

**Standards Respecting  
Standby Vessels**

Canadian Coast Guard  
Ship Safety

TP7920E  
(REVISED OCTOBER 1988)

**STANDARDS RESPECTING  
STANDBY VESSELS**



**PART III**

<b>TRAINING</b> .....	15
Section 26    Medical .....	15
Section 27    Individual Training .....	15
Section 28    Crew Training and Organization .....	15

## FOREWORD

1. The Canada Oil and Gas Drilling Regulations state that

"(1) A suitable standby craft shall be provided for a drilling operation as a means of evacuating personnel from the drill site.

(2) The standby craft referred to in subsection (1) shall have sufficient capacity and equipment to evacuate all personnel from the drill site."

2. These Standards are issued by the Canadian Coast Guard for guidance in assessing the suitability of standby craft when such a craft is a vessel; they indicate to all concerned the procedures and standards required for the issue of a Letter of Compliance in respect of a standby vessel.

3. Any vessel may be surveyed under the requirements of these Standards as indicated in section 9; it must be emphasized that while in the standby mode the standby vessel role takes precedence over any other function the vessel is capable of performing; the installation operator must ensure that the multi-purpose roles of a vessel do not interfere with or detract in any way from the capability of the vessel and its crew to respond immediately to fulfill the functions of a standby vessel, as set out in section 5 of these Standards.

4. Any approval required under these Standards is separate and distinct from any approval required under the Canada Shipping Act except where otherwise indicated.

5. Nothing in these Standards shall be construed to imply any limitation on the master's statutory duty to assist those in distress at sea, nor to suggest that he should at any time put his vessel or crew in danger. The master's conduct shall at all times be governed by the normal practice of seamanship. He shall behave with prudence in all operations, including launching a rescue boat and handling cargo, taking into consideration the operating area and the current and anticipated weather conditions.

### Short Title

1. These Standards may be cited as the Standby Vessel Standards.

### Definitions

2. (1) In these Standards, unless expressly provided otherwise, the terms therein have the meanings defined in the following paragraphs:

"approved" means approved by the Board or approved in such a manner as the Board may accept or direct;

"approved organisation" means the St. John Ambulance Association, the Canadian Red Cross Society or any provincial workers compensation board;

"basic first aid certificate" means a certificate issued by or with the authority of an approved organization for successful completion of a first aid course of at least 8 hours duration;

"Board" means the Board of Steamship Inspection;

"complement" means the number of crew the standby vessel is certificated to carry as indicated on the Letter of Compliance;

"drilling unit" means any vessel capable of engaging in drilling operations for the exploration for or the exploitation of resources beneath the sea-bed;

"Energy Authority" means the agency responsible for the administration of legislation governing the exploration and development of oil and gas in an offshore area of the frontier lands;

"existing standby vessel" means any standby vessel that holds a Letter of Compliance issued prior to 1 January 1988;

"first aid for mariners, level II certificate" means a certificate issued by an approved organization for successful completion of a first aid course of at least 40 hours duration;

"frontier lands" means

(a) the Yukon Territory, the Northwest Territories, Sable Island, and.

(b) those submarine areas, not within a province, adjacent to the coast of Canada and extending throughout the natural prolongation of the land territory of Canada to the outer edge of the continental margin or to a distance of two hundred nautical miles from the baselines from which the breadth of the territorial sea of Canada is measured, whichever is the greater;

"Letter of Compliance" means Standby Vessel Letter of Compliance;

"rescue zone" means the area of the vessel which is designated to receive survivors on board;

"survivor" means a person evacuated from a drilling unit or from another craft on account of an emergency or rescued from the water;

"Technical Committee" means a Committee formed between an Energy Authority and the Canadian Coast Guard to

(a) provide overall technical guidance on the interpretation of these Standards; and

(b) determine the scope, manner and frequency of any assessment or inspection required by these Standards.

(2) The numerical units used in these Standards are as defined in the "Metric Practice Guide" published by the Canadian Standards Association.

(3) Unless specifically defined in a particular Standard, all other words and expressions used in these Standards have the same meaning as in the Canada Shipping Act.

