

Subject	U.S. Code		
	Title	Section	Page
Labor Department; definitions regarding.....	33	902	62
Lakes, bays, and sounds; able seamen on vessels navigating.....	46	672(a)	138
Studies and investigations by.....	33	941(b)	62
Lantern; displayed as stern light.....	33	1070	40
Displayed by rowing boat at night.....	33	1067(b)	37
Motorboat to carry and display to prevent collision.....	46	526b(c)	66
Showing red and green, displayed as sidelight.....	33	1067	37
Launches, fuel for.....	46	170a	97
Law enforcement; Coast Guard officials.....	14	89	50
Under Federal Boating Act.....	46	527h	75
Laws governing marine inspection.....	46	492	23
Lemon or lime juice, rations of.....	46	666	195
Letters USCG, etc., unauthorized use, penalty.....	14	639	54
Liability of owner, master, or person in charge of small passenger vessel.....	46	390d	116
Libel for wages.....	46	604	217
Canalboat, exempted from.....	46	611	217
License and licensing; adjudications in suspension or revocation proceedings.....	5	1004	10
Definitions.....	5	1001(e)	8
For barge, seagoing.....	46	397	98
For cargo vessels, steam.....	46	405	89
For small passenger vessels.....	46	390b	115
For tank vessels.....	46	391a	89
For towing vessels, steam.....	46	405	89
General.....	46	224	147
Seamen.....	46	672	138
Licensed officers; assist Coast Guard inspectors.....	46	234	23, 156
Certificate of competency to.....	46	224a	149
Criminal liability, evidence of.....	46	239(h)	232
Hawaiian vessels.....	46	367	78, 227
Investigation of acts in violation of law or regulation.....	46	239(d)	231
Motorboat operators.....	46	526f	67
Motor vessels.....	46	367	78
Oath of.....	46	231	148
On subsidized vessels.....	46	1131(b)	143
Pilots.....	46	214	159
Pilots, when required.....	46	364	78
Professional capacity, minimums.....	46	224a	149
Renewal of license without appearing in person.....	46	233	148
Replaced on foreign voyage.....	46	221	144
U.S. citizenship required.....	46	672(a)	38, 1176
Licenses; alteration of penalty.....	46	231	148
Appeal from suspension or revocation.....	46	239(g)	157
Applications for.....	46	224	147
Certificates of competency.....	46	224a	149
Denial, narcotics violations.....	46	239b	158
Duration of.....	46	225	147
Engineers.....	46	229	166
Exhibition of.....	46	232	144
Exhibition of, by radio officers.....	46	229f	168
Hawaiian Islands, for masters and engineers.....	46	367	78
Imposition of sanctions against.....	5	1008	14
Indians.....	46	237	155
Limited to 5-year terms.....	46	225	147
Masters.....	46	226	159

Subject	U.S. Code		
	Title	Section	Page
Licenses—Continued			
Mates.....	46	228	159
Misuse of, fine.....	18	2197	60
Motorboat operators; carrying six passengers or less for hire.....	46	526f	67
Officer's refusal to serve, grounds for suspension or revocation.....	46	240	157
Officers, required, as condition of employment.....	46	224a(3)	149
Operators for small passenger vessels.....	46	390b	115
Pilots.....	46	214	159
Radio officers.....	46	229a	167
Records of those issued, revoked, suspended, or refused.....	46	414	21
Renewal of.....	46	225	147
Renewal of, when at distance from Coast Guard official.....	46	233	148
Reports regarding.....	46	414	21
Revocation, narcotics violations.....	46	239b	158
Suspension or revocation of, general requirements regarding.....	46	239(g)	157
To Indians of the Tsimpsean or Haida tribe.....	46	237	155
Unlawful possession and use of.....	18	2197	60
Lifeboat drills.....	46	481	86
Lifeboatman; certificate as.....	46	672(d)	141, 181
Certificate or endorsement as, considered as one of efficiency.....	46	672(d)	141, 181
Investigation of illegal acts by.....	46	239(d)	231
Manning.....	46	222	137
Lifeboats; fuel for.....	46	170a	97
Number, type, size, capacity, operation, stowage, etc.....	46	481	86
Life preservers; motorboats to carry.....	46	526e	66
Number, type, size, stowage, etc.....	46	481	86
Required on vessels carrying persons not passengers.....	46	459	102
Life, safety of, primary duties.....	14	2	4
Lifesaving apparatus and equipment; approval required.....	46	489	88
Barge, seagoing.....	46	397	98
Carried on motorboats.....	46	526e	66
Fuel, flammable or combustible, used in.....	46	170a	97
Inspected vessels.....	46	481	86
Inspected vessels, delegation of functions T.D. Order 167-38.....			87
Inspection by Coast Guard.....	46	362	77
Passenger vessels engaged in excursions.....	46	453	101
Regulations concerning.....	46	481	86
Tank vessels.....	46	391a(2)	90
Light, air, and accommodations for steerage passengers.....	46	153	121
Lighthouse service, unauthorized use of, penalty.....	14	639	54
Lights and shapes, anchor lights.....	33	1071	40
Fishing vessels.....	33	1069	39
International rules.....	33	1062	33
Motorboats.....	33	1067	37
Motorboats, inland waters.....	46	526b	65
Pilot vessels.....	33	1068	38
Sailing vessels underway.....	33	1065	36
Stern light requirements.....	33	1070	40

Subject	U.S. Code		
	Title	Section	Page
Lights and shapes—Continued			
Vessels engaged in minesweeping operations	33	1064	35
Vessels handling submarine cable or navigation mark	33	1064	35
Vessels not under command	43	1064	35
Vessels proceeding under both sail and machinery	33	1074	42
Vessels towing or pushing	33	1063	35
Vessels underway	33	1062	32
Lights for Navy and Coast Guard vessels; international rules, 1951 act	33	143a	25
International rules, 1963 act	33	1062	26
Lights for rafts and other craft; Great Lakes	33	259	29
Inland waters	33	178(d)	28
St. Lawrence River	33	256	29
Western rivers	33	316(b)	30
Lights for seaplanes	33	1061	32
Lights for vessels; international rules, 1960	33	1061	32
Lights, signals, and other appliances for vessels operating under or near bridges	33	157a	28
Liquid cargoes; bulk, as dangerous cargo	46	170(1)	92
Bulk, handling of	46	391a(2)	90
Bulk, shipping papers describing	46	391a(5)	91
Bulk, stowage of	46	391a(2)	90
Bulk, tankerman handling	46	391a(6)	91
Regulations governing handling of	46	391a(2)	90
List of merchant vessels	46	4	21
Lists, crew	46	674	205
Loadlines; actual line of safety	46	85a	127
Actual line of safety, coastwise	46	88a	132
American Bureau of Shipping	46	85b	127
American Bureau of Shipping, coastwise	46	88b	132
Certificates	46	85b	127
Certificates, coastwise	46	88b	132
Coastwise Act	46	88	132
Detention of vessel for violations of Load Line act	46	85f	129
Detention of vessels on coastwise voyages	46	88f	134
Determinations	46	85a	127
Determinations, coastwise vessels	46	88a	132
Foreign countries	46	85d	128
For coastwise vessels	46	88	132
Foreign vessels, coastwise trade	46	88d	133
For Great Lakes	46	88a	132
For ocean-going vessels	46	85	127
Logbook entries	46	85e	129
Logbook entries, coastwise voyages	46	88e	133
Marking on vessels	46	85b	127
Marking on vessels, coastwise	46	88b	132
Markings, coastwise	46	88b	132
Marks not to be submerged when vessel is in sea water	46	85c	128
Penalties for violations re	46	85g	129
Local authorities foreign country, handling in-subordination of seamen	46	703	219
Local regulations, Dangerous Cargo Act	46	170(7)	93
Lodging; supplies and services to persons in need	14	88	230

Subject	U.S. Code		
	Title	Section	Page
Logbooks	46	201	188
Actual drafts of vessel and loadlines	46	85e	129
Deceased seaman, entries about	46	621	221
Deceased seamen, wages, deductions, etc., noted in	46	622	221
Deductions from seaman's wages kept in	46	672	138
Entries about provisions or water	46	662	193
Entries required	46	201	188
Entry of offense by seaman	46	702	190
Insubordination of seamen, entries about by discharging officer	46	703	219
Mode of making entries in	46	202	188
Omitting entries, penalty	46	203	189
Longshoremen's and Harborworkers' Compensation Act, definitions	33	902	62
Installation of safety devices and safeguards	33	941	62
Safe place of employment	33	941	62
Safety rules and regulations	33	941	62
Lookout; duties, 1960 international rules	33	1091	47
In low visibility none below able seaman rating permitted	46	672(a)	138, 176
Lookout, required by 1960 international rules	33	1061(b)	33
Loss of life, marine casualty	46	239(a)	231
Loss of vessel, report of probable	33	362	229
Lowest passenger deck, definition	46	151	119
Low-water alarm indicators, steam vessels	46	405	89
Machinery and equipment; boilers, unfired pressure vessels, and appurtenances	46	392	85
Cargo and miscellaneous vessels	46	391	84
Cargo steam vessels	46	405	89
Civilian nautical schoolships	46	1333	117
Electrical equipment	46	392	85
Inspections	46	391	84
Mechanically propelled vessels	46	404	88
Passenger vessels	46	391	84
Safety, approval of	46	489	88
Seagoing barges	46	395	97
Small passenger vessels	46	390(b)	114
Tank vessels	46	391a(2)	90
Tugboats and towing vessels	46	405	89
Vessels subject to inspection	46	481	86
Main steampiping, inspection of	46	392	85
Maintenance, firefighting and lifesaving equipment	46	481	86
Manifests; dangerous cargoes	46	170(7)	93
Presented to boarding officer	46	158	124
Steerage passenger vessels	46	158	124
Manning and wage scales, Maritime Administration	46	1131	142
Manning; able seamen to have certifications of qualifications	46	672(d)	141, 181
Bilge systems	46	481(a)	87
Cargo vessels, steam	46	405	89
Complement of officers and crews	46	222	137
Exceptions for fishing or whaling vessels or yachts	46	690	142, 184
Exceptions for sailing vessels	46	672-1	142
Firefighting equipment	46	481	86
Lifeboatmen to have certifications of qualifications	46	672(d)	141, 181

Subject	U.S. Code		
	Title	Section	Page
Manning—Continued			
Lifesaving equipment	46	481	86
Number of radio officers	46	229h	169
Radio officers required	46	229b	167
Small passenger vessels	46	390b	115
Subsidized vessels during emergency	46	1132(h)	59
Tank vessels	46	391a(2)	90
Towing vessels, steam	46	405	89
Waivers of compliance by President for acquired foreign vessels	50	198	80
Manufacturer; name and information on boilerplates, counterfeiting	46	410	113
Stamping name and information on boilerplates required	46	409	112
Marine casualties			227
Assistance required to be rendered by motorboat	46	526L	68, 227
Assistance required to be rendered by vessel	33	367	227
Barges, reports regarding	33	365	229
Classification	46	239(b)	231
Coast Guard aid and assistance	14	88	230
Evidence of criminal liability turned over to Justice Department	46	239(h)	232
Exchange of information between motorboats and vessels	46	526L	68, 227
Exchange of information between vessels required	33	367	227
Involving loss of life	46	239(a)	231
Involving loss of life, recreational boating	46	526L	68, 227
Other than one involving loss of life	46	239(b)	231
Regulations governing investigations	46	239(j)	233
Rendering assistance, penalty for failure	33	368	227
Reports transmitted to Commandant, U.S. Coast Guard	33	363	229
Reports under Motorboat Act	46	526L	68, 227
Statements about entered in logbook	46	201	188
Marine documents; certificate of number	46	527a	71
Marine engineering; appurtenances to boilers, etc.	46	411	111
Boilerplate	46	408	112
Boilerplate, maximum thickness	46	412	112
Boilerplates, stamping required on	46	409	112
Boilers; design, material and construction	46	411	111
Cargo and miscellaneous vessels	46	392	85
Civilian nautical schoolships	46	1333	117
Construction of boilers and unfired pressure vessels, materials required	46	406	111
Control of safety valves and steam gages	46	393	113
Counterfeiting stamps, punishment	46	410	113
Factor of safety of four for boilers, etc.	46	411	111
Factory inspections	46	408	112
Fittings, maximum allowable working pressures	46	411	111
Formulas authorized	46	411	111
Improper construction of boilers, steam piping, or unfired pressure vessels; punishment for	46	407	111
Inspection of boilers, unfired pressure vessels, appurtenances, machinery, and electrical equipment	46	392	85
Iron or steel for boilers or unfired pressure vessels	46	406	111

Subject	U.S. Code		
	Title	Section	Page
Marine engineering—Continued			
Maximum work pressure formulas for boilers, etc.	46	411	111
Mechanically propelled seagoing vessels	46	367	78
Mechanically propelled vessels	46	404	88
Obstructing safety valves	46	413	113
Passenger vessels	46	392	85
Small passenger vessels	46	390b	115
Regulations authorized	46	411	111
Steam piping	46	411	111
Unfired pressure vessels; design, materials, and construction	46	411	111
Valves, maximum allowable working pressure	46	411	111
Welding methods	46	407	111
Maritime Administration; civilian nautical schools	46	1332	117
Foreign vessels acquired by	50	198	80
Manning and wage scales	46	1131	142
Vessels subject to inspection	46	363	78
Maritime navigation; meaning of			155
Marking and labeling of dangerous cargo	46	170	92
Marking loadlines on oceangoing vessels	46	85b	127
Marking loadlines on coastwise and Great Lakes vessels	46	88b	132
Marriages aboard vessels; logbook entries about	46	201	188
Master; acting as a pilot	46	230	160
Barges over 100 gross tons carrying passengers, licensing and classifying for	46	224	147
Casualties, logbook entries about, by	46	201	188
Citizenship of	46	221	145
Color blindness, examination	46	225	147
Collision between two vessels, duties of	33	367	227
Crew list, under his oath, delivered to collector of customs	46	674	205
Crews, signing on or discharging of, by	46	643L	175
Deceased seaman, responsible for effects of	46	621	221
Deceased seamen within the United States, duties and responsibilities regarding effects, etc.	46	625	223
Definition, for manning	46	713	147
Deserting seamen, forfeitures turned over to shipping commissioner	46	706	224
Destitute seamen, passage accepted when requested by consul	46	679	197
Discharge of seamen by	46	641	207
Discipline of steerage passengers by	46	156	123
Duties regarding unseaworthy vessel	46	653	191
Entries in logbooks to be made by as witnessed	46	202	188
Exhibition of license	46	232	144
Failure to give assistance, information, etc., in marine casualty, penalty	33	368	227
Great Lakes, licensed as pilots	46	216(c)	163
Indians licensed as	46	237	155
Liability in cases of corporal punishment	46	712	61
Liability of, to passengers for damages	46	491	109
License as	46	226	159
License deemed to be a certificate of competency	46	224a	149
License, endorsed as pilot	46	230	160
License, grounds for suspension or revocation	46	226	159

Subject	U.S. Code		
	Title	Section	Page
Master—Continued			
License, validity limited to 5 years	46	226	159
Licensing and classifying of	46	224	147
Logbook entries by	46	201	188
Maintain records as to seamen's wages	46	642	208
Mechanically propelled vessels in Hawaii	46	367	78
Misuse of license as	18	2197	60
Mutual release of claims for wages signed by	46	644	210
Neglecting to provide sufficient ship's stores	46	661	193
Neglect of duty by	18	2196	156
Neglect of master to take charge of effects of deceased seaman, penalty	46	623	222
Oath to faithfully perform duties as	46	231	148
Performance of shipping commissioner duties authorized	46	643(k)	175
Performing duties of shipping commissioner	46	546	204
Permission regarding complaint about food or water	46	664	194
Professional capacity of	46	224a	149
Refusal to pay wages and charges	46	660	193
Refusal to serve under license, grounds for suspension or revocation	46	240	157
Regulations regarding conduct of seamen, etc., in shipping articles	46	564	199
Removal by owners	46	227	144
Required for inspected vessels	46	223	137
Required to post shipping agreement	46	577	203
Report of marine casualty by	33	361	228
Reports regarding steerage passengers	46	158	124
Sail vessels over 700 gross tons, licensing and classifying for	46	224	147
Seagoing mechanically propelled vessels	46	367	78
Seamen's wages, on justifiable complaint in foreign port	46	685	219
Seaman's wages paid when discharged before consul	46	682	218
Shipping articles by, vessels in coasting trade	46	574	202
Shipping articles signed by	46	564	199
Steam vessels, licensing and classifying for	46	224	147
Suspension or revocation for use of unlawful length of towline	33	153	98
Wages, seaman, appropriation of, for court costs	46	707	218
When not a passenger	46	390(a)	114
Masthead light	33	1062	33
Mate; acting as a pilot	46	230	160
Citizenship required	46	221	145
Classification of in licensing	46	228	159
Color blindness examination	46	225	147
Exhibition of license	46	232	144
Indians licensed as	46	237	155
Inland	46	228	159
Liability of, to passengers for damages	46	491	109
License as	46	228	159
License deemed to be a certificate of proficiency	46	224a	149
License endorsed as pilot	46	230	160
License, grounds for suspension or revocation	46	228	159
License, validity limited to 5 years	46	228	159
Licensing and classifying of	46	224	147
Misuse of license as	18	2197	60

Subject	U.S. Code		
	Title	Section	Page
Mate—Continued			
Oath to faithfully perform duties as	46	231	148
Ocean or coastwise	46	228	159
Professional capacity of	46	224a	149
Refusal to serve under license, grounds for suspension or revocation	46	240	157
Seagoing mechanically propelled vessels	46	367	78
Steam vessels licensing and classifying for	46	224	147
Vessels of limited tonnages	46	223	137
Materials; boilers, unfired pressure vessels, appurtenances, and steam piping	46	411	111
Inspection of	46	392	85
Specifications for boilerplate	46	408	112
Small passenger vessels	46	390b	115
Tank vessels	46	391a	89
Tested, inspected and stamped by Coast Guard	46	407	111
Welding methods	46	407	111
Measures and weights	46	668	195
Medical division on passenger vessels	46	242	170
Medicines	46	666	195
For steerage passengers	46	155	123
Supplies and services to persons in need	14	88	230
Members of engine department, manning	46	672(e)	139, 182
Qualified	46	672(e)	139, 192
Merchant marine; administration of, by Commandant	46	2	20
Coast Guard field office addresses			C210
Merchant Mariner's document; able seamen	46	672(b)	177
Able seamen, manning	46	672(a)	138, 176
As certificates of identification	46	643	173
As certificates of service	46	672	138
Denial, narcotics violations	46	239b	158
Investigation of illegal acts while serving under	46	239(d)	231
Lifeboatman	46	672(d)	141, 181
Qualified member of engine department	46	672(e)	139, 182
Revocation, narcotics violations	46	239b	158
Suspension and revocation of, authorized	46	672(h)	183
Suspension or revocation of, general requirements	46	239(g)	157
Tanker	46	391a(6)	91
Merchant seamen	46	643	173
Coast Guard official prohibited from charging for certain services	46	542a	24
Cruelty to, prohibited	18	2191	61
Customs officials serving as shipping commissioner	46	543	24
Freedom unimpaired	46	672(k)	183
General superintendence by Commandant	46	2	20
Merchant vessels; acquisition of foreign vessels	50	198	80
Coastwise loadlines	46	88	132
Complement of officers and crew	46	222	137
Detention if in violation of Coastwise Load Line Act	46	88f	134
Detention if in violation of Load Line Act	46	85f	129
Loadlines	46	85	127
Minimum number of officers	46	223	137
Requirements, qualifications, and regulations as to crews	46	672	138
When being towed with no cargo, no loadlines required	46	85(c)	128

Subject	U.S. Code		
	Title	Section	Page
Military explosives, transportation of	46	170(7)	93
Military service, Coast Guard, status as	14	1	4
Military vessels, lights, and shapes displayed by	33	1073	41
Mill inspections, boilerplates	46	408	112
Minesweeper, lights and shapes for	33	1064(d)	36
Minimum Age (Sea) Convention, 1936			185
Reservations by the U.S. Government			187
Misconduct of officer or seaman, investigation of	46	239(b)	231
Mississippi River; crew accommodations in steamboats on	46	660-1	102
Pilot rules applicable to	33	301	30
Misuse of Federal certificate, license or document, fine	18	2197	60
Mitigation or remission of penalties; authorized	46	7	53
Carrying too many passengers	46	882	107
Federal Boating Act	46	527e	74
Loadlines	46	85g	129
Loadlines, Coastwise Act	46	85g	129
Officer's Competency Certificates Convention, 1936 Enabling Act	46	224a(10)	151
Refunding penalties	46	8	53
Mode of making entries in logbooks	46	202	188
Morse code distress signals	33	1093	47
Motorboat; accident assistance by operator of	46	526L	68, 227
Act of 1940	46	526	65
Act of 1940, delegation of functions, T.D. Order 167-32			75
Application of other laws to	46	526q	70
Application of act to vessel	46	526u	70
Backfire traps	46	526i	68
Bells	46	526d	66
Boarding by Coast Guard officers	46	527c	73
Carburetor flame arresters	46	526i	68
Carrying copies of pilot rules not required	46	526k	68
Carrying six or less passengers for hire	46	526f	67
Casualties involving	46	526L	68, 227
Casualty report	46	526L	68, 227
Classification of	46	526a	65
Combined lantern for	46	526b	65
Definitions in act	46	526	65
Exemption of racing outboard motorboats from act	46	526h	68
Fire extinguishers	46	526g	67
Fuel for	46	170a	97
Indian ownership of	46	237	155
Life preservers, etc.	46	526e	66
Lights for	46	526b	65
Lights under 1948 international rules	46	526b(f)	66
Lights under 1960 international rules	33	1067	37
Lights when propelled by sail and machinery	46	526b(e)	66
Lights when operation as sail vessels	46	526b(c)	66
Minimum number of officers not applicable to	46	223	137
Not to hamper vessels in narrow channels	33	1087(c)	46
Open construction, ventilation of	46	526(j)	68
Operators licenses	46	526f	67
Penalties for violations of act	46	526o	69
Reckless or negligent operation	46	526L	68, 227
Reckless or negligent operation, prohibition, fine	46	526m	69, 228
Regulations to carry out act in most effective manner	46	526p	70

Subject	U.S. Code		
	Title	Section	Page
Motorboat—Continued			
Small craft carrying passengers for hire, operators' licenses	46	526f	67
Sound signals by	33	1076	42
Towing or pushing other vessels, lights for	33	1067(b)	37
Ventilation of engine and fuel compartment bilges	46	526j	68
Violations, general	46	526o	69
Whistles or other sound-producing appliances	46	526c	66
Motor lifeboat, fuel for	46	170a	97
Motor vehicles, transportation of	46	170(16)	96
Municipal governments, not to impede pilots licensed by Federal Government	46	215	160
Municipal ordinances or regulations re dangerous cargoes	46	170	92
Municipal regulation of pilots; prohibited on Great Lakes	46	216g	164
Muster lists required as lifesaving and firefighting precautions	46	481	86
Muster of crew; by boarding officer	46	677	207
On information	46	672(d)	141, 181
Mutual release of claims for wages	46	644	210
Name and home port, exhibited on stern	46	46	82
Name of vessel, exhibited on pilothouse	46	493	82
Narcotic drug; definition	46	239a	158
Violations; denial or revocation of seamen's documents	46	239b	158
Narrow channels (motorboats); power-driven vessel of less than 65 feet not to hamper vessels in	33	1087(c)	46
Sailing vessels not to hamper power-driven vessels in	33	1082(b)	45
National defense; emergency foreign vessel acquisition	50	198	80
Waivers of laws in interest of	46	prec. 1	58
Nationality of crews	46	672a	145
Officers	46	221	145
Naturalized officers	46	221	145
Subsidized vessels	46	1132(a)	145
Vessels of the United States	46	672a	145
Nautical schoolship; civilian	46	1333	117
Graduates as able seamen	46	672(a)	138
Graduates as qualified members of engine department	46	672(e)	139, 182
Naval Reserve, U.S.; members may wear uniforms	46	1131(b)	143
Members registered as staff officers	46	245	171
Officers of subsidized vessels, members in	46	1132(g)	138
Naval vessels, safety of	14	91	51
Navigable waters of the United States; Federal Boating Act applicable to	46	527a	71
Irondequoit Bay, N.Y.	46	365	81
Motorboat Act applicable to	46	526u	70
Numbering undocumented vessels on	46	527a	71
Navigation; aids to	14	2	4
Navigation in restricted visibility use of radar	33	1094	48
Navigation laws; enforcement by Treasury Department; officers	19	1581	52
Penalties remitted or mitigated	46	7	53
Refunding penalties	6	8	53
Reports on	46	4	21
Vessels subject to	46	364	78

