134

CAYMAN ISLANDS

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THE MERCHANT SHIPPING (LOAD LINE) (CAYMAN ISLANDS) RULES, 1988

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inserted.

11. Where special procedures such as partly filling or completely filling particular spaces designaged for cargo, fuel, fresh water or other purposes are necessary to maintain adequate stability, a statement of instructions as to the appropriate procedure in each case.

12. A copy of the report on the inclining test and of the calculation therefrom of the light condition particulars.

Made in Council this 20th day of April , 1988

Ulona N Jackson
Clerk of the Executive Council

EXPLANATORY NOTE

(This note is not part of the Rules.)

These Rules contain requirements relating to the surveying of and assignment of freeboards to ships, the marking of load lines and the issue of load line certificates, in order to enable the Cayman Islands to give effect to the International Convention on Load Lines 1966. The Rules also prescribe particulars as to the information relating to stabilty, loading and ballasting to be supplied to the masters of ships.

intended to be used exclusively for the carriage of vehicles or of containers.

(d) Service loaded conditions, both (i) on departure and (ii) on arrival.

(2)(a) A profile diagram of the ship drawn to a suitable small scale showing the disposition of all components of the deadweight.

(b) A statement showing the lightweight, the disposition and the total weights of all components of the deadweight, the displacement, the corresponding positions of the centre of gravity, the metacentre and also the metacentric height (GM).

(c) A diagram showing a curve of Righting Levers (GZ) derived from the cross curves of stability referred to in paragraph 9. Where credit is shown for the buoyancy of a timber deck cargo the curve of Righting Levers (GZ) must be drawn both with and without this credit.

(3) The metacentric height and the curve of Righting Levers (GZ) shall be corrected for liquid free surface.

(4) Where there is a significant amount of trim in any of the conditions referred to in sub-paragraph (1) the metacentric height and the curve of Righting Levers (GZ) may be required to be determined from the trimmed waterline.

(5) If in the opinion of the Chief Marine Surveyor the stability characteristics in either or both of the conditions referred to in sub-paragraph (1)(c) are not satisfactory, such conditions shall be marked accordingly and an appropriate warning to the master shall be

THE MERCHANT SHIPPING (LOAD LINE) (CAYMAN ISLANDS) RULES 1988

ARRANGEMENT OF RULES

(4) An example shall be given showing how to obtain a curve of Righting Levers (GZ) from the cross curves of stability.

(5) Where the buoyancy of a structure is to be taken into account in the calculation of stability information to be supplied in the case of a vehicle ferry or similar ship having bow doors, ship's side doors or stern doors, there shall be included in the stability information a specific statement that such doors must be secured weathertight before the ship proceeds to sea and that the cross curves of stability are based upon the assmumption that such doors have been so secured.

10-(1) The diagram and satements referred to in sub-paragraph (2) of this paragraph shall be provided separately for each of the following conditions of the ship:-

(a) Light condition. If the ship has permanent ballast, such diagram and statements shall be provided for the ship in light condition both (i) with such ballast, and (ii) without such ballast.

(b) Ballast condition, both (i) on departure, and (ii) on arrival, it being assumed for the purpose of the latter in this and the following sub-paragraphs that oil fuel, fresh water, consumble stores and the like are reduced to 10 per cent of their capacity.

(c) Condition both (i) on departure, and (ii) on arrival, when loaded to the Summer load line with cargo filling all spaces available for cargo, cargo for this purpose being taken to be homogeneous cargo except where this is clearly inappropriate, for example in the case of cargo spaces in a ship which are

used as for the centres of gravity referred to in paragraphs 3, 4 and 5.

8. The effect on stability of free surface in each tank in the ship in which liquids may be carried, including an example to show how the metacentric height is to be corrected.

9.-(1) A diagram showing cross curves of stability indicating the height of the assumed axis from which the Righting Levers are measured and the trim which has been assumed. In the case of ships having raked keels, where a datum other than the top of keel has been used the position of the assumed axis shall be clearly defined.

(2) Subject to the following sub-paragraph, only (a) enclosed superstructures and (b) efficient trunks as defined in paragraph 10 of Schecule 5 shall be taken into account in deriving such curves.

(3) The following structures may be taken into account in deriving such curves if the Board are satisfied that their location, integrity and means of closure will contribute to the ship's stability:-

(a) superstructures located above the superstructure deck;

(b) deckhouses on or above the freeboard deck, whether wholly or in part only;

(c) hatchway structures on or above the freeboard deck.

Additionally, in the case of a ship carrying timber deck cargo, the volume of the timber deck cargo, or a part thereof, may with the Chief Marine Surveyor's approval be taken into account in deriving a supplementary curve of stability appropriate to the ship when carrying such cargo.

SCHEDULES

The Governor in Council, in exercise of the powers conferred on him by sections 33, 37, 39, 42, 52, 53 and 54 of the Merchant Shipping (Applicable Conventions) Law 1987 and of all other powers enabling him in that behalf, hereby makes the following Rules:-

Ships to which the Rules apply

1. These Rules apply to all ships except-

(a) ships of war;

(b) ships solely engaged in fishing; and

(c) pleasure yachts.

PART 1

SURVEYS AND CERTIFICATES

Application to Assigning Authority for the assignment of freeboards and issue of load line certificates

2.-(1) The Assigning Authorities for the purposes of these Rules shall be the Governor, the Marine Directorate of the United Kingdom Department of Transport, Lloyd's Register of Shipping, the British Committee of Bureau Veritas, the British Technical Committee of the American Bureau of Shipping, the British Committee of Det norske Veritas and the British Committee of Germanischer Lloyd.

(2) Application for the assignement of freeboards to a ship and for the issue of a load line certificate in respect of the ship shall be made to an Assigning Authority by or on behalf of the owner of the ship, who shall furnish to the Authority such plans, drawings, specifications and other documents and information relating to the design and construction of the ship as the Authority may require.

Load Line Survey

3.-(1) After receipt of the application and the documents and information required by the preceding Rule the Assigning Authority shall cause the ship to be surveyed by a Surveyor in order to ascertain-

(a) whether the ship complies with such of the requirements of Rule 23 and Schedule 4 to these Rules as are applicable to the ship; and

(b) such other data as may be necessary -

(i) for the assignment of freeboards to the ship in accordance of gravity passengers and crew shall be assumed to be distributed about the ship in the spaces they will normally occupy, including the highest decks to which either or both have access.

5. The estimated weight and the disposition and centre of gravity of the maximum amount of deck cargo which the ship may reasonably be expected to carry on an exposed deck. The estimated weight shall include in the case of deck cargo likely to absorb water the estimated weight of water likely to be so absorbed and allowed for in arrival conditions, such weight in the case of timber deck cargo being taken to be 15 per cent by weight.

6. A diagram or scale showing the load line mark and load lines with particulars of the corresponding freeboards, and also showing the displacement, metric tons per centimetre immersion, and deadweight corresponding in each case to a range of mean draughts extending between the waterline representing the deepest load line and the waterline of the ship in light condition.

7. A diagram or tabular statement showing the hydrostatic particulars of the ship, including-

(1) the heights of the transverse metacentre and

(2) the values of the moment to change trim one centimetre,

for a range of mean draughts extending at least between the waterline representing the deepest load line and the waterline of the ship in light condition. Where a tabular statement is used, the intervals between such draughts shall be sufficiently close to permit accurate interpolation. In the case of ships having raked keels, the same datum for the heights of centres of buoyancy and metacentres shall be

SCHEDULE 7

INFORMATION AS TO STABILTY OF SHIPS

(Rule 30)

The information relating to the stability of a ship to be provided for the master pursuant to Rule 30 of these Rules shall include particulars appropriate to the ship of the matters specified below. Such particulars shall be in the form of a statement unless the contrary is indicated.

1. The ship's name, official number, port of registry, gross and register tonnages, principal dimensions, displacement, deadweight and draught to the Summer load line.

2. A profile view and, if the Chief Marine Surveyor so requires in a particular case, plan views of the ship drawn to scale showing with their names all compartments, tanks, storerooms and crew and passenger accommodation spaces, and also showing the mid-length position.

3. The capacity and the centre of gravity (longitudinally and vertically) of every compartment available for the carriage of cargo, fuel, stores, feed water, domestic water and water ballast.

In the case of vehicle ferry, the vertical centre of gravity of compartments for the carriage of vehicles shall be based on the estimated centres of gravity of the vehicles and not on the volumetric centres of the compartments.

4. The estimated total weight of (a) passenges and their effects and (b) crew and their effects, and the centre of gravity (longitudinally and vertically) of each such total weight. In assessing such centres

with Part IV and Schedule 5 to these Rules and

(ii) to enable information to be supplied to the master of the ship pursuant to Rules 30 and 31.

(2) In the course of the survey to be carried out pursuant to the preceding paragraph of this Rule the ship and any of her fittings or equipment shall be submitted to such tests as may in the opinion of the Assigning Authority be necessary to ascertain the matters referred to in that paragraph. Tests carried out as to stability shall be subject to the requirements of Rule 30 and of paragraph 2 (3) of Schedule 4.

(3) The owner of the ship shall afford all necessary facilities for such survey and shall at the request of the Assigning Authority furnish for the Authority's use and retention if required such further documents or information relating to the ship as the Authority may require.

Surveyor's Report

4.-(1) On completion of the survey the Surveyor shall furnish to the Assigning Authority a report giving the results of the survey and his findings in relation to the matters specified in Rule 3.

(2) There shall be appended to the report the record of particulars required for the purposes of section 33(2)(b) of the Law and the requirements of Rule 25 shall apply in respect of that record.

(3) In the case of a ship which is required to comply with the requirements of Schedule 4 to these Rules relating to stability the

Surveyor shall furnish to the Chief Marine Surveyor information necessary to enable him to determine whether the ship complies with those requirements.

Assignment of Freeboards

5.-(1) The Assigning Authority shall-

(a) if satisfied on receipt of the Surveyor's report that the ship complies with the requirements of Rule 23 and Schedule 4 (other than those relating to stability) applicable to her, and

(b) on receipt from the Chief Marine Surveyor of notification that he is satisfied that the ship complies with those requirements insofar as they relate to stability-

assign freeboards to the ship in accordance with Part IV and Schedule 5.

(2) On assigning freeboards the Assigning Authority shall furnish to the owner of the ship-

(a) particulars of the freeboards so assigned;

(b) directions specifying-

(i) which of the load lines described in Part II of these Rules are to be marked on the sides of the ship in accordance with the requirements of that Part, and

(ii) the position in which those load lines, the deck-line and the load line mark are to be so marked; and

(c) a copy of the record of particulars relating to conditions of assignment.

Issue and form of Load Line Certificates

6. Subject to the provisions of Rule 11 (Exemption and Exemption

TABLE B (continued)

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
294	4560	318	4823	342	5075
295	4572	319	4834	343	5086
296	4583	320	4844	344	5097
297	4595	321	4855	345	5108
298	4607	322	4866	346	5119
299	4618	323	4878	347	5130
300	4630	324	4890	348	5140
301	4642	325	4899	349	5150
302	4654	326	4909	350	5160
303	4665	327	4920	351	5170
304	4676	328	4931	352	5180
305	4868	329	4943	353	5190
306	4695	330	4955	354	5200
307	4704	331	4965	355	5210
308	4714	332	4975	356	5220
309	4725	333	4985	357	5230
310	4736	334	4995	358	5240
311	4748	335	5005	359	5250
312	4757	336	5015	360	5260
313	4768	337	5025	361	5268
314	4779	338	5035	362	5276
315	4790	339	5045	363	5285
316	4801	340	5055	364	5294
317	4812	341	5065	365	5303

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation.

TABLE B (continued)

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
159	2500	204	3330	249	4005
160	2520	205	3347	250	4018
161	2540	206	3363	251	4032
162	2560	207	3380	252	4045
163	2580	208	3397	253	4058
164	2600	209	3413	254	4072
165	2620	210	3430	255	4085
166	2640	211	3445	256	4098
167	2660	212	3460	257	4112
168	2680	213	3475	258	4125
169	2698	214	3490	259	4139
170	2716	215	3505	260	4152
171	2735	216	3520	261	4165
172	2754	217	3537	262	4177
173	2774	218	3554	263	4189
174	2795	219	3570	264	4201
175	2815	220	3586	265	4214
176	2835	221	3601	266	4227
177	2855	222	3615	267	4240
178	2875	223	3630	268	4252
179	2895	224	3645	269	4264
180	2915	225	3660	270	4276
181	2933	226	3675	271	4287
182	2952	227	3690	272	4302
183	2970	228	3705	273	4315
184	2988	229	3720	274	4327
185	3007	230	3735	275	4339
186	3025	231	3750	276	4350
187	3044	232	3765	277	4362
188	3062	233	3780	278	4373
189	3080	234	3795	279	4385
190	3098	235	3808	280	4397
191	3116	236	3821	281	4408
192	3134	237	3835	282	4420
193	3151	238	3849	283	4432
194	3167	239	3864	284	4443
195	3185	240	3880	285	4455
196	3202	241	3893	286	4467
197	3219	242	3906	287	4478
198	3235	243	3920	288	4490
199	3249	244	3934	289	4502
200	3264	245	3949	290	4513
201	3280	246	3965	291	4525
202	3296	247	3978	292	4537
203	3313	248	3992	293	4547

Certificates) the Assigning Authority shall, on being satisified that the ship has been duly marked in accordance with the directions referred to in the preceding Rule, issue to the owner of the ship either an Intenational Load Line Certificate (1966) or an Islands load line certificate, as may be required by the Law, in the form set out for such certificates respectively in Schedule 1 to these Rules; and for that purpose each of the Assigning Authorities other than the Governor is hereby authorised by the Governor to issue load line certificates in pursuance of section 37(3)(a) of the Law.

Duration

7. Subject to the provisions of section 45 (3) of the Law (Cancellation of Islands load line certificates of ships plying on international voyages) and except as otherwise provided in the following Rules of this Part, a load line certificate shall be valid until a date to be determined by the Assigning Authority, not being a date more than five years after the date of completion of the survey referred to in Rule 3.

Extension

8.-(1) Subject to paragraph (2) of this Rule, where-

(a) application has been made to an Assigning Authority by the owner of a ship in respect of which a load line certificate is in force for the issue of a load line certificate in respect of the ship to take effect on the expiry of the current certificate, and

(b) following such application the ship has been duly surveyed in accordance with Rule 3,

the Assigning Authority may, if it is satisfied on receipt of the

Surveyor's report that the ship complies with the requirements of Rule 23 and Schedule 4 (other than those relating to stability) applicable to her and has received notification from the Chief Marine Surveyor that the ship complies with those requirements insofar as they relate to stability, but considers that it will not be reasonably practicable under the circumstances to issue the load line certificate applied for before the date of expiry of the current certificate, extend the period of validity specified in the current certificate for a period not exceeding 5 months.

(2) No such extension shall have effect unless particulars of the date to which the period of validity is extended, together with particulars of the place at and date on which such extension was given, are endorsed by the Assigning Authority on the current certificate.

(3) The period of validity of any load line certificate coming into effect immediately on the expiry of a certificate extended pursuant to this Rule shall not exceed a period of 5 years commencing on the date of completion of the survey referred to in paragraph (1) of this Rule.

Cancellation

9.-(1) The Chief Marine Surveyor may cancel a load line certificate-

(a) if satisfied (whether by a report from an Assigning Authority or otherwise) that-

(i) the ship to which the certificate relates does not comply with the conditions of assignment; or

(ii) the structural strength of the ship is lowered to such an extent that the ship is unsafe; or

21. The following is the Freeboard Table B referred to in definition of "tabular freeboard" in paragraph 1 of Schedule 5:-

TABLE B

Freeboard Table for Type "B" Ships

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
24	200	69	705	114	1565
25	208	70	721	115	1587
26	217	71	738	116	1609
27	225	72	754	117	1630
28	233	73	769	118	1651
29	242	74	784	119	1671
30	250	75	800	120	1690
31	258	76	816	121	1709
32	267	77	833	122	1729
33	275	78	850	123	1750
34	283	79	868	124	1771
35	292	80	887	125	1793
36	300	81	905	126	1815
37	308	82	923	127	1837
38	316	83	942	128	1859
39	325	84	960	129	1880
40	334	85	978	130	1901
41	344	86	996	131	1921
42	354	87	1015	132	1940
43	364	88	1034	133	1959
44	374	89	1054	134	1979
45	385	90	1075	135	2000
46	396	91	1096	136	2021
47	408	92	1116	137	2043
48	420	93	1135	138	2065
49	432	94	1154	139	2087
50	443	95	1172	140	2109
51	455	96	1190	141	2130
52	467	97	1209	142	2151
53	478	98	1229	143	2171
54	490	99	1250	144	2190
55	503	100	1271	145	2209
56	516	101	1293	146	2229
57	530	102	1315	147	2250
58	544	103	1337	148	2271
59	559	104	1359	149	2293
60	573	105	1380	150	2315
61	587	106	1401	151	2334
62	601	107	1421	152	2354
63	615	108	1440	153	2375
64	629	109	1459	154	2396
65	644	110	1479	155	2418
66	659	111	1500	156	2440
67	674	112	1521	157	2460
68	689	113	1543	158	2480

TABLE A (continued)

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
291	3224	316	3318	341	3385
292	3228	317	3222	342	3387
293	3233	318	3325	343	3389
294	3237	319	3328	344	3392
295	3241	320	3331	345	3394
296	3246	321	3334	346	3396
297	3250	322	3337	347	3399
298	3254	323	3339	348	3401
299	3258	324	3342	349	3403
300	3262	325	3345	350	3406
301	3266	326	3347	351	3408
302	3270	327	3350	352	3410
303	3274	328	3353	353	3412
304	3278	329	3355	354	3414
305	3281	330	3358	355	3416
306	3285	331	3361	356	3418
307	3288	332	3363	357	3420
308	3292	333	3366	358	3422
309	3295	334	3368	359	3423
310	3298	335	3371	360	3425
311	3302	336	3373	361	3427
312	3305	337	3375	362	3428
313	3308	338	3378	363	3430
314	3312	339	3380	364	3432
315	3315	340	3382	365	3433

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation.

(iii) information on the basis of which freeboards were assigned to the ship was incorrect in a material particular;

(b) if the certificate is not endorsed in accordance with the requirements of Rule 10 to show that the ship has been inspected in accordance with the requirements of that Rule;

(c) if a new certificate is issued in respect of the ship;

(d) if the ship was registered in the Islands when the certificate was issued and has ceased to be so registered.

(2) In every such case the Chief Marine Surveyor shall notify the owner of the ship in writing of the cancellation specifying the grounds therefor and the date on which it is to take effect.

