Lloyd's Register Marine

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Compliance Review Against SOLAS Requirements

(Vessel : 'Galleons Passage' ,LR 9772888)

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1. Executive Summary

At the request of new Owners of the vessel, Lloyd's Register Technical Support Office, Singapore has carried out a compliance review to determine the gaps in the vessel's current arrangement against the requirements of SOLAS (Safety of Life at Sea 1974 with the amendments there in).

At the time of new build, vessel was delivered to comply with Lloyds Register Special Service Craft Rules (for Classification matters) and Australian NSCV 1C (National Standard for Commercial Vehicles) standards (for statutory matters) . New Owners of the vessel intend to apply SOLAS requirements applicable for short international voyage to the vessel for their future operations.

Gap analysis study was carried out based on the plans and documents submitted to this office during the new build plan approval stage.

Study outcome shows several non-compliances, which are reported in Appendix-1.

Major gaps are found to be from Fire-Safety & damage stability aspects. Gaps are to be resolved through modification of arrangement or submission of further calculations/details. Cost impact of such modification could be significant.

Purpose of this study is only to highlight the gaps and does not constitute to be complete plan appraisal leading to issuance of Design Appraisal Documents etc. Full plan appraisal will be carried when further submissions are made in accordance with the remarks stated in the Appendix.

2. Background

Lloyd's Register Technical Support Office, Singapore has been contracted by the Owenrs of the vessel to carryout a Gap analysis study of the vessel, 'Galleons Passage', in order to determine the gaps in the vessel's current arrangement against the requirements of SOLAS (Safety of Life at Sea 1974 with the amendments there in) applicable for short international voyage.

Short international voyage is an international voyage in the course of which a ship is not more than 200 miles from a port or place in which the passengers and crew could be placed in safety. Neither the distance between the last port of call in the country in which the voyage begins and the final port of destination nor the return voyage shall exceed 600 miles. The final port of destination is the last port of call in the scheduled voyage at which the ship commences its return voyage to the country in which the voyage began.

Vessel was originally built to comply with the requirements of Lloyds Register Special Service Craft Rules and Australian NSCV 1C (National Standard for Commercial Vehicles) standards for statutory matters.

From structural strength point of view, vessel's operation is limited by G3 Service Group 3, which covers craft intended for service in waters where the range to refuge is 150 nautical miles or less.

3. Vessel Particulars

The vessel particulars are as follows:

Length Overall	73.60 m
Length B P	67.27 m
Breadth	22.0 m
Depth	5.75 m
Draft (summer)	2.75 m
GT	2796
NT	838

Class notation:

✠ 100A1 SSC Passenger, Catamaran, LDC, G3

[✠] LMC

4. Review methodology & comments.

Gap analysis study was done based on the plans and documents submitted to this office during the new build plan approval phase. All plans & documents previously approved against NSCV requirements have been re-examined against SOLAS requirements.

Primary focus of the review was on the requirements of SOLAS Chapter-II-1 & II-2, III & V, which make significant impact on the vessel design & arrangement from various aspects.

Study outcome shows several non-compliances, which are reported in **Appendix-1**.

Gaps listed in the Appendix-1 are categorized as:

No	Not in compliance with the regulation
Yes	In compliance with the regulation
NA	Not applicable for this type/size of vessels
Unable to verify	Needs to be verified onboard or Insufficient information to confirm compliance, further details are required

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APPENDIX-1

SOLAS GAP ANALYSIS FOR GALLEONS PASSAGE

Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
1	Chapter II-1 Regulation 5-1 - Stability information to be supplied to the master	2	The information should include: .1 curves or tables of minimum operational metacentric height (GM) versus draught which assures compliance with the relevant intact and damage stability requirements, alternatively corresponding curves or tables of the maximum allowable vertical centre of gravity (KG) versus draught, or with the equivalents of either of these curves:	Probabilistic Damage Stability Booklet	No	- NSCV requirements of damage stability are on basis of deterministic method (existing approval). - Stability information stated in Reg.5-1 (requirement of limiting MinGM curve as simplified stability information supplied to the Master) shall be submitted and for compliance with the requirements of Reg.6 (Required Index R) and Reg.7 (Attained Index A).	See also the explanatory notes to SOLAS Chapter II-1, IMO Res. MSC.429(98) for the details of probabilistic damage stability calculations.
2	Chapter II-1 Regulation 6 - Required subdivision index R	1	The subdivision of a ship is considered sufficient if the attained subdivision index A, determined in accordance with regulation 7, is not less than the required subdivision index R calculated in accordance with this regulation and if, in addition, the partial indices A s , A p and A l are not less than 0.9R for passenger ships and 0.5R for cargo ships.	Probabilistic Damage Stability Booklet	No	- NSCV requirements of damage stability are on basis of deterministic method (existing approval). - Stability information stated in Reg.5-1 (requirement of limiting MinGM curve as simplified stability information supplied to the Master) shall be submitted and for compliance with the requirements of Reg.6 (Required Index R) and Reg.7 (Attained Index A).	See also the explanatory notes to SOLAS Chapter II-1, IMO Res. MSC.429(98) for the details of probabilistic damage stability calculations.
3	Chapter II-1 Regulation 8 - Special requirements concerning passenger ship stability	1	A passenger ship intended to carry 400 or more persons shall have watertight subdivision abaft the collision bulkhead so that si = 1 for the three loading conditions on which is based the calculation of the subdivision index and for a damage involving all the compartments within 0.08L measured from the forward perpendicular.	Side Damage and Fwd Damage within 0.08L	No	Side & fwd damage stability calculations has not been done.	Side & fwd damage stability calculations shall be submitted for approval.
4		2	A passenger ship intended to carry 36 or more persons is to be capable of withstanding damage along the side shell to an extent specified in paragraph 3. Compliance with this regulation is to be achieved by demonstrating that si , as defined in regulation 7-2, is not less than 0.9 for the three loading conditions on which is based the calculation of the subdivision index.				
5	Chapter II-1 Regulation B-1 - System capabilities and operational information after a flooding casualty on passenger ships	1 - Application	Passenger ships having three or more main vertical zones shall comply with the provisions of this regulation.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	Unable to verify	No main vertical or horizontal zones are provided.	Where three or more main vertical zones are provided, ship is to comply with section 2 of this regulation.
6		2 - Availability of essential systems in case of flooding damage	A passenger ship constructed on or after 1 July 2010 shall be designed so that the systems specified in regulation II-2/21.4 remain operational when the ship is subject to flooding of any single watertight compartment.				
7	Chapter II-1 Regulation 9 - Double bottoms in passenger ships and cargo ships other than tankers	1	A double bottom shall be fitted extending from the collision bulkhead to the afterpeak bulkhead, as far as this is practicable and compatible with the design and proper working of the ship.	Damage Stability Book Dwg. no: 1029.L02.01(B)	No	Double bottom is not fitted in way of Engine Room. Double bottom damage stability calculation as per Reg.9 is not submitted.	Double bottom damage stability calculation as per Reg.9.6 and Reg.9.8 shall be submitted.
8	Chapter II-1 Regulation 12 - Peak and machinery space bulkheads, shaft tunnels, etc.	1	A collision bulkhead shall be fitted which shall be watertight up to the bulkhead deck. This bulkhead shall be located at a distance from the forward perpendicular of not less than 0.05L or 10 m, whichever is the less, and, except as may be permitted by the Administration, not more than 0.08L or 0.05L + 3 m, whichever is the greater.	General Arrangement	No	Existing arrangement does not meet the requirement. Position of collision bulkhead is outside the range of 0.05L-0.08L from forward perpendicular.	Flag exemption is to be sought.
9	Chapter II-1 Regulation 13 - Openings in watertight bulkheads below the bulkhead deck in passenger ships	5.1	Watertight doors, except as provided in paragraph 9.1 or regulation 14, shall be power-operated sliding doors complying with the requirements of paragraph 7 capable of being closed simultaneously from the central operating console at the navigation bridge in not more than 60 s with the ship in the upright position.	Damage Control Plan Dwg. no: VGH677-270-02	No	Hinged doors are fitted in all transverse bulkheads below freeboard deck. (not comply)	Requirements as specified in Reg.13 for the sliding door, such as means of operation, door controls, construction of the door, electrical power, etc., are applicable. Existing arrangement is to be modified to meet the requirement.
10	Chapter II-1 Regulation 18 - Assigning, marking and recording of subdivision load lines for passenger ships	2	The subdivision load lines assigned and marked shall be recorded in the Passenger Ship Safety Certificate, and shall be distinguished by the notation P1 for the principal passenger service configuration, and P2, P3, etc., for the alternative configurations. The principal passenger configuration shall be taken as the mode of operation in which the required subdivision index R will have the highest value.	Freeboard Assignment	No	Freeboard as passenger ship to be re-assigned.	Nil
11	Chapter II-1 Regulation 19 - Damage control information	1	There shall be permanently exhibited, or readily available on the navigation bridge, for the guidance of the officer in charge of the ship, plans showing clearly for each deck and hold the boundaries of the watertight compartments, the openings therein with the means of closure and position of any controls thereof, and the arrangements for the correction of any list due to flooding. In addition, booklets containing the aforementioned information shall be made available to the officers of the ship.	Damage Control Booklet	No	NSCV requires Damage Control Plan to be carried onboard and has been examined (existing). Damage Control Booklet shall be submitted for approval if the ship to comply with SOLAS 2009 passenger ship requirement.	Damage control information refers to MSC.1/Circ.1245

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SOLAS GAP ANALYSIS FOR GALLEONS PASSAGE

Item No	SOLAS Chapter/ Regulation No	Section	Requirement	Drawing	Compliance	GAP	Remarks
12	Chapter II-1 Regulation 22-1 - Flooding detection systems for passenger ships carrying 36 or more persons constructed on or after 1 July 2010		A flooding detection system for watertight spaces below the bulkhead deck shall be provided based on the guidelines developed by the Organization.		No	Details are not shown in the drawing.	Detail are to be provided to verify compliance.
13	Chapter II-1 Regulation 23 - Special requirements for ro-ro passenger ships	1	Special category spaces and ro-ro spaces shall be continuously patrolled or monitored by effective means, such as television surveillance, so that any movement of vehicles in adverse weather conditions and authorized access by passengers thereto can be detected whilst the ship is underway.		No	Details are not shown in the drawing	Detail are to be provided to verify compliance.
14	Chapter II-1 Regulation 35-1 - Bilge pumping arrangements	3 - Passenger ships	3.2 At least three power pumps shall be fitted connected to the bilge main, one of which may be driven by the propulsion machinery. Where the bilge pump numeral is 30 or more, one additional independent power pump shall be provided.	Bilge & Fire Schematic, Dwg no: 1029-I02-01D, Rev D	No	Bilge main is not provided. Submersible bilge pumps are provided for each compartment.	A bilge main is to be fitted having branch bilge suction to each compartment. Bilge pump numeral is to be calculated.
15			3.3 Where practicable, the power bilge pumps shall be placed in separate watertight compartments and so arranged or situated that these compartments will not be flooded by the same damage. If the main propulsion machinery, auxiliary machinery and boilers are in two or more watertight compartments, the pumps available for bilge service shall be distributed as far as is possible throughout these compartments.				A bilge main is to be fitted having branch bilge suction to each compartment.
16	Chapter II-1 Regulation 35-1 - Bilge pumping arrangements	3 - Passenger ships	3.4 On a ship having a bilge pump numeral, calculated in accordance with paragraph 3.2, of 30 or more, the arrangements shall be such that at least one power bilge pump shall be available for use in all flooding conditions which the ship is required to withstand, as follows: .1 one of the required bilge pumps shall be an emergency pump of a reliable submersible type having a source of power situated above the bulkhead deck; or .2 the bilge pumps and their sources of power shall be so distributed throughout the length of the ship that at least one pump in an undamaged compartment will be available.	Bilge & Fire Schematic, Dwg no: 1029-I02-01D, Rev D	No	Bilge main is not provided. Submersible bilge pumps are provided for each compartment.	Bilge pump numeral is to be calculated.
17			3.5 With the exception of additional pumps which may be provided for peak compartments only, each required bilge pump shall be so arranged as to draw water from any space required to be drained by paragraph 2.1.				
18			3.6 Each power bilge pump shall be capable of pumping water through the required main bilge pipe at a speed of not less than 2 m/s. Independent power bilge pumps situated in machinery spaces shall have direct suctions from these spaces, except that not more than two such suctions shall be required in any one space. Where two or more such suctions are provided, there shall be at least one on each side of the ship. The Administration may require independent power bilge pumps situated in other spaces to have separate direct suctions. Direct suctions shall be suitably arranged and those in a machinery space shall be of a diameter not less than that required for the bilge main.				A bilge main is to be fitted having branch bilge suction to each compartment.
19			3.7.1 In addition to the direct bilge suction or suctions required by paragraph 3.6, a direct suction from the main circulating pump leading to the drainage level of the machinery space and fitted with a non-return valve shall be provided in the machinery space. The diameter of this direct suction pipe shall be at least two thirds of the diameter of the pump inlet in the case of steamships, and of the same diameter as the pump inlet in the case of motorships.				
20			3.7.2 Where in the opinion of the Administration the main circulating pump is not suitable for this purpose, a direct emergency bilge suction shall be led from the largest available independent power driven pump to the drainage level of the machinery space; the suction shall be of the same diameter as the main inlet of the pump used. The capacity of the pump so connected shall exceed that of a required bilge pump by an amount deemed satisfactory by the Administration.				
21			3.8 All bilge suction piping up to the connection to the pumps shall be independent of other piping.				

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Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
22	Chapter II-1 Regulation 35-1 - Bilge pumping arrangements	3 - Passenger ships	3.9 The diameter d of the bilge main shall be calculated according to the following formula. However, the actual internal diameter of the bilge main may be rounded off to the nearest standard size acceptable to the Administration: where: d = is the internal diameter of the bilge main (millimetres): L and B = are the length and the breadth of the ship (metres) as defined in regulation 2; and D = is the moulded depth of the ship to the bulkhead deck (metres) provided that, in a ship having an enclosed cargo space on the bulkhead deck which is internally drained in accordance with the requirements of paragraph 2.6.2 and which extends for the full length of the ship, D shall be measured to the next deck above the bulkhead deck. Where the enclosed cargo spaces cover a lesser length, D shall be taken as the moulded depth to the bulkhead deck plus h/L where ∝ and h are the aggregate length and height respectively of the enclosed cargo spaces (metres). The diameter of the bilge branch pipes shall meet the requirements of the Administration.	Bilge & Fire Schematic, Dwg no: 1029-I02-01D, Rev D	No	Bilge main is not provided. Submersible bilge pumps are provided for each compartment.	A bilge main is to be fitted having branch bilge suction to each compartment.
23			3.10 Provision shall be made to prevent the compartment served by any bilge suction pipe being flooded in the event of the pipe being severed or otherwise damaged by collision or grounding in any other compartment. For this purpose, where the pipe is at any part situated nearer the side of the ship than one fifth of the breadth of the ship (as defined in regulation 2 and measured at right angles to the centreline at the level of the deepest subdivision load line), or is in a duct keel, a non-return valve shall be fitted to the pipe in the compartment containing the open end.				
24			3.11 Distribution boxes, cocks and valves in connection with the bilge pumping system shall be so arranged that, in the event of flooding, one of the bilge pumps may be operative on any compartment; in addition, damage to a pump or its pipe connecting to the bilge main outboard of a line drawn at one fifth of the breadth of the ship shall not put the bilge system out of action. If there is only one system of pipes common to all the pumps, the necessary valves for controlling the bilge suctions must be capable of being operated from above the bulkhead deck. Where in addition to the main bilge pumping system an emergency bilge pumping system is provided, it shall be independent of the main system and so arranged that a pump is capable of operating on any compartment under flooding condition as specified in paragraph 3.1; in that case only the valves necessary for the operation of the emergency system need be capable of being operated from above the bulkhead deck.				
25	Chapter II-1 Regulation 37 - Communication between navigation bridge and machinery space	2	At least two independent means shall be provided for communication orders from the navigation bridge to the position in the machinery space or in the control room from which the speed and direction of thrust of the propellers are normally controlled; one of these shall be an engine-room telegraph which provides visual indication of the orders and responses both in the machinery spaces and on the navigation bridge. Appropriate means of communications shall be provided from the navigation bridge and the engine-room to any other position from which the speed or direction of thrust of the propellers may be controlled.	Internal communication system diagram, Dwg. no: VGH677-650-2TX Internal Communication Equipment Arrangement, Dwg. no: VGH677-650-1BZ	No	Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance.
26	Chapter II-1 Regulation 38 - Engineers' alarm		An engineers' alarm shall be provided to be operated from the engine control room or at the manoeuvring platform as appropriate, and shall be clearly audible in the engineers' accommodation.	Engine Room Central Alarm System, Dwg. no: VGH677-670-1TX	No	Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance.
27	Chapter II-1 Regulation 42-1 - Supplementary emergency lighting for ro ro passenger ships	1	In addition to the emergency lighting required by regulation 42.2, on every passenger ship with ro ro cargo spaces or special category spaces as defined in regulation II-2/3: .1 all passenger public spaces and alleyways shall be provided with supplementary electric lighting that can operate for at least 3 h when all other sources of electrical power have failed and under any condition of heel. The illumination provided shall be such that the approach to the means of escape can be readily seen. The source of power for the supplementary lighting shall consist of accumulator batteries located within the lighting units that are continuously charged, where practicable, from the emergency switchboard. Alternatively, any other means of lighting which is at least as effective may be accepted by the Administration. The supplementary lighting shall be such that any failure of the lamp will be immediately apparent. Any accumulator battery provided shall be replaced at intervals having regard to the specified service life in the ambient conditions that they are subject to in service; and .2 a portable rechargeable battery operated lamp shall be provided in every crew space alleyway, recreational space and every working space which is normally occupied unless supplementary emergency lighting, as required by subparagraph .1, is provided.	Lighting System Diagram, Dwg. no: VGH677-630-2XT Rev C Lighting Equipment Arrangement, Dwg. no: VGH677-630-1BZ	No	Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance.