Subject	U.S. Code		
	Title	Section	Page
Navy, Coast Guard as a service in.....	14	1-3	4, 5
Navy vessels, as civilian nautical schoolships.....	46	1334	118
Exemptions regarding lights for, 1951 act.....	33	143a	25
Lights and shapes; exemptions from 1960 international rules.....	33	1073	41
Lights for.....	33	1052	26
Lights for, exemptions.....	33	356	31
Safety in territorial waters, Coast Guard control over vessels.....	14	91	51
Neglect of duty or drunkenness by seamen.....	18	2196	156
Neglect to provide sufficient stores.....	46	661	193
Negligent operation of a motorboat or a vessel, penalty.....	46	526m	69, 228
Negligent or reckless operation of vessels.....	46	526L	68, 227
Nitroglycerin, liquid, transportation of.....	46	170	92
Notice of repairs, inspected vessels.....	46	435	100
Notice of proposed regulations; Administrative Procedure Act.....	5	1003(a)	10
Dangerous cargoes.....	46	170(9)	95
Inland pilot rules.....	33	157	172
Published in Federal Register.....	5	1003(a)	10
Tank vessels.....	46	391a(3)	90
Western rivers pilot rules.....	33	353	31
Notices; time, place, and subject of investigations.....	46	239(g)	157
To mariners; lights for Navy or Coast Guard vessels.....	33	360a	32
Notice of transfer of interest; destruction or abandonment of undocumented vessel; or change of address of owner.....	46	527b	73
Number; assigned undocumented vessel, displayed on bows.....	46	527a(c)	71
Certificate of.....	46	527a(c)	71
For documented vessels.....	46	45	83
For undocumented vessels.....	46	527a(c)	71
Nurses, certificates of registry for.....	42	242	170
Oaths; licensed officer.....	46	231	148
Radio officer, to perform duties.....	46	229e	168
Seamen, to perform duties.....	46	672(g)	182
Staff officers, to perform assigned duties.....	46	244	171
Witnesses in investigations, casualty cases, etc.....	46	239(e)	232
Obstructing safety valves prohibited.....	46	413	113
Offenses; by seamen, penalties.....	46	701	189
Entry in logbook about.....	46	702	90
Regarding artificial islands and fixed structures.....	43	1333(e)	56
Officer in charge, marine inspection, addresses of.....			C210
Officers and crews; cargo vessels, steam.....	46	405	89
Complement of, for manning.....	46	222	137
Laws relating to, waived by President for foreign vessels acquired.....	50	198	80
Seagoing motor vessels.....	46	367	78
Tank vessels.....	46	391a(2)	90
Towing vessels, steam.....	46	405	89
Visiting parts of vessels occupied by passengers.....	46	157	124
Officer Competency Certificates Convention, 1936 (ILO No. 53).....			151
Enabling Act.....	46	224a	149
Reservations by the United States.....			155
Officers' liability for damages to passengers.....	46	491	109

Subject	U.S. Code		
	Title	Section	Page
Officers of merchant vessels; alteration of license by.....	46	231	148
Appearing in person to renew licenses.....	46	225	147
Assistance to Coast Guard inspectors by.....	46	234	156
Citizenship required.....	46	221	145
Complement of.....	46	221	145
Definition.....	46	221	145
Engineers included.....	46	221	145
Engineers, inspected vessels.....	46	229	166
Engineers, uninspected vessels.....	46	224a	149
Exhibition of license.....	46	232	144
Indians as.....	46	237	155
Investigation of acts of incompetency or misconduct by.....	46	239(b)	231
Licensed, replacement of, on foreign voyage.....	46	221	144
Licenses limited to 5-year terms.....	46	225	147
Licensing and classifying of, general.....	46	224	147
Master, inspected vessel.....	46	226	159
Master, license endorsed as pilot.....	46	230	160
Master, uninspected vessel.....	46	224a	149
Mate, inspected vessels.....	46	228	159
Mate, license endorsed as pilot.....	46	230	160
Mate, uninspected vessel.....	46	224a	149
Minimum number of officers required.....	46	223	137
Misuse of licenses by.....	18	2197	60
Narcotic drug law violations, denial or revocation of licenses for.....	46	239(a)	158
Naval reservists.....	46	1332(g)	138
Naval Reserve, U.S. members may wear uniforms.....	46	1131(b)	143
Neglect of duty by.....	18	2196	156
Number endorsed on certificate of inspection.....	46	222	137
Oaths of.....	46	231	148
Orders by, to be in language understood by crew members.....	46	672(a)	138, 176
Passenger spaces, unlawful visiting in.....	46	157	124
Pilot.....	46	214	159
Quarters on subsidized vessels for.....	46	1131(b)	143
Radiotelegraph officers to be licensed.....	46	229b	167
Replacement on foreign voyage.....	46	221	144
Staff officers.....	46	242	170
State regulations as to licensed pilots.....	46	215	160
Subsidized vessels, manning and wage scales.....	46	1131	142
Surrender of license in case of inflicting corporal punishment.....	46	712	61
Watches.....	46	235	138
Watches of seagoing vessel.....	46	673	140
Official logbook.....	46	201	188
Deceased seaman, entries about.....	46	621	221
Deceased seamen, wages, deductions, etc., noted in.....	46	622	221
Deductions from seamen's wages kept in.....	46	642	208
Entry of seamen's offense in.....	46	702	190
Insubordination of seamen, entries about by discharging officer.....	46	703	219
Loadlines and vessel's draft entries in.....	46	85e	129
Mode of making entries in.....	46	202	188
Official notice of a material fact.....	5	1006	12
Official numbers for documented vessels.....	46	45	83

Subject	U.S. Code		
	Title	Section	Page
Official records, agency rule on availability	5	1002(c)	9
Operate, definition of	46	526L(a)	68, 227
Operation of vessels on Great Lakes without registered pilots	46	216f	164
Operator; duty of, in marine casualty or accident	46	526L	68, 227
License for motorboats	46	526f	67
Small passenger vessels	46	390b	115
Order; declaratory	5	1004(d)	11
Definition of	5	1001(d)	8
Number of crew members able to understand	46	672(a)	138, 176
Subpenas and production of evidence	5	1005(c)	12
Organic laws governing Coast Guard			1
Other officer, definition	46	216(e)	161
Outboard motorboats, exemptions for	46	526h	68
Outer Continental Shelf Lands Act	43	1333	56
Delegation of functions, T.D. Order 167-15			57
Laws and regulations governing	43	1333	56
Overtaking vessel to keep out of the way	33	1086	45
Overtime services of Coast Guard or customs officials	46	382b	21
Owner; definition, for manning	46	713	147
Liability of, Small Passenger Act	46	390d	116
Liability of, to passengers for damages	46	491	109
Report of probable loss of vessel	33	362	229
Packages, drums or barrels; flammable or combustible liquids in	46	391a(1)	89
Pamphlets required by law; Laws Governing Marine Inspection	46	492	23
Pilot rules not required to be carried aboard motorboats	46	526k	68
Rules of the Road—Western Rivers	33	353	31
Rules of the Road—Inland	33	157	27
Panama Canal Zone; Dangerous Cargo Act not applicable in	46	170(1)	92
Papers; clearance, withholding	46	161	126
Hearing records	5	1006	12
Shipping, dangerous cargoes	46	170(7)	93
Ship's documents and papers, examination by Coast Guard	14	89	50
Ship's manifest and other documents, examination by Treasury Department officials	19	1581	52
Tank vessels	46	391a(5)	91
Party, definition of	5	1001(b)	8
Passenger-carrying vessel; cargo vessels carrying passengers	46	882	107
Definition, for small passenger vessel	46	390(b)	114
Definition, in Dangerous Cargo Act	46	170(2)	92
Passenger deck; definition, for steerage passengers	46	151	119
Passenger; definition, for small passenger vessels	46	390(a)	114
Number needed to have a "passenger vessel"	46	882	107
Passengers; cabin	46	151	119
Discipline and cleanliness steerage	46	156	123
Emigrant	46	161	126
Liability of master and owners for damage to	46	491	109
Number allowable on cargo vessels	46	882	107
Number allowable on passenger vessels	46	451	106
Steerage	46	151	119
Steerage, death of	46	159	124

Subject	U.S. Code		
	Title	Section	Page
Passenger vessels; accommodation of deck passengers	46	478	109
Accommodations, separation by sexes	46	152	120
Accommodations for steerage passengers	46	151	119
Accommodations, small passenger vessels	46	390a(a)	115
Barges, seagoing	46	395(a)	97
Berths for steerage passengers	46	151	119
Boarding officer furnished passenger list	46	158	124
Boiler, unfired pressure vessels, appurtenances, machinery and electrical equipment, inspection	46	392	85
Bulkheads on seagoing and lake steam vessels	46	482	106
Carrying emigrants to foreign countries	46	161	126
Certificate of inspection required	46	399	98
Civilian nautical schoolships considered to be	46	1333	117
Contract plans and specifications for	46	369	104
Count or list of passengers	46	460	107
Crew quarters	46	660-1	102
Crew quarters, inspection monthly	46	660a	103
Death of steerage passenger	46	159	124
Deck accommodations for passengers	46	478	109
Definition, in Dangerous Cargo Act	46	170(2)	92
Definition, in number allowed	46	882	107
Excursion permits	46	453	101
Exhibit of inspection certificate	46	400	99
Firefighting equipment and precautions	46	481	86
Food for steerage passengers	46	154	122
Hospitals, surgeon, and medicines when carrying steerage passengers	46	155	123
Hull and equipment inspections	46	391	84
Instructions and standards in building	46	369	104
Laws applicable to	46	362	77
Laws governing marine inspection, copies of, for	46	492	23
Lifesaving equipment	46	481	86
List or count of passengers	46	460	107
Load waterlines	46	85a	127
Load waterlines, coastwise	46	88a	132
Lowest passenger deck, definition	46	151	119
Manning of	46	222	137
Mechanically propelled	46	404	88
Medical division in staff department	46	242	170
Minimum number of officers required	46	223	137
Number of passengers allowable	46	451	106
Passenger deck	46	151	119
Plans and specifications	46	369	104
Seagoing, motor propelled	46	367	78
Small, inspection of	46	390	114
Staff departments on	46	242	170
Stairways and gangways	46	477	108
Steering apparatus for	46	473	108
Steerage; inspection and examination by customs officers	46	160	125
Steerage passengers	46	151	119
Transportation of animals in	46	156a	126
Visiting by seamen prohibited	46	157	124
Watchmen, night, on	46	470	108

Subject	U.S. Code		
	Title	Section	Page
Passengers received on board vessels without valid inspection certificate.....	46	400	99
Passing rules for vessels.....			32
Payment of wages to seamen.....	46	642	208
Payment of witness fees and expenses.....	46	239(f)	232
Peak space bulkheads.....	46	483	106
Penalties; altering certificate or license.....	46	231	148
Assessment, mitigation or remission; Coastwise Load Line Act.....	46	88g	135
Assessment, mitigation or remission; Federal Boating Act.....	46	527e	74
Assessment, mitigation or remission; Load Line Act.....	46	85g	129
Barge, seagoing, failure to have certificate of inspection.....	46	398	98
Carrying sheath knives by seamen.....	46	710	157
Carrying too many passengers.....	46	452	106
Casualties, reporting.....	33	364	229
Coast Guard ensigns and pennants, unlawful display of.....	14	638	54
Complement of officers and crew.....	46	222	137
Crew accommodations, failure to provide.....	46	660-1	102
Crew members employed in violation of law.....	46	672a(d)	145
Crew members visiting passenger quarters.....	46	157	124
Customs officers omission to enforce inspection laws.....	46	495	50
Dangerous Cargo Act or regulations.....	46	170	92
Death of passenger during voyage.....	46	159	124
Discharging crews of merchant vessels.....	46	643	173
Employment as officers without licenses.....	46	224	147
Employment of crew members in violation of subsidy law.....	46	1132(e)	146
Employment of persons not holding licenses as officers.....	46	224a(5)	150
Employment of seaman without certificate of service.....	46	672(i)	183
Failing to produce crew lists.....	46	676	206
Failure in discipline, cleanliness of steerage passengers, or to provide exercise space.....	46	156	123
Failure to carry copies of laws governing marine inspection.....	46	492	23
Failure to comply with inspection laws.....	46	497	79
Failure to exhibit name and home port.....	46	46	82
Failure to have valid inspection certificate.....	46	402	100
Failure to keep a count or list of passengers.....	46	461	108
Failure to keep medicines on board.....	46	667	195
Failure to keep watchmen.....	46	471	108
Failure to maintain proper crew quarters.....	46	660a	103
Failure to make repairs on notice.....	46	436	101
Failure to make required logbook entries.....	46	201	188
Failure to pay wages, etc., to seamen when vessel is sold foreign.....	46	684	219
Failure to perform shipping commissioner duties.....	46	643(k)	209
Failure to post copy of shipping agreement.....	46	577	203
Failure to produce apprentice.....	46	562	205
Failure to produce or account for person on crew list.....	46	677	207
Failure to produce records or evidence in arbitration proceedings.....	46	652	211

Subject	U.S. Code		
	Title	Section	Page
Penalties—Continued			
Failure to provide clothing and heat for seamen.....	46	669	196
Failure to provide good food or water.....	46	662	193
Failure to provide hospital, surgeon, and medicine for steerage passengers.....	46	155	123
Failure to provide light, air, and accommodations on passenger vessels.....	46	153	121
Failure to provide medicines, medical stores, lime or lemon juice, sugar, salt, vinegar, etc.....	46	667	195
Failure to provide proper accommodations for passengers.....	46	479	109
Failure to provide provisions or water.....	46	662	193
Failure to report and pay collector of customs for death of steerage passenger.....	46	159	124
Failure to report probable loss of vessel.....	33	362	229
Failure to submit marine casualty reports.....	33	361	228
Failure to submit reports on employment and discharge of seamen.....	46	643L	175, 209
False certification by inspector.....	46	403	22
Federal Boating Act.....	46	527e	74
For shipping seamen without articles.....	46	575	203
Fraud in obtaining certificate, document, or license.....	18	2197	60
Great Lakes Pilotage Act.....	46	216e	163
Hours of work.....	46	673	140
Knowingly shipping seamen without shipping articles.....	46	568	201
Loadline violations.....	46	85g	129
Loadline violations, coastwise.....	46	88g	135
Logbook entries, omitting.....	46	203	189
Mitigation by Commandant, U.S. Coast Guard, or Commissioner of Customs.....	46	7	53
Motorboat Act, generally.....	46	526e	69
Mustering of crew, etc.....	46	672(d)	141, 181
Name of vessel not exhibited on pilothouse.....	46	493	82
Neglect or refusal to pay over balance of forfeitures by deserting seamen.....	46	706	224
Neglect to take charge of effects of deceased seamen.....	46	623	222
Negligent operation of vessels.....	46	526L	68, 227
Numbering of undocumented vessels.....	46	527e	74
Obstructing complaints about provisions or water.....	46	664	194
Offenses by seamen.....	46	701	189
Omitting required entries from logbooks.....	46	203	189
Operating vessels without required officers and crew.....	46	222	137
Passenger vessels not constructed or altered as described in approved plans.....	46	369	104
Personating shipping commissioner.....	46	546	204
Pilot rules, St. Marys River.....	33	474	30
Radiotelegraph officers or operators.....	46	229b	167
Reckless or negligent operation of a motorboat or vessel.....	46	528m	69
Refusing or neglecting complaint that vessel is unseaworthy.....	46	653	191
Remission by Commandant, U.S. Coast Guard, or Commissioner of Customs.....	46	7	53
Remission or mitigation, marine casualties.....	33	364	229
Seagoing barges.....	46	398	98

Subject	U.S. Code		
	Title	Section	Page
Penalties—Continued			
Seamen failing to join ship after signing shipping articles	46	576	203
Sending unseaworthy vessel to sea	46	658	192
Shipping seamen in foreign ports not before consul	46	571	202
Shipping seamen without agreement	46	567	201
Signing on crews of merchant vessels	46	643	173
Small Passenger Vessel Act	46	390d	116
Staff officers	46	246	171
Tank Vessel Act or regulations	46	391a	84, 89
Unauthorized use of words "Coast Guard," etc.	14	639	54
Unlawful discharge of seamen	46	641	207
Use of unlawful towline	33	153	98
Vessels failing to have required coastwise load line certificates	46	88b	132
Vessels failing to have required loadline certificates	46	85b	127
Vessels operated without complying with inspection laws	46	497	79
Vessels violating laws regarding emigrant or steerage passengers	46	162	126
Watch duty of deck officers	46	235	138
Watches and hours of labor	46	673	140
Wearing sheath knife	46	710	157
Willful breach of duty	18	2196	156
Penalty cases; adjudications in	5	1004	10
Permits; dangerous cargoes, to load or discharge	46	170(7)	93
Excursion	46	453	101
Tank vessels	46	391a	84, 89
Person, definition of	5	1001(b)	8
Impairment of rights prohibited	5	1011	16
Right to petition regarding rules and regulations	5	1003(d)	10
Persons in addition to crew on cargo vessels	46	882	107
Persons not considered as passengers	46	458	101
Petitions for issuance, amendment or repeal of rules and regulations	5	1003(d)	10
Notice of denial	5	1005(d)	12
Petroleum carried in double bottoms	46	467	110
Petty officers, Coast Guard law enforcement	14	89	50
Photographs of seamen	46	672(d)	141, 131
Physical examinations and qualifications; able seamen	46	672(a)	138, 176
Food handlers must be free of communicable disease	46	672(g)	182
Ordinary seamen	46	672(a)	138, 176
Qualified member of engine department	46	672(e)	139, 182
Physician; or surgeon; as a staff officer	46	243	170
On passenger vessel carrying steerage passengers	46	155	123
Pirates, transportation of	46	170	92
Piledrivers; not subject to Dangerous Cargo Act	46	170(6)	93
Pilotage; duty by pilot vessel, lights and shapes displayed	33	1068	38
Fees or charges for	46	215	160
For vessels not sailing under register	46	364	78
Great Lakes, regulations and policies	46	216h	164
State	46	215	160

Subject	U.S. Code		
	Title	Section	Page
Pilot associations for Great Lakes	46	216b(e)	162
Boarding vessels on arrival	46	158	124
Canadian registered	46	216(d)	160
Canadian, serving on U.S. registered vessels on Great Lakes	46	216a	161
Citizenship requirements	46	221	144
Coastwise or inland vessels under direction of federally licensed	46	364	78
Color blindness, grounds for rejection on renewal of license	46	225	147
Determination by, when navigation is unsafe	46	480	109
Endorsement as, on master's or mate's license	46	230	160
Great Lakes; areas required to have registered pilots	46	216a	161
Great Lakes; vessels operating on under control of	46	216a	161
Indians licensed as	46	237	155
Liability of, to passengers for damages	46	491	109
License	46	214	159
License, exhibition of, by	46	232	144
License, grounds for suspension or revocation	46	214	159
License, validity limited to 5 years	46	214	159
Licensing and classification as	46	224	147
Oath to faithfully perform duties as	46	231	148
Refusal to serve under license, grounds for suspension or revocation	46	240	157
Registration of Great Lakes pilots	46	216b	161
Required on vessels not sailing under registry	46	364	78
Small steam vessels, ferryboats, canalboats and yachts	46	404	88
State regulation of	46	215	160
State regulation prohibited, Great Lakes	46	216g	164
U.S. registered, definition	46	216(c)	160
Vessels requiring Federal licenses	46	364	78
Pilothouse; name of vessel exhibited on sides of	46	493	82
Signaling apparatus to engineroom	46	473	108
Pilot Rules; carrying copies of, not required for motorboats	46	526k	68
Certain inland waters, harbors, and rivers applicability to	33	154	27
Certain inland waters; lights for rafts, etc.	33	178(d)	28
Certain inland waters; special rules authorized	33	157	27
Demarcation of high seas for	33	151	27
Exceptions to rules of navigation	33	157a	28
Exemption for Navy or Coast Guard vessels	33	356	31
Great Lakes; applicability of	33	241	29
Great Lakes; lights for small tugs, St. Lawrence River vessels, ferryboats, rafts and canalboats	33	256	29
Great Lakes; lights for boats, rafts, etc., navigating by hand or horsepower, or at anchor	33	259	29
Great Lakes; special rules authorized	33	243	29
Great Lakes; St. Marys River	33	474	30
International Rules, 1948	33	143	25
International Rules, 1960	33	1061	32
International Rules, 1960, applicability	33	1051	25
International Rules; departures from under special circumstances	33	1089	46
International Rules, lights and shapes	33	1062	33

Subject	U.S. Code		
	Title	Section	Page
Pilot Rules—Continued			
International Rules; Navy and Coast Guard vessels, exemptions for lights	33	1052	26
Lights for motorboats	46	526b	65
Navy and Coast Guard vessels, exemptions regarding lights	33	143a	25
Navy or Coast Guard vessels of special construction	33	360	32
Vessels subject to passing rules	46	364	78
Western rivers; applicability of	33	301	30
Western rivers; lights not otherwise provided for	33	316(b)	30
Western rivers; special rules authorized	33	353	31
Pilot vessels; exempted from crew accommodation requirements	46	660-1	102
Lights and shapes displayed	33	1068	38
Sound signals by	33	1076	42
Places of employment, inspection of	33	941(c)	63
Plans and specifications; definition, in passenger vessel construction or alteration	46	369(d)	105
Passenger vessels	46	369	104
Tank vessels	46	391a(4)	90
Portable side lights	33	1066	37
Port; definition of	46	47	82
Home port name exhibited on stern	46	46	82
Light for motorboat	46	526b	65
Light, under International Rules, 1960	33	1062(a)	33
Posting; agreement between master and crew	46	577	203
Certificates of inspection	46	400	99
Law on visiting parts of vessels occupied by passengers by seamen	46	157	124
Licenses of officers	46	232	144
Licenses of radiotelegraph officers	46	229f	168
Muster lists and duties of seamen	46	481	86
Pilot Rules—Great Lakes	33	243	29
Power-driven vessel, definition, 1960 International Rules	33	1061(c)	33
Lights for	33	1062	33
Sound signals by, when in sight of one another	33	1090	46
Precautions against fire regulations authorized	46	481	86
Watchmen during nighttime	46	470	108
President; authorized to suspend laws	46	82	50
Authorized to waive compliance with certain laws	50	198	80
Documents signed by	44	311(g)	19
Great Lakes requiring registered pilots described by	46	216a	161
Proclamation of, published in Federal Register	44	305(a)	17
Proclamation of, regulations for preventing collisions at sea, 1951 act	33	143	25
Proclamation of, regulations for preventing collisions at sea, 1963 act	33	1051	25
Publication of lines regarding Continental Shelf	43	1333	56
Pressure vessels, construction	46	407	111
Inspection	46	392	85
Probate of deceased seaman's estate	46	627	223
Procedure after arrest for violation of Motorboat Act	46	526n	69
Procedures; rulemaking	5	1003(b)	10
Production of copy of crew list on return of vessel	46	677	107
Prolonged blast, definition of, Rules of the Road	33	1061(c)	33

Subject	U.S. Code		
	Title	Section	Page
Propelling machinery	46	392	85
Proper lookout, 1960 International Rules	33	1091	47
Provisions or food; allowance for reduction of	46	665	194
Complaints about	46	662	193
False complaint about	46	663	194
Lemon or lime juice, salt, sugar, and vinegar required	46	666	195
Measures or weights	46	668	195
Permission from master as to complaint about	46	664	194
Provisions to guard against fires; motorboats	46	526i	68
Small passenger vessels	46	390b	115
Special regulations	46	481	86
Tank vessels	46	391a	89
Publication of information required by Administrative Procedure Act	5	1002(a)	9
Publication of notice and character of lights for vessels of special construction	33	360a	32
Public Health Service; fumigation of forecastles, rules for	46	660-1	102
Public hearings; dangerous cargo regulations	46	170(9)	95
Notice of, under Administrative Procedure Act	5	1003(a)	10
Pilot Rules—Certain Inland Waters	33	157	27
Pilot Rules—Western Rivers	33	353	31
Tank vessel regulations	46	391a(3)	90
Public inspection of final opinions or orders	5	1002	9
Public records; marine casualties involving loss of life	46	239(a)	231
Public vessels of United States numbering of, not required	46	527a	71
Puerto Rico, Commonwealth of; Motorboat Act applicable in	46	526u	70
Numbering undocumented vessels in	46	527a	71
Pumps; bilge systems	46	481	86
Punishment; coercion or bribery of witness	46	239(i)	232
Corporal; inflicted on seamen	46	712	61
Counterfeiting continuous discharge books	46	643	173
Cruelty to seamen	18	2191	61
Drunkenness by seamen	18	2196	156
Failure to give assistance, information, etc., in marine casualty	33	368	227
False information regarding crews of vessels	46	672(d)	141
Improper construction of boilers, etc.	46	407	111
Influencing or injuring witness before agencies	18	1505	233
Inspector certifying falsely	46	403	22
Manufacture of faulty lifesaving or firefighting equipment	46	481	86
Neglect of duty by seamen	18	2196	156
Reckless or negligent operation of a motorboat or a vessel	46	526m	69, 228
Shipping commissioner charging fees for furnishing merchant seamen	46	542a	24
Unauthorized use of words "Coast Guard," etc.	14	639	54
Purser, creation of staff department with purser's division	46	244	171
Investigation of illegal acts by	46	239(d)	231
Member of Naval Reserve	46	245	171
Oath required when receiving certificate of registry	46	244	171
Registration as staff officer	46	242	170

Subject	U.S. Code		
	Title	Section	Page
Qualifications; able seaman.....	46	672(b)	177
Certificate of registry.....	46	243	170
Crew members.....	46	672(a)	138
Engineer's licenses.....	46	229	166
Lifeboatman.....	46	672(d)	141, 181
Master's licenses.....	46	226	159
Mate's licenses.....	46	228	159
Pilot's licenses.....	46	214	159
Qualified members of engine department.....	46	672(e)	139, 182
Radio officers licenses.....	46	229e	168
Radio operator.....	46	672(g)	182
Staff officers.....	46	243	170
Tankerman.....	46	391a	89
Quarters; civilian nautical schoolships.....	46	1333	117
Crew.....	46	660-1	102
Crew, inspection.....	46	660a	103
Hospital.....	46	660-1	102
Passenger.....	46	369	104
Passenger, seagoing barges.....	46	395	97
Passenger, small passenger vessels.....	46	390b	115
Passenger, steerage.....	46	151	119
Racing outboard motorboats, exemptions for.....	46	526h	68
Radar; as an aid to avoid collisions at sea.....	33	1094	48
Information, recommendations on the use of.....	33	1094	48
Information to be used to prevent collisions.....	33	1075	42
Range and bearing, recommendation regarding.....	33	1094	48
Radio officers.....	46	229g	168
For Great Lakes vessels.....	46	229h	169
Licenses.....	46	229a	167
Licenses, grounds for suspension or revocation.....	46	229c	167
Licenses, validity limited to 5 years.....	46	229c	167
Radio operator.....	46	672(g)	182
Investigation of illegal acts by.....	46	239(d)	231
Neglect of duty by.....	18	2196	156
Produce unexpired license of Federal Communications Commission.....	46	672(g)	182
Radiotelegraph alarm signed for distress calls.....	33	1093	47
Radiotelegraph operators; as officers, licensing of.....	46	229a	167
For Great Lakes vessels.....	46	229g	168
Three watches required.....	46	673	140
Radiotelephone alarm signals for distress calls.....	33	1093	47
Rafts; certain inland waters; navigating by handpower or current.....	33	178(d)	28
Great Lakes.....	33	256	29
Great Lakes; navigating by handpower or current.....	33	259	29
Lights or day signals for; certain inland waters.....	33	157	27
Western rivers.....	33	316(b)	30
Western rivers; navigating by handpower or current.....	33	353	31
Rates and charges for services of Great Lakes pilots.....	46	216c	163
Real property, acquisition by Coast Guard.....	14	92	5
Reciprocity agreements regarding vessel inspections.....	46	362	77
Reciprocity and comity among several State jurisdictions.....	46	527f	74
Reckless or negligent operation of vessels; prohibition.....	46	526L	68, 227
Penalty.....	46	526m	69, 228
Records and reports about navigation laws.....	46	4	21
Records and reports of Coast Guard officials.....	46	414	21

