

CHAPTER 34

FIRE, SPRINKLING & DRAINAGE SYSTEMS
(PLATE XII)

34-1 FIRE SYSTEM:-

(a) The Fire System is served by two horizontal, two stage, single end suction, centrifugal pumps, each having a capacity of 200 g.p.m. against a discharge pressure of 100 p.s.i. These pumps are driven by electric motors through flexible couplings. One pump is assembled for right hand and the other for left hand rotation.

These pumps are located in the engine room, B-1, lower level, one port and one starboard, and are cross connected with a 3" pipe. Suction is taken from either the port, starboard or centerline sea chests.

The firemain is arranged in a loop system in the hold and extends between frames 12 and 26, port and starboard.

ENGINE ROOM:-

(b) Branches from the Fire System in the engine room consist of port and starboard branches to main bilge eductors with overboard discharge, two starboard and one port branch to Foam Generators, and one hose connection, port.

LOOP FORWARD:-

(c) The loop forward of the engine room serves four risers leading to fire plugs on the Main and Superstructure Decks, to a shore connection on the Superstructure Deck and to the forward bilge eductor. A branch is also taken from this loop which serves the Sprinkling System in compt. A-209M.

LOOP AFT:-

(d) The loop aft of the engine room serves four risers leading to fire plugs on the Main and Superstructure Decks and to a shore connection on the Superstructure Deck. A branch is also taken from this loop which serves the Sprinkling System in compt. C-202M.

March 1, 1944

CHAPTER 34

FIRE, SPRINKLING & DRAINAGE SYSTEMS

34-1 FIRE SYSTEM

LOOP AFT:-

(e) For list and location of fire plugs, see CHAPTER 14.

For further information concerning the Fire System, see PLATE XII.

34-2 SPRINKLING SYSTEM:-

(a) The Sprinkling System is divided into two groups, a forward group which provides sprinkling for the 20 M/M magazine A-209M and an after group providing sprinkling for the 20 M/M magazine C-202M.

Each group is supplied by a separate connection from the firemain and controlled by a group control valve.

(b) The group control valves are distantly operated by means of mechanical operating gear from control stations on the Main Deck. The forward group control valve is located in the crew's W.R. space A-103L, starboard, and the after group control valve in the boiler room, C-101-1/2E, starboard. These valves are secured in lock boxes.

In addition to the control valve, each group is provided with a separate cut-out valve, operated at the valve only, in the open position in a locked box.

A hose cap connection is provided between the group control valve and the cut-out valve for periodical flushing of the control valve.

(c) The perforations in the sprinkler pipes are so arranged that water will impinge upon deck above and form a spray and thoroughly drench the deck above, bulkheads and stowage. The total area of the perforations in the piping is not less than 50 per cent in excess of the area of the supply line.

Sprinkling pipes must never be painted.

March 1, 1944

CHAPTER 34

FIRE, SPRINKLING & DRAINAGE SYSTEMS

34-2 SPRINKLING SYSTEM:-

(c) (cont'd.)

For further information concerning the Sprinkling System, see PLATE XII.

34-3 DRAINAGE SYSTEM:-

(a) The main drainage facilities consist of a bilge drainage system which drains the engine room B-1, auxiliary machinery space C-201EL, chain locker A-204E and void compartments A-201V, A-202V, A-203V forward and void compartment C-205V aft. Drainage of the forward compartments is controlled by distant operating gear located in Bos'ns. stores A-102AE.

(b) Drainage is accomplished by three firemain motivated eductors. Two eductors are located in the engine room B-1, port and starboard, and one in the void space A-203V, port.

Two hose connections are provided in the engine room B-1 for draining inaccessible places.

In addition to the above, an emergency bilge suction connection from the ballast system is provided in the engine room B-1, port.

(c) The Steering Gear Room and other spaces not otherwise provided with drainage should be drained by means of the portable pumps. (See CHAPTER 32)

(d) The galley, officers, crews and troops washrooms and other spaces above the Main Deck are drained overboard by gravity through floor drains leading to the side of the vessel without scupper valves. Water closets and urinals are drained overboard by gravity through separate drains not combined with other plumbing drains.

(e) Drainage of the cargo area on the Main Deck is provided by means of perforations in the Main Deck in way of three transverse troughs, located at frames 9-17 and 29, under the deck, which lead to shell openings.

March 1, 1944

34-3

CHAPTER 34

FIRE, SPRINKLING & DRAINAGE SYSTEMS

34-3 DRAINAGE SYSTEM:-

(e) (cont'd.)

For further information concerning the Drainage System, see PLATE XII.

March 1, 1944