Indian Register of Shipping

Report of HSC Safety Code Initial Survey

Name of Craft/Yard No..…….. I. R. No.: …….

Port of Survey: …… Report No.: …….

Use "Y" for satisfactory; "N" for not satisfactory/see recommendation in continuation sheet; "–" for not applicable.	
NOTES:	
1	"Code" in this report refers to "International Code of Safety for High-Speed Craft"
2	Refer relevant Flag state instruction (D.13) for flag specific requirements
3	Ships may be fitted with equipment over and above the requirement. Same is to be maintained and included in report

1. GENERAL

1.1	Is the craft in conformity with the requirements of the recognized organization of the administration and in possession of document to this effect e.g. Certificate of Class?	…
1.2	Confirmation that craft is in possession of following certificates/documents (as applicable based on size/type of craft) (For Existing craft undergoing change of flag survey): (i)Certificate of Registry (ii)International Tonnage Certificate (iii)Minimum Safe Manning Document (iv)Valid radio license issued by flag administration (v)Safety Management Certificate (vi)Copy of Document of Compliance issued to the Company (vii)ISPS Certificate, Continuous Synopsis Record, Ships Security Plan (viii)International Load Line Exemption Certificate (ix)IOPP certificate, Oil Record Book, Shipboard Oil Pollution Emergency Plan (craft above 400GT) (x)ISPP Certificate (xi)IAPP Certificate, EIAPP Certificates for engines, NOx technical File (xii)International Anti-Fouling System Certificate (xvii)Garbage Record Book, Garbage Management Plan (crafts above 400GT) (xviii)Search & Rescue co-operation plan (Passenger Crafts) (xix)STCW certificates for Master, officers and ratings. Certificate for GMDSS operators	…
1.3	Confirmation that a Permit to Operate the high speed craft has been issued by the administration.	
1.4	Confirmation that manning of the craft meets the min safe manning requirements.	
1.5	Confirmation that Master and crew are in possession of type rating certificates issued by administration.	
1.6	Confirmation that craft is provided with Technical manuals (consisting of Route operating Manual, Craft Operating Manual , Training Manual, Maintenance Manual and Servicing Schedule)	
1.7	Verification that following included in Craft Operating Manual. (i)Evacuation procedure (ii) any limitation on the operation of the craft (as may be necessary to ensure that the redundancy or safeguards in the systems provide equivalent safety) (iii) max permissible speed at which the craft may be towed (iv) information on controllability and maneuverability (v) instructions regarding craft limitations and required actions subsequent to prescribed failures (vi) Critical speed range for engines	
1.8	Confirmation that training manual is provided in each crew mess room and recreation room	
1.9	Confirmation that information on change in craft behavior during transition from one type of operating surface or mode to another and craft operating limitations due to surface irregularities is available to the Master.	
1.10	Confirmation that clear instructions to be followed in the event of an emergency is provided for each person on board.	
1.11	Confirmation that illustrations and instructions in appropriate languages are posted in public spaces and conspicuously displayed at assembly stations, at other passenger spaces and near each seat to inform passengers of their assembly station, the essential actions they must take in an emergency and the	

	method of donning lifejackets.	
1.12	Confirmation that muster lists are exhibited in conspicuous places throughout the craft including the control compartment, engine-room and crew accommodation spaces	

2. BUOYANCY, STABILITY AND SUBDIVISION

2.1	Verification of type approval of watertight doors, satisfactory installation, hose testing, local and remote operation, indicators for close/open position, audio/visual alarm during door operation, provision of power in case of main power failure.	…
2.2	Verification of watertight integrity of all bulkhead penetrations.	
2.3	Verification of satisfactory installation of shell doors, loading doors, inner bow doors, vehicle ramps and other closing appliances against approved plan as applicable (for ro-ro crafts). Verification of weather tightness of the doors, indicator and alarm system, confirmation that power supply for the indicator/alarm system are independent of the power supply for the door operation.	…
2.4	Verification of television surveillance and water leakage detection system for ro-ro spaces and special category spaces.	
2.5	Verification of doors, windows and other openings in boundaries of weather tight spaces/ superstructures against approved plan and hose test for weather tightness.	…
2.6	Verification of construction, arrangement and the means of securing weather tightness of cargo/other hatchways, machinery space openings, miscellaneous openings, air pipes and ventilators in exposed decks as per approved plans. Verification of weather tightness of closing appliances.	
2.7	Verification of arrangement of scuppers, inlets and discharges including provision of valves and indicators as per approved plan. (Confirmation that all shell fittings and valves are of a suitable ductile material. Valves of ordinary cast iron or similar material are not acceptable)	
2.8	Confirmation that freeing ports for bulwark on deck fitted with closing device/flaps to prevent water entering the deck but allowing water on deck to drain.	
2.9	Scales of draughts permanently marked at the bow and stern? Loadline permanently marked on craft sides and verified? Draught-indicating system if fitted verified for correct functioning?	
2.10	Inclining/lightweight* survey carried out? Date of survey……..	…

3. STRUCTURES

3.1	Confirmation that structures conforms to approved plan. Material used for hull and superstructure and other structures meet the requirements & workmanship is satisfactory.	**...**

4. ACCOMMODATION AND ESCAPE MEASURES

4.1	Verification of the general arrangement, seating arrangement, fire control and evacuation arrangement with due regard to the protection of the passengers and crew during normal and emergency conditions. Confirmation that exit doors are capable of being operated from inside and outside the craft, doors along the escape routes open in the direction of escape flow from the space served.	…
4.2	Verification of the provision of safety belts for passenger as well as crew seats, provision of handhold, anti-skid treatment of the embarkation deck, guardrails or bulwarks on all exposed parts of decks to which crew or passengers have access.	
4.3	Confirmation that spaces accessible to passengers do not contain controls, electrical equipment, high-temperature parts and pipelines, rotating assemblies or other items, from which injury to passengers could result, unless such items are adequately shielded, isolated, or otherwise protected, operating controls are not located in the public places.	…
4.4	Verification & test of public address system. (Public address system and its performance standards are to be approved by the administration)	…
4.5	Verification of provision of illuminated or luminous notices or video information system(s) visible to all sitting passengers, in order to notify them of safety measures.	
4.6	Confirmation that public spaces, evacuation routes, exits, lifejacket stowage, survival craft stowage, and the embarkation stations are clearly and permanently marked and illuminated. Adequate handholds are provided on both sides of the passages. Notices are posted to direct passengers to exits.	…
4.7	Verification of means of escape from main propulsion machinery spaces and ro-ro spaces.	…
4.8	Verification of arrangement for storage of baggage, store and cargo including arrangement for preventing shifting during voyage and falling from the overhead shelves, loading limits are durably marked in the compartments and closures of exterior openings weather tight.	…
4.9	Verification of noise level in public spaces, crew accommodation and operating compartments. {Noise level in public spaces and accommodation shall not exceed 75dB(A) and in operating compartments shall not exceed 65dB(A)} carried out	