Subject	U.S. Code		
	Title	Section	Page
Records; certificates of efficiency.....	46	672(f)	182
Certificates of service.....	47	672(e)	180
Crew lists.....	46	675	206
Loadlines and drafts of coastwise vessels.....	46	88e	133
Marine casualties involving loss of life.....	46	239(a)	231
Seamen, not public records.....	46	643(f)	174, 208
Service by seamen.....	46	643(e)	173, 208
Recovery for injury to or death of seamen.....	46	688	196
Recreational boating; Federal Boating Act.....	46	527	71
Red River of the North; Pilot Rules, Inland, not applicable to.....	33	154	27
Pilot Rules, Western Rivers, applicable to.....	33	301	30
Refunding of penalties.....	46	8	53
Refusal of master to pay wages and charges.....	46	660	193
Refusal of seamen to sail when vessel is found seaworthy.....	46	655	192
Refusal to clear a vessel; not complying with Coastwise Load Line Act.....	46	88f	134
Not complying with inspection laws.....	46	496	50
Not complying with Load Line Act.....	46	85f	129
Register; barge, seagoing.....	46	397	98
Certificates of, for staff officers.....	46	242	170
Coast Guard certificates of character of seamen.....	46	645	211
Seamen, shipping commissioner to maintain.....	46	545	204
Registered, definition for emergency foreign vessel acquisition.....	50	198(f)	81
Registration of staff officers.....	46	242	170
Registration of U.S. pilots.....	46	216b	161
Registry or enrollment denied to vessels not complying with law.....	46	496	50
Regulation of carriage of explosives or other dangerous articles on vessels.....	46	170	92
Regulation of Great Lakes pilots and pilotage.....	46	216	160
Regulation of length of towlines.....	33	152	98
Regulations and rules; able seamen; certification of.....	46	672(d)	141, 181
Accidents and other casualties reported under Motorboat Act.....	46	526L(e)	69, 228
Administration of, to be uniform.....	46	372	20
Allotments of seamen's wages.....	46	599(f)	215
Amendment procedures.....	5	1003	10
Artificial islands and fixed structures, Outer Continental Shelf.....	43	1333(e)	56
Authority to comply with Administrative Procedure Act.....	5	1011	16
Barges, seagoing.....	46	395	97
Bell pulls for signaling between engineroom and pilothouse.....	46	473	108
Boiler inspections.....	46	392	85
Boilerplate.....	46	406	111
Boilerplate testing and inspection standards.....	46	408	112
Boilers; design, materials, and construction.....	46	411	111
Bulkheads, watertight, in steam vessels.....	46	482	106
Carburetor flame arresters and backfire traps for machinery using gasoline as fuel.....	46	526i	68
Casualty and accident assistance, reports.....	46	526L	68, 227
Casualty, marine.....	46	239(a)	231
Certificate for coastwise loadlines.....	46	88b	132
Certificates of identification or continuous discharge books.....	46	643	173

Subject	U.S. Code		
	Title	Section	Page
Regulations and rules—Continued			
Certificates of inspection	46	399	98
Certificates of service or efficiency	46	672(a)	138
Civilian nautical schools	46	1333	117
Coastwise Load Line Act	46	88a	132
Codifications of, in Federal Register	44	311	19
Commandant's authority, T.D. Order 120			4
Commerce Department vessels	46	363	78
Congress, submitted to	46	527d	73
Crew accommodations	46	660-1	102
Dangerous cargoes	46	170	92
Definitions regarding	5	1001	8
Delegation of powers by the Secretary of the Treasury	14	631	6
Demarcation lines of high seas	33	151	27
Designation of regulations for preventing collisions at sea	33	1053	26
Discharging crew members	46	643(k)	175, 209
Electrical apparatus and equipment	46	392	85
Employment and discharge of seamen, reports, etc.	46	643(l)	175
Enforcement of provisions regarding Officers' Competency Certificates Convention, 1936	46	224a	149
Enforcement of seamen's laws	46	689	20
Excursion permits	46	453	101
Exhibiting posters containing Pilot Rules—Great Lakes	33	243	29
Explosives	46	170(7)	93
Federal Boating Act	46	527d	73
Fire extinguishers for motorboats, etc.	46	526g	67
Firefighting equipment and precautions	46	481	86
Foreign vessels acquired by Maritime Administration	50	198	80
Fuel for lifeboats	46	170a	97
Great Lakes pilots and pilotage	46	216	160
Handling liquid cargo in bulk	46	391a(2)	90
Having force of law	46	375	20
Hawaiian vessels, officers for	46	367	78
Hull inspections	46	391	84
Hydrostatic and other tests	46	392	85
Incapacitated seamen requiring prompt discharge	46	683	218
Inspection, enforcement of	46	416	20
Inspection of vessels, generally	46	375	20
International Rules, 1960	33	1061	32
Investigations of accidents, casualties, etc.	46	239(a)	231
Labor Department	33	941	62
License renewals	46	225	147
License renewals, when licensed officer need not be present	46	233	148
Licensing and classifying of officers	46	224	147
Lifesaving devices for motorboats	46	526e	66
Lifesaving equipment	46	481	86
Lights and shapes, International Rules	33	1062	33
Lights for Navy and Coast Guard vessels	33	1052	26
Lights for vessels of special construction, 1945 act	33	360	32
Load Line Act, Coastwise	46	88a	132
Load Line Act, Oceangoing Vessels	46	85a	127

Subject	U.S. Code		
	Title	Section	Page
Regulations and rules—Continued			
Local, not inconsistent with dangerous cargo regulations	46	170(7)	93
Machinery, propelling and auxiliary	46	392	85
Manifests of cargo on steamer passenger vessels	46	158	124
Manning, tank vessels	46	391a(6)	91
Marine casualties	46	239(a)	231
Marine casualty investigations	46	239(j)	233
Marine engineering	46	411	111
Mechanically propelled vessels	46	404	88
Merchant seamen, enforcement of laws governing	46	689	20
Motorboat Act	46	526p	70
Motorboat operator's license	46	526f	67
Notice of contents by publication in Federal Register	44	307	18
Notice of rulemaking	5	1003(a)	10
Numbering of undocumented vessels	46	527d	73
Overtime services performed by Coast Guard or customs officials	46	382b	21
Passengers, number, allowable	46	481	86
Passenger vessels, construction or alteration	46	369	104
Petitions regarding	5	1003(d)	10
Physical standards for seamen	46	672(a)	138, 176
Pilot Rules—Great Lakes	33	243	29
Pilot Rules—Inland Waters	33	154	27
Pilot Rules, St. Marys River	33	474	30
Pilot Rules—Western Rivers	33	353	31
Pilots, registered, for Great Lakes	46	216(c)	160
Piping, steam	46	411	111
Posting certificate of inspection	46	400	99
Presumption of validity when published in Federal Register	44	307	18
Prima facie evidence of text	44	311(e)	19
Publication of, in Federal Register	5	1002	9
Public hearings, Administrative Procedure Act	5	1003(a)	10
Public hearings, dangerous cargo regulations	46	170(9)	95
Public hearings, inland pilot rules	33	157	27
Public hearings; Pilot Rules—Western Rivers	33	353	31
Public hearings; tank vessel regulations	46	391a(3)	90
Registration of staff officers	46	247	172
Reinspections of vessels	46	435	100
Rulemaking procedures	5	1003	10
Rules of the Road—Demarcation Line Between High Seas and Inland Waters	33	151	27
Rules of the Road—Exceptions in or Around Bridges	33	157a	28
Rules of the Road—Great Lakes	33	243	29
Rules of the Road—Inland Waters	33	157	27
Rules of the Road—International Rules, 1948	33	143	25
Rules of the Road—International Rules, 1960	33	1061	32
Rules of the Road—St. Marys River	33	474	30
Rules of the Road—Vessels of Special Construction	33	360	32
Safety; promulgation and enforcement	14	2	4
Schoolships approved so graduates may receive able seamen or qualified members of engine department certificates	46	672(e)	139, 182
Seagoing barges	46	395	97

Subject	U.S. Code		
	Title	Section	Page
Regulations and rules—Continued			
Seagoing motor vessels	46	367	78
Secretary of the Treasury, promulgation by	14	633	6
Shipment and discharge of merchant seamen	46	643(j)	175
Shipment and discharge of seamen not shipped before Coast Guard official	46	643(1)	175, 209
Signals between engine room and pilothouse	46	473	108
Signing on crew members	46	643(k)	175, 209
Small passenger-carrying vessels	46	390b	115
Special rules under 1960 International Rules	33	1090	46
Superintendence of commercial marine and merchant seamen	46	2	20
Suspension and revocation of licenses or documents	46	239(g)	157
System for numbering undocumented vessels	46	527a	71
Tankerman certificate	46	391a(6)	91
Tank vessels	46	391a(2)	90
Tests of boilers and machinery	46	392(d)	86
Title 52 of the Revised Statutes, to carry out	46	375	20
Title 52 of the Revised Statutes, to secure proper excursion of	46	416	20
To enforce seamen's laws	46	689	20
Towing vessels, steam	46	405	89
Towlines, length of	33	152	98
Unfired pressure vessels; design, materials, and construction	46	411	111
Ventilation of motorboat engine and fuel compartments	46	526j	68
Vessels operating under or near bridges	33	157a	28
Welding for boilers, etc.	46	407	111
Regulations for preventing collisions at sea, 1960	33	1061	32
Applicability of 1951 act	33	143	25
Applicability of 1963 act	33	1051	25
Designation of	33	1053	26
Exemptions for Navy and Coast Guard vessels, 1951 act	33	143a	25
Not affected by Motorboat Act	46	526r	70
Reinspections of vessels	46	435	100
Remission or mitigation of penalties; authorization for Coast Guard to	46	7	53
Coastwise Load Line Act	46	88g	135
Federal Boating Act	46	527e	74
Load Line Act	46	85g	129
Marine casualties	33	364	229
Motorboat Act	46	526p	70
Officers' Competency Certificates Convention, 1936, Enabling Act	46	224a(10)	151
Removal of captain or master by owners	46	227	144
Renewal of licenses; appearing in person required	46	225	147
Officer living in foreign country	46	225	147
When residing at a distance from Coast Guard official	46	233	148
Reorganization Plan No. 3 of 1946			1
Reorganization Plan No. 26 of 1950			3
Assignment of functions under			4
Repairs or alterations of vessels; notice to Coast Guard	46	435	100
Passenger vessel	46	369	104
Small passenger vessels	46	390b	115
Tank vessels	46	391a(2)	90

Subject	U.S. Code		
	Title	Section	Page
Replacement of crew members	46	222	137
Replacement of officer on foreign voyage	46	221	144
Reporting accidents, collisions, and other casualties, required by Motorboat Act	46	526L(o)	69, 228
Reporting marine casualty involving loss of life	46	239(a)	231
Reports; accidents, etc., under Motorboat Act	46	526L	68, 227
Customs officers on steamer passenger vessels	46	160	125
Employment or discharge of seamen	46	643(L)	175, 209
Inspections by Coast Guard officials	46	414	21
Licenses issued, etc., by Coast Guard officials	46	414	21
Loss of vessel, by owner	33	362	229
Marine casualties by master, owner, or agent	33	361	228
Marine casualties involving loss of life	46	239(a)	231
Navigation laws, improvement to	46	4	21
Quarterly, by consular officers, regarding deceased seamen	46	624	222
Recreational boating accident, collision or other casualty	46	526L	68, 227
Shipping seamen to replace those lost by desertion or casualty	46	569	144, 201
Shipment and discharge of seamen, by masters	46	643(L)	175, 209
Rescues; facilities for promotion of safety, primary duties	14	2	4
Saving life and property	14	88	230
Reservations by the United States; Minimum Age (Sea) Convention, 1936			185
Officer's Competency Certificates Convention			151
Reshipment of seamen	46	672(a)	138
Restricted visibility, duty to reduce speed	33	1077	43
Revised Statutes of the United States, table listing			235
Revocation and suspension proceedings; adjudications in	5	1004	10
Certificate, document or license subject to	46	239(g)	157
Certificates of registry as staff officers	46	246(c)	172
Certificates of service or efficiency	46	672(h)	183
Engineer's license	46	229	166
Licenses to officers of uninspected vessels	46	224a	149
Master's license	46	226	159
Mate's license	46	228	159
Notice of time, place, and subject	46	239(g)	157
Officer's refusal to serve	46	240	157
Pilot's license	46	214	159
Radio officers licenses	46	229c	167
Right of appeal	46	239(g)	157
Seaman's documents; narcotics violations	46	239b	158
Tankerman's certificate	46	391a	89
Revocation; based on inspection	46	391(d)	84
Certificate of inspection	46	399	98
Civilian nautical schoolships	46	1333(c)	117
Enforcement procedures	46	435	100
Loadline classification society appointment	46	88b	132
Right of appeal	46	435	100
Small passenger vessel	46	390c	115
Tank vessels	46	391a(4)	90
Right of appeal; complement of officers and crew	46	222	137
Inspection of vessels and deficiencies reported	46	391	84
Loadlines, coastwise, detention of vessels	46	88f	134
Loadlines, detention of vessel	46	85f	129
Reinspections and notices for repairs	46	435	100
Suspension or revocation proceedings	46	239(g)	157
Under Administrative Procedure Act	5	1009	15

Subject	U.S. Code		
	Title	Section	Page
Right of judicial review.....	5	1009	15
Right of seamen to a discharge.....	46	673	140
Right to counsel.....	46	239(d)	231
Ring buoys; number, type, size, stowage, etc.....	46	481	86
On motorboats.....	46	526e	66
River steam vessels; mates, licensing.....	46	228	159
To be anchored when navigation is unsafe.....	46	480	109
Rockets as distress signals.....	33	1093	47
Routes or areas of operation for vessels, small passenger vessels.....	46	390b	115
Rowing boats; lights for, under 1960 International Rules.....	33	1067	37
Sound signals by.....	33	1076	42
Rule and rulemaking, definition of.....	5	1001	8
Rules as to list of crew.....	46	676	206
Rules for settlement of wages.....	46	644	210
Rules for shipping articles.....	46	565	200
Rules in regard to effects of deceased seamen.....	46	622	221
Rules of the Road; compliance with, by numbered vessels.....	46	527e	24
Exceptions concerning navigation near bridges.....	33	157a	28
Great Lakes.....	33	243	29
Inland.....	33	157	27
International Rules, 1960.....	33	1061	32
International Rules, 1960, annex to.....	33	1094	48
Lights for motorboats.....	46	526b	65
Local rules under 1960 International Rules.....	33	1092	47
Passing rules, vessels subject to.....	46	364	78
Pilot Rules not required aboard motorboats.....	46	526k	68
Western rivers.....	33	353	31
Safe place of employment; variations from requirements.....	33	941(d)	63
Safety certificates. (See certificates of inspection.)			
Safety certificates under Safety of Life at Sea Convention.....	46	390c	115
Safety devices and safeguards.....	33	941	62
Safety of Life at Sea Convention, 1960 Index to.....	14	2	C186
Safety of life, promotion of.....	46	239(b)	231
Safety of navigation or commerce; investigations of casualties to promote.....	46	239(b)	231
Safety regulations; promulgation and enforcement of.....	14	2	4
Safety valves; cargo vessels, steam.....	46	405	89
Controlled by Coast Guard.....	46	393	113
Obstructing prohibited.....	46	413	113
Towing steam vessels.....	46	405	89
Sailing rules, and steering.....	33	1078	44
Sailing vessels; carrying passengers, inspection of.....	46	391(c)	84
Excepted from coastwise laws.....	46	544	142
Fog signals by.....	33	1076	42
Lights for.....	33	1065	36
Lights when operated as motorboat.....	46	526b(c)	66
Manning, exceptions for.....	46	672-1	142
Licensing of masters of.....	46	226	159
Licensing of mates of.....	46	228	159
Masters of those over 700 gross tons.....	46	224	147
Mates of those over 700 gross tons.....	46	228	159
Not to hamper safe passage of power-driven vessel in restricted or narrow channel.....	33	1082(b)	45

Subject	U.S. Code		
	Title	Section	Page
Sailing vessels—Continued			
Passenger-carrying.....	46	390a	114
Sound signals on fog horns.....	33	1076	42
Steering rules.....	33	1079	44
Sale of effects of deceased seaman.....	46	621	221
Salt rations.....	46	666	195
Salvage vessels, not subject to Dangerous Cargo Act.....	46	170 (6)	93
Watches not applicable to.....	46	673	140
Samples of dangerous articles or materials.....	46	170 (4)	92
Sanction and relief, definition of.....	5	1001 (f)	9
Sanctions, imposition of.....	5	1008	14
Saving life and property, Coast Guard function.....	14	88	230
Schoolships; approved and conducted under regulations of Commandant, U.S. Coast Guard.....	46	672(a)	138, 176
Schoolships, civilian nautical.....	46	1333	117
Screens for side lights.....	33	1062(a)	33
Seagoing barge; definition, for manning.....	46	672(c)	184
Inspection.....	46	395	97
Manning.....	46	672b	183
Towlines, length of.....	33	152	98
Seagoing vessels, propelled by internal-combustion engines, subject to inspection.....	46	367	78
Seal, official, shipping commissioner.....	46	565	200
Seaman; absent without leave, penalties.....	46	701	189
Advances and allotments of wages noted on shipping articles.....	46	564	199
Advances to.....	46	599	214
Agreement as to loss of lien or right to wages prohibited.....	46	600	216
Allotments by.....	46	599	214
Allowances to, for reduction of provisions.....	46	665	194
Capacity in which employed described in shipping articles.....	46	564	199
Carrying sheath knives by, prohibited.....	46	710	157
Certificate of character by master.....	46	645	211
Certificate of service or efficiency.....	46	672(a)	138
Certificates of discharge for.....	46	643(e)	173, 208
Certificates of identification or continuous discharge books.....	46	643(g)	174
Clothing and heat for.....	46	669	196
Clothing exempt from attachment.....	46	563	199
Complaints about provisions or water.....	46	662	193
Continuous discharge books for.....	46	643	173
Crew list to contain names of those allowed to ship on foreign voyages.....	46	675	206
Criminal liability, evidence of.....	46	239(h)	232
Cruelty to, prohibited, fine.....	18	2191	61
Deceased, duties of consular officer.....	46	624	222
Deceased, effects distributed by district court.....	46	627	223
Deceased, effects turned over to district court.....	46	626	223
Deceased, within the United States.....	46	625	223
Definition, for manning.....	46	713	147
Demands for wages.....	46	644	210
Deserting, forfeiture by.....	46	706	224
Desertion, penalties.....	46	701	189
Disobedience to lawful command.....	46	701	189
Destitute, disabled or sick, transportation to United States.....	46	679	179
Destitute, in foreign ports.....	46	678	197

Subject	U.S. Code		
	Title	Section	Page
Seaman—Continued			
Destitute, transportation of, to United States	46	679	197
Document, definition	46	239a	158
Drunkenness by	18	2196	156
Effects, logbook entries about	46	201	188
Effects of deceased	46	621	221
Failing to join ship at time specified in shipping articles	46	576	203
Failure to join vessel, penalties	46	701	189
Freedom unimpaired	46	672(k)	183
Identification of	46	643	173
Improper discharge, right of wages in case of	46	594	212
Incapacitated, discharge before consul	46	683	218
Incapacitated, requiring prompt discharge	46	683	218
Information about placed in crew list	46	674	205
In safe harbor, not required to do unnecessary work on Sundays and holidays	46	673	140
Insubordination in foreign country	46	703	219
Investigation of acts of incompetency or misconduct by	46	239(b)	231
Knowingly shipping, without shipping articles	46	568	201
Laws applicable to fishing or whaling vessels or yachts	46	690	142, 184
Lemon or lime juice for	46	666	195
Limit of sum recoverable during voyage by	46	602	216
Logbook entries about	46	201	188
Lost by desertion or casualty	46	569	144, 201
Maintenance and travel expenses back to United States when incapacitated	46	683	218
Medicines for	46	666	195
Mode of discharge	46	641	207
Mutual release of claims for wages signed by	46	644	210
Neglect of duty by	18	2196	156
Neglect to join ship as required under shipping articles	46	576	203
Number in deck department	46	672(a)	138, 176
Offenses by, entry in logbook	46	702	190
Protection and relief	46	653	191
Protection and relief of, in foreign port	46	679	197
Quitting vessel without leave, penalties	46	701	189
Records, kept by Coast Guard	46	643(f)	174
Recovery of injury to or death of	46	688	196
Refusal to sail when vessel is found seaworthy	46	655	192
Relief and protection	46	653	191
Relief of sick and destitute, unclaimed wages and effects of deceased seamen	46	628	224
Replacement of	46	569	144, 201
Reshipment, signing shipping articles required	46	572	202
Salt ration	46	666	195
Sea service, records of	46	643(e)	173
Shipping articles signed by	46	564	199
Shipping articles, vessels in coasting trade	46	574	202
Shipping commissioner to superintend engagement and discharge	46	575	203
Shipping in foreign ports	46	570	201
Shipping to replace those lost by desertion or casualty	46	569	144, 201
Slop chest for	46	670	196
Soliciting, as lodgers	46	709	184
Sugar ration	46	666	195

Subject	U.S. Code		
	Title	Section	Page
Seaman—Continued			
Transportation to place of shipment	46	593	212
Unlawful shipment	46	578	204
Various offenses by, penalties	46	701	189
Vinegar ration	46	666	195
Visiting parts of vessels occupied by passengers prohibited	46	157	124
Voyage descriptions in shipping articles signed by	46	572	202
Wages, accounting as to	46	642	208
Wages affected when unlawfully refusing or neglecting to work	46	595	213
Wages, appropriation of for court costs	46	707	218
Wages, commencement of	46	591	212
Wages, consul neglecting to collect when discharging seaman	46	683	218
Wages, forfeitures or deductions, enforcement	46	705	220
Wages, libel for	46	604	217
Wages, libel for, canalboat, exempted	46	611	217
Wages, logbook entries about	46	201	188
Wages, nonpayment, summons for	46	603	216
Wages, partial payment at ports	46	597	213
Wages, time for payment	46	596	213
Wages, when discharged before consul	46	682	218
Wages, when vessel is sold foreign	46	684	219
Who cease to be crew members, logbook entries about	46	201	188
Working alternatively in deck and engine departments prohibited	46	673	146
Searches and seizures, law enforcement	14	80	50
Sea service, evidence of	46	643(e)	208
Seaplane; definition of in 1960 International Rules	33	1061	41
International Rules, 1960, applicable to	33	1061	41
Lights and shapes displayed when at anchor	33	1071(a)	41
Lights and shapes displayed when aground	33	1071(a)	41
Lights required when underway on water	33	1062(b)	41
On the water, definition of	33	1080(b)	41
To keep clear of all vessels	33	1082(a)	41
Stern light for	33	1070	41
Towing lights for	33	1043	41
Use of flareup light by	33	1079	41
When not under command	33	1064(b)	41
Secretary of Commerce; advisory committee on Great Lakes pilotage	46	216a	164
Arrangements with Canada re Great Lakes pilotage, concurrence of Secretary of State	46	216d	163
Authorized to use Federal facilities on reimbursable basis	46	216f	165
Civilian nautical school, examination and inspection of	46	1332	117
Definition, in regulation of Great Lakes pilots and pilotage	46	216	160
Foreign vessels, emergency acquisition of	50	198	80
Functions transferred from			1
Mitigate or remit penalties under regulation of Great Lakes pilots and pilotage	46	216e	163
Operation of vessels acquired under emergency conditions	50	198	80
Registration of U.S. pilots for Great Lakes	46	216b	161
Rules and regulations Great Lakes pilotage	46	216(e)	161

Subject	U.S. Code		
	Title	Section	Page
Secretary of Commerce—Continued			
Suspension or revocation of registration of U.S. pilot, Great Lakes	46	216b	161
Secretary of Defense, waivers requested by	46	1	58
Secretary of the Interior, definition	43	1331(b)	56
Secretary of labor; definition of	33	902	62
Investigations by	33	941(b)	62
Safety rules, authorized	33	941	62
Studies by	33	941(b)	62
Secretary of the Navy; orders of, Coast Guard subject to	14	3	5
Prescribe distinguishing insignia for members in U.S. Naval Reserve who are licensed officers	46	1131(b)	143
Staff officers who are members of U.S. Naval Reserve, wearing insignia approved by	46	245	171
Secretary of State; instructions regarding destitute seamen	46	678	197
Written arrangements between Canada and United States re Great Lakes pilotage, concurrence of	46	216d	160
Secretary of the Treasury; appeals from inspection requirements	46	391(d)	84
Boilers and machinery	46	392	85
Casualties, etc., reported to, under Motorboat Act	46	526(L)	68, 227
Dangerous cargoes	46	170	92
Definition	14	5	5
Definition, under denial or revocation of seamen's documents	46	239a	231
Delegation of powers authorized	14	631	6
Delegation of functions, T.D. Order 120			4
Delegation of functions, T.D. Order 167-14			81
Delegation of functions, T.D. Order 167-15			57
Delegation of functions, T.D. Order 167-17			7
Delegation of functions, T.D. Order 167-20			116
Delegation of functions, T.D. Order 167-32			75
Delegation of functions, T.D. Order 167-33			31
Delegation of functions, T.D. Order 167-38			87
Delegation of functions, T.D. Order 167-48			131
Delegation of functions, T.D. Order 167-58			28
Delegation of functions, T.D. Order CGFR 51-1			58
Delegation of functions, T.D. Order CGFR 56-28			85
Firefighting equipment and precautionary measures	46	481	86
Functions	14	92	6
General powers	46	391	84
Hulls and equipment			
Lifesaving equipment and precautionary measures	46	481	86
Lights for Coast Guard vessels, exemptions regarding, 1945 act	33	360	32
Lights for Coast Guard vessels, exemptions regarding, 1948 act	33	356	31
Lights, signals, etc., for vessels operating under or near bridges	33	157a	28
Loadlines, coastwise	46	88a	132
Loadlines, oceangoing vessels	46	85a	127
Mechanically propelled vessels	46	404	88

