proof.
5. Check height of electrolite in all batteries.
6. Check battery circuits for grounds.
7. Clean batteries and grease terminals with petrolatum.
*8. Change over all duplicate machinery.
*9. Change over main generators. (end of each voyage leg for electric drive.)
10. Clean all machines secured during weekly change-over, by blowing out with dry air and wiping with lintless cloth.

*Log entry required.

ELECTRICIAN - RESPONSIBILITIES Cont'd.

11. Test all electrical interlocks and safety devices as practicable.
*12. Test operate diesel generator under load for at least 30 minutes. Test change over relays.
*13. Test ship's whistle from all stations and also from automatic time signal station.
*14. Inspect all lifeboat limit switches and electrical equipment (Chapter 82, this manual). Observe test of all fire screen and W.T. doors.
*15. Test operate master unit, switches on bridge and outside engine casing.
16. Megger test main generators (and main propulsion unit if T.E. ship) or when operation permits.
17. Inspect all motors for oil or grease leaking from bearings to windings.
*18. Operate unused equipment 30 minutes, observe bearings, conditions of commutators and commutation.
19. At every opportunity and whenever practicable, clean interiors and exteriors of motors, generators and controllers and keep them dust free.

Monthly: Measure insulation resistance whenever practical of the ship's service and emergency generators and exciters and enter on megger cards.

Quarterly:

1. Give all batteries an equalizing charge.
2. Inspect pulleys, bells, guards and brush rigging for tightness and soundness.
*3. Check all motors for end play.
4. Check all sleeve bearings for clearance.
5. Check brush alignment and correct if necessary.
6. Check distance of brush holder from commutator (not more than 1/8" or less than 1/16").
7. Check brush pressure all motors (should be $1\frac{1}{2}$ to $2\frac{1}{4}$ lbs. per sq.in. of contact surface.)
8. Make sure brushes move freely in holders and are clean.
9. Blow out all motors and clean thoroughly.
*10. Check all electrical meters against standards.

*Log entry required.

ELECTRICIAN - RESPONSIBILITIES Cont'd.

Semi-annually:

1. Drain, flush out and renew oil in sleeve bearings where fitted. Add grease to ball bearings if required.
2. Record on history cards.
3. Inspect all housing gaskets and bearing seals. Replace as required.
4. Measure insulation resistance of all motors, circuits and motor generator sets, except fractional horsepower motors. Insulation resistance of fractional horsepower motors to be measured as frequently as service conditions require.
5. Inspect armature banding, slot wedges, connections of armature coils to commutator risers, tighten electrical connections, inspect commutator clamping rings, clean slots in commutator.

REFRIGERATION ENGINEER - RESPONSIBILITIES

In ships without a refrigeration engineer, these responsibilities will be assigned to the licensed junior engineer.

Index No.	Name of Unit
S-23	Compressed gases (freon bottles).
S-34	Commissary equipment: reach-in refrigeration boxes, ice cream cabinets.
S-38	Heating and ventilating: air conditioning limits.
S-59	Refrigeration equipment: main refrigeration system, ship service walk-in boxes, ice-making equipment.

Daily:

1. Examine operating logs to determine any erratic operation or variation in temperatures.
2. Inspect all diffusers for icing, visually observe electric equipment for sparking or other signs of mal-operation.
3. Inspect all pumps and pump packing and make the necessary adjustments.
4. Clean sea suction strainers on circulating water pumps.

Weekly:

1. Make a complete halide test of all refrigeration piping, compressors and seals, main units, all reach-in or independent units.
2. Operate all water valves that are not used during normal operation. Lubricate stems and threads, check packing and adjust.
3. Make a thermometer check of each scuttlebutt and observe unit for one complete cycle of operations. Check belt tension, motor operation and condition, condenser for cleanliness and area for any dampness.
4. Inspect all reach-in or domestic type refrigerators, observe that steward department has properly defrosted unit. Check unit through one cycle of operations to see that proper temperatures are maintained and that unit is cycling properly. Check and adjust belt tension if necessary.
*5. Test operate all refrigerator alarm bells in conjunction with the chief cook or butcher.

*Log entry required.

REFRIGERATION ENGINEER - RESPONSIBILITIES CONT'D.

Monthly:

1. Operate each main compressor with suction valve closed to determine time required to obtain 28" vacuum. If vacuum cannot be obtained, the cause shall be determined and rectified.
2. Take PH and salinometer test of all brine and treat with chemicals as necessary to restore proper density of PH value.
3. Supervise the defrosting of ice boxes when necessary and boxes are empty.