Periodical Inspection of Ships

10.-(1) Every ship in respect of which a load line certificate is in force shall be periodically inspected by a Surveyor in accordance with the provisions of this Rule in order to ensure that-

(a) the fittings and appliances for the protection of openings, the guard rails, the freeing ports and the means of access to the crew's quarters in the ship are in an effective condition; and

(b) no changes have been made or taken place in the hull or superstructures of the ship such as to render no longer accurate data on the basis of which freeboards were assigned to the ship.

(2) Application for the inspection shall be made by or on behalf of the owner of the ship to an Assigning Authority, who shall appoint a Surveyor to carry out the inspection.

(3) The Surveyor may in the course of any such inspection require

the carrying out of tests considered by him to be necessary to establish that the ship complies with the requirements of paragraph (1) of this Rule.

(4) Inspection of a ship pursuant to this Rule shall be carried out on or within 3 months before or after each anniversary of the date of completion of the survey leading to the issue of the certificate:

Provided that unless the Assigning Authority otherwise consents the intervals between inspections shall not be less than 9 or more than 15 months.

(5) The Surveyor, if satisfied after inspection that the ship complies with the requirements of paragraph (1) of this Rule, shall endorse a record of the inspection and of the fact-

(a) in the case of an International Load Line Certificate (1966), that the ship was found to comply with the relevant provisions of the Load Lines Convention, and

(b) in the case of an Islands load line certificate, that the ship was found to comply with the relevant provisions of these Rules,

on the load line certificate in the space provided, specifying the Assigning Authority by which he was appointed to carry out the inspection.

Exemption and Exemption Certificates

11.-(1) Where the Chief Marine Surveyor exempts a ship pursuant to setion 51 of the Law, the International Load Line Exemption Certificate or Islands load line exemption certificate to be issued to the owner of the ship by the Chief Marine Surveyor as required by

TABLE A (continued)

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
144	1870	193	2541	242	2959
145	1886	194	2552	243	2966
146	1903	195	2562	244	2973
147	1919	196	2572	245	2979
148	1935	197	2582	246	2986
149	1952	198	2592	247	2993
150	1968	199	2602	248	3000
151	1984	200	2612	249	3006
152	2000	201	2622	250	3012
153	2016	202	2631	251	3018
154	2032	203	2641	252	3024
155	2048	204	2650	253	3030
156	2064	205	2659	254	3036
157	2080	206	2669	255	3042
158	2096	207	2678	256	3048
159	2111	208	2687	257	3054
160	2126	209	2696	258	3060
161	2141	210	2705	259	3066
162	2155	211	2714	260	3072
163	2169	212	2723	261	3078
164	2184	213	2732	262	3084
165	2198	214	2741	263	3089
166	2212	215	2749	264	3095
167	2226	216	2758	265	3101
168	2240	217	2767	266	3106
169	2254	218	2775	267	3112
170	2268	219	2784	268	3117
171	2281	220	2792	269	3123
172	2294	221	2801	270	3128
173	2307	222	2809	271	3133
174	2320	223	2817	272	3138
175	2332	224	2825	273	3143
176	2345	225	2833	274	3148
177	2357	226	2841	275	3153
178	2369	227	2849	276	3158
179	2381	228	2857	277	3163
180	2393	229	2865	278	3167
181	2405	230	2872	279	3172
182	2416	231	2880	280	3176
183	2428	232	2888	281	3181
184	2440	233	2895	282	3185
185	2451	234	2903	283	3189
186	2463	235	2910	284	3194
187	2474	236	2918	285	3198
188	2486	237	2925	286	3202
189	2497	238	2932	287	3207
190	2508	239	2939	288	3211
191	2519	240	2946	289	3215
192	2530	241	2953	290	3220

SCHEDULE 6

Freeboard Tables

(Schedule 5)

1. The following is the Freeboard Table A referred to in definition of "tabular freeboard" in paragraph 1 of Schedule 5:-

TABLE A

Freeboard Table for Type "A" Ships

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
24	200	64	626	104	1196
25	208	65	639	105	1212
26	217	66	653	106	1228
27	225	67	666	107	1244
28	233	68	680	108	1260
29	242	69	693	109	1276
30	250	70	706	110	1293
31	258	71	720	111	1309
32	267	72	733	112	1326
33	275	73	746	113	1342
34	283	74	760	114	1359
35	292	75	773	115	1376
36	300	76	786	116	1392
37	308	77	800	117	1409
38	316	78	814	118	1426
39	325	79	828	119	1442
40	334	80	841	120	1459
41	344	81	855	121	1476
42	354	82	869	122	1494
43	364	83	883	123	1511
44	374	84	897	124	1528
45	385	85	911	125	1546
46	396	86	926	126	1563
47	408	87	940	127	1580
48	420	88	955	128	1598
49	432	89	969	129	1615
50	443	90	984	130	1632
51	455	91	999	131	1650
52	467	92	1014	132	1667
53	478	93	1029	133	1684
54	490	94	1044	134	1702
55	503	95	1059	135	1719
56	516	96	1074	136	1736
57	530	97	1089	137	1753
58	544	98	1105	138	1770
59	559	99	1120	139	1787
60	573	100	1135	140	1803
61	587	101	1151	141	1820
62	600	102	1166	142	1837
63	613	103	1181	143	1853

section 52 of the Law shall be in the form set out for such certificates respectively in Schedule 1 to these Rules.

(2) Except in so far as the nature or terms of any such exemption require the contrary the provisions of Rules 2 to 5 and 7 to 10 shall have effect in the case of any ship so exempted and of any exemption certificate issued in respect of such a ship as they have effect in the case of a ship in rspect of which a load line certificate has been issued and of such a certificate, subject to substitution-

(a) for references in the said Rules to an Assigning Authority, of references to the Chief Marine Surveyor;

(b) for paragraph (5) of Rule 10, of the following:-

"(5) The Surveyor, if satisfied after inspection that the ship continues to comply with the conditions subject to which the exemption was granted, shall endorse a record of the inspection and of that fact on the exemption certificate in the space provided."

PART II

LOAD LINES AND MARKS

"Appropriate Marks"

12. In this Part of the Rules the expression "the appropriate marks" in relation to a ship means the load lines directed to be marked on the ship pursuant to Rule 5(2)(b) and the deck-line and load line mark.

Marking

13. On receipt from the Assigning Authority of the particulars and directions referred to in Rule 5 the owner of the ship shall cause the appropriate marks to be marked on each side of the ship in accordance

with the said directions and the requirements of this Part of the Rules.

Deck-line

14.-(1) The deck-line shall consist of horizontal line 300 millimetres in length and 25 millimetres in width and shall be marked amidships on each side of the ship in accordance with the following provisions of this Rule so as to indicate the position of the freeboard deck.

(2) Subject to paragraph (3) of this Rule, the deck-line shall be marked in such a position on the side of the ship that its upper edge passes through the point amidships where the continuation outwards of the upper surface of the freeboard deck, or of any sheathing of that deck, intersects the outer surface of the shell of the ship as shown in Figure 1.

(3) Where the design of the ship or other circumstances render it in the opinion of the Assigning Authority impracticable to mark the deck-line in accordance with paragraph (2), the Authority may include in the directions given pursuant to Rule 5 a direction that it may be marked by reference to another fixed point in the ship as near as practicable to the position described in paragraph (2).

Unmanned barges

21. The freeboards to be assigned to unmanned barges having on the freeboard deck only small access openings closed by watertight gasketed covers of steel shall be freeboards determined in accordance with the provisions of Part I of this Schedule omitting paragraphs 5 and 16. Such freeboards may be reduced by such amounts not exceeding 25 per cent. as the Chief Marine Surveyor may direct in each particular case.

sub-paragraph (b), be obtained by deducting from the Summer Timber freeboard the quantity-

$$\frac{\triangle}{4T} \text{ millimetres}$$

where $\triangle$ is the displacement in salt water in metric tons at the waterline which will when load lines have been marked on the ship's side correspond to the Summer Timber load line, amd T represents metric tons per centimetre immersion in salt water at that waterline.

(b) In any case in which the displacement at that waterline cannot be ascertained the deduction shall be one forty-eighth (1/48th) of the summer timber draught of the ship.

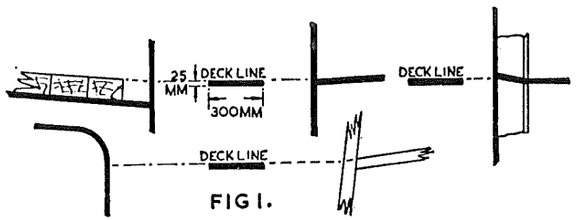


FIG I.

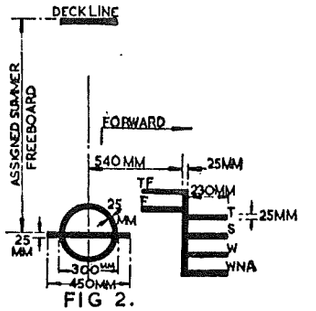


FIG 2.

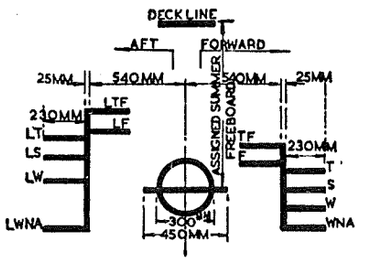


FIG3

PART III

SAILING SHIPS AND OTHER SHIPS

Sailing ships and tugs

19. The freeboards to be assigned to sailing ships and tugs shall be freeboards determined in accordance with the provisions of Part I of this Schedule increased by such amounts as the Chief Marine Surveyor may direct in each particular case.

Ships of wood and other ships

20. The freeboards to be assigned to ships of wood or of composite constrution or of other materials, or to ships with constructional features such as to render freeboards calculated in accordance with Part I of this Schedule unreasonable or impracticable shall be determined by the Chief Marine Surveyor in each particular case.

Load Line Mark

15. The load line mark shall consist, as shown by Figure 2, of a ring 300 millimetres in outside diameter and 25 millimetres wide, intersected by a horizontal line 450 millimetres long and 25 millimetres wide the upper edge of which passes through the centre of the ring. The centre of the ring shall be marked amidships vertically below the deck-line, so that, except as otherwise provided in Rule 28 (Greater than minimum freeboards), the distance from the centre of the ring to the upper edge of the deck-line is equal to the Summer freeboard assigned to the ship.

Load Lines

16.-(1) Load Lines as described in this and the following Rule indicates the maximum depth to which a ship marked therewith may be located in the circumstances described in Schedule 2 (Appropiraite Load Lines-Zones,Areas and Seasonal Periods).

(2) Except as otherwise provided in paragraph (3) of this Rule, the following Rule and Rule 28 (Greater than minimum freeboards), load lines shall consist as shown in Figure 2 of horizontal lines each 230 millimeters in length and 25 millimetres in width extending forward or abaft of a vertical line 25 millimetres in width marked 540 millimetres forward of the centre of the ring of the load line mark and at right angles to that line, and individual load lines shall be as follows:-

the Summer load line, which shall extend forward of the said vertical line and be marked S, and shall correspond horizontally with the line passing through the centre of the ring of the load line mark;

TABLE

	Total effective length of superstructures										
	0	0.1 (L)	0.2 (L)	0.3 (L)	0.4 (L)	0.5 (L)	0.6 (L)	0.7 (L)	0.8 (L)	0.9 (L)	1.0 (L)
Percentage of deduction for all types of superstructures	20	31	42	53	64	70	76	82	88	94	100

Percentages at intermediate lengths of superstructures shall be obtained by linear interpolation.

(4) Corrections shall be applied to the freeboard obtained pursuant to the preceding sub-paragraphs in accordance with the provisions of paragraphs 12 to 15 of this Schedule, and the freeboard so corrected shall be the Summer Timber freeboard to be assigned to the ship.

Other Timber freeboards

18.-(1) The Winter Timber freeboard shall be obtained by adding to the Summer Timber freeboard one thirty-sixth (1/36th) of the summer timber draught of the ship.

(2) The Winter North Atlantic Timber freeboard shall be the same as the Winter North Atlantic freeboard assigned to the ship.

(3) The Tropical Timber freeboard shall be obtained by deducting from the Summer Timber freeboard one forty-eighth (1/48th) of the summer timber draught of the ship.

(4)(a) The Fresh Water Timber freeboard shall, subject to

Formula 2

$$7000 \left(\frac{1.36}{C_b + 0.68}\right) \text{ millimetres}$$

C_b being taken as not less than 0.68 in the case of each formula.

PART II

TIMBER FREEBOARDS

Summer Timber freeboard

17. The Summer Timber freeboard shall be determined as follows:-

(1) There shall first be ascertained the freeboard appropriate to the ship under the provisions of sub-paragraphs (1), (2)(a), (9) and (10) of paragraph 5 of this Schedule.

(2) Corrections shall be applied to the freeboard so obtained in accordance with the provisions of paragraphs 6 to 10 of this Schedule.

(3) Deductions for the effective length of superstructures only shall be made from the freeboard obtained pursuant to the preceding sub-paragraphs, in accordance with the provisions of paragraph 11(1) and (2)(b) of this Schedule but substituting for the Table "Percentage of Deduction for Type "B" ships" therein the following Table:-

the Winter load line, which shall extend forward of the said vertical line and be marked W;

the Winter North Atlantic load line, which shall extend forward of the said vertical line and be marked WNA;

the Tropical load line, which shall extend forward of the said vertical line and be marked T;

the Fresh Water load line, which shall extend abaft the said vertical line and be marked F;

the Tropical Fresh Water load line, which shall extend abaft the said vertical line and be marked TF.

The maximum depth of loading referred to in paragraph (1) shall be the depth indicated by the upper edge of the appropriate load line.

(3) In the case of a sailing ship-

(a) the Summer load line shall consist of the line passing through the centre of the ring of the load line mark; and

(b) the Winter North Atlantic load line and Fresh Water load line only shall be marked on the ship as shown in Figure 4.

Timber Load Lines

17. Timber load lines shall consist as shown in Figure 3 of horizontal lines of the dimensions specified in respect of such lines in the preceding Rule, extending abaft or forward of a vertical line of the dimensions specified in respect of such a line in that Rule marked 540 millimetres abaft the centre of the ring of the load line mark and at right angles to that line; and individual Timber load lines shall be as follows:-

the Summer Timber load line, which shall extend abaft the said vertical line and be marked LS;

the Winter Timber load line, which shall extend abaft the said vertical line and be marked LW;

the Winter North Atlantic Timber load line, which shall extend abaft the said vertical line and be marked LWNA;

the Tropical Timber load line, which shall extend abaft the said vertical line and be marked LT;

the Fresh Water Timber load line, which shalll extend forward of the said vertical line and be marked LF;

the Tropical Fresh Water Timber load line, which shall extend forward of the said vertical line and be marked LTF.

The maximum depth of loading referred to in Rule 16 (1) shall be the depth indicated by the upper edge of the appropriate Timber load line.

Appropriate Load Line

18. The appropriate load line in respect of a ship at any particular place and time shall be ascertained in accordance with the provisions of Schedule 2.

Position of Load Lines

19. Each load line required to be marked on a ship shall be marked in such a position on each side of the ship that the distance measured vertically downwards from the upper edge of the deck-line to the upper edge of the load line is equal to the freeboard assigned to the ship which is appropriate to that load line.

Method of marking

20.-(1) The appropriate marks shall be marked on each side of a ship in accordance with the requirements of this Rule in such a manner as to be plainly visible.

(3) In the case of a ship to which sub-paragraph (1) applies, being a ship which is constructed to meet exceptional operational requirements, the correction to be made pursuant to the preceding sub-paragraphs may be reduced or waived if the Board are satisfied that the safety of the ship will not be impaired in consequence in the worst sea and weather conditions likely to be encountered by the ship in service.

(4) The bow height of a ship is the vertical distance at the forward perpendicular between the Summer load waterline of the ship at the designed trim and the top of the exposed deck at side ascertained as follows:-

(a) Where the bow height is obtained by including sheer, the sheer shall extend for not less than 15 per cent. of the ship's length (L) measured from the forward perpendicular.

(b) Where the bow height is obtained by including the height of a superstructure, such superstructure shall:-

(i) extend from the stem to a point not less than 0.07 of the ship's length (L) measured from the forward perpendicular;

(ii) if the ship's length (L) is 100 metres or less, be an enclosed superstructure; and

(iii) if the ship's length (L) exceeds 100 metres in length, be fitted with satisfactory closing appliances.

(5) The minimum bow height for a ship shall be derived from formula 1 in the case of a ship of less than 250 metres in length (L) and from formula 2 in the case of a ship of 250 metres or more in length (L):-

Formula 1

$$56(L)\left(1 - \frac{(L)}{500}\right)\left(\frac{1.36}{C_b + 0.68}\right) \text{ millimetres}$$

and 0.1 (L) abaft amidships, the correction for excess of sheer determined in accordance with sub-paragraph (1) shall be modified in the ratio of the amount of 0.2 (L) amidships which is covered by the superstructure, to 0.2 (L).

(4) The maximum deduction for excess sheer shall be at the rate of 125 millimetres per 100 metres of length (L).

Correction for Minimum Bow Height

16.-(1) Except as otherwise provided in sub-paragraphs (2) and (3), where the bow height of a ship determined in accordance with sub-paragraph (4) is less than the minimum bow height appropriate to the ship determined in accordance with sub-paragraph (5), the freeboard determined for the ship in accordance with the foregoing paragraphs shall be increased by an amount equal to the difference between the bow height and the minimum bow height.

(2) Where an existing ship to which sub-paragraph (1) applies has been so constructed or modified as to comply with all the requirements of Schedule 4 applicable to a new ship of her type and is to be assigned freeboards determined in accordance with this Schedule, and/or-

(a) the forecastle is less than 0.07 (L);

(b) the sheer extends for less than 15 per cent. of the ship's length (L) measured from the forward perpendicular,

the freeboard determined for the ship in acordance with the foregoing paragraphs shall be increased by such amount as the Board may determine in each particular case.

(2) If the sides of the ship are of metal, the appropriate marks shall be cut in, centre punched or welded; if the sides of the ship are of wood, the marks shall be cut into the planking to a depth of not less than 3 millimetres; if the sides are of other materials to which the foregoing methods of marking cannot effectively be applied, the marks shall be permanently affixed to the sides of the ship by bonding or some other effective method.

(3) The appropriate marks shall be painted in white or yellow if the background is dark, and in black if the background is light.

Authorisation of removal, etc., of appropriate marks

21. After the appropriate marks have been marked on a ship, such marks may not be concealed, removed, altered, defaced or obliterated except under the authority of an Assigning Authority.

Mark of Assigning Authority

22.-(1) The mark of the Assigning Authority as described in the following paragraph of this Rule may be marked on each side of the ship in a position alongside the load line mark either above the horizontal line forming part of that mark, or above and below it.

(2) An Assigning Authority's mark for this purpose shall consist of not more than four initials to identify the Authority's name, each measuring approximately 115 millimetres in height and 75 millimetres in width.