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Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
28	Chapter II-2 Regulation 4 - Probability of ignition	2 - Arrangements for oil fuel, lubrication oil and other flammable oils	2.2.5.5 In multi-engine installations which are supplied from the same fuel source, means of isolating the fuel supply and spill piping to individual engines, shall be provided. The means of isolation shall not affect the operation of the other engines and shall be operable from a position not rendered inaccessible by a fire on any of the engines.	Fuel Oil Piping Schematic, Dwg no: 1029-I06-01G, Rev G	No	Isolation valves are not provided for the engines return piping to the fuel oil day tanks.	Isolation valves are to be provided for the engines return piping to the fuel oil day tanks.
29	Chapter II-2 Regulation 7 - Detection and alarm	2 - General requirements	2.3 A fixed fire detection and fire alarm system and a sample extraction smoke detection system required in this regulation and other regulations in this part shall be of an approved type and comply with the Fire Safety Systems Code.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Noted that fire detection and alarm system is fitted onboard. Details are not shown in the drawing	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code.
30			2.4 A fixed fire detection and fire alarm system for passenger ships shall be capable of remotely and individually identifying each detector and manually operated call point.				
31		4 - Protection of machinery spaces	4.1 Installation A fixed fire detection and fire alarm system shall be installed in: .1 periodically unattended machinery spaces; .2 machinery spaces where: .2.1 the installation of automatic and remote control systems and equipment has been approved in lieu of continuous manning of the space; and .2.2 the main propulsion and associated machinery including sources of the main sources of electrical power are provided with various degrees of automatic or remote control and are under continuous manned supervision from a control room; and .3 enclosed spaces containing incinerators.		Yes	Nil	Nil
32			4.2 Design The fixed fire detection and fire alarm system required in paragraph 4.1.1 shall be so designed and the detectors so positioned as to detect rapidly the onset of fire in any part of those spaces and under any normal conditions of operation of the machinery and variations of ventilation as required by the possible range of ambient temperatures. Except in spaces of restricted height and where their use is specially appropriate, detection systems using only thermal detectors shall not be permitted. The detection system shall initiate audible and visual alarms distinct in both respects from the alarms of any other system not indicating fire, in sufficient places to ensure that the alarms are heard and observed on the navigating bridge and by a responsible engineer officer. When the navigating bridge is unmanned the alarm shall sound in a place where a responsible member of the crew is on duty.		Unable to verify	Noted that fire detection and alarm system is fitted onboard. Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code.
33		5 - Protection of accommodation and service spaces and control stations	5.2 Requirements for passenger ships carrying more than 36 passengers A fixed fire detection and fire alarm system shall be installed and arranged as to provide smoke detection in service spaces, control stations and accommodation spaces, including corridors, stairways and escape routes within accommodation spaces. Smoke detectors need not be fitted in private bathrooms and galleys. Spaces having little or no fire risk such as voids, public toilets, carbon dioxide rooms and similar spaces need not be fitted with a fixed fire detection and alarm system. Detectors fitted in cabins, when activated, shall also be capable of emitting, or cause to be emitted, an audible alarm within the space where they are located.		Unable to verify	Noted that fire detection and alarm system is fitted onboard. Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code.
34		7 - Manually operated call points	Manually operated call points complying with the Fire Safety Systems Code shall be installed throughout the accommodation spaces, service spaces and control stations. One manually operated call point shall be located at each exit. Manually operated call points shall be readily accessible in the corridors of each deck such that no part of the corridor is more than 20 m from a manually operated call point.		Yes	Nil	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code.

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35	Chapter II-2 Regulation 7 - Detection and alarm	9 - Fire alarm signalling systems in passenger ships	9.2 The control panel of fixed fire detection and fire alarm systems shall be designed on the fail-safe principle (e.g. an open detector circuit shall cause an alarm condition).	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Noted that fire detection and alarm system is fitted onboard. Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code.
36			9.3 Passenger ships carrying more than 36 passengers shall have the fire detection alarms for the systems required by paragraph 5.2 centralized in a continuously manned central control station. In addition, controls for remote closing of the fire doors and shutting down the ventilation fans shall be centralized in the same location. The ventilation fans shall be capable of reactivation by the crew at the continuously manned control station. The control panels in the central control station shall be capable of indicating open or closed positions of fire doors and closed or off status of the detectors, alarms and fans. The control panel shall be continuously powered and shall have an automatic change-over to standby power supply in case of loss of normal power supply. The control panel shall be powered from the main source of electrical power and the emergency source of electrical power defined by regulation II-1/42 unless other arrangements are permitted by the regulations, as applicable.		Unable to verify	Noted that fire detection and alarm system is fitted onboard. Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance. Fixed fire detection and fire alarm system are to be of an approved type and comply with FSS Code. Controls for remote closing of the fire doors shall be centralized in the same location.
37			9.4 A special alarm, operated from the navigation bridge or fire control station, shall be fitted to summon the crew. This alarm may be part of the ship's general alarm system and shall be capable of being sounded independently of the alarm to the passenger spaces.		Unable to verify	Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance.
38	Chapter II-2 Regulation 8 - Control of smoke spread	3 - Release of smoke from machinery spaces	3.2 Suitable arrangements shall be made to permit the release of smoke, in the event of fire, from the space to be protected, subject to the provisions of regulation 9.5.2.1 The normal ventilation systems may be acceptable for this purpose.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
39			3.3 Means of control shall be provided for permitting the release of smoke and such controls shall be located outside the space concerned so that they will not be cut off in the event of fire from the space they serve.				
40			3.4 In passenger ships, the controls required by paragraph 3.3 shall be situated at one control position or grouped in as few positions as possible to the satisfaction of the Administration. Such positions shall have a safe access from the open deck.				
41		4 - Draught stops	Air spaces enclosed behind ceilings, panelling or linings shall be divided by close-fitting draught stops spaced not more than 14 m apart. In the vertical direction, such enclosed air spaces, including those behind linings of stairways, trunks, etc., shall be closed at each deck.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	Yes	Nil	Nil
42	Chapter II-2 Regulation 9 - Containment of fire 2 Thermal and structural boundaries 2.2 Passenger ships	2.2.1 - Main vertical zones and horizontal zones	2.2.1.1.1 In ships carrying more than 36 passengers, the hull, superstructure and deckhouses shall be subdivided into main vertical zones by "A-60" class divisions. Steps and recesses shall be kept to a minimum, but where they are necessary they shall also be "A-60" class divisions. Where a category (5), (9) or (10) space defined in paragraph 2.2.3.2.2 is on one side or where fuel oil tanks are on both sides of the division the standard may be reduced to "A-0".	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	No main vertical or horizontal zones are provided.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m.
43			2.2.1.2 As far as practicable, the bulkheads forming the boundaries of the main vertical zones above the bulkhead deck shall be in line with watertight subdivision bulkheads situated immediately below the bulkhead deck. The length and width of main vertical zones may be extended to a maximum of 48 m in order to bring the ends of main vertical zones to coincide with watertight subdivision bulkheads or in order to accommodate a large public space extending for the whole length of the main vertical zone provided that the total area of the main vertical zone is not greater than 1,600 m2 on any deck. The length or width of a main vertical zone is the maximum distance between the furthermost points of the bulkheads bounding it.				
44			2.2.1.3 Such bulkheads shall extend from deck to deck and to the shell or other boundaries				
45			2.2.1.4 Where a main vertical zone is subdivided by horizontal "A" class divisions into horizontal zones for the purpose of providing an appropriate barrier between a zone with sprinklers and a zone without sprinklers, the divisions shall extend between adjacent main vertical zone bulkheads and to the shell or exterior boundaries of the ship and shall be insulated in accordance with the fire insulation and integrity values given in table 9.4.				

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46	Chapter II-2 Regulation 9 - Containment of fire 2 Thermal and structural boundaries 2.2 Passenger ships	2.2.1 - Main vertical zones and horizontal zones	2.2.1.5.1 On ships designed for special purposes, such as automobile or railroad car ferries, where the provision of main vertical zone bulkheads would defeat the purpose for which the ship is intended, equivalent means for controlling and limiting a fire shall be substituted and specifically approved by the Administration. Service spaces and ship stores shall not be located on ro-ro decks unless protected in accordance with the applicable regulations.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	No main vertical or horizontal zones are provided.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m.
47			2.2.1.5.2 However, in a ship with special category spaces, such spaces shall comply with the applicable provisions of regulation 20 and where such compliance would be inconsistent with other requirements for passenger ships specified in this chapter, the requirements of regulation 20 shall prevail.				
48		2.2.2 - Bulkheads within a main vertical zone	2.2.2.1 For ships carrying more than 36 passengers, bulkheads which are not required to be "A" class divisions shall be at least "B" class or "C" class divisions as prescribed in the tables in paragraph 2.2.3.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	"B" class or "C" class divisions are not shown in the plan.	To identify the "B" class or "C" class divisions in the plan with proper legend.
49			2.2.2.3 Bulkheads required to be "B" class divisions, except corridor bulkheads as prescribed in paragraph 2.2.2.2, shall extend from deck to deck and to the shell or other boundaries. However, where a continuous "B" class ceiling or lining is fitted on both sides of a bulkhead which is at least of the same fire resistance as the adjoining bulkhead, the bulkhead may terminate at the continuous ceiling or lining.		No	Details are not shown in the drawing	Detail are to be provided to verify compliance.
50		2.2.3 - Fire integrity of bulkheads and decks in ships carrying more than 36 passengers	Table 9.1 and 9.2	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Noted that the superstructure is constructed of aluminium and hull is of steel. Non-compliance is noted in "Remarks", however is not including the requirement of above mention section 2.2.1 since there is no main vertical zone being identified.	1. Wheelhouse bulkhead boundary to the cabins is to be A0 2. The bulkhead boundary between the 2 cabins on the Sun Deck is to be B0 3. The bulkhead boundary between the stairways and cabins on the Sun deck is to be B0 4. The external bulkhead of the cabins and stairways on the Sun deck facing survival craft storage area is to be A30 5. The external bulkhead of the cabins and stairways on the Sun deck is to be A0. 6. Deck of the wheelhouse to the passenger accommodation below is to be A60. 7. Deck of the Sun deck to the passenger accommodation below is to be A60. 8. Deck of the cabins on Sun deck to the passenger accommodation below is to be A15. 9. Deck of the survival craft storage area on Sun deck to the passenger accommodation below is to be A60. 10. On the Upper deck, the bulkhead of the toilet to the passenger accommodation is to be B0. 11. On the Upper deck, the bulkhead between the 2 passenger accommodations is to be B0. 12. On the Upper deck, the bulkhead of the stairways (frame 34-37) leading down to the Main deck Evac station is to be A60. 13. On the Upper deck, the ship side is to be A0. 14. On the Upper deck, the forward passenger accommodation forward bulkhead (frame 50) is to be A60. 15. On the Upper deck, the aft passenger accommodation aft bulkhead (frame 5) is to be A60. 16. On the Upper deck, the deck forward of starboard passenger accommodation is to be A0. 17. On Main deck, bulkhead of the both forward stores is to be A60. 18. On Main deck, bulkhead of the E-Gen room is to be A60.
51		2.2.5 - Protection of stairways and lifts in accommodation area	2.2.5.1 Stairways shall be within enclosures formed of "A" class divisions, with positive means of closure at all openings, except that: .1 a stairway connecting only two decks need not be enclosed, provided the integrity of the deck is maintained by proper bulkheads or self-closing doors in one 'tween-deck space. When a stairway is closed in one 'tween-deck space, the stairway enclosure shall be protected in accordance with the tables for decks in paragraphs 2.2.3 or 2.2.4; and .2 stairways may be fitted in the open in a public space, provided they lie wholly within the public space.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	The enclosure of the stairways (frame 34-37 port & starboard) leading down to the Main deck Evac station is not protected as in accordance with the tables for decks in paragraphs 2.2.3	Refer to table 9.1 and 9.2 for the required fire protection rating for the stairway enclosure.
52	Chapter II-2 Regulation 9 - Containment of fire 2 Thermal and structural boundaries 2.2 Passenger ships	2.2.5 - Protection of stairways and lifts in accommodation area	2.2.5.2 Lift trunks shall be so fitted as to prevent the passage of smoke and flame from one 'tween-deck to another and shall be provided with means of closing so as to permit the control of draught and smoke. Machinery for lifts located within stairway enclosures shall be arranged in a separate room, surrounded by steel boundaries, except that small passages for lift cables are permitted. Lifts which open into spaces other than corridors, public spaces, special category spaces, stairways and external areas shall not open into stairways included in the means of escape.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Lift trunks on the upper deck is not indicated with any fire-rating.	The life trunk on the upper deck is to be A0. It is to prevent the passage of smoke and flame from one 'tween-deck to another and shall be provided with means of closing so as to permit the control of draught and smoke.
53	Chapter II-2 Regulation 9 - Containment of fire	3 - Penetrations in fire-resisting divisions and prevention of heat transmission	3.1 Where "A" class divisions are penetrated, such penetrations shall be tested in accordance with the Fire Test Procedures Code, subject to the provisions of paragraph 4.1.1.6. In the case of ventilation ducts, paragraphs 7.1.2 and 7.3.1 apply. However, where a pipe penetration is made of steel or equivalent material having a thickness of 3mm or greater and a length of not less than 900 mm (preferably 450 mm on each side of the division), and no openings, testing is not required. Such penetrations shall be suitably insulated by extension of the insulation at the same level of the division.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Details are not shown in the drawing. Penetrations are to maintain fire integrity of the boundary as specified in Table 9.1 and 9.2. Current details on the plan is insufficient to show compliance.	Refer to table 9.1 and 9.2 for the required fire protection rating and penetration detail are to be provided to verify compliance.

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Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
54	Chapter II-2 Regulation 9 - Containment of fire	3 - Penetrations in fire-resisting divisions and prevention of heat transmission	3.2 Where "B" class divisions are penetrated for the passage of electric cables, pipes, trunks, ducts, etc., or for the fitting of ventilation terminals, lighting fixtures and similar devices, arrangements shall be made to ensure that the fire resistance is not impaired, subject to the provisions of paragraph 7.3.2. Pipes other than steel or copper that penetrate "B" class divisions shall be protected by either: .1 a fire-tested penetration device, suitable for the fire resistance of the division pierced and the type of pipe used; or .2 a steel sleeve, having a thickness of not less than 1.8 mm and a length of not less than 900 mm for pipe diameters of 150 mm or more and not less than 600 mm for pipe diameters of less than 150 mm (preferably equally divided to each side of the division). The pipe shall be connected to the ends of the sleeve by flanges or couplings; or the clearance between the sleeve and the pipe shall not exceed 2.5 mm; or any clearance between pipe and sleeve shall be made tight by means of non-combustible or other suitable material.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Details are not shown in the drawing. Penetrations are to maintain fire integrity of the boundary as specified in Table 9.1 and 9.2. Current details on the plan is insufficient to show compliance.	Refer to table 9.1 and 9.2 for the required fire protection rating and penetration detail are to be provided to verify compliance.
55			3.3 Uninsulated metallic pipes penetrating "A" or "B" class divisions shall be of materials having a melting temperature which exceeds 950°C for "A-0" and 850°C for "B-0" class divisions.				
56			3.4 In approving structural fire protection details, the Administration shall have regard to the risk of heat transmission at intersections and terminal points of required thermal barriers. The insulation of a deck or bulkhead shall be carried past the penetration, intersection or terminal point for a distance of at least 450 mm in the case of steel and aluminium structures. If a space is divided with a deck or a bulkhead of "A" class standard having insulation of different values, the insulation with the higher value shall continue on the deck or bulkhead with the insulation of the lesser value for a distance of at least 450 mm.		Yes	Nil	Nil
57	Chapter II-2 Regulation 9 - Containment of fire 4 Protection of openings in fire-resisting divisions 4.1 Openings in bulkheads and decks in passenger ships	4.1.1 - Openings in "A" class divisions	4.1.1.1 Except for hatches between cargo, special category, store, and baggage spaces, and between such spaces and the weather decks, openings shall be provided with permanently attached means of closing which shall be at least as effective for resisting fires as the divisions in which they are fitted.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Due to the requirement of fire integrity of boundary as specified in Table 9.1 and 9.2, some of the doors fitted are not able to maintain fire integrity as required of the boundary.	Refer to Main vertical zone requirement, table 9.1 and 9.2 for the required fire protection rating for the boundary. Door are to maintain the fire integrity of the boundary they are fitted. 'A' class door are to be of approved type. Fire door plan is to be submitted.
58			4.1.1.2 The construction of doors and door frames in "A" class divisions, with the means of securing them when closed, shall provide resistance to fire as well as to the passage of smoke and flame equivalent to that of the bulkheads in which the doors are situated, this being determined in accordance with the Fire Test Procedures Code. Doors approved without the sill being part of the frame, which are installed on or after 1 July 2010, shall be installed such that the gap under the door does not exceed 12 mm. A non-combustible sill shall be installed under the door such that floor coverings do not extend beneath the closed door.				
59			4.1.1.3 Such doors and door frames shall be constructed of steel or other equivalent material. Watertight doors need not be insulated.				
61			4.1.1.5 Fire doors in main vertical zone bulkheads, galley boundaries and stairway enclosures other than power-operated watertight doors and those which are normally locked, shall satisfy the following requirements: Refer point 1 to 15		No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requiremen and details of the fire doors are to be provided. Details of fire doors in main vertical zone bulkheads, galley boundaries and stairway enclosures other than power-operated watertight doors and those which are normally locked, shall be provided to verify compliance to the requirements of point 1 to 15.
62			4.1.1.8 Except for watertight doors, weathertight doors (semi-watertight doors), doors leading to the open deck and doors which need to be reasonably gastight, all "A" class doors located in stairways, public spaces and main vertical zone bulkheads in escape routes shall be equipped with a self-closing hose port. The material, construction and fire resistance of the hose port shall be equivalent to the door into which it is fitted, and shall be a 150 mm square clear opening with the door closed and shall be inset into the lower edge of the door, opposite the door hinges or, in the case of sliding doors, nearest the opening.		No	Details are not shown in the drawing.	Detail are to be provided to verify compliance.
63			4.1.1.9 Where it is necessary that a ventilation duct passes through a main vertical zone division, a fail-safe automatic closing fire damper shall be fitted adjacent to the division. The damper shall also be capable of being manually closed from each side of the division. The operating position shall be readily accessible and be marked in red light-reflecting colour. The duct between the division and the damper shall be of steel or other equivalent material and, if necessary, insulated to comply with the requirements of paragraph 3.1. The damper shall be fitted on at least one side of the division with a visible indicator showing whether the damper is in the open position.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement and ventilation duct arrangement passing through the division are to be fitted with a fail-safe automatic closing fire damper adjacent to the division.