Subject	U.S. Code		
	Title	Section	Page
Secretary of the Treasury—Continued			
Motorboat operators when carrying passengers for hire	46	526f	67
Pilot Rules—Western Rivers	33	353	31
Regulations regarding accident assistance	46	526L	68, 227
Reinspection of vessels	46	435	100
Reports on navigation laws to	46	4	21
Rules and regulations artificial islands and fixed structures on Outer Continental Shelf	43	1333(e)	56
Rules and regulations collection and handling fees for deaths of steerage passengers	46	159	124
Rules and regulations, promulgation	14	633	6
Small passenger vessels	46	390(d)	114
Small passenger vessel functions	46	390a	114
Vessels, foreign, documented for coastwise trade	50	198	80
Waivers of navigation and vessel inspection laws	46	1	58
Sections of United States Code in pamphlet			239
Seizures; by Treasury Department officers	19	1581	
Separability of laws	46	691	184
Service of rules; Administrative Procedure Act requirements	5	1003(c)	10
Services; persons in need, furnishing	14	88	230
Shapes and lights	33	1062	33
Shipment and discharge of merchant seamen; before Coast Guard officials	46	643	173
Before customs officials	46	643(k)	175, 209
Crews	46	563	199
Not applicable to vessels on certain voyages	46	643(L)	175, 209
Not applicable to unriggered vessels except seagoing barges	46	643a	176
Shipping commissioner duties to superintend	46	545	204
Shipment and discharge of merchant seamen	46	643	173
Arbitration of disputes by shipping commissioner	46	651	211
Shipment of seamen, only those in certified crew lists allowed to sail foreign	46	675	206
Shipment, unlawful, void	46	578	204
Shipping agreements between master and crew	46	563	199
Shipping articles; allotments of wages contained in	46	599	214
Certificate of acknowledgement, form of	46	565	200
Consular's endorsement re shipping seamen in foreign ports	46	570	201
Copy posted for information of crew	46	577	203
Entries on, regarding insubordination of seamen, by consul	46	703	219
Exceptions to, for certain vessels	46	565	200
Notations regarding deceased seamen	46	622	221
Reshipment of seamen, signed on, in foreign port	46	573	202
Rules for	46	565	200
Scale of provisions set forth in	46	564	199
Seamen's capacity in which employed noted on	46	564	199
Seamen replacing those lost by desertion or casualty	46	569	144
Shipment of seamen without signing, penalties	46	567	201
Shipping commissioner's seal on	46	565	200
Ship's regulations, in	46	564	199

Subject	U.S. Code		
	Title	Section	Page
Shipping articles—Continued			
Stipulations regarding abandonment of right to wages	46	600	216
Time for payment of wages under	46	596	213
Unlawful shipment void	46	578	204
Vessels in coasting trade	46	574	202
Vessels required to enter into	46	564	199
Vessels sold foreign, presented to consul	46	684	219
Voyage description and other data required in	46	564	199
Wages of seamen whose services are terminated before period or voyage ends	46	593	212
Shipping casualty, evidence of criminal liability	46	239(h)	232
Shipping commissioner; allotments examined and enforced by	46	599	214
Apprentices, duties regarding	46	561	205
Arbiter of problems submitted by master and crew members	46	651	211
Certificates of discharge issued by	46	643(e)	173, 208
Certificates regarding deceased seamen, issued by	46	622	221
Complaints about provisions or water made to	46	662	193
Continuous discharge books, entries in	46	643(d)	173
Crews shipped before	46	563	199
Deceased seamen's effects turned over to district court by	46	626	223
Deceased seamen, responsibilities and duties regarding	46	622	221
Deceased seamen within the United States, duties and responsibilities	46	625	223
Deserting seamen; clothes, effects and wages, forfeited by, responsibilities regarding	46	706	224
Discharging seamen	46	641	207
Duties	46	545	204
Duties performed by collectors of customs, masters, etc.	46	643(k)	175, 209
Fees for furnishing merchant seamen prohibited	46	542a	24
Master performing duties of	46	546	204
May ship and discharge crews of vessels in coastwise trade	46	646	211
Mutual discharge and settlement of claims of wages supervised by	46	644	210
Mutual release signed in presence of	46	644	210
Official seal of	46	565	200
Personating, penalty for	46	546	204
Register of character certificates of seamen maintained	46	645	211
Shipping articles, rules for	46	565	200
When customs officials may serve as	46	543	24
Shipping; control in order to safeguard naval vessels	14	91	51
Documents and papers; inspection by Coast Guard	14	89	50
Papers; dangerous cargoes	46	170(7)	93
Papers; tank vessels	46	391a(5)	91
Seamen replacing those lost by desertion or casualty	46	569	144, 201
Shippers and consignees described on shipping papers, tank vessels	46	391a(5)	91
Ship's lifeboats, numbering of	46	527a	71
Ships of war; lights and shapes used by	33	1073	41

Subject	U.S. Code		
	Title	Section	Page
Ship's signal and emergency equipment, transportation of	46	170(4)	92
Ship's stores; flammable or combustible liquids as	46	391a(1)	89
Transportation of	46	170	92
Short blast, definition of, Rules of the Road	33	1061(e)	33
Side lights, motorboats	46	526(b)	65
Signalling apparatus, between engine room and pilothouse	46	473	108
Signals; bend	33	1087	46
Distress, under 1960 International Rules	33	1093	47
Distress, transportation of	46	170(4)	92
Lights and shapes of vessels	33	1064(g)	36
Rules of the Road, definitions	33	1061(c)	32
Slop chest	46	670	196
Small passenger-carrying vessels	46	390	114
Small vessels, lights for	33	1067	37
Smuggling, by seaman, penalties	46	701	189
Soliciting seamen as lodgers	46	709	184
Sound-producing devices or whistles for motorboats	46	526c	66
Sound signals; and conduct in restricted visibility	33	1076	42
Bend	33	1087(b)	46
Indicating course, meaning of	33	1090(a)	46
Radar does not relieve vessel from giving	33	1075	42
Visual signals shown simultaneously	33	1090	46
When in doubt of action of other vessel	33	1090	46
Special permit for excursions	46	453	101
Specifications and plans for passenger vessels	46	369	104
Speed in weather restricting visibility	33	1077	43
Sprinkler systems, passenger vessels	46	369	104
Stability of vessels; loadlines	46	85a	127
Loadlines, coastwise	46	88a	132
Staff officers; certificates of registry	46	242	170
Stairways and gangways	46	477	108
Stamps for marking steel or iron plates	46	409	112
Starboard light	33	1062(a)	33
Starboard light for motorboat	46	526b	65
State; agreements with Coast Guard about enforcement	46	527f	74
Defined, in Motorboat Act	46	526u	70
Federal agreements	46	527f	74
Governments; not to impede pilots licensed by Federal Government	46	215	160
Jurisdiction; Outer Continental Shelf	43	1333	56
Laws; applicability to submerged lands off coasts	43	1333	56
Laws enforcement provisions	46	527h	73
Numbering of undocumented vessels	46	527a	71
Readiness in time of war	14	2	4
Regulation of pilots prohibited on Great Lakes	46	216g	164
Regulations as to licenses of pilots and pilot charges	46	215	160
Regulations regarding dangerous cargoes	46	170	92
System of numbering	46	527a	71
Tax laws and withholding of taxes	46	601	216
Vessels, numbering of	46	527a	71
Where undocumented vessel is principally used	46	527a(b)	71
Statement of general course of business by agency, publication of	5	1002(a)	9
Steam generators construction	46	407	111
Steam launches, manning of	46	404	88

Subject	U.S. Code		
	Title	Section	Page
Steam propelled motorboats, inspection of	46	526	65
Steam vessels; approved equipment for	46	489	88
Boilers, etc., to be inspected	46	392	85
Boilers; design, construction, and materials for	46	411	111
Carrying persons not passengers	46	458	101
Certificate of inspection	46	399	98
Coastwise, pilotage	46	215	160
Crew accommodations	46	660-1	102
Engineers of, licensing	46	229	166
Excepted from certain laws when on certain voyages	46	544	142
Inspection required	46	361	77
Licensing and classifying officers of	46	224	147
Masters of, licensing	46	226	159
Mates of, licensing	46	228	159
Motorboats considered as	46	526	65
Name exhibited on pilothouse	46	493	82
Pilots, licensed by State for	46	215	160
Pilots of, licensing	46	214	159
Radio officers, licensing of	46	229b	167
Reinspections	46	435	100
River, anchored when navigation is unsafe	46	480	109
Stairways and gangways	46	477	108
Vessels, carrying flammable or combustible liquids in bulk, considered as	46	391a	89
Watertight bulkheads required	46	483	106
What are	46	361	77
Steelplates; boiler construction	46	406	111
Inspection standards	46	408	112
Testing standards	46	408	112
Unfired pressure vessels	46	406	111
Steerage passengers	46	151	119
Berths for	46	151	119
Death of	46	159	124
Deck space allotted to	46	151	119
Definition of	46	151	119
Food for	46	154	122
Hospitals for	46	155	123
Light, air, cooking, and toilet facilities for	46	153	121
List of, presented boarding officer or customs	46	158	124
Navy rations	46	154	122
Space for exercise	46	156	123
Surgeon for	46	155	123
Steering and navigating apparatus for passenger-carrying vessels	46	473	108
Steering and sailing rules	33	1078	44
Applicable when vessels are in sight of each other	33	1078	44
Duty to slacken speed, reverse, or stop	33	1085	45
General considerations	33	1078	44
Motorboats not to hamper vessels in channels	33	1087(e)	46
Overtaking vessel to keep out of way	33	1086	45
Power-driven vessels crossing	33	1081	45
Power-driven vessels meeting end on	33	1080	44
Power-driven vessels in narrow channels	33	1087	46
Power-driven vessels nearing bends in channels	33	1087(b)	46
Power-driven vessels to keep out of way of sailing vessel	33	1082	45
Right-of-way of fishing vessels	33	1088	46
Sailing vessels approaching one another; windward side	33	1079	44

Subject	U.S. Code		
	Title	Section	Page
Steering and sailing rules—Continued			
Special circumstances requiring departure from	33	1089	46
Vessel crossing ahead of vessel having right-of-way	33	1084	45
Vessels to keep out of way of another	33	1083	45
Vessels having right-of-way	33	1083	45
Steering, navigating and signaling apparatus	46	473	108
Stern light	33	1062(a)	33
Motorboats	33	1067(b)	37
Requirements for	33	1070	40
Sailing vessel	33	1065	35
Steward, investigation of illegal acts by	46	239(d)	231
St. Mary's River, rules and regulations governing	33	474	30
Stopping vessels, immunity of Coast Guard officers	14	637	54
Stores, ship; neglect to provide	46	661	193
Petroleum in double bottoms	46	467	110
Stowage, firefighting and lifesaving equipment	46	481	86
Stowaways on vessels or aircraft, fines	18	2199	60
Submarine cable-laying vessel; fog signals sounded by	33	1076	42
Lights and shapes displayed	33	1071(d)	41
Lights and shapes for	33	1064(c)	35
Submergence of coastwise loadlines	46	88c	133
Submergence of loadlines	46	85c	128
Subpenas; and production of evidence	5	1005(c)	12
Witnesses and documents, etc., authorized	46	239(e)	232
Subsidized vessels; citizenship of officers and crews	46	1132	145
Manning and wage scales, posted on	46	1131	142
Sugar, rations	46	666	195
Sundays, overtime services performed on	46	382b	21
Unnecessary work on by seamen	46	673	140
Sunken vessels, destruction or towing into port	14	88	230
Surgeon, vessel carrying steerage passengers	46	155	123
Surgeons, registration of, as staff officers	46	242	170
Suspension and revocation proceedings; adjudications	5	1004	10
Appeals	46	239(g)	157
Authority for	46	239(g)	157
Certificates of registry as staff officers	46	246(c)	172
Counsel permitted	46	239(g)	157
Engineers licenses	46	229	166
Imposition of sanctions	5	1008	14
Initial decisions	5	1007	13
Judicial review	5	1009	15
Master's license, if using unlawful length of towline	33	153	98
Master's licenses	46	226	159
Mate's licenses	46	228	159
Merchant mariners documents as certificates of identification; service or efficiency	46	672(h)	183
Motorboat operator's license	46	526f	67
Notice of time, place, and subject	46	239(g)	157
Officer's failure to assist in inspections	46	234	23, 156
Pilot's licenses	46	214	159
Pilots, registered, for Great Lakes	46	216b	161
Presiding officers	5	1006	12
Radio officers licenses	46	229c	167
Records of testimony and findings	46	239(g)	157
Regulations governing	46	239(j)	233
Refusal to serve or perform his official duties	46	240	157

Subject	U.S. Code		
	Title	Section	Page
Suspension and revocation proceedings—Continued			
Review of initial decisions.....	5	1007	13
Tankerman.....	46	391a(6)	91
Suspension of certificate of inspection.....	46	435	100
Passenger vessel not in compliance with approved plans and specifications.....	46	369	104
Suspension of laws, rules, and regulations.....	46	82	58
Suspension, manning subsidized vessels.....	46	1132(h)	59
Suspension of provisions as to watch officers.....	46	236	58
Table listing laws by United States Code sections.....			239
Table listing Revised Statutes.....			235
Tanker Act.....	46	391a	89
Not amended or altered by Motorboat Act.....	46	526r	70
Tankerman certificate.....	46	391a(6)	91
Tank vessels; applicability of Dangerous Cargo Act to.....	46	170(1)	92
Inspection required.....	46	391a	89
Officers, number, required.....	46	391a(6)	91
Permit endorsed on certificate of inspection.....	46	391a(4)	90
Plans approved by American Bureau of Shipping.....	46	391a(4)	90
Tankermen on, to be certificated.....	46	391a	89
Temporary certificate of inspection.....	46	399	98
Tests; inspection, for foreign vessels admitted to registry.....	46	366	79
Three-watch system for certain vessels.....	46	673	140
Time for payment of wages.....	46	596	213
Time of publication or service of rules.....	5	1003(c)	10
Towing lights and shapes.....	33	1063	35
Towing vessels; able seamen, exceptions.....	46	672b	183
Fog signals by.....	33	1076	42
Hours of labor for Great Lakes limited to 8 hours.....	46	673	140
Inspection when propelled by steam.....	46	405	89
Lights for, St. Lawrence River.....	33	256	29
Not subject to Dangerous Cargo Act.....	46	170(b)	93
On voyages of less than 600 miles.....	46	673	140
When guest is not a passenger.....	46	390(a)	114
Towlines, length of.....	33	152	98
Transcript of evidence.....	5	1005(b)	12
Transcript of records at hearings.....	5	1006(d)	12
Transfer and transportation of fishing catch of other vessels.....	46	404a	89
Transfer of functions to the Secretary of the Treasury.....			3
Transfer of ownership of undocumented vessel.....	46	527a	71
Transportation of destitute seamen to United States.....	46	679	197
Transportation of seamen to place of shipment, when required.....	46	593	212
Trawling, lights and shapes for vessels engaged in.....	33	1069	39
Treasury Department, Coast Guard a bureau of.....	14	1	4
Treasury Department Order 120.....			4
Order 167-14.....			81
Order 167-15.....			57
Order 167-17.....			7
Order 167-20.....			116
Order 167-32.....			75
Order 167-33.....			31
Order 167-38.....			87
Order 167-48.....			131
Order 167-58.....			28

Subject	U.S. Code		
	Title	Section	Page
Treasury Department—Continued			
Order CGFR 51-1.....			58
Order CGFR 56-28.....			85
Treaties; applicable to tank vessels.....	46	391a(4)	90
Triennial inspections; small passenger.....	46	390a	114
Trinitrotoluene, transportation of.....	46	170	92
Tsimpsean or Haida Tribe of Indians.....	46	237	155
Tugboats and towboats not motorboats if propelled by steam.....	46	526	65
Tugboats, steam.....	46	405	89
Unauthorized fees for inspection of vessels.....	18	1912	22
Underway, definition of, Rules of the Road.....	33	1061(c)	33
Undocumented vessels, numbering system for identification.....	46	527a	71
Unfired pressure vessels; constructed of iron, steel, or other metals.....	46	406	111
Construction and design requirements.....	46	411	111
Exemption for those having diameters 30 inches or less.....	46	408	112
Inspections.....	46	392	85
Materials for.....	46	411	111
Materials used not meeting requirements.....	46	407	111
Uniformity of laws, rules, and regulations: Congressional policy.....	46	527f	74
United States Code, table listing sections printed.....			239
United States district courts, jurisdiction over violations of Longshoremen's and Harborworkers' Compensation Act.....	33	941(e)	63
United States Government employees, investigation of performance of duties.....	46	239(d)	231
United States registered pilot, definition.....	46	216	160
Unlawful shipments of seamen void.....	46	578	204
Unrigged vessel, definition.....	46	672c	184
Definition, in connection with Officers' Competency Certificates Convention, 1936.....	46	224a	149
Except seagoing barges, shipment and discharge of seamen, not applicable to.....	46	643a	17
Exempt from inspection of crew quarters.....	46	660b	103
Manning exceptions.....	46	672b	183
Unseaworthy vessel, complaints.....	46	653	191
In foreign ports.....	46	656	192
Payment of charges for inspection of vessel.....	46	659	193
Use of flammable or combustible fuel.....	46	170a	97
Use of instruments for security of life to be approved.....	46	489	88
Use of radar information, recommendation.....	33	1094	48
Valves, formulas for.....	46	411	111
Maximum allowable working pressures.....	46	411	111
Minimum thickness.....	46	411	111
Safety, control of.....	46	393	113
Safety, obstructing.....	46	413	113
Ventilation of engine and fuel compartment bilges or motorboats and vessels using volatile fuels.....	46	526j	68
Ventilators, for steerage passengers.....	46	153	121
Vessel; able seamen required.....	46	672(a)	138, 176
Accommodations for steerage passengers.....	46	151	119
Actual line of safety, re loadlines.....	46	85a	127
Aground; lights and shapes displayed.....	33	1071	40
Aground, sound signals by.....	33	1076	42
Allowance for reduction of provisions.....	46	665	194

Subject	U.S. Code		
	Title	Section	Page
Vessel—Continued			
Alteration of courses in meeting situations	33	1094	48
American Bureau of Shipping re loadlines for	46	85b	127
Anchor light and shapes displayed	33	1071	40
Approved equipment for	46	489	88
Assistance to be rendered when casualty occurs	33	367	227
Barges, inspection required	46	395	97
Being pushed ahead; lights and shapes for	33	1065(c)	36
Being towed; shape to be displayed	33	1065(d)	37
Berths for passengers, stowage	46	152	120
Biennial inspection	46	391	84
Bilge systems	46	481	86
Boarding by Coast Guard authorized	14	89	50
Boarding by Coast Guard officers	46	527e(c)	51
Boiler and machinery inspections	46	391	84
Cargo, steam, inspection of	46	405	89
Carrying emigrant passengers from United States	46	161	126
Carrying passengers for hire, Motorboat Act	46	526f	67
Carrying passengers, means of escape	46	477	108
Carrying passengers, number allowable	46	451	106
Carrying passengers, steering apparatus for	46	473	108
Carrying sheath knives aboard by seamen prohibited	46	710	157
Carrying steerage passengers, accommodations for	46	151	119
Carrying steerage passengers and animals	46	156a	126
Carrying steerage passengers, boarding on arrival	46	158	124
Carrying steerage passengers; clearance papers withheld	46	161	126
Carrying steerage passengers; death of passengers	46	159	124
Carrying steerage passengers, discipline and cleanliness	46	156	123
Carrying steerage passengers; fines and penalties	46	162	126
Carrying steerage passengers, food for	46	154	122
Carrying steerage passengers; hospitals, surgeons, and medicines	46	155	123
Carrying steerage passengers; inspections and examination by customs and their reports	46	160	125
Carrying steerage passengers; lights, air, and accommodations for passengers	46	153	121
Carrying steerage passengers; seamen prohibited from visiting areas occupied by passengers	46	157	124
Carrying steerage passengers; space for exercising passengers	46	156	123
Certificate of inspection	46	399	98
Certificate of inspection, based on examinations	46	391	84
Certificate of inspection, valid, required in order to navigate lawfully	46	399	98
Civilian nautical schoolships	46	1333	117
Classification society re loadlines	46	85b	127
Clearance withheld for Load Line Act violations	46	85f	129
Clothing and heat for crew members	46	669	196
Coastwise, seagoing, subject to navigation laws	46	364	78
Collision with another vessel	33	367	227
Commerce Department, subject to inspection	46	363	78

Subject	U.S. Code		
	Title	Section	Page
Vessel—Continued			
Complaint about provisions or water	46	662	193
Complaint that it is unseaworthy	46	653	191
Complement of officers and crew	46	222	137
Conduct in restricted visibility	33	1075	42
Crew accommodations	46	660-1	102
Crew list, certified copy, furnished boarding officer	46	677	207
Crew lists for collector	46	674	205
Crew lists, rules governing	46	676	206
Crew, percentage to be U.S. citizens	46	672a(b)	145
Crew quarters inspected	46	660a	103
Crew required to be signed on in presence of shipping commissioner	46	563	199
Deceased seamen	46	621	221
Definition, for carriage of explosives, etc.	46	170	92
Definition, for manning	46	713	147
Definition, in Federal Boating Act	46	527	71
Definition in 1960 International Rules	33	1061(c)	33
Detention, Load Line Act	46	85f	129
Detention; officer requirements	46	224a	149
Detention; on coastwise voyages	46	88f	134
Detention; under Dangerous Cargo Act	46	170(13)	95
Discharge of seamen in presence of shipping commissioner	46	641	207
Documents and paper examined by Coast Guard	14	89	50
Documentation denied if not inspected	46	496	50
Documentation of	46	2	20
Draft marks exhibited	46	48	82
Electrical equipment inspection	46	392	85
Engaged in fishing, definition of	33	1061(c)	33
Engaged in taking oysters	46	598	220
Engaged in underwater operations, lights and shapes displayed when at anchor	33	1071(d)	41
Entries in logbooks re loadlines and vessels actual drafts	46	85e	129
Entries of offenses by seamen in logbooks of	46	702	190
Equipment inspection	46	391	84
Examination after complaints about food or water	46	662	193
Examination by surveyors on complaint of unseaworthiness	46	654	191
Exceptions for, when in coastwise trade	46	544	142
Exemptions under Dangerous Cargo Act	46	170(11)	95
Explosives or dangerous weapons aboard without permission, fine	18	2277	61
Fire extinguishers required by Motorboat Act	46	526g	67
Fishing, exempted from inspection	46	367	78
Fishing, lights and shapes for	33	1069	39
Fog signals sounded by	33	1076	42
Foreign, acquired under emergency conditions	50	198	80
Foreign-going, clearance if crew member is deceased	46	622	221
Great Lakes, operation without registered pilots	46	216f	164
Great Lakes, pilotage	46	216a	161
Great Lakes, subject to navigation laws	46	364	78
Handling submarine cable or navigation mark	33	1064(c)	35
Hull inspection	46	391	84

Subject	U.S. Code		
	Title	Section	Page
Vessel—Continued			
In coasting trade; master performing shipping commissioner duties	46	546	204
In coasting trade; shipment and discharge of crews	46	646	211
In coasting trade; shipping articles for	46	574	202
In coastwise trade; shipment and discharge of crews	46	646	211
Indian ownership of	46	237	155
In foreign ports, reports on complaints of unseaworthiness	46	657	192
In foreign port, vessel unseaworthy complaint	46	656	192
Insubordination of seamen in foreign country	46	703	219
Knowingly shipping seamen without articles, penalties	46	568	201
Laid up, dismantled, and out of commission	46	391(e)	85
Liable for violations of Title 52, Revised Statutes	46	497	79
Libel for wages	46	604	217
Lifesaving devices required by Motorboat Act	46	526e	66
Lights and shapes for	33	1062	33
Lights and shapes displayed when aground	33	1071(c)	41
Lights and shapes displayed when at anchor	33	1071	40
Loaded so as not to submerge loadline marks	46	85c	128
Loading, maximum allowed	46	85a	127
Loading so as to submerge coastwise loadlines	46	88c	133
Loadline, coastwise, regulations	46	88b	132
Loadlines for oceangoing	46	85	127
Logbook entries re coastwise loadlines, and drafts of vessel	46	88e	133
Logbooks required	46	201	188
Longshoremen's and Harborworkers Compensation Act	33	941(g)	64
Loss of, report	33	362	229
Manning	46	222	137
Manning, exceptions for fishing or whaling vessels or yachts	46	690	142, 184
Marine casualties	46	239	231
Marine casualty reports involving submittal of	33	361	228
Marine engineering	46	411	111
Marking loadlines	46	85b	127
Marking loadlines, coastwise	46	88b	132
Master, licensed, required	46	223	137
Master or owner neglecting to provide sufficient stores	46	661	193
Master, U.S. citizenship required under manning law	46	713	147
Material factors considered for loadlines	46	85a	127
Mates, licensed, required	46	223	137
Mates, licensed, when engaged on voyages of less than 400 miles	46	223	137
Mechanically propelled, above 15 gross tons, and carrying freight for hire inspection of	46	404	88
Mechanically propelled, subject to inspection	46	367	78
Medicines, chest of	46	666	195
Members of engine department	46	672(e)	139
Moderate speed in fog, etc.	33	1077	43
Motorboat	46	526	65
Muster of crew	46	672(d)	141
Name and home port exhibited on	46	46	82