PART III

RULES AS TO CONDITIONS OF ASSIGNMENT

Requirements relevant to the assignment of freeboards

23.-(1) The requirements specified in this Rule and in Schedule 4 in respect of the hulls, superstructures, fittings and appliances of ships are requirements considered by the Governor to be relevant to the assignment of freeboards to ships and are prescribed as such for the purposes of section 33(2)(a) of the Law.

(2) Except as otherwise provided in paragraphs (3) and (4) of this Rule, every ship to which freeboards are to be assigned under these Rules shall comply with the requirments applicable to her under Part 1 of Schedule 4.

(3) Every ship to which Part II (Special Requirements applicable to Type "A" ships), Part III (Special Requirements applicable to certain Type "B" ships) or Part IV (Special Requirements applicable to ships to be assigned Timber Freeboards) of Schedule 4 applies shall comply with the requirements of such Part applicable to her and with the requirements of Part I of that Schedule except in so far as compliance with those of the said Part II, III or IV as the case may be otherwise requires.

(4) Every existing ship, not being a ship to which freeboards are to be assigned in accordance with Rule 27 (1) by virtue of the proviso to Rule 27(2), shall comply with such of the requirements relevant to the assignment of freeboards to ships applicable to her under the Internation Convention for the Safety of Life at Sea and Loadlines 1930.

L' = mean enclosed length of poop or forecastle up to a maximum length of 0.5 (L).

The above formula provides a curve in the form of a parabola tangential to the actual sheer curve at the freeboard deck and intersecting the end ordinate at a point below the superstructure deck at a distance equal to the standard height of the poop or forecastle. The superstructure deck shall not be less than standard height above this curve at any point. This curve shall be used in determining the sheer profile for forward and after halves of the ship.

Correction for Variations from Standard Sheer Profile

15.-(1) The correction for sheer shall be the deficiency or excess of sheer determined in accordance with paragraph 14 multiplied by

$$0.75 - \frac{S}{2\,(L)}$$

(2) In the case of a ship with sheer less than the standard sheer profile, the correction for deficiency of sheer determined in accordance with sub-paragraph (1) shall be added to the basic freeboard of the ship.

(3) Subject to sub-paragraph (4), in the case of a ship having an excess of sheer-

(a) if an enclosed superstructure covers 0.1 (L) before and 0.1 (L) abaft amidships, the correction for excess of sheer determined in accordance with subparagraph (1) shall be deducted from the basic freeboard of the ship;

(b) if no enclosed superstructure covers amidships, no deductions shall be made from the basic freeboard of the ship;

(c) if an enclosed superstructure covers less than 0.1 (L) before

sheer in the forward or after half. The arithmetical mean of the excess or deficiency in the forward and after halves shall be the excess or deficiency of sheer.

(2) Where the after half of the sheer profile is greater than the standard sheer profile and the forward half is less than the standard sheer profile, no credit shall be allowed for the part in excess, and deficiency only shall be measured.

(3) Where the forward half of the sheer profile exceeds the standard sheer profile, and the after half of the sheer profile is not less than 75 per cent. of the standard sheer profile, credit shall be allowed for the part in excess.

Where the after half of the sheer profile is less than 50 per cent. of the standard sheer profile, no credit shall be given for the excess of sheer forward.

Where the sheer in the after half is between 50 per cent. and 75 per cent. of the standard sheer profile, intermediate allowances may be granted for excess sheer forward.

(4) Where sheer credit is given for a poop or forecastle the following formula shall be used:

Where s = sheer credit, to be deducted from the deficiency or added to the excess of sheer;

$$s = \frac{y}{3} \times \frac{L'}{(L)}$$

y = difference between actual and standard height of superstructure at the end ordinate of sheer; and

Compliance with conditions of assignment

24.-(1) Except as otherwise provided in paragraph(2) of this Rule, a ship shall for the purposes of the Act be taken not to comply with the conditions of assignment-

(a) if at any time after the assignment of freeboards to the ship there has been any alteration of the hull, superstructures, fittings or appliances of the ship such that either-

(i) any requirement applicable to the ship under the preceeding Rule is not complied with in respect of the ship; or

(ii) the record of particulars made in relation to the ship pursuant to the following Rule is rendered inaccurate in a material respect; or

(b) if that record of particulars is not kept on board the ship in accordance with paragraph(2) of that Rule.

(2) A ship shall be taken to comply with the conditions of assignment notwithstanding an alteration described in paragraph (1)(a)of this Rule if either-

(a) fresh freeboards appropriate to the condition of the ship after the alteration have been assigned to the ship and the ship has been marked with load lines and a fresh certificate issued to the owner of the ship accordingly; or

(b) the alteration has been inspected by a Surveyor on behalf of the Assigning Authority, that Authority is satisfied that the alteration is not such as to require any change in the freeboards assigned to the ship, and full particulars of the alteration together with the date and place of his inspection have been endorsed by the Surveyor on the record above referred to.

Record of Particulars

25.-(1) The record required by section 33(2)(b) of the Law of particulars of requirements in respect of the hull, superstructures, fittings and appliances of a ship to which freeboards are assigned shall be in the form set out in Schedule 3 to these Rules or a form as near thereto as circumstances permit and shall contain the particulars required by that form:

Provided that in a case where the record relates to a ship to which section 31(2)(a) (Cayman Islands registered Convention ships) or section 42 (non-Cayman Islands registered Convention ships) of the Law applies:

(a) the references in the parentheses above the heading to particular paragraphs of Schedule 4 to these Rules and the reference to these Rules in the statement to be signed by the surveyor, may be omitted; and

(b) at the beginning of the Record of Particulars, for the words "the Merchant Shipping (Load Line) Rules 1988" there may be substituted the words "the International Convention on Load Lines 1966" and the words from "and reference to" to "mentioned Rules" may be omitted.

(2) The record shall be completed by the Surveyor carrying out the survey of the ship pursuant to Rule 3 and shall be furnished by him to the Assigning Authority in accordance with Rule 4. A copy of the record shall be sent by the Assigning Authority to the owner of the ship and it shall be kept on the ship at all times in the custody of the master.

Standard Sheer Profile

13. The ordinates of the standard sheer profile are given in the following Table:

	Station	Ordinate (in millimetres)	Factor
After half	After perpendicular	$25\left(\frac{(L)}{3}+10\right)$	1
	1/6 (L) from A.P.	$11.1\left(\frac{(L)}{3}+10\right)$	3
	1/3 (L) from A.P.	$2.8\left(\frac{(L)}{3}+10\right)$	3
	Amidship	0	1
Forward half	Amidship	0	1
	1/3 (L) from F.P.	$5.6\left(\frac{(L)}{3}+10\right)$	3
	1/6 (L) from F.P.	$22.2\left(\frac{(L)}{3}+10\right)$	3
	Forward perpendicular	$50\left(\frac{(L)}{3}+10\right)$	1

Measurement of Variation from Standard Sheer Profile

14.-(1) Where the sheer profile of a ship differs from the standard sheer profile, the four ordinates of each profile in the forward and after halves of the ship shall be multiplied by the appropriate factors given in the Table of ordinates in the preceding paragraph . The difference between the sums of the respective products and those of the standard divided by 8 shall be the deficiency or excess of

(2) In ships designed with a rake of keel, the sheer shall be measured in relation to a line of reference drawn parallel to the Summer load waterline.

(3) In flush deck ships and in ships with detached superstructures the sheer shall be measured at the freeboard deck.

(4) In ships with topsides of unusual form in which there is a step or break in the topsides, the sheer shall be considered in relation to the equivalent depth amidships.

(5) In ships with a superstructure of standard height which extends over the whole length of the freeboard deck, the sheer shall be measured at the superstructure deck. Where the height of the superstructure exceeds the standard height the least difference (Z) between the actual and standard heights shall be added to each end ordinate. Similarly, the intermediate ordinates at distances of 1/6 (L) and 1/3 (L) from each perpendicular shall be increased by 0.444 (Z) and 0.111 (Z) respectively.

(6) Where the deck of an enclosed superstructure has at least the same sheer as the exposed freeboard deck, the sheer of the enclosed portion of the freeboard deck shall not be taken into account.

(7) Where an enclosed poop or forecastle is either (a) of standard height with greater sheer than that of the freeboard deck, or (b) is of more than standard height, an addition to the sheer of the freeboard deck shall be made calculated in accordance with paragraph 14(4).

PART IV

FREEBOARDS

Types of freeboard

26. The freeboards assignable to a ship under these Rules are the Summer freeboard, Tropical freeboard, Winter freeboard, Winter North Atlantic freeboard, Fresh Water freeboard, and Tropical Fresh Water freeboard, and in the case of ships to which Timber freeboards are to be assigned the Summer Timber freeboard, Winter Timber freeboard, Winter North Atlantic Timber freeboard, Tropical Timber Freeboard, Fresh Water Timber freeboard and Tropical Fresh Water Timber freeboard.

Determination of freeboards

27. Except as otherwise provided in the following Rule-

(1)the freeboards to be assigned to a new ship shall be determined in accordance with the provisions of Schedule 5 to these Rules; and

(2) the freeboards to be assigned to an existing ship which prior to the coming into operation of these Rules has been assigned freeboards in accordance with the Load Lines Convention shall continue to be determined in accordance with the Load Lines convention;

(3) the freeboards to be assigned to any existing ship which does not fall within paragraph (2) shall be assigned in accordance with the provisions of the International Convention for the Safety of Life at Sea and Load Lines 1930:

Provided that if an existing ship has been so constructed or modified as to comply with all the requirements of Schedule 4 applicable to a new ship of her type and application is made for the

assignment to her of freeboards determined in acordance with the provisions of Schedule 5, such freeboards shall be assigned to her.

Greater than minimum freeboards

28.-(1) A freeboard determined in accordance with the preceding Rules of this Part is hereafter referred to in this Rule as a minimum freeboard.

(2) The owner of a ship may, when making application under Rule 2 for the assignment of freeboards in respect of the ship, request the assignment of freeboards greater than minimum freeboards.

(3)(a) In any such case the Assigning Authority may, if satisfied after survey of the ship pursuant to Rule 3 that the ship complies with the requirements of Rule 23 and Schedule 4 (other than those relating to stability) and if the Authority has received notification from the Chief Marine Surveyor that the ship complies with those requirements in so far as they relate to stability, assign to the ship freeboards (other than timber freeboards) exceeding the minimum freeboards appropriate to the ship by such amount as they may determine, and furnish to the owner of the ship particulars thereof in accordance with Rule 5. Such freeboards are hereafter referred to in this Rule as greater than minimum freeboards.

(b) Timber freeboards shall not be assigned to a ship to which greater than minimum freeboards have been assigned.

(4) In any case in which the greater than minimum Summer freeboard assigned to a ship in accordance with the provisions of the preceding paragraph is such that the position on the sides of the ship of the

TABLE

Percentage Of Deduction For Type 'B' Ships

	Total effective length of superstructures and trunks											
	Line	0	0.1 (L)	0.2 (L)	0.3 (L)	0.4 (L)	0.5 (L)	0.6 (L)	0.7 (L)	0.8 (L)	0.9 (L)	1.0 (L)
Ships with forecastle and without detached bridges	I	0	5	10	15	23.5	32	46	63	75.3	87.7	100
Ships with forecastle and detached bridges	II	0	6.3	12.7	19	27.5	36	46	63	75.3	87.7	100

(i) Where the effective length of a bridge covers less than 0.1 (L) before amidships and 0.1 (L) abaft amidships the percentages shall be obtained by linear interpolation between the lines I and II.

(ii) Where the effective length of a forecastle is more than 0.4 (L), the percentages shall be obtained from line II.

(iii) Where the effective length of a forecastle is more than 0.07 (L), the above percentages shall be reduced by:

$$5 \times \frac{(0.07(L) - f)}{0.07(L)}$$

where "f" is the effective length of the forecastle.

Measurement of Sheer

12.-(1) The sheer shall be measured from the deck at side to a line of reference drawn parallel to the keel through the sheer line at amidships.

a ship is 1.0(L), the basic freeboard of the ship shall be reduced:-

by 350 millimetres if the ship is 24 metres in length (L);

" 860 " " " " " 85 " " " "

" 1070 " " " " " 122 " " " " or more;

and by amounts obtained by linear interpolation in the case of ships of intermediate length.

(2) The basic freeboard of a ship shall be reduced according to the total effective length of her superstructures and trunks as follows:-

(a) in the case of Type "A" ship, by a percentage ascertained by reference to the following Table, the percentage in the case of a ship having superstructures and trunks of an effective length intermediate to those specified in the Table being obtained by linear interpolation:-

TABLE

Percentage Of Decuction For Type 'A' Ships

	Total effective length of superstructures and trunks										
	0	0.1 (L)	0.2 (L)	0.3 (L)	0.4 (L)	0.5 (L)	0.6 (L)	0.7 (L)	0.8 (L)	0.9 (L)	1.0 (L)
Percentage of deduction for all types of superstructures	0	7	14	21	31	41	52	63	75.3	87.7	100

(b) in the case of a Type "B" ship, by a percentage ascertained by reference to the following Table and to such of directions (i) to (iii) appended thereto as apply in the circumstances, the percentage in the case of a ship having superstructures and trunks of an effective length intermediate to those specified in the Table being obtained by linear interpolation:-

load line appropriate to that freeboard would correspond to, or be lower than, the position at which the lowest of the load lines appropriate to minimum freeboards for the ship would be marked-

(a) the following load lines only shall be marked on the sides of the ship, that is to say, those appropriate to the greater than minimum Summer freeboard and Fresh Water freeboard;

(b) the load line appropriate to the greater than minimum Summer freeboard shall be known as the "All Seasons load line" and shall consist of the horizontal line intersecting the load line mark and such mark shall be placed accordingly;

(c) the vertical line described in Rule 16 shall be omitted;

(d) subject to the provisions of sub-paragraph (c), the Fresh Water load line shall be as described in Rule 16(2) and be marked accordingly.

Special position of deck-line: correction of freeboards

29. In any case in which the deck-line is to be marked on the sides of a ship as provided in Rule 14(3), the freeboards to be assigned to the ship shall be corrected to allow for the vertical distance by which the position of the deckline is altered by virtue of that paragraph. The location of the point by reference to which the deck-line has been so marked and the identity of the deck which has been taken as the freeboard deck shall be specified in the load line certificate issued in respect of the ship.

PART V

GENERAL

Information as to stability of ships

30.-(1) The owner of any ship to which freeboards are assigned under

these Rules shall provide for the guidance of the master of the ship information relating to the stability of the ship in accordance with the following provisions of this Rule.

(2) Except as otherwise provided in paragraph(6) of this Rule, such information shall include particulars appropriate to the ship in respect of all matters specified in Schedule 7 to these Rules and shall be in the form required by that Schedule.

(3) Subject to the following paragraph, the information shall, when first supplied, be based on the determination of stability by means of an inclining test which shall unless the Chief Marine Surveyor otherwise permits be carried out in the presence of a surveyor appointed by the Chief Marine Surveyor. The information first supplied shall be replaced by fresh information whenever its accuracy is materially affected by alteration of the ship. Such fresh information shall if the Chief Marine Surveyor so require be based on a further inclining test.

(4) The Chief Marine Surveyor may-

(a) in the case of any ship allow the information to be based on the determination, by means of an inclining test, of the stability of a sister ship;

(b) in the case of a ship specially designed for the carriage of liquids or ore in bulk, or of any class of such ships, dispense with an inclining test if satisfied from the information available in respect of similiar ships that the ship's proportions and arrangements are such as to ensure more than sufficient stability in all probable loading conditions.

covers or by equivalent means;

(vi) that open rails or wires are fitted on the weather parts of the freeboard deck in way of the trunk for at least half their length;

(vii) that the machinery casings are protected by the trunk, or by an enclosed superstructure of at least standard height, or by a deckhouse of the same height and of strength and weathertightness equivalent to those of such a superstructure;

(viii) that the breath of the trunk is at least 60 per cent of the breath of the ship(B);

(ix) that where there is no superstructure the length of the trunk is at least 0.6(L).

(c) Except as otherwise provided in sub-paragraph (d), the effective length of an efficient trunk shall be its full length reduced in the ratio of its mean breadth to the breadth of the ship (B).

(d) If the actual height of an efficient trunk is less than the standard height, its effective length shall be the length calculated in accordance with sub-paragraph (c) reduced in the ratio of the actual to the standard height of the trunk. In addition, if the ship is a Type "B" ship and the height of hatchway coamings on the trunk deck is less than that required by paragraph 5(1) or 6(1) of Schedule 4 a reduction from the actual height of the trunk shall be made of an amount corresponding to the difference between the actual height of such coamings and the height so required for them.

Deduction for effective length of Superstructures and Trunks

11.-(1) Where the sum of the effective lengths of superstructures of

height.

(d) A superstructure which is not an enclosed superstructure shall have no effective length.

Standard height and effective length of trunks

10.-(1) The standard height of a trunk shall be determined in the same manner as that applicable to a superstructure other than a raised quarter deck under paragraph 9(1).

(2) The effective length of a trunk shall be determined as follows:-

(a) A trunk which is not an efficient trunk as described in sub-paragraph (b) shall have no effective length.

(b) A trunk shall be treated as an efficient trunk subject to the following conditions:-

(i) that it shall be at least as strong as a superstructure;

(ii) that the hatchways in way of the trunk are in the trunk deck, and the hatchway coamings and covers comply with the requirements of paragraphs 4 to 6 of Schedule 4.

Provided that small access openings with watertight covers may be permitted in the freeboard deck;

(iii) that the width of the trunk deck stringer provides a satisfactory gangway and sufficient lateral stiffness;

(iv) that a permanent working platform fore and aft fitted with guard rails or guard wires complying with the requirements applicable thereto under paragraph 18(2)(a) of Schedule 4 is provided by the trunk deck, or by detached trunks connected to superstructures by efficient permanent gangways;

(v) that ventilators are protected by the trunk, by watertight

(5) The information, and any fresh information to replace the same pursuant to paragraph (3) of this Rule, shall before issue to the master:-

(a) if it relates to a ship which is-

(i) an oil tanker over 100 metres in length;

(ii) a bulk carrier, or an ore carrier, over 150 metres in length;

(iii) a single deck bulk carrier over 100 metres but not exceeding 150 metres in length;

(iv) a single deck dry cargo ship over 100 metres in length; or

(v) a purpose built container ship over 125 metres in length;

be submitted in duplicate by or on behalf of the owner of the ship either to the Chief Marine Surveyor or to the Assigning Authority which assigned freeboards to the ship for approval; or

(b) if it relates to any other ship, be submitted in duplicate by or on behalf of the owner of the ship to the Chief Marine Surveyor for approval.