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Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
64	Chapter II-2 Regulation 9 - Containment of fire 4 Protection of openings in fire-resisting divisions 4.1 Openings in bulkheads and decks in passenger ships	4.1.2 - Openings in "B" class divisions	4.1.2.1 Doors and door frames in "B" class divisions and means of securing them shall provide a method of closure which shall have resistance to fire equivalent to that of the divisions, this being determined in accordance with the Fire Test Procedures Code except that ventilation openings may be permitted in the lower portion of such doors. Where such opening is in or under a door the total net area of any such opening or openings shall not exceed 0.05 m2. Alternatively, a non-combustible air balance duct routed between the cabin and the corridor, and located below the sanitary unit is permitted where the cross-sectional area of the duct does not exceed 0.05 m2. All ventilation openings shall be fitted with a grill made of non-combustible material. Doors shall be non-combustible. Doors approved without the sill being part of the frame, which are installed on or after 1 July 2010, shall be installed such that the gap under the door does not exceed 25 mm.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	"B" class divisions and door details are not shown in the drawing.	To identify the "B" class divisions in the plan with proper legend. Door are to maintain the fire integrity of the boundary they are fitted. 'B' class door are to be of approved type. Fire door plan is to be submitted.
65			4.1.2.2 Cabin doors in "B" class divisions shall be of a self-closing type. Hold-back hooks are not permitted.				
66		4.1.3 - Windows and sidescuttles	4.1.3.1 Windows and sidescuttles in bulkheads within accommodation and service spaces and control stations other than those to which the provisions of paragraph 4.1.1.7 and of paragraph 4.1.2.3 apply shall be so constructed as to preserve the integrity requirements of the type of bulkheads in which they are fitted, this being determined in accordance with the Fire Test	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Due to the requirement of fire integrity of boundary as specified in Table 9.1, the window are required to be fire-rated. Details are not shown in the drawing. Window fitted are not indicated with the required fire-rating.	Windows fitted in fire-rated boundaries are to maintain the same fire integrity as required in table 9.1. Details of the windows and dedicated sprinkler (if fitted) are to be provided. Fire-rated windows are to be of approved type.
67			4.1.3.2 Notwithstanding the requirements of tables 9.1 to 9.4, windows and sidescuttles in bulkheads separating accommodation and service spaces and control stations from weather shall be constructed with frames of steel or other suitable material. The glass shall be retained by a metal glazing bead or angle.		No	Details are not shown in the drawing.	Detail are to be provided to verify compliance.
68	Chapter II-2 Regulation 9 - Containment of fire 4 Protection of openings in fire-resisting divisions 4.1 Openings in bulkheads and decks in passenger ships		4.1.3.3 Windows facing life-saving appliances, embarkation and assembly stations, external stairs and open decks used for escape routes, and windows situated below liferaft and escape slide embarkation areas shall have fire integrity as required in table 9.1. Where automatic dedicated sprinkler heads are provided for windows, "A-0" windows may be accepted as equivalent. To be considered under this paragraph, the sprinkler heads shall either be: .1 dedicated heads located above the windows, and installed in addition to the conventional ceiling sprinklers; or .2 conventional ceiling sprinkler heads arranged such that the window is protected by an average application rate of at least 9ℓ/min/m2 and the additional window area is included in the calculation of the area of coverage; or .3 water-mist nozzles that have been tested and approved in accordance with the guidelines approved by the Organization Windows located in the ship's side below the lifeboat embarkation area shall have fire integrity at least equal to "A-0" class.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Due to the requirement of fire integrity of boundary as specified in Table 9.1, the window are required to be fire-rated. Details are not shown in the drawing. Window fitted are not indicated with the required fire-rating and no dedicated sprinkler are noted.	Windows facing life-saving appliances, embarkation and assembly stations, external stairs and open decks used for escape routes, and windows situated below liferaft and escape slide embarkation areas shall have fire integrity as required in table 9.1. Details of the windows and dedicated sprinkler (if fitted) are to be provided. Fire-rated windows are to be of approved type.
69	Chapter II-2 Regulation 9 - Containment of fire 5 Protection of openings in machinery space boundaries	5.2 - Protection of openings in machinery space boundaries	5.2.3 Means of control shall be provided for closing power-operated doors or actuating release mechanisms on doors other than power-operated watertight doors. The control shall be located outside the space concerned, where they will not be cut off in the event of fire in the space it serves.		No	Power-operated doors or actuating release mechanisms on doors and its control system are not provided.	Modification is required to meet the requirement and details are to be provided to show compliance
70			5.2.4 In passenger ships, the means of control required in paragraph 5.2.3 shall be situated at one control position or grouped in as few positions as possible to the satisfaction of the Administration. Such positions shall have safe access from the open deck.		No		
71			5.2.5 In passenger ships, doors, other than power-operated watertight doors shall be so arranged that positive closure is assured in case of fire in the space by power-operated closing arrangements or by the provision of self-closing doors capable of closing against an inclination of 3.5° opposing closure, and having a fail-safe hold-back arrangement, provided with a remotely operated release device. Doors for emergency escape trunks need not be fitted with a fail-safe hold-back facility and a remotely operated release device.		No		
72	Chapter II-2 Regulation 9 - Containment of fire	6 - Protection of cargo space boundaries	6.1 In passenger ships carrying more than 36 passengers, the boundary bulkheads and decks of special category and ro-ro spaces shall be insulated to "A-60" class standard. However, where a category (5), (9) and (10) space, as defined in paragraph 2.2.3, is on one side of the division the standard may be reduced to "A-0". Where fuel oil tanks are below a special category space, the integrity of the deck between such spaces may be reduced to "A-0" standard.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Boundary bulkhead and deck of the ro-ro space is not insulated to A60.	Details refer to section 2.2.3 "Remarks" item 17 to 20.

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Gap No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
73	Chapter II-2 Regulation 9 - Containment of fire 7 Ventilation systems	7.1 - General	7.1.1 Ventilation ducts, including single and double wall ducts, shall be of steel or equivalent material except flexible bellows of short length not exceeding 600 mm used for connecting fans to the ducting in air-conditioning rooms. Unless expressly provided otherwise in paragraph 7.1.6, any other material used in the construction of ducts, including insulation, shall also be non-combustible. However, short ducts, not generally exceeding 2 m in length and with a free cross-sectional area not exceeding 0.02 m2, need not be of steel or equivalent material, subject to the following conditions: .1 the ducts shall be made of non-combustible material, which may be faced internally and externally with membranes having low flame-spread characteristics and, in each case, a calorific value not exceeding 45 MJ/m2 of their surface area for the thickness used; .2 the ducts are only used at the end of the ventilation device; and .3 the ducts are not situated less than 600 mm, measured along the duct, from an opening in an "A" or "B" class division, including continuous "B" class ceiling.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	Details are not shown in the drawing	Detail are to be provided to verify compliance and can also be verified on site.
74			7.1.3 Fire dampers shall be easily accessible. Where they are placed behind ceilings or linings, these ceilings or linings shall be provided with an inspection hatch on which the identification number of the fire damper is marked. The fire damper identification number shall also be marked on any remote controls provided.		Unable to verify	Details are not shown in the drawing	Requirement can be verified on site
75			7.1.4 Ventilation ducts shall be provided with hatches for inspection and cleaning. The hatches shall be located near the fire dampers.		Unable to verify	Details are not shown in the drawing	Requirement can be verified on site
76			7.1.5 The main inlets and outlets of ventilation systems shall be capable of being closed from outside the spaces being ventilated. The means of closing shall be easily accessible as well as prominently and permanently marked and shall indicate the operating position of the closing device.		No	Noted some inlet and outlet arrangement on the Sun Deck are not provided with closing arrangement.	Closing arrangement are to be provided for main inlet and outlet of ventilation system.
77			7.1.6 Combustible gaskets in flanged ventilation duct connections are not permitted within 600 mm of openings in "A" or "B" class divisions and in ducts required to be of "A" class construction.		Unable to verify	Details are not shown in the drawing	Detail are to be provided to verify compliance and can also be verified on site
78			7.1.7 Ventilation openings or air balance ducts between two enclosed spaces shall not be provided except as permitted by paragraphs 4.1.2.1 and 4.2.3		Yes	Nil	Nil
79	Chapter II-2 Regulation 9 - Containment of fire 7 Ventilation systems	7.2 - Arrangement of ducts	7.2.1 The ventilation systems for machinery spaces of category A, vehicle spaces, ro-ro spaces, galleys, special category spaces and cargo spaces shall, in general, be separated from each other and from the ventilation systems serving other spaces. However, the galley ventilation systems of cargo ships of less than 4,000 gross tonnage and in passenger ships carrying not more than 36 passengers need not be completely separated from other ventilation systems, but may be served by separate ducts from a ventilation unit serving other spaces. In such a case, an automatic fire damper shall be fitted in the galley ventilation duct near the ventilation unit.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	Galley ventilation system not separated from the ventilation system serving other spaces.	Galley ventilation is to be separated from ventilation system serving other spaces.
80			7.2.2 Ducts provided for the ventilation of machinery spaces of category A, galleys, vehicle spaces, ro-ro spaces or special category spaces shall not pass through accommodation spaces, service spaces, or control stations unless they comply with paragraph 7.2.4.		No	Galley ventilation system is passing through accommodation space. However it is not shown that the duct is complying with paragraph 7.2.4.	Galley ventilation system passing through accommodation space is complying with paragraph 7.2.4. Details are to be provided to verify compliance.
81			7.2.3 Ducts provided for the ventilation of accommodation spaces, service spaces or control stations shall not pass through machinery spaces of category A, galleys, vehicle spaces, ro-ro spaces or special category spaces unless they comply with paragraph 7.2.4.		Yes	Nil	Nil

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Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
82	Chapter II-2 Regulation 9 - Containment of fire 7 Ventilation systems	7.2 - Arrangement of ducts	7.2.4 As permitted by paragraphs 7.2.2 and 7.2.3 ducts shall be either: .1 constructed of steel having a thickness of at least 3 mm for ducts with a free cross-sectional area of less than 0.075 m2, at least 4 mm for ducts with a free cross-sectional area of between 0.075 m2 and 0.45 m2, and at least 5 mm for ducts with a free cross-sectional area of over 0.45 m2; 1.2 suitably supported and stiffened; 1.3 fitted with automatic fire dampers close to the boundaries penetrated; and 1.4 insulated to "A-60" class standard from the boundaries of the spaces they serve to a point at least 5 m beyond each fire damper; or 2.1 constructed of steel in accordance with paragraphs 7.2.4.1.1 and 7.2.4.1.2; and 2.2 insulated to "A-60" class standard throughout the spaces they pass through, except for ducts that pass through spaces of category (9) or (10) as defined in paragraph 2.2.3.2.2.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	Galley ventilation duct are not complying. Current details on the plan is insufficient to show compliance.	Galley ventilation system passing through accommodation space is complying with paragraph 7.2.4. Details are to be provided to verify compliance to 7.2.4.1 or 7.2.4.2.
83			7.2.5 For the purposes of paragraphs 7.2.4.1.4 and 7.2.4.2.2, ducts shall be insulated over their entire cross-sectional external surface. Ducts that are outside but adjacent to the specified space, and share one or more surfaces with it, shall be considered to pass through the specified space, and shall be insulated over the surface they share with the space for a distance of 450 mm past the duct.		No	Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance and can also be verified on site
84			7.2.6 Where it is necessary that a ventilation duct passes through a main vertical zone division, an automatic fire damper shall be fitted adjacent to the division. The damper shall also be capable of being manually closed from each side of the division. The control location shall be readily accessible and be clearly and prominently marked. The duct between the division and the damper shall be constructed of steel in accordance with paragraphs 7.2.4.1.1 and 7.2.4.1.2 and insulated to at least the same fire integrity as the division penetrated. The damper shall be fitted on at least one side of the division with a visible indicator showing the operating position of the damper.		No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement and ventilation duct arrangement passing through the division are to be fitted with a fail-safe automatic closing fire damper adjacent to the division. Fire damper are to be of approved type.
85		7.3 - Details of fire dampers and duct penetrations	7.3.1 Ducts passing through "A" class divisions shall meet the following requirements: .1 where a thin plated duct with a free cross sectional area equal to, or less than, 0.02 m2 passes through "A" class divisions, the opening shall be fitted with a steel sheet sleeve having a thickness of at least 3 mm and a length of at least 200 mm, divided preferably into 100 mm on each side of bulkhead or, in the case of a deck, wholly laid on the lower side of the decks penetrated; .2 where ventilation ducts with a free cross-sectional area exceeding 0.02 m2, but not more than 0.075 m2, pass through "A" class divisions, the openings shall be lined with steel sheet sleeves. The ducts and sleeves shall have a thickness of at least 3 mm and a length of at least 900 mm. When passing through bulkheads, this length shall be divided preferably into 450 mm on each side of the bulkhead. These ducts, or sleeves lining such ducts, shall be provided with fire insulation. The insulation shall have at least the same fire integrity as the division through which the duct passes; and .3 automatic fire dampers shall be fitted in all ducts with a free cross-sectional area exceeding 0.075 m2 that pass through "A" class divisions. Each damper shall be fitted close to the division penetrated and the duct between the damper and the division penetrated shall be constructed of steel in accordance with paragraphs 7.2.4.2.1 and 7.2.4.2.2. The fire damper shall operate automatically, but shall also be capable of being closed manually from both sides of the division. The damper shall be fitted with a visible indicator which shows the operating position of the damper. Fire dampers are not required, however, where ducts pass through spaces surrounded by "A" class divisions, without serving those spaces, provided those ducts have the same fire integrity as the divisions which they penetrate. A duct of cross-sectional area exceeding 0.075 m2 shall not be divided into smaller ducts at the penetration of an "A" class division and then recombined into the original duct once through the division to avoid installing the damper required by this provision.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	Due to the requirement of main vertical zone and fire integrity of boundary as specified in Table 9.1 and 9.2, ducts passing through A class boundaries are required to satisfy this requirement. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. The fire integrity of boundary as specified in Table 9.1 and 9.2 is to be met and details of the ducts penetration are to be provided to verify compliance. Fire damper are to be of approved type.
86		7.4 - Ventilation systems for passenger ships carrying more than 36 passengers	7.4.2 In general, the ventilation fans shall be so arranged that the ducts reaching the various spaces remain within a main vertical zone.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. and ventilation fan and ducting arrangement serving various spaces remain within a main vertical zone.
87			7.4.3 Stairway enclosures shall be served by an independent ventilation fan and duct system (exhaust and supply) which shall not serve any other spaces in the ventilation systems.		No	The enclosure of the stairways (frame 34-37 port & starboard) leading down to the Main deck Evac station is not served by independent ventilation fan and duct system.	Independent ventilation fan and duct system are to be provided for the stairway enclosure.
88			7.4.5 Vertical ducts shall, if necessary, be insulated as required by tables 9.1 and 9.2. Ducts shall be insulated as required for decks between the space they serve and the space being considered, as applicable.		No	Due to the requirement of main vertical zone and fire integrity of boundary as specified in Table 9.1 and 9.2, ducts passing through fire-rated boundaries are required to satisfy this requirement. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. The fire integrity of boundary as specified in Table 9.1 and 9.2 is to be met and details of the ducts arrangement are to be provided to verify compliance.

