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**THE MERCHANT SHIPPING (SUBMERSIBLE CRAFT CONSTRUCTION, EQUIPMENT AND
SURVEY) (CAYMAN ISLANDS) REGULATIONS, 1991**

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THE MERCHANT SHIPPING (SUBMERSIBLE CRAFT) LAW, 1991

In exercise of the powers conferred upon the Governor by section 12 of the Merchant Shipping (Submersible Craft) Law, 1991, the following regulations are made

Citation and
Commencement

1. These regulations may be cited as the Merchant Shipping. (Submersible Craft Construction, Equipment and Survey) (Cayman Islands) Regulations, 1991, and shall be deemed to have come into force on the 1st day of June, 1991.

Interpretation

2. (1) In these regulations-

"autonomous submersible craft" means a submersible craft which does not rely on a parent craft for launch and recovery and recharging its power source or for surface support;

"Certifying Authority" means the Chief Marine Surveyor or any person authorised by him and includes (if so authorised) Lloyd's Register of Shipping, the British Committee of Bureau Veritas, the British Committee of Det Norske Veritas, the British Committee of Germanischer Lloyd and the British Technical Committee of the American Bureau of Shipping;

"collapse depth" means that depth at which failure of the pressure hull is estimated to occur, due to the external pressure;

"command module" means the main compartment of a lock-out submersible craft which may house the crew, the diving supervisor and the control equipment for both the submersible craft and the diver lock-out compartment;

"crew" means the person or persons within the submersible craft required to operate the submersible craft and its equipment;

"depth" means the depth measured from the surface to the lowest part of the submersible craft's pressure hull;

"diver lock-out compartment" means a compartment forming part of the submersible craft with underwater access for personnel and with a means of controlling the differential pressure between the inside and outside environment;

"exostructure" means all structures and appendages outside the pressure hull such as floodable structure, supporting equipment and including hydrodynamic fairings, lifting pads, manipulators and other such structures and appendages;

"hull penetration" means any opening in the pressure hull;

"life support systems" means equipment installed to render a manned submersible craft habitable and includes breathing systems, temperature and humidity control equipment, waste disposal and toxic fume removal equipment and food and water supplies;

"maximum operating depth" means the maximum depth to which the submersible craft is designed to submerge during normal operation;

"passenger" means a person who is not crew;

"the Law" means the Merchant Shipping (Submersible Craft) Law, 1991;

"supporting equipment" means the launching and recovery gear used in connection with a submersible craft;

"surveyor" means a surveyor appointed by a Certifying Authority;

"umbilical" means a connecting link to a submersible craft which contains one or more life support, surveillance, communication or remote control leads with or without power supply cables.

(2) References in these regulations to the owner of a submersible craft or supporting equipment include, for the purpose of the application of any provision of these regulations in relation to any particular submersible craft or supporting equipment, references to the person who at the relevant time has the management of that

submersible craft or supporting equipment.

Application

3. (1) Subject to paragraph (2), these regulations apply to any submersible craft which

- (a) is registered in the register of submersible craft; and
- (b) is required to be registered in the register of submersible craft under section 5(2) of the Law, whether it is so registered or not.

(2) These regulations apply to any supporting apparatus which is used in connection with a submersible craft to which these regulations apply.

Equivalents and exemptions

4. (1) The Chief Marine Surveyor may permit any fitting, material, appliance or apparatus to be fitted in a submersible craft or supporting apparatus as an alternative to that required by these regulations if such fitting, material, appliance or apparatus is at least as effective as that required by these regulations.

(2) The Chief Marine Surveyor may, if he is satisfied that compliance with such provision is either impracticable or unreasonable, exempt any submersible craft from any of the provisions of these regulations on such conditions as he may specify, and may alter or cancel such exemption.

Requirements for construction, support and carriage of equipment and stores in submersible craft

5. (1) Every submersible craft and all supporting equipment to which these regulations apply, except such submersible craft as are referred to in paragraph (2), shall be constructed and supported in accordance with the requirements of, and shall carry the equipment and stores set out in Schedule 1.

(2) Every one-man submersible craft and every atmospheric diving suit and all supporting equipment operated in connection with such one-man submersible craft and atmospheric diving suit shall be constructed and supported in accordance with the requirements of, and shall carry the equipment and stores set out in, Schedule 2.

Criteria for the issue of safety certificates

6. Every submersible craft and all supporting equipment to which these regulations apply shall satisfy the criteria set out in Schedule 3.