PART I

GENERAL

Application

3. (1) Subject to subsection (2) these Standards apply to vessels designated to operate as standby vessels on frontier lands on or after 1 January 1988.

(2) These Standards apply to existing standby vessels to the extent considered reasonable and practical by the Technical Committee.

Functions

4. (1) The paramount function of a vessel in the standby mode is to save life; the capability of a vessel to perform tasks other than standby duty does not preclude it from receiving a Letter of Compliance provided that it complies fully with the criteria for a standby vessel.

(2) The main functions of a vessel in the standby mode are

(a) to assist in the rescue of drilling unit personnel in the event of an emergency;

(b) to accommodate all the drilling unit personnel on a short term basis in the event of a total evacuation;

(c) to provide first aid to rescued personnel;

(d) to act as a rescue radio station able to communicate with the drilling unit, other vessels and installations in the vicinity, rescue craft and coast station(s);

(e) to rescue any person from the water;

(f) to attend close to the drilling unit as necessary fully prepared to rescue persons during the following operations:

(i) helicopter landing or taking off;

(ii) personnel working overside; and

(iii) personnel working near or in the water and

(g) to assist in collision avoidance.

### Responsibility

5. The owner and master of every standby vessel shall ensure that the vessel complies with all the applicable provisions of these Standards.

### Equivalents

6. Where these Standards require that a particular fitting, material, appliance, apparatus, item of equipment or type thereof shall be fitted or carried on a standby vessel, or that any particular provision shall be made, or any procedure or arrangement shall be complied with, the Technical Committee may allow any other fitting, material, appliance, apparatus, item of equipment or type thereof to be made in the vessel, if it is satisfied by trial thereof or otherwise that such fitting, material, appliance, apparatus, item of equipment or type thereof or that any particular provision, procedure or arrangement is at least as effective as that required by these Standards.

### Submission of Plans and Data for Standby Vessels and Equipment

7. (1) Every standby vessel shall be constructed and equipped in accordance with plans and data as described in section 8.

(2) The plans and data referred to in subsection (1) shall be submitted, in quadruplicate, in legible English or French language form.

### Plans and Data Required

8. (1) The following plans and data, where applicable, shall be submitted to the Canadian Coast Guard for approval:

(a) a general arrangement plan indicating

(i) the accommodation spaces and other spaces where survivors may be held; the plan shall be accompanied by calculations confirming the required area for the number of survivors that the standby vessel will be certified to carry.

(ii) the location and marking of the rescue zone required by section 15,

(iii) the location and marking of the emergency helicopter winching area required by section 16,

(iv) the location of the communications equipment required by section 17,

(v) the location of the rescue equipment required by section 18,

- (vi) the lighting required by section 25, and
- (vii) the location of the medical equipment;
- (b) an emergency organizational plan; and
- (c) for vessels carrying deck cargo a detailed deck cargo stowage plan or manual indicating
  - (i) the areas designated for cargo,
  - (ii) the marking of designated areas,
  - (iii) the types of cargo,
  - (iv) the securing arrangements taking into account environmental factors and motion forces, and
  - (v) the handling procedures for cargo.

(2) The plans and data submitted for approval in accordance with subsection 8(1) shall be available on board the vessel.

#### Inspection

9. In addition to inspections required by the relevant Canada Shipping Act Regulations for vessel certification purposes, the Steamship Inspector shall at the first and subsequent inspections

- (a) confirm that all rescue and other related standby equipment listed in sections 13, 15, 16, 17, 18, 20, 21, 22, and 25 are on board properly stowed or fitted where required and in good working order; and
- (b) confirm that the machinery and electrical equipment that directly affects the standby duty is being maintained in an efficient and operative condition;
- (c) confirm that the crew is sufficient and efficient for rescue operations.

### Inspection Fees

10. Inspection fees shall be paid in accordance with the Board of Steamship Inspection Scale of Fees.

### Certification

11. In addition to Canada Shipping Act vessel certification, a Letter of Compliance as per appendix I is required.

PART II

OPERATIONAL REQUIREMENTS

Stability

12. (1) Subject to subsection (2) all vessels shall have on board stability data as required by the Load Line Regulations.

(2) Additional stability data may be required where deemed necessary by the Canadian Coast Guard.