The information shall incorporate such additions and amendments as the Chief Marine Surveyor or the Assigning Aauthority to which it is submitted, as the case may be, may in any particular case specify for the purpose of ensuring that the information complies with the provisions of this Rule.

(6) Information provided pursuant to the foregoing provisions of this Rule shall be furnished by the owner of the ship to the master in the form of a book which shall be kept on the ship at all times in the custody of the master.

Information as to loading and ballasting of ships

31.-(1) The owner of any ship to which freeboards are assigned under these Rules, being a ship of more than 150 metres in length specially designed for the carriage of liquids or ore in bulk, shall provide for the information of the master information relating to the loading and ballasting of the ship in accordance with the following provisions of this Rule.

(2) Such information shall consist of working instructions specifying in detail the manner in which the ship is to be loaded and ballasted so as to avoid the creation of unacceptable stresses in her structure and shall indicate the maximum stresses permissible for the ship.

(3) The provisions of paragraph (5) of the preceding Rule shall have effect in respect of information required under this Rule, and the information duly approved in accordance with that paragraph shall be contained in the book to be furnished to the master of the ship pursuant to paragraph (7) of that Rule, so however that the information to be provided pursuant to each Rule is separately shown in the book under separate headings specifying the number and heading of each Rule.

Recognition of certificates issued by other Governments

32.-(1) In this Rule, "Load Lines Convention ship" means a ship to which section 42 of the Law applies.

(2) The circumstances in which certificates which are issued as International Load Line Certificates (1966) in respect of Load Lines

of the curvature:

Provided that the amount of the curvature to be taken into account shall not exceed one half the breadth of the superstructure at the point of intersection of the curved end of the superstructure with its side.

(3) The effective length of a superstructure (E) shall be as follows:-

(a) Subject to sub-paragraph (c), (E) the case of an enclosed superstructure of standard height shall be either-

(i) its length (S), or

(ii) if the superstructure is set in from the sides of the ship, its length (S) modified in the ratio b/Bs, where-

"b" is the breadth of the superstructure at the middle of its length (S) and

"Bs" is the breadth of the ship at the middle of the length of the superstructure (S):

Provided that if the superstructure is so set in for part only of its length, such modification shall be applied only to that part.

(b) Subject to sub-paragraph (c), (E) in the case of an enclosed superstructure of less than standard height shall be its length (S) reduced in the ratio of the actual height of the superstructure to its standard height.

(c) (E) in the case of an enclosed superstructure consisting of a raised quarter deck shall, if the deck is fitted with an intact front bulkhead, be its length (S) subject to a maximum of 0.6 of the ship's length (L); and if not so fitted, be ascertained by treating the raised quarter deck as a poop of less than standard

been fixed in accordance with the provisions of Rule 14(3), the actual depth of the ship shall be taken for the purposes of the foregoing requirement to the point amidships where the continuation outwards of the upper surface of the freeboard deck or of any sheathing of that deck intersects the outer surface of the shell of the ship.

Standard height, length and effective length of superstructures

9.-(1) The standard height of a superstructure shall be the height appropriate to the ship's length (L) determined in accordance with the following Table:-

Length of ship (L) (metres)	Standard Height (metres)	
	of a raised quarter deck	of a superstructure other than a raised quarter deck
30 or less	0.90	1.80
75	1.20	1.80
125 or more	1.80	2.30

Standard heights for intermediate lengths of ship shall be obtained by linear interpolation.

(2)(a) Subject to sub-paragraph (b), the length of superstructure (S) shall be the mean length of the parts of the superstructure which lie within the length of the ship(L).

(b) In the case of an enclosed superstructure having an end bulkhead which extends in a fair convex curve beyond its intersection with the superstructure sides, the length of the superstructure (S) may be taken as its length ascertained in accordance with sub-paragraph (a) increased on the basis of an equivalent plane bulkhead by the amount of two-thirds of the fore and aft extent

Convention ships by Governments other than the Government of the Cayman Islands shall be recognised for the purposes of the Law are as follows:-

(a) the certificate shows by its terms that it was issued in respect of the ship by a Government, being either-

(i) the Government of the Load Lines Convention country in which the ship is registered or,if the ship is not registered in any such country or elswhere, the Government of the Load Line Convention country whose flag she flies; or

(ii) the Government of any other Load Lines Convention country stated in the certificate to have issued the certificate at the request of a country specified in sub-paragraph (i),

or by a person or organisation under the authority of such a Government;

(b) the certificate is in the official language or languages of the issuing country and, if the language used is neither English nor French, includes in its text a translation into one of those languages;

(c) the certificate is in the form set out in Annex III to the Load Lines Convention for an International Load Line Certificate (1966) and contains all the particulars required by such form;

(d) the certificate shows that it is currently in force and applicable to the voyage in respect of which clearance or transire is required;

(e) the period for which the certificate is expressed to be valid does not exceed 5 years from the date of issue;

(f) any extension of the period for which the certificate is expressed to be valid is duly endorsed on the certificate by the

issuing authority and does not exceed 5 months;

(g) periodical inspections of the ship to which the certificate relates, being inspections required by Article 14(1)(c)of the Load Lines Convention,are shown duly endorsed on the certificate by the issuing authority;

(h) the ship to which the certificate relates-

(i) if registered in a Load Lines Convention country whenthe certificate was issued, remains registered in that country, or

(ii) if not so registered when the certificate was issued, either has since been registered in the Load Lines Convention country by or on behalf of the Government of which the certificate was issued and remains so registered, or flies the flag of that Load Lines Convention country.

(3) The circumstances in which exemption certificates which, in accordance with the Load Lines Convention, are issued in respect of Convention ships by Governments other than the Government of the Cayman Islands shall have the like effect for the purposes of the Law as if they were valid Load Lines Convention certificates are those specified in sub-paragraphs (a) to (h) of paragraph (2) of this Rule subject to the substitution for the reference in sub-paragraph(c) to an International Load Line Certificate(1966) of reference to an International Load Line Exemption Certificate.

PART VI

INTERPRETATION, CITATION AND COMMENCEMENT

Interpretation

33.-(1) In these Rules, except where the context otherwise requires-

omitting in the case of a Type "A" ship the corrections referred to in paragraph 4(3) and in the case of a Type "B" ship the corrections referred to in paragraph 5(11).

Correction for Depth

7.-(1) If the depth for freeboard (D) of a ship exceeds (L)/15, the basic freeboard of the ship shall be increased by ((D)-(L)/15)R millimetres, R for this purpose being taken to be (L)/0.48 in the case of a ship less than 120 metres in length, and 250 in the case of a ship of 120 metres or more in length

(2) If the depth for freeboard (D) of a ship is less than (L)/15, the basic freeboard of the ship shall be reduced by ((D)-(L)/15)R millimetres if, but only if, the ship has either (a) an enclosed superstructure covering at least 0.6(L) amidships, or (b) an efficient trunk extending for the ship's length (L), or(c) a combination of enclosed superstructures connected by efficient trunks, being a combintion extending for the ship's length(L):

Provided that if the height of any such superstructure or trunk is less than standard height the amount of such reduction shall be reduced in the ratio of the actual to the standard height of the superstructure or trunk.

Correction for position of deck-line

8. If the actual depth to the upper edge of the deck-line is greater or less than the depth for freeboard (D), the difference if greater shall be added to, or if less shall be deducted from, the basic freeboard of the ship:

Provided that in a case in which the position of the deck-line has

Freeboards at intermediate lengths of ship shall be obtained by linear interpolation. The increase in the case of ships of more than 200 metres in length shall be such amount as the Board may determine in each particular case.

(9)(a)This sub-paragraph applies to every Type "B" ship not of more than 100 metres in length having enclosed superstructures the total effective length of which does not exceed 35 per cent. of the ship's length (L).

(b) the freeboard calculated in respect of such a ship in accordance with sub-paragraphs (1), (2) and (8) above shall be increased by an amount ascertained in accordance with the formula $7.5(100-(L))(0.35-(E)/(L)$ millimetres.

(10) In the case of a ship the block coefficient (C_b) of which exceeds 0.68 the freeboard calculated in respect of the ship in accordance with sub-paragraphs (1) to (9) above shall be multiplied by the factor $\frac{(C_b)+0.68}{1.36}$

(11) Corrections in accordance with paragraphs 6 to 16 of this Schedule sahll be applied to the freeboard ascertained in accordance with sub-paragraphs (1) to (10) above and subject to the proviso to paragraph 3(1) the freeboard so corrected shall be the Summer freeboard to be assigned to the ship.

Basic freeboard

6. In the following paragraphs of this Schedule "basic freeboard" in relation to ship means the Summer freeboard calculated for the ship in accordance with paragraph 4 or 5 whichever is applicable, but

"alteration" includes deterioration;

"amidships" means the middle of the ship's length (L);

"Chief Marine Surveyor" means the Chief Marine Surveyor appointed by the Governor under the Law or any person duly appointed by the Chief Marine Surveyor to act on his behalf;

"deck cargo regulations" means the deck cargo regulations for the time being in force under section 56 of the Law;

"existing ship" means a ship which is not a new ship;

"freeboard" means the distance measured vertically downwards amidships from the upper edge of the deck-line described in Rule 14 of these Rules to the position at which the upper edge of the load line appropriate to the freeboard is to be marked;

"freeboard deck" in relation to a ship means the deck from which the freeboards assigned to the ship are calculated, being either-

(a) the uppermost complete deck exposed to weather and sea, which has permanent means of closing all openings in its weather portions, and below which all openings in the sides of the ship are fitted with permanent means of watertight closing; or

(b) at the request of the owner and subject to the approval of the Chief Marine Surveyor, a deck lower than that described in paragraph (a), subject to its being a complete and permanent deck which is continuous both (i) in a fore and aft direction at least between the machinery space and peak bulkheads of the ship and (ii) athwartships,

a deck which is stepped being taken to consist for this purpose of the lowest line of the deck and the continuation of that line parallel to the upper part of the deck;

"Governor" means the Governor in Council;

"the Law" means the Merchant Shipping (Applicable Conventions) Law

1987;

"length" and the symbol "(L)" in relation to a ship mean the length of the ship ascertained in accordance with paragraph (2) of this Rule;

"load line certificate" means a load line certificate issued pursuant to these Rules;

"Load Lines Convention" means the International Convention on Load Lines, signed on behalf of the United Kingdom in London on 5th April 1966;

"Load Lines Convention Country" has the meaning assigned to it in section 58(2) of the Law;

"moulded depth" in relation to a ship means the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side:

Provided that-

(a) in the case of a wood or composite ship, it shall be measured from the lower edge of the keel rabbet;

(b) if the form at the lower part of the midship section of the ship is of a hollow character, or if thick garboards are fitted, it shall be measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel;

(c) in the case of a ship having rounded gunwales, it shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design;

(d) if the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, it shall be measured to a line of reference extending from the lower part of the deck along a line parallel to the raised part of the deck;

(d) that the height of the centre of gravity above the base-line is assessed allowing for homogeneous loading of cargo holds and 50 per cent. of the designed capacity of consumable fluids and stores.

(8) The tabular freeboard of a ship to which sub-paragraph (2)(b) of this paragraph applies shall be increased by the amount shown by the following Table to be appropriate to the ship's length:-

TABLE

Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)	Length of ship (metres)	Freeboard increase (millimetres)
108 and below	50	139	175	170	290
109	52	140	181	171	292
110	55	141	186	172	294
111	57	142	191	173	297
112	59	143	196	174	299
113	62	144	201	175	301
114	64	145	206	176	304
115	68	146	210	177	306
116	70	147	215	178	308
117	73	148	219	179	311
118	76	149	224	180	313
119	80	150	228	181	315
120	84	151	232	182	318
121	87	152	236	183	320
122	91	153	240	184	322
123	95	154	244	185	325
124	99	155	247	186	327
125	103	156	251	187	329
126	108	157	254	188	332
127	112	158	258	189	334
128	116	159	261	190	336
129	121	160	264	191	339
130	126	161	267	192	341
131	131	162	270	193	343
132	136	163	273	194	346
133	142	164	275	195	348
134	147	165	278	196	350
135	153	166	280	197	353
136	159	167	283	198	355
137	164	168	285	199	357
138	170	169	287	200	358

(6) The condition of equilibrium referred to in sub-paragraphs (3) and (5) above is as follows:-

(a) the final waterline after flooding is below the top of any ventilator coaming, the lower edge of any air pipe opening, the upper edge of the sill of any access opening fitted with a weathertight door, and the lower edge of other opening through which progressive flooding may take place;

(b) the angle of heel due to unsymmetrical flooding does not exceed 15 degrees;

(c) the metacentric height calculated using the constant displacement method has a positive value of at least 50 millimetres in the upright condition after flooding; and

(d) the ship has adequate residual stability.

(7) The following assumptions shall be made for the purposes of calculations pursuant to sub-paragraphs (3)(d) and (5)(c):-

(a) that the vertical extent of damage is equal to the depth of the ship at the point of damage, measured from and including the freeboard deck at side to the underside of the keel;

(b) that the transverse penetration of damage is not more than one fifth of the breadth of the ship (B), this distance being measured inboard from the ship's side at right angles to the centre line of the ship at the level of the Summer load waterline:
Provided that if damage of a lesser extent results in a more severe condition, such lesser extent shall be assumed;

(c) that, except in the case of compartments referred to in sub-paragraph (5)(c)(i). no main transverse bulkhead is damaged.

"new ship" means a ship whose keel is laid, or which is at a similar stage of construction, on or after 21st July 1968;

"rake of keel" means the inclination of the keel to a horizontal baseline;

"sailing ship" includes a ship provided with sufficient sail area for navigation under sails alone, whether or not fitted with mechanical means of propulsion;

"Surveyor" means a surveyor of ships appointed either by the Governor under the Law or by any other Assigning Authority;

"watertight" means capable of preventing the passage of water in any direction.

(2) The length of a ship shall be the greater of the following distances:-

(a) the distance between the fore side of the stem and the axis of the rudder stock; or

(b) a distance measured from the fore side of the stern, being 96 per cent. of the distance between that point and the aft side of the stern,

the said points and measurements being taken respectively at and along the waterline defined in the following paragraph.

(3) The waterline referred to in the preceding paragraph shall be at 85 per cent. of the least moulded depth of the ship. In the case of a ship having a rake of keel the waterline shall be parallel to the designed waterline.

Citation and Commencement

34. These Rules may be cited as the Merchant Shipping (Load Line)

(Cayman Islands) Rules 1988 and shall come into operation in accordance with the provisions of the Merchant Shipping (Load Line (Commencement) and Notice of Arrangements for Surveys) (Cayman Islands) Regulations 1988.

other than the machinery space at an assumed permeability of 0.95, in the condition of equilibrium described in sub-paragraph (6):

Provided that if the length of the ship exceeds 225 metres the machinery space shall rank as a floodable compartment for the purposes of this requirement having for the purpose an assumed permeability of 0.85.

(4) Subject to sub-paragraph (5) no reduction of freeboard pursuant to sub-paragraph (3) shall exceed 60 per cent of the difference between the tabular freeboards appropriate to the ship's length under Freeboard Table A and Freeboard Table B.

(5) The reduction of 60 percent referred to in the preceding paragraph may be increased to 100 per cent if the Assigning Authority is satisfied that-

(a) the ship complies with the requirements of paragraphs 17 and 20 of Schedule 4 as if it were a Type "A" ship and with those of paragraph 22 of that Schedule;

(b) the ship complies with the requirements of sub-paragraph (3)(a) to (c); and

(c) the ship when loaded to the Summer load waterline will remain afloat in the condition of equilibrium described in sub-paragraph (6) after the flooding-

(i) of any two compartments adjacent fore and aft, neither of which is the machinery space, at an assumed permeability of 0.95, and

(ii) in the case of a ship exceeding 225 metres in length, of the machinery space alone, at an assumed permeability of

Summer freeboard: Type "B" ships

5. The Summer freeboard to be assigned to a Type "B" ship shall be determined as follows:-

(1) There shall first be ascertained the ship's tabular freeboard.

(2)(a) If the ship has hatchways in Position 1 the covers of which are either (i) pontoon covers complying with the requirements of paragraph 5(4) of Schedule 4 or (ii) covers which comply with those of paragraph 6 of that Schedule, the tabular freeboard may be corrected in accordance with such of the provisions of sub-paragraphs (3) to (7) of this paragraph as are applicable to the ship.

(b) If the ship has hatchways in Position 1 the covers of which comply with the requirements of paragraph 5 of Schedule 4 except those of sub-paragraph(4) of that paragraph, the tabular freeboard shall be corrected in accordance with the provisions of sub-paragraph (8) of this paragraph.

(3) The tabular freeboard of a ship to which sub-paragraph (2)(a) applies and which exceeds 100 metres in length may be reduced by an amount not exceeding the maximum applicable under sub-paragraphs (4) and (5) if the Assigning Authority is satisfied that-

(a) the measures for the protection of the crew comply with the requirements of paragraph 15 of Schedule 4;

(b) the freeing arrangements comply with the requirements of paragraph 14 of Schedule 4;

(c) all covers of hatchways in Positions 1 and 2 comply with the requirements of paragraph 6 of Schedule 4;

(d) the ship when loaded to the Summer load waterline will remain afloat, after the flooding or any single damaged compartment

SCHEDULE 1

FORMS OF CERTIFICATES

(Rules 6 and 11)

1. Form of International Load Line Certificate (1966):-

INTERNATIONAL LOAD LINE CERTIFICATE (1966)

(Official Seal)

Issued under the provisions of the International Convention on Load Lines, 1966, under the authority of the Government of the Cayman Islands by (full official designation of the Assigning Authority).

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined in Article 2(8)	Gross Tonnage

*Freeboard assigned as: A new ship, An existing ship.

*Type of Ship: Type A, Type B, Type B with reduced/increased freeboard/timber freeboard.

	Freeboard from Deck Line	Load Line
Tropical	.....mm.(T)	....mm.above(S)
Summer	.....mm.(S)	Upper edge of line through centre of ring
Winter	.....mm.(W)	....mm. below(S)
Winter North Atlantic	.....mm.(WNA)	.....mm.below(S)
Timber tropical	.....mm.(LT)	.....mm.above(LS)
Timber summer	.....mm.(LS)	.....mm.above(S)
Timber winter	.....mm.(LW)	.....mm.below(LS)
Timber winter North Atlantic	.....mm(LWNA)	.....mm.below(LS)

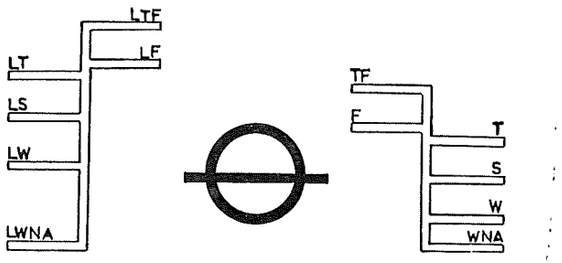
Note: Freeboards and Load Lines which are not applicable need not be entered on the certificate.