5. DIRECTIONAL CONTROL SYSTEM

5.1	Verification of direction control system as per approved plan, verification of the provision of back up electrical system, automatic operation in case of a power failure, provision of secondary means of actuation and single failure criteria. Confirmation that directional control can be accomplished without undue physical effort	…
5.2	Where directional control systems can also be operated from other positions, confirmation that two-way communication is provided between the operating station and these other positions. Verification that indications are provided at the operating station and these other positions to provide the person controlling the craft with verification of the correct response of the directional control device to the demand, and also to indicate any abnormal responses or malfunction, the indications of steering response or rudder angle indicator are independent of the system for directional control, the logic of such feedback and indications are consistent with other alarms and indications so that in an emergency operators are unlikely to be confused.	
5.3	A satisfactory demonstration of the direction control system carried out?	

6. ANCHORING, TOWING AND BERTHING

6.1	Verification of certificates for anchoring, towing and mooring equipments to confirm that these are of correct size/design as required for the craft and manufactured under survey as applicable.	…
6.2	Verification of attachment and foundation details of anchoring equipment, towing bitts, mooring bollards, fairleads, cleats and eyebolts.	…
6.3	Verification of towing arrangement to confirm that any surface against which the towing cable may chafe (for example, fairleads) is of sufficient radius to prevent the cable being damaged when under load. Where towage is to be from more than one point, confirmation that a suitable bridle is provided.	
6.4	Verification of enclosed space containing the anchor-recovery equipment to ensure that persons using the equipment are not put at risk with particular attention to the means of access to such spaces, the walkways, the illumination and protection from the cable and the recovery machinery.	
6.5	Verification of arrangements provided for two-way voice communication between the operating compartment and persons engaged in dropping, weighing or releasing the anchor.	…
6.6	Verification that adequate mooring ropes are provided including provision for their storage.	…
6.7	Witnessing operational test of anchoring equipment.	…

7. FIRE SAFETY

7.1	Confirmation that notices/instructions available forbidding passengers to any special category spaces, cargo spaces and open ro-ro spaces during the voyage.	…
7.2	Verification that structural fire protection, material used for construction meets the approved plan and the Code requirements, fire doors and door frames are of approved type and structural protection is equivalent to the bulkhead in which these are fitted.	…
7.3	Verification that fire-resisting integrity is maintained at the penetrations of a fire-resisting division.	
7.4	Verification of certificates for material used for any thermal & acoustic insulation, deck finish material, exposed surfaces in corridors, stairway enclosures and bulkhead, ceilings/linings including furniture and furnishings etc. to confirm these meet the requirement of the Code.	…
7.5	Verification with respect to the storage of fuel oil and arrangement of the fuel oil system against the approved plan and Code requirements.	…
7.6	Confirmation that tanks containing fuel and other flammable fluids are separated from passenger, crew, and baggage compartments by vapour-proof enclosures or cofferdams which are suitably ventilated and drained.	
7.7	Confirmation that fuel oil pipe which if damaged, would allow oil to escape from a storage, settling, daily service tank is provided with a cock/valve capable of being closed from outside the space in which the tanks are situated.	
7.8	Confirmation that sounding pipes do not terminate in any space where the risk of ignition of spillage from the sounding pipe might arise, in particular, they do not terminate in passenger or crew spaces.	
7.9	Confirmation that pipes, valves and couplings conveying flammable fluids are arranged as far from hot surfaces or air intakes of engine installations, electrical appliances and other potential sources of ignition as is practicable and located or shielded so that the likelihood of fluid leakage coming into contact with such sources of ignition is kept to a minimum.	…
7.10	For crafts using fuel oil with flash point below 43deg C (use of fuel with flash point below 35deg C is not allowed), confirmation of the provision of fixed vapour-detection system for spaces through which fuel lines pass. Examination and test of fixed vapour-detection system.	…
7.11	For crafts using fuel oil with flash point below 43deg C, confirmation that electrical equipment in spaces where fuel leakage can occur are of "safe type".	
7.12	Verification of ventilation arrangement as per the approved plan. For ventilation ducts passing through a fire resisting division, a fail safe automatic closing fire damper is provided adjacent to the division.	…