Quarterly:

1. Check the operation of all pressure and vacuum gages with a standard gage or one known to be accurate.
2. Open up all heat exchanger equipment and salt water condensers. Thoroughly clean interiors and paint out all steel or iron heads and water boxes with Apexior or equal. Check and renew zincs as necessary.
3. Open liquid ends of all salt water service pumps for examination or overhaul.
4. Inspect and test all gages and thermometers for correct operation.

Semi-annually:

1. Perform scheduled maintenance and lubrication on all refrigeration machinery - per mfr. instruction book.
2. Make chalk test of all gaskets and doors of walk-in and domestic refrigerator. Make necessary adjustments and replacement.

Annually:

1. Disassemble each main plant compressor for thorough overhaul. Remove pistons and block. Renew all parts that are worn beyond manufacturer's recommended tolerances.
2. Record cylinder micrometer readings.

MACHINIST - RESPONSIBILITIES

In ships without a deck engineer, the machinist will be responsible for some of the duties set up for that position.

Index No.	Name of Unit
S-23	Compressed gases: acetylene gas bottles, oxygen gas bottles.
S-92	Ship upkeep shop tools: lathe, shaper, drill press, milling machine, welding machine (except electrical end).

Daily:

1. Clean and oil all machine tools after day's operation.
2. Inspect all machine tools, lube oil sump for proper operating level of lubricant.
3. Secure power to all machines at end of day's work or at other times when machines are not attended.
4. See that all tools from ship's tool room are returned at the close of the day.

Weekly:

1. Inspect and test operate safety devices and stops on all machine tools.
2. Inspect all guards and adjust for serviceability.

Monthly:

1. Perform routine maintenance on upkeep shop tools - per mfr. instructions.
2. Inspect all belt-driven equipment, adjust belt tension and insure that it is kept free of oil and grease.
3. Drain coolant systems of sludge and sediment.
4. Check empty oxygen and acetylene bottles for reordering.

PLUMBER - RESPONSIBILITIES

These responsibilities are assumed by the engine utilityman when no plumber is assigned.

Index	Name of Unit
S-34	Relief valves, traps and piping on all commissary equipment.
S-35	Relief valves, traps and piping on all laundry equipment.
S-38	Heating and ventilation; steam heat piping valves, traps and thermostat controls.
S-47	Sewerage disposal pumps, F.W, circulating pumps.
S-48	F.W. piping (hot and cold), sanitary piping (outside engine spaces); galley and heating system steam piping; fire main piping (outside engine spaces); water chlorinating equipment; F.W. filling and transfer piping. Drain and bilge piping external to engine room (except chain locker and exterior deck drains). All valves, reducing valves and fitting with above piping systems.
S-59	Lagging and insulation on all piping listed under S-48, above.

Daily:

1. Inspect all troop and crew heads for proper operation.
2. Inspect and test operate each sewerage disposal installation. Keep equipment clean and dry. Make adjustments and perform routine service, i.e., set up packing, oil linkage, etc., as necessary. Report electrical troubles promptly.
3. Sound all potable F.W. tanks.
4. Inspect and adjust all heating systems as necessary.
5. Perform daily service on clorinating equipment. Lubricate links, maintain cleanliness and adjustment - per mfr. instructions.
6. Inspect all galley steam equipment and correct deficiencies. Adjust or add packing to valves, etc.
7. Inspect F.W. circulating pumps and adjust packing as needed.
8. Inspect all F.W. pressure tanks for proper air bank, recharge as necessary.

PLUMBER - RESPONSIBILITIES Cont'd

Weekly:

1. Test all safety and relief valves on systems for which responsible.
2. Perform necessary weekly service to sewerage disposal pumps. Add or adjust packing. Change over duplicate pumps to equalize running time. Oil couplings, clean glands.
3. Inspect all piping in galley and laundry and make necessary adjustments to packing etc. for proper operation.
4. Operate all valves, lubricate valve stems and threads on drainage, sanitary and heating systems (excluding valves and portions of systems designated under S-48: carpenter responsibility).
5. Inspect all fire main and sanitary salt water reducing stations for proper operation. Clean and lubricate stems, adjust packing and observe freedom of movement.
6. Test operate fore and after peak valves, clean and lubricate stems and remove rods.
7. Perform necessary weekly services to chlorinating systems and equipment.
8. Inspect F.W. circulating pump for proper operation and perform any required maintenance.