Allowance for Fresh Water for all freeboards other than timber .....mm.

Allowance for Fresh Water for Timber freeboards .....mm.

The upper edge of the deck line from which these freeboards are measured is.....

.....mm. .....



Note: Applicable load lines to be indicated.

Date of initial or periodical survey.....

This is to certify that this ship has been surveyed and that the freeboards have been assigned and load lines shown above have been marked in accordance with the International Convention on Load Lines 1966.

This certificate is valid until.....subject to periodical inspections in accordance with Article 14(1)(c)of the Convention.

Issued at ..... on .....19.....

The undersigned declares that

+ he is duly authorised

+ .....(specify Assigning Authority) are duly authorised by the said Government to issue this certificate.

.....
(Signature and designation)

NOTE

1. When a ship departs from a port situated on a river or inland water, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown above. Where the density is other than unity an allowance shall be made proportional to the difference between 1.025 and the actual density.

(4) The Winter North Atlantic freeboard shall be obatined by adding to the Winter freeboard applicable to the ship a distance of 50 millimetres.

(5)(a) The Fresh Water freeboard shall, subject to sub-paragraph (b), be obtained by deducting from the Summer freeboard the quantity-

$$\frac{\triangle}{4T}$$

where $\triangle$ the displacement in salt water in metric tons at the Summer load waterline, and T represents metric tons per centimetre immersion in salt water at that waterline.

(b) In any case in which the displacement at that waterline cannot be ascertained the deduction shall be one forty-eighth (1/48th) of the summer draught of the ship.

Summer freeboard: Type "A" ships

4. The Summer freeboard to be assigned to a Type "A" ship shall be determined as follows:-

(1) There shall first be ascertained the ship's tabular freeboard.

(2) If the block coefficient (C_b) of the ship exceeds 0.68 the tabular freeboard shall be multiplied by the factor $\frac{(C_b)+0.68}{1.36}$.

(3) Corrections in accordance with paragraphs 6 to 16 of this Schedule shall be applied to the freeboard ascertained in accordance with sub-paragraphs (1) and (2).

(4) Subject to the proviso to paragraph 3(1), the freeboard so corrected shall be the Summer freeboard to be assigned to the ship.

unmanned barges having on the freeboard deck only small access openings closed by watertight gasketed covers of steel, shall be determined in accordance with the provisions of Part III of this Schedule.

PART I

FREEBOARDS OTHER THAN TIMBER FREEBOARDS

Determination of freeboards

3.-(1) The Summer freeboard shall be determined in accordance with the provisions of pargraphs 4 to 16 of this Schedule:

Provided that the freeboard so obtained but omitting any correction made for deckline as provided in paragraph 8 shall be not less than 50 millimetres except in the case of a ship with hatchways in Position 1 to which paragraph 5 of Schedule 4 applies but which do not have pontoon covers, in which case it be shall be not less than 150 millimetres.

(2) The Tropical freeboard shall be obtained by deducting from the summer freeboard applicable to the ship one forty-eighth (1/48th) of the summer draught of the ship:

Provided that the freeboard so obtained but omitting any correction made for deckline as provided in paragraph 8 shall be not less than 50 millmetres except in the case of ship with hatchways in Position 1 to which paragraph 5 of Schedule 4 applies but which do not have pontoon covers, in which case it shall be not less than 150 millimetres.

(3) The Winter freeboard shall be obatined by adding to the Summer freeboard applicable to the ship one-forty-eighth (1/48th) of the summer draught of the ship.

* Delete whichever is inapplicable.

\+ The first alternative is to be used if the Ceritficate is issued by the Governor and the second where it is issued by an Assigning Authority other than the Governor.
Delete whichever is inapplicable.

This is to certify that at a periodical inspection required by Article 14(1)(c) of the Convention, this ship was found to comply with the relevant provisions of the Convention.

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

The provisions of the Convention being fully complied with by this ship, the validity of this certificate is, in accordance with Article 19(2) of the Convention, extended until.....

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

NOTE

This Certificate must be kept framed and posted up in some conspicuous place on board the ship, so long as it remains in force and the ship is in use.

2. Form of International Load Line Exemption Certificate:-

INTERNATIONAL LOAD LINE EXEMPTION CERTIFICATE

(Official seal)

Issued under the provisions of the International Conventions on Load Lines, 1966, under the authority of the Government of the Cayman Islands.

Name of Ship	Distinctive Number of Letters	Port of Registry

This is to certify that the above-mentioned ship is exempted from the provisions of the 1966 Convention, under the authority conferred by Article 6(2)/Article 6(4)* of the Convention referred to above.

The provisions of the Convention from which the ship is exempted under Article 6(2) are:

.....

.....

.....

The voyage for which exemption is granted under Article 6(4)is:

From:.....

To:.....

Conditions, if any, on which the exemption is granted under either Article 6(2) or Article 6(4):

.....

.....

.....

.....

.....

.....

"tabular freeboard" means in the case of a Type "A" ship the freeboard appropriate to the ship's length under Freeboard Table A set out in Schedule 6 to these Rules and in the case of a Type "B" ship the freeboard appropriate to the ship's length under Freeboard Table B in that Schedule.

Freeboards: general

2.-(1) Except as otherwise provided in sub-paragraphs (2) and (3), the freeboards to be assigned to ship other than Timber freeboards shall be determined in accordance with the provisions of Part I of this Schedule, and Timber Freeboards to be assigned to a ship shall be determined in accordance with Part II.

(2) Freeboards determined as described in sub-paragraph (1) are the freeboards appropriate to ships the structural strength of which complies with the highest standard required by an Assigning Authority; and the freeboards to be assigned to ships the structural strength of which does not comply with that standard shall be freeboards so determined but increased in each case by such amount as the Assigning Authority with approval of the Chief Marine Surveyor may determine as appropriate to the ship's structural strength.

(3) The freeboards to be assigned to-

sailing ships;

tugs;

ships of wood or of composite construction or of other materials; ships with constructional features such as to render freeboards determined as described in sub-paragraph (1) unreasonable or impraticable; and

(c) in the case of a ship having rounded gunwales, it shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design;

(d) if the freeboard deck is stepped and the raised part of the deck extends over the point at which the moulded depth is to be determined, it shall be measured to a line of reference extending from the lower part of the deck along a line parallel to the raised part of the deck.

"summer draught" in relation to a ship means the draught measured from-

(a) in the case of a wood or composite ship, the lower edge of the keel rabbet;

(b) if the form at the lower part of the midship section is of a hollow character, or if thick garboards are fitted, the point where the line of the line of the flat of the bottom continued inwards cuts the side of keel, and

(c) in any other case from the top of the keel,

to the point which when load lines and mark have been marked on the ship's side will correspond to the centre of the ring of the load line mark;

"summer timber draught" in relation to ship means the draught measured from point (a), (b) or (c) described in the preceding definition to the point which when timber load lines have been marked on the ship's side will correspond to the upper edge of the Summer Timber load line;

This certificate is valid until.....subject, where appropriate, to periodical inspections in accordance with Article 14(1)(c) of the Convention.

Issued at.....on.....19.....

The undersigned declares that he is duly authorised by the said Government to issue this certificate.

.....
An authorised officer of the Governor

*Delete whichever is inapplicable.

This is to certify that this ship continues to comply with the conditions under which this exemption was granted.

Place..... Date.....

.....Surveyor, Cayman Islands Government

Place..... Date.....

.....Surveyor, Cayman Islands Government

Place..... Date.....

.....Surveyor, Cayman Islands Government

Place..... Date.....

.....Surveyor, Cayman Islands Government

This ship continues to comply with the conditions under which this exemption was granted, and the validity of this certificate is, in accordance with article 19(4)(a) of the Convention, extended until.....

Place..... Date.....

.....
authorised by the Governor

3. Form of Islands load line certificate:

ISLANDS LOAD LINE CERTIFICATE

(Official Seal)

Issued *by the Government of the Cayman Islands * under the authority of the Chief Marine Surveyor by (full official designation of the Assigning Authority).

Name of Ship	Distinctive Number or Letters	Port of Registry	Length (L) as defined by regulations under section 32(6) of the Merchant Shipping (Load Lines) Act 1967	Gross Tonnage

*Freeboard assigned as: A new ship, An existing ship.

*Type of Ship: Type A, Type B, Type B with reduced/increased freeboard

Freeboard from Deck Line		Load Line
Tropical	mm.(T)	mm.above(S).
Summer	mm.(S)	Upper edge of line through centre of ring.
Winter	mm.(W)	mm.below(S)
Winter North Atlantic	mm. (WNA)	mm. below(S)

Allowance for fresh water for all freeboards.....mm.

The upper edge of the deck line from which these freeboards are measured is...

.....

This is to certify that this ship has been surveyed and the freebaords and load lines shown above have been assigned in accordance with the Merchant Shipping (Load Line) Rules 1968.

This certificate is valid until.....subject to periodical inspections in accordance with those Rules.

Issued at.....on.....19.....

Signature and designation.....

on behalf of.....
(specify Assigning Authority)

greater than 4 per cent of the breadth of the ship (B) or having topsides of unusual form, means the depth, calculated in accordance with sub-paragraph (a), which would be the depth for freeboard purposes of a ship having a midship section with vertical topsides and with the same round of beam and the same area of topside section as that of the midship section of the first mentioned ship;

"effective length" and the symbol "(E)" in relation to a super-structure means the effective length of the superstructure ascertained in accordance with the provisions of paragraph 9 of this Schedule;

"flush deck ship" means a ship which has no superstructure on the freeboard deck;

"length" and the symbol "(S)" in relation to a superstructure means the length of the superstructure acertained in accordance with the provisions of paragraph 9 of this Schedule;

"moulded depth" in relation to a ship means the vertical distance measured from the top of the keel to the top of the freeboard deck beam at side;

Provided that-

(a) in the case of a wood or composite ship, it shall be measured from the lower edge of the keel rabbet;

(b) if the form at the lower part of the midship section of the ship is of a hollow character, or if thick garboards are fitted, it shall be measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel;

SCHEDULE 5

FREEBOARDS

(Rule 27)

Interpretation

1. In this Schedule expressions defined in Schedule 4 have the meanings thereby assigned to them respectively, and-

"block coefficient" or the symbol "(Cb) " in relation to a ship means the product of-

$$\frac{\nabla}{L.Bd_1}$$

where-

∇ is the volume of the moulded displacement of the ship (excluding bossing) if the ship has a metal shell, and of displacement to the outer surface of the hull if the ship has a shell of any other material, displacement being taken in each case at a moulded draught of d_1 and

d_1 is 85 per cent of the least moulded depth;

provided that in no case shall the block coefficient (C_b)be taken to be less than 0.68;

"depth for freeboard" and the symbol "(D)" in relation to a ship-

(a) means, except as otherwise stated in sub-paragraph (b), the moulded depth of the ship amidships plus the thicknes of the freeboard deck stringer plate where fitted, plus, if the exposed freeboard deck is sheathed, the product of $\frac{T\ ((L)-(S))}{(L)}$ where T is the mean thickness of the exposed sheathing clear of deck openings;

(b) in the case of a ship having a rounded gunwale with a radius

NOTE:

1. When a ship departs from a port situated on a river or inland water, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.

2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of the fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.

*Delete whichever is inapplicable.

This is to certify that at a periodical inspection required by the Merchant Shipping (Load Line) Rules 1988 this ship was found to comply with the relevant provisions of the Rules.

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

Survey of this ship having been satisfactorily completed in accordance with the requirements of the Merchant Shipping (Load Line) Rules 1988, this Certificate is extended until.....

Place..... Date.....

(Signature and designation).....

on behalf of.....(specify Assigning Authority)

NOTE

This Certificate must be kept framed and posted up in some conspicuous place on board the ship, so long as it remains in force and the ship is in use.

4. Form of Islands load line exemption certificate:-

ISLANDS LOAD LINE EXEMPTION CERTIFICATE

(Official Seal)

Issued by the Government of Cayman Islands

Name of Ship	Distinctive Number of Letters	Port of Registry

This is to certify that the above-mentioned ship is exempted pursuant to Section 51(3) of the Merchant Shipping (Applicable Conventions) Law 1987 from-

*All the provisions of that Law and of the Merchant Shipping (Load Line) Rules 1988

*The following provisions of that Law and of the Merchant Shipping (Load Line) Rules 1988:-

.....

.....

.....

Subject to the following conditions+:-

.....

.....

.....

*Delete whichever is inapplicable.

+Delete if inapplicable.

This certificate is valid until.....subject, where appropriate, to periodical inspections in accordance with the Merchant Shipping (Load Line) Rules 1988.

Issued at .....on.....19.....

.....
An authorised officer of the Governor.

This is to certify that this ship continues to comply with the conditions under which this exemption was granted-

stays attached to the deck, and are provided with freeing ports complying with the requirements of paragraph 14(1) to (6), or

(2) efficient guard rails and stanchions at least 1 metre in height, of specially strong construction, and complying with the requirements of paragraph 15(4).

PART V

GENERAL

Equivalent or exceptional provision

30. The Assigning Authority may with the approval of the Chief Marine Surveyor-

(1) allow any fitting, material, appliance or apparatus to be fitted in a ship, or allow other provision to be made in a ship, in the place of any fitting, material, appliance, apparatus or provision respectively which is required under any of the provisions of this Schedule, if satisfied by trial thereof or otherwise that it is at least as effective as that so required; or

(2) allow in any exceptional case departures from the requirements of any of the said provisons on condition that the freeboards to be assigned to the ship are increased to such an extent as to satisfy the Chief Marine Surveyor that the safety of the ship and protection afforded to the crew will be no less effective than would be the case if the ship fully complied with those requirements and there were no such increase of freeboards.

PART IV

SPECIAL REQUIREMENTS APPLICABLE TO SHIPS TO BE ASSIGNED TIMBER FREEBOARDS

Application

26. The requirements of paragraphs 27 to 29 of this Part apply only in the case of ships to be assigned Timber freeboards.

Superstructures

27.-(1) The ship shall have a forecastle of not less than the standard height of an enclosed superstructure and not less in length than 0.07(L).

(2) If the ship is less than 100 metres in length it shall be fitted aft with either-

(i) a poop of not less than standard height, or

(ii) a raised quarter deck having either a deck house or a strong steel hood, so that the total height thereof is not less than the standard height of an enclosed superstructure.

Double Bottom Tanks

28. Double botttom tanks where fitted within the midship half length of the ship shall have satisfactory watertight longitudinal subdivision.

Bulwarks, guard rails and stanchions

29. The ship shall be fitted with either-

(1) permanent bulwarks at least 1 metre in height which are specially stiffened on the upper edge and supported by strong bulwark

Signed..... Place..... Date.....
Surveyor, Cayman Islands Government

Signed..... Place..... Date.....
Surveyor, Cayman Islands Government

Signed..... Place..... Date.....
Surveyor, Cayman Islands Government

Signed..... Place..... Date.....
Surveyor, Cayman Islands Government

SCHEDULE 2

APPROPRIATE LOAD LINES - ZONES, AREA AND SEASONAL PERIODS

PART I

Appropriate Load Lines (Rules 16 to 18)

1. Subject to paragraphs 3-6 of this Part, the load line appropriate to a ship shall be-

(1) the Summer load line when the ship is in a summer zone (excluding any part of such a zone which is to be regarded as a seasonal area in relation to the ship);

(2) the Tropical load line when the ship is in the tropical zone;

(3) when the ship is in a seasonal zone or area (including any part of a summer zone which is to be regarded as a seasonal area in relation to the ship) the Summer load line, the Winter load line or the Tropical load line according to whether the seasonal period applicable in that zone or area to that ship is respectively summer, winter or tropical.

2.-(1)The zones,

(2)the seasonal zones, seasonal areas and seasonal periods applicable to a ship, shall be those set out in Part II of this Schedule and shown by way of illustration on the Chart annexed to these Rules.

3. In the case of a ship of 100 metres or less in length, the appropriate load line shall be the Winter North Atlantic load line in-

(1) the North Atlantic Winter Seasonal Zone I as described in paragraph 1(1) of Part II of this Schedule;

(2) so much of North Atlantic Winter Seasonal Zone II, as so

relation to shelters in paragraph 18(5)(d) shall be provided in way of the gangway.

24. In the case of a ship the crew of which may in the course of their duties be required to go in adverse weather conditions to a position or positions forward of the detached bridge, or forward of the poop in cases where there is no detached bridge and all crew accommodation and machinery spaces are situated at the after end of the ship, access to such positions shall be -

(1) by the means described in paragraph 18(4), or

(2) by the means described in paragraph 23(2), or

(3) equivalent means of access:

Provided that in the case of a ship the hatchway coamings of which are 600 millimetres or more in height from the deck, two walkways giving access to the said positions and complying with the following requirements may be provided:-

(i) the walkways shall be efficiently constructed and of satisfactory stength;

(ii) the walkways shall each be at least 1 metre in width and shall be fitted on the freeboard deck alongside the outboard structure of the hatchway coamings, one to port and the other to starboard of the hatchways;

(iii) each walkway shall be fitted on the side outboard of the hatchways with guard rails or guard wires complying with the requirements set out in relation to such rails or wires in paragraph 18(2)(a)

Freeing arrangements

25. The ship shall comply with the requirements of paragraph 20(4).

of freeing ports and arrangements it will be particularly subjected under service conditions to the building up of quantities of water on the freeboard deck, efficient breakwaters shall be fitted in suitable positions on that deck.

PART III

SPECIAL REQUIREMENTS APPLICABLE TO CERTAIN TYPE "B" SHIPS

Application

21. The requirements of paragraphs 22 to 25 apply only in the case of Type "B" ships to be assigned a reduced freeboard under the provisions of paragraph 5(3) of Schedule 5.

Gangway and access

22. The ship shall comply with the requirements of either -

(1) paragraph 18 as if it were a Type "A" ship, or

(2) paragraphs 23 and 24.

23.-(1) References in this paragraph to a poop or detached bridge include references to a deckhouse fitted in lieu of and serving the purpose of a poop or detached bridge.

(2) Access between the poop and the detached bridge shall be by means of an efficiently constructed gangway of substantial strength connecting those structures, fitted on or near the centre line of the ship. The gangway shall be at least 1 metre in width and shall be fitted at each side throughout its length with guard rails or guard wires complying with the requirements set out in relation to such rails or wires in paragraph 18(2)(a). If the length of the gangway exceeds 70 metres, shelters complying with the reqirements set out in

described, as lies between the meridians of longitude of 15 degrees W and 50 degrees W

during the winter seasonal periods respectively applicable in those zones.

4. In the case of a sailing ship the appropriate load line shall except in circumstances in which paragraph 3 applies, be the Summer load line.