7.13	Confirmation that ventilation system main inlet/outlets and ventilation fans are capable of being operated from outside the spaces being ventilated, controls of ventilators are prominently and permanently marked to indicate shut-off is open or closed. For areas of major fire hazard these are capable of being operated from a control station.	
7.14	Test of manual and remote shutting of dampers and ventilation fans.	
7.15	Verification of arrangement for exhaust ducts from galley ranges to confirm that these are provided with grease trap and fire dampers, a fixed means of extinguishing fire within the duct, remote control for shutting off the exhaust/supply fans and arrangement for inspection and cleaning.	
7.16	Verification that the fire detection and alarm system arrangement including the provision of manually operated call points conform to the approved plan and requirements of the Code.	…
7.17	Verification that fire detection and manually call points are of approved type.	
7.18	Verification that two sources of power supply are available for fire detection and alarm system and power supplies and electric circuits for the system is monitored for loss of power or fault condition and initiate visual and audible fault signals at the control panel, control panel is located in the operating compartment or in the main fire control station, clear information is displayed on or adjacent to each indicating unit about the spaces covered and the location of the sections.	
7.19	Verification that suitable instructions and component spares for testing and maintenance is provided for the fire detection system.	
7.20	Test of the fire detection system to verify its satisfactory operation and to confirm that alarms are distinct from other alarms.	
7.21	Verification of television surveillance system where provided for detection of onset of fire.	
7.22	Verification of installation and test of piping system for fixed fire fighting installation as per approved plan and the requirements of the Code. Verification of provision to prevent inadvertent admission of the medium to any space. Verification that where pipelines are led through accommodation spaces, these are of substantial thickness, pipelines only joined by welding and not fitted with drains or other opening in such space and tightness verified. Verification that pipelines are not passing through refrigerated spaces, non return valves are installed in discharge lines between cylinders and manifolds.	…
7.23	Verification of the storage room for fixed fire fighting system to confirm its location meets the requirement, ventilation arrangement provided for the space, access door open outwards, where the medium produces significant over or under pressure, means provided to limit the induced pressure, control valves marked to indicate clearly the spaces to which the pipes are led.	
7.24	Confirmation that the fixed fire extinguishing system is of approved type.	
7.25	For fixed CO2 fire fighting systems, confirmation of provision of two separate controls for releasing CO2.	
7.26	Verification that means are provided to close all openings for the space protected by a fixed fire fighting system, operable from outside the protected space.	
7.27	Verification that appropriate notices, operating instructions are posted for fixed fire fighting system. Test of the alarm for the fixed fire fighting system.	
7.28	Verification that approved type portable fire extinguishers are provided at all control stations, public space, crew accommodation, corridors and service spaces meeting the requirement of the Code.	…
7.29	Verification that fireman's outfit and breathing apparatus meeting the requirements of section 7.10.3 of the Code are provided.	
7.30	Verification of arrangement and test of piping for fire pump and associated system as per approved plan. Verification of provision of isolating valves, hydrant, hoses and approved dual purpose type nozzle with shut off.	…
7.31	Test of main and emgy. fire pumps.	
7.32	Where deep-fat cooking equipment is installed, verification of the arrangement to confirm same meets the requirements of the Code.	…
7.33	For passenger ships, verification of provision of alternative safe area, independent ventilation arrangement for each safe zone and where required.	…
7.34	Verification of arrangement for fixed sprinkler system for public spaces, service spaces, crew accommodation, storage rooms. Confirmation that plan of the fixed sprinkler system is displayed at each operating station. Verification of the drainage arrangement.	
7.35	Verification that fixed sprinkler system is of approved type.	
7.36	For cargo craft verification that control stations, life saving appliance stowage positions, escape routes and places of embarkation into the survival craft are located adjacent to crew accommodation area, and protected by an approved fixed quick acting fire extinguishing system.	…
7.37	Verification of arrangement for automatic smoke detection system for cargo spaces(except open deck areas or refrigerated holds)	
7.38	Confirmation that automatic smoke detection system is of approved type.	
7.39	Test of the smoke detection system.	
7.40	For crew accommodation (more than 50m2 deck area) verification of arrangement of the fixed sprinkler system. Verification of the drainage arrangement.	
7.41	Confirmation that sprinkler system is approved type and plan of the fixed sprinkler system is displayed at each operating station.	

7.42	Confirmation that fire control plans are posted and duplicate sets stored outside the deck house in a prominently marked weather tight enclosure.	…
7.43	Confirmation that craft complies with following sections of the Code with regard to requirements for the carriage of dangerous goods (Requirements detailed in sheet 13 to 15). Confirmation that crafts issued with document of compliance to this effect by/on behalf of the administration.	…

7.17.3.1.1	…	7.17.3.2	…	7.17.3.4.5	…	7.17.3.8.2	…
7.17.3.1.2	…	7.17.3.3	…	7.17.3.5	…	7.17.3.9	…
7.17.3.1.3	…	7.17.3.4.1	…	7.17.3.6.1	…	7.17.3.10	…
7.17.3.1.4	…	7.17.3.4.2	…	7.17.3.6.2	…		
7.17.3.1.5	…	7.17.3.4.3	…	7.17.3.7	…		
7.17.3.1.6	…	7.17.3.4.4	…	7.17.3.8.1	…		

8. LIFE-SAVING APPLIANCES AND ARRANGEMENTS

8.1	Confirmation of the provision for two way communication (three nos.) using VHF radio, two nos. radar transponders, provision of pyrotechniques and line throwing appliance.	
8.2	Confirmation that required numbers of lifebuoys meeting the requirement of LSA Code and approved by/on behalf of the administration are provided. {At least one lifebuoy with SI light and smoke signal on each side capable of quick release from control compartment, at least one(with buoyant line of 30m length) adjacent to each normal exit from craft and on each open deck(subject to min. two), not less than half the total numbers fitted with SI lights.}. Expiry date of MOB markers……..	…
8.3	Confirmation that lifejackets complying with the requirements of the LSA Code and approved by/on behalf of the administration provided for every person on board the craft and additional lifejackets(not less than 5% of no. of persons on board) for stowing in conspicuous places on deck and assembly stations, lifejackets for children(at least 10% of no. of passengers or as may be required to provided a life jacket for each child), life jackets for persons on watch and for use at remotely located survival craft and rescue boat stations. Life jackets are provided with light complying with the requirement of the LSA Code. Life jackets are placed so as to be readily accessible and their positions are clearly marked. Validity of Lifejacket lights…….	…
8.4	Confirmation that immersion suits of appropriate size complying with the requirement of the LSA Code and approved by/on behalf of the administration are provided for every person assigned to crew the rescue boat.	…
8.5	Confirmation that an immersion suit or an anti-exposure suit is provided for each member of the crew assigned, in the muster list, to duties in a MES party for embarking passengers into survival craft. (These immersion suits or anti-exposure suits need not be required if the craft is constantly engaged on voyages in warm climates where, in the opinion of the Administration, such suits are unnecessary.)	…
8.6	Confirmation that survival crafts and rescue boats provided on board including their launching devices are approved type and meeting the requirement of the Code with respect to the capacity, location and arrangement.	
8.7	Verification that stowage of survival craft is such that it can be safely launched and boarded from designated embarkation stations and having regard to clearance from propeller or waterjet and steeply overhanging portion of the hull. Means provided to prevent discharge of water into survival craft when launched.	
8.8	Confirmation that survival crafts including rescue boats are properly secured, fastened to the deck, stowed in sheltered positions, protected from damage by fire and explosion and close to passenger accommodation, embarkation stations. Length of securing lines and arrangements of the bowsing lines satisfactory.	
8.9	Confirmation that survival crafts are fully equipped and in a state of readiness.	
8.10	Confirmation that posters or signs are provided on or in the vicinity of survival craft and their launching controls illustrating purpose of controls and procedures for operating the appliance and give relevant instructions and warnings using recommended symbols.	…
8.11	Survival craft and the area of water into which it is to be launched are adequately illuminated with supply from both main and emergency source of electrical power.	
8.12	Static and dynamic load test of the launching devices and operational test carried out satisfactorily? Date of dynamic load test……..	…
8.13	Verification and test of recovery arrangement for rescue boat.	
8.14	Confirmation that power supply for launching system for rescue boat on category B crafts are from two sources in each independent engine room.	
8.15	Where MES is provided (in lieu of davit launched survival craft), verification that these are of approved type and arrangement satisfactory. Verification of alternative means of evacuating passenger and crew into the survival craft for category B crafts (where MES is provided). A safety knife is provided at each MES embarkation station.	