Monthly:

1. Perform monthly service on sewerage disposal units. Observe unit through cycle. Adjust or add packing to pump gland. Clean and lubricate linkage, clean and lubricate shaft and coupling. Clean strainer. Observe electrical end for sufficient ventilation. Report any sparking or electrical troubles.
2. Check operation of overboard clapper valves.
3. Check operation of all hot water thermostats for proper operation.
4. Clean all stack drains as operation permits.

Quarterly: Thoroughly inspect all piping systems under full working pressure and repair as necessary.

Semi-annually: Inspect interior of portable F.W. tanks with first engineer and record condition.

Annually:

1. Open liquid ends of sewerage disposal pumps, replace worn parts and reassemble.
2. Inspect interiors of all hot water tanks for deterioration.
3. Open and overhaul the liquid end of F.W. circulating pumps.

CHIEF STEWARD - RESPONSIBILITIES

Index No.	Name of Unit
S-34	Commissary equipment and storage areas.
S-35	Laundry equipment and storage areas.
S-36	Sanitation and storage areas.
S-33	Passenger areas, messing areas and passageways. Crew areas, messing areas and passageways. Troop messing areas.
S-59	Ice boxes, storage and adjacent areas used for storage of food. Food preparation and disposal areas (galleys, pantries, bake shops and garbage chute)

SECOND STEWARD - RESPONSIBILITIES

In all ships:

Crew areas: crew recreation, day room, officer and crew spaces, crew laundries.

Custodian of stewards, other than food handlers.

In transports:

Passenger areas: troop messing areas, ports and closures, lounges, public wash rooms, writing rooms, children's play areas, dining room (over all) and passenger laundry.

Galleys and bake shops.

Daily:

1. Maintain and clean surfaces in accordance with current painting instructions.
2. Maintain laundry checkoff list of all equipment assigned to the chief laundryman.

Weekly: Inspect, clean and lubricate all ports and closures.

SECOND STEWARD (TROOP MESS) - RESPONSIBILITIES

In passenger (P-2) transports, there are two positions established as second steward. The second steward in this position is responsible for the following:

Index No.	Name of Unit
S-34	Dishwashing machines, rinsing equipment, rack, coffee urn, ice cream cabinets, steam tables, storage areas (condiments), troop messing areas.

Daily: Clean as necessary: furniture, ports, closures, condiment racks, curtain rods, interior doors.

Weekly: Clean and lubricate all wing nuts, dogs and drop bolts on port and dead lights.

THIRD STEWARD (SANITATION) - RESPONSIBILITIES

The duties of the third steward (sanitation) are included in Article 9.11 of COMSTSINST 3120.2B and make him responsible for the inspection of all food handling areas and food handling equipment in regard to sanitation. As outlined in the following pages, certain steward department personnel are delegated duties to maintain these food handling areas and food handling equipment. The duties of the third steward (sanitation) will, therefore, include supervision to ascertain that these people are cleaning and maintaining equipment in conformance with manufacturers' instructions, both for maintenance and sanitation.

CHIEF COOK (3)/ENLISTED MAN COOK - RESPONSIBILITIES

Index No.	Name of Unit
S-34	Commissary equipment: galley ranges, deep fat fryers, kettles, food equipment, vegetable peelers, meat grinder (in galley), vegetable cubers and slicers, can openers, electric ranges, griddles, hot plates, warming ovens, steam cookers, meat slicer (in galley).
S-38	Ventilation and heating: hoods over ranges, ovens and deep fat fryers, attached filters.
S-59	Refrigeration boxes: reach-in reefer box in galley only.

Daily:

1. Clean all appliances and assure that they are in a sanitary condition.
2. Check all equipment not used to see that it is dry and properly preserved.
3. Clean each fry kettle daily. Fat shall not be left in fry kettles for storage.
4. Clean all ranges, griddles and hot plates of all carbonized grease on grids and range tops.
5. Thoroughly clean all grease drains on ranges and grills.
6. Thoroughly clean all points of appliance where grease may contact electrical equipment to prevent carbon formation.
7. Observe that all safety devices of steam cookers are free of interferences and ready for operation.
8. Drain all grease traps in ventilation system.
9. Check all grills, fry kettles and other electric equipment to see that all switches are in OFF position when not in use.
10. Inspect reach-in boxes for overloading and proper stowage. Loading not to interfere with coils or equipment.
11. Inspect and clean all oil burner tips and fire boxes for carbon deposits before lighting fires, under supervision of junior engineer or the engine utility man.
12. Secure all burners in open position when not in use.

