

**MANNING STUDY**

POSITION	IMO EQUIVALENT	QUANTITY		REGULATORY REFERENCES	IMO REGULATORY REFERENCES	INTERPRETATIONS / ASSUMPTIONS	STATION BILL DUTIES		Watch
		MIN <sup>1</sup>	Recommended				FIRE & EMERGENCY DUTIES	ABANDIN SHIP DUTIES	
Master	Master	1	1	46 CFR 15.805(a)(1) & 815(a)	STCW-95 Reg II/2	'Every self-propelled, seagoing documented vessel of 200 gross tons and over.'	On Bridge, in Command of All operations	On Bridge, in Command of All operations	N/A
Chief Mate	Chief Officer (Chief Mate)	1	1	46 CFR 15.810(b)(1)	STCW-95 Reg II/2&3	'Vessels of 1000 gross tons or more - three mates'	1st: On Scene - In Charge Communications	1st: On charge of Boat deck Operations	1
Second Mate	Officer in Charge of a Navigational Watch (OICN/W)	1	1	46 CFR 15.810(b)(1)	STCW-95 Reg II/2&4	'Vessels of 1000 gross tons or more - three mates'	2nd: on Bridge, helm or GMDSS,	2nd: Lifeboat #1	2
Third Mate	Officer in Charge of a Navigational Watch (OICN/W)	1	1	46 CFR 15.810(b)(1)	STCW-95 Reg II/2&5	'Vessels of 1000 gross tons or more - three mates'	3rd: Fire Team #1 Nozzleman	3rd: Lifeboat #2	3
Able Seaman	Able Seafarer Deck (AS-D)	3	6	46 CFR 15.840(a) and Marine Safety Manual Vol. 3, Part B4 D.1	STCW-95 Reg III/5	At least 65% of the deck crew of these vessels, excluding individuals serving as officers, must be able seamen. Each watch will have helmsman and lookout based on mission requirements.	on Bridge, helm or Messenger Team #2 - Nozzleman #1 - Hoseman Hoseman	On Bridge, Helm or Communications Lifeboat #3 Liferaft #2	
Ordinary Seaman	Rating forming part of a Navigational Watch (RFPNW)	0	4	46 CFR 12.25-1 and Marine Safety Manual Vol. 3, Part B4 D.1	STCW-95 Reg III/4	65% of deck crew must be AB's, therefore remaining compliment can be Ordinary Seamen	Fire Team #1 - Valveman Team #2 - Valveman	On bridge, helm or Messenger to Chief Mate, Messenger	Report to Chief Mate, Messenger
<b>DECK</b>		<b>7</b>	<b>14</b>						
Chief Engineer	Chief Engineer (CE)	1	1	46 CFR 15.820(a)(1)	STCW-95 Reg III/3	'Seagoing or Great Lakes vessels of 200 gross tons and over.'	in charge engine room	in charge engine room	1
Assistant Engineer	Officer in Charge of an Engineering Watch (OICEW)	3	3	46 CFR 15.825	STCW-95 Reg III/1	Licensed Assistant Engineer(s) required; OCMI determines quantity based on level of automation. (over 200 GT) Must have one licensed engineer per watch.	Report to Emer. DG - Standby Engine Room Assist as needed - Fire Pumps	Report to Emer. DG - Stand By Motorman Lifeboat #2 Lifeboat #1 - Motorman	2.3
Electrotechnical Oiler (QMED)	Electro-technical Officer (ETO) Able Seafarer Engine (AS-E)	1 0	2 3	Marine Safety Manual Vol. 3, Part B4 E.5	STCW-95 Reg III/6 STCW-95 Reg III/5	Billet not specifically required by CFR. No unlicensed watchstander required in engine room with "deadman" alarm.	Report to Emer. DG Rm, Assist as Directed Report to EOS, Assist as Directed Report to Chief Mate, Assist as Directed	Report to Emer DG Rm, Assist as Directed Report to EOS, Assist as Directed Liferaft #3 - In charge	
Wiper	Rating forming part of an Engineering Watch (RFPPEW)	0	0	Marine Safety Manual Vol. 3, Part B4	STCW-95 Reg III/4	Billet not specifically required by CFR. No unlicensed watchstander required in engine room with "deadman" alarm.			
<b>ENGINE</b>		<b>5</b>	<b>9</b>						
Chief Steward	Chief Steward/Purser	1	1	46 CFR 12.25-1 & -2		Billet not specifically required by CFR. Must be food handler endorsed.	In charge at designated Muster Station Take Muster	in charge at designated Muster station. Take Muster	
Cook	Cook/2nd Steward	2	2	46 CFR 12.25-1 & -2		Billet not specifically required by CFR. Must be food handler endorsed.	Assist at Designated Muster Station, Sweep Vessel, Assist as Directed	Liferaft #2 Assist as Directed; Liferaft #3 assist as directed	
Mess Assistant	Steward	2	2	46 CFR 12.25-1 & -2		Billet not specifically required by CFR. Must be food handler endorsed.	assist as directed	assist as directed	
<b>STEWARDS</b>		<b>5</b>	<b>5</b>						
Total Crew		17	28						
Scientist		45	45						
Technicians		10	10						
<b>Total</b>		<b>72</b>	<b>83</b>						

2 fire teams

1. Minimum crew size based on minimum requirements by regulations and emergency squad capabilities  
 2. One electrician/techs will have lifeboatman/MMD certification.