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89	Chapter II-2 Regulation 9 - Containment of fire 7 Ventilation systems	7.5 - Exhaust ducts from galley ranges	7.5.1.1 In addition to the requirements in sections 7.1, 7.2 and 7.3, exhaust ducts from galley ranges shall be constructed in accordance with paragraphs 7.2.4.2.1 and 7.2.4.2.2 and insulated to "A-60" class standard throughout accommodation spaces, service spaces, or control stations they pass through. They shall also be fitted with: .1 a grease trap readily removable for cleaning unless an alternative approved grease removal system is fitted; .2 a fire damper located in the lower end of the duct at the junction between the duct and the galley range hood which is automatically and remotely operated and, in addition, a remotely operated fire damper located in the upper end of the duct close to the outlet of the duct; .3 a fixed means for extinguishing a fire within the duct; .4 remote-control arrangements for shutting off the exhaust fans and supply fans, for operating the fire dampers mentioned in paragraph 7.5.1.1.2 and for operating the fire-extinguishing system, which shall be placed in a position outside the galley close to the entrance to the galley. Where a multi-branch system is installed, a remote means located with the above controls shall b provided to close all branches exhausting through the same main duct before an extinguishing medium is released into the system; and .5 suitably located hatches for inspection and cleaning, including one provided close to the exhaust fan and one fitted in the lower end where grease accumulates.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C Air Conditioning And Ventilation Layout, AU15024-02-001-01/04, Rev _3	No	Exhaust ducts from galley is passing through accommodation spaces and is not complying with the required. Current details on the plan is insufficient to show compliance.	Detail are to be provided to verify compliance and can also be verified on site
90							
91	Chapter II-2 Regulation 10 - Fire Fighting 2.1 Fire mains and hydrant	2.1.2 - Ready availability of water supply	The arrangements for the ready availability of water supply shall be: .1 in passenger ships: .1.1 of 1,000 gross tonnage and upwards such that at least one effective jet of water is immediately available from any hydrant in an interior location and so as to ensure the continuation of the output of water by the automatic starting of one required fire pump; .1.2 of less than 1,000 gross tonnage by automatic start of at least one fire pump or by remote starting from the navigation bridge of at least one fire pump. If the pump starts automatically or if the bottom valve cannot be opened from where the pump is remotely started, the bottom valve shall always be kept open; and .1.3 if fitted with periodically unattended machinery spaces in accordance with regulation II-1/54, the Administration shall determine provisions for fixed water fire-extinguishing arrangement for such spaces equivalent to those required for normally attended machinery spaces;	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Automatic starting of the fire pump is required. However, details are not shown in the drawing. Noted that remote starting of the fire pump can be done from the wheelhouse.	Detail are to be provided to verify compliance and can also be verified on site.
92		2.1.4 - Isolating valves and relief valves	2.1.4.1 Isolating valves to separate the section of the fire main within the machinery space containing the main fire pump or pumps from the rest of the fire main shall be fitted in an easily accessible and tenable position outside the machinery spaces. The fire main shall be so arranged that when the isolating valves are shut all the hydrants on the ship, except those in the machinery space referred to above, can be supplied with water by another fire pump or an emergency fire pump. The emergency fire pump, its seawater inlet, and suction and delivery pipes and isolating valves shall be located outside the machinery space. If this arrangement cannot be made, the sea chest may be fitted in the machinery space if the valve is remotely controlled from a position in the same compartment as the emergency fire pump and the suction pipe is as short as practicable. Short lengths of suction or discharge piping may penetrate the machinery space, provided they are enclosed in a substantial steel casing, or are insulated to "A-60" class standards. The pipes shall have substantial wall thickness, but in no case less than 11 mm, and shall be welded except for the flanged connection to the sea inlet valve.		Yes	Nil	Nil
93			2.1.4.2 A valve shall be fitted to serve each fire hydrant so that any fire hose may be removed while the fire pumps are in operation.		Yes	Nil	Nil
94			2.1.4.3 Relief valves shall be provided in conjunction with fire pumps if the pumps are capable of developing a pressure exceeding the design pressure of the water service pipes, hydrants and hoses. These valves shall be so placed and adjusted as to prevent excessive pressure in any part of the fire main system.		Yes	Nil	Nil

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95	Chapter II-2 Regulation 10 - Fire fighting 2.1 Fire mains and hydrant	2.1.5 - Number and position of hydrants	2.1.5.1 The number and position of hydrants shall be such that at least two jets of water not emanating from the same hydrant, one of which shall be from a single length of hose, may reach any part of the ship normally accessible to the passengers or crew while the ship is being navigated and any part of any cargo space when empty, any ro-ro space or any vehicle space in which latter case the two jets shall reach any part of the space, each from a single length of hose. Furthermore, such hydrants shall be positioned near the accesses to the protected spaces.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance. In accordance with 2.1.5.2.1, it is also not possible to ensure two jet of water not emanating from the same hydrant to reach any part of the ship.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. At least two jet of water not emanating from the same hydrant to reach the following spaces when a watertight doors and all doors in main vertical zone bulkheads are closed: 1. Passenger port forward 2. Passenger port aft 3. Passenger starboard forward 4. Passenger starboard aft 5. Steering gear room port 6. Steering gear room starboard 7. Crew accommodation space 8. Galley 9. Engine room port 10. Engine room starboard
96			2.1.5.2 In addition to the requirements in the paragraph 2.1.5.1, passenger ships shall comply with the following: .1 in the accommodation, service and machinery spaces the number and position of hydrants shall be such that the requirements of paragraph 2.1.5.1 may be complied with when all watertight doors and all doors in main vertical zone bulkheads are closed; and .2 where access is provided to a machinery space of category A at a low level from an adjacent shaft tunnel, two hydrants shall be provided external to, but near the entrance to that machinery space. Where such access is provided from other spaces, in one of those spaces two hydrants shall be provided near the entrance to the machinery space of category A. Such provision need not be made where the tunnel or adjacent spaces are not part of the escape route.				
97		2.1.7 - International shore connection	2.1.7.1 Ships of 500 gross tonnage and upwards shall be provided with at least one international shore connection complying with the Fire Safety Systems Code		Yes	Nil	Nil
98			2.1.7.2 Facilities shall be available enabling such a connection to be used on either side of the ship.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
99	Chapter II-2 Regulation 10 - Fire fighting 2.2 Fire pumps	2.2.2 - Number of fire pumps	Ships shall be provided with independently driven fire pumps as follows: .1 in passenger ships of: 4,000 gross tonnage and upwards at least three less that 4,000 gross tonnage at least two	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
100		2.2.3.1 - Fire pumps	The arrangement of sea connections, fire pumps and their sources of power shall be as to ensure that: .1 in passenger ships of 1,000 gross tonnage and upwards, in the event of a fire in any one compartment all the fire pumps will not be put out of action;		Yes	Nil	Nil
101		2.2.3.2 - Requirements for the space containing the emergency fire pump	2.2.3.2.1 Location of the space The space containing the fire pump shall not be contiguous to the boundaries of machinery spaces of category A or those spaces containing main fire pumps. Where this is not practicable, the common bulkhead between the two spaces shall be insulated to a standard of structural fire protection equivalent to that required for a control station.		Yes	Nil	Nil
102			2.2.3.2.2 Access to the emergency fire pump No direct access shall be permitted between the machinery space and the space containing the emergency fire pump and its source of power. When this is impracticable, the Administration may accept an arrangement where the access is by means of an airlock with the door of the machinery space being of "A-60" class standard, and the other door being at least steel, both reasonably gastight, self-closing and without any hold-back arrangements. Alternatively, the access may be through a watertight door capable of being operated from a space remote from the machinery space and the space containing the emergency fire pump and unlikely to be cut off in the event of fire in those spaces. In such cases, a second means of access to the space containing the emergency fire pump and its source of power shall be provided.		Yes	Nil	Nil
103			2.2.3.2.3 Ventilation of the emergency fire pump space Ventilation arrangements to the space containing the independent source of power for the emergency fire pump shall be such as to preclude, as far as practicable, the possibility of smoke from a machinery space fire entering or being drawn into that space.		Yes	Nil	Nil

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104	Chapter II-2 Regulation 10 - Fire fighting 2.2 Fire pumps	2.2.4 - Capacity of fire pumps	2.2.4.1 Total capacity of required fire pumps The required fire pumps shall be capable of delivering for fire-fighting purposes a quantity of water, at the pressure specified in paragraph 2.1.6, as follows: .1 pumps in passenger ships: the quantity of water is not less than two thirds of the quantity required to be dealt with by the bilge pumps when employed for bilge pumping; and .2 pumps in cargo ships, other than any emergency pump: the quantity of water is not less than four thirds of the quantity required under regulation II-1/35-1 to be dealt with by each of the independent bilge pumps in a passenger ship of the same dimension when employed in bilge pumping, provided that in no cargo ship, other than those included in paragraph 7.3.2, need the total required capacity of the fire pumps exceed 180 m3/h.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
105			2.2.4.2 Capacity of each fire pump Each of the required fire pumps (other than any emergency pump required in paragraph 2.2.3.1.2 for cargo ships) shall have a capacity not less than 80% of the total required capacity divided by the minimum number of required fire pumps but in any case not less than 25 m3/h and each such pump shall in any event be capable of delivering at least the two required jets of water. These fire pumps shall be capable of supplying the fire main system under the required conditions. Where more pumps than the minimum of required pumps are installed such additional pumps shall have a capacity of at least 25 m3/h and shall be capable of delivering at least the two jets of water required in paragraph 2.1.5.1.		Yes	Nil	Nil
106	Chapter II-2 Regulation 10 - Fire fighting 2.3 Fire hoses and nozzles	2.3.1 - General specifications	2.3.1.1 Fire hoses shall be of non-perishable material approved by the Administration and shall be sufficient in length to project a jet of water to any of the spaces in which they may be required to be used. Each hose shall be provided with a nozzle and the necessary couplings. Hoses specified in this chapter as "fire hoses" shall, together with any necessary fittings and tools, be kept ready for use in conspicuous positions near the water service hydrants or connections. Additionally, in interior locations in passenger ships carrying more than 36 passengers fire hoses shall be connected to the hydrants at all times. Fire hoses shall have a length of at least 10 m, but not more than: .1 15 m in machinery spaces; .2 20 m in other spaces and open decks; and .3 25 m for open decks on ships with a maximum breadth in excess of 30 m.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Interior locations in passenger ships carrying more than 36 passengers, fire hoses shall be connected to the hydrants at all times.
107			2.3.1.2 Unless one hose and nozzle is provided for each hydrant in the ship, there shall be complete interchangeability of hose couplings and nozzles.		Yes	Nil	Nil
108			2.3.2.2 In passenger ships, there shall be at least one fire hose for each of the hydrants required by paragraph 2.1.5 and these hoses shall be used only for the purposes of extinguishing fires or testing the fire-extinguishing apparatus at fire drills and surveys.		Yes	Nil	Nil
109		2.3.3 - Size and types of nozzles	2.3.3.1 For the purposes of this chapter, standard nozzle sizes shall be 12 mm, 16 mm and 19 mm or as near thereto as possible. Larger diameter nozzles may be permitted at the discretion of the Administration.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
110			2.3.3.2 For accommodation and service spaces, a nozzle size greater than 12 mm need not be used.				
111			2.3.3.3 For machinery spaces and exterior locations, the nozzle size shall be such as to obtain the maximum discharge possible from two jets at the pressure mentioned in paragraph 2.1.6 from the smallest pump, provided that a nozzle size greater than 19 mm need not be used.				
112			2.3.3.4 Nozzles shall be of an approved dual-purpose type (i.e., spray/jet type) incorporating a shutoff.				
113	Chapter II-2 Regulation 10 - Fire fighting 3 Portable fire extinguishers	3.1 - Type and design	Portable fire extinguishers shall comply with the requirements of the Fire Safety Systems Code.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Portable powder fire extinguisher is less than 5kg.	Each powder or carbon dioxide extinguisher shall have a capacity of at least 5 kg and each foam extinguisher shall have a capacity of at least 9 l. Fire extinguisher are to be of approved type.
114		3.2 - Arrangement of fire extinguishers	3.2.1 Accommodation spaces, service spaces and control stations shall be provided with portable fire extinguishers of appropriate types and in sufficient number to the satisfaction of the Administration. Ships of 1,000 gross tonnage and upwards shall carry at least five portable fire extinguishers.		No	Portable powder fire extinguisher is less than 5kg. Additional locations are required to provide fire extinguishers. Refer to remarks.	Each powder or carbon dioxide extinguisher shall have a capacity of at least 5 kg and each foam extinguisher shall have a capacity of at least 9 l. Fire extinguisher are to be of approved type. Sun Deck is to be provided with fire extinguisher for both port and starboard side. Galley if fitted with deep-fat fryer are to provide 1 additional class F or K fire extinguisher. RoRo Space are to be provided with fire extinguisher such that the fire extinguisher are within 20m walking distance from each other.
115			3.2.2 One of the portable fire extinguishers intended for use in any space shall be stowed near the entrance to that space.		Yes	Nil	Nil
116			3.2.3 Carbon dioxide fire extinguishers shall not be placed in accommodation spaces. In control stations and other spaces containing electrical or electronic equipment or appliances necessary for the safety of the ship, fire extinguishers should be provided whose extinguishing media are neither electrically conductive nor harmful to the equipment and appliances.		Yes	Nil	Nil

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117			3.2.4 Fire extinguishers shall be situated ready for use at easily visible places, which can be reached quickly and easily at any time in the event of a fire, and in such a way that their serviceability is not impaired by the weather, vibration or other external factors. Portable fire extinguishers shall be provided with devices which indicate whether they have been used.		Yes	Nil	Nil
118	Chapter II-2 Regulation 10 - Fire fighting 3 Portable fire extinguishers	3.3 - Spare charges	3.3.1 Spare charges shall be provided for 100% of the first 10 extinguishers and 50% of the remaining fire extinguishers capable of being recharged on board. Not more than 60 total spare charges are required. Instructions for recharging shall be carried on board.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	No spare charges is noted in the drawing	To provided space charges or additional fire extinguisher as required.
119			3.3.2 For fire extinguishers which cannot be recharged on board, additional portable fire extinguishers of the same quantity, type, capacity and number as determined in paragraph 3.3.1 above shall be provided in lieu of spare charges.		No	No additional fire extinguishers are noted in the drawing	
120	Chapter II-2 Regulation 10 - Fire fighting	4 - Fixed fire-extinguishing systems	4.1.1 A fixed fire-extinguishing system required by paragraph 5 below may be any of the following systems: .1 a fixed gas fire-extinguishing system complying with the provisions of the Fire Safety Systems Code; .2 a fixed high-expansion foam fire-extinguishing system complying with the provisions of the Fire Safety Systems Code; and .3 a fixed pressure water-spraying fire-extinguishing system complying with the provisions of the Fire Safety Systems Code.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance. The fixed fire-extinguishing system is to be approved type as per Fire Safety Systems Code.
121			4.2 Closing appliances for fixed gas fire-extinguishing systems Where a fixed gas fire-extinguishing system is used, openings which may admit air to, or allow gas to escape from, a protected space shall be capable of being closed from outside the protected space.		Yes	Nil	Nil
122			4.3 Storage rooms of fire-extinguishing medium When the fire-extinguishing medium is stored outside a protected space, it shall be stored in a room which is located behind the forward collision bulkhead, and is used for no other purposes. Any entrance to such a storage room shall preferably be from the open deck and shall be independent of the protected space. If the storage space is located below deck, it shall be located no more than one deck below the open deck and shall be directly accessible by a stairway or ladder from the open deck. Spaces which are located below deck or spaces where access from the open deck is not provided, shall be fitted with a mechanical ventilation system designed to take exhaust air from the bottom of the space and shall be sized to provide at least 6 air changes per hour. Access doors shall open outwards, and bulkheads and decks including doors and other means of closing any opening therein, which form the boundaries between such rooms and		Yes	Nil	Nil
123			4.4 Water pumps for other fire-extinguishing systems Pumps, other than those serving the fire main, required for the provision of water for fire-extinguishing systems required by this chapter, their sources of power and their controls shall be installed outside the space or spaces protected by such systems and shall be so arranged that a fire in the space or spaces protected will not put any such system out of action.		NA	NA	NA
124	Chapter II-2 Regulation 10 - Fire fighting 5 Fire extinguishing arrangements in machinery spaces	5.2 - Machinery spaces of category A containing internal combustion machinery	5.2.1 Fixed fire-extinguishing systems Machinery spaces of category A containing internal combustion machinery shall be provided with one of the fixed fire-extinguishing systems in paragraph 4.1.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Noted that FM200 system is provided onboard. Details are not shown in the drawing	The fixed fire-extinguishing system is to be approved type as per Fire Safety Systems Code. Details are to be provided to verify compliance.
125		5.2.2 - Additional fire-extinguishing arrangements	5.2.2.1 There shall be at least one portable foam applicator unit complying with the provisions of the Fire Safety Systems Code.		No	No portable foam applicator unit is provided in the engine room.	At least one portable foam applicator unit complying with the provisions of the Fire Safety Systems Code is to be provided in each engine room.
126			5.2.2.2 There shall be in each such space approved foam-type fire extinguishers, each of at least 45 ℓ capacity or equivalent, sufficient in number to enable foam or its equivalent to be directed onto any part of the fuel and lubricating oil pressure systems, gearing and other fire hazards. In addition, there shall be provided a sufficient number of portable foam extinguishers or equivalent which shall be so located that no point in the space is more than 10 m walking distance from an extinguisher and that there are at least two such extinguishers in each such space. For smaller spaces of cargo ships the Administration may consider relaxing this requirement.		No	Insufficient number of portable foam extinguishers or equivalent are provided and located more than 10m walking distance apart. Portable powder fire extinguisher is less than 5kg.	A sufficient number of portable foam extinguishers or equivalent which shall be so located that no point in the space is more than 10 m walking distance from an extinguisher and that there are at least two such extinguishers in each such space. Each powder or carbon dioxide extinguisher shall have a capacity of at least 5 kg and each foam extinguisher shall have a capacity of at least 9 l.
127		5.4 - Other machinery spaces	Where, in the opinion of the Administration, a fire hazard exists in any machinery space for which no specific provisions for fire-extinguishing appliances are prescribed in paragraphs 5.1, 5.2 and 5.3, there shall be provided in, or adjacent to, that space such a number of approved portable fire extinguishers or other means of fire extinction as the Administration may deem sufficient.		Yes	Nil	Nil
128		5.5 - Additional requirements for passenger ships	In passenger ships carrying more than 36 passengers, each machinery space of category A shall be provided with at least two suitable water fog applicators.		No	No water fog applicators are provided in the engine room.	At least two suitable water fog applicators are to be provided in each engine room.