5. In the case of a ship marked with an All Seasons load line in accordance with Rule 28 that load line shall be the appropriate load line in all circumstances.

6. In the case of a ship marked with Timber load lines and carrying timber deck cargo in accordance with the requirements of the deck cargo regulations, the load line to be observed in any particular circumstances shall be the Timber load line corresponding to the load line which would be applicable in those circumstances under paragraphs 1 to 5 of this Schedule if the ship were not so marked.

PART II

Zones, Areas and Seasonal Periods

1. NORTHERN WINTER SEASONAL ZONES AND AREA

(1)North Atlantic Winter Seasonal Zones I and II

(a)The North Atlantic Winter Seasonal Zone I lies within the meridian of longitude 50 degrees W from the coast of Greenland to latitude 45 degrees N, thence the parallel of latitude 45 degrees N to longitude 15 degrees W, thence the meridian of longitude 15 degrees W of latitude 60 degrees N, thence the

parallel of latitude 60 degrees N to the Greenwich Meridian, thence this meridian northwards.

Seasonal periods:

Winter: 16 October to 15 April.

Summer: 16 April to 15 October.

(b) The North Atlantic Winter Seasonal Zone II lies within the meridian of longitude 68 degrees 30 minutes W from the coast of the United States to latitude 40 degrees N thence the rhumb line to the point latitude 36 degrees N longitude 73 degrees W thence the parallel of latitude 36 degrees N to longitude 25 degrees W and thence the rhumb line to Cape Torinana.

Excluded from this zone are the North Atlantic Winter Seasonal Zone I, the North Atlantic Winter Seasonal Area and the Baltic Sea bounded by the parallel of latitude of The Skaw in the Skagerrak.

Seasonal periods;

Winter: 1 November to 31 March.

Summer: 1 April to 31 October.

The Shetland Islands are to be considered as being on the boundary line between the North Atlantic Winter Seasonal Zones I and II.

(2) North Atlantic Winter Seasonal Area

The boundary of the North Atlantic Winter Seasonal area is - the meridian of longitude 68 degrees 30'W from the coast of the United States to latitude 40 degrees N, thence the rhumb line to the southernmost intersection of the meridian of longitude 61 degrees W with the coast of Canada and thence the east coasts of Canada and the

be provided with efficient means of passage over such obstruction.

(6) The requirements of this paragraph shall not apply in the case of unmanned barges.

Hatchway covers

19. The covers of hatchways in an exposed position on the freeboard deck, on a forecastle deck or on the top of an expansion trunk shall be of steel, of efficient construction, and watertight when secured.

Freeing arrangements

20.-(1) All exposed parts of the freeboard deck and superstructure decks shall be fitted at their perimeter for at least half their length with guard rails or guard wires in lieu of bulwarks or with other equally effective freeing arrangements. Such guard rails or guard wires shall comply with the requirements set out in relation to such rails or wires in paragraph 18(2)(a).

(2) The upper edge of the sheer strake shall be as low as practicable.

(3) If superstructures of the ship are connected by a trunk, the exposed parts of the freeboard deck in way of the trunk shall be fitted at their perimeter throughout their length with guard rails or guard wires complying with the requirements set out in relation to such rails or wires in paragraph 18(2)(a).

(4) If the ship is so constructed that notwithstanding the provision

their duties be required to go in adverse weather conditons to a position or positions forward of the detached bridge, or forward of the poop in cases where there is no detached bridge and all crew accommodation and machinery spaces are situated at the after end of the ship, access to such positions shall be by means of either -

(a) a gangway complying with the requirements of sub-paragraph (2)(a), or

(b) an underdeck passage complying with the requirements of sub-paragraph (3), or

(c) a walkway complying with the requirements of sub-paragraph (5).

(5) A walkway provided pursuant to sub-paragraph (4)(c) shall-

(a) be not less than 1 metre in width and be situated on or as near as practicable to the centre line of the ship;

(b) be fitted at each side throughout its length with guard rails or guard wires complying with the requirements set out in relation to such rails or wires in sub-paragraph (2)(a);

(c) have openings giving free access to and from the freeboard deck, set in such guard rails or guard wires as near as practicable to the working areas to be used by the crew, so however that such openings shall be on alternate sides of the walkway and be situated not more than 90 metres apart on either side;

(d) if the length of exposed deck to be traversed exceeds 70 metres, have shelters of substantial construction set in way of the walkway at intervals not exceeding 45 metres, every such shelter being capable of accommodating at least one person and so constructed as to afford weather protection on the forward, port and starboard sides;

(e) if obstructed by pipes or other fittings of a permanent nature,

United States.

Seasonal periods:

For ships over 100 metres in length:

Winter: 16 December to 15 February.

Summer: 16 February to 15 December

For ships of 100 metres or less in length:

Winter: 1 November to 31 March.

Summer: 1 April to 31 October.

(3) North Pacific Winter Seasonal Zone

The southern boundary of the North Pacific Winter Seasonal Zone is- the parallel of latitude 50 degrees N from the east coast of the USSR to the west coast of Sakhalin, thence the west coast of Sakhalin to the southern extremity of Cape Kril'on, thence the rhumb line to Wakkanai, Hokkaido, Japan, thence the east and south coasts of Hokaaido to longitude 145 degrees E, thence the meridian of longitude 145 degrees to latitude 35 degrees N, thence the parallel of latitude 35 degrees N to longitude 150 degrees W and thence the rhumb line to the southern extremity of Dall Island, Alaska.

Seasonal periods:

Winter: 16 October to 15 April.

Summer: 16 April to 15 October.

2. SOUTHERN WINTER SEASONAL ZONE

The northern boundary of the Southern Winter Seasonal Zone is- the rhumb line from the east coast of the American continent at Cape Tres Puntas to the Point latitude 34 degrees S, longitude 50 degrees

W, thence the parallel of latitude 34 degrees S to longitude 17 degrees E, thence the rhumb line to the point latitude 35 degrees 10'S, longitude 20 degrees E, thence the rhumb line to the point latitude 34 degrees S, longitude 28 degrees E, thence the rhumb line to the point latitude 35 degrees 30'S, longitude 118 degrees E, and thence the rhumb line to Cape Grim on the northwest coast of Tasmania; thence along the north and east coasts of Tasmania to the southernmost point of Bruny Island, thence the rhumb line to Black Rock Point on Stewart Island, thence the rhumb line to the point latitude 47 degrees S, longtitude 170 degrees E, thence the rhumb line to the point latitude 33 degrees S, longitude 170 degrees W, and thence the parallel of latitude 33 degrees S to the west coast of the American continent.

Seasonal periods:

Winter: 16 April to 15 October.

Summer: 16 October to 15 April.

Valparaiso is to be considered as being on the boundary line of the Summer and Winter Seasonal Zones.

3. TROPICAL ZONE

(1) Northern Boundary of the Tropical Zone

The northern boundary of the Tropical Zone is-

the parallel of latitude 13 degrees N from the east coast of the American continent to longitude 60 degrees W, thence the rhumb line to the point latitude 10 degrees N, longitude 58 degrees W, thence the parallel of latitude 10 degrees N to longitude 20 degrees W, thence the meridian of longitude 20 degrees W to latitude 30 degrees N and thence the parallel of latitude 30 degrees N to the west coast of Africa; from the east coast of

access between those structures and complying with the requirements of sub-paragraph (3);

or (c) equivalent means of access.

(3) An underdeck passage provided pursuant to sub-paragraph (2)(b) shall comply with the following requirements:-

(a) the passage and all fittings therein shall be oil and gas tight;

(b) the passage shall be well lighted, and be fitted with efficient gas detection and ventilation systems;

(c) it shall be situated immediately below the freeboard deck;

(d) its distance from the shell plating shall at no point throughout its length be less than one fifth of the breadth (B) of the ship:

Provided that in the case of a ship so designed as to render compliance with this requirement not reasonably practicable, two underdeck passages may be provided one to port and one to starboard each of which shall comply with all requirements of this paragraph except this requirement;

(e) means of exit from the passage to the freeboard deck shall be-

(i) so arranged as to be as near as practicable to the working areas to be used by the crew,

(ii) in no case be more than 90 metres apart, and

(iii) fitted with efficient means of closing which are capable of quick release and operable from either side;

(f) openings in the freeboard deck corresponding to the means of exit referred to in sub-paragraph (e) shall be protected in accordance with the requirements of paragraph 8(2)(a).

(4) In the case of a ship the crew of which may in the course of

(a) if there is no opening in the casing which gives direct access from the freeboard deck to the machinery space; or

(b) if the only opening in the casing has a steel weathertight door and leads to a space or passageway which is as strongly constructed as the casing and is separated from the stairway to the machinery space by a second steel weathertight door.

Gangway and access

18.-(1) Reference in this paragraph to a poop or detached bridge include references to a deckhouse fitted in lieu of and serving the purpose of a poop or detached bridge.

(2) Access between the poop and the detached bridge shall be by means of either -

(a) a permanent and efficiently constructed gangway of substantial strength connecting those structures. The gangway shall be at the level of the superstructure deck and have a platform at least 1 metre in width and of non-slip material. Efficient means of access from gangway level to the deck shall be provided at each terminal point. The platform shall be fitted at each side throughout its length with guard rails or guard wires supported by stanchions. Such rails or wires shall consist of not less than 3 courses, the lowest being not more than 230 millimetres, and the uppermost being at least 1 metre, above the platform, and no intermediate opening being more than 380 millimetres in height. Stanchions shall be at intervals of not more than 1.5 metres;

or (b) an underdeck passage connecting and providing unobstructed

Africa the parallel of latitude 8 degrees N to longitude 70 degrees E, thence the meridian of longitude 70 degrees E to latitude 13 degrees N, thence the parallel of latitude 13 degrees N to the west coast of India; thence the south coast of India to latitude 10 degrees 30'N on the east coast of India, thence the rhumb line to the point latitude 9 degrees N, longtitude 82 degrees E, thence the meridian of longitude 82 degrees E to latitude 8 degrees N, thence the parallel of latitude 8 degrees N to the west coast of Malaysia, thence the coast of South-East Asia to the east coast of Vietnam at latitude 10 degrees N, thence the parallel of latitude 10 degrees N to longitude 145 degrees E, thence the meridian of longitude 145 degrees E to latitude 13 degrees N and thence the parallel of latitude 13 degrees N to the west coast of the American continent.

Saigon is to be considered as being on the boundary line of the Tropical Zone and the Seasonal Tropical Area.

(2) Southern Boundary of the Tropical Zone

The southern boundary of the Tropical Zone is-

the rhumb line from the Port of Santos, Brazil, to the point where the meridian of longitude 40 degrees W intersects the Tropic of Capricorn; thence the Tropic of Capricorn to the west coast of Africa; from the east coast of Africa the parallel of latitude 20 degrees S to the west coast of Madagascar, thence the west and north coasts of Madagascar to longitude 50 degrees E, thence the meridian of longitude 50 degrees E to latitude 10 degrees S, thence the parallel of latitude 10 degrees S to longitude 98 degrees E, thence the rhumb line to Port Darwin, Australia, thence the coasts of Australia and Wessel Island

eastwards to Cape Wessel, thence the parallel of latitude 11 degrees S to the west side of Cape York; from the east side of Cape York the parallel of latitude 11 degrees S to longitude 150 degrees W, thence the rhumb line to the point latitude 26 degrees S, longitude 75 degrees W, and thence the rhumb line to the west coast of the American continent at latitude 30 degrees S.

Coquimbo and Santos are to be considered as being on the boundary line of the Tropical and Summer Zones.

(3) Areas to be included in the Tropical Zone

The following areas are to be treated as included in the Tropical Zone-

(a) The Suez Canal, The Red Sea and the Gulf of Aden, from Port Said to the meridian of longitude 45 degrees E.
Aden and Berbera are to be considered as being on the boundary line of the Tropical Zone and Seasonal Tropical Area.

(b) The Persian Gulf to the Meridian of longitude 59 degrees E.

(c) The area bounded by the parallel of latitude 22 degrees S from the east coast of Australia to the Great Barrier Reef, thence the Great Barrier Reef to latitude 11 degrees S. The northern boundary of the area is the southern boundary of the Tropical Zone.

4. SEASONAL TROPICAL AREAS

The following are Seasonal Tropical Areas:-

(1) In the North Atlantic

An area bounded-

on the north by the rhumb line from Cape Catoche, Yucatan, to Cape San Antonio, Cuba, the north coast of Cuba to latitude 20 degrees N

wires shall exceed 380 millimetres in height. Where the ship has rounded gunwales the stanchions shall be secured at the perimeter of the flat of the deck.

(5) Gangways, underdeck passages and all other means of access by which members of the crew pass between their quarters, the machinery space and any other space in the ship used by them in the course of their necessary work about the ship shall be so designed and constructed, and be fitted where necessary with such life lines, access ladders, guard rails or guard wires, hand rails or other safety fittings, as to afford effective protection for the crew.

(6) The requirements of this paragraph shall not apply in the case of unmanned barges.

PART II

SPECIAL REQUIREMENTS APPLICABLE TO TYPE "A" SHIPS

Application

16. The requirements of paragraphs 17 to 20 of this Part apply in the case of Type "A" ships only.

Machinery casings

17. Every casing enclosing a machinery space opening in Position 1 or Position 2 shall be protected by either -

(1) an enclosed poop or bridge of at least standard height, or

(2) a deckhouse of equal height and equivalent strength and weathertightness:

Provided that this requirement shall not apply and the casing may accordingly be exposed -

material.

(7) Efficient provision shall be made for freeing from water any superstructure other than an enclosed superstructure.

Protection of the Crew

15.-(1) Every deckhouse used for the accommodation of members of the crew shall be of efficient construction.

(2) Except as otherwise provided in sub-paragraph (3), all exposed parts of the freeboard deck and of every superstructure deck shall be fitted at their perimeter either with efficient guard rails or guard wires and stanchions complying with the requirements of sub-paragraph (4) or with bulwarks, being in either case at least 1 metre in height from the deck at side.

(3) The height specified in relation to guard rails or guard wires and bulwarks in sub-paragraph (2) may be reduced at any particular point if -

(a) the working of the ship would be unreasonably interfered with if such minimum height were adhered to at that point, and

(b) adequate protection is provided at that point.

(4) Guard rails or guard wires fitted pursuant to sub-paragraph (2) shall consist of courses of rails or wires supported by stanchions efficiently secured to the deck. The opening between the lowest course of the rails or wires and the deck shall not exceed 230 millimetres in height, and no opening above that course of rails or

and thence the parallel of latitude 20 degrees N to longitude 20 degrees W;

on the west by the coast of the American continent;

on the south and east by the northern boundary of the Tropical Zone.

Seasonal periods:

Tropical: 1 November to 15 July.

Summer: 16 July to 31 October

(2) In the Arabian Sea

An area bounded-

on the west by the coast of Africa, the meridian of longitude 45 degrees E in the Gulf of Aden, the coast of South Arabia and the meridian of longitude 59 degrees E in the Gulf of Oman;

on the north and east by the coasts of Pakistan and India;

on the south by the northern boundary of the Tropical Zone.

Seasonal periods:

Tropical: 1 September to 31 May.

Summer : 1 June to 31 August.

(3) In the Bay of Bengal

The Bay of Bengal north of the northern boundary of the Tropical Zone.

Seasonal Periods:

Tropical: 1 December to 30 April.

Summer: 1 May to 30 November.

(4) In the South Indian Ocean

(a) An area bounded-

on the north and west by the southern boundary of the Tropical Zone

and the east coast of Madagasar;
on the south by the parallel of latitude 20 degrees S;
on the east by the rhumb line from the point latitude 20 degrees S, longitude 50 degrees E, to the point latitude 15 degrees S, longitude 51 degrees 30'E, and thence by the meridian of longitude 51 degrees 30'E to latitude 10 degrees S.
Seasonal periods:
Tropical: 1 April to 30 November.
Summer: 1 December to 31 March.

(b) An area bounded-
on the north by the southern boundary of the Tropical Zone;
on the east by the coast of Australia;
on the south by the parallel of latitude 15 degrees S from longitude 51 degrees 30'E, to longitude 120 degrees E and thence the meridian of longitude 120 degrees E to the coast of Australia;
on the west by the meridian of longitude 51 degrees 30'E.
Seasonal periods:
Tropical: 1 May to 30 November.
Summer: 1 December to 30 April.

(5) In the China Sea
An area bounded-
on the west and north by the coasts of Vietnam and China from latitude 10 degrees N to Hong Kong;
on the east by the rhumb line from Hong Kong to the Port of Sual (Luzon Island) and the west coasts of the Islands of Luzon, Samar and Leyte to latitude 10 degrees N;
on the south by the parallel of latitude 10 degrees N.

(ii) If the bulwark is more than 1.2 metres in average height the required area shall be increased by 0.004 square metres per metre of length of well for each 0.1 metre difference in height. If the bulwark is less than 0.9 metre in average height, the required area may be decreased by 0.004 square metre per metre of length of well for each 0.1 metre difference in height.

(3)(a) If the deck on which the well is situated has no sheer, the area (A) shall be the area ascertained in accordance with sub-paragraph (2) increased by 50 per cent.

(b) If the deck on which the well is situated has sheer less than standard sheer, the area (A) shall be the area ascertained in accordance with subparagraph (2) increased by a percentage to be obtained by linear interpolation.

(c) If the deck on which the well is situated has sheer, two thirds of the freeing port area (A) shall be situated in the half of the well which is nearest to the lowest point of the sheer.

(4) The lower edge of every freeing port shall be as near to the deck as parcticable.

(5) Every freeing port more than 230 millimetres in depth shall be protected by rails or bars so fixed that the distance between the lowest rail or bar and the lower edge of the freeing port does not exceed 230 millimetres.

(6) Every freeing port which is fitted with a shutter shall have sufficient clearance to prevent jamming of the shutter, and the shutter hinges shall have pins or bearings of efficient non-corrodible

whichever is the greater.

(3) Every side scuttle, deadlight and glass (if fitted) shall be of substantial construction and be efficiently fitted.

Freeing ports and arrangements

14.-(1) Where bulwarks on the weather portions of the freeboard deck, a raised quarter deck or a superstructure deck form wells, efficient provision shall be made for rapidly freeing the decks of water in bulk and for draining them, and in particular the requirements set out in sub-paragraphs (2) to (7) below shall be complied with.

(2) Except as otherwise provided in sub-paragraph (3) and (4), the sum of the areas of the openings of freeing ports on each side of the ship for each such well (hereafter referred to in this paragraph as "the freeing port area" and by the symbol "(A)") shall -

(a) if the well is on the freeboard deck or on a raised quarter deck be not less than the area ascertained in accordance with the following formula, and

(b) if the well is on a superstructure deck other than a raised quarter deck be not less than one half of that area:-

Formula

(i) Where the length of a bulwark (l) in the well is 20 metres or less

(A) = 0.7+0.035 (l) (square metres); and where (l) exceeds 20 metres,

(A) = 0.07 (l) (square metres)

(l) need in no case be taken as greater that 0.7(L).