8.16	Verification to confirm that assembly stations have ample room for marshalling and instruction of passengers. Embarkation stations are readily accessible. Alleyways, stairways and exits giving access to the assembly and embarkation stations are adequately illuminated by lighting supplied by both main and emergency electrical power supply.	…
8.17	Test of general alarm system.	
8.18	Confirmation that containers, brackets, racks and other similar stowage locations for life-saving equipment, are marked with required symbols, indicating the devices stowed in that location for that purpose. If more than one device is stowed in that location, the number of devices also is indicated.	…
8.19	Confirmation that spares and repair equipment are provided for life-saving appliances and their components which are subject to excessive wear or consumption.	
8.20	Verification of the arrangement for designated helicopter pick-up area (required for voyages having a duration of 2hrs or more).	

9. MACHINERY

9.1	Confirmation that operating and maintenance instructions/manuals for the craft's machinery, equipments essential to the safe operation of the crafts are available in the language understandable by officers and crew.	…
9.2	Verification of machineries and associated piping systems and fittings relating to main machinery and aux. power are installed and protected as to reduce any danger to persons, due regard being paid to moving parts, hot surfaces and other hazards, surfaces with temp. exceeding 220^0C where impingement of flammable liquids may occur are insulated with impervious insulation, draining of excess fuel and oil to safe position, every boiler, pressure vessel and associated piping system is fitted with adequate means to prevent over-pressures in service.	
9.3	Confirmation that normal operation of propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes inoperative. Confirmation of provision of two independent means of propulsion for category B passenger crafts. Essential machinery and control can be maintained in the event of a fire or other casualties in any one compartment on board(applicable only for Cargo crafts & category B passenger crafts).	…
9.4	Test of first start arrangement.	
9.5	Verification of certificates for engines, machineries, boilers, pressure vessels and other components to confirm that these have been built under survey. (It is to be confirmed that parts of machinery, hydraulic, pneumatic and other systems and their associated fittings which are under internal pressure have been subjected to appropriate tests including a pressure test)	…
9.6	Test of engine safety monitoring devices e.g. over speed, lubricating oil low pressure, loss of cooling medium, high temperature, malfunction of moving part, overload. Confirmation that safety devices shall not cause complete engine shutdown without prior warning, except in cases where there is a risk of complete breakdown or explosion. Test of independent means (at least two is to be provided) of stopping the engines from the operating compartment under any operating conditions. Critical speed range if any has been identified and notices posted to this effect.	…
9.7	Confirmation that all external high pressure fuel delivery lines for engines are jacketed and led to a collection tank. Test of leak-off alarm.	
9.8	Verification and test of automation and remote controls, bilge alarm system, fire detection system, remote machinery instrumentation and alarm system. Test of controls from craft's operating compartment and other machinery control positions.	…
9.9	Verification of the ventilation arrangement for machinery spaces as per approved plan. Confirmation that protection against ingress of foreign matter is provided at the intakes.	…
9.10	Confirmation that torsional vibration calculations for engines have been satisfactorily verified.	…
9.11	Where Gas turbines are fitted, verification of installation with due regard to probable shedding of compressor or turbine blades will not endanger the craft and the persons, critical speed range identified in craft operating manual and notices posted to this effect, turbine is protected against ingestion of contaminants, accumulation of salt deposits, air intake from icing, suitable guards fitted. Verification of fire detection & extinguishing system for acoustically enclosed spaces. Test of protection and safety devices for the gas turbine.	…
9.12	Verification of installation of the transmission shafting system with due regard to protection against damage, loss of lubricating fluid pressure. Test of failure alarm fitted to the system.	…

10. AUXILIARY SYSTEMS

10.1	Verification that fluid systems so arranged that failure/leakage in the system will not cause damage to electrical systems or impinge on a hot surfaces causing a fire/explosion hazard. Provision exists to limit max. pressure of system to design pressure and where the system may be exposed to higher pressure relief devices have been fitted. Material used in the piping system is compatible with the fluid conveyed.	…
10.2	Testing of tanks and piping system to test pressure as per approved plan and requirements.	…

10.3	Verification that oil fuel, lubricating oil and other flammable oil lines are suitably screened/protected, flexible pipes in use are of approved type, illumination of machinery spaces containing oil fuel systems containing heated oil under pressure, provision of savealls or gutters under every fuel tank, arrangement of oil level gauges where fitted in place of sounding pipes (cylindrical gauge glasses are not allowed), provision against overpressure/overflow of oil tanks and provision of high temperature alarm for heated daily service/settling tanks.	…
10.4	Verification and test of bilge pumping and drainage systems. Test of self priming arrangements. Marking of all manually operated valves. Distribution of bilge pumps, their source of power and provision of emgy. bilge pump in case of a category B passenger craft.	…
10.5	Verification of emergency bilge suction arrangement and provision of extended spindle above machinery space floor plates.	…
10.6	Verification and test of bilge alarm for unattended machinery space.	…
10.7	Verification and test of ballast system, segregation of fuel system from ballast system.	…
10.8	Verification of engine exhaust system to confirm that arrangement minimize the intake of exhaust gases into the manned spaces, air conditioning systems and engine intakes, where exhaust is discharged through hull in the vicinity of waterline, means to prevent water flooding or entering the exhaust manifold.	…

11. REMOTE CONTROL, ALARM AND SAFETY SYSTEMS

11.1	Verification of arrangement for transfer of control between various stations, two way communication between all stations including the look-out position, provision of back up system for category B passenger crafts and cargo craft.	…
11.2	Verification and test of emergency controls from operating compartment e.g. fixed fire fighting system, closing ventilation opening/fans, shut off fuel supplies, disconnect electrical power supplies, stop main engine/aux. engine. Provision of emergency control at one or more station outside operating compartment for category B crafts.	…
11.3	Verification and test of alarm (audio and visual) systems provided at craft's control position. Confirmation that alarms can be maintained until they are accepted and the visual indications of individual alarms remain until the fault has been corrected, in case a second fault occurs before the first is rectified, the audible and visual alarms operates again, alarm systems incorporate a test facility. Provision of separate alarm with visual indication distinct from others provided for conditions requiring action to prevent degradation to an unsafe condition. Verification of monitoring system for fire and flooding in passenger, cargo and machinery spaces.	
11.4	Verification that where overriding function is fitted for automatic shutdown system for the main propulsion machinery, these preclude any inadvertent operation, audible and visual alarms are activated when shut down system is activated.	