CHIEF COOK (3)/ENLISTED MAN COOK - RESPONSIBILITIES Cont'd

Weekly:

1. Clean all ventilation filters and canopies over ranges, ovens and fry kettles (Article 38-109, BUSHIPS Manual).
2. Clean all grease traps in ventilation system.
3. Thoroughly clean all areas behind ranges, fry kettles and grills.
4. Defrost reach-in boxes and thoroughly clean interior with water and baking soda or vinegar.
5. Thoroughly clean interiors of ovens, ranges and steam cookers. Clean all associated trays and racks.
6. Remove and clean all portable shelving.
7. Remove all lower sections of steam tables and clean all areas thoroughly.
8. Spread insecticide in area where insect breeding may develop.
*9. Test operate safety devices in company with engine department.

Monthly: Furnish assistance to engine department to clean galley area after engine department personnel clean interiors of soot traps.

*Log entry required.

CHIEF BAKER - RESPONSIBILITIES

Index No.	Name of Unit
S-34	Commissary equipment: bake ovens, mixing machines, proofing ovens, bread slicing machines.
S-38	Ventilation and heating: canopy and exhaust trunks and filters in bakery spaces. Reach-in boxes.

Daily:

1. Clean all appliances in bake shop spaces and insure that they are in sanitary condition.
2. Check all equipment not in use and insure that it is dry and properly preserved.
3. Clean all oven shelves of shortening, crumbs or other particles that may carbonize and affect the elements or wiring of the oven.
4. Inspect and clean all areas adjacent to ovens of combustible materials.
5. Observe that all switches are off when ovens are not in use.
6. Apply lard to blades and interior of dough mixer when not in use.
7. After a production run, clean thoroughly all ovens.
8. Thoroughly clean and maintain all areas and units of proofing cabinet to give proper uniform proofing in all details. Thoroughly clean all racks.
9. At the end of each production run, clean insides of dough troughs and cover with film of lard or divider oil to prevent rusting.
10. At end of each production run, clean dough mixers. Lubricate mixer drive; maintain all shafts and bearings in good running condition.
11. Care of dough divider:
    a. Inspect and lubricate prior to each production run. Keep all foreign substances out of the divider to prevent breakage of the mechanism.
    b. Protect cut-off knife plunger pocket mechanism and all sliding and rotating surfaces in the head assembly by the application of a film of divider oil.
    c. Carefully adjust pockets and main plunger for correct scaling from each pocket. The divider is usually equipped with a shear pin, which breaks if the machine is subject to abnormal strain. The sheaving strength of this pin has been predetermined, and a pin of greater strength should not be used.
    d. At the end of each run, thoroughly clean the divider head mechanism, dry and cover all surfaces with film of divider oil. Hard metallic scrapers shall not be used as they would injure the divider.

CHIEF BAKER - RESPONSIBILITIES Cont'd

Weekly:

1. Thoroughly clean all shelving and doors of ovens and proofing cabinets. Place a few drops of light oil on all hinges when required.
2. Inspect, lubricate and adjust proofing cabinet as required for first class proofing performance.
3. Lubricate dough trough casters with a viscous oil to prevent rusting of bearings and for ease of operation.
4. Maintain in good working condition minor equipment such as pan trucks, pans, pails, etc.

CHIEF PANTRYMAN - RESPONSIBILITIES

Index No.	Name of Unit
S-34	Equipment: Meat slicer, grill, toasters, reach-in boxes, coffee urns, bread slicers, steam tables, dishwashing machines, egg boilers, can opener (mechanical), and warming ovens.

Daily:

After each meal period:

a. Clean grills and remove all grease.
b. Clean toasters.
c. Thoroughly clean coffee urns and fittings.
d. Thoroughly clean all slicing machines.
e. Thoroughly clean egg boilers and timers.
f. Thoroughly clean dishwashing machine and dry it.
g. Thoroughly clean all warming ovens and fittings.

Weekly:

1. Defrost and clean out all reach-in boxes.
2. Thoroughly clean all grease filters in ventilation ducts in pantry.
3. Thoroughly clean pantry and equipment, including drain guards and shelves.

BUTCHER - RESPONSIBILITIES

Index No.	Name of Unit
S-30	Meat and fish box
S-34	Meat saws, meat grinders, fish and bone cutters, meat blocks.