Requirements Regarding Survivor Accommodation,  
Facilities and Equipment

13. (1) All survivors shall be accommodated in spaces which afford protection from the elements and shall include a treatment room for the injured and holding rooms with access to necessary sanitary facilities.

(2) An area assessment shall be carried out to ascertain the maximum number of survivors capable of being accommodated on a standby vessel; when measuring the available area 0.5m<sup>2</sup> shall be allowed per person; deck area taken up by cupboards or other permanent furnishings shall not be included; there shall be sufficient beds for at least 10 percent of the survivors, these beds may be crew beds; in calculating the available area, 0.5m<sup>2</sup> shall be allowed for each bed.

(3) The area available to survivors that may be included in the measurement shall be the crew accommodation and passageways with the exceptions of the following:

- (a) galleys;
- (b) sanitary spaces; and
- (c) all spaces necessary for the safe working of the vessel.

(4) Subsection (3) does not preclude the use of any other space provided a Steamship Inspector is satisfied that the space concerned is provided with adequate heating, ventilation, lighting and proper access which can be used at sea.

(5) The number of survivors that may be accommodated on the vessel shall be indicated on the Letter of Compliance and shall be the lesser of

- (a) the number of survivors requested by the owner; or
  - (b) as calculated by the above measurement criteria.
- (6) The treatment room shall be fitted and equipped to give first aid to the injured and shall include the following:
- (a) a hand basin with hot and cold water supply;
  - (b) a suitable bed, couch or table for treatment;
  - (c) a lockable medical chest or a cabinet;
  - (d) a movable instrument table and waste receptacle;
  - (e) an adjustable work lamp; and
  - (f) a communication system for consultation with a doctor on shore.
- (7) First aid supplies shall be provided in accordance with appendix II in addition to the vessel's first aid kit and facilities shall be readily available to accept and accommodate the medical kit listed in appendix III.
- (8) Additional equipment shall be provided as follows:
- (a) for each survivor the vessel is certified to carry as indicated on the Letter of Compliance, one woollen blend blanket and 1½ days supply of instant soup; the blankets required in appendix II may be included in this number;
  - (b) an urn or equivalent capable of providing continuously hot potable water; and
  - (c) an adequate supply of potable water.
- (9) It shall be possible to carry stretcher cases between the rescue zone and the treatment room and the emergency helicopter winching area, and between the rescue zone and the emergency helicopter winching area in a safe manner.

### Machinery and Propulsion Installations

14. The machinery of a standby vessel shall

(a) be capable of providing the manoeuvrability and positioning ability required by section 24;

(b) be capable of providing side thrust to complement the main propulsion and steering systems;

(c) be capable of being fully controlled from the navigating bridge and be readily manoeuvred by one person; and

(d) have at least two independent means of propulsion so arranged that one can manoeuvre the vessel in the event of failure of the other; equivalent arrangements for existing vessels will be considered by the Technical Committee.

### Rescue Zone

15. Every standby vessel shall be provided with a rescue zone that

(a) extends for the full breadth of the vessel;

(b) is not less than 8 metres in length;

(c) has a freeboard not exceeding 2.5 metres;

(d) is located on the weather deck as clear of obstructions as practicable, near to the accommodation and at a safe distance from the propellers;

(e) has provision to prevent any overboard discharge from interfering with the rescue operation;

(f) is unencumbered by flare at the vessel's sides at the rescue zone; fenders, if fitted, shall be faired as may be required to prevent survival craft from being upset or damaged;

(g) is clearly marked with diagonal stripes in a contrasting colour extending from the bulwarks to the waterline and having the words "RESCUE ZONE" painted prominently on the vessel's sides; and

(h) has adequate working space between the bulwark and crash barrier throughout its length.

### Emergency Helicopter Winching Area

16. A clear deck for winching operations shall be provided of ,sufficient size to contain a circular area that shall be
- (a) not less than 4.5 metres in diameter and free from all obstacles; and
  - (b) designated by a yellow marker.