Subject	U.S. Code		
	Title	Section	Page
Vessel—Continued			
Name exhibited on pilothouse	46	493	82
Navigating Irondequoit Bay, N.Y., to be inspected	46	365	81
Neglect of duty by seamen aboard	18	2196	156
Negligent or reckless operation of	46	526L	68, 227
Not subject to Dangerous Cargo Act	46	170(6)	93
Not under command; fog signals sounded by	33	1076	42
Numbering of those documented	46	45	83
Officers to assist in the inspection	46	234	23, 156
On Great Lakes and inland waters carrying persons not passengers	46	458	101
On foreign voyages, filling vacancies in crew	46	672a(c)	145
Operating-differential subsidy, manning and wage scales for	46	1131	142
Passenger, oceangoing, staff officers	46	242	170
Passengers, sailing with unregistered staff officers	46	246	171
Passing rules	33	1080	44
Penalties for not complying with inspection requirements	46	497	79
Pilotage, State	46	215	160
Pilots required, when vessels are not sailing under registry	46	364	78
Power-driven, definition	33	1061(c)	33
Proceeding under sail and machinery, day signal displayed	33	1074	42
Producing seamen before shipping commissioner	46	573	202
Professional capacity of officers for	46	224a	149
Radio officers required	46	229b	167
Rates, charges, etc., for Great Lakes registered pilots	46	216c	163
Reckless or negligent operation of	46	526L	68, 227
Refusal of officers to serve prohibited	46	240	157
Registered in a territory, meaning of			155, 187
Regulations for preventing collisions applicable to	33	1061	32
Reinspections	46	435	100
Removal of master by owners	46	227	144
Replacement of officers	46	221	144
Reshipment of seamen in foreign ports	46	573	202
Reshipment of seamen, U.S. ports	46	572	202
Responsibility to reduce speed in restricted visibility	33	1094	48
Risk of collision	33	1078	44
Rules as to list of crew	46	676	206
Seamen failing to join at time specified in articles	46	576	203
Seamen refusing to sail after vessel is found seaworthy	46	655	192
Seamen to have certificates of identification or continuous discharge books	46	643	173
Seamen's wages, appropriation of, for court costs	46	707	218
Seamen's wages, payment	46	597	213
Seamen working, alternatively in deck and engine departments prohibited	46	673	140
Shipping articles required by	46	564	199
Shipping seamen in foreign ports	46	570	201

Subject	U.S. Code		
	Title	Section	Page
Weights and measures	46	668	195
Welding for boilers	46	407	111
Welding vessels, not subject to Dangerous Cargo Act	46	170(6)	93
Western Rivers—Pilot Rules	33	301	30
Whaling vessel; allowance for reduction of provisions, not applicable to	46	665	194
Crew list for collector	46	674	205
Discharging crew in foreign port if unseaworthy, not applicable to	46	658	192
Examinations required on complaints of unseaworthiness not applicable to	46	654	191
Manning, exceptions for	46	690	142
Minimum number of officers, not applicable to	46	223	137
Replacement of seamen not applicable to	46	569	144
Seaman's refusal to sail, penalty, not applicable to	46	655	192
Seamen omitting to join, penalty not applicable to	46	576	203
Seamen or crew members on, not required to have continuous discharge books or certificates of identification	46	643(i)	175, 209
Seamen's documents and records not applicable to	46	643(i)	175, 209
Seamen's laws applicable to	46	690	184
Seamen's wages, partial payment, not applicable to	46	597	213
Shipping seamen to replace those lost by desertion or casualty, not applicable to	46	569	144, 201
Slop chest not required on	46	670	196
Unseaworthy complaint in foreign port, not applicable to	46	656	192
Wheelhouse, name of vessel exhibited on	46	493	82
Whistle, definition of, Rules of the Road	33	1061(c)	33
Or other sound-producing appliances for motor-boats	46	528c	66
Sound signals by	33	1076	42
Whistling, useless and unnecessary, prohibited	46	375	20
Wiper, engine department	46	672(e)	139
Rating	46	672(e)	139
Withholding of State taxes	46	601	216
Witnesses; bribery prohibited	46	239(i)	232
Coercion prohibited	46	239(i)	232
Fees and expenses	46	239(f)	232
Influencing	18	1505	233
In investigations under R.S. 4450	46	239(d)	231
Oaths administered by Coast Guard	46	239(e)	232
Subpenaing of	46	239(e)	232
Threatening	18	1505	233
Travel by expenses for	46	239(f)	232
Work, hours of	46	673	140
Working hours, radio officers	46	229d	167
Wrecking vessels, minimum number of officers not applicable to	46	223	137
Wreck or loss of vessel, wages of seamen	46	592	212
Yacht; allowance for reduction of provisions, not applicable to	46	665	194
Discharging crew in foreign port if unseaworthy, not applicable to	46	658	192
Examinations required on complaints of unseaworthiness not applicable to	46	654	191

Subject	U.S. Code		
	Title	Section	Page
Yacht—Continued			
Exempted from crew accommodation requirements	46	660-1	102
Inspection of hulls and boilers	46	404	88
Manning, exceptions for	46	690	184
Minimum number of officers not applicable to	46	223	137
Professional capacity of officers for	46	224a	149
Replacement of seamen not applicable to	46	569	144
Seamen omitting to join, penalty not applicable to	46	576	203
Seamen or crewmembers on, not required to have continuous discharge books or certificates of identification	46	643(i)	175, 209
Seamen's documents and records not applicable to	46	643(i)	175, 209
Seamen's laws applicable to	46	690	142, 184
Seamen's refusal to sail, penalty, not applicable to	46	655	192
Seamen's wages, partial payment, not applicable to	46	597	213
Shipping seamen to replace those lost by desertion or casualty, not applicable to	46	569	144
Unseaworthy complaint in foreign port, not applicable to	46	656	192

APPENDIX II

INTERNATIONAL CONFERENCE ON SAFETY OF LIFE AT SEA, 1960

CONTENTS

	<i>Page</i>
Final Act of Conference (partial, list of contracting governments).....	C2
International Convention for the Safety of Life at Sea, 1960.....	C3
Articles.....	C3
<i>Regulations</i>	
Chapter I.—General Provisions.....	C9
Part A.—Application, Definitions, etc.....	C9
Part B.—Surveys and Certificates.....	C11
Part C.—Casualties.....	C17
Chapter II.—Construction.....	C18
Part A.—General.....	C18
Part B.—Subdivision and Stability.....	C20
Part C.—Machinery and Electrical Installations.....	C49
Part D.—Fire Protection.....	C57
Part E.—Fire Detection and Extinction in Passenger Ships and Cargo Ships.....	C72
Part F.—General Fire Precautions.....	C90
Chapter III.—Lifesaving Appliances, etc.....	C93
Part A.—General.....	C93
Part B.—Passenger Ships Only.....	C114
Part C.—Cargo Ships Only.....	C121
Chapter IV.—Radiotelegraphy and Radiotelephony.....	C128
Part A.—Application and Definitions.....	C128
Part B.—Watches.....	C128
Part C.—Technical Requirements.....	C130
Part D.—Radio Logs.....	C143
Chapter V.—Safety of Navigation.....	C145
Chapter VI.—Carriage of Grain.....	C158
Chapter VII.—Carriage of Dangerous Goods.....	C165
Chapter VIII.—Nuclear Ships.....	C169
Appendix.—Certificates.....	C172
Index.....	C186

C1

INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1960

Article I

(a) The Contracting Governments undertake to give effect to the provisions of the present Convention and of the Regulations annexed thereto, which shall be deemed to constitute an integral part of the present Convention. Every reference to the present Convention implies at the same time a reference to these Regulations.

(b) The Contracting Governments undertake to promulgate all laws, decrees, orders and regulations and to take all other steps which may be necessary to give the present Convention full and complete effect, so as to ensure that, from the point of view of safety of life, a ship is fit for the service for which it is intended.

Article II

The ships to which the present Convention applies are ships registered in countries the Governments of which are Contracting Governments, and ships registered in territories to which the present Convention is extended under Article XIII.

Article III

Laws, Regulations

The Contracting Governments undertake to communicate to and deposit with the Inter-Governmental Maritime Consultative Organization (hereinafter called the Organization):

- (a) a list of non-governmental agencies which are authorised to act in their behalf in the administration of measures for safety of life at sea for circulation to the Contracting Governments for the information of their officers;
- (b) the text of laws, decrees, orders and regulations which shall have been promulgated on the various matters within the scope of the present Convention;
- (c) a sufficient number of specimens of their Certificates issued under the provisions of the present Convention for circulation to the Contracting Governments for the information of their officers.

Article IV

Cases of Force Majeure

(a) No ship, which is not subject to the provisions of the present Convention at the time of its departure on any voyage, shall become subject to the provisions of the present Convention on account of any deviation from its intended voyage due to stress of weather or any other cause of *force majeure*.

Art.

FINAL ACT OF THE INTERNATIONAL CONFERENCE ON SAFETY OF LIFE AT SEA, 1960

Upon the invitation of the Inter-Governmental Maritime Consultative Organization, a Conference was held in London from 17 May to 17 June 1960 for the purpose of drawing up a Convention to replace the International Convention for the Safety of Life at Sea signed in London on 10 June 1948 as well as for the purpose of revising the International Regulations for Preventing Collisions at Sea, 1948.

The Governments of the following countries, being desirous of promoting safety of life at sea by establishing in common agreement uniform principles and rules directed thereto, were represented by Delegations at the Conference:—

Argentina	Republic of Korea
Australia	Kuwait
Belgium	Liberia
Brazil	Mexico
Bulgaria	Netherlands
Cameroun	New Zealand
Canada	Norway
China	Pakistan
Cuba	Panama
Czechoslovakia	Peru
Denmark	Philippines
Dominican Republic	Poland
Finland	Portugal
France	Spain
Federal Republic of Germany	Sweden
Greece	Switzerland
Hungary	Union of Soviet Socialist Republics
Iceland	United Arab Republic
India	United Kingdom
Ireland	United States of America
Israel	Venezuela
Italy	Yugoslavia
Japan	

The Governments of the following countries were represented at the Conference by observers:—

Ceylon	Roumania
Chile	Thailand
Guinea	Turkey
Indonesia	Union of South Africa
Iran	Vietnam

Who, having communicated their full powers, found in good and due form, have agreed as follows:—

* * * * *

(b) Persons who are on board a ship by reason of *force majeure* or in consequence of the obligation laid upon the master to carry shipwrecked or other persons shall not be taken into account for the purpose of ascertaining the application to a ship of any provisions of the present Convention.

Article V

Carriage of Persons in Emergency

(a) For the purpose of moving persons from any territory in order to avoid a threat to the security of their lives a Contracting Government may permit the carriage of a larger number of persons in its ships than is otherwise permissible under the present Convention.

(b) Such permission shall not deprive other Contracting Governments of any right of control under the present Convention over such ships which come within their ports.

(c) Notice of any such permission, together with a statement of the circumstances, shall be sent to the Organization by the Contracting Government granting such permission.

Article VI

Suspension in case of War

(a) In case of war or other hostilities, a Contracting Government which considers that it is affected, whether as a belligerent or as a neutral, may suspend the operation of the whole or any part of the Regulations annexed hereto. The suspending Government shall immediately give notice of any such suspension to the Organization.

(b) Such suspension shall not deprive other Contracting Governments of any right of control under the present Convention over the ships of the suspending Government when such ships are within their ports.

(c) The suspending Government may at any time terminate such suspension and shall immediately give notice of such termination to the Organization.

(d) The Organization shall notify all Contracting Governments of any suspension or termination of suspension under this Article.

Article VII

Prior Treaties and Conventions

(a) As between the Contracting Governments the present Convention replaces and abrogates the International Convention for the Safety of Life at Sea which was signed in London on 10 June 1948.

(b) All other treaties, conventions and arrangements relating to safety of life at sea, or matters appertaining thereto, at present in force between

Art.

Governments parties to the present Convention, shall continue to have full and complete effect during the terms thereof as regards:

- (i) ships to which the present Convention does not apply;
- (ii) ships to which the present Convention applies, in respect of matters for which it has not expressly provided.

(c) To the extent, however, that such treaties, conventions or arrangements conflict with the provisions of the present Convention, the provisions of the present Convention shall prevail.

(d) All matters which are not expressly provided for in the present Convention remain subject to the legislation of the Contracting Governments.

Article VIII

Special Rules drawn up by Agreement

When in accordance with the present Convention special rules are drawn up by agreement between all or some of the Contracting Governments, such rules shall be communicated to the Organization for circulation to all Contracting Governments.

Article IX

Amendments

(a) (i) The present Convention may be amended by unanimous agreement between the Contracting Governments.

(ii) Upon the request of any Contracting Government a proposed amendment shall be communicated by the Organization to all Contracting Governments for consideration and acceptance under this paragraph.

(b) (i) An amendment to the present Convention may be proposed to the Organization at any time by any Contracting Government and such proposal, if adopted by a two-thirds majority of the Assembly of the Organization (hereinafter called the Assembly), upon recommendation adopted by a two-thirds majority of the Maritime Safety Committee of the Organization (hereinafter called the Maritime Safety Committee), shall be communicated by the Organization to all Contracting Governments for their acceptance.

(ii) Any such recommendation by the Maritime Safety Committee shall be communicated by the Organization to all Contracting Governments for their consideration at least six months before it is considered by the Assembly.

(c) (i) A conference of Governments to consider amendments to the present Convention proposed by any Contracting Government shall at any time be convened by the Organization upon the request of one-third of the Contracting Governments.

Art.

(ii) Every amendment adopted by such conference by a two-thirds majority of the Contracting Governments shall be communicated by the Organization to all Contracting Governments for their acceptance.

(d) Any amendment communicated to Contracting Governments for their acceptance under paragraph (b) or (c) of this Article shall come into force for all Contracting Governments, except those which before it comes into force make a declaration that they do not accept the amendment, twelve months after the date on which the amendment is accepted by two-thirds of the Contracting Governments including two-thirds of the Governments represented on the Maritime Safety Committee.

(e) The Assembly, by a two-thirds majority vote, including two-thirds of the Governments represented on the Maritime Safety Committee, and subject to the concurrence of two-thirds of the Contracting Governments to the present Convention, or a conference convened under paragraph (c) of this Article by a two-thirds majority vote, may determine at the time of its adoption that the amendment is of such an important nature that any Contracting Government which makes a declaration under paragraph (d) of this Article and which does not accept the amendment within a period of twelve months after the amendment comes into force, shall, upon the expiry of this period, cease to be a party to the present Convention.

(f) Any amendment to the present Convention made under this Article which relates to the structure of a ship shall apply only to ships the keels of which are laid after the date on which the amendment comes into force.

(g) The Organisation shall inform all Contracting Governments of any amendments which come into force under this Article, together with the date on which such amendments shall come into force.

(h) Any acceptance or declaration under this Article shall be made by a notification in writing to the Organisation, which shall notify all Contracting Governments of the receipt of the acceptance or declaration.

Article X

Signature and Acceptance

(a) The present Convention shall remain open for signature for one month from this day's date and shall thereafter remain open for acceptance. Governments of States may become parties to the Convention by:

- (i) signature without reservation as to acceptance;
- (ii) signature subject to acceptance followed by acceptance; or
- (iii) acceptance.

(b) Acceptance shall be effected by the deposit of an instrument with the Organisation, which shall inform all Governments that have already accepted the Convention of each acceptance received and of the date of its receipt.

Art.

Article XI

Coming into Force

(a) The present Convention shall come into force twelve months after the date on which not less than fifteen acceptances, including seven by countries each with not less than one million gross tons of shipping, have been deposited in accordance with Article X. The Organization shall inform all Governments which have signed or accepted the present Convention of the date on which it comes into force.

(b) Acceptances deposited after the date on which the present Convention comes into force shall take effect three months after the date of their deposit.

Article XII

Denunciation

(a) The present Convention may be denounced by any Contracting Government at any time after the expiry of five years from the date on which the Convention comes into force for that Government.

(b) Denunciation shall be effected by a notification in writing addressed to the Organization which shall notify all the other Contracting Governments of any denunciation received and of the date of its receipt.

(c) A denunciation shall take effect one year, or such longer period as may be specified in the notification, after its receipt by the Organization.

Article XIII

Territories

(a) (i) The United Nations in cases where they are the administering authority for a territory or any Contracting Government responsible for the international relations of a territory shall as soon as possible consult with such territory in an endeavour to extend the present Convention to that territory and may at any time by notification in writing given to the Organization declare that the present Convention shall extend to such territory.

(ii) The present Convention shall from the date of the receipt of the notification or from such other date as may be specified in the notification extend to the territory named therein.

(b) (i) The United Nations or any Contracting Government which has made a declaration under paragraph (a) of this Article, at any time after the expiry of a period of five years from the date on which the Convention has been so extended to any territory, may by a notification in writing given to the Organization declare that the present Convention shall cease to extend to any such territory named in the notification.

(ii) The present Convention shall cease to extend to any territory mentioned in such notification one year, or such longer period as may be

Art.

specified therein, after the date of receipt of the notification by the Organization.

(c) The Organization shall inform all the Contracting Governments of the extension of the present Convention to any territories under paragraph (a) of this Article, and of the termination of any such extension under the provisions of paragraph (b), stating in each case the date from which the present Convention has been or will cease to be so extended.

Article XIV

Registration

(a) The present Convention shall be deposited in the archives of the Organization and the Secretary-General of the Organization shall transmit certified true copies thereof to all Signatory Governments and to all other Governments which accept the present Convention.

(b) As soon as the present Convention comes into force it shall be registered by the Organization with the Secretary-General of the United Nations.

CHAPTER I.—GENERAL PROVISIONS

PART A.—APPLICATION, DEFINITIONS, &c.

Regulation 1

Application

(a) Unless expressly provided otherwise, the present Regulations apply only to ships engaged on international voyages.

(b) The classes of ships to which each Chapter applies are more precisely defined, and the extent of the application is shown, in each Chapter.

Regulation 2

Definitions

For the purpose of the present Regulations, unless expressly provided otherwise:—

(a) "Regulations" means the Regulations referred to in Article I (a) of the present Convention.

(b) "Administration" means the Government of the country in which the ship is registered.

(c) "Approved" means approved by the Administration.

(d) "International voyage" means a voyage from a country to which the present Convention applies to a port outside such country, or conversely; and for this purpose every territory for the international relations of which a Contracting Government is responsible or for which the United Nations are the administering authority is regarded as a separate country.

(e) A passenger is every person other than:—

(i) the master and the members of the crew or other persons employed or engaged in any capacity on board a ship on the business of that ship; and

(ii) a child under one year of age.

(f) A passenger ship is a ship which carries more than twelve passengers.

(g) A cargo ship is any ship which is not a passenger ship.

(h) A tanker is a cargo ship constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable nature.

(i) A fishing vessel is a vessel used for catching fish, whales, seals, walrus or other living resources of the sea.

(j) A nuclear ship is a ship provided with a nuclear power plant.

(k) "New ship" means a ship the keel of which is laid on or after the date of coming into force of the present Convention.

(l) "Existing ship" means a ship which is not a new ship.

(m) A mile is 6,080 feet or 1,852 metres.

Regulation 3

Exceptions

(a) The present Regulations, unless expressly provided otherwise, do not apply to:—

- (i) Ships of war and troopships.
- (ii) Cargo ships of less than 500 tons gross tonnage.
- (iii) Ships not propelled by mechanical means.
- (iv) Wooden ships of primitive build, such as dhows, junks, &c.
- (v) Pleasure yachts not engaged in trade.
- (vi) Fishing vessels.

(b) Except as expressly provided in Chapter V, nothing herein shall apply to ships solely navigating the Great Lakes of North America and the River St. Lawrence as far east as a straight line drawn from Cap des Rosiers to West Point, Anticosti Island and, on the north side of Anticosti Island, the 63rd Meridian.

Regulation 4

Exemptions

A ship which is not normally engaged on international voyages but which, in exceptional circumstances, is required to undertake a single international voyage may be exempted by the Administration from any of the requirements of the present Regulations provided that it complies with safety requirements which are adequate in the opinion of the Administration for the voyage which is to be undertaken by the ship.

Regulation 5

Equivalents

(a) Where the present Regulations require that a particular fitting, material, appliance or apparatus, or type thereof, shall be fitted or carried in a ship, or that any particular provision shall be made, the Administration may allow any other fitting, material, appliance or apparatus, or type thereof, to be fitted or carried, or any other provision to be made in that ship, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance

or apparatus, or type thereof, or provision, is at least as effective as that required by the present Regulations.

(b) Any Administration which so allows, in substitution, a fitting, material, appliance or apparatus, or type thereof, or provision, shall communicate to the Organization particulars thereof together with a report on any trials made and the Organization shall circulate such particulars to other Contracting Governments for the information of their officers.

PART B.—SURVEYS AND CERTIFICATES

Regulation 6

Inspection and Survey

The inspection and survey of ships, so far as regards the enforcement of the provisions of the present Regulations and the granting of exemptions therefrom, shall be carried out by officers of the country in which the ship is registered, provided that the Government of each country may entrust the inspection and survey either to surveyors nominated for the purpose or to organizations recognised by it. In every case the Government concerned fully guarantees the completeness and efficiency of the inspection and survey.

Regulation 7

Initial and Subsequent Surveys of Passenger Ships

(a) A passenger ship shall be subjected to the surveys specified below:

- (i) A survey before the ship is put in service.
- (ii) A periodical survey once every twelve months.
- (iii) Additional surveys, as occasion arises.

(b) The surveys referred to above shall be carried out as follows:

- (i) *The survey before the ship is put in service* shall include a complete inspection of its structure, machinery and equipments, including the outside of the ship's bottom and the inside and outside of the boilers. This survey shall be such as to ensure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation, radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire detecting and extinguishing appliances, pilot ladders and other equipments, fully comply with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration for ships of the service for which it is intended. The survey shall also be such as to ensure that the workmanship

of all parts of the ship and its equipments is in all respects satisfactory, and that the ship is provided with the lights, means of making sound signals and distress signals as required by the provisions of the present Convention and the International Collision Regulations.

(ii) *The periodical survey* shall include an inspection of the structure, boilers and other pressure vessels, machinery and equipments, including the outside of the ship's bottom. The survey shall be such as to ensure that the ship, as regards the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installation, radio installation, radiotelegraph installations in motor lifeboats, portable radio apparatus for survival craft, life-saving appliances, fire detecting and extinguishing appliances, pilot ladders and other equipments, is in satisfactory condition and fit for the service for which it is intended, and that it complies with the requirements of the present Convention, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration. The lights and means of making sound signals and the distress signals carried by the ship shall also be subject to the above-mentioned survey for the purpose of ensuring that they comply with the requirements of the present Convention and of the International Collision Regulations.

(iii) *A survey either general or partial*, according to the circumstances, shall be made every time an accident occurs or a defect is discovered which affects the safety of the ship or the efficiency or completeness of its life-saving appliances or other equipments, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory, and that the ship complies in all respects with the provisions of the present Convention and of the International Collision Regulations, and of the laws, decrees, orders and regulations promulgated as a result thereof by the Administration.

(c) (i) The laws, decrees, orders and regulations referred to in paragraph (b) of this Regulation shall be in all respects such as to ensure that, from the point of view of safety of life, the ship is fit for the service for which it is intended.

(ii) They shall among other things prescribe the requirements to be observe as to the initial and subsequent hydraulic or other acceptable alternative tests to which the main and auxiliary boilers, connections, steam pipes, high pressure receivers, and fuel tanks for internal combustion engines

are to be submitted, including the test procedures to be followed and the intervals between two consecutive tests.

Regulation 8

Surveys of Life-Saving Appliances and other Equipments of Cargo Ships

The life-saving appliances, except a radiotelegraph installation in a motor lifeboat or a portable radio apparatus for survival craft, and the fire extinguishing appliances of cargo ships to which Chapters II and III of the present Regulations apply shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter with the substitution of 24 months for 12 months in sub-paragraph (a) (ii) of that Regulation. The fire control plans in new ships and the pilot ladders, lights and means of making sound signals carried by new and existing ships shall be included in the surveys for the purpose of ensuring that they comply fully with the requirements of the present Convention and, where applicable, the International Collision Regulations.

Regulation 9

Surveys of Radio Installations of Cargo Ships

The radio installations of cargo ships to which Chapter IV of the present Regulations applies and any radiotelegraph installation in a motor lifeboat or portable radio apparatus for survival craft which is carried in compliance with the requirements of Chapter III of the present Regulations shall be subject to initial and subsequent surveys as provided for passenger ships in Regulation 7 of this Chapter.

Regulation 10

Survey of Hull, Machinery and Equipment of Cargo Ships

The hull, machinery and equipment (other than items in respect of which Cargo Ship Safety Equipment Certificates, Cargo Ship Safety Radiotelegraphy Certificates or Cargo Ship Safety Radiotelephony Certificates are issued) of a cargo ship shall be surveyed on completion and thereafter in such manner and at such intervals as the Administration may consider necessary in order to ensure that their condition is in all respects satisfactory. The survey shall be such as to ensure that the arrangements, material, and scantlings of the structure, boilers and other pressure vessels and their appurtenances, main and auxiliary machinery, electrical installations and other equipments are in all respects satisfactory for the service for which the ship is intended.

Regulation 11*Maintenance of Conditions after Survey*

After any survey of the ship under Regulations 7, 8, 9 or 10 has been completed, no change shall be made in the structural arrangements, machinery, equipments, &c. covered by the survey, without the sanction of the Administration.