Daily:

1. Clean all tools and equipment after each day's using.
2. Dismantle, thoroughly wash and air dry grinders.
3. Steam scald bone saws.
4. Take precautions not to wet electrical equipment.
5. Clean all blood, etc., from wood work, and rinse all butcher shop drains.

Weekly:

1. Test operate safety alarm bells from the interior of meat and fish boxes in company with steward and refrigeration engineer.
2. Clean all tools and machines thoroughly - per mfr. recommendations. Coat bare metal parts with light oil to prevent rusting.

LAUNDRYMAN - RESPONSIBILITIES

Index No.	Name of Unit
S-35	Mangle, washing machines, driers, presses, extractors. Ventilation screens, laundry stowage space. Safety devices. Bluing pot, starch pot, etc.

Daily:

1. Clean thoroughly all equipment after use (Chapter 35, BUSHIPS Manual.
2. Release tension springs on mangle when run is completed for the day.
3. Lubricate mangle drum to prevent rusting.
4. Removal all lint from drier screens. Remove lint from supply and exhaust vents.

Weekly:

1. Remove grease from washing machines and extractors (Chapter 35, BUSHIPS Manual.
2. Lubricate machiner, except electrical motors and controls.

RADIO OFFICER - RESPONSIBILITIES

Electronics Apparatus:

Index No.	Name of Unit
S-67	Radio Direction Finder
S-67	Radar (Main and Auxiliary)
S-67	Loran
S-67	Fathometer
S-67	Lifeboat Radios
S-67	Radio Batteries
S-67	Facsimile
S-67	Radio Transmitters
S-67	Radio Receivers
S-67	Radiac
S-67	Antenna System
S-67	Automatic Alarm
S-60/63	Motor-generators (radio)
S-62	Batteries (radio)
S-69	Test Equipment (electronics)

Daily:

1. Operational check of all communication receivers.
2. Operational check of all transmitters.
3. Visual inspection of antennas.
4. Specific-gravity readings of radio wet batteries; check chargers.
5. Enter checks in maintenance log.

Weekly:

1. Test operate radar, loran, RDF, fathometer, facsimile and radiac.
2. Open each equipment and make visual inspection. Clean free of dust, oil and corrosion.
3. Lubricate moving parts as required. Clean batteries and apply grease to terminals.
4. Make operational test of lifeboat radios. Clean and check lifeboat radio batteries and grease terminals. Check charging systems and drying circuits.
5. Make minor repairs and adjustments as required to all electronic equipment.
6. Enter tests in maintenance log and repairs on equipment history cards.

Overtime to accomplish weekly duties 1, 2, 3, 5 and 6 is not expected to exceed three hours per week. Additional weekly overtime shall be paid in the amount stated in CMPI 85 for item 4.

Quarterly: (In addition to above)

1. Test all tubes in each electronic equipment and replace as required. (radiac equipment excluded)
2. Perform preventive maintenance on all equipment as follows:

   (a) Clean interior and exterior of chassis and cabinets.
   (b) Make visual inspection for loose or broken parts and poor electrical connections.
   (c) Check relays and switches. Burnish and clean as required.
   (d) Check meter readings and compare with instruction book or known nominal readings.
   (e) Check safety devices and signs.
   (f) Megger all wire antennas. Make thorough inspection of antenna wire and hardware. Clean insulators.
   (g) Inspect, test, clean and lubricate motor-generators and blower motors as required.
   (h) Make minor repairs and adjustments to all electronics equipment as required.

3. Originate work request for work required by shore services. Give as much detail as possible such as symbol number of parts needed (if known) or a verbal account of any intermittent failures.

   Twelve hours overtime quarterly should be sufficient under normal circumstances to accomplish the above duties.

SAMPLE

RADIO MAINTENANCE CHECK OFF SCHEDULE

YEAR _____ MONTH _____

DAILY

ITEM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1. Check Batteries																															
2. Test Transmitters																															
3. Test Receivers																															
4. Inspect Antennas																															

Enter initials in proper spaces.

WEEKLY	DATE	1	2	3	4	5
1. Operational check navigation electronics						
2. Operational check lifeboat radios						
3. Open all equipment and clean						
4. Lubricate moving parts as required						
5. Make minor repairs and adjustments						

QUARTERLY DATE _____

1. Test all tubes
2. Clean chassis and cabinets
3. Inspect for loose parts and connections
4. Check and clean relays and switches
5. Check meter readings
6. Check safety
7. Megger all wire antennas
8. Clean and lube motor-generators
9. Make minor repairs and adjustments
10. Work request for shore service