Hong Kong and Sual are to be considered as being on the boundary of the Seasonal Tropical Area and Summer Zone.

Seasonal periods:

Tropical: 21 January to 20 April.

Summer: 1 May to 20 January.

(6) In the North Pacific

(a) An area bounded-

on the north by the parallel of latitude 25 degrees N;
on the west by the meridian of longitude 160 degrees E;
on the south by the parallel of latitude 13 degrees N;
on the east by the meridian of longitude 130 degrees W.

Seasonal periods:

Tropical: 1 April to 31 October.

Summer: 1 November to 31 March.

(b) An area bounded-

on the north and east by the west coast of the American continent;
on the west by the meridian of longitude 123 degrees W from the coast of the American continent to latitude 33 degrees N and by the rhumb line from the point latitude 33 degrees N, longitude 123 degrees W to the point latitude 13 degrees N, longitude 105 degrees W;
on the south by the parallel of latitude 13 degrees N.

Seasonal periods:

Tropical: 1 March to 30 June and 1 November to 30 November.

Summer: 1 July to 31 October and 1 December to 28/29 February.

(7) In the South Pacific

(a) The Gulf of Carpentaria south of latitude 11 degrees S.

Seasonal periods:

Tropical: 1 April to 30 November.

Summer: 1 December to 31 March.

(b) An area bounded-

on the north and east by the southern boundary of the Tropical Zone;
on the south by the Tropic of Capricorn from the east coast of Australia to longitude 150 degrees W, thence by the meridian of longitude 150 degrees W to latitude 20 degrees S and thence by the parallel of latitude 20 degrees S to the point where it intersects the southern boundary of the tropical Zone;
on the west by the boundaries of the area within the Great Barrier Reef included in the Tropical Zone and by the east coast of Australia.

Seasonal periods:

Tropical: 1 April to 30 November.

Summer: 1 Decmeber to 31 March.

5. SUMMER ZONES

The remaining sea areas constitute the summer Zones.
However, for ships of 100 metres or less in length, the area bounded-
on the north and west by the east coast of the United States;
on the east by the meridian of longitude 68 degrees 30' W from the coast of the United States to latitude 40 degrees N and thence by the rhumb line to the point latitude 36 degrees N longitude 73 degrees W;
on the south by the parallel of latitude 36 degrees N;
is a Winter Seasonal Area.

Seasonal periods:

Winter: 1 November to 31 March.

Summer: 1 April to 31 October.

Provided that this paragraph shall not apply -

(i) where the scupper or discharge pipe is fitted with means for preventing water from passing inboard in accordance with the provisions of sub-paragraphs (1) to (3); or

(ii) in any case in which the piping of the scupper or discharge pipe is of substantial thickness.

(6) Every scupper leading from a superstructure other than an enclosed superstructure or from a deckhouse not fitted with weathertight doors shall be led overboard.

(7) All valves and shell fittings required by the provisions of this paragraph shall be of steel, bronze or other suitable ductile material, and all pipes referred to in this paragraph shall be of steel or equivalent material.

Side Scuttles

13. (1) Every side scuttle to space below the freeboard deck or to space within an enclosed superstructure shall be fitted with a hinged inside deadlight by which it can be effectively closed and secured watertight.

(2) No side scuttle shall be fitted in a position such that its sill, when load lines have been marked on the ship's side, will be below a line drawn parallel to the freeboard deck at side having as its lowest point -

(a) 2.5 per cent of the breadth of the ship (B) above the Summer load line, or

(b) 500 millimetres above the Summer load line,

(4)(a) The controls of any valve situated in a manned machinery space, and serving a main or auxiliary sea inlet or discharge or bilge injection system shall be so sited as to be readily accessible at all times under service conditions. Valves referred to in this and the following sub-paragraph shall be equipped with an indicator showing whether the valve is open or closed.

(b) The controls of any valve situated in an unattended machinery space and serving a sea inlet or discharge or bilge injection system shall be so sited as to be readily accessible at all times under service conditions, particular attention being paid in this regard to possible delay in reaching or operating the controls. In addition, the machinery space in which the valve is situated shall be equipped with an efficient warning device to give warning at suitable control positions of any entry of water into the machinery space other than water resulting from the normal operation of the machinery.

(c) In this sub-paragraph "unattended machinery space" means a machinery space which during the normal operation of the ship at sea is unmanned for any period, and "manned machinery space" means a machinery space other than an unattended machinery space.

(5) Every scupper and discharge pipe originating at any level and penetrating the shell of the ship either -

(a) more than 450 millimetres below the freeboard deck, or

(b) less than 600 millimetres above the Summer load waterline shall be equipped with an automatic non-return valve situated as close to the ship's shell as practicable and substantially connected thereto:

6. ENCLOSED SEAS

(1) Baltic Sea

This sea bounded by the parallel of latitude of The Skaw in the Skagerrak is included in the Summer Zones.

However, for ships of 100 metres or less in length, it is a Winter Seasonal Area.

Seasonal periods:

Winter: 1 November to 31 March.

Summer: 1 April to 30 October.

(2) Black Sea

This sea is included in the Summer Zones.

However, for ships of 100 metres or less in length, the area north of latitude 44 degrees N is a Winter Seasonal Area.

Seasonal periods:

Winter: 1 December to 28/29 February.

Summer: 1 March to 30 November.

(3) Mediterranean

This sea is included in the Summer Zones.

However, for ships of 100 metres or less in length, the area bounded-

on the north and west by the coasts of France and Spain and the meridian of longitude 3 degrees E from the coast of Spain to latitude 40 degrees N;

on the south by the parallel of latitude 40 degres N from longitude 3 degrees E to the West coast of Sardinia;

on the east by the west and north coasts of Sardinia from latitude 40 degrees N to longitude 9 degrees E, thence by the meridian of longitude 9 degrees E to the south coast of Corsica, thence by the

west and north coasts of Corsica to longitude 9 degrees E and thence by the rhumb line to Cape Sicie,
is a Winter Seasonal Area.
Seasonal periods:

Winter: 16 December to 15 March.

Summer: 16 March to 15 December.

(4) Sea of Japan

This sea south of latitude 50 degrees N is included in the Summer Zones.
However, for ships of 100 metres or less in length, the area between the parallel of latitude 50 degrees N and the rhumb line from the east coast of Korea at latitude 38 degrees N to the west coast of Hokkaido, Japan, at latitude 43 degrees 12′ N is a Winter Seasonal Area.
Seasonal periods:

Winter: 1 December to 28/29 February.

Summer: 1 March to 30 November.

(7) Ports on Boundary Lines

For the purposes of the application of the provisons of this Schedule to a ship at a port which stands on the boundary line between two zones or areas or between a zone and an area, or which is required under the foregoing provisions of this Schedule to be considered as being on such a boundary line, the port shall be deemed to be within the zone or area into which the ship is about to proceed or from which she has arrived as the case may be.

(b) from within any enclosed superstructrure, or from within any deckhouse on the freeboard deck which is fitted with weathertight doors,

shall be fitted in accordance with sub-paragraphs (2) and (3) with efficient means for preventing water from passing inboard.

(2) Subject to sub-paragraph (3), such means shall consist of a single automatic non-return valve fitted at the shell of the ship and having positive means of closure from a position or positions above the freeboard deck. Such positions shall be readily accessible at all times under service conditions and shall be provided with an indicator showing whether the valve is open or closed.

(3)(a) If when load lines are marked on the ship's side the vertical distance from the Summer load waterline to the inboard end of a discharge pipe will exceed 0.01(L), such means may consist of two automatic non-return valves having no positive means of closure, one of which shall be situated as close to the ship's shell as parcticable and be substantially connected thereto and the inboard one of which is so situated that it will at all times under service conditions be readily accessible for examination.

(b) Where the vertical distance referred to in sub-paragraph (a) will exceed 0.02(L) such means may consist, if in the circumstances the following would be equally effective, of a single automatic non-return valve having no positive means of closure, situated as close to the ship's shell as practicable and substantially connected thereto.

(4) The height described in the preceding sub-paragraph may in any particular case be lower than the minimum specified in relation thereto in that sub-paragraph if -

(a) the working of the ship would be unreasonably interfered with if such minimum heights were adhered to, and

(b) the closing arrangements are such as to ensure that such lower height is adequate in the circumstances.

Cargo ports and similar openings

11.-(1) Cargo ports and similar openings in the ship's side below the freeboard deck or in the sides or ends of superstructures which form part of the shell of the ship shall be compatible with the design of the ship and shall not exceed in number those necessary for the proper working of the ship.

(2) Every such cargo port and opening shall be provided with a door or doors so fitted and designed as to ensure watertightness and structural integrity commensurate with the surrounding shell plating.

(3) No such cargo port or opening below the freeboard deck shall, unless the Board otherwise consents, be so situated that when load lines have been marked on the ship's side the lower edge of the port or opening will be below a line drawn parallel to the freeboard deck at side having as its lowest point the upper edge of the uppermost load line.

Scuppers, inlets and discharges

12.-(1) Every discharge led through the shell of a ship either -

(a) from spaces below the freeboard deck, or

SCHEDULE 3

(Rule 25)

RECORD OF PARTICULARS

The following is the form of record of particulars referred to in Rule 25:-

MERCHANT SHIPPING (LOAD LINE) RULES 1988

RECORD OF PARTICULARS RELATING TO

CONDITIONS OF ASSIGNMENT

In this record reference to regulations are references to the regulations set out in Annex 1 to the Load Lines Convention and reference to paragraphs are references to paragraphs of Schedule 4 (Conditions of Assignment) to the above mentioned Rules.

Name of ship

Port of registry

Nationality

Distinctive number or letters

Shipbuilders

Yard number

Date of build/conversion

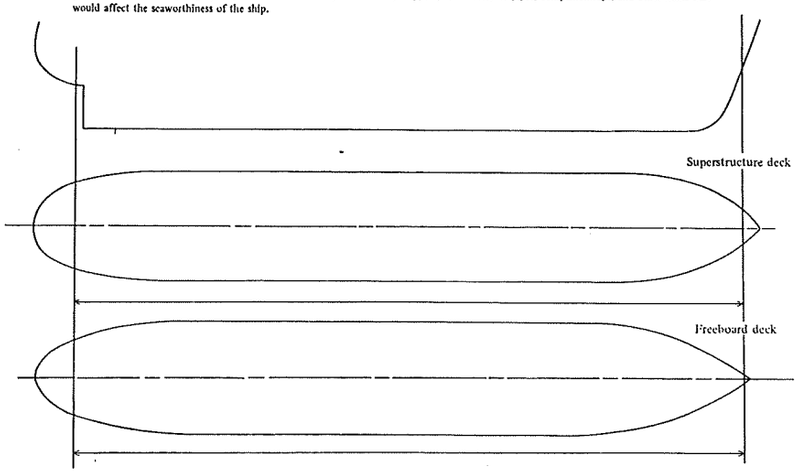
Freeboards assigned as a ship of Type

Classification

Date and place of initial survey.

A plan of suitable size may be attached to this Report in preference to the sketches on this page

Disposition and dimensions of superstructures, trunks, deckhouses, machinery casings; extent of bulwarks, guard rails and wood sheathing on exposed deck, to be inserted in the diagrams and tables following; together with positions of hatchways, gangways, and other means for the protection of the crew; cargo ports, bow and stern doors, side scuttles, scuppers, ventilators, air pipes, companionways, and other items that would affect the seaworthiness of the ship.



(See Schedule 4 to these Rules, paragraphs 7 and 8)

DOORWAYS IN SUPERSTUCTURES, EXPOSED MACHINERY CASINGS AND DECKHOUSES PROTECTING OPENINGS IN FREEBOARD AND SUPERSTRUCTURE DECKS

(Regulations 12, 17 and 18)

Location	Ref. No. on Sketch or Plan	Number and Size of Openings	Height of Sills	Closing Appliances	
				Type and Material	Number of Clips
In forecastle bulkhead					
In bridge forward bulkhead					
In bridge after bulkhead					
In raised quarter deck bulkhead					
In poop bulkhead					
In exposed machinery casings on freeboard or raised quarter decks					

DOORWAYS IN SUPERSTRUCTURES, EXPOSED MACHINERY CASINGS AND DECKHOUSES PROTECTING OPENINGS IN FREEBOARD AND SUPERSTRUCTURE DECKS

(continued)

Location	Ref. No on Sketch or Plan	Number and Size of Openings	Height of Sills	Closing Appliances	
				Type and Material	Number of Clips
In exposed machinery casings on superstructure decks					
In machinery casings within superstructures or deckhouses on freeboard deck					
In deckhouses in Position 1 enclosing openings leading below freeboard deck					
In deckhouses in Position 2 enclosing openings leading within enclosed superstructures or below freeboard deck					
In exposed pump room casings					

of any other ship shall either be so attached or be conveniently stowed near to, the ventilator for which it is provided.

(5)(a) A ventilator in Position 1 the coaming of which exceeds 4.5 metres in height above the deck, and a ventilator in Positon 2 the coaming of which exceeds 2.3 metres in height above the deck, need not be fitted with a closing appliance unless either -

(i) it serves the machinery spaces or a cargo compartment, or

(ii) the fitting of such an appliance is necessary in the circumstances in order to provide adequate protection.

(b) A ventilator in Position 1 or Position 2 leading to space in a battery room shall not be fitted with a closing appliance.

Air pipes

10.-(1) The exposed parts of any air pipe leading to a ballast or other tank and extending above the freeboard deck or a superstructure deck shall be of substantial construction.

(2) The exposed opening of any such air pipe shall be fitted with efficient means of closing the opening weathertight, which shall be permanently attached in a position ready for immediate use.

(3) The Subject to sub-paragraph (4), the height above deck of the exposed opening of any such airpipe shall be -

(a) at least 760 millimetres if that deck is the freeboard deck;

(b) if that deck is a superstructure deck, at least 450 millimetres or, if the superstructure is of less than standard height, such greater height as is necessary to provide adequate protection having regard to the lower height of the superstructure.

have a coaming of steel or equivalent material, substantially constructed and efficiently connected to the deck.

The height of such coamings shall be at least -

(i) 900 millimetres above the deck if the ventilator is in Position 1;

(ii) 760 millimetres above the deck if the ventilator is Position 2;

(b) Where the coaming for any ventilator referred to in sub-paragraph (a) is situated in a position in which it will be particularly subjected to weather and sea the height of the coaming shall exceed the relevant minimum height above specified by such amount as is necessary to provide adequate protection having regard to its position.

(2) If the coaming of any ventilator referred to in the preceding sub-paragraph exceeds 900 millimetres in height above the deck it shall be efficiently supported by stays, brackets or other means.

(3) Every ventilator in Position 1 or Position 2 which passes through a superstructure other than an enclosed superstructure shall have a coaming of steel or equivalent material at the freeboard deck, substantially constructed and efficiently connected to that deck and at least 900 millimetres in height above that deck.

(4) Subject to the following sub-paragraph, every ventilator opening in Position 1 or Position 2 shall be provided with an efficient appliance by which it can be closed and secured weathertight. Every such closing appliance so provided on board a ship of not more than 100 metres in length shall be permanently attached to, and in the case

(See Schedule 4 to these Rules, paragraph 3)

HATCHWAYS AT POSITIONS 1 AND 2 CLOSED BY PORTABLE COVERS AND SECURED WEATHERTIGHT BY TARPAULINS AND BATTENING DEVICES (Regulation 15)

Position and Reference No. on Sketch or Plan						
Dimensions of clear opening at top of coaming						
Height of coamings above deck						
PORTABLE BEAMS — Number						
PORTABLE BEAMS — Spacing						
PORTABLE BEAMS — $b_1 \times t_f$						
PORTABLE BEAMS — $D \times t_w$						
PORTABLE BEAMS — $b_2 \times t_f$						
PORTABLE BEAMS — Bearing surface						
Means of securing each beam						
PORTABLE COVERS — Material						
PORTABLE COVERS — Thickness						
PORTABLE COVERS — Direction fitted						
PORTABLE COVERS — Bearing surface						
Spacing of Cleats						
TARPAULINS — No. of layers						
TARPAULINS — Material						

Means of securing each section of covers: .....

Are wood covers fitted with galvanized end bands? .....

(See Schedule 4 to these Rules, paragraphs 6 and 19)

HATCHWAYS AT POSITIONS 1 AND 2 CLOSED BY WEATHERTIGHT COVERS OF STEEL (OR OTHER EQUIVALENT MATERIAL) FITTED WITH GASKETS AND CLAMPING DEVICES (Regulation 16)

Position and Reference No. on Sketch or Plan						
Dimensions of clear opening at top of coaming						
Height of coaming above deck						
Type of cover or Patent Name						
Material						

Position and Reference No. on Sketch or Plan						
Dimensions of clear opening at top of coaming						
Height of coaming above deck						
Type of cover or Patent Name						
Material						

(See Schedule 4 to these Rules, paragraphs 7 and 8)

MACHINERY SPACE OPENINGS AND MISCELLANEOUS OPENINGS IN FREEBOARD AND SUPERSTRUCTURE DECKS (Regulations 17 and 18)

Positions and Reference No. on Sketch or Plan						
Dimensions						
Height of coaming						
COVER — Material						
COVER — How attached						
Number and Spacing of Toggles						

Position and Reference No. on Sketch or Plan						
Dimensions						
Height of coaming						
COVER — Material						
COVER — How attached						
Number and Spacing of Toggles						

Particulars of spurling pipe closing arrangements (Regulation 18 and see Schedule 4 to these Rules, paragraph 8) : .....

(See Schedule 4 to these Rules, paragraph 9)

VENTILATORS ON FREEBOARD AND SUPERSTRUCTURE DECKS (POSITIONS 1 AND 2) (Regulation 19)

Deck on which fitted	Number fitted	Coaming		Type (State Patent Name if any)	Closing Appliances
		Dimensions	Height		

(See Schedule 4 to these Rules, paragraph 10)

AIR PIPES ON FREEBOARD AND SUPERSTRUCTURE DECKS (Regulation 20)

Deck on which fitted	Number fitted	Coaming		Type (State Patent Name if any)	Closing Appliances
		Dimensions	Height		

(2) Every opening in a deck other than a hatchway, machinery space opening, manhole or flush scuttle shall -

(a) if situated in the freeboard deck be protected either by an enclosed superstructure or by a deckhouse or companionway equivalent in strength and weathertightness to an enclosed superstructure;

(b) if situated in an exposed position either -

(i) in a deck over an enclosed superstructure and giving access to space within that superstructure, or

(ii) on top of a deckhouse on the freeboard deck and giving access to space below that deck,

be protected by an efficient deckhouse or companionway fitted with weathertight doors;

(c) if situated in an exposed position in a deck above the deck over an enclosed superstructure and giving access to space within that superstructure, be protected either in accordance with the requirements of sub-paragraph (b) or to such lesser extent as may be adequate having regard to its position.