Survey

7. (1) The owner of every submersible craft to which these regulations apply shall cause it to be surveyed by a Certifying Authority before it is put into service for the first time after the effective date of section 4 of the Law and before any safety certificate (whether upon first issue or upon renewal) is issued in respect of it.

(2) Upon making application to a Certifying Authority for the survey of a submersible craft to which these regulations apply the owner shall deliver to the Certifying Authority such plans, drawings, specifications and other documents relating to the specifications set out in Schedule 1. (as the case may require) and such other information relating to the design, construction and testing of the submersible craft and its supporting equipment as the Certifying Authority may require.

(3) After receiving an application for survey and payment of such fees as may be specified by the Governor, a surveyor shall survey the submersible craft or its supporting equipment, or both, as specified in the application and the owner shall

(a) supply to the surveyor any further document or information necessary in order that the surveyor may be able to ascertain whether the submersible craft and its supporting equipment comply with such of the criteria set out in Schedule 3 as are applicable to that type of submersible craft or supporting equipment; and

(b) afford all necessary facilities for the survey to take place; and

(c) cause or permit the submersible craft or its supporting equipment or both to undergo such tests as the surveyor may require for the purpose of determining whether the submersible craft and its supporting equipment accord with the specifications set out in Schedule 1 or (as the case may require) and satisfy the criteria set out in Schedule 3.

(4) After the survey has been completed the surveyor shall provide the Chief Marine Surveyor with a declaration of survey in respect of the submersible craft and its supporting apparatus.

Offences

8. (1) Any person who is concerned in the operation of a submersible craft to which these regulations apply and which does not comply with the specifications set out in Schedule 1 or Schedule 2 (as the case may require) shall be guilty of an offence and liable upon summary conviction to a fine not exceeding ten thousand dollars in respect of any one contravention.
- (2) Any owner of a submersible craft who contravenes regulation 7(1), (2), or (3) shall be guilty of an offence and liable upon summary conviction to a fine not exceeding two thousand dollars in respect of any one contravention.
- (3) In any proceedings for an offence under these regulations it shall be a defence for the person charged with the offence to prove-
 - (a) that he exercised all due diligence to prevent commission of the offence; and
 - (b) that the offence was committed without his consent, connivance or default.

Detention

9. (1) Any submersible craft to which these regulations apply and which does not comply with the specifications set out in Schedule 1 or Schedule 2 (as the case may require) shall be liable to be detained.
- (2) Sections 74 to 76 of the Merchant Shipping (Applicable Conventions) Law 1987 shall have effect in relation to a submersible craft detained under these regulations and for the purpose of applying those sections -
 - (a) the words "submersible craft" shall be substituted for the word "ship" wherever it occurs, except when the vessel to be detained may properly be described as a "ship" as defined in the Merchant Shipping (Applicable Conventions) Law 1987; and
 - (b) the words "the Merchant Shipping (Submersible Craft Construction, Equipment and Survey) Regulations 1991" shall be substituted for the words "this Law" wherever the latter occur.

SCHEDULE 1 (Regulation 5(1))

Requirements For Submersible Craft And Supporting Equipment

ARRANGEMENT OF PARAGRAPHS

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Hull

1. (1) Manned submersible craft shall normally consist of a pressure hull and an exostructure.
 - (2) The pressure hull and an exostructure shall be -
 - (a) so designed that all loads to be exerted on the structure are taken into account. These shall include the most severe loads imposed in normal conditions together with loads resulting from several conditions occurring simultaneously. The planned maximum operating depth and the collapse depth shall be specified;
 - (b) designed, where practicable, so that all pipe systems penetrating the pressure hull shall be provided with two isolating valves, primary and secondary, readily accessible to the crew, the primary valve to be immediately inboard of the penetration. Where this is not practicable all components of the system between the hull penetration and the primary isolating valve shall be designed for an internal pressure of not less than that equivalent to the collapse depth;
 - (c) fitted with a lifting point and a towing point (where appropriate) and external structural members capable of withstanding the stresses that may be experienced in service conditions;
 - (d) subjected to satisfactory tests and survey during building and acceptance trials. Records of these and copies of all certificates obtained shall be made available;
 - (e) subjected to regular maintenance inspections. Details of the current and proposed inspection intervals and the tests involved shall be made available;
 - (f) equipped with at least one alternative lifting point to which attachments may be secured to raise the submersible craft to the surface in an emergency;
 - (g) provided with an access hatch operable from both sides., The hatch shall be positioned so that the occupants may leave the craft when it is on the surface. If more than 6 passengers are carried, at least 2 such hatches shall be provided. Means shall be provided for equalizing pressure on each side of each hatch prior to opening and ensure that the hatches are opened under the control of the pilot;
 - (h) provided with a transparent, shatter proof inner screen for all windows normally accessible to passengers;
 - (i) provided with suitable seats allocated for all occupants.