### Communications Equipment

17. The standby vessel shall be equipped with the following communications equipment:
- (a) permanently installed VHF communication facilities to communicate with a helicopter;
  - (b) portable marine VHF radiotelephone;
  - (c) a fixed or portable communication system between the navigating bridge, the rescue zone and the emergency helicopter winching area; and
  - (d) a VHF/DF set capable of homing on the aeronautical emergency frequency 121.5 MHz and the International Maritime mobile distress, safety and calling frequency 156.8 MHz (channel 16). (See appendix IV for guidelines.)

### Rescue Equipment

18. The standby vessel shall carry the following rescue equipment:
- (a) in the rescue zone
    - (i) on one side a crane suitable for launching and retrieving the rescue boat and for handling the rescue basket; and
    - (ii) on the other side a powered device with a maximum SWL of 300 Kg for retrieving persons from the water;
  - (b) one approved rescue boat having self-righting capabilities with efficient means of launching, power recovery and stowage and equipped with
    - (i) an inboard or outboard motor, capable of maintaining 8 knots for 2 hours when carrying the maximum number of persons and equipment the boat is certified to carry,

- (ii) a means of towing a survival craft,
- (iii) the requirements of Regulation 47.2 of the International Convention for the Safety of Life at Sea, 1974 as amended, (See appendix V for list of equipment)
- (iv) a two way radio means of voice communication to the standby vessel, including 156.8 MHz (channel 16); and
- (v) one rescue frame to retrieve persons from the water;
- (c) inflatable life rafts such that the total together with life rafts as required by the Life Saving Equipment Regulations is sufficient in number to accommodate 300 percent of the complement;
- (d) an approved rescue basket;
- (e) one scramble net having a minimum longitudinal length of 3.5m, on each side of the vessel for use in the rescue zone; the scramble nets shall be equipped with fenders on the inward side to facilitate climbing;
- (f) four lines of 25 metres in length having a breaking strength of 1500 Kg with safety hooks and helicopter harnesses (horsecollar type) to retrieve persons from the water;
- (g) four approved lifebuoys with lines easily accessible from the rescue zone; these are in addition to lifebuoys required to be carried by the Life saving Equipment Regulations;
- (h) four rescue hooks having a minimum length of 5.5 m;
- (i) a portable ladder capable of being secured to stand off the vessel's side; and
- (j) two or more searchlights remotely controlled from the bridge suitable for searching for persons in the water;

### Multifunction Vessels

19. (1) When a vessel which performs functions other than the standby functions assumes the standby mode

(a) there shall be a clear and unequivocal understanding of when the standby mode begins and ends;

(b) the times of assuming and relinquishing the standby mode shall be recorded in the log;

(c) the medical kit listed in appendix III, if not already on board, shall be transferred to the vessel and the master shall record the transfer in the log;

(d) the designated rescue zone and emergency helicopter winching area together with the access areas required by subsection 13(9) shall be kept clear of obstructions at all times.

(2) A vessel in the standby mode may carry cargo on deck provided that the cargo is stowed and secured in accordance with the deck cargo stowage plan or manual required by paragraph 8(1)(c) and is limited to

(a) cargo in containers;

(b) cargo in cargo baskets;

(c) tubulars under 350 mm diameter, suitably bundled, and contained by stanchions or equivalent, and

(d) anchors.

(3) Notwithstanding subsection (2) no explosive or flammable cargo shall be carried on deck while a vessel is in the standby mode.

(4) The transfer of cargo and bulk materials is permitted while the vessel is in the standby mode provided that such operations do not impair the vessel's required standby response capability in any emergency.

### Operation in Waters Subject to Icing

20. Standby vessels which operate in waters where icing is a hazard shall be equipped with effective de-icing equipment for the rescue zone area, emergency helicopter winching area and rescue equipment.

### Rescue Crew Protection

21. Crews on standby vessels shall be provided with protection from personal injury and the weather during rescue operations; this may include, but is not restricted to, buoyant thermal protective worksuits and safety lines with harnesses at the rescue zone and emergency helicopter winching area.

### Towing Arrangements

22. Standby vessels shall have a minimum towing capacity of 10 tonnes bollard pull and shall be fitted with appropriate towing equipment for towing lifeboats.

### Navigating Bridge

23. The navigating bridge shall be so constructed that the master of the standby vessel has a view of the rescue zone and the emergency helicopter winching area whilst manoeuvring the vessel.