Regulation 12*Issue of Certificates*

- (a) (i) A certificate called a Passenger Ship Safety Certificate shall be issued after inspection and survey to a passenger ship which complies with the requirements of Chapters II, III and IV and any other relevant requirements of the present Regulations.
- (ii) A certificate called a Cargo Ship Safety Construction Certificate shall be issued after survey to a cargo ship which satisfies the requirements for cargo ships on survey set out in Regulation 10 of this Chapter and complies with the applicable requirements of Chapter II, other than those relating to fire extinguishing appliances and fire control plans.
- (iii) A certificate called a Cargo Ship Safety Equipment Certificate shall be issued after inspection to a cargo ship which complies with the relevant requirements of Chapters II and III and any other relevant requirements of the present Regulations.
- (iv) A certificate called a Cargo Ship Safety Radiotelegraphy Certificate shall be issued after inspection to a cargo ship, fitted with a radiotelegraph installation, which complies with the requirements of Chapter IV and any other relevant requirements of the present Regulations.
- (v) A certificate called a Cargo Ship Safety Radiotelephony Certificate shall be issued after inspection to a cargo ship, fitted with a radiotelephone installation, which complies with the requirements of Chapter IV and any other relevant requirements of the present Regulations.
- (vi) When an exemption is granted to a ship under and in accordance with the provisions of the present Regulations, a certificate called an Exemption Certificate shall be issued in addition to the certificates prescribed in this paragraph.
- (vii) Passenger Ship Safety Certificates, Cargo Ship Safety Construction Certificates, Cargo Ship Safety Equipment Certificates, Cargo Ship Safety Radiotelegraphy Certificates, Cargo Ship Safety Radiotelephony Certificates and Exemption Certificates shall be issued either by the Administration or by any person or organization duly

authorised by it. In every case, that Administration assumes full responsibility for the Certificate.

(b) Notwithstanding any other provision of the present Convention any certificate issued under, and in accordance with, the provisions of the International Convention for the Safety of Life at Sea, 1948, which is current when the present Convention comes into force in respect of the Administration by which the certificate is issued, shall remain valid until it expires under the terms of Regulation 13 of Chapter I of that Convention.

(c) A Contracting Government shall not issue Certificates under, and in accordance with, the provisions of the International Convention for the Safety of Life at Sea, 1948 or 1929, after the date on which acceptance of the present Convention by the Government takes effect.

Regulation 13*Issue of Certificate by another Government*

A Contracting Government may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the requirements of the present Regulations are complied with, shall issue certificates to the ship in accordance with the present Regulations. Any certificate so issued must contain a statement to the effect that it has been issued at the request of the Government of the country in which the ship is or will be registered, and it shall have the same force and receive the same recognition as a certificate issued under Regulation 12 of this Chapter.

Regulation 14*Duration of Certificates*

(a) Certificates other than Cargo Ship Safety Construction Certificates, Cargo Ship Safety Equipment Certificates and Exemption Certificates shall be issued for a period of not more than 12 months. Cargo Ship Safety Equipment Certificates shall be issued for a period of not more than 24 months. Exemption Certificates shall not be valid for longer than the period of the certificates to which they refer.

(b) If a survey takes place within two months before the end of the period for which a Cargo Ship Safety Radiotelegraphy Certificate or a Cargo Ship Safety Radiotelephony Certificate issued in respect of cargo ships of 300 tons gross tonnage and upwards, but less than 500 tons gross tonnage, was originally issued, that certificate may be withdrawn, and a new certificate may be issued which shall expire 12 months after the end of the said period.

(c) If a ship at the time when its certificate expires is not in a port of the country in which it is registered, the certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the country in which it is registered or is to be surveyed, and then only in cases where it appears proper and reasonable so to do.

(d) No certificate shall be thus extended for a longer period than five months, and a ship to which such extension is granted shall not, on its arrival in the country in which it is registered or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or country without having obtained a new certificate.

(e) A certificate which has not been extended under the foregoing provisions of this Regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

Regulation 15

Form of Certificates

(a) All certificates shall be drawn up in the official language or languages of the country by which they are issued.

(b) The form of the certificates shall be that of the models given in the Appendix to the present Regulations. The arrangement of the printed part of the model certificates shall be exactly reproduced in the certificates issued, or in certified copies thereof, and the particulars inserted in the certificates issued, or in certified copies thereof, shall be in Roman characters and Arabic figures.

Regulation 16

Posting up of Certificates

All certificates or certified copies thereof issued under the present Regulations shall be posted up in a prominent and accessible place in the ship.

Regulation 17

Acceptance of Certificates

Certificates issued under the authority of a Contracting Government shall be accepted by the other Contracting Governments for all purposes covered by the present Convention. They shall be regarded by the other Contracting Governments as having the same force as certificates issued by them.

Regulation 18

Qualification of Certificates

(a) If in the course of a particular voyage a ship has on board a number of persons less than the total number stated in the Passenger Ship Safety Certificate and is in consequence, in accordance with the provisions of the present Regulations, free to carry a smaller number of lifeboats and other

life-saving appliances than that stated in the Certificate, an annex may be issued by the Government, person, or organization referred to in Regulation 12 or 13.

(b) This annex shall state that in the circumstances there is no infringement of the provisions of the present Regulations. It shall be annexed to the Certificate and shall be substituted for it in so far as the life-saving appliances are concerned. It shall be valid only for the particular voyage for which it is issued.

Regulation 19

Control

Every ship holding a certificate issued under Regulation 12 or Regulation 13 is subject in the ports of the other Contracting Governments to control by officers duly authorised by such Governments in so far as this control is directed towards verifying that there is on board a valid certificate. Such certificate shall be accepted unless there are clear grounds for believing that the condition of the ship or of its equipment does not correspond substantially with the particulars of that certificate. In that case, the officer carrying out the control shall take such steps as will ensure that the ship shall not sail until it can proceed to sea without danger to the passengers or the crew. In the event of this control giving rise to intervention of any kind, the officer carrying out the control shall inform the Consul of the country in which the ship is registered in writing forthwith of all the circumstances in which intervention was deemed to be necessary, and the facts shall be reported to the Organization.

Regulation 20

Privileges

The privileges of the present Convention may not be claimed in favour of any ship unless it holds appropriate valid certificates.

PART C.—CASUALTIES

Regulation 21

Casualties

(a) Each Administration undertakes to conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the present Regulations might be desirable.

(b) Each Contracting Government undertakes to supply the Organization with pertinent information concerning the findings of such investigations. No reports or recommendations of the Organization based upon such information shall disclose the identity or nationality of the ships concerned or in any manner fix or imply responsibility upon any ship or person.

CHAPTER II.—CONSTRUCTION

PART A.—GENERAL

Regulation 1

Application

(a) (i) Unless expressly provided otherwise, this Chapter applies to new ships.

(ii) In the case of existing passenger ships and cargo ships the keels of which were laid on or after the date of coming into force of the International Convention for the Safety of Life at Sea, 1948, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to new ships as defined in that Chapter are complied with. In the case of existing passenger ships and cargo ships the keels of which were laid before the date of coming into force of that Convention, the Administration shall ensure that the requirements which were applied under Chapter II of that Convention to existing ships as defined in that Chapter are complied with. As regards those requirements of Chapter II of the present Convention which are not contained in Chapter II of the 1948 Convention the Administration shall decide which of these requirements shall be applied to existing ships as defined in the present Convention.

(b) For the purpose of this Chapter:—

(i) A new passenger ship is a passenger ship the keel of which is laid on or after the date of coming into force of the present Convention, or a cargo ship which is converted to a passenger ship on or after that date, all other passenger ships being described as existing passenger ships.

(ii) A new cargo ship is a cargo ship the keel of which is laid on or after the date of coming into force of the present Convention.

(c) The Administration may, if it considers that the sheltered nature and conditions of the voyage are such as to render the application of any specific requirements of this Chapter unreasonable or unnecessary, exempt from those requirements individual ships or classes of ships belonging to its country which, in the course of their voyage, do not proceed more than 20 miles from the nearest land.

(d) In the case of a passenger ship which is permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided, it shall comply with the special standards of subdivision set out in paragraph (e) of Regulation 5 of this Chapter, and the associated special provisions regarding permeability in paragraph (d) of Regulation 4 of this Chapter, unless the Administration is satisfied that, having regard to the nature and conditions of the voyage, compliance with the other provisions of the Regulations of this Chapter is sufficient.

(e) In the case of passenger ships which are employed in the carriage of large numbers of unberthed passengers in special trades, such, for example, as the pilgrim trade, the Administration, if satisfied that it is impracticable to enforce compliance with the requirements of this Chapter, may exempt such ships, when they belong to its country, from those requirements on the following conditions:—

(i) That the fullest provision which the circumstances of the trade will permit shall be made in the matter of construction.

(ii) That steps shall be taken to formulate general rules which shall be applicable to the particular circumstances of these trades. Such rules shall be formulated in concert with such other Contracting Governments, if any, as may be directly interested in the carriage of such passengers in such trades.

Notwithstanding any provisions of the present Convention, the *Simla Rules, 1931*, shall continue in force as between the parties to those Rules until the rules formulated under sub-paragraph (e) (ii) of this Regulation shall come into force.

Regulation 2

Definitions

For the purpose of this Chapter, unless expressly provided otherwise:—

(a) (i) A *subdivision loadline* is a waterline used in determining the subdivision of the ship.

(ii) The *deepest subdivision loadline* is the waterline which corresponds to the greatest draught permitted by the subdivision requirements which are applicable.

(b) The *length of the ship* is the length measured between perpendiculars taken at the extremities of the deepest subdivision loadline.

(c) The *breadth of the ship* is the extreme width from outside of frame to outside of frame at or below the deepest subdivision loadline.

(d) The *draught* is the vertical distance from the moulded base line amidships to the subdivision loadline in question.

(e) The *bulkhead deck* is the uppermost deck up to which the transverse watertight bulkheads are carried.

(f) The *margin line* is a line drawn at least 3 inches (or 76 millimetres) below the upper surface of the bulkhead deck at side.

(g) The *permeability* of a space is the percentage of that space which can be occupied by water.

The volume of a space which extends above the margin line shall be measured only to the height of that line.

- (h) The *machinery space* is to be taken as extending from the moulded base line to the margin line and between the extreme main transverse watertight bulkheads bounding the spaces containing the main and auxiliary propelling machinery, boilers serving the needs of propulsion, and all permanent coal bunkers.

In the case of unusual arrangements, the Administration may define the limits of the machinery spaces.

- (i) *Passenger spaces* are those which are provided for the accommodation and use of passengers, excluding baggage, store, provision and mail rooms.

For the purposes of Regulations 4 and 5 of this Chapter, spaces provided below the margin line for the accommodation and use of the crew shall be regarded as passenger spaces.

- (j) In all cases *volumes* and *areas* shall be calculated to moulded lines.

PART B.—SUBDIVISION AND STABILITY

(Part B applies to passenger ships only, except that Regulation 19 also applies to cargo ships.)

Regulation 3

Floodable Length

(a) The floodable length at any point of the length of a ship shall be determined by a method of calculation which takes into consideration the form, draught and other characteristics of the ship in question.

(b) In a ship with a continuous bulkhead deck, the floodable length at a given point is the maximum portion of the length of the ship, having its centre at the point in question, which can be flooded under the definite assumptions set forth in Regulation 4 of this Chapter without the ship being submerged beyond the margin line.

(c) (i) In the case of a ship not having a continuous bulkhead deck, the floodable length at any point may be determined to an assumed continuous margin line which at no point is less than 3 inches (or 76 millimetres) below the top of the deck (at side) to which the bulkheads concerned and the shell are carried watertight.

(ii) Where a portion of an assumed margin line is appreciably below the deck to which bulkheads are carried, the Administration may permit a limited relaxation in the watertightness of those portions of the bulkheads which are above the margin line and immediately under the higher deck.

Regulation 4

Permeability

(a) The definite assumptions referred to in Regulation 3 of this Chapter relate to the permeabilities of the spaces below the margin line.

In determining the floodable length, a uniform average permeability shall be used throughout the whole length of each of the following portions of the ship below the margin line:—

- (i) the machinery space as defined in Regulation 2 of this Chapter;
- (ii) the portion forward of the machinery space; and
- (iii) the portion abaft the machinery space.

(b) (i) The uniform average permeability throughout the machinery space shall be determined from the formula—

$$85 + 10 \left(\frac{a-c}{v} \right)$$

where:—

a=volume of the passenger spaces, as defined in Regulation 2 of this Chapter, which are situated below the margin line within the limits of the machinery space.

c=volume of between deck spaces below the margin line within the limits of the machinery space which are appropriated to cargo, coal or stores.

v=whole volume of the machinery space below the margin line.

(ii) Where it is shown to the satisfaction of the Administration that the average permeability as determined by detailed calculation is less than that given by the formula, the detailed calculated value may be used. For the purpose of such calculation, the permeabilities of passenger spaces, as defined in Regulation 2 of this Chapter, shall be taken as 95, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such values as may be approved in each case.

(c) Except as provided in paragraph (d) of this Regulation, the uniform average permeability throughout the portion of the ship before (or abaft) the machinery space shall be determined from the formula—

$$63 + 35 \frac{a}{v}$$

where:

a=volume of the passenger spaces, as defined in Regulation 2 of this Chapter, which are situated below the margin line, before (or abaft) the machinery space, and

v =whole volume of the portion of the ship below the margin line before (or abaft) the machinery space.

(d) In the case of a ship which is permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided, and is required under paragraph (d) of Regulation 1 of this Chapter to comply with special provisions, the uniform average permeability throughout the portion of the ship before (or abaft) the machinery space shall be determined from the formula—

$$95 - 35 \frac{b}{v}$$

where:

b =the volume of the spaces below the margin line and above the tops of floors, inner bottom, or peak tanks, as the case may be, which are appropriated to and used as cargo spaces, coal or oil fuel bunkers, store rooms, baggage and mail rooms, chain lockers and fresh water tanks, before (or abaft) the machinery space; and

v =whole volume of the portion of the ship below the margin line before (or abaft) the machinery space.

In the case of ships engaged on services where the cargo holds are not generally occupied by any substantial quantities of cargo, no part of the cargo spaces is to be included in calculating " b ".

(e) In the case of unusual arrangements the Administration may allow, or require, a detailed calculation of average permeability for the portions before or abaft the machinery space. For the purpose of such calculation, the permeability of passenger spaces as defined in Regulation 2 of this Chapter shall be taken as 95, that of spaces containing machinery as 85, that of all cargo, coal and store spaces as 60, and that of double bottom, oil fuel and other tanks at such value as may be approved in each case.

(f) Where a between deck compartment between two watertight transverse bulkheads contains any passenger or crew space, the whole of that compartment, less any space completely enclosed within permanent steel bulkheads and appropriated to other purposes, shall be regarded as passenger space. Where, however, the passenger or crew space in question is completely enclosed within permanent steel bulkheads, only the space so enclosed need be considered as passenger space.

Regulation 5

Permissible Length of Compartments

(a) Ships shall be as efficiently subdivided as is possible having regard to the nature of the service for which they are intended. The degree of subdivision shall vary with the length of the ship and with the service, in such manner that the highest degree of subdivision corresponds with the ships of greatest length, primarily engaged in the carriage of passengers.

(b) *Factor of Subdivision.*—The maximum permissible length of a compartment having its centre at any point in the ship's length is obtained from the floodable length by multiplying the latter by an appropriate factor called the *factor of subdivision*.

The factor of subdivision shall depend on the length of the ship, and for a given length shall vary according to the nature of the service for which the ship is intended. It shall decrease in a regular and continuous manner—

(i) as the length of the ship increases, and

(ii) from a factor A, applicable to ships primarily engaged in the carriage of cargo, to a factor B, applicable to ships primarily engaged in the carriage of passengers.

The variations of the factors A and B shall be expressed by the following formulae (I) and (II) where L is the length of the ship as defined in Regulation 2 of this Chapter:

L in feet

$$A = \frac{190}{L-198} + .18 \quad (L=430 \text{ and upwards})$$

L in metres

$$A = \frac{58.2}{L-60} + .18 \quad (L=131 \text{ and upwards}) \dots \dots \dots (I)$$

L in feet

$$B = \frac{100}{L-138} + .18 \quad (L=260 \text{ and upwards})$$

L in metres

$$B' = \frac{30.3}{L-42} + .18 \quad (L=79 \text{ and upwards}) \dots \dots \dots (II)$$

(c) *Criterion of Service.*—For a ship of given length the appropriate factor of subdivision shall be determined by the Criterion of Service Numeral (hereinafter called the Criterion Numeral) as given by the following formulae (III) and (IV) where:—

C_s =the Criterion Numeral;

L=length of the ship, as defined in Regulation 2 of this Chapter;

M=the volume of the machinery space, as defined in Regulation 2 of this Chapter; with the addition thereto of the volume of any permanent oil fuel bunkers which may be situated above the inner bottom and before or abaft the machinery space;

P=the whole volume of the passenger spaces below the margin line, as defined in Regulation 2 of this Chapter;

V=the whole volume of the ship below the margin line;

$P_1 = KN$ where:—

N=number of passengers for which the ship is to be certified, and

K has the following values:—

	Value of K
Length in feet and volumes in cubic feet ...	·6L
Length in metres and volumes in cubic metres ...	·056L

Where the value of KN is greater than the sum of P and the whole volume of the actual passenger spaces above the margin line, the figure to be taken as P_1 is that sum or $\frac{2}{3} KN$, whichever is the greater.

When P_1 is greater than P—

$$C_s = 72 \frac{M + 2P_1}{V + P_1 - P} \dots \dots \dots \text{(III)}$$

and in other cases—

$$C_s = 72 \frac{M + 2P}{V} \dots \dots \dots \text{(IV)}$$

For ships not having a continuous bulkhead deck the volumes are to be taken up to the actual margin lines used in determining the floodable lengths.

(d) *Rules for Subdivision of Ships other than those covered by paragraph (e) of this Regulation*

(i) *The subdivision abaft the forepeak of ships 430 feet (or 131 metres) in length and upwards having a criterion numeral of 23 or less shall be governed by the factor A given by formula (I); of those having a criterion numeral of 123 or more by the factor B given by formula (II); and of those having a criterion numeral between 23 and 123 by the factor F obtained by linear interpolation between the factors A and B, using the formula:—*

$$F = A - \frac{(A - B)(C - 23)}{100} \dots \dots \dots \text{(V)}$$

Nevertheless, where the criterion numeral is equal to 45 or more and simultaneously the computed factor of subdivision as given by formula (V) is ·65 or less, but more than ·50, the subdivision abaft the forepeak shall be governed by the factor ·50.

Where the factor F is less than ·40 and it is shown to the satisfaction of the Administration to be impracticable to comply with the factor F in a machinery compartment of the ship, the subdivision of such compartment may be governed by an increased factor, which, however, shall not exceed ·40.

(ii) *The subdivision abaft the forepeak of ships less than 430 feet (or 131 metres) but not less than 260 feet (or 79 metres) in length having a criterion numeral equal to S, where—*

$$S = \frac{9,382 - 20L}{34} \text{ (L in feet)} = \frac{3,574 - 25L}{13} \text{ (L in metres)}$$

shall be governed by the factor unity; of those having a criterion numeral of 123 or more by the factor B given by the formula (II); of those having a criterion numeral between S and 123 by the factor F obtained by linear interpolation between unity and the factor B using the formula:—

$$F = 1 - \frac{(1 - B)(C_s - S)}{123 - S} \dots \dots \dots \text{(VI)}$$

(iii) *The subdivision abaft the forepeak of ships less than 430 feet (or 131 metres) but not less than 260 feet (or 79 metres) in length and having a criterion numeral less than S, and of all ships less than 260 feet (or 79 metres) in length shall be governed by the factor unity, unless, in either case, it is shown to the satisfaction of the Administration to be impracticable to comply with this factor in any part of the ship, in which case the Administration may allow such relaxation as may appear to be justified, having regard to all the circumstances.*

(iv) The provisions of sub-paragraph (iii) of this paragraph shall apply also to ships of whatever length, which are to be certified to carry a number of passengers exceeding 12 but not exceeding—

$$\frac{L^2 \text{ (in feet)}}{7,000} = \frac{L^2 \text{ (in metres)}}{650} \text{ or 50, whichever is the less.}$$

(e) *Special Standards of Subdivision for Ships which are permitted under paragraph (c) of Regulation 27 of Chapter III to carry a number of persons on board in excess of the lifeboat capacity provided and are required under paragraph (d) of Regulation 1 of this Chapter to comply with special provisions.*

(i) (1) In the case of ships primarily engaged in the carriage of passengers, the subdivision abaft the forepeak shall be governed by a factor of ·50 or by the factor determined according to paragraphs (c) and (d) of this Regulation, if less than ·50.

(2) In the case of such ships less than 300 feet (or 91·5 metres) in length, if the Administration is satisfied that compliance with such factor would be impracticable in a compartment, it may allow the length of that

compartment to be governed by a higher factor provided the factor used is the lowest that is practicable and reasonable in the circumstances.

(ii) Where, in the case of any ship whether less than 300 feet (or 91.5 metres) or not, the necessity of carrying appreciable quantities of cargo makes it impracticable to require the subdivision abaft the forepeak to be governed by a factor not exceeding .50, the standard of subdivision to be applied shall be determined in accordance with the following sub-paragraphs (1) to (5), subject to the condition that where the Administration is satisfied that insistence on strict compliance in any respect would be unreasonable, it may allow such alternative arrangement of the watertight bulkheads as appears to be justified on merits and will not diminish the general effectiveness of the subdivision.

(1) The provisions of paragraph (c) of this Regulation relating to the criterion numeral shall apply with the exception that in calculating the value of P_1 for berthed passengers K is to have the value defined in paragraph (c) of this Regulation or 125 cubic feet (or 3.55 cubic metres), whichever is the greater, and for unberthed passengers K is to have the value 125 cubic feet (or 3.55 cubic metres).

(2) The factor B in paragraph (b) of this Regulation shall be replaced by the factor BB determined by the following formula:—

L in feet

$$BB = \frac{57.6}{L-108} + .20 \quad (L=180 \text{ and upwards})$$

L in metres

$$BB = \frac{17.6}{L-33} + .20 \quad (L=55 \text{ and upwards})$$

(3) *The subdivision abaft the forepeak* of ships 430 feet (or 131 metres) in length and upwards having a criterion numeral of 23 or less shall be governed by the factor A given by formula (I) in paragraph (b) of this Regulation; of those having a criterion numeral of 123 or more by the factor BB given by the formula in sub-paragraph (ii) (2) of this paragraph; and of those having a criterion numeral between 23 and 123 by the factor F obtained by linear interpolation between the factors A and BB , using the formula:—

$$F = A - \frac{(A - BB)(C_s - 23)}{100}$$

except that if the factor F so obtained is less than .50 the factor to be used shall be either .50 or the factor calculated according to the provisions of paragraph (d) (i) of this Regulation, whichever is the smaller.

(4) *The subdivision abaft the forepeak* of ships less than 430 feet (or 131 metres) but not less than 180 feet (or 55 metres) in length having a criterion numeral equal to S_1 where—

$$S_1 = \frac{1,950 - 4L}{10} \quad (L \text{ in feet})$$

$$S_1 = \frac{3,712 - 25L}{19} \quad (L \text{ in metres})$$

shall be governed by the factor unity; of those having a criterion numeral of 123 or more by the factor BB given by the formula in sub-paragraph (ii) (2) of this paragraph; of those having a criterion numeral between S_1 and 123 by the factor F obtained by linear interpolation between unity and the factor BB using the formula:—

$$F = 1 - \frac{(1 - BB)(C_s - S_1)}{123 - S_1}$$

except that in either of the two latter cases if the factor so obtained is less than .50 the subdivision may be governed by a factor not exceeding .50.

(5) *The subdivision abaft the forepeak* of ships less than 430 feet (or 131 metres) but not less than 180 feet (or 55 metres) in length and having a criterion numeral less than S_1 and of all ships less than 180 feet (or 55 metres) in length shall be governed by the factor unity, unless it is shown to the satisfaction of the Administration to be impracticable to comply with this factor in particular compartments, in which event the Administration may allow such relaxations in respect of those compartments as appear to be justified, having regard to all the circumstances, provided that the aftermost compartment and as many as possible of the forward compartments (between the forepeak and the after end of the machinery space) shall be kept within the floodable length.

Regulation 6

Special Rules concerning Subdivision

(a) Where in a portion or portions of a ship the watertight bulkheads are carried to a higher deck than in the remainder of the ship and it is desired to take advantage of this higher extension of the bulkheads in calculating the floodable length, separate margin lines may be used for each such portion of the ship provided that—

(i) the sides of the ship are extended throughout the ship's length to the deck corresponding to the upper margin line and all openings in the shell plating below this deck throughout the length of the ship are treated as being below a margin line, for the purposes of Regulation 14 of this Chapter; and

(ii) the two compartments adjacent to the "step" in the bulkhead deck are each within the permissible length corresponding to their respective margin lines, and, in addition, their combined length does not exceed twice the permissible length based on the lower margin line.

(b) (i) A compartment may exceed the permissible length determined by the rules of Regulation 5 of this Chapter provided the combined length of each pair of adjacent compartments to which the compartment in question is common does not exceed either the floodable length or twice the permissible length, whichever is the less.

(ii) If one of the two adjacent compartments is situated inside the machinery space, and the second is situated outside the machinery space, and the average permeability of the portion of the ship in which the second is situated differs from that of the machinery space, the combined length of the two compartments shall be adjusted to the mean average permeability of the two portions of the ship in which the compartments are situated.

(iii) Where the two adjacent compartments have different factors of subdivision, the combined length of the two compartments shall be determined proportionately.

(c) In ships 330 feet (or 100 metres) in length and upwards, one of the main transverse bulkheads abaft the forepeak shall be fitted at a distance from forward perpendicular which is not greater than the permissible length.

(d) A main transverse bulkhead may be recessed provided that all parts of the recess lie inboard of vertical surfaces on both sides of the ship, situated at a distance from the shell plating equal to one-fifth the breadth of the ship, as defined in Regulation 2 of this Chapter, and measured at right angles to the centre line at the level of the deepest subdivision loadline.