Power

2. (1) Manned submersible craft shall be -
 - (a) provided with -
 - (i) a source of power capable of maintaining normal services for a period adequate for the service envisaged and including the minimum life support requirements set out in head V of this Schedule;
 - (ii) an emergency source of power capable of providing continuity of communications for the minimum life support requirements set out in head V of this Schedule;
 - (b) equipped with means of propulsion adequate for the service envisaged.

- (2) Where electrical power is used the craft shall be -
- (a) fitted with equipment compatible with special conditions pertaining to marine service. Where practicable, all equipment shall be continuously rated;
 - (b) provided with adequate electrical protection;
 - (c) fitted with an effective means of isolating all poles or phases from every circuit and sub-circuit as may be necessary to minimise shock hazard;
 - (d) fitted with gas control safeguards, where applicable, on the compartments containing the power source;
 - (e) equipped with a pressure compensation device for the power source if it is external to the pressure hull and is subjected to ambient sea pressure;
 - (f) fitted with circuits which do not use hull return;
 - (g) provided with an earth leakage measuring device.

Control

3. Manned submersible craft shall (where appropriate) –
- (a) contain valves, gauges and such other equipment as is necessary to control the propulsion and auxiliary systems, including any fuel supply and exhaust systems;
 - (b) contain such equipment as is necessary to control the direction of the craft in azimuth;
 - (c) contain such valves, gauges and other equipment as are necessary to control the depth, attitude and rate of descent and ascent without inducing resonant or unstable motions;
 - (d) be provided with a display, alarm, and interlock system in order to prevent the pilot initiating descent with hatches in the open position;
 - (e) be fitted with jettisonable weights or other means suitably protected against inadvertent operation to achieve positive buoyancy in an envisaged emergency situation;
 - (f) be fitted with valves or other fittings to enable manipulators, grasping or anchoring devices and jettisonable equipment to be released in a planned or envisaged emergency situation;
 - (g) be fitted with an umbilical capable of maintaining services and of sufficient strength for its intended service;
 - (h) be equipped with an internal release device suitably protected against inadvertent operation, for severing or releasing the umbilical cable. In the case of a towed submersible craft, similar arrangements should be provided for the towing cable;
 - (i) be equipped with a device for the early detection of water leakage into the pressure hull or any other compartment;
 - (j) be equipped (in the case of an autonomous submersible craft) with an effective bilge pumping system;
 - (k) be equipped (in the case of an autonomous submersible craft) with such anchors and cables as are sufficient in number, weight and strength having regard to the size and intended service of the craft.

Buoyancy and Stability

4. (1) Manned submersible craft shall, where appropriate, have sufficient buoyancy and stability to enable a properly trained crew to operate it in all sea states and conditions for which it is intended.
- (2) There shall be provided, for each craft instructions showing operating procedures in intended service conditions together with emergency procedures. The instructions shall take into account the fully submerged and transient submerging and surfacing conditions together with a full buoyancy condition. The effects of releasing any jettisonable devices either singly or in combination shall be taken into account.

Life Support

5. (1) Manned submersible craft shall be provided with the means of life support to maintain all occupants carried at or near atmospheric pressure in a safe and breathable atmosphere for a minimum period of 72 hours over and above the planned dive time where the charted depth plus mean high water spring tide does not exceed 50 metres and 96 hours in every other case.

(2) Manned submersible craft shall -

- (a) contain adequate equipment to maintain a safe and breathable atmosphere in the operator's compartment. The equipment shall be capable of functioning whether or not the main electrical power source of the craft is operable. When oxygen is stored in bottles, at least two bottles shall be provided. If these are fitted externally, they shall be piped separately to the inside of the submersible craft;
- (b) contain monitoring devices to test the atmosphere in the crew and passenger compartments;
- (c) contain valves, gauges and other equipment as are necessary to monitor and control the pressure, temperature and humidity and (where practicable) to control the pressure, temperature and humidity within the crew and passenger compartments;
- (d) be equipped with an adequate emergency breathing system for use in case of fire or smoke;
- (e) at all times carry emergency supplies of food and water to sustain the occupants for the periods given in paragraph (1);
- (f) under normal conditions and in the event of an emergency either have sufficient power reserves to maintain an adequate temperature in the crew compartment, or be equipped with a means of thermal protection of the occupants;
- (g) contain the minimum of flammable and toxic material;
- (h) be fitted with an adequate fire extinguishing system;
- (i) be equipped with approved medical stores.