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129	Chapter II-2 Regulation 10 - Fire fighting 5 Fire extinguishing arrangements in machinery spaces	5.6 - Fixed local application fire-extinguishing systems	5.6.2 Machinery spaces of category A above 500 m3 in volume shall, in addition to the fixed fire-extinguishing system required in paragraph 5.1.1, be protected by an approved type of fixed water-based or equivalent local application fire-fighting system, based on the guidelines developed by the Organization. In the case of periodically unattended machinery spaces, the fire fighting system shall have both automatic and manual release capabilities. In the case of continuously manned machinery spaces, the fire-fighting system is only required to have a manual release capability.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	NA	NA	NA
130			5.6.3 Fixed local application fire-extinguishing systems are to protect areas such as the following without the necessity of engine shutdown, personnel evacuation, or sealing of the spaces: .1 the fire hazard portions of internal combustion machinery or, for ships constructed before 1 July 2014, the fire hazard portions of internal combustion machinery used for the ship's main propulsion and power generation; .2 boiler fronts; .3 the fire hazard portions of incinerators; and .4 purifiers for heated fuel oil.				
131			5.6.4 Activation of any local application system shall give a visual and distinct audible alarm in the protected space and at continuously manned stations. The alarm shall indicate the specific system activated. The system alarm requirements described within this paragraph are in addition to, and not a substitute for, the detection and fire alarm system required elsewhere in this chapter.				
132	Chapter II-2 Regulation 10 - Fire fighting 6 Fire-extinguishing arrangements in control stations, accommodation and service spaces	6.1 - Sprinkler and water spray systems in passenger ships	6.1.1 Passenger ships carrying more than 36 passengers shall be equipped with an automatic sprinkler, fire detection and fire alarm system of an approved type complying with the requirements of the Fire Safety Systems Code in all control stations, accommodation and service spaces, including corridors and stairways. Alternatively, control stations, where water may cause damage to essential equipment, may be fitted with an approved fixed fire-extinguishing system of another type. Spaces having little or no fire risk such as voids, public toilets, carbon dioxide rooms and similar spaces need not be fitted with an automatic sprinkler system.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	No automatic sprinkler system is fitted in all control stations, accommodation and service spaces, including corridors and stairways.	An automatic sprinkler, fire detection and fire alarm system of an approved type complying with the requirements of the Fire Safety Systems Code is to be provided in all control stations, accommodation and service spaces, including corridors and stairways.
133		6.3 - Spaces containing flammable liquid	6.3.1 Paint lockers shall be protected by: .1 a carbon dioxide system, designed to give a minimum volume of free gas equal to 40% of the gross volume of the protected space; .2 a dry powder system, designed for at least 0.5 kg powder/m 3; .3 a water spraying or sprinkler system, designed for 5 ℓ/m2min. Water spraying systems may be connected to the fire main of the ship; or .4 a system providing equivalent protection, as determined by the Administration. In any case, the system shall be operable from outside the protected space.		Unable to verify	Current details on the plan is insufficient to show compliance.	Clarification is required if paint locker or flammable liquid locker is provided onboard to determine the application of requirement.
134			6.3.2 Flammable liquid lockers shall be protected by an appropriate fire-extinguishing arrangement approved by the Administration.				
135			6.3.3 For lockers of a deck area of less than 4 m2, which do not give access to accommodation spaces, a carbon dioxide portable fire extinguisher sized to provide a minimum volume of free gas equal to 40% of the gross volume of the space may be accepted in lieu of a fixed system. A discharge port shall be arranged in the locker to allow the discharge of the extinguisher without having to enter into the protected space. The required portable fire extinguisher shall be stowed adjacent to the port. Alternatively, a port or hose connection may be provided to facilitate the use of fire main water.				

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136	Chapter II-2 Regulation 10 - Fire fighting 6 Fire-extinguishing arrangements in control stations, accommodation and service spaces	6.4 - Deep-fat cooking equipment	Deep-fat cooking equipment installed in enclosed spaces or on open decks shall be fitted with the following: .1 an automatic or manual fire-extinguishing system tested to an international standard acceptable to the Organization; .2 a primary and backup thermostat with an alarm to alert the operator in the event of failure of either thermostat; .3 arrangements for automatically shutting off the electrical power upon activation of the fire-extinguishing system; .4 an alarm for indicating operation of the fire-extinguishing system in the galley where the equipment is installed; and .5 controls for manual operation of the fire-extinguishing system which are clearly labelled for ready use by the crew.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Current details on the plan is insufficient to show compliance.	Clarification is required if deep-fat cooking equipment is provided onboard to determine the application of requirement.
137	Chapter II-2 Regulation 10 - Fire fighting 10 Fire-fighter's outfits	10.1 - Types of firefighter's outfits	.1 Fire-fighter's outfits shall comply with the Fire Safety Systems Code; and .2 Self-contained compressed air breathing apparatus of fire-fighter's outfits shall comply with paragraph 2.1.2.2 of chapter 3 of the Fire Safety Systems Code by 1 July 2019.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site. Fire-fighter's outfit is to be of approved type as per Fire Safety Systems Code.
138		10.2 - Numbers of fire-fighter's outfits	10.2.1 Ships shall carry at least two fire-fighter's outfits.		Yes	Nil	Nil
139			10.2.2 In addition, in passenger ships there shall be provided: .1 for every 80 m, or part thereof, of the aggregate of the lengths of all passenger spaces and service spaces on the deck which carries such spaces or, if there is more than one such deck, on the deck which has the largest aggregate of such lengths, two fire-fighter's outfits and, in addition, two sets of personal equipment, each set comprising the items stipulated in the Fire Safety Systems Code. In passenger ships carrying more than 36 passengers, two additional fire-fighter's outfits shall be provided for each main vertical zone. However, for stairway enclosures which constitute individual main vertical zones and for the main vertical zones in the fore or aft end of a ship which do not contain spaces of categories (6), (7), (8) or (12) defined in regulation 9.2.2.3, no additional fire-fighter's outfits are required; and .2 on ships carrying more than 36 passengers, for each pair of breathing apparatus there shall be provided one water fog applicator which shall be stored adjacent to such apparatus.		No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance. No water fog applicators are provided and stored adjacent to each pair of breathing apparatus.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement and two additional fire-fighter's outfit are to be provided for each main vertical zone. One water fog applicators are to be provided and stored adjacent to each pair of breathing apparatus.
140	Chapter II-2 Regulation 10 - Fire fighting 10 Fire-fighter's outfits	10.2 - Numbers of fire-fighter's outfits	10.2.4 The Administration may require additional sets of personal equipment and breathing apparatus, having due regard to the size and type of the ship.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	NA	NA	NA
141			10.2.5 Two spare charges shall be provided for each required breathing apparatus. Passenger ships carrying not more than 36 passengers and cargo ships that are equipped with suitably located means for fully recharging the air cylinders free from contamination, need carry only one spare charge for each required apparatus. In passenger ships carrying more than 36 passengers, at least two spare charges for each breathing apparatus shall be provided.		Unable to verify	Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site.
142			10.2.6 Passenger ships carrying more than 36 passengers constructed on or after 1 July 2010 shall be fitted with a suitably located means for fully recharging breathing air cylinders, free from contamination. The means for recharging shall be either: .1 breathing air compressors supplied from the main and emergency switchboard, or independently driven, with a minimum capacity of 60 l/min per required breathing apparatus, not to exceed 420 l/min; or .2 self-contained high-pressure storage systems of suitable pressure to recharge the breathing apparatus used on board, with a capacity of at least 1,200 l per required breathing apparatus, not to exceed 50,000 l of free air."		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
143		10.3 - Storage of fire-fighter's outfits	10.3.1 The fire-fighter's outfits or sets of personal equipment shall be kept ready for use in an easily accessible location that is permanently and clearly marked and, where more than one fire-fighter's outfit or more than one set of personal equipment is carried, they shall be stored in widely separated positions.		Yes	Nil	Nil
144			10.3.2 In passenger ships, at least two fire-fighter's outfits and, in addition, one set of personal equipment shall be available at any one position. At least two fire-fighter's outfits shall be stored in each main vertical zone.		No	No main vertical or horizontal zones are provided/identified. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement and two additional fire-fighter's outfit and one set of personal equipment shall be available at any one position are to be provided for each main vertical zone.

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145	Chapter II-2 Regulation 10 - Fire fighting 10 Fire-fighter's outfits	10.4 - Fire-fighter's communication	For ships constructed on or after 1 July 2014, a minimum of two two-way portable radiotelephone apparatus for each fire party for fire-fighter's communication shall be carried on board. Those two-way portable radiotelephone apparatus shall be of an explosion-proof type or intrinsically safe. Ships constructed before 1 July 2014 shall comply with the requirements of this paragraph not later than the first survey after 1 July 2018."	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
146	Chapter II-2 Regulation 11 - Structural integrity	2 - Material of hull, superstructures, structural bulkheads, decks and deckhouses	The hull, superstructures, structural bulkheads, decks and deckhouses shall be constructed of steel or other equivalent material. For the purpose of applying the definition of steel or other equivalent material as given in regulation 3.43 the "applicable fire exposure" shall be according to the integrity and insulation standards given in tables 9.1 to 9.4. For example, where divisions such as decks or sides and ends of deckhouses are permitted to have "B-0" fire integrity, the "applicable fire exposure" shall be half an hour.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	The superstructure is constructed of aluminium and it is not insulated as required to table 9.1 and 9.2	Aluminium structure is to be insulated to the required fire integrity as per table 9.1 and 9.2.
147		3 - Structure of aluminium alloy	Unless otherwise specified in paragraph 2, in cases where any part of the structure is of aluminium alloy, the following shall apply: .1 the insulation of aluminium alloy components of "A" or "B" class divisions, except structure which, in the opinion of the Administration, is non-load-bearing, shall be such that the temperature of the structural core does not rise more than 200°C above the ambient temperature at any time during the applicable fire exposure to the standard fire test; and .2 special attention shall be given to the insulation of aluminium alloy components of columns, stanchions and other structural members required to support lifeboat and liferaft stowage, launching and embarkation areas, and "A" and "B" class divisions to ensure: .2.1 that for such members supporting lifeboat and liferaft areas and "A" class divisions, the temperature rise limitation specified in paragraph 3.1 shall apply at the end of one hour; and .2.2 that for such members required to support "B" class divisions, the temperature rise limitation specified in paragraph 3.1 shall apply at the end of half an hour.				
148		4 - Machinery spaces of category A	4.1 Crowns and casings Crowns and casings of machinery spaces of category A shall be of steel construction and shall be insulated as required by tables 9.5 and 9.7, as appropriate.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
149			4.2 Floor plating The floor plating of normal passageways in machinery spaces of category A shall be made of steel				Details are to be provided to verify compliance and can also be verified on site.
150		5 - Materials of overboard fittings	Materials readily rendered ineffective by heat shall not be used for overboard scuppers, sanitary discharges, and other outlets which are close to the waterline and where the failure of the material in the event of fire would give rise to danger of flooding.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
151	Chapter II-2 Regulation 12 - Notification of crew and passengers	2 - General emergency alarm system	A general emergency alarm system required by regulation III/6.4.2 shall be used for notifying crew and passengers of a fire.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
152		3 - Public address systems in passenger ships	A public address system or other effective means of communication complying with the requirements of regulation III/6.5 shall be available throughout the accommodation and service spaces and control stations and open decks.				
153	Chapter II-2 Regulation 13 - Means of escape 3 Means of escape from control stations, accommodation spaces and service spaces	3.1 - General requirements	3.1.1 Stairways and ladders shall be so arranged as to provide ready means of escape to the lifeboat and liferaft embarkation deck from passenger and crew accommodation spaces and from spaces in which the crew is normally employed, other than machinery spaces.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
154			3.1.2 Unless expressly provided otherwise in this regulation, a corridor, lobby, or part of a corridor from which there is only one route of escape shall be prohibited. Dead-end corridors used in service areas which are necessary for the practical utility of the ship, such as fuel oil stations and athwartship supply corridors, shall be permitted, provided such dead-end corridors are separated from crew accommodation areas and are inaccessible from passenger accommodation areas. Also, a part of a corridor that has a depth not exceeding its width is considered a recess or local extension and is permitted.		Yes	Nil	Nil

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155	Chapter II-2 Regulation 13 - Means of escape 3 Means of escape from control stations, accommodation spaces and service spaces	3.1 - General requirements	3.1.3 All stairways in accommodation and service spaces and control stations shall be of steel frame construction except where the Administration sanctions the use of other equivalent material.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	The superstructure is constructed of alumitium. Details are not indicated to show that the stairways are of steel frame construction.	Details are to be provided to verify compliance and can also be verified on site.
156			3.1.5 Doors in escape routes shall, in general, open in way of the direction of escape, except that: .1 individual cabin doors may open into the cabins in order to avoid injury to persons in the corridor when the door is opened; and .2 doors in vertical emergency escape trunks may open out of the trunk in order to permit the trunk to be used both for escape and for access.		Yes	Nil	Nil
157	Chapter II-2 Regulation 13 - Means of escape 3 Means of escape from control stations, accommodation spaces and service spaces 3.2 Means of escape in passenger ships	3.2.1 - Escape from spaces below the bulkhead deck	3.2.1.1 Below the bulkhead deck, two means of escape, at least one of which shall be independent of watertight doors, shall be provided from each watertight compartment or similarly restricted space or group of spaces. Exceptionally, the Administration may dispense with one of the means of escape for crew spaces that are entered only occasionally, if the required escape route is independent of watertight doors.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
158			3.2.1.2 Where the Administration has granted dispensation under the provisions of paragraph 3.2.1.1, this sole means of escape shall provide safe escape. However, stairways shall not be less than 800 mm in clear width with handrails on both sides.		NA	NA	NA
159		3.2.2 - Escape from spaces above the bulkhead deck	Above the bulkhead deck there shall be at least two means of escape from each main vertical zone or similarly restricted space or group of spaces at least one of which shall give access to a stairway forming a vertical escape.		No	No main vertical or horizontal zones are provided. Current details on the plan is insufficient to show compliance.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m.
160		3.2.3 - Direct access to stairway enclosures	Stairway enclosures in accommodation and service spaces shall have direct access from the corridors and be of a sufficient area to prevent congestion, having in view the number of persons likely to use them in an emergency. Within the perimeter of such stairway enclosures, only public toilets, lockers of non-combustible material providing storage for non-hazardous safety equipment and open information counters are permitted. Only corridors, lifts, public toilets, special category spaces and open ro-ro spaces to which any passengers carried can have access, other escape stairways required by paragraph 3.2.4.1 and external areas are permitted to have direct access to these stairway enclosures. Public spaces may also have direct access to stairway enclosures except for the backstage of a theatre. Small corridors or "lobbies" used to separate an enclosed stairway from galleys or main laundries may have direct access to the stairway provided they have a minimum deck area of 4.5 m2, a width of no less than 900 mm and contain a fire hose station.		Yes	Nil	Nil
161		3.2.4 - Details of means of escape	3.2.4.1 At least one of the means of escape required by paragraphs 3.2.1.1 and 3.2.2 shall consist of a readily accessible enclosed stairway, which shall provide continuous fire shelter from the level of its origin to the appropriate lifeboat and liferaft embarkation decks, or to the uppermost weather deck if the embarkation deck does not extend to the main vertical zone being considered. In the latter case, direct access to the embarkation deck by way of external open stairways and passageways shall be provided and shall have emergency lighting in accordance with regulation III/11.5 and slip-free surfaces underfoot. Boundaries facing external open stairways and passageways forming part of an escape route and boundaries in such a position that their failure during a fire would impede escape to the embarkation deck shall have fire integrity, including insulation values, in accordance with tables 9.1, 9.2, 9.3 and 9.4, as appropriate.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	The enclosure of the stairways (frame 34-37 port & starboard) leading down to the Main deck Evac station is not protected as in accordance with the tables for decks in paragraphs 2.2.3 Boundaries facing external open stairways and passageways forming part of an escape route are not insulated to the required as per table 9.1 and 9.2.	Refer to table 9.1 and 9.2 for the required fire protection rating for the stairway enclosure and external boundaries facing external open stairways and passageways forming part of an escape route.
162			3.2.4.2 Protection of access from the stairway enclosures to the lifeboat and lferaft embarkation areas shall be provided either directly or through protected internal routes which have fire integrity and insulation values for stairway enclosures as determined by tables 9.1 to 9.4, as appropriate.				
163			3.2.4.5 The widths, number and continuity of escapes shall be in accordance with the requirements in the Fire Safety Systems Code.		No	Details are not shown in the drawing	Details are to be provided to verify compliance
164		3.2.5 - Marking of escape routes	3.2.5.1 In addition to the emergency lighting required by regulations II-1/42 and III/11.5, the means of escape, including stairways and exits, shall be marked by lighting or photoluminescent strip indicators placed not more than 300 mm above the deck at all points of the escape route including angles and intersections. The marking must enable passengers to identify the routes of escape and readily identify the escape exits. If electric illumination is used, it shall be supplied by the emergency source of power and it shall be so arranged that the failure of any single light or cut in a lighting strip will not result in the marking being ineffective. Additionally, escape route signs and fire equipment location markings shall be of photoluminescent material or marked by lighting. The Administration shall ensure that such lighting or photoluminescent equipment has been evaluated, tested and applied in accordance with the Fire Safety Systems Code.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
165			3.2.5.2 In passenger ships carrying more than 36 passengers, the requirements of paragraph 3.2.5.1 shall also apply to the crew accommodation areas.				