12. ELECTRICAL INSTALLATIONS

12.1	Verification of the electrical installations against approved plan. Verification of the safety arrangements against electrical shock, fire, other hazards of electrical origin. Verification that exposed metal parts of electrical machines are suitably earthed, main switchboard placed relative to the main generating station to ensure integrity of the normal supply in one space, easy access is available and switchboard is guarded with provision of non-conducting mats/gratings, segregation of distribution system for main and emgy power provided.	…
12.2	Verification of separation and duplication of power supply for category B passenger craft.	
12.3	Verification of provision for detecting earth faults/monitoring the insulation level is available with alarm function.	
12.4	Confirmation that electrical wiring/cables are of approved flame retardant type and electrical equipments in hazardous area are "safe type"	
12.5	Confirmation that electrical aux. services necessary for normal operation and habitable condition can be maintained by main source of power without recourse to emgy source of power, with any one generator or its primary source of power out of operation, the remaining generating set is capable of providing the electrical services necessary to start the main propulsion plant from dead craft condition.	
12.6	Test of short circuit and overload protecting device.	
12.7	Verification that location of emgy source of electrical power and associated transforming equipments, transitional source of power, emgy switchboard is such that in case of a fire or casualty affecting main source of power, emgy power supply is not affected.	…
12.8	When the emgy source of power is a generator, verification of the automatic starting function and confirmation that electrical power can be restored in 45s, emgy switchboard is located in the same space as the emgy generator, emgy switchboard is supplied from main switchboard during normal operation and interconnector feeder protected at main switchboard against overload and short circuit and disconnect upon failure of main source of electrical power, provision of disconnection of non-emgy circuit when emgy source of power is supplied.	
12.9	Verification of the provision of transitional source of power.	
12.10	Verification to confirm that emergency generating set is equipped with starting devices with a stored	

	energy capable of at least three consecutive starts and arrangement to preclude critical depletion of the stored energy (not required where a second independent means of starting is provided). Confirmation that a second source of energy is provided for an additional three starts within 30 minutes (not required where manual starting is provided).	
12.11	Where the emgy source of electrical power is an accumulator battery, verification that it is of sufficient capacity, provided with means of charging and can be automatically connected to the emgy switchboard, battery is not stored in the same space as the emgy switchboard. Indicator for battery discharge is provided in the craft's operating compartment.	
12.12	Where steering is dependent on one device, verification that electrical power to this device is provided through two independent circuits, one of which is fed through emgy switchboard or an independent power supply. Verification and test of short circuit protection, overload alarm and where provided protection against excess current (set point should not be less than twice the full load current)	
12.13	Verification of storage of accumulator batteries including provision of ventilation and confirmation that electrical or other light fitting are installed in the compartment are of "safe type". (accumulator batteries are not allowed to be stored in the crew accommodation).	

13. SHIPBORNE NAVIGATIONAL SYSTEMS, EQUIPMENTS AND VDR

13.1	Verification that craft is provided with navigational equipment meeting the requirement of the Code and these are of approved type. Verification of installation and operational test of these equipments.	…

13.2	Standard Magnetic Compass	**...**
13.3	Gyro Compass (Required for passenger craft certified to carry 100passengers or more and cargo craft)	…
13.4	Arrangement for supplying visual compass readings to emergency steering position	…
13.5	Gyro Compass bearing repeaters	…
13.6	Gyro Compass heading repeaters	
13.7	Automatic steering Aid (Automatic Pilot) (with provision to change to manual mode)	…
13.8	Transmitting Heading Device (Required for passenger craft certified to carry 100passengers or less)	…
13.9	Means of steering and means to show the mode of propulsion system(s)	…
13.10	Electronic Chart Display and information system (ECDIS)/Nautical charts* Performance Standard of ECDIS: MSC.232(82)*	…
13.11	Back up arrangements for ECDIS: 2nd ECDIS/ Nautical charts*	…
13.12	Nautical publications	…
13.13	Receiver for a Global Navigation Satellite System / a Terrestrial Radio Navigation System	…
13.14	Radar $9GH_Z$ (3 cm)	…
13.15	Radar $3GH_Z$ (10 cm) (required for craft of 500GT and upwards or craft certified to carry more than 450 passengers in addition to 9GHz radar)	…
13.16	Automatic Radar Plotting Aids (ARPA)	…
13.17	Auto Tracking Aid (ATA)	…
13.18	Automatic Identification System (AIS)	…
13.19	Voyage Data Recorder (VDR) (required for all passenger craft irrespective of size and cargo craft of 3000GT and upwards)	…
13.20	Speed and Distance measuring device (speed and distance measuring devices on craft fitted with an ARPA or ATA shall be capable measuring distance through water)	…
13.21	Echo Sounding Device (Required for non-amphibious craft)	…
13.22	Rudder Angle Indicator / Indicator showing direction of steering thrust*	…
13.23	Rate of turn indicator (required for craft of 500GT and upwards. Also required for crafts less than 500GT where the turn rate exceed safety level 1)	…
13.24	Sound reception System for totally enclosed navigation bridge	…
13.25	Daylight signaling lamp and source of power	…
13.26	Search Light	…
13.27	Night Vision Equipment	…
13.28	Radar reflectors (required for craft of 150GT and below)	…

14. RADIO COMMUNICATIONS

Signal letters and identification codes:

Call sign: ……	ID for DSC (VHF):…….
Selcall No. for NBDP:……..	ID for DSC (MF/HF): ……
1st ID for INMARSAT-B/ Fleet 77: ……..	ID for DSC (MF):……..
2nd ID for INMARSAT- B/ Fleet 77: …….	1st ID for INMARSAT-C: ……..
ID for Satellite EPIRB:……	2nd ID for INMARSAT-C: ……..
Note 1: Functional tests of craft equipments are to be verified for compliance with IMO performance standard.	
Sea area in which craft is certified to operate: A1 ☐; A1+A2 ☐; A1+A2+A3 ☐; A1+A2+A3+A4 ☐	
Any other specific area: ..... ☐	