Communications

6. (1) Submersible craft shall be fitted with such equipment as is necessary for the submersible craft to communicate with its parent craft when on the surface and when submerged. Equipment using through-water communication methods shall have a minimum range of twice the maximum operating depth of the craft.

(2) Autonomous submersible craft shall be fitted with -

- (a) such main and reserve equipment as is necessary for the submersible craft to communicate with its support base;
- (b) such equipment as is necessary for the submersible craft, when on the surface, to alert by radio other shipping in the vicinity in the event of distress and to communicate with such shipping;
- (c) such equipment as is necessary for the submersible craft, when submerged, to communicate with surface craft. The equipment should have a minimum range of twice the operating depth of the craft.

(3) Where the submersible craft has more than one manned compartment, equipment shall be fitted to provide communication between these compartments.

(4) Where more than 6 passengers are carried, an electrical public address system shall be fitted.

Navigation and
Position Indication

7. (1) Manned submersible craft shall be -

- (a) fitted with a compass;
- (b) fitted with an adequate means of determining the distance of the craft from the seabed;
- (c) provided with an adequate means of visual look-out ahead of the craft or be fitted with equipment to determine and avoid obstacles when submerged;
- (d) fitted with such gauges or instruments to provide a continuous read-out of depth to the crew; a minimum of two such instruments shall be fitted; one of which shall be dial gauge; they shall not share a common hull penetration;
- (e) fitted with equipment to indicate heel and trim;
- (f) fitted with a visual means of position indication for use when on the surface, including highly visible paint, and strobe light;
- (g) fitted with a sonic location device to provide position indication in an emergency when submerged;
- (h) be equipped with a timepiece which does not use the main power supply.

Supporting
Equipment: Launch
and Recovery
System

8. (1) Manned submersible craft shall be so constructed as to be capable of use in association with a lifting gear system (where appropriate) which enables the craft to be lowered into and recovered from the water with adequate safety factors for the intended service.
- (2) If wires or ropes are incorporated for hoisting or lowering any submersible craft these shall have safety factors based upon the proven or calculated breaking strength of the wire or rope.
- (3) The lifting gear system shall be subjected to static and dynamic load tests.

Lock-out
Arrangements

9. (1) Manned submersible craft fitted with diver lock-out facilities shall -
 - (a) be provided with the means of life support to maintain any occupants subjected to raised pressures in a safe and breathable atmosphere;
 - (b) be fitted with a saturation control compartment or a command module adjacent to the diver lock-out compartment from which control and monitoring of the chamber may be carried out;
 - (c) be equipped with sufficient storage capacity to contain the appropriate breathing mixture to supply to persons occupying or working from the lock-out compartment;
 - (d) be equipped with at least one breathing mask for each occupant inside the lock-out compartment; the masks to be connected to the gas supply and exhaust system either permanently or by plug and socket connectors;
 - (e) be fitted with such equipment as may be necessary to ensure that each diver's body temperature is kept within safe limits;
 - (f) contain such valves, gauges and other fittings as are necessary to control and monitor the pressures and the composition of the atmosphere within the lock-out compartment and to ascertain the external water pressures on the lock-out compartment. This equipment shall be fitted in the command module, the saturation control compartment and the diver lock-out compartment; except that the control valves in the saturation control and diver lock-out compartments shall be capable of being overridden from the control compartment;
 - (g) be equipped with a two-way oral communication system whereby contact may be maintained between personnel in the command module or saturation control compartment and the divers inside and outside the compartment under all operating conditions. The system shall be fitted with an auxiliary power source for use in an emergency. Speech unscramblers are to be provided when mixed gas is used.
- (2) The command module shall be equipped with a means of setting the submersible craft on the seabed and, if mid-water operations are to be carried out, the craft shall have positive control of depth so that divers can move freely between the diver lock-out compartment and the water.
- (3) The diver lock-out compartment shall -
 - (a) be equipped with means whereby each diver using the compartment is able to enter and leave without difficulty;
 - (b) contain adequate first-aid facilities and lifting equipment sufficient to enable an unconscious or injured diver to be hoisted into the compartment by a person located therein;
 - (c) be capable, where applicable, of allowing a person to transfer under pressure between the compartment and a compression chamber;
 - (d) be equipped with doors which act as pressure seals and which may, where appropriate, be opened from either side;
 - (e) contain adequate re-generation equipment to maintain a safe and breathable atmosphere in the compartment. The equipment shall be capable of functioning whether or not the main power source of the submersible craft is operable;
 - (f) at all times carry emergency supplies of food and water to sustain the occupants for the periods given in head V (1);
 - (g) be equipped with a means of thermal protection for the divers;
 - (h) be equipped with a mechanical lock or equivalent arrangements of adequate size which can be used at pressures equivalent to the maximum operating depth of the diver lock-out compartment.