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166			3.2.5.3 In lieu of the escape route lighting system required by paragraph 3.2.5.1, alternative evacuation guidance systems may be accepted if approved by the Administration based on the guidelines developed by the Organization.				
167	Chapter II-2 Regulation 13 - Means of escape 3 Means of escape from control stations, accommodation spaces and service spaces 3.2 Means of escape in passenger ships	3.2.6 - Normally locked doors that form part of an escape route	3.2.6.1 Cabin and stateroom doors shall not require keys to unlock them from inside the room. Neither shall there be any doors along any designated escape route which require keys to unlock them when moving in the direction of escape.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
168			3.2.6.2 Escape doors from public spaces that are normally latched shall be fitted with a means of quick release. Such means shall consist of a door-latching mechanism incorporating a device that releases the latch upon the application of a force in the direction of escape flow. Quick release mechanisms shall be designed and installed to the satisfaction of the Administration and, in particular: .1 consist of bars or panels, the actuating portion of which extends across at least one half of the width of the door leaf, at least 760 mm and not more than 1120 mm above the deck; .2 cause the latch to release when a force not exceeding 67 N is applied; and .3 not be equipped with any locking device, set screw or other arrangement that prevents the release of the latch when pressure is applied to the releasing device.				
169	Chapter II-2 Regulation 13 - Means of escape 3 Means of escape from control stations, accommodation spaces and service spaces	3.4 - Emergency escape breathing devices	3.4.1 Emergency escape breathing devices shall comply with the Fire Safety Systems Code. Spare emergency escape breathing devices shall be kept onboard.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	EEBD are not provided in the accommodation spaces	EEBD are to be of approved type and spares are to be provided
170			3.4.2 All ships shall carry at least two emergency escape breathing devices within accommodation spaces.				At least two EEBD are to be provided in accommodation spaces.
171			3.4.3 In all passenger ships, at least two emergency escape breathing devices shall be carried in each main vertical zone.				
172			3.4.4 In all passenger ships carrying more than 36 passengers, two emergency escape breathing devices, in addition to those required in paragraph 3.4.3 above, shall be carried in each main vertical zone.				At least four EEBD are to be provided in each main vertical zone.
173			3.4.5 However, paragraphs 3.4.3 and 3.4.4 do not apply to stairway enclosures which constitute individual main vertical zones and for the main vertical zones in the fore or aft end of a ship which do not contain spaces of categories (6), (7), (8) or (12) defined in regulation 9.2.2.3.				Nil
174	Chapter II-2 Regulation 13 - Means of escape 4 Means of escape from machinery spaces	4.1 - Means of escape on passenger ships	4.1.1 Escape from spaces below the bulkhead deck Where the space is below the bulkhead deck the two means of escape shall consist of either: .1 two sets of steel ladders, as widely separated as possible, leading to doors in the upper part of the space similarly separated and from which access is provided to the appropriate lifeboat and liferaft embarkation decks. One of these ladders shall be located within a protected enclosure that satisfies regulation 9.2.2.3, category (2), or regulation 9.2.2.4, category (4), as appropriate, from the lower part of the space it serves to a safe position outside the space. Self-closing fire doors of the same fire integrity standards shall be fitted in the enclosure. The ladder shall be fixed in such a way that heat is not transferred into the enclosure through non-insulated fixing points. The protected enclosure shall have minimum internal dimensions of at least 800 mm x 800 mm, and shall have emergency lighting provisions; or .2 one steel ladder leading to a door in the upper part of the space from which access is provided to the embarkation deck and additionally, in the lower part of the space and in a position well separated from the ladder referred to, a steel door capable of being operated from each side and which provides access to a safe escape route from the lower part of the space to the embarkation deck.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	No steel ladder is provided for as an escape route. Two escape routes provided are through water-tight doors.	Two means of escape is to be provided as per the requirements.
175			4.1.2 Escape from spaces above the bulkhead deck Where the space is above the bulkhead deck, the two means of escape shall be as widely separated as possible and the doors leading from such means of escape shall be in a position from which access is provided to the appropriate lifeboat and liferaft embarkation decks. Where such means of escape require the use of ladders, these shall be of steel.		NA	NA	NA

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176			4.1.3 Dispensation from two means of escape In a ship of less than 1,000 gross tonnage, the Administration may dispense with one of the means of escape, due regard being paid to the width and disposition of the upper part of the space. In a ship of 1,000 gross tonnage and above, the Administration may dispense with one means of escape from any such space, including a normally unattended auxiliary machinery space, so long as either a door or a steel ladder provides a safe escape route to the embarkation deck, due regard being paid to the nature and location of the space and whether persons are normally employed in that space. In the steering gear space, a second means of escape shall be provided when the emergency steering position is located in that space unless there is direct access to the open deck.		NA	NA	NA
177	Chapter II-2 Regulation 13 - Means of escape 4 Means of escape from machinery spaces	4.1 - Means of escape on passenger ships	4.1.4 Escape from machinery control rooms Two means of escape shall be provided from a machinery control room located within a machinery space, at least one of which will provide continuous fire shelter to a safe position outside the machinery space.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	NA	NA	NA
178			4.1.5 Inclined ladders and stairways For ships constructed on or after 1 January 2016, all inclined ladders/stairways fitted to comply with paragraph 4.1.1 with open treads in machinery spaces being part of or providing access to escape routes but not located within a protected enclosure shall be made of steel. Such ladders/stairways shall be fitted with steel shields attached to their undersides, such as to provide escaping personnel protection against heat and flame from beneath.		Unable to verify	Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site.
179			4.1.6 Escape from main workshops within machinery spaces For ships constructed on or after 1 January 2016, two means of escape shall be provided from the main workshop within a machinery space. At least one of these escape routes shall provide a continuous fire shelter to a safe position outside the machinery space.		NA	NA	NA
180		4.3 - Emergency escape breathing devices	4.3.1 On all ships, within the machinery spaces, emergency escape breathing devices shall be situated ready for use at easily visible places, which can be reached quickly and easily at any time in the event of fire. The location of emergency escape breathing devices shall take into account th layout of the machinery space and the number of persons normally working in the spaces.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
181			4.3.2 The number and location of these devices shall be indicated in the fire control plan required in regulation 15.2.4.		Yes	Nil	Nil
182			4.3.3 Emergency escape breathing devices shall comply with the Fire Safety Systems Code.		Unable to verify	Current details on the plan is insufficient to show compliance.	EEBD are to be of approved type.
183	Chapter II-2 Regulation 13 - Means of escape	5 - Means of escape on passenger ships from special category and open ro-ro spaces to which any passengers carried can have access	5.1 In special category and open ro-ro spaces to which any passengers carried can have access, the number and locations of the means of escape both below and above the bulkhead deck shall be to the satisfaction of the Administration and, in general, the safety of access to the embarkation deck shall be at least equivalent to that provided for under paragraphs 3.2.1.1, 3.2.2, 3.2.4.1 and 3.2.4.2. Such spaces shall be provided with designated walkways to the means of escape with a breadth of at least 600 mm. The parking arrangements for the vehicles shall maintain the walkways clear at all times.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Designated walkways to the means of escape with a breadth of at least 600 mm are not shown in the drawing.	Details are to be provided to verify compliance and can also be verified on site.
184			5.2 One of the escape routes from the machinery spaces where the crew is normally employed shall avoid direct access to any special category space.		NA	NA	NA
185	Chapter II-2 Regulation 13 - Means of escape	6 - Means of escape from ro-ro spaces	At least two means of escape shall be provided in ro-ro spaces where the crew are normally employed. The escape routes shall provide a safe escape to the lifeboat and liferaft embarkation decks and shall be located at the fore and aft ends of the space.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Nil
186	Chapter II-2 Regulation 13 - Means of escape 7 Additional requirements for ro-ro passenger ships	7.2 - Instruction for safe escape	7.2.1 Decks shall be sequentially numbered, starting with "1" at the tank top or lowest deck. The numbers shall be prominently displayed at stair landings and lift lobbies. Decks may also be named, but the deck number shall always be displayed with the name.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Details are not shown in the drawing.	Details are to be provided to verify compliance and can also be verified on site.
187			7.2.2 Simple "mimic" plans showing the "you are here" position and escape routes marked by arrows, shall be prominently displayed on the inside of each cabin door and in public spaces. The plan shall show the directions of escape and shall be properly oriented in relation to its position o the ship.				
188		7.3 - Strength of handrails and corridors	7.3.1 Handrails or other handholds shall be provided in corridors along the entire escape route so that a firm handhold is available at every step of the way, where possible, to the assembly stations and embarkation stations. Such handrails shall be provided on both sides of longitudinal corridors more than 1.8 m in width and transverse corridors more than 1 m in width. Particular attention shall be paid to the need to be able to cross lobbies, atriums and other large open space along escape routes. Handrails and other handholds shall be of such strength as to withstand a distributed horizontal load of 750 N/m applied in the direction of the centre of the corridor or space, and a distributed vertical load of 750 N/m applied in the downward direction. The two loads need not be applied simultaneously.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance.

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189			7.3.2 The lowest 0.5 m of bulkheads and other partitions forming vertical divisions along escape routes shall be able to sustain a load of 750 N/m to allow them to be used as walking surfaces from the side of the escape route with the ship at large angles of heel.				
190		7.4 - Evacuation analysis	Escape routes shall be evaluated by an evacuation analysis early in the design process. The analysis shall be used to identify and eliminate, as far as practicable, congestion which may develop during an abandonment, due to normal movement of passengers and crew along escape routes, including the possibility that crew may need to move along these routes in a direction opposite the movement of passengers. In addition, the analysis shall be used to demonstrate that escape arrangements are sufficiently flexible to provide for the possibility that certain escape routes, assembly stations, embarkation stations or survival craft may not be available as a result of a casualty.		Unable to verify	There is no submission of the evacuation analysis.	Evacuation analysis is to be done and submitted for verification.
191	Chapter II-2 Regulation 15 - Instructions, on-board training and drills 2 General requirements	2.4 - Fire control plans	2.4.1 General arrangement plans shall be permanently exhibited for the guidance of the ship's officers, showing clearly for each deck the control stations, the various fire sections enclosed by "A" class divisions, the sections enclosed by "B" class divisions together with particulars of the fire detection and fire alarm systems, the sprinkler installation, the fire-extinguishing appliances, means of access to different compartments, decks, etc., and the ventilating system including particulars of the fan control positions, the position of dampers and identification numbers of the ventilating fans serving each section. Alternatively, at the discretion of the Administration, the aforementioned details may be set out in a booklet, a copy of which shall be supplied to each officer, and one copy shall at all times be available on board in an accessible position. Plans and booklets shall be kept up to date; any alterations thereto shall be recorded as soon as practicable. Description in such plans and booklets shall be in the language or languages required by the Administration. If the language is neither English nor French, a translation into one of those languages shall be included.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Yes	Nil	Revised drawing is to be approved if there is any changes due to modification.
192			2.4.2 A duplicate set of fire control plans or a booklet containing such plans shall be permanently stored in a prominently marked weathertight enclosure outside the deckhouse for the assistance of shore-side fire-fighting personnel.				
193	Chapter II-2 Regulation 20 - Protection of vehicle, special category and ro-ro spaces 2 General requirements	2.2 - Basic principles for passenger ships	2.2.1 The basic principle underlying the provisions of this regulation is that the main vertical zoning required by regulation 9.2 may not be practicable in vehicle spaces of passenger ships and, therefore, equivalent protection must be obtained in such spaces on the basis of a horizontal zone concept and by the provision of an efficient fixed fire-extinguishing system. Based on this concept, a horizontal zone for the purpose of this regulation may include special category spaces on more than one deck provided that the total overall clear height for vehicles does not exceed 10 m.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	No main vertical or horizontal zones are provided	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m.
194			2.2.2 The basic principle underlying the provisions of paragraph 2.2.1 are also applicable to ro-ro spaces.				
195			2.2.3 The requirements of ventilation systems, openings in "A" class divisions and penetrations in "A" class divisions for maintaining the integrity of vertical zones in this chapter shall be applied equally to decks and bulkheads forming the boundaries separating horizontal zones from each other and from the remainder of the ship.				
196	Chapter II-2 Regulation 20 - Protection of vehicle, special category and ro-ro spaces 4 Detection and alarm	4.1 - Fixed fire detection and fire alarm systems	Except as provided in paragraph 4.3.1, there shall be provided a fixed fire detection and fire alarm system complying with the requirements of the Fire Safety Systems Code. The fixed fire detection system shall be capable of rapidly detecting the onset of fire. The type of detectors and their spacing and location shall be to the satisfaction of the Administration taking into account the effects of ventilation and other relevant factors. After being installed the system shall be tested under normal ventilation conditions and shall give an overall response time to the satisfaction of the Administration.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Noted that fire detection and alarm system is fitted onboard. Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site.
197	Chapter II-2 Regulation 20 - Protection of vehicle, special category and ro-ro spaces	5 - Structural fire protection	Notwithstanding the provisions of regulation 9.2.2, in passenger ships carrying more than 36 passengers, the boundary bulkheads and decks of special category spaces and ro-ro spaces shall be insulated to "A-60" class standard. However, where a category (5), (9) or (10) space, as defined in regulation 9.2.2.3, is on one side of the division the standard may be reduced to "A-0". Where fuel oil tanks are below a special category space or a ro-ro space, the integrity of the deck between such spaces may be reduced to "A-0" standard.	Structural Fire Protection Plan, Dwg no:1029-J04-01C, Rev C	No	Boundary bulkhead and deck of the ro-ro space is not insulated to A60.	Details refer to section 2.2.3 "Remarks" item 17 to 20.
198	Chapter II-2 Regulation 20 - Protection of vehicle, special category and ro-ro spaces 6 Fire-extinction	6.1 - Fixed fire-extinguishing systems	6.1.2 Vehicle spaces and ro-ro spaces not capable of being sealed and special category spaces shall be fitted with a fixed water-based fire-fighting system for ro-ro spaces and special category spaces complying with the provisions of the Fire Safety Systems Code which shall protect all parts of any deck and vehicle platform in such spaces. Such a water-based fire-fighting system shall have: .1 a pressure gauge on the valve manifold; .2 clear marking on each manifold valve indicating the spaces served; .3 instructions for maintenance and operation located in the valve room; and .4 a sufficient number of drainage valves to ensure complete drainage of the system.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Ro-ro space is not fitted with fixed water-based fire-fighting system.	Ro-ro space is to be fitted with fixed water-based fire-fighting system as required by this requirement.

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199			6.1.3 The Administration may permit the use of any other fixed fire-extinguishing system that has been shown, by a full-scale test in conditions simulating a flowing petrol fire in a vehicle space or a ro-ro space, to be not less effective in controlling fires likely to occur in such a space.		NA	NA	NA
200	Chapter II-2 Regulation 20 - Protection of vehicle, special category and ro-ro spaces 6 Fire-extinction	6.1 - Fixed fire-extinguishing systems	6.1.4 The requirement of this paragraph shall apply to ships constructed on or after 1 January 2010. Ships constructed on or after 1 July 2002 and before 1 January 2010 shall comply with the previously applicable requirements of paragraph 6.1.4, as amended by resolution MSC.99(73). When fixed pressure waterspraying systems are fitted, in view of the serious loss of stability which could arise due to large quantities of water accumulating on the deck or decks during the operation of the fixed pressure water-spraying system, the following arrangements shall be provided: .1 in passenger ships: .1.1 in the spaces above the bulkhead deck, scuppers shall be fitted so as to ensure that such water is rapidly discharged directly overboard, taking into account the guidelines developed by the Organization; .1.2.1 in ro-ro passenger ships, discharge valves for scuppers, fitted with positive means of closing operable from a position above the bulkhead deck in accordance with the requirements of the International Convention on Load Lines in force, shall be kept open while the ships are at sea; .1.2.2 any operation of valves referred to in paragraph 6.1.4.1.2.1 shall be recorded in the log-book; .1.3 in the spaces below the bulkhead deck, the Administration may require pumping and	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Ro-ro space is not fitted with fixed water-based fire-fighting system. The required arrangement by this requirement for the fixed water-based fire-fighting system is not provided.	Ro-ro space fitted with fixed water-based fire-fighting system is to provide the arrangement as required by this requirement.
201		6.2 - Portable fire-extinguishers	6.2.1 Portable extinguishers shall be provided at each deck level in each hold or compartment where vehicles are carried, spaced not more than 20 m apart on both sides of the space. At least one portable fire-extinguisher shall be located at each access to such a cargo space.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Fire extinguisher are spaced more than 20m apart. Portable powder fire extinguisher is less than 5kg. Forward access to the ro-ro space are not provided with fire extinguishers.	The fire extinguisher are to be spaced not more than 20m apart. Each powder or carbon dioxide extinguisher shall have a capacity of at least 5 kg and each foam extinguisher shall have a capacity of at least 9 l. Fire extinguisher are to be of approved type.
202			6.2.2 In addition to the provision of paragraph 6.2.1, the following fire extinguishing appliances shall be provided in vehicle, ro-ro and special category spaces intended for the carriage of motor vehicles with fuel in their tanks for their own propulsion: .1 at least three water-fog applicators; and .2 one portable foam applicator unit complying with the provisions of the Fire Safety Systems Code, provided that at least two such units are available in the ship for use in such ro-ro spaces.		No	Portable foam applicator unit are not provided on the ro-ro space and onboard.	One portable foam applicator unit complying with the provisions of the Fire Safety Systems Code are to be provided and that at least two such units are available in the ship for use in such ro-ro spaces.
203	Chapter II-2 Regulation 21 - Casualty threshold, safe return to port and safe areas	1 - Application	Passenger ships constructed on or after 1 July 2010 having length, as defined in regulation II-1/2.5, of 120 m or more or having three or more main vertical zones shall comply with the provisions of this regulation.		Unable to verify	No main vertical or horizontal zones are provided.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m. Where three or more main vertical zones are provided, ship is to comply with this regulation.
204		2 - Purpose	The purpose of this regulation is to establish design criteria for a ship's safe return to port under its own propulsion after a casualty that does not exceed the casualty threshold stipulated in paragraph 3 and also provides functional requirements and performance standards for safe areas.				
205		3 - Casualty threshold	The casualty threshold, in the context of a fire, includes: .1 loss of space of origin up to the nearest "A" class boundaries, which may be a part of the space of origin, if the space of origin is protected by a fixed fire extinguishing system; or .2 loss of the space of origin and adjacent spaces up to the nearest "A" class boundaries, which are not part of the space of origin.				
206		4 - Safe return to port	When fire damage does not exceed the casualty threshold indicated in paragraph 3, the ship shall be capable of returning to port while providing a safe area as defined in regulation 3. To be deemed capable of returning to port, the following systems shall remain operational in the remaining part of the ship not affected by fire: .1 propulsion; .2 steering systems and steering-control systems; .3 navigational systems; .4 systems for fill, transfer and service of fuel oil; .5 internal communication between the bridge, engineering spaces, safety centre, fire-fighting and damage control teams, and as required for passenger and crew notification and mustering; .6 external communication; .7 fire main system; .8 fixed fire-extinguishing systems; .9 fire and smoke detection system; .10 bilge and ballast system; .11 power-operated watertight and semi-watertight doors; .12 systems intended to support "safe areas" as indicated in paragraph 5.1.2; .13 flooding detection systems; and .14 other systems determined by the Administration to be vital to damage control efforts.				