Any part of a recess which lies outside these limits shall be dealt with as a step in accordance with paragraph (e) of this Regulation.

(e) A main transverse bulkhead may be stepped provided that it meets one of the following conditions:—

(i) the combined length of the two compartments, separated by the bulkhead in question, does not exceed either 90 per cent. of the floodable length or twice the permissible length, except that in ships having a factor of subdivision greater than .9, the combined length of the two compartments in question shall not exceed the permissible length;

(ii) additional subdivision is provided in way of the step to maintain the same measure of safety as that secured by a plane bulkhead;

(iii) the compartment over which the step extends does not exceed the permissible length corresponding to a margin line taken 3 inches (or 76 millimetres) below the step.

(f) Where a main transverse bulkhead is recessed or stepped, an equivalent plane bulkhead shall be used in determining the subdivision.

(g) If the distance between two adjacent main transverse bulkheads, or their equivalent plane bulkheads, or the distance between the transverse planes passing through the nearest stepped portions of the bulkheads, is less than 10 feet (or 3.05 metres) plus 3 per cent. of the length of the ship, or 35 feet (or 10.67 metres) whichever is the less, only one of these bulkheads shall be regarded as forming part of the subdivision of the ship in accordance with the provisions of Regulation 5 of this Chapter.

(h) Where a main transverse watertight compartment contains local subdivision and it can be shown to the satisfaction of the Administration that, after any assumed side damage extending over a length of 10 feet (or 3.05 metres) plus 3 per cent. of the length of the ship, or 35 feet (or 10.67 metres) whichever is the less, the whole volume of the main compartment will not be flooded, a proportionate allowance may be made in the permissible length otherwise required for such compartment. In such a case the volume of effective buoyancy assumed on the undamaged side shall not be greater than that assumed on the damaged side.

(i) Where the required factor of subdivision is .50 or less, the combined length of any two adjacent compartments shall not exceed the floodable length.

Regulation 7

Stability of Ships in Damaged Condition

(a) Sufficient intact stability shall be provided in all service conditions so as to enable the ship to withstand the final stage of flooding of any one main compartment which is required to be within the floodable length.

Where two adjacent main compartments are separated by a bulkhead which is stepped under the conditions of sub-paragraph (e) (i) of Regulation 6 of this Chapter the intact stability shall be adequate to withstand the flooding of those two adjacent main compartments.

Where the required factor of subdivision is .50 or less but more than .33 intact stability shall be adequate to withstand the flooding of any two adjacent main compartments.

Where the required factor of subdivision is .33 or less the intact stability shall be adequate to withstand the flooding of any three adjacent main compartments.

(b) (i) The requirements of paragraph (a) of this Regulation shall be determined by calculations which are in accordance with paragraphs (c), (d) and (f) of this Regulation and which take into consideration the proportions and

design characteristics of the ship and the arrangement and configuration of the damaged compartments. In making these calculations the ship is to be assumed in the worst anticipated service condition as regards stability.

(ii) Where it is proposed to fit decks, inner skins or longitudinal bulkheads of sufficient tightness to seriously restrict the flow of water, the Administration shall be satisfied that proper consideration is given to such restrictions in the calculations.

(iii) In cases where the Administration considers the range of stability in the damaged condition to be doubtful, it may require investigation thereof.

(c) For the purpose of making damage stability calculations the volume and surface permeabilities shall be in general as follows:

Spaces	Permeability
Appropriated to Cargo, Coal or Stores	60
Occupied by Accommodation	95
Occupied by Machinery	85
Intended for Liquids	0 or 95*

*Whichever results in the more severe requirements.

Higher surface permeabilities are to be assumed in respect of spaces which, in the vicinity of the damage waterplane, contain no substantial quantity of accommodation or machinery and spaces which are not generally occupied by any substantial quantity of cargo or stores.

(d) Assumed extent of damage shall be as follows:—

(i) *longitudinal extent*: 10 feet (or 3.05 metres) plus 3 per cent. of the length of the ship, or 35 feet (or 10.67 metres) whichever is the less. Where the required factor of subdivision is .33 or less the assumed longitudinal extent of damage shall be increased as necessary so as to include any two consecutive main transverse watertight bulkheads;

(ii) *transverse extent* (measured inboard from the ship's side, at right angles to the centre line at the level of the deepest subdivision load line): a distance of one-fifth of the breadth of the ship, as defined in Regulation 2 of this Chapter; and

(iii) *vertical extent*: from the base line upwards without limit.

(iv) If any damage of lesser extent than that indicated in sub-paragraphs (i), (ii) and (iii) of this paragraph would result in a more severe condition regarding heel or loss of metacentric height, such damage shall be assumed in the calculations.

(e) Unsymmetrical flooding is to be kept to a minimum consistent with efficient arrangements. Where it is necessary to correct large angles of heel, the means adopted shall, where practicable, be self-acting, but in any case where controls to cross-flooding fittings are provided they shall be operable from above the bulkhead deck. These fittings together with their controls as well as the maximum heel before equalisation shall be acceptable to the Administration. Where cross-flooding fittings are required the time for equalisation shall not exceed 15 minutes. Suitable information concerning the use of cross-flooding fittings shall be supplied to the master of the ship.

(f) The final conditions of the ship after damage and, in the case of unsymmetrical flooding, after equalisation measures have been taken shall be as follows:—

(i) in the case of symmetrical flooding there shall be a positive residual metacentric height of at least 2 inches (or 0.05 metres) as calculated by the constant displacement method;

(ii) in the case of unsymmetrical flooding the total heel shall not exceed seven degrees, except that, in special cases, the Administration may allow additional heel due to the unsymmetrical moment, but in no case shall the final heel exceed fifteen degrees;

(iii) in no case shall the margin line be submerged in the final stage of flooding. If it is considered that the margin line may become submerged during an intermediate stage of flooding, the Administration may require such investigations and arrangements as it considers necessary for the safety of the ship.

(g) The master of the ship shall be supplied with the data necessary to maintain sufficient intact stability under service conditions to enable the ship to withstand the critical damage. In the case of ships requiring cross-flooding the master of the ship shall be informed of the conditions of stability on which the calculations of heel are based and be warned that excessive heeling might result should the ship sustain damage when in a less favourable condition.

(h) (i) No relaxation from the requirements for damage stability may be considered by the Administration unless it is shown that the intact metacentric height in any service condition necessary to meet these requirements is excessive for the service intended.

(ii) Relaxations from the requirements for damage stability shall be permitted only in exceptional cases and subject to the condition that the Administration is to be satisfied that the proportions, arrangements and other characteristics of the ship are the most favourable to stability after damage which can practically and reasonably be adopted in the particular circumstances.

Regulation 8*Ballasting*

When ballasting with water is necessary, the water ballast should not in general be carried in tanks intended for oil fuel. In ships in which it is not practicable to avoid putting water in oil fuel tanks, oily-water separator equipment to the satisfaction of the Administration shall be fitted, or other alternative means acceptable to the Administration shall be provided for disposing of the oily-water ballast.

Regulation 9*Peak and Machinery Space Bulkheads, Shaft Tunnels, &c.*

(a) (i) A ship shall have a forepeak or collision bulkhead, which shall be watertight up to the bulkhead deck. This bulkhead shall be fitted not less than 5 per cent. of the length of the ship, and not more than 10 feet (or 3.05 metres) plus 5 per cent. of the length of the ship from the forward perpendicular.

(ii) If the ship has a long forward superstructure, the forepeak bulkhead shall be extended weathertight to the deck next above the bulkhead deck. The extension need not be fitted directly over the bulkhead below, provided it is at least 5 per cent. of the length of the ship from the forward perpendicular, and the part of the bulkhead deck which forms the step is made effectively weathertight.

(b) An afterpeak bulkhead, and bulkheads dividing the machinery space, as defined in Regulation 2 of this Chapter, from the cargo and passenger spaces forward and aft, shall also be fitted and made watertight up to the bulkhead deck. The afterpeak bulkhead may, however, be stopped below the bulkhead deck, provided the degree of safety of the ship as regards subdivision is not thereby diminished.

(c) In all cases stern tubes shall be enclosed in watertight spaces of moderate volume. The stern gland shall be situated in a watertight shaft tunnel or other watertight space separate from the stern tube compartment and of such volume that, if flooded by leakage through the stern gland, the margin line will not be submerged.

Regulation 10*Double Bottoms*

(a) A double bottom shall be fitted extending from the forepeak bulkhead to the afterpeak bulkhead as far as this is practicable and compatible with the design and proper working of the ship.

(i) In ships 165 feet (or 50 metres) and under 200 feet (or 61 metres) in length a double bottom shall be fitted at least from the machinery space to the forepeak bulkhead, or as near thereto as practicable.

(ii) In ships 200 feet (or 61 metres) and under 249 feet (or 76 metres) in length a double bottom shall be fitted at least outside the machinery space, and shall extend to the fore and after peak bulkheads, or as near thereto as practicable.

(iii) In ships 249 feet (or 76 metres) in length and upwards a double bottom shall be fitted amidships, and shall extend to the fore and after peak bulkheads, or as near thereto as practicable.

(b) Where a double bottom is required to be fitted its depth shall be to the satisfaction of the Administration and the inner bottom shall be continued out to the ship's sides in such a manner as to protect the bottom to the turn of the bilge. Such protection will be deemed satisfactory if the line of intersection of the outer edge of the margin plate with the bilge plating is not lower at any part than a horizontal plane passing through the point of intersection with the frame line amidships of a transverse diagonal line inclined at 25 degrees to the base line and cutting it at a point one-half the ship's moulded breadth from the middle line.

(c) Small wells constructed in the double bottom in connection with drainage arrangements of holds, &c., shall not extend downwards more than necessary. The depth of the well shall in no case be more than the depth less 18 inches (or 457 millimetres) of the double bottom at the centreline, nor shall the well extend below the horizontal plane referred to in paragraph (b) of this Regulation. A well extending to the outer bottom is, however, permitted at the after end of the shaft tunnel of screw ships. Other wells (e.g., for lubricating oil under main engines) may be permitted by the Administration if satisfied that the arrangements give protection equivalent to that afforded by a double bottom complying with this Regulation.

(d) A double bottom need not be fitted in way of watertight compartments of moderate size used exclusively for the carriage of liquids, provided the safety of the ship, in the event of bottom or side damage, is not, in the opinion of the Administration, thereby impaired.

(e) In the case of ships to which the provisions of paragraph (d) of Regulation 1 of this Chapter apply and which are engaged on regular service within the limits of a short international voyage as defined in Regulation 2 of Chapter III, the Administration may permit a double bottom to be dispensed with in any part of the ship which is subdivided by a factor not exceeding .50, if satisfied that the fitting of a double bottom in that part would not be compatible with the design and proper working of the ship.

Regulation 11*Assigning, Marking and Recording of Subdivision Loadlines*

(a) In order that the required degree of subdivision shall be maintained, a loadline corresponding to the approved subdivision draught shall be assigned and marked on the ship's sides. A ship having spaces which are specially adapted for the accommodation of passengers and the carriage of cargo alternatively may, if the owners desire, have one or more additional loadlines assigned and marked to correspond with the subdivision draughts which the Administration may approve for the alternative service conditions.

(b) The subdivision loadlines assigned and marked shall be recorded in the Passenger Ship Safety Certificate, and shall be distinguished by the notation C.1 for the principal passenger condition, and C.2, C.3, &c., for the alternative conditions.

(c) The freeboard corresponding to each of these loadlines shall be measured at the same position and from the same deck line as the freeboards determined in accordance with the International Convention respecting Load Lines in force.

(d) The freeboard corresponding to each approved subdivision loadline and the conditions of service for which it is approved, shall be clearly indicated on the Passenger Ship Safety Certificate.

(e) In no case shall any subdivision loadline mark be placed above the deepest loadline in salt water as determined by the strength of the ship and/or the International Convention respecting Load Lines in force.

(f) Whatever may be the position of the subdivision loadline marks, a ship shall in no case be loaded so as to submerge the loadline mark appropriate to the season and locality as determined in accordance with the International Convention respecting Load Lines in force.

(g) A ship shall in no case be so loaded that when she is in salt water the subdivision loadline mark appropriate to the particular voyage and condition of service is submerged.

Regulation 12*Construction and Initial Testing of Watertight Bulkheads, &c.*

(a) Each watertight subdivision bulkhead, whether transverse or longitudinal, shall be constructed in such a manner that it shall be capable of supporting, with a proper margin of resistance, the pressure due to the maximum head of water which it might have to sustain in the event of damage to the ship but at least the pressure due to a head of water up to the margin line. The construction of these bulkheads shall be to the satisfaction of the Administration.

(b) (i) Steps and recesses in bulkheads shall be watertight and as strong as the bulkhead at the place where each occurs.

(ii) Where frames or beams pass through a watertight deck or bulkhead, such deck or bulkhead shall be made structurally watertight without the use of wood or cement.

(c) Testing main compartments by filling them with water is not compulsory. When testing by filling with water is not carried out, a hose test is compulsory; this test shall be carried out in the most advanced stage of the fitting out of the ship. In any case, a thorough inspection of the watertight bulkheads shall be carried out.

(d) The forepeak, double bottoms (including duct keels) and inner skins shall be tested with water to a head corresponding to the requirements of paragraph (a) of this Regulation.

(e) Tanks which are intended to hold liquids, and which form part of the subdivision of the ship, shall be tested for tightness with water to a head up to the deepest subdivision loadline or to a head corresponding to two-thirds of the depth from the top of keel to the margin line in way of the tanks, whichever is the greater; provided that in no case shall the test head be less than 3 feet (or 0.92 metres) above the top of the tank.

(f) The tests referred to in paragraphs (d) and (e) of this Regulation are for the purpose of ensuring that the subdivision structural arrangements are watertight and are not to be regarded as a test of the fitness of any compartment for the storage of oil fuel or for other special purposes for which a test of a superior character may be required depending on the height to which the liquid has access in the tank or its connections.

Regulation 13*Openings in Watertight Bulkheads*

(a) The number of openings in watertight bulkheads shall be reduced to the minimum compatible with the design and proper working of the ship; satisfactory means shall be provided for closing these openings.

(b) (i) Where pipes, scuppers, electric cables, &c., are carried through watertight subdivision bulkheads, arrangements shall be made to ensure the integrity of the watertightness of the bulkheads.

(ii) Valves and cocks not forming part of a piping system shall not be permitted in watertight subdivision bulkheads.

(iii) Lead or other heat sensitive materials shall not be used in systems which penetrate watertight subdivision bulkheads, where deterioration of such systems in the event of fire would impair the watertight integrity of the bulkheads.

(c) (i) No doors, manholes, or access openings are permitted:—

(1) in the collision bulkhead below the margin line;

(2) in watertight transverse bulkheads dividing a cargo space from an adjoining cargo space or from a permanent or reserve bunker, except as provided in paragraph (f) of this Regulation.

(ii) Except as provided in sub-paragraph (iii) of this paragraph, the collision bulkhead may be pierced below the margin line by not more than one pipe for dealing with fluid in the forepeak tank, provided that the pipe is fitted with a screwdown valve capable of being operated from above the bulkhead deck, the valve chest being secured inside the forepeak to the collision bulkhead.

(iii) If the forepeak is divided to hold two different kinds of liquids the Administration may allow the collision bulkhead to be pierced below the margin line by two pipes, each of which is fitted as required by sub-paragraph (ii) of this paragraph, provided the Administration is satisfied that there is no practical alternative to the fitting of such a second pipe and that, having regard to the additional subdivision provided in the forepeak, the safety of the ship is maintained.

(d) (i) Watertight doors fitted in bulkheads between permanent and reserve bunkers shall be always accessible, except as provided in sub-paragraph (ii) of paragraph (k) of this Regulation for between deck bunker doors.

(ii) Satisfactory arrangements shall be made by means of screens or otherwise to prevent the coal from interfering with the closing of watertight bunker doors.

(e) Within spaces containing the main and auxiliary propelling machinery including boilers serving the needs of propulsion and all permanent bunkers, not more than one door apart from the doors to bunkers and shaft tunnels may be fitted in each main transverse bulkhead. Where two or more shafts are fitted the tunnels shall be connected by an inter-communicating passage. There shall be only one door between the machinery space and the tunnel spaces where two shafts are fitted and only two doors where there are more than two shafts. All these doors shall be of the sliding type and shall be located so as to have their sills as high as practicable. The hand gear for operating these doors from above the bulkhead deck shall be situated outside the spaces containing the machinery if this is consistent with a satisfactory arrangement of the necessary gearing.

(f) (i) Watertight doors shall be sliding doors or hinged doors or doors of an equivalent type. Plate doors secured only by bolts and doors required to be closed by dropping or by the action of a dropping weight are not permitted.

(ii) Sliding doors may be either:—

hand operated only, or
power operated as well as hand operated.

(iii) Authorized watertight doors may therefore be divided into three Classes:—

Class 1—hinged doors;

Class 2—hand operated sliding doors;

Class 3—sliding doors which are power operated as well as hand operated.

(iv) The means of operation of any watertight door whether power operated or not shall be capable of closing the door with the ship listed to 15 degrees either way.

(v) In all classes of watertight doors indicators shall be fitted which show, at all operating stations from which the doors are not visible, whether the doors are open or closed. If any of the watertight doors, of whatever Class, is not fitted so as to enable it to be closed from a central control station, it shall be provided with a mechanical, electrical, telephonic, or any other suitable direct means of communication, enabling the officer of the watch promptly to contact the person who is responsible for closing the door in question, under previous orders.

(g) Hinged doors (Class 1) shall be fitted with quick action closing devices, such as catches, workable from each side of the bulkhead.

(h) Hand operated sliding doors (Class 2) may have a horizontal or vertical motion. It shall be possible to operate the mechanism at the door itself from either side, and in addition, from an accessible position above the bulkhead deck, with an all round crank motion, or some other movement providing the same guarantee of safety and of an approved type. Departures from the requirement of operation on both sides may be allowed, if this requirement is impossible owing to the layout of the spaces. When operating a hand gear the time necessary for the complete closure of the door with the vessel upright, shall not exceed 90 seconds.

(i) (i) Power operated sliding doors (Class 3) may have a vertical or horizontal motion. If a door is required to be power operated from a central control, the gearing shall be so arranged that the door can be operated by power also at the door itself from both sides. The arrangement shall be such that the door will close automatically if opened by local control after being closed from the central control, and also such that any door can be kept closed by local systems which will prevent the door from being opened from the upper control. Local control handles in connection with the power gear shall be provided each side of the bulkhead and shall be so arranged as to enable persons passing through the doorway to hold both handles in the open position without being able to set the closing mechanism in operation accidentally. Power operated sliding doors shall be provided with hand gear workable at the door itself on either side and from an accessible position

above the bulkhead deck, with an all round crank motion or some other movement providing the same guarantee of safety and of an approved type. Provision shall be made to give warnings by sound signal that the door has begun to close and will continue to move until it is completely closed. The door shall take a sufficient time to close to ensure safety.

(ii) There shall be at least two independent power sources capable of opening and closing all the doors under control, each of them capable of operating all the doors simultaneously. The two power sources shall be controlled from the central station on the bridge provided with all the necessary indicators for checking that each of the two power sources is capable of giving the required service satisfactorily.

(iii) In the case of hydraulic operation, each power source shall consist of a pump capable of closing all doors in not more than 60 seconds. In addition, there shall be for the whole installation hydraulic accumulators of sufficient capacity to operate all the doors at least three times, *i.e.*, closed—open—closed. The fluid used shall be one which does not freeze at any of the temperatures liable to be encountered by the ship during its service.

(j) (i) Hinged watertight doors (Class 1) in passenger, crew and working spaces are only permitted above a deck the underside of which, at its lowest point at side, is at least 7 feet (or 2.13 metres) above the deepest subdivision loadline.

(ii) Watertight doors, the sills of which are above the deepest loadline and below the line specified in the preceding sub-paragraph shall be sliding doors and may be hand operated (Class 2), except in vessels engaged on short international voyages and required to have a factor of subdivision of .50 or less in which all such doors shall be power operated. When trunkways in connection with refrigerated cargo and ventilation or forced draught ducts are carried through more than one main watertight subdivision bulkhead, the doors at such openings shall be operated by power.

(k) (i) Watertight doors which may sometimes be opened at sea, and the sills of which are below the deepest subdivision loadline shall be sliding doors. The following rules shall apply:—

(1) when the number of such doors (excluding doors at entrances to shaft tunnels) exceeds five, all of these doors and those at the entrance to shaft tunnels or ventilation or forced draught ducts, shall be power operated (Class 3) and shall be capable of being simultaneously closed from a central station situated on the bridge;

(2) when the number of such doors (excluding doors at entrances to shaft tunnels) is greater than one, but does not exceed five,

(a) where the ship has no passenger spaces below the bulkhead deck, all the above mentioned doors may be hand operated (Class 2);

(b) where the ship has passenger spaces below the bulkhead deck all the above mentioned doors shall be power operated (Class 3) and shall be capable of being simultaneously closed from a central station situated on the bridge;

(3) in any ship where there are only two such watertight doors and they are into or within the space containing machinery, the Administration may allow these two doors to be hand operated only (Class 2).

(ii) If sliding watertight doors which have sometimes to be open at sea for the purpose of trimming coal are fitted between bunkers in the between decks below the bulkhead deck, these doors shall be operated by power. The opening and closing of these doors shall be recorded in such log book as may be prescribed by the Administration.

(f) (i) If the Administration is satisfied that such doors are essential, watertight doors of satisfactory construction may be fitted in watertight bulkheads dividing cargo between deck spaces. Such doors may be hinged, rolling or sliding doors but shall not be remotely controlled. They shall be fitted at the highest level and as far from the shell plating as practicable, but in no case shall the outboard vertical edges be situated at a distance from the shell plating which is less than one-fifth of the breadth of the ship, as defined in Regulation 2 of this Chapter, such distance being measured at right angles to the centre line of the ship at the level of the deepest subdivision loadline.

(ii) Such doors shall be closed before the voyage commences and shall be kept closed during navigation; and the time of opening such doors in port and of closing them before the ship leaves port shall be entered in the log book. Should any of the doors be accessible during the voyage, they shall be fitted with a device which prevents unauthorized opening. When it is proposed to fit such doors, the number and arrangements shall receive the special consideration of the Administration.

(m) Portable plates on bulkheads shall not be permitted except in machinery spaces. Such plates shall always be in place before the ship leaves port, and shall not be removed during navigation except in case of urgent necessity. The necessary precautions shall be taken in replacing them to ensure that the joints shall be watertight.

(n) All watertight doors shall be kept closed during navigation except when necessarily opened for the working of the ship, and shall always be ready to be immediately closed.

(o) (i) Where trunkways or tunnels for access from crew accommodation to the stokehold, for piping, or for any other purpose are carried through main transverse watertight bulkheads, they shall be watertight and in accordance with the requirements of Regulation 16 of this Chapter. The access to at least one end of each such tunnel or trunkway, if used as a passage at sea, shall be through a trunk extending watertight to a height sufficient to permit access above the margin line. The access to the other end of the trunkway or tunnel may be through a watertight door of the type required by its location in the ship. Such trunkways or tunnels shall not extend through the first subdivision bulkhead abaft the collision bulkhead.

(ii) Where it is proposed to fit tunnels or trunkways for forced draught, piercing main transverse watertight bulkheads, these shall receive the special consideration of the Administration.

Regulation 14

Openings in the Shell Plating below the Margin Line

(a) The number of openings in the shell plating shall be reduced to the minimum compatible with the design and proper working of the ship.

(b) The arrangement and efficiency of the means for closing any opening in the shell plating shall be consistent with its intended purpose and the position in which it is fitted and generally to the satisfaction of the Administration.

(c) (i) If in a between decks, the sills of any sidescuttles are below a line drawn parallel to the bulkhead deck at side and having its lowest point $2\frac{1}{2}$ per cent. of the breadth of the ship above the deepest subdivision loadline, all sidescuttles in that between deck shall be of the non-opening type.

(ii) All sidescuttles the sills of which are below the margin line, other than those required to be of a non-opening type by sub-paragraph (i) of this paragraph, shall be of such construction as will effectively prevent any person opening them without the consent of the master of the ship.

(iii) (1) Where in a between decks, the sills of any of the sidescuttles referred to in sub-paragraph (ii) of this paragraph are below a line drawn parallel to the bulkhead deck at side and having its lowest point $4\frac{1}{2}$ feet (or 1.37 metres) plus $2\frac{1}{2}$ per cent. of the breadth of the ship above the water when the ship departs from any port, all the sidescuttles in that between decks shall be closed watertight and locked before the ship leaves port, and they shall not be opened before the ship arrives at the next port. In the application of this sub-paragraph the appropriate allowance for fresh water may be made when applicable.

(2) The time of opening such sidescuttles in port and of closing and locking them before the ship leaves port shall be entered in such log book as may be prescribed by the Administration.

(3) For any ship that has one or more sidescuttles so placed that the requirements of clause (1) of this sub-paragraph would apply when she was floating at her deepest subdivision loadline, the Administration may indicate the limiting mean draught at which these sidescuttles will have their sills above the line drawn parallel to the bulkhead deck at side, and having its lowest point $4\frac{1}{2}$ feet (or 1.37 metres) plus $2\frac{1}{2}$ per cent. of the breadth of the ship above the waterline corresponding to the limiting mean draught, and at which it will therefore be permissible to depart from port without previously closing and locking them and to open them at sea on the responsibility of the master during the voyage to the next port. In tropical zones as defined in the International Convention respecting Load Lines in force, this limiting draught may be increased by 1 foot (or 0.305 metres).

(d) Efficient hinged inside deadlights arranged so that they can be easily and effectively closed and secured watertight shall be fitted to all sidescuttles except that abaft one-eighth of the ship's length from the forward perpendicular and above a line drawn parallel to the bulkhead deck at side and having its lowest point at a height of 12 feet (or 3.66 metres) plus $2\frac{1}{2}$ per cent. of the breadth of the ship above the deepest subdivision loadline, the deadlights may be portable in passenger accommodation other than that for stowage passengers, unless the deadlights are required by the International Convention respecting Load Lines in force to be permanently attached in their proper positions. Such portable deadlights shall be stowed adjacent to the sidescuttles they serve.