### Station Keeping Capabilities

24. (1) The size, manoeuvring and positioning abilities of the vessel shall be sufficient to perform the work tasks envisaged, with special regard to the sea and wind conditions which may be expected in the area of operation.

(2) The results of tank tests or other practical tests with the appropriate calculations that demonstrate the manoeuvring and positioning abilities of the vessel shall be submitted to the Canadian Coast Guard.

Illumination of Rescue Zone and Vicinity

25. (1) Adequate illumination shall be provided in way of the deck area and over the side in way of the rescue zone.
- (2) The illumination shall be such that it does not impair the vision of persons on the navigating bridge or of helicopter pilots.

PART III

TRAINING

Medical

26. (1) At least 75 percent of crew members as indicated on the Letter of Compliance shall possess a Basic First Aid Certificate.
- (2) Three crew members shall hold a First Aid for Mariners, Level II certificate or equivalent.
- (3) The Master and the Chief Engineer may not be counted under subsection (2).
- (4) All the above qualifications shall be maintained current.

Individual Training

27. (1) All crew members as indicated on the Letter of Compliance shall have a valid lifeboatman's certificate.
- (2) The master, the chief mate, the chief engineer and the second engineer shall have completed the MED III course; on revision of the marine emergency duties training program they shall have complete the MED course prescribed for obtaining a senior certificate of competency.
- (3) A minimum of three crew members shall have been trained in the operation of the rescue boat.
- (4) The master shall be familiar with the requirements of the operation of the rescue boat.

Crew Training and Organization

28. (1) It is the master's responsibility to train crew members and to enhance their abilities so that they are an effective rescue and aid team.
- (2) When prevailing conditions allow, the master shall exercise the crew in their rescue duties at intervals of not less than once a week and shall record the exercise in the deck log book.
- (3) The master shall assign standby vessel rescue duties to crew members in the watch and station bill or similar ship instructions.

(4) The organization of the vessel shall be such that

(a) in addition to the persons operating the rescue boat, not less than three additional persons shall be available to assist survivors in the rescue zone; and

(b) the senior first aid person and one other person may be assigned solely to the care of survivors.

APPENDIX I

STANDBY VESSEL

LETTER OF COMPLIANCE

<u>NAME OF VESSEL</u>	<u>OFFICIAL NO.</u>	<u>GROSS TONNAGE</u>	<u>PORT OF REGISTRY</u>
-----------------------	---------------------	----------------------	-------------------------

This is to certify:

1. That the above mentioned vessel has been designated as a suitable standby craft by the Canada Oil and Gas Lands Administration in accordance with the provisions of Section 18 of the Canada Oil and Gas Drilling Regulations.

2. That for standby operations the number or persons, including Master, comprising the crew is \_\_\_\_\_.

3. That the following rescue equipment is provided:

<u>Required</u>	<u>Fitted</u>	
_____ one	_____	suitably equipped rescue boat with launch/recovery system;
_____ one	_____	powered device to retrieve survivors;
_____ one	_____	inflatable liferafts capable of accommodating _____ persons;
_____ one	_____	rescue basket;
_____ two	_____	scramble nets;
_____ four-	_____	lines with safety hooks and helicopter harnesses;
_____ four	_____	lifebuoys with heaving lines;
_____ four	_____	rescue hooks;
_____ one	_____	portable ladder;
_____ two	_____	searchlights;
_____ one	_____	first aid supplies as listed in appendix II.

APPENDIX I (continued)

4. That the assessment and inspection showed that the vessel complies in all respects with the provisions of the Standards Respecting Standby Vessels (TP 7920) and is suitable for accommodating \_\_\_\_\_ survivors.

This letter is issued under the authority of the Government of Canada. It will remain in force until \_\_\_\_\_.

Issued at: \_\_\_\_\_ Issued on: \_\_\_\_\_

Signed : \_\_\_\_\_

Steamship Inspector

This letter is to be displayed and its validity is contingent upon

- (1) the validity of the vessel's Inspection Certificate,
- (2) the medical kit listed in appendix III of the Standards being on board the vessel, and
- (3) the deck cargo carried during the standby mode being in accordance with the deck cargo stowage plan or manual.

