	7			8		9		10		11		12		13		14		15	
	S	M	G	S	M	S	M	S	M	S	M	S	M	S	M	S	M	S	M
Deck machinery	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ventilation systems	X	X	X			X	X			X	X			X	X			X	X
Thermodynamics																			
Heat exchangers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Watch duties				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
International rules and regulations						X	X			X	X			X	X			X	X
Refrigeration and air conditioning:																			
Theory	X	X	X			X	X			X	X			X	X			X	X
Air conditioning systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Refrigeration systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Control systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Instruments-gauges	X	X				X	X			X	X			X	X			X	X
Safety	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Casualty control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Electricity, electronics and control systems**:**																			
Theory	X	X	X			X	X			X	X			X	X			X	X
General maintenance	X	X	X			X	X			X	X			X	X			X	X
Generators	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Motors	X	X	X			X	X			X	X			X	X			X	X
Motor controllers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Propulsion systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Distribution systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Electronic systems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Batteries	X	X	X			X	X			X	X			X	X			X	X
Communications	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Safety	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Casualty control	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Troubleshooting	X	X	X	X	X			X	X			X	X			X	X		