(e) Sidescuttles and their deadlights, which will not be accessible during navigation, shall be closed and secured before the ship leaves port.

(f) (i) No sidescuttles shall be fitted in any spaces which are appropriated exclusively to the carriage of cargo or coal.

(ii) Sidescuttles may, however, be fitted in spaces appropriated alternatively to the carriage of cargo or passengers, but they shall be of such construction as will effectively prevent any person opening them or their deadlights without the consent of the master of the ship.

(iii) If cargo is carried in such spaces, the sidescuttles and their deadlights shall be closed watertight and locked before the cargo is shipped and such closing and locking shall be recorded in such log book as may be prescribed by the Administration.

(g) Automatic ventilating sidescuttles shall not be fitted in the shell plating below the margin line without the special sanction of the Administration.

(h) The number of scuppers, sanitary discharges and other similar openings in the shell plating shall be reduced to the minimum either by making each discharge serve for as many as possible of the sanitary and other pipes, or in any other satisfactory manner.

(i) (i) All inlets and discharges in the shell plating shall be fitted with efficient and accessible arrangements for preventing the accidental admission of water into the ship. Lead or other heat sensitive materials shall not be used for pipes fitted outboard of shell valves in inlets or discharges, or any other application where the deterioration of such pipes in the event of fire would give rise to danger of flooding.

(ii) (1) Except as provided in sub-paragraph (iii) of this paragraph, each separate discharge led through the shell plating from spaces below the margin line shall be provided either with one automatic non-return valve fitted with a positive means of closing it from above the bulkhead deck, or, alternatively, with two automatic non-return valves without such means, the upper of which is so situated above the deepest subdivision loadline as to be always accessible for examination under service conditions, and is of a type which is normally closed.

(2) Where a valve with positive means of closing is fitted, the operating position above the bulkhead deck shall always be readily accessible, and means shall be provided for indicating whether the valve is open or closed.

(iii) Main and auxiliary sea inlets and discharges in connection with machinery shall be fitted with readily accessible cocks or valves between the pipes and shell plating or between the pipes and fabricated boxes attached to the shell plating.

(j) (i) Gangway, cargo and coaling ports fitted below the margin line shall be of sufficient strength. They shall be effectively closed and secured watertight before the ship leaves port, and shall be kept closed during navigation.

(ii) Such ports shall be in no case fitted so as to have their lowest point below the deepest subdivision loadline.

(k) (i) The inboard opening of each ash-shoot, rubbish-shoot, &c. shall be fitted with an efficient cover.

(ii) If the inboard opening is situated below the margin line, the cover shall be watertight, and in addition an automatic non-return valve shall be fitted in the shoot in an easily accessible position above the deepest subdivision loadline. When the shoot is not in use both the cover and the valve shall be kept closed and secured.

Regulation 15

Construction and Initial Tests of Watertight Doors, Sidescuttles, &c.

(a) (i) The design, materials and construction of all watertight doors, sidescuttles, gangway, cargo and coaling ports, valves, pipes, ash-shoots and rubbish-shoots referred to in these Regulations shall be to the satisfaction of the Administration.

(ii) The frames of vertical watertight doors shall have no groove at the bottom in which dirt might lodge and prevent the door closing properly.

(iii) All cocks and valves for sea inlets and discharges below the bulkhead deck and all fittings outboard of such cocks and valves shall be made of steel, bronze or other approved ductile material. Ordinary cast iron or similar materials shall not be used.

(b) Each watertight door shall be tested by water pressure to a head up to the bulkhead deck. The test shall be made before the ship is put in service, either before or after the door is fitted.

Regulation 16

Construction and Initial Tests of Watertight Decks, Trunks, &c.

(a) Watertight decks, trunks, tunnels, duct keels and ventilators shall be of the same strength as watertight bulkheads at corresponding levels. The means used for making them watertight, and the arrangements adopted for closing openings in them, shall be to the satisfaction of the Administration. Watertight ventilators and trunks shall be carried at least up to the bulkhead deck.

(b) After completion, a hose or flooding test shall be applied to watertight decks and a hose test to watertight trunks, tunnels and ventilators.

Regulation 17

Watertight Integrity above the Margin Line

(a) The Administration may require that all reasonable and practicable measures shall be taken to limit the entry and spread of water above the bulkhead deck. Such measures may include partial bulkheads or webs. When partial watertight bulkheads and webs are fitted on the bulkhead deck, above or in the immediate vicinity of main subdivision bulkheads, they shall have watertight shell and bulkhead deck connections so as to restrict the flow of water along the deck when the ship is in a heeled damaged condition. Where the partial watertight bulkhead does not line up with the bulkhead below, the bulkhead deck between shall be made effectively watertight.

(b) The bulkhead deck or a deck above it shall be weathertight in the sense that in ordinary sea conditions water will not penetrate in a downward direction. All openings in the exposed weather deck shall have coamings of ample height and strength and shall be provided with efficient means

for expeditiously closing them weathertight. Freeing ports, open rails and/or scuppers shall be fitted as necessary for rapidly clearing the weather deck of water under all weather conditions.

(c) Sidescuttles, gangway, cargo and coaling ports and other means for closing openings in the shell plating above the margin line shall be of efficient design and construction and of sufficient strength having regard to the spaces in which they are fitted and their positions relative to the deepest subdivision loadline.

(d) Efficient inside deadlights, arranged so that they can be easily and effectively closed and secured watertight, shall be provided for all sidescuttles to spaces below the first deck above the bulkhead deck.

Regulation 18

Bilge Pumping Arrangements in Passenger Ships

(a) Ships shall be provided with an efficient bilge pumping plant capable of pumping from and draining any watertight compartment which is neither a permanent oil compartment nor a permanent water compartment under all practicable conditions after a casualty whether the ship is upright or listed. For this purpose wing suction will generally be necessary except in narrow compartments at the ends of the ship, where one suction may be sufficient. In compartments of unusual form, additional suction may be required. Arrangements shall be made whereby water in the compartment may find its way to the suction pipes. Where in relation to particular compartments the Administration is satisfied that the provision of drainage may be undesirable, it may allow such provision to be dispensed with if calculations made in accordance with the conditions laid down in paragraph (b) of Regulation 7 of this Chapter show that the safety of the ship will not be impaired. Efficient means shall be provided for draining water from insulated holds.

(b) (i) Ships shall have at least three power pumps connected to the bilge main, one of which may be attached to the propelling unit. Where the criterion numeral is 30 or more, one additional independent power pump shall be provided.

(ii) The requirements are summarised in the following table:—

Criterion numeral	Less than 30	30 and over
Main engine pump (may be replaced by one independent pump)	1	1
Independent pumps	2	3

(iii) Sanitary, ballast and general service pumps may be accepted as independent power bilge pumps if fitted with the necessary connections to the bilge pumping system.

(c) Where practicable, the power bilge pumps shall be placed in separate watertight compartments so arranged or situated that these compartments will not readily be flooded by the same damage. If the engines and boilers are in two or more watertight compartments, the pumps available for bilge service shall be distributed throughout these compartments as far as is possible.

(d) On ships 300 feet (or 91.5 metres) or more in length or having a criterion numeral of 30 or more, the arrangements shall be such that at least one power pump shall be available for use in all ordinary circumstances in which a ship may be flooded at sea. This requirement will be satisfied if:—

- (i) one of the required pumps is an emergency pump of a reliable submersible type having a source of power situated above the bulkhead deck; or
- (ii) the pumps and their sources of power are so disposed throughout the length of the ship that under any condition of flooding which the ship is required to withstand, at least one pump in an undamaged compartment will be available.

(e) With the exception of additional pumps which may be provided for peak compartments only, each required bilge pump shall be arranged to draw water from any space required to be drained by paragraph (a) of this Regulation.

(f) (i) Each power bilge pump shall be capable of giving a speed of water through the required main bilge pipe of not less than 400 feet (or 122 metres) per minute. Independent power bilge pumps situated in machinery spaces shall have direct suction from these spaces, except that not more than two such suction shall be required in any one space. Where two or more such suction are provided there shall be at least one on the port side and one on the starboard side. The Administration may require independent power bilge pumps situated in other spaces to have separate direct suction. Direct suction shall be suitably arranged and those in a machinery space shall be of a diameter not less than that required for the bilge main.

(ii) In coal-burning ships there shall be provided in the stokehold, in addition to the other suction required by this Regulation, a flexible suction hose of suitable diameter and sufficient length, capable of being connected to the suction side of an independent power pump.

(g) (i) In addition to the direct bilge suction or suctions required by paragraph (f) of this Regulation there shall be in the machinery space a direct suction from the main circulating pump leading to the drainage level of the machinery space and fitted with a non-return valve. The diameter of this direct suction pipe shall be at least two-thirds of the diameter of the pump inlet in the case of steamships, and of the same diameter as the pump inlet in the case of motorships.

(ii) Where in the opinion of the Administration the main circulating pump is not suitable for this purpose, a direct emergency bilge suction shall be led from the largest available independent power driven pump to the drainage level of the machinery space; the suction shall be of the same diameter as the main inlet of the pump used. The capacity of the pump so connected shall exceed that of a required bilge pump by an amount satisfactory to the Administration.

(iii) The spindles of the sea inlet and direct suction valves shall extend well above the engine room platform.

(iv) Where the fuel is, or may be, coal and there is no watertight bulkhead between the engines and the boilers, a direct discharge overboard or alternatively a by-pass to the circulating pump discharge, shall be fitted from any circulating pump used in compliance with sub-paragraph (i) of this paragraph.

(h) (i) All pipes from the pumps which are required for draining cargo or machinery spaces shall be entirely distinct from pipes which may be used for filling or emptying spaces where water or oil is carried.

(ii) All bilge pipes used in or under coal bunkers or fuel storage tanks or in boiler or machinery spaces, including spaces in which oil-settling tanks or oil fuel pumping units are situated, shall be of steel or other approved material.

(i) The diameter of the bilge main shall be calculated according to the following formulae provided that the actual internal diameter of the bilge main may be of the nearest standard size acceptable to the Administration:

$$d = \sqrt{\frac{L (B+D)}{2,500}} + 1$$

where d = internal diameter of the bilge main in inches

L = length of ship in feet

B = breadth of ship in feet

D = moulded depth of ship to bulkhead deck in feet;

or

$$d = 1.68 \sqrt{L (B+D)} + 25$$

where d = internal diameter of the bilge main in millimetres

L = length of ship in metres

B = breadth of ship in metres

D = moulded depth of ship to bulkhead deck in metres.

The diameter of the bilge branch pipes shall be determined by rules to be made by the Administration.

(j) The arrangement of the bilge and ballast pumping system shall be such as to prevent the possibility of water passing from the sea and from water ballast spaces into the cargo and machinery spaces, or from one compartment to another. Special provision shall be made to prevent any deep tank having bilge and ballast connections being inadvertently run up from the sea when containing cargo, or pumped out through a bilge pipe when containing water ballast.

(k) Provision shall be made to prevent the compartment served by any bilge suction pipe being flooded in the event of the pipe being severed, or otherwise damaged by collision or grounding in any other compartment. For this purpose, where the pipe is at any part situated nearer the side of the ship than one-fifth the breadth of the ship (measured at right angles to the centre line at the level of the deepest subdivision load line), or in a duct keel, a non-return valve shall be fitted to the pipe in the compartment containing the open end.

(l) All the distribution boxes, cocks and valves in connection with the bilge pumping arrangements shall be in positions which are accessible at all times under ordinary circumstances. They shall be so arranged that, in the event of flooding, one of the bilge pumps may be operative on any compartment; in addition, damage to a pump or its pipe connecting to the bilge main outboard of a line drawn at one-fifth of the breadth of the ship shall not put the bilge system out of action. If there is only one system of pipes common to all the pumps, the necessary cocks or valves for controlling the bilge suctions must be capable of being operated from above the bulkhead deck. Where in addition to the main bilge pumping system an emergency bilge pumping system is provided, it shall be independent of the main system and so arranged that a pump is capable of operating on any compartment under flooding conditions; in that case only the cocks and valves necessary for the operation of the emergency system need be capable of being operated from above the bulkhead deck.

(m) All cocks and valves mentioned in paragraph (l) of this Regulation which can be operated from above the bulkhead deck shall have their controls at their place of operation clearly marked and provided with means to indicate whether they are open or closed.

Regulation 19

Stability Information for Passenger Ships and Cargo Ships

(a) Every passenger ship and cargo ship shall be inclined upon its completion and the elements of its stability determined. The master shall be supplied with such reliable information as is necessary to enable him by rapid and simple processes to obtain accurate guidance as to the stability of the ship under varying conditions of service, and a copy shall be furnished to the Administration.

(b) Where any alterations are made to a ship so as to materially affect the stability information supplied to the master, amended stability information shall be provided. If necessary the ship shall be re-inclined.

(c) The Administration may allow the inclining test of an individual ship to be dispensed with provided basic stability data are available from the inclining test of a sister ship and it is shown to the satisfaction of the Administration that reliable stability information for the exempted ship can be obtained from such basic data.

(d) The Administration may also allow the inclining test of an individual ship or class of ships, especially designed for the carriage of liquids or ore in bulk, to be dispensed with when reference to existing data for similar ships clearly indicate that due to the ship's proportions and arrangements more than sufficient metacentric height will be available in all probable loading conditions.

Regulation 20

Damage Control Plans

There shall be permanently exhibited, for the guidance of the officer in charge of the ship, plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.

Regulation 21

Marking, Periodical Operation and Inspection of Watertight Doors, &c.

(a) This Regulation applies to new and existing ships.

(b) Drills for the operating of watertight doors, sidescuttles, valves and closing mechanisms of scuppers, ash-shoots and rubbish-shoots shall take place weekly. In ships in which the voyage exceeds one week in duration

a complete drill shall be held before leaving port, and others thereafter at least once a week during the voyage. In all ships all watertight power doors and hinged doors, in main transverse bulkheads, in use at sea, shall be operated daily.

(c) (i) The watertight doors and all mechanisms and indicators connected therewith, all valves the closing of which is necessary to make a compartment watertight, and all valves the operation of which is necessary for damage control cross connections shall be periodically inspected at sea at least once a week.

(ii) Such valves, doors and mechanisms shall be suitably marked to ensure that they may be properly used to provide maximum safety.

Regulation 22

Entries in Log

(a) This Regulation applies to new and existing ships.

(b) Hinged doors, portable plates, sidescuttles, gangway, cargo and coaling ports and other openings, which are required by these Regulations to be kept closed during navigation, shall be closed before the ship leaves port. The time of closing and the time of opening (if permissible under these Regulations) shall be recorded in such log book as may be prescribed by the Administration.

(c) A record of all drills and inspections required by Regulation 21 of this Chapter shall be entered in the log book with an explicit record of any defects which may be disclosed.

PART C.—MACHINERY AND ELECTRICAL INSTALLATIONS

(Part C applies to passenger ships and cargo ships)

Regulation 23

General

(a) Electrical installations in passenger ships shall be such that:—

- (i) services essential for safety will be maintained under various emergency conditions; and
- (ii) the safety of passengers, crew and ship from electrical hazards will be assured.

(b) Cargo ships shall comply with Regulations 26, 27, 28, 29, 30 and 33 of this Chapter.

Regulation 24*Main Source of Electrical Power in Passenger Ships*

(a) Every passenger ship, the electrical power of which constitutes the only means of maintaining the auxiliary services indispensable for the propulsion and the safety of the ship, shall be provided with at least two main generating sets. The power of these sets shall be such that it shall still be possible to ensure the functioning of the services referred to in subparagraph (a) (i) of Regulation 23 of this Chapter in the event of any one of these generating sets being stopped.

(b) In a passenger ship where there is only one main generating station, the main switchboard shall be located in the same main fire zone. Where there is more than one main generating station, it is permissible to have only one main switchboard.

Regulation 25*Emergency Source of Electrical Power in Passenger Ships*

(a) There shall be above the bulkhead deck and outside the machinery casings a self-contained emergency source of electrical power. Its location in relation to the main source or sources of electrical power shall be such as to ensure to the satisfaction of the Administration that a fire or other casualty to the machinery space as defined in paragraph (h) of Regulation 2 of this Chapter will not interfere with the supply or distribution of emergency power. It shall not be forward of the collision bulkhead.

(b) The power available shall be sufficient to supply all those services that are, in the opinion of the Administration, necessary for the safety of the passengers and the crew in an emergency, due regard being paid to such services as may have to be operated simultaneously. Special consideration shall be given to emergency lighting at every boat station, on deck and oversides, in all alleyways, stairways and exits, in the machinery spaces and in the control stations as defined in paragraph (f) of Regulation 35 of this Chapter, to the sprinkler pump, to navigation lights, and to the daylight signalling lamp if operated from the main source of power. The power shall be adequate for a period of 36 hours, except that, in the case of ships engaged regularly on voyages of short duration, the Administration may accept a lesser supply if satisfied that the same standard of safety would be attained.

(c) The emergency source of power may be either:—

- (i) a generator driven by a suitable prime-mover with an independent fuel supply and with approved starting arrangements; the fuel used shall have a flash point of not less than 110°F. (or 43°C.); or

- (ii) an accumulator (storage) battery capable of carrying the emergency load without recharging or excessive voltage drop.

(d) (i) Where the emergency source of power is a generator there shall be provided a temporary source of emergency power consisting of an accumulator battery of sufficient capacity:—

- (1) to supply emergency lighting continuously for half an hour;
- (2) to close the watertight doors (if electrically operated) but not necessarily to close them all simultaneously;
- (3) to operate the indicators (if electrically operated) which show whether power operated watertight doors are open or closed; and
- (4) to operate the sound signals (if electrically operated) which give warning that power operated watertight doors are about to close.

The arrangements shall be such that the temporary source of emergency power will come into operation automatically in the event of failure of the main electrical supply.

(ii) Where the emergency source of power is an accumulator battery, arrangements shall be made to ensure that emergency lighting will automatically come into operation in the event of failure of the main lighting supply.

(e) An indicator shall be mounted in the machinery space, preferably on the main switchboard, to indicate when any accumulator battery fitted in accordance with this Regulation is being discharged.

(f) (i) The emergency switchboard shall be installed as near as is practicable to the emergency source of power.

(ii) Where the emergency source of power is a generator, the emergency switchboard shall be located in the same space as the emergency source of power, unless the operation of the emergency switchboard would thereby be impaired.

(iii) No accumulator battery fitted in accordance with this Regulation shall be installed in the same space as the emergency switchboard.

(iv) The Administration may permit the emergency switchboard to be supplied from the main switchboard in normal operation.

(g) Arrangements shall be such that the complete emergency installation will function when the ship is inclined 22½ degrees and/or when the trim of the ship is 10 degrees.

(h) Provision shall be made for the periodic testing of the emergency source of power and the temporary source of power, if provided, which shall include the testing of automatic arrangements.

Regulation 26*Emergency Source of Electrical Power in Cargo Ships**(a) Cargo ships of 5,000 Tons Gross Tonnage and upwards*

(i) In cargo ships of 5,000 tons gross tonnage and upwards there shall be a self-contained emergency source of power, located to the satisfaction of the Administration above the uppermost continuous deck and outside the machinery casings, to ensure its functioning in the event of fire or other casualty causing failure to the main electrical installation.

(ii) The power available shall be sufficient to supply all those services which are, in the opinion of the Administration, necessary for the safety of all on board in an emergency, due regard being paid to such services as may have to be operated simultaneously. Special consideration shall be given to:—

- (1) emergency lighting at every boat station on deck and oversides, in all alleyways, stairways and exits, in the main machinery space and main generating set space, on the navigating bridge and in the chartroom;
- (2) the general alarm; and
- (3) navigation lights if solely electric, and the daylight signalling lamp if operated by the main source of electrical power.

The power shall be adequate for a period of 6 hours.

(iii) The emergency source of power may be either:—

- (1) an accumulator (storage) battery capable of carrying the emergency load without recharging or excessive voltage drop; or
- (2) a generator driven by a suitable prime-mover with an independent fuel supply and with starting arrangements to the satisfaction of the Administration. The fuel used shall have a flash point of not less than 110°F. (or 43°C.).

(iv) Arrangements shall be such that the complete emergency installation will function when the ship is inclined 22½ degrees and/or when the trim of the ship is 10 degrees.

(v) Provision shall be made for the periodic testing of the complete emergency installation.

(b) Cargo ships of less than 5,000 Tons Gross Tonnage

(i) In cargo ships of less than 5,000 tons gross tonnage there shall be a self-contained emergency source of power located to the satisfaction of the Administration, and capable of supplying the illumination at launching stations and stowage positions of survival craft prescribed in sub-paragraphs

(a) (ii), (b) (ii) and (b) (iii) of Regulation 19 of Chapter III, and in addition such other services as the Administration may require, due regard being paid to Regulation 38 of Chapter III.

(ii) The power available shall be adequate for a period of at least 3 hours.

(iii) These ships shall also be subject to sub-paragraphs (iii), (iv), and (v) of paragraph (a) of this Regulation.

Regulation 27*Precautions against Shock, Fire and other Hazards of Electrical Origin**(a) Passenger Ships and Cargo Ships*

(i) (1) All exposed metal parts of electrical machines or equipment which are not intended to be "live", but are liable to become "live" under fault conditions, shall be earthed (grounded); and all electrical apparatus shall be so constructed and so installed that danger of injury in ordinary handling shall not exist.

(2) Metal frames of all portable electric lamps, tools and similar apparatus, supplied as ship's equipment and rated in excess of a safety voltage to be prescribed by the Administration shall be earthed (grounded) through a suitable conductor, unless equivalent provisions are made such as by double insulation or by an isolating transformer. The Administration may require additional special precautions for electric lamps, tools or similar apparatus for use in damp spaces.

(ii) Main and emergency switchboards shall be so arranged as to give easy access back and front, without danger to attendants. The sides and backs and, where necessary, the fronts of switchboards shall be suitably guarded. There shall be non-conducting mats or gratings front and rear where necessary. Exposed current carrying parts at voltages to earth (ground) exceeding a voltage to be specified by the Administration shall not be installed on the face of any switchboard or control panel.

(iii) (1) Where the hull return system of distribution is used, special precautions shall be taken to the satisfaction of the Administration.

(2) Hull return shall not be used in tankers.

(iv) (1) All metal sheaths and armour of cables shall be electrically continuous and shall be earthed (grounded).

(2) Where the cables are neither sheathed nor armoured and there might be a risk of fire in the event of an electrical fault, precautions shall be required by the Administration.

(v) Lighting fittings shall be arranged to prevent temperature rises that would be injurious to the wiring, and to prevent surrounding material from becoming excessively hot.

(vi) Wiring shall be supported in such a manner as to avoid chafing or other injury.

(vii) Each separate circuit shall be protected against short circuit. Each separate circuit shall also be protected against overload, except in accordance with Regulation 30 of this Chapter or where the Administration grants an exemption. The current-carrying capacity of each circuit shall be permanently indicated, together with the rating or setting of the appropriate overload protective device.

(viii) Accumulator batteries shall be suitably housed, and compartments used primarily for their accommodation shall be properly constructed and efficiently ventilated.

(b) Passenger Ships only

(i) Distribution systems shall be so arranged that fire in any main fire zone will not interfere with essential services in any other main fire zone. This requirement will be met if main and emergency feeders passing through any zone are separated both vertically and horizontally as widely as is practicable.

(ii) Electric cables shall be of a flame retarding type to the satisfaction of the Administration. The Administration may require additional safeguards for electric cables in particular spaces of the ship with a view to the prevention of fire or explosion.

(iii) In spaces where inflammable mixtures are liable to collect, no electrical equipment shall be installed unless it is of a type which will not ignite the mixture concerned, such as flameproof (explosion proof) equipment.

(iv) A lighting circuit in a bunker or hold shall be provided with an isolating switch outside the space.

(v) Joints in all conductors except for low voltage communication circuits shall be made only in junction or outlet boxes. All such boxes or wiring devices shall be so constructed as to prevent the spread of fire from the box or device. Where splicing is employed, it shall only be by an approved method such that it retains the original mechanical and electrical properties of the cable.

(c) Cargo Ships only

Devices liable to arc shall not be installed in any compartment assigned principally to accumulator batteries unless the devices are flameproof (explosion proof).

Regulation 28

Means of Going Astern

(a) Passenger Ships and Cargo Ships

Ships shall have sufficient power for going astern to secure proper control of the ship in all normal circumstances.

(b) Passenger Ships only

The ability of the machinery to reverse the direction of thrust of the propeller in sufficient time, under normal manoeuvring conditions, and so to bring the ship to rest from maximum ahead service speed shall be demonstrated at the initial survey.

Regulation 29

Steering Gear

(a) Passenger Ships and Cargo Ships

(i) Ships shall be provided with a main steering gear and an auxiliary steering gear to the satisfaction of the Administration.

(ii) The main steering gear shall be of adequate strength and sufficient to steer the ship at maximum service speed. The main steering gear and rudder stock shall be so designed that they are not damaged at maximum astern speed.

(iii) The auxiliary steering gear shall be of adequate strength and sufficient to steer the ship at navigable speed and capable of being brought speedily into action in an emergency.

(iv) The exact position of the rudder, if power operated, shall be indicated at the principal steering station.

(b) Passenger Ships only

(i) The main steering gear shall be capable of putting the rudder over from 35 degrees on one side to 35 degrees on the other side with the ship running ahead at maximum service speed. The rudder shall be capable of being put over from 35 degrees on either side to 30 degrees on the other side in 28 seconds at maximum service speed.

(ii) The auxiliary steering gear shall be operated by power in any case in which the Administration would require a rudder stock of over 9 inches (or 22.86 centimetres) diameter in way of the tiller.

(iii) Where main steering gear power units and their connections are fitted in duplicate to the satisfaction of the Administration, and each power unit enables the steering gear to meet the requirements of sub-paragraph (i) of this paragraph, no auxiliary steering gear need be required.