SCHEDULE 2 Regulation 5(2)

Requirements for One-man Submersible Craft, Atmospheric Diving Suits and Supporting Equipment

ARRANGEMENT OF PARAGRAPHS

1. [Hull](#)
2. [Power](#)
3. [Control](#)
4. [Buoyancy and Stability](#)
5. [Life Support](#)
6. [Communications](#)
7. [Navigation and Position Indication](#)
8. [Supporting Equipment: launch and Recovery System](#)

The requirements referred to in regulation 5(2) are as follows -

- Hull
1. (1) One man submersible craft and atmospheric diving suits shall normally consist of a pressure hull and an exostructure.

- (2) The pressure hull and the exostructure shall be-

- (a) so designed that all loads to be exerted on the structure are taken into account. These shall include the most severe loads imposed in normal conditions together with loads resulting from several conditions occurring simultaneously. The planned maximum operating depth and the collapse depth shall be specified;
- (b) designed where practicable, so that all pipe systems penetrating the pressure hull shall be provided with two isolating valves, primary and secondary, readily accessible to the operator, the primary valve to be immediately inboard of the penetration. Where this is not practicable all components of the system between the hull penetration and the primary isolating valve shall be designed for an internal pressure of not less than that equivalent to the collapse depth;
- (c) fitted with a lifting point and external structural members capable of withstanding the stresses that may be experienced in service condition;
- (d) subjected to satisfactory tests and survey during building and acceptance trials. Records of these and copies of all certificates obtained shall be made available;
- (e) subjected to regular maintenance inspections. Details of the current and proposed inspection intervals and the tests involved shall be made available;
- (f) equipped with at least one alternative lifting point to which attachments may be secured to raise the submersible craft to the surface in an emergency.

- Power
2. (1) One-man submersible craft and atmospheric diving suits shall be -

- (a) provided with a source of power capable of maintaining normal services for a period adequate for the service envisaged and including the minimum life support requirements set out in head V of this Schedule;
- (b) equipped with means of propulsion adequate for the service envisaged.

- (2) Where electrical power is used that craft shall, where appropriate, be -

- (a) fitted with equipment compatible with the special conditions pertaining to marine service. Where practicable all equipment shall be continuously rated;
- (b) provided with adequate electrical protection;
- (c) fitted with effective means of isolating all poles or phases from every circuit and sub-circuit as may be necessary to minimise shock hazard;
- (d) fitted with circuits which do not use hull return;
- (e) provided with an earth leakage measuring device;
- (f) fitted with gas control safeguards, where applicable, on the compartments containing the power source.

Control

3. One-man submersible craft and atmospheric diving suits shall, where appropriate
- (a) contain valves, gauges and such other equipment as is necessary to control the propulsion and auxiliary systems, including any fuel supply and exhaust systems;
 - (b) contain such equipment as is necessary to control the direction of the craft in azimuth;
 - (c) contain such valves, gauges and other equipment as are necessary to control the depth, attitude, and rate of descent and ascent without inducing resonant or unstable motions;
 - (d) be fitted with jettisonable weights or other means, suitably protected against inadvertent operation, to achieve positive buoyancy in an envisaged emergency situation;
 - (e) be fitted with valves or other fittings to enable manipulators, grasping or anchoring devices and jettisonable equipment to be released in a planned or envisaged emergency situation;
 - (f) be fitted with an umbilical capable of maintaining services and of sufficient strength for its intended service;
 - (g) be equipped with an internal release suitably protected against inadvertent operation, for severing or releasing the umbilical cable. In the case of a towed submersible craft similar arrangements should be provided for the towing cable.