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207	Chapter II-2 Regulation 21 - Casualty threshold, safe return to port and safe areas	5 - Safe area(s)	5.1 Functional requirements: .1 the safe area(s) shall generally be internal space(s); however, the use of an external space as a safe area may be allowed by the Administration taking into account any restriction due to the area of operation and relevant expected environmental conditions; .2 the safe area(s) shall provide all occupants with the following basic services to ensure that the health of passengers and crew is maintained: .1 sanitation; .2 water; .3 food; .4 alternate space for medical care; .5 shelter from the weather; .6 means of preventing heat stress and hypothermia; .7 light; and .8 ventilation; .3 ventilation design shall reduce the risk that smoke and hot gases could affect the use of the safe area(s); and .4 means of access to life-saving appliances shall be provided from each area identified or used		Unable to verify	No main vertical or horizontal zones are provided.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m. Where three or more main vertical zones are provided, ship is to comply with this regulation.
208			5.2 Alternate space for medical care Alternate space for medical care shall conform to a standard acceptable to the Administration.				
209	Chapter II-2 Regulation 22 - Design criteria for systems to remain operational after a fire casualty	1 - Application	Passenger ships constructed on or after 1 July 2010 having length, as defined in regulation II-1/2.5, of 120 m or more or having three or more main vertical zones shall comply with the provisions of this regulation.		Unable to verify	No main vertical or horizontal zones are provided.	Main vertical or horizontal zones are to be identified/provided in accordance with the requirement. For each vertical zone, the mean length and width of which on any deck does not in general exceed 40 m. Where three or more main vertical zones are provided, ship is to comply with this regulation.
210		2 - Purpose	The purpose of this regulation is to provide design criteria for systems required to remain operational for supporting the orderly evacuation and abandonment of a ship, if the casualty threshold, as defined in regulation 21.3, is exceeded.				
211		3 - Systems	3.1 In case any one main vertical zone is unserviceable due to fire, the following systems shall be so arranged and segregated as to remain operational: .1 fire main; .2 internal communications (in support of fire-fighting as required for passenger and crew notification and evacuation); .3 means of external communications; .4 bilge systems for removal of fire-fighting water; .5 lighting along escape routes, at assembly stations and at embarkation stations of life-saving appliances; and .6 guidance systems for evacuation shall be available.				
212			3.2 The above systems shall be capable of operation for at least 3 h based on the assumption of no damage outside the unserviceable main vertical zone. These systems are not required to remain operational within the unserviceable main vertical zones.				
213			3.3 Cabling and piping within a trunk constructed to an "A-60" standard shall be deemed to remain intact and serviceable while passing through the unserviceable main vertical zone for the purposes of paragraph 3.1. An equivalent degree of protection for cabling and piping may be approved by the Administration.				

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214	Chapter II-2 Regulation 23- Safety centre on passenger ships	3 - Location and arrangement	The safety centre shall either be a part of the navigation bridge or be located in a separate space adjacent to and having direct access to the navigation bridge, so that the management of emergencies can be performed without distracting watch officers from their navigational duties.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
215		4 - Layout and ergonomic design	The layout and ergonomic design of the safety centre shall take into account the guidelines developed by the Organization, as appropriate.				
216		5 - Communications	Means of communication between the safety centre, the central control station, the navigation bridge, the engine control room, the storage room(s) for fire extinguishing system(s) and fire equipment lockers shall be provided.				
217		6 - Control and monitoring of safety systems	Notwithstanding the requirements set out elsewhere in the Convention, the full functionality (operation, control, monitoring or any combination thereof, as required) of the safety systems listed below shall be available from the safety centre: .1 all powered ventilation systems; .2 fire doors; .3 general emergency alarm system; .4 public address system; .5 electrically powered evacuation guidance systems; .6 watertight and semi-watertight doors; .7 indicators for shell doors, loading doors and other closing appliances; .8 water leakage of inner/outer bow doors, stern doors and any other shell door; .9 television surveillance system; .10 fire detection and alarm system; .11 fixed fire-fighting local application system(s); .12 sprinkler and equivalent systems; .13 water-based systems for machinery spaces; .14 alarm to summon the crew; .15 atrium smoke extraction system; .16 flooding detection systems; and .17 fire pumps and emergency fire pumps.				
218	Chapter III Regulation 6 - Communications 2 Radio life-saving appliances	2.1 -Two-way VHF radiotelephone apparatus	2.1.1 At least 3 two-way VHF radiotelephone apparatus shall be provided on every passenger ship and on every cargo ship of 500 gross tonnage and upwards. At least 2 two-way VHF radiotelephone apparatus shall be provided on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such apparatus shall conform to performance standards not inferior to those adopted by the Organization. If a fixed two-way VHF radiotelephone apparatus is fitted in a survival craft it shall conform to performance standards not inferior to those adopted by Organization	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
219		2.2 - Search and rescue locating devices	At least one search and rescue locating device shall be carried on each side of every passenger ship and of every cargo ship of 500 gross tonnage and upwards. At least one search and rescue locating device shall be carried on every cargo ship of 300 gross tonnage and upwards but less than 500 gross tonnage. Such search and rescue locating devices shall conform to the applicable performance standards not inferior to those adopted by the Organization. The search and rescue locating devices shall be stowed in such location that they can be rapidly placed in any survival craft other than the liferaft or liferafts required by regulation 31.1.4. Alternatively one search and rescue locating device shall be stowed in each survival craft other than those required by regulation 31.1.4. On ships carrying at least two search and rescue locating devices and equipped with free-fall lifeboats one of the search and rescue locating devices shall be stowed in a free-fall lifeboat and the other located in the immediate vicinity of the navigation bridge so that it can be utilized on board and ready for transfer to any of the other survival craft."		No	Search and rescue locating device are not provided onboard.	At least one search and rescue locating device shall be carried on each side of every passenger ship.
220	Chapter III Regulation 6 - Communications	3 - Distress flares	Not less than 12 rocket parachute flares, complying with the requirements of section 3.1 of the Code, shall be carried and be stowed on or near the navigation bridge.		No	Only 3 rocket parachute flares are to be provided.	Total 12 rocket parachute flares are to be provided.
221		4 - On-board communications and alarm systems	4.1 An emergency means comprised of either fixed or portable equipment or both shall be provided for two-way communications between emergency control stations, muster and embarkation stations and strategic positions on board.		Yes	Noted portable two-way VHF radiotelephone apparatus are provided onboard which can be used as communication between emergency control stations, muster and embarkation stations.	Nil
222			4.2 A general emergency alarm system complying with the requirements of paragraph 7.2.1 of the Code shall be provided and shall be used for summoning passengers and crew to muster stations and to initiate the actions included in the muster list. The system shall be supplemented by either a public address system complying with the requirements of paragraph 7.2.2 of the Code or other suitable means of communication. Entertainment sound systems shall automatically be turned off when the general emergency alarm system is activated.		Unable to verify	Noted a general alarm system is fitted onboard. However, current details on the plan is insufficient to verify compliance of the system to LSA Code.	Details are to be provided to verify compliance and can also be verified on site.
223			4.3 The general emergency alarm system shall be audible throughout all the accommodation and normal crew working spaces. On passenger ships, the system shall also be audible on all open decks.				
224			4.4 On ships fitted with a marine evacuation system communication between the embarkation station and the platform or the survival craft shall be ensured.				

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225	Chapter III Regulation 6 - Communications	5 - Public address systems on passenger ships	5.1 In addition to the requirements of regulation II-2/40.5 or regulation II-2/41.2, as appropriate, and of paragraph 4.2, all passenger ships shall be fitted with a public address system. With respect to passenger ships constructed before 1 July 1997 the requirements of paragraphs 5.2 and 5.4, subject to the provisions of paragraph 5.5, shall apply not later than the date of the first periodical survey after 1 July 1997.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
226			5.2 The public address system shall be clearly audible above the ambient noise in all spaces, prescribed by paragraph 7.2.2.1 of the Code, and shall be provided with an override function controlled from one location on the navigation bridge and such other places on board as the Administration deems necessary, so that all emergency messages will be broadcast if any loudspeaker in the spaces concerned has been switched off, its volume has been turned down or the public address system is used for other purposes.		Unable to verify	Noted a public address system is fitted onboard. However, current details on the plan is insufficient to verify compliance of the system to LSA Code.	Details are to be provided to verify compliance and can also be verified on site.
227			5.3 On passenger ships constructed on or after 1 July 1997: .1 the public address system shall have at least two loops which shall be sufficiently separated throughout their length and have two separate and independent amplifiers; and .2 the public address system and its performance standards shall be approved by the Administration having regard to the recommendations adopted by the Organization.		Unable to verify	Noted a public address system is fitted onboard. However, current details on the plan is insufficient to verify compliance of the system to LSA Code.	Details are to be provided to verify compliance and can also be verified on site.
228			5.4 The public address system shall be connected to the emergency source of electrical power required by regulation II-1/42.2.2.		Unable to verify	Noted a public address system is fitted onboard. However, current details on the plan is insufficient to verify compliance of the system to LSA Code	Details are to be provided to verify compliance and can also be verified on site.
229	Chapter III Regulation 7 - Personal life-saving appliances	1 - Lifebuoys	1.1 Lifebuoys complying with the requirements of paragraph 2.1.1 of the Code shall be: .1 so distributed as to be readily available on both sides of the ship and as far as practicable on all open decks extending to the ship's side; at least one shall be placed in the vicinity of the stern; and .2 so stowed as to be capable of being rapidly cast loose, and not permanently secured in any way.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
230			1.2 At least one lifebuoy on each side of the ship shall be fitted with a buoyant lifeline complying with the requirements of paragraph 2.1.4 of the Code equal in length to not less than twice the height at which it is stowed above the waterline in the lightest seagoing condition, or 30 m, whichever is the greater.				
231			1.3 Not less than one half of the total number of lifebuoys shall be provided with lifebuoy self-igniting lights complying with the requirements of paragraph 2.1.2 of the Code; not less than two of these shall also be provided with lifebuoy self-activating smoke signals complying with the requirements of paragraph 2.1.3 of the Code and be capable of quick release from the navigation bridge; lifebuoys with lights and those with lights and smoke signals shall be equally distributed on both sides of the ship and shall not be the lifebuoys provided with lifelines in compliance with the requirements of paragraph 1.2.				
232			1.4 Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.				
233	Chapter III Regulation 7 - Personal life-saving appliances	2 - Lifejackets	2.1 A lifejacket complying with the requirements of paragraph 2.2.1 or 2.2.2 of the Code shall be provided for every person on board the ship and, in addition: .1 for passenger ships on voyages less than 24 h, a number of infant lifejackets equal to at least 2.5% of the number of passengers on board shall be provided; .2 for passenger ships on voyages 24 h or greater, infant lifejackets shall be provided for each infant on board; .3 a number of lifejackets suitable for children equal to at least 10% of the number of passengers on board shall be provided or such greater number as may be required to provide a lifejacket for each child; .4 a sufficient number of lifejackets shall be carried for persons on watch and for use at remotely located survival craft stations. The lifejackets carried for persons on watch should be stowed on the bridge, in the engine control room and at any other manned watch station; and .5 if the adult lifejackets provided are not designed to fit persons weighing up to 140 kg and with a chest girth of up to 1,750 mm, a sufficient number of suitable accessories shall be available on board to allow them to be secured to such persons.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Infant lifejackets are not provided onboard.	Infant lifejackets are to be provided as required by this regulation.
234			2.2 Lifejackets shall be so placed as to be readily accessible and their position shall be plainly indicated. Where, due to the particular arrangements of the ship, the lifejackets provided in compliance with the requirements of paragraph 2.1 may become inaccessible, alternative provisions shall be made to the satisfaction of the Administration which may include an increase in the number of lifejackets to be carried.		Yes	Nil	Nil

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235			2.3 The lifejackets used in totally enclosed lifeboats, except free-fall lifeboats, shall not impede entry into the lifeboat or seating, including operation of the seat belts in the lifeboat.		No	Lifeboats are not provided onboard.	Nil
236	Chapter III Regulation 7 - Personal life-saving appliances	3 - Immersion suits and anti-exposure suits	An immersion suit, complying with the requirements of section 2.3 of the Code or an anti-exposure suit complying with section 2.4 of the Code, of an appropriate size, shall be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party. If the ship is constantly engaged in warm climates where, in the opinion of the Administration thermal protection is unnecessary, this protective clothing need not be carried.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Immersion suit are not provided onboard.	Immersion suit are to be provided for every person assigned to crew the rescue boat or assigned to the marine evacuation system party.
237	Chapter III Regulation 11 - Survival craft muster and embarkation arrangements	1	Lifeboats and liferafts for which approved launching appliances are required shall be stowed as close to accommodation and service spaces as possible.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
238		2	Muster stations shall be provided close to the embarkation stations. Each muster station shall have sufficient clear deck space to accommodate all persons assigned to muster at that station, but at least 0.35 m2 per person.		Unable to verify	Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site.
239		3	Muster and embarkation stations shall be readily accessible from accommodation and work areas.		Yes	Nil	Nil
240		4	Muster and embarkation stations shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.		Yes	Nil	Nil
241		5	Alleyways, stairways and exits giving access to the muster and embarkation stations shall be lighted. Such lighting shall be capable of being supplied by the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate. In addition to and as part of the markings required under regulation II-2/28.1.10, routes to muster stations shall be indicated with the muster station symbol, intended for that purpose, in accordance with the recommendations		Yes	Nil	Nil
242		6	Davit-launched and free-fall launched survival craft muster and embarkation stations shall be so arranged as to enable stretcher cases to be placed in survival craft.		Unable to verify	Details are not shown in the drawing.	Details are to be provided to verify compliance and can also be verified on site.
243		7	An embarkation ladder complying with the requirements of paragraph 6.1.6 of the Code extending, in a single length, from the deck to the waterline in the lightest seagoing condition under all conditions of trim of up to 10° and a list of up to 20° either way shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship. However, the Administration may permit such ladders to be replaced by approved devices to afford access to the survival craft when waterborne, provided that there shall be at least one embarkation ladder on each side of the ship. Other means of embarkation enabling descent to the water in a controlled manner may be permitted for the liferafts required by regulation 31.1.4.		Unable to verify	Concluded that the evacuation slide is the MES provided onboard. Noted evacuation ladder are provided onboard. However, current details on the plan is insufficient to verify compliance of the ladder to LSA Code.	Details are to be provided to verify compliance and can also be verified on site.
244	Chapter III Regulation 12 - Launching stations		Launching stations shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging portions of the hull and so that, as far as possible, survival craft, except survival craft specially designed for free-fall launching, can be launched down the straight side of the ship. If positioned forward, they shall be located abaft the collision bulkhead in a sheltered position and, in this respect, the Administration shall give special consideration to the strength of the launching appliance.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
245	Chapter III Regulation 13 - Stowage of survival craft	1	Each survival craft shall be stowed: .1 so that neither the survival craft nor its stowage arrangements will interfere with the operation of any other survival craft or rescue boat at any other launching station; .2 as near the water surface as is safe and practicable and, in the case of a survival craft other than a liferaft intended for throw over board launching, in such a position that the survival craft in the embarkation position is not less than 2 m above the waterline with the ship in the fully loaded condition under unfavourable conditions of trim of up to 10° and listed up to 20° either way, or to the angle at which the ship's weatherdeck edge becomes submerged, whichever is less; .3 in a state of continuous readiness so that two crew members can carry out preparations for embarkation and launching in less than 5 min; .4 fully equipped as required by this chapter and the Code; and .5 as far as practicable, in a secure and sheltered position and protected from damage by fire and explosion. In particular, survival craft on tankers, other than the liferafts required by regulation 31.1.4, shall not be stowed on or above a cargo tank, slop tank, or other tank containing explosive or hazardous cargoes.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
246		2	Lifeboats for lowering down the ship's side shall be stowed as far forward of the propeller as practicable. On cargo ships of 80 m in length and upwards but less than 120 m in length, each lifeboat shall be so stowed that the after end of the lifeboat is not less than the length of the lifeboat forward of the propeller. On cargo ships of 120 m in length and upwards and passenger ships of 80 m in length and upwards, each lifeboat shall be so stowed that the after end of the lifeboat is not less than 1.5 times the length of the lifeboat forward of the propeller. Where appropriate, the ship shall be so arranged that lifeboats, in their stowed positions, are protected from damage by heavy seas.		No	Lifeboats are not provided onboard.	Lifeboat is to be provided as per Chapter III Regulation 21 . The launching and stowage arrangement is to comply with this regulation.
247		3	Lifeboats shall be stowed attached to launching appliances.				

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248			4.1 Every liferaft shall be stowed with its painter permanently attached to the ship.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
249		4 - Liferaft	4.2 Each liferaft or group of liferafts, shall be stowed with a float-free arrangement complying with the requirements of paragraph 4.1.6 of the Code so that each floats free and, if inflatable, inflates automatically when the ship sinks.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
250			4.3 Liferafts shall be so stowed as to permit manual release of one raft or container at a time from their securing arrangements.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
251	Chapter III Regulation 14 - Stowage of rescue boats		Rescue boats shall be stowed: .1 in a state of continuous readiness for launching in not more than 5 min, and if the inflated type, in a fully inflated condition at all times; .2 in a position suitable for launching and recovery; .3 so that neither the rescue boat nor its stowage arrangements will interfere with the operation of any survival craft at any other launching station; and .4 if it is also a lifeboat, in compliance with the requirements of regulation 13.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
252	Chapter III Regulation 15 - Stowage of marine evacuation systems	1	The ship's side shall not have any openings between the embarkation station of the marine evacuation system and the waterline in the lightest seagoing condition and means shall be provided to protect the system from any projections.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Unable to verify	Concluded that the evacuation slide is the MES provided onboard. Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site. MES is to be of approved type as per LSA Code.
253		2	Marine evacuation systems shall be in such positions as to ensure safe launching having particular regard to clearance from the propeller and steeply overhanging positions of the hull and so that, as far as practicable, the system can be launched down the straight side of the ship.				
254		3	Each marine evacuation system shall be stowed so that neither the passage nor platform nor its stowage or operational arrangements will interfere with the operation of any other life-saving appliance at any other launching station.				
255		4	Where appropriate, the ship shall be so arranged that the marine evacuation systems in their stowed positions are protected from damage by heavy seas.				
256	Chapter III Regulation 16 - Survival craft launching and recovery arrangements	1	Unless expressly provided otherwise, launching and embarkation appliances complying with the requirements of section 6.1 of the Code shall be provided for all survival craft except those which are: .1 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which have a mass of not more than 185 kg; or .2 boarded from a position on deck less than 4.5 m above the waterline in the lightest seagoing condition and which are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way; or .3 carried in excess of the survival craft for 200% of the total number of persons on board the ship and which have a mass of not more than 185 kg; or .4 carried in excess of the survival craft for 200% of the total number of persons on board the ship, are stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way, or .5 provided for use in conjunction with a marine evacuation system, complying with the requirements of section 6.2 of the Code and stowed for launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Unable to verify	Current details on the plan is insufficient to show compliance	Details are to be provided to verify compliance and can also be verified on site. Survival craft launching appliances are to be of approved type and is to be able to launching directly from the stowed position under unfavourable conditions of trim of up to 10° and list of up to 20° either way.
257		2	Each lifeboat shall be provided with an appliance which is capable of launching and recovering the lifeboat. In addition there shall be provision for hanging-off the lifeboat to free the release gear for maintenance.		No	Lifeboats are not provided onboard.	Lifeboat is to be provided as per Chapter III Regulation 21 . The launching and stowage arrangement is to comply with this regulation.
258	Chapter III Regulation 16 - Survival craft launching and recovery arrangements	3	Launching and recovery arrangements shall be such that the appliance operator on the ship is able to observe the survival craft at all times during launching and for lifeboats during recovery.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
259		4	Only one type of release mechanism shall be used for similar survival craft carried on board the ship.		Yes	Nil	Nil
260		5	Preparation and handling of survival craft at any one launching station shall not interfere with the prompt preparation and handling of any other survival craft or rescue boat at any other station.		Yes	Nil	Nil
261		6	Falls, where used, shall be long enough for the survival craft to reach the water with the ship in its lightest seagoing condition, under unfavourable conditions of trim of up to 10° and list of up to 20° either way.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.