14.1. DOCUMENTATION

1.1	Verification of radio operators certificate					…
	Name	**Rank**	**Certificate Held**	**Expiry**	**Issued by**	
1st Operator						
2nd Operator						
3rd Operator						
1.2	Verification that up to date International Telecommunication Convention (ITU) publication are available on board					…
1.3	Verification that operating manuals are available, on board for all equipment					…
1.4	Verification that service manuals are available on board for all equipment, if at sea maintenance is the declared option.					…
1.5	Confirmation that all radio equipments are type approved to appropriate performance standard.					
1.6	Verification that plans for the provision and position of the radio installation (including source of energy and antenna) and the radio life saving appliances are available on board					…

14.2. SELECTED METHOD OF MAINTENANCE

Duplication of equipment	…
Shore-based maintenance	…
At –sea maintenance	…

14.3. GENERAL CHECKING OF RADIO INSTALLATION

3.1	Are all radio controls for operating the radio installation adequately illuminated	…
3.2	Are call sign, ship station identity, and other codes, as applicable, for use of the radio station posted	…
3.3	Is the radio installation protected from adverse environmental conditions	…
3.4	Is the radio installation so located that no harmful interference affects its use and so located to ensure the greatest possibility of operational availability.	…
3.5	General examination of all antennas (including INMARSAT antennas) including insulation and safety	…
3.6	Are spare parts and tools available	…
3.7	For at-sea maintenance are additional technical documentation, tools, measuring equipment and spare parts available.	…
3.8	Facilities for bridge wings communications	…
3.9	Verification that all two way communication equipment capable of automatically including craft's position in the distress alert are automatically provided with the information from internal or external navigation receiver. If such receiver is not on board, verification of procedure for manually updating the position and the time of determining the position at intervals not exceeding 4 hours.	…

14.4. SOURCES OF ENERGY

4.1	Main	…	Emergency	…	Reserve …
4.2	Confirmation that the reserve source of energy has sufficient capacity to operate the primary or the duplicated equipment for 1 hours or 6 hours as appropriate.				…
4.3	If the reserve source of energy is battery, verification where appropriate, of its good condition by specific gravity measurement or voltage measurement.				…
4.4	If the reserve source of energy is battery, verification that the chargers are capable of re-charging the battery within 10 hours.				…

14.5. COMPOSITION OF RADIO INSTALLATION

	VHF	MF	MF/HF	INMARSAT
Primary System	…	…	…	…
Duplicated System	…	…	…	…

14.6. V.H.F RADIO INSTALLATION

6.1	Checking for operation on channel 6, 13 and 16	…
6.2	Checking proper operation of all controls	…
6.3	Test call of DSC encoder	…
6.4	Channel 70 DSC watch receiver, including confirmation that correct Maritime Mobile Service Identity (MMSI) is programmed in the equipment, and verification of DSC alarm	…
6.5	Checking for operation from main, emergency (if fitted), and reserve source of energy	…

14.7. MF/HF* RADIO TELEPHONE INSTALLATION

7.1	General examination of MF/HF* Radio telephone equipment	…
7.2	Verification that equipment operates from main, emergency (if provided) and reserve source of energy	…
7.3	Verification of the MF/HF* Radio telephone equipment for correct operation by contacting a coast station and/or measuring transmission quality and radio frequency output	…
7.3.1	During the survey	
a)	Is the DSC equipment tested in Routine call category with the ship station and or a shore station.	…
b)	Is the DSC equipment tested in Safety call category with a ship station and or a shore station.	…
7.4	Verification of antenna tuning in all appropriate bands.	…
7.5	Verification that control unit on bridge has first priority for purposes of initiating distress alerts, if control units are provided outside the navigation bridge.	…
7.6	Checking receiver performance by monitoring known radio station on all appropriate bands.	…
7.7	Verification that the correct selective calling number is programmed in the equipment.	…
7.8	Verification of availability of the MF/HF* DSC alarm.	…
7.9	Verification that distress /safety DSC frequencies are being monitored on the MF/HF* DSC watch receiver	…

14.8. INMARSAT SHIP EARTH STATION

8.1	Verification that equipment operates from main, emergency (if provided) and reserve source of energy	…
8.2	Verification of distress function by means of an approved test procedure, where possible	…
8.3	Verification of correct operation by inspection of recent hard copy of test call by telex or telephone.	…

14.9.NAVTEX RECEIVER

9.1	Verification for correct operation by monitoring incoming message or inspecting recent hard copy/ display unit	…
9.2	Performance test run of the self test program if provided	…

14.10. ENHANCED GROUP CALL (EGC)

10.1	Verification for correct operation and area by monitoring incoming messages or by inspecting recent hard copy.	…
10.2	Performance test run of the self test programs, if provided.	…

14.11. HF-NBDP EQUIPMENT (applicable if ship exempted from INMARSAT EGC receiver)

11.1	Examination if appropriate of the radio equipment for receipt of MSI by HF/NBDP	…
11.2	Performance test run of the self test programs, if provided.	…

14.12. TWO WAY RADIO TELEPHONE APPARATUS

12.1	Examination of two way VHF radio apparatus including verification of its correct operation on both channel 16 and any other channel through a test with another fixed or portable VHF installation.				…
12.2	Expiry of Primary Battery	1. …….	2. ……..	3. …….	
12.3	Charging arrangement for battery, where rechargeable battery is used				…

14.13. EPIRB

	VHF EPIRB **…**		406 MHz EPIRB **…**	
13.1	Verification of condition by visual examination, position and mounting for float free operation			…
13.2	Self test routine			…
13.3	Labeling of EPIRB			…
13.3.1	Verification of battery expiry date	1. ……..	2. …….	
13.3.2	Manufacturer's serial number			…
13.3.3	Verification that call sign of the ship marked on the EPIRB			…
13.4	Verification of hydrostatic release and its expiry date	1. ……	2. ……	
Additionally for 406 MHz EPIRB				
13.5	Verification of emission on operational frequencies, coding and registration on the 406 MHz signal without transmission of a distress call to the satellite			…
13.6	Initial Testing of the satellite EPIRB carried out on: …….			
13.7	Verification that EPIRB ID is clearly marked on the outside of the equipment			…