Buoyancy and Stability

4. (1) One-man submersible craft and atmospheric diving suits shall, where appropriate, have sufficient buoyancy and stability to enable a properly trained person to operate it in all sea states and conditions for which it is intended.
- (2) There shall be provided, for each craft or suit, instructions showing operating procedures in intended service conditions together with emergency procedures. The instructions shall take into account the fully submerged and transient submerging and surfacing conditions together with a full buoyancy condition. The effects of releasing any jettisonable devices either singly or in combination shall be taken into account.

Life Support

5. (1) One-man submersible craft and atmospheric diving suits shall be provided with the means of life support to maintain the occupant in a safe and breathable atmosphere for a minimum period of 72 hours.
- (2) One-man submersible craft and atmospheric diving suits shall -
- (a) contain adequate equipment to maintain a safe and breathable atmosphere in the operator's compartment. Where electrical power is used the equipment shall be capable of functioning whether or not the main electrical power source of the craft is operable. Where oxygen is stored in bottles, at least two bottles shall be provided. If these are fitted externally they shall be piped separately to the inside of the submersible craft;
 - (b) contain monitoring devices to test the atmosphere in the operator's compartment;
 - (c) contain valves, gauges and other equipment necessary to monitor and control the pressure within the operator's compartment;
 - (d) at all times carry emergency supplies of food and water to sustain the occupant for the period given in paragraph (1);
 - (e) contain the minimum of flammable and toxic material.

Communications

6. (1) One-man submersible craft and atmospheric diving suits shall be fitted with such equipment as is necessary for the submersible craft to communicate with its parent craft when on the surface and when submerged. Equipment using through water communication methods shall have a minimum range of twice the maximum operating depth of the craft.
- (2) Where main communications are transmitted through the umbilical, emergency through water means of communication shall also be provided.

Navigation and Position Indication

7. One-man submersible craft and atmospheric diving suits shall be -
- (a) fitted with an efficient compass;
 - (b) provided with an adequate means of visual look-out ahead of the craft;

- (c) fitted with such gauges or instruments to provide a continuous read-out of depth to the crew;
- (d) fitted with a visual means of position indication for use on the surface, including highly visible paint, and strobe light;
- (e) fitted with a sonic location device to provide position indication in an emergency when submerged.

Supporting
Equipment: Launch
and Recovery
System

8. (1) One man submersible craft and atmospheric diving suits shall be so constructed as to be capable of use in association with a lifting gear system which enables the craft or suit to be lowered into and recovered from the water with adequate safety factors for the intended service.
- (2) If wires or ropes are incorporated for hoisting or lowering any submersible craft or suit these shall have safety factors based upon the proven or calculated breaking strength of the wire or rope.
- (3) The lifting gear system shall be subjected to static and dynamic load tests.

SCHEDULE 3 (Regulation 6)

Criteria for Certification of Submersible Craft and Supporting Equipment

1. The construction of the submersible craft shall be such that the general structural strength is sufficient for the use for which it is intended.
2. Materials, fittings and fluids used in the construction of the submersible craft and its equipment shall be suitable for the intended service.
3. The sealing arrangements of all openings and penetrations shall be sufficient for use at all depths up to the collapse depth of the submersible craft.
4. The testing and inspection program shall be adequate both in frequency and standard.
5. The margin of safety from pressure damage calculated from the manufacturer's specified operating limits shall be adequate for the use for which the submersible craft is intended.
6. The capacity and design of the power and propulsion systems shall be sufficient for the use for which the submersible craft is intended.
7. The design and construction of the submersible craft and its equipment shall be such as to ensure that it has an adequate margin of buoyancy, where applicable, and stability in all probable operating and emergency conditions.
8. The life support systems and emergency arrangements, shall be as sufficient as is practicable for the type of submersible craft.
9. An adequate fire extinguishing system shall be fitted except in the case of one-man craft and atmospheric diving suits.
10. The communication systems shall be adequate for the use for which the submersible craft is intended.
11. The navigational system shall be adequate for the use for which the submersible craft is intended.
12. The launch and recovery system, where applicable, shall be adequate for the type of submersible craft used. 125
13. Diver lock-out arrangements, if applicable, shall be adequate for the use for which the submersible craft is intended.

Made in Council this 11th day of June, 1991.

MONA N. BANKS-JACKSON

Clerk of the Executive Council.