Vessel Name: GALLEONS PASSAGE
IMO NO: 9772888

SOLAS GAP ANALYSIS FOR GALLEONS PASSAGE

Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
262		7	During preparation and launching, the survival craft, its launching appliance, and the area of water into which it is to be launched shall be adequately illuminated by lighting supplied from the emergency source of electrical power required by regulation II-1/42 or II-1/43, as appropriate.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
263		8	Means shall be available to prevent any discharge of water onto survival craft during abandonment.		Yes	Nil	Nil
264	Chapter III Regulation 17 - Rescue boat embarkation, launching and recovery arrangements	1	The rescue boat embarkation and launching arrangements shall be such that the rescue boat can be boarded and launched in the shortest possible time.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B Rescue boat davit/ Launching Arrangement Plan, Dwg no: 1029-F04-01A, Rev A	Yes	Nil	Nil
265		2	If the rescue boat is one of the ship's survival craft, the embarkation arrangements and launching station shall comply with the requirements of regulations 11 and 12.		NA	Rescue boat is not one of the ship's survival craft.	NA
266		3	Launching arrangements shall comply with the requirements of regulation 16. However, all rescue boats shall be capable of being launched, where necessary utilizing painters, with the ship making headway at speeds up to 5 knots in calm water.		Unable to verify	Current details on the plan is insufficient to show compliance	Details are to be provided to verify compliance and can also be verified on site.
267		4	Recovery time of the rescue boat shall be not more than 5 min in moderate sea conditions when loaded with its full complement of persons and equipment. If the rescue boat is also a lifeboat, this recovery time shall be possible when loaded with its lifeboat equipment and the approved rescue boat complement of at least six persons.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
268		5	Rescue boat embarkation and recovery arrangements shall allow for safe and efficient handling of a stretcher case. Foul weather recovery strops shall be provided for safety if heavy fall blocks constitute a danger.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
269	Chapter III Regulation 17-1 - Recovery of persons from the water	1	All ships shall have ship-specific plans and procedures for recovery of persons from the water, taking into account the guidelines developed by the Organization. The plans and procedures shall identify the equipment intended to be used for recovery purposes and measures to be taken to minimize the risk to shipboard personnel involved in recovery operations. Ships constructed before 1 July 2014 shall comply with this requirement by the first periodical or renewal safety equipment survey of the ship to be carried out after 1 July 2014, whichever comes first.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
270		2	Ro-ro passenger ships which comply with regulation 26.4 shall be deemed to comply with this regulation.				
271	Chapter III Regulation 18 - Line-throwing appliances		A line-throwing appliance complying with the requirements of section 7.1 of the Code shall be provided.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Yes	Nil	Nil
272	Chapter III Regulation 21 - Survival craft and rescue boats	1 - Survival craft	1.2 Passenger ships engaged on short international voyages shall carry: .1 partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board. The lifeboats shall, as far as practicable, be equally distributed on each side of the ship. In addition inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code shall be carried of such aggregate capacity that, together with the lifeboat capacity, the survival craft will accommodate the total number of persons on board. The liferafts shall be served by launching appliances equally distributed on each side of the ship; and .2 in addition, inflatable or rigid liferafts complying with the requirements of section 4.2 or 4.3 of the Code of such aggregate capacity as will accommodate at least 25% of the total number of persons on board. These liferafts shall be served by at least one launching appliance on each side which may be those provided in compliance with the requirements of paragraph 1.2.1 or equivalent approved appliances capable of being used on both sides. However, stowage of these liferafts need not comply with the requirements of regulation 13.5.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Lifeboats are not provided onboard.	Partially or totally enclosed lifeboats complying with the requirements of section 4.5 or 4.6 of the LSA Code of such aggregate capacity as will accommodate at least 30% of the total number of persons on board are to be provided. The liferafts provided are to be of approved type as per LSA Code.
273		2 - Rescue boats	2.1 Passenger ships of 500 gross tonnage and over shall carry at least one rescue boat complying with the requirements of section 5.1 of the Code on each side of the ship.		No	Only one rescue boat is provided.	Another rescue boat is to be provided on the starboard side of the ship. The rescue boat is to be of a approved type.
274			2.3 A lifeboat may be accepted as a rescue boat provided that it and its launching and recovery arrangements also comply with the requirements for a rescue boat.		NA	Lifeboats are not provided onboard.	Nil
275		3 - Marshalling of liferafts	3.1 The number of lifeboats and rescue boats that are carried on passenger ships shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than six liferafts need be marshalled by each lifeboat or rescue boat.		Yes	Nil	Nil
276			3.2 The number of lifeboats and rescue boats that are carried on passenger ships engaged on short international voyages shall be sufficient to ensure that in providing for abandonment by the total number of persons on board not more than nine liferafts need be marshalled by each lifeboat or rescue boat.		Yes	Nil	Nil

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SOLAS GAP ANALYSIS FOR GALLEONS PASSAGE

Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
277	Chapter III Regulation 22 - Personal life-saving appliances	1 - Lifebuoys	1.1 A passenger ship shall carry not less than the number of lifebuoys complying with the requirements of regulation 7.1 and section 2.1 of the Code prescribed in the following table: Length of ship in metres — Minimum number of lifebuoys Under 60 — 8 60 and under 120 — 12 120 and under 180 — 18 180 and under 240 — 24 240 and over — 30	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Only 8 lifebuoys are provided onboard.	Total of 12 lifebuoys are to be provided onboard.
278		2 - Lifejackets	2.1 In addition to the lifejackets required by regulation 7.2, every passenger ship shall carry lifejackets for not less than 5% of the total number of persons on board. These lifejackets shall be stowed in conspicuous places on deck or at muster stations.		Yes	Nil	Nil
279			2.2 Where lifejackets for passengers are stowed in staterooms which are located remotely from direct routes between public spaces and muster stations, the additional lifejackets for these passengers required under regulation 7.2.2, shall be stowed either in the public spaces, the muster stations, or on direct routes between them. The lifejackets shall be stowed so that their distribution and donning does not impede orderly movement to muster stations and survival craft embarkation stations.		Yes	Nil	Nil
280		3 - Lifejacket lights	3.1 On all passenger ships each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.		No	Coastal lifejackets with light & whistle are provided onboard.	SOLAS lifejacket with light are to be provided. Lifejackets and its light are to be of approved type as per LSA Code. Compliance can be verified on site.
281		4 - Immersion suits and thermal protective aids	4.1 All passenger ships shall carry for each lifeboat on the ship at least three immersion suits complying with the requirements of section 2.3 of the Code and, in addition, a thermal protective aid complying with the requirements of section 2.5 of the Code for every person to be accommodated in the lifeboat and not provided with an immersion suit. These immersion suits and thermal protective aids need not be carried: .1 for persons to be accommodated in totally or partially enclosed lifeboats; or .2 if the ship is constantly engaged on voyages in warm climates where, in the opinion of the Administration, they are unnecessary.		No	Lifeboats are not provided onboard. Immersion suit are not provided onboard.	Immersion suit and thermal protective aids are to be provided for as per the requirement if applicable.
282	Chapter III Regulation 26 - Additional requirements for ro-ro passenger ships	2 - Liferafts	2.1 The ro-ro passenger ship's liferafts shall be served by marine evacuation systems complying with the requirements of section 6.2 of the Code or launching appliances complying with the requirements of paragraph 6.1.5 of the Code, equally distributed on each side of the ship.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Unable to verify	Concluded that the evacuation slide is the MES provided onboard. However, current details on the plan is insufficient to verify compliance of the MES to LSA Code.	Details are to be provided to verify compliance and can also be verified on site. MES is to be of approved type as per LSA Code.
283			2.2 Every liferaft on ro-ro passenger ships shall be provided with float-free stowage arrangements complying with the requirements of regulation 13.4.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
284			2.3 Every liferaft on ro-ro passenger ships shall be of a type fitted with a boarding ramp complying with the requirements of paragraph 4.2.4.1 or 4.3.4.1 of the Code, as appropriate.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
285			2.4 Every liferaft on ro-ro passenger ships shall either be automatically self-righting or be a canopied reversible liferaft which is stable in a seaway and is capable of operating safely whichever way up it is floating. Alternatively, the ship shall carry automatically self-righting liferafts or canopied reversible liferafts, in addition to its normal complement of liferafts, of such aggregate capacity as will accommodate at least 50% of the persons not accommodated in lifeboats. This additional liferaft capacity shall be determined on the basis of the difference between the total number of persons on board and the number of persons accommodated in lifeboats. Every such liferaft shall be approved by the Administration having regard to the recommendations adopted by the Organization		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
286			2.5 Liferafts carried on ro-ro passenger ships shall be fitted with a search and rescue locating device in the ratio of one search and rescue locating device for every four liferafts. The search and rescue locating device shall be mounted inside the liferaft so its antenna is more than one metre above the sea level when the liferaft is deployed, except that for canopied reversible liferafts the search and rescue locating device shall be so arranged as to be readily accessed and erected by survivors. Each search and rescue locating device shall be arranged to be manually erected when the liferaft is deployed. Containers of liferafts fitted with search and rescue locating devices shall be clearly marked.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
287		3 - Fast rescue boats	3.1 At least one of the rescue boats on a ro-ro passenger ship shall be a fast rescue boat complying with section 5.1.4 of the Code.		No	Fast rescue boat and its launching appliances are not provided onboard	At least one of the rescue boats shall be a fast rescue boat complying with section 5.1.4 of the LSA Code is to be provided with its launching appliances.
288			3.2 Each fast rescue boat shall be served by a suitable launching appliance complying with section 6.1.7 of the Code.				

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SOLAS GAP ANALYSIS FOR GALLEONS PASSAGE

Item No	SOLAS Chapter/ Regulation	Section	Requirement	Drawing	Compliance	GAP	Remarks
289			3.3 At least two crews of each fast rescue boat shall be trained and drilled regularly having regard to the Seafarers Training, Certification and Watchkeeping (STCW) Code and recommendations adopted by the Organisation, including all aspects of rescue, handling, manoeuvring, operating these craft in various conditions, and righting them after capsize.		Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
290	Chapter III Regulation 26 - Additional requirements for ro-ro passenger ships	4 - Means of rescue	4.1 Each ro-ro passenger ship shall be equipped with efficient means for rapidly recovering survivors from the water and transferring survivors from rescue units or survival craft to the ship.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	Unable to verify	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
291			4.2 The means of transfer of survivors to the ship may be part of a marine evacuation system, or may be part of a system designed for rescue purposes.				
292			4.3 If the slide of a marine evacuation system is intended to provide the means of transfer of survivors to the deck of the ship, the slide shall be equipped with handlines or ladders to aid in climbing up the slide.		Unable to verify	Concluded that the evacuation slide is the MES provided onboard. Current details on the plan is insufficient to show compliance.	Details are to be provided to verify compliance and can also be verified on site. MES is to be of approved type as per LSA Code.
293		5 - Lifejackets	5.1 Notwithstanding the requirements of regulations 7.2 and 22.2, a sufficient number of lifejackets shall be stowed in the vicinity of the muster stations so that passengers do not have to return to their cabins to collect their lifejackets.		Yes	Nil	Nil
294			5.2 In ro-ro passenger ships, each lifejacket shall be fitted with a light complying with the requirements of paragraph 2.2.3 of the Code.		No	Coastal lifejackets with light & whistle are provided onboard.	SOLAS lifejacket with light are to be provided. Lifejackets and its light are to be of approved type as per LSA Code. Compliance can be verified on site.
295	Chapter III Regulation 28 - Helicopter landing and pick-up areas	1	All ro-ro passenger ships, shall be provided with a helicopter pick-up area approved by the Administration having regard to the recommendations adopted by the Organization.	Fire Control Plan, Dwg no:1029-J02-01, Rev B	No	Helicopter pick-up area is not provided onboard.	Helicopter pick-up area is to be provided as per the requirement in this regulation.
296	Chapter III Regulation 29 - Decision support system for masters of passenger ships	2	In all passenger ships, a decision support system for emergency management shall be provided on the navigation bridge.	Fire Control Plan, Dwg no:1029-J02-01, Rev B Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Details are not shown in the drawing	Details are to be provided to verify compliance and can also be verified on site.
297		3	The system shall, as a minimum, consist of a printed emergency plan or plans. All foreseeable emergency situations shall be identified in the emergency plan or plans, including, but not limited to, the following main groups of emergencies: .1 fire; .2 damage to ship; .3 pollution; .4 unlawful acts threatening the safety of the ship and the security of its passengers and crew; .5 personnel accidents; .6 cargo-related accidents; and .7 emergency assistance to other ships.				
298		4	The emergency procedures established in the emergency plan or plans shall provide decision support to masters for handling any combination of emergency situations.				
299		5	The emergency plan or plans shall have a uniform structure and be easy to use. Where applicable, the actual loading condition as calculated for the passenger ship's voyage stability shall be used for damage control purposes.				
300		6	In addition to the printed emergency plan or plans, the Administration may also accept the use of a computer-based decision support system on the navigation bridge which provides all the information contained in the emergency plan or plans, procedures, checklists, etc., which is able to present a list of recommended actions to be carried out in foreseeable emergencies.				
301	Chapter III Regulation 34		All life-saving appliances and arrangements shall comply with the applicable requirements of the Code.	Life Saving Appliances & Evacuation Plan, Dwg no:1029-J01-01B, Rev B	No	Appliances provided are not LSA compliant.	All life-saving appliances and arrangements shall comply with the applicable requirements of the LSA Code.
302	Chapter V Regulation 19-1 - Long-range identification and tracking of ships			Radio communication and navigation system diagram VGH677-640-1TX	No	No equipment are provided as per the requirement.	Equipment are to be provided as per the regulation.
302	Chapter V Regulation 23 - Pilot transfer arrangements				No	No transfer arrangement and equipment are provided as per the requirement.	Transfer arrangement and equipment are to be provided as per the regulation as applicable.

STARBOARD PROFILE

SUN DECK PLAN

UPPER DECK PLAN

MAIN DECK PLAN

CREW ACCOMMODATION DECK / TANK TOP PLAN

TYPICAL MIDSHIP SECTION

PRINCIPAL PARTICULARS

LENGTH (OA, EXCL. RAMPS)	73.6	m
LENGTH (BP)	67.3	m
BREADTH (MAX)	22.0	m
DEPTH (MOULDED)	5.75	m
DESIGN DRAFT	2.75	m
SPEED (MAX)	23	KNOTS
DEADWEIGHT	475	TONNE
CARS	94	
TRUCKS	140	LANE M
PASSENGERS (TOTAL)	672	
BUSINESS CLASS (STARBOARD)	75	
TOURIST CLASS (STARBOARD AFT)	182	
TOURIST CLASS (PORT AFT)	194	
TOURIST CLASS (PORT FWD)	125	
SUN DECK	96	
CREW	10	
TOTAL COMPLEMENT	682	
LIFE SAVING APPLIANCE CAPACITY	900	
FUEL OIL CAPACITY	156,000	L
FRESH WATER CAPACITY	13,000	L
MAIN ENGINES (PROPULSION)	2x MTU 16V 4000 M70 (2240KW @ 2000RPM)	
MAIN ENGINES (AUXILLIARY)	2x MTU 16V 4000 M70 (2240KW @ 2000RPM)	
TRANSMISSION	ZF 7600 2.905:1 RATIO	

GENERAL NOTES

1. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. DO NOT SCALE FROM DRAWING.
3. ALL MATERIALS USED ARE TO BE GOOD QUALITY MARINE GRADE.
4. IT IS THE BUILDERS RESPONSIBILITY TO CROSS-CHECK ALL DIMENSIONS & SPECIFICATIONS ON ALL RELATED PLANS. SHOULD ANY DISCREPANCY BE FOUND, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER & RECONCILED, BEFORE ANY SUCH ITEM IS FABRICATED OR ASSEMBLED.

REVISION	DESCRIPTION	DRAWN BY	CHECKED BY	DATE
A	DRAFT ISSUE FOR CLIENT COMMENT	SLP	SP	19.06.2012
B	BREADTH & DEPTH INCREASED, MAIN ENGINE CHANGED TO M70	SLP	SP	20.07.2012
C	STBD MIDSHIP PAX STAIR ADDED	SLP	SP	19.10.2012
D	CREW ACCOMMODATION TO STBD, ADD SUNDECK AWNING, GENERAL UPDATES	SLP	SP	03.12.2012
E	UPDATED PROPULSION ARRANGEMENT & ASSOCIATED STRUCTURE	SLP	SP	14.12.2012
F	CLIENT ARGMT REVISIONS & REGS COMPLIANCE, DBL BOTT ACCESS COVERS	CPL	SLP	13.08.2013
G	CLIENT ARGMT REVISIONS – INCLUDE VARIATIONS 01-09	AJW	SLP	25.05.2015
H	UDPATES FOR MES CHANGE – NOT ISSUED	SLP		NOT ISSUED

TITLE: GENERAL ARRANGEMENT

PROJECT: 73.6m ROPAX CATAMARAN FERRY

DWG NO: 1029-A01-01 | SCALE: 1:150 | SHEET SIZE: B1

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