14.14.SECONDARY MEANS OF ALERTING

Designated equipment		
VHF (DSC) …	INMARSAT B/Fleet 77 …	INMARSAT –C …
MF (DSC) …	HF (DSC) …	406 MHz EPIRB …
VHF EPIRB …		

14.15.RADIO LIFE SAVING APPLIANCES

15.1	Operational test of Survival craft radar transponder/ AIS SART		…
15.2	Battery expiry date	1 …….	2 ……..…….

14.16.AUTOMATIC IDENTIFICATION SYSTEM

16.1	Operational test carried out	…

14.17. SHIP SECURITY ALERT SYSTEM

17.1	Functionality test carried out with competent authority	…

14.18.VOYAGE DATA RECORDER

18.1	Operational test carried out	…

14.19.LONG RANGE IDENTIFICATION AND TRACKING:

19.1	Conformance Test Certificate is available on board	…
19.2	DNID member number registered by CSP in the LRIT ship borne equipment (i.e. Sat C) is not disabled or deleted	…

14.20.ON PASSENGER CRAFTS ONLY:

20.1	Two way on-scene radio communication on 121.5 MHz and 123.1 MHz from navigating bridge.	…
20.2	A GOC Certified operator assigned to perform only radio communication duties during distress incidents.	…

14.21.GMDSS RADIO OPERATORS:

21.1	Is the onboard operator(s) able to use the GMDSS equipment and carry out function tests for transmitting and receiving distress and safety alerts	…
21.2	Is operator(s) able to explain correct procedures for the followings:	…
21.2.1	Canceling a false distress alert	…
21.2.2	Receiving a distress alert.	…
21.2.3	Sending a distress alert	…

15. OPERATING COMPARTMENT LAYOUT

15.1	Verification of the layout of the operating compartment/navigating work station with due regard to ergonomics, temperature/ventilation, safety measures, field of vision and blind sectors, disposition and arrangement of equipments and facilities, relative positions of controls and seat for operating crew, lighting, provision of clear view through window, provision to avoid glare, reflection and adjust lighting intensity.	…
15.2	Where minimum manning levels are proposed, verification that the design and layout of the primary and communication controls form an integrated operational and emergency control centre from which the craft can be controlled under all operational and emergency events by the operating crew without the necessity for any crew member to vacate the compartment.	…
15.3	Verification of internal communication facilities e.g. between the operating compartment and other spaces, communication between crew members in both normal and emgy conditions, provisions for means to monitor, receive and transmit radio safety messages at the operating compartment, means of making public address and safety announcements.	…

16. STABILISATION SYSTEMS

16.1	Verification that in case of failure or malfunctioning of any one of the stabilization devices or equipment, it is possible either to maintain the main parameters of the craft's motion within safe limits with the aid of working stabilization devices or to put the craft into the displacement or other safe mode.	…
16.2	Verification that in case of failure of any automatic equipment or stabilization device, or of its power drive, the parameters of craft motion shall remain within safe limits	…
16.3	Verification that craft with automatic stabilization system is provided with an automatic safety control unless the redundancy in the system provides equivalent safety. Verification of provision for overriding automatic safety control and cancel the override from main operating station.	…
16.4	Demonstration and verification to determine any adverse effects upon the safe operation of the craft in the event of an uncontrollable total deflection of any control device. (Tests to evaluate operational is conducted on the first craft of a new design or of a design incorporating new features which may modify the results of a previous testing)	…

17. HANDLING, CONTROLLABILITY AND PERFORMANCE

17.1	Confirmation that full scale test of the prototype craft have been completed to determine, handling and performance limitations, actions to be taken in the event of prescribed failure and limitations to be observed for safe operation subsequent to prescribed failures. Full-scale tests included evaluation of condition during night operation.	…
17.2.	Confirmation that effects of failures considered as critical has been verified during demonstration and verification process.	…
17.3	Confirmation that controls are easily operated, craft is capable of performing those manoeuvres essential to its safe operation up to the critical design conditions.	…
17.4	Confirmation that max safe speeds and min depth of water for all modes of operation and for amphibious craft, clearance of the hard structure when cushion-borne have been determined.	…

18. OPERATIONAL REQUIREMENTS

18.1	Verification that safety provisions have been made by operator as per section 18.1.3 of the Code	…
18.2	Confirmation that crew has undergone the required operational training.	…
18.3	A satisfactory demonstration of emergency evacuation carried out?	…
18.4	Confirmation that rescue boat drill/fire drill witnessed satisfactorily.	…

Remarks

Signature of Radio Surveyor
(With respect to Radio Survey
Carried Out & reported in page 9 to 12)

Name of Radio Surveyor:
Name of Radio Firm :
Date:

Surveyor(s) to Indian Register of Shipping
Date:
Port:

Annex

Special requirements of section 7.17.3 of the Code for the carriage of dangerous goods

7.17.3.1. Water supplies

7.17.3.1.1. Arrangements shall be made to ensure immediate availability of a supply of water from the fire main at the required pressure either by permanent pressurization or by suitably placed remote starting arrangements for the fire pumps.

7.17.3.1.2. The quantity of water delivered shall be capable of simultaneously supplying the arrangements required by 7.17.3.1.3 for the largest designated cargo space and the four nozzles of a size and at a pressure as specified in 7.7.5, capable of being trained on any part of the cargo space when empty. This requirement shall be met by the total capacity of the main fire pump(s) not including the capacity of the emergency fire pump, if fitted. This amount of water may be applied by equivalent means to the satisfaction of the Administration.

7.17.3.1.3. Means shall be provided of effectively cooling the designated under deck cargo space by with water at not less than 5 l/min/m2 of the horizontal area of cargo spaces, either by a fixed arrangement of spraying nozzles, or flooding the space with water. Hoses may be used for this purpose in small cargo spaces and in small areas of larger cargo-spaces at the discretion of the Administration. In any event the drainage and pumping arrangements shall meet the requirements of 7.8.6 and be such as to prevent the build-up of free surfaces. If this is not possible, the adverse effect upon stability of the added weight and free surface of water shall be taken into account.

7.17.3.1.4. Provision to flood a designated under-deck cargo space with suitable specified media may be substituted for the requirements in 7.17.3.1.3 above. Substitution by a high expansion foam system complying with regulation II-2/10.4.1.1.2 of the Convention is also acceptable.