(3) Every door in a companionway, deckhouse or enclosed superstructure referred to in sub-paragraph 2(a) or (b) shall have a sill the height of which shall be at least -

(a) 600 millimetres if the structure is in Position 1;

(b) 380 millimetres if the structure is in Position 2.

Ventilators

9.- (1)(a) Except as otherwise provided in sub-paragraph (b), every ventilator in Position 1 or Position 2 leading to space below the freeboard deck or below the deck of an enclosed superstructure shall

which the casing is protected by other structures.

(2) Every doorway in a casing referred to in the preceding sub-paragraph shall be fitted with a steel weathertight door having a sill the height of which shall be at least -

(a) 600 millimetres above the deck if the opening is in Position 1;

(b) 380 millimetres above the deck if the opening is in Position 2.

(3) Every opening in such a casing other than a doorway shall be fitted with a permanently attached cover of steel, which is fitted with efficient means by which it can be secured and maintained weathertight and, except in the case of a cover consisting of a plate secured by bolts, is capable of being operated from either side of the opening.

(4) Every fiddley, funnel or machinery space ventilator situated in an exposed position on the freeboard deck or on a superstructure deck shall have a coaming of such height above the deck as will provide adequate protection having regard to its position.

Miscellaneous Openings in Freeboard and Superstructure Decks

8.- (1) Every manhole and flush scuttle in Position 1 or Position 2 shall be provided with a substantial cover fitted with efficient means by which it can be secured and maintained watertight. Unless secured by closely spaced bolts, every such covers shall be permanently attached by a chain or equivalent means so as to be available for immediate use at all times.

(See Schedule 4 to these Rules, paragraph 11)

CARGO PORTS AND OTHER SIMILAR OPENINGS (Regulation 21)

Position of port	Dimensions of opening	Distance of lower edge from freeboard deck	Securing devices	Remarks

(See Schedule 4 to these Rules, paragraph 12)

SCUPPERS, INLETS AND DISCHARGES (Regulation 22)

State if Scupper or Discharge	Number	Pipe			From	Vertical distance above top of keel			Number, Type and Material of Discharge Valves	Position of Controls
						Discharge		Uppermost Valve		
		Diameter	Thick-ness	Material		Outlet in hull	Inboard end			

NOTE: In Ro-ro ships, indicate how ready accessibility to scupper valves is ensured when vehicle space is filled.....

S—Scupper
D—Discharge

MS—Mild Steel
CS—Cast Steel
GM—Gun Metal
Any other approved material to be designated

SD—Screw down
ANR—Automatic non-return
SD ANR—Screw down automatic non-return

(*See Schedule 4 to these Rules, paragraph* 13)

SIDE SCUTTLES (Regulation 23)

Position	Number fitted	Clear glass size	Fixed or opening	Material		Type of Glass and Thickness	Standards used and Type No.
				Frame	Deadlight		

Indicate the vertical distance between the freeboard deck and the lower sill of the side scuttle positioned at the greatest vertical distance below the freeboard deck. .....

(*See Schedule 4 to these Rules, paragraphs* 14 *and* 20)

FREEING PORTS (Regulation 24)

	Length of Bulwark	Height of Bulwark	Number and Size of Freeing Ports each side	Total Area each side	Required Area each side
Freeboard Deck After Well					
Forward Well					
Superstructure Deck					

State fore and aft position of each freeing port in relation to superstructure end bulkheads { After Well / Forward Well }

Particulars of shutters, bars or rails fitted to freeing ports.

Height of lower edge of freeing port above deck.

(*See Schedule 4 to these Rules, paragraphs* 15, 18, 22, 23 *and* 24)

PROTECTION OF THE CREW (Regulations 25 and 26)

State particulars of bulwarks or guardrails on freeboard and superstructure decks:

State details of lifelines, walkways, gangways or underdeck passageways where required to be fitted:

(See Schedule 4 to these Rules, paragraph 29)

TIMBER DECK CARGO FITTINGS (Regulation 44)

State particulars of uprights, sockets, lashings, guardrails and lifelines:

OTHER SPECIAL FEATURES

(b) A hatchway may have a coaming of less than the height applicable under the provisions of sub-paragraph (a), or in exceptional circumstances a coaming may be dispensed with, provided:

(i) that the safety of the ship will not be impaired in consequence in the worst sea and weather conditions likely to be encountered by the ship in service, and

(ii) that any coaming fitted pursuant to this sub-paragraph is of substantial construction.

(2) Weathertight Covers: (a) The strength of every cover of mild steel shall be calculated with an assumed load ascertained in accordance with the Table set out in paragraph 5(2) and the product of the maximum stress thus calculated and the factor 4.25 shall not exceed the minimum ultimate strength of the material. Every such cover shall be so designed as to limit the deflection under such a load to not more than 0.0028 times the span.

(b) Every cover constructed of material other than mild steel shall have strength and stiffness equivalent to those required in the case of a cover of mild steel.

(c) Every cover shall be fitted with efficient means by which it can be secured and made weathertight.

(d) Mild steel plating forming the top of any cover shall be not less in thickness than one per cent. of the spacing of the stiffeners or 6 millimetres whichever is the greater.

Machinery Space Openings

7.-(1) Every machinery space opening situated in Position 1 or Position 2 shall be efficiently framed and enclosed by a steel casing of substantial strength, account being taken of the extent, if any, to

their purpose and in good condition. Wedges shall be of tough wood or equivalent material cut to a taper of not more than 1 in 6 and shall be not less than 13 millimetres thick at the toes.

(8) Tarpaulins: At least two layers of tarpaulins shall be provided for every hatchway. Such tarpaulins shall be waterproof, in good condition, and of material of satisfactory strength and quality.

(9) Security of hatchway covers: (a) Except as otherwise provided in sub-paragraph (b), steel bars shall be provided for every hatchway sufficient to ensure that each section of hatchway covers can be efficiently and independently secured after the tarpaulins have been battened down and that hatchway covers more than 1.5 metres in length are so secured by at least two such bars.

(b) Bars of material other than steel, or means of securing hatchway covers otherwise than by bars, may be so used, provided:

(i) that in the case of the former, the strength and stiffness of the bars used are equivalent to those of steel bars;

(ii) that in either case the degree of security so achieved is not less than that which would be achieved by the use of steel bars.

Hatchways closed by Weathertight Covers of Steel or equivalent material fitted with Gaskets and Clamping Devices

6.-(1) Coamings: (a) Except as otherwise provided in sub-paragraph (b), every hatchway shall have a coaming of substantial construction the height of which above the deck shall be at least -

600 millimetres if the hatchway is in Position 1;

450 millimetres if the hatchway is in Position 2.

INITIAL SURVEY

The conditions of assignment shown on this form are a record of the arrangements and fittings provided on the ship and are in accordance with the requirements of the relevant regulations set out in Annex I to the Load Line Convention and of these Rules.

.....
(Surveyor's Signature)

.....
(Date)

SUBSEQUENT PERIODICAL SURVEYS

I have completed the periodical survey and am satisfied that the fittings and appliances are in accordance with the particulars shown in this record and are in good condition and that approved stability information and, where applicable, information relating to loading and ballasting of the ship is on board.

Signature	Port of Survey	Date of Survey
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

SCHEDULE 4

CONDITIONS OF ASSIGNMENT

Interpretation

1. In this Schedule, except where the context otherwise requires-

"breadth" and the symbol "(B)" in relation to a ship mean the maximum breadth of the ship measured amidships to the moulded line of the frame in the case of a ship having a metal shell, or to the outer surface of the hull in the case of a ship having a shell of any other material;

"enclosed superstructure" means a superstructure-

(a) which has enclosing bulkheads of efficient construction in which all access openings are fitted with sills and weathertight doors, and

(b) in which all other openings in sides or ends thereof are fitted with efficient weathertight means of closing,

but shall not include a bridge or poop fulfilling these requirements unless access is provided by which the crew can reach machinery and other working spaces within the bridge or poop by alternative means which are available for the purpose at all times when access openings in the bulkheads of the bridge or poop are closed;

"exposed position" means a position which is either-

(a) exposed to weather and sea, or

(b) within a structure so exposed other than an enclosed superstructure;

"forward perpendicular" means the perpendicular taken at the forward

(4) Pontoon covers: (a) Where pontoon covers of mild steel are used in place of portable beams and covers their strength shall be calculated with the appropriate assumed load ascertained in accordance with the Table in sub-paragraph (2) and the product of the maximum stress thus calculated and the factor 5 shall not exceed the minimum ultimate strength of the material.

(b) Such pontoon covers shall be so designed as to limit the deflection to not more than 0.0022 times the span under the load appropriate to a pontoon cover under sub-paragraph (a).

(c) Mild steel plating forming the tops of such covers shall be not less in thickness than 1 per cent of the spacing of the stiffeners or 6 millimetres, whichever is the greater.

(d) In the case of pontoon covers not made of mild steel, the strength and stiffness of the cover shall be equivalent to those of a cover of mild steel.

(5) Carrier or sockets: Carriers or sockets for portable beams shall be of substantial construction, and shall provide efficient means for the fitting and securing of the beams. Where rolling types of beams are used the arrangements shall ensure that the beams remain properly in position when the hatchway is closed.

(6) Cleats: Cleats shall be set to fit the taper of the wedges. They shall be at least 65 millimetres wide and spaced not more than 600 millimetres centre to centre. The end cleats along each side or end of the hatchway shall be not more than 150 millimetres from the hatch corners.

(7) Battens and wedges: Battens and wedges shall be efficient for

TABLE

Ship's Length (L)	Assumed Load, per square metre	
	Hatchway in Position 1	Hatchway in Position 2
24 metres	1 metric ton	.75 metric ton
100 metres or over	1.75 metric tons	1.30 metric tons
Over 24 metres but less than 100 metres	to be ascertained by linear interpolation	

(ii) the cover shall be so designed as to limit the deflection to not more than 0.0028 times the span under the load appropriate to the hatchway cover under sub-paragraph(i).

(d) In the case of a cover made neither of mild steel nor wood the strength and stiffness of the cover shall be equivalent to those of a cover of mild steel.

(3) Portable beams: (a) Where portable beams for supporting hatchway covers are made of mild steel, the strength of such beams shall be calculated with the appropriate assumed load ascertained in accordance with the Table in sub-paragraph (2) and the product of the maximum stress thus calculated and the factor 5 shall not exceed the minimum ultimate strength of the material.

(b) Such beams shall be so designed as to limit the deflection to not more than 0.0022 times the span under the load appropriate to the beam under sub-paragraph (a).

(c) In the case of portable beams not made of mild steel, the strength and stiffness of the beams shall be equivalent to those of beams of mild steel.

end of the ship's length (L), coinciding with the foreside of the stem on the waterline on which such length is measured; and "after perpendicular" means the perpendicular taken at the after end of such length;

"height" in relation to a superstructure means the least vertical height measured at side from the top of the superstructure deck beams to the top of the freeboard deck beams; and the "standard height" of a superstructure means the height ascertained in accordance with the provisions of paragraph 9 of Schedule 5;

"IMO" means the Intergovernmental Martime Organisation;

"Summer load waterline" in relation to a ship means the waterline which corresponds, or will when load lines have been marked on the sides of the ship correspond, to the Summer load line of the ship;

"superstructure" means a decked structure (including a raised quarter deck) situated on the freeboard deck which either extends from side to side of the ship or is such that its side plating is not inboard of the shell plating of the ship by more than 4 per cent of the breadth (B) of the ship; and, where the freeboard deck of the ship consists of a lower deck as described in sub-paragraph (b) of the definition of "freeboard deck"in Rule 33, includes that part of the hull of the ship which extends above the freeboard deck;

"superstructure deck" means a deck forming the top of a superstructure;

"Type "A" ship" means a ship which is designed to carry only liquid cargoes in bulk and has the characteristics set out below:-

(a) The cargo tanks of the ship have only small access openings closed by water-tight gasketed covers of steel.

(b) The ship in consequence of its design has high integrity of the exposed deck and has a high degree of safety against flooding in consequence of the low permeability of loaded cargo spaces and the degree of subdivision therein.

(c) If over 150 metres in length and designed to have empty compartments when loaded to the Summer load waterline, the ship shall be capable of remaining afloat after the flooding of any one of such empty compartments, at an assumed permeability of 0.95 in the condition of equilibrium described in the following sub-paragraph;

Provided that if the ship exceed 225 metres in length its machinery space shall also be treated as one of the floodable compartments above mentioned but with an assumed permeability of 0.85.

(d) The condition of equilibrium referred to in sub-paragraph (c) is as follows:-

(i) the final water line after the flooding specified in that sub-paragraphis below the top of any ventilator coaming, the lower edge of any air pipe opening, the upper edge of the sill of any access opening fitted with a weather-tight door, and the lower edge of any other opening through which progressive flooding may take place;

(ii) the angle of heel due to unsymmetrical flooding does not exceed 15 degrees;

(iii) the metacentric height calculated using the constant displacement method has a positive value of at least 50

be constructed of other material provided that the strength and stiffness of the coaming are equivalent to those of a coaming of mild steel. The height of the coaming above the deck shall be at least-

600 millimetres if the hatchway is in Position 1;

450 millimetres if the hatchway is in Position 2.

(2) Covers: (a) The width of every bearing surface for a hatchway cover shall be at least 65 millimetres.

(b) In the case of a cover made of wood-

(i) the finished thickness of the cover shall be at least 60 millimetres in association with a span of not more than 1.5 metres, and the thickness of covers for larger spans shall be increased in the ratio of 60 millimetres to a span of 1.5 metres;

(ii) the ends of the cover shall be protected by galvanised steel bands efficiently secured.

(c) In the case of a cover made of mild steel-

(i) the strength of the cover shall be calculated with an assumed load ascertained in accordance with the following Table, and the product of the maximum stress thus calculated and the factor 4.25 shall not exceed the minimum ultimate strength of the material:-

3. Bulkheads at exposed ends of enclosed superstructures shall be of efficient construction. The height of any sill in an access opening in such a bulkhead shall except where otherwise stated be at least 380 millimetres above the deck.

Hatchways: General

4.-(1) The provisions of this paragraph and of paragraphs 5 and 6 apply to all hatchways in Position 1 or in Position 2 except where otherwise stated.

(2) Subject to sub-paragraph (3), the construction and the means for securing the weathertightness of a hatchway shall-

(a) in the case of a hatchway closed by a portable cover and secured weathertight by tarpaulins and battening devices, comply with the requirements of paragraph 5; and

(b) in the case of a hatchway closed by a weathertight cover of steel or other equivalent material fitted with gaskets and clamping devices, comply with the requirements of paragraph 6.

(3) Every hatchway in an exposed position on a deck above a superstructure deck and leading to space below that superstructure deck shall be of such construction and be fitted with such means for securing the weathertightness of the hatchway as are adequate having regard to its position.

Hatchways Closed by Portable Covers and Secured Weathertight by Tarpaulins and Battening Devices.

5.-(1) Coamings: Every hatchway shall have a coaming of substantial construction. The coaming shall be constructed of mild steel but may

millimetres in the upright condition after the flooding specified in that sub-paragraph; and

(iv) the ship has adequate residual stability.

"Type "B" ship" means either-

(a) a new ship other than a Type "A" ship, or

(b) an existing ship which, being so constructed or modified as to comply with all the requirements of this Schedule applicable to a new ship of her type, is to be assigned freeboards determined in accordance with Schedule 5;

"weathertight" in relation to any part of a ship other than a door in a bulkhead means that the part is such that water will not penetrate it and so enter the hull of the ship in the worst sea and weather conditions likely to be encountered by the ship in service; and in relation to a door in a bulkhead means a door which-

(a) is constructed of steel or other equivalent material, is permanently and strongly attached to the bulkhead, and is framed, stiffened and fitted so that the whole structure in which it is set is of equivalent strength to the unpierced bulkhead;

(b) is closed by means of gaskets, clamping devices or other equivalent means permanently attached to the bulkhead or to the door itself;

(c) when closed, is weathertight as above defined; and

(d) is so arranged that it can be operated from either side of the bulkhead.

References to any structure, opening or fitting as being in Position 1 or Position 2 shall be construed as references to its being in the

following positions respectively:-

Position 1: in an exposed position on either (a) the freeboard deck or a raised quarter deck or (b) a superstructure deck and forward of a point one quarter of the ship's length (L) from the forward perpendicular;

Position 2: in an exposed position on a superstructure deck and abaft the said point.

PART I

SHIPS IN GENERAL

Structural Strength and Stability

2.- (1) The construction of the ship shall be such that her general structural strength will be sufficient for the freeboards to be assigned to her.

(2) Without prejudice to paragraph (4), the design and construction of the ship shall be such as to ensure that her stability in all probable loading conditions will be sufficient for the freeboards to be assigned to her, and for this purpose regard shall be had, in addition to the intended service of the ship and to any relevant requirements of Regulations made under the Law relating to the safety of life at sea, to the following criteria:-

(a) The area under the curve of Righting Levers (GZ curve) shall not be less than-

(i) 0.055 metre-radians up to an angle of 30 degrees;

(ii) 0.09 metre-radians up to an angle of either 40 degrees or the angle at which the lower edges of any openings in the hull, superstructures or deckhouses, being opeings which cannot be closed weathertight, are immersed if that angle

be less;

(iii) 0.03 metre-radians between the angles of heel of 30 degrees and 40 degrees or such lesser angle as is referred to in (ii).

(b) The Righting Lever (GZ) shall be at least 0.20 metres at an angle of heel equal to or greater than 30 degrees.

(c) The maximum Righting Lever (GZ) shall occur wherever possible at an angle of heel not less than 30 degrees, and in any event at any angle of heel not less than 25 degrees.

(d) The initial transverse metacentric height shall not be less than 0.15 metres. In the case of a ship carrying a timber deck cargo which complies with subparagraph (a) by taking into account the volume of timber deck cargo the initial transverse metacentric height shall not be less than 0.05 metres.

(3) To determine whether the ship complies with the requirements of sub-paragraph (2) the ship shall, unless the Chief Marine Surveyor otherwise permits be subjected to an inclining test carried out in the presence of a surveyor appointed by the Chief Marine Surveyor and the Chief Marine Surveyor shall notify the Assigning Authority whether or not they are satisfied that the ship complies with those requirements.

(4) Where the Chief Marine Surveyor considers that the criteria referred to in paragraph (2) are inappropriate to the assessment of the stability of a particular ship he may authorise other appropriate criteria to be used and in specifyng such other appropriate criteria he shall have regard to the current standard laid down by the IMO.

Superstructure End Bulkheads