REMARKS AND/OR CONDITIONS

---

---

---

---

---

---

---

APPENDIX II

LIST OF FIRST AID SUPPLIES ON BOARD STANDBY VESSELS  
FOR USE BY PERSONS HOLDING

FIRST AID FOR MARINERS, LEVEL II CERTIFICATE

In order to ensure security and readiness, the supplies/equipment must be

- under the control of the master;
- stored in a secure area such as a designated first aid room or within a suitably modified storage compartment;
- maintained on a regular basis at no more than 6 month intervals; and
- used only in an emergency.

<u>ITEM</u>	<u>QUANTITY</u>
<u>Diagnostic Equipment</u>	
Stethoscope — combination, standard length	2
Blood Pressure machine — Aneroid type, complete with adult cuff and inflation system	2
Rectal Thermometer — low level reading, complete with case	12
Low reading Rectal Thermometer Digital Device	2
Flashlight — 2 cell, plastic	2
<u>Respiratory System</u>	
Medical Oxygen Cylinder — D size, packaged for transport	5
Oxygen Cylinder Attachment — Duplex T	5
Adapter for industrial oxygen cylinders	2
Oxygen Mask — disposal, non-breathing standard	10
Oxygen Flowmeter	10
Oxygen Tubing	10
Self Inflating Bap Resuscitator - with 100% Oxygen reservoir attachment - transparent	2

APPENDIX II (continued)

<u>ITEM</u>	<u>QUANTITY</u>
Airway — adult, transparent, anatomical profile with insert	12
Laerdal (R) Pocket Mask — standard model or equivalent	
Suction Catheter — with control vent, transparent, size 14 French complete with suction tuning	12
Portable Suction — Laerdal (P) or equivalent	2
<u>Cardiovascular System</u>	
Esmarch Bandage or equivalent	10
Tourniquet — penrose drain, 5/8" x 12"	10
<u>Gastrointestinal System</u>	
Plastic Fracture Bed Pan - adult	2
Large size Ziploc (R) Bags or equivalent	25
<u>Genitourinary System</u>	
Plastic Disposable Urine bag (Aviation type)	25
<u>Musculoskeletal System</u>	
Speedsplint (R) — short or equivalent	12
Speedsplint (R) — long	12
Cervical Collar — adult firm foam, medium size, 3"x 11" — 15"	6
Stretcher — wire basket - with flotation and hoist attachment	5
Spine Board with Straps, including head strap - folding type available for storage	2
LIT-O-Splint (R) or equivalent	10
Rescue Stretcher — Miller (R) or equivalent	2
Ace (R) Bandage — 4"	20
Triangular Bandage — muslin cotton, 4C	20
Traction Splint - Speedsplint (R) or equivalent	2

APPENDIX II (continued)

<u>ITEM</u>	<u>QUANTITY</u>
<u>Skin</u>	
Burn Dressing Kit — Roehampton (R) Emergency Squad Kit or equivalent with required saline	10
Gauze — 3" x 3" sterile - box of 100	3 boxes
Gauze — 3" Kling (R) - non-sterile, dozen per pack	2 pkgs.
Cotton Combination Roll — 8" x 20 yds.	1
Abdominal Dressing Pad — sterile - 15cm x 20cm	20
Non-allergic Adhesive — 1" roll Dermicil ® or equivalent	10
Band-aids — assorted box of 100, 7/8" x 3"	2 boxes
Paper Tape Closure Strip — Shurestrip (R) or equivalent ¼" box of 100	1 box
Elastoplast (R) or equivalent - 3" x 5 yds.	1 box
Non Stick Dressing Pad — Telfa (R) or equivalent — 3" x 4", individually wrapped - box of 100	1 box
<u>Ears, Eyes, Nose</u>	
Eyepad — sterile, single package	10
<u>Miscellaneous</u>	
Thermal Recovery Capsule (R) or equivalent	6
Hot Water Bottle — plastic 2 quart capacity	15
Woollen Blend Blanket — standard first aid, 71" x 83"	30
Tags — waterproof, durable material, 2" x 4"	100
Safety Pins — medium size	100
Pen/Pencil — - waterproof ink	2
Ring cutter — heavy duty	2
Scissors — heavy duty all purpose utility with serrated edge, 8" size	5
Scissors — standard - bandage, 5½"	
Disposable Gloves	1 box