7.17.3.1.5. The requirements of 7.17.3.1.1 to 7.17.3.1.4 may be fulfilled by a water spray system approved by the Administration based on the standards developed by the Organization, provided that the amount of water required for fire-fighting purposes in the largest cargo space allows simultaneous use of the water spray system plus four jets of water from hose nozzles in accordance with 7.17.3.1.2.

7.17.3.1.6. Craft carrying dangerous goods shall be provided with three fire hoses and nozzles complying with 7.7.5.6 in addition to those required by 7.7.5.5.

7.17.3.2. Sources of ignition

. Electrical equipment and wiring shall not be fitted in enclosed cargo spaces or vehicle decks, unless it is essential for operational purposes. However, if electrical equipment is fitted in such spaces, it shall be of a certified safe type for use in the dangerous environments to which it may be exposed unless it is possible to completely isolate the electrical system (by removal of links in the system, other than fuses). Cable penetrations of the decks and bulkheads shall be sealed against the passage of gas or vapour. Through runs of cables and cables within the cargo spaces shall be protected against damage from impact. Any other equipment which may constitute a source of ignition of flammable vapour shall not be permitted.

7.17.3.3. Detection system

. Enclosed cargo spaces shall be provided with an approved automatic smoke detection system complying with 7.7.1 or with a detection system which, in the opinion of the Administration, gives equivalent protection.

7.17.3.4. Ventilation

7.17.3.4.1. Adequate power ventilation shall be provided in enclosed spaces. The arrangement shall be such as to provide for at least six air changes per hour in the cargo space based on an empty space and for removal of vapours from the upper or lower parts of the space, as appropriate.

7.17.3.4.2. The fans shall be such as to avoid the possibility of ignition of flammable gas air mixtures. Exhaust fans shall be of non-sparking type. Suitable wire mesh guards having a mesh size not exceeding 13 mm x 13 mm shall be fitted over inlet and outlet ventilation openings to prevent foreign objects from entering into the casing.

7.17.3.4.3. If adjacent spaces are not separated from cargo spaces by gastight bulkheads or decks, ventilation requirements shall apply to the adjacent spaces as for the cargo space itself.

7.17.3.4.4. Natural ventilation shall be provided in enclosed spaces intended for the carriage of solid dangerous goods in bulk, where there is no provision for mechanical ventilation.

7.17.3.4.5. For open-top container craft, power ventilation is required only for the lower part of the cargo hold for which purpose-built ducting is required. The ventilation rate shall be at least two air changes per hour, based on the empty hold volume below the weather deck.

7.17.3.5. Bilge pumping

. Where it is intended to carry flammable or toxic liquids in enclosed spaces, the bilge pumping system shall be designed to ensure against inadvertent pumping of such liquids through machinery space piping or pumps. Where large quantities of such liquids are carried, consideration shall be given to the provision of additional means of draining those spaces as follows:

.1. if the bilge drainage system for cargo spaces is additional to the system served by pumps in the machinery space, the capacity of the system shall be not less than than 10 m3/h per cargo space served. If the additional system is a common system, the capacity need not exceed 25 m3/h. The additional bilge system need not be arranged with redundancy. Whenever flammable or toxic liquids are carried, the bilge line into the machinery space shall be isolated either by fitting a blank flange or by a closed lockable valve;

.2. if bilge drainage of cargo spaces is arranged by gravity drainage, the drainage shall be either led directly overboard or to a closed drain tank located outside the machinery spaces. The tank shall be provided with vent pipe to a safe location on the open deck;

.3. enclosed spaces outside machinery spaces containing bilge pumps serving cargo spaces intended for carriage of flammable or toxic liquids shall be fitted with separate mechanical ventilation giving at least six air changes per hour. Electrical equipment in the space shall be of certified safe type. If the space has access from another enclosed space, the door shall be self-closing; and

.4. drainage from a cargo space into bilge wells in a lower space is only permitted if that space satisfies the same requirements as the cargo space above.

7.17.3.6. Personnel protection

7.17.3.6.1. Four sets of full protective clothing resistant to chemical attack shall be provided in addition to the firefighter's outfits required by 7.10 and shall be selected taking into account the hazards associated with the chemicals being transported and the standards developed by the Organization according to the class and physical state. The protective clothing shall cover all skin, so that no part of the body is unprotected.

7.17.3.6.2. At least two self-contained breathing apparatuses additional to those required by 7.10 shall be provided. In addition to the requirements of 7.10.3.2.2, two spare charges suitable for use with the breathing apparatus shall be provided for each required apparatus.

7.17.3.7. Portable fire extinguishers

. Portable fire extinguishers with a total capacity of at least 12 kg of dry powder or equivalent shall be provided for the cargo spaces. These extinguishers shall be in addition to any portable fire extinguishers required elsewhere in this chapter.

7.17.3.8. Fixed fire-extinguishing system

7.17.3.8.1. Cargo spaces, except for open decks, shall be provided with an approved fixed fire-extinguishing system complying with the provisions of 7.7.3 or with a fire-extinguishing system which, in the opinion of the Administration, gives equivalent protection for the cargo carried.

7.17.3.8.2. Each open ro-ro space having a deck above it and each ro-ro space not capable of being sealed shall be fitted with an approved fixed pressure water-spraying system for manual operation which shall protect all parts of any deck and vehicle platform in such space, except that the Administration may permit the use of any other fixed fire-extinguishing system that has been shown by full-scale test to be no less effective. In any event the drainage and pumping arrangements shall meet the requirements of 7.8.6, have valves operable from outside the space at a position in the vicinity of the extinguishing system controls and be such as to prevent the build-up of free surfaces. If this is not possible the adverse effect upon stability of the added weight and free surface of water shall be taken into account to the extent deemed necessary by the Administration in its approval of the stability information.

7.17.3.9. Separation between ro-ro spaces and open ro-ro spaces

. A separation shall be provided between a ro-ro space and an adjacent open ro-ro space. The separation shall be such as to minimize the passage of dangerous vapours and liquids between such spaces. Alternatively, such separation need not be provided if both spaces fully comply with the requirements for ro-ro spaces in Part D.

7.17.3.10. Separation between ro-ro spaces and weather decks

. A separation shall be provided between a ro-ro space and the adjacent weather deck. The separation shall be such as to minimize the passage of dangerous vapours and liquids between such spaces. Alternatively, a separation need not be provided if the ro-ro space fully complies with the requirements for ro-ro spaces in Part D. However, a separation is still required when dangerous goods carried shall be loaded on the weather deck only.