APPENDIX III

MEDICAL KIT AVAILABLE TO THE STANDBY VESSEL

FOR USE OF THE MEDIC AND/OR PHYSICIAN

In order to ensure security and readiness

- the medical kit must be under the control of the master;
- the medical kit must be transferred to the standby vessel when the vessel assumes standby duties;
- compatibility of intravenous (IV) administration sets and solutions must be ensured; and
- drugs shall be clearly labelled in both English and French with expiration date, lot # and drug store's name.

<u>ITEM</u>	<u>QUANTITY</u>
Scalpel — #15 disposal, sterile, pre-assembled	3
Alcohol Swabs — regular size, 1 <sup>1/2</sup> " x 1 <sup>1/3</sup> ", single use	100
Artery Forceps — straight 6 <sup>1/2</sup> " Kelly (R) full sized	10
IV solution (1 litre bags). — Lactated Ringers USP	24
Solution Administration Set (Adult) 10 drops per ml, sterile single use with flow clamp	12
Disposable suture sets — with silk sutures	3
Disposable suture sets — with catgut sutures	3
IV Catheters — JELCO (R) catheter placement unit	
— 20G x 1 <sup>3/4</sup> " or equivalent	12
— 16G x 1 <sup>3/4</sup> " or equivalent	12
Morphine Sulphate - 10 mg - ampules	20
Dimenhydrinate - 50 mg - ampules	30
— suppositories	24
— tablets	100

APPENDIX III (continued)

<u>ITEM</u>	<u>QUANTITY</u>
Transderm V Systems (R) or equivalent	50
Xylocaine 1% — with epinephrine - 10 ml	1-
— without epinephrine - 10 ml	1.
Penicillin G Sodium — IV - 1,000 I.U. with sterile water	12
Penicillin V — 500,000 I.U. tabs	50
ANAKIT (R) or equivalent - Adrenalin 1/1000 — prepackaged 1 cc syringe	6
Diazepam — 10 mg - ampules	5
Chloramphenicol — IV - 1 gram	50
Disposable Catheter Set — complete with Foley Catheter #14 and drainage collection	6
Syringes — 3 cc, complete with needle #20 x 1 <sup>1/2</sup> "	20

APPENDIX IV

VHF/W GUIDELINES

The DF system should have a sensitivity of 2 microvolts/m or better.

The DF equipment should be capable of taking direction finding bearings on those frequencies without ambiguity of sense within an arc of 30 degrees on either side of the bow.

As far as practicable, the direction-finding equipment should be so located that as little interference as possible will be caused to efficient determination of bearings from mechanical or other noise. Signals on channels other than the tuned channel should be rejected by at least 70 dB.

As far as practicable, the VHF/DF antenna should be erected in such a manner that the efficient determination of bearings will be hindered as little as possible by the close proximity of other antennae, derricks, wire halyards or other large metal objects. It is recommended the antenna extend a minimum of 2 metres above other structures for optimum performance.

APPENDIX V

LIST OF EQUIPMENT FOR RESCUE BOATS

Regulation 47.2 of Section V of Part C of Chapter III of the International Convention for the Safety of Life at Sea, 1974, as amended reads as follows:

"2 Rescue boat equipment

2.1 All items of rescue boat equipment, with the exception of boat-hooks which shall be kept free for fending off purposes, shall be secured within the rescue boat by lashings, storage in lockers or compartments, storage in brackets or similar mounting arrangements, or other suitable means. The equipment shall be secured in such a manner as not to interfere with any launching or recovery procedures. All items of rescue boat equipment shall be as small and of as little mass as possible and shall be packed in suitable and compact form.

2.2 The normal equipment of every rescue boat shall consist of:

.1 sufficient buoyant oars or paddles to make headway in calm seas. Thole pins, crutches or equivalent arrangements shall be provided for each oar. Thole pins or crutches shall be attached to the boat by lanyards or chains;

.2 a buoyant bailer;

.3 a binnacle containing an efficient compass which is luminous or provided with suitable means of illumination;

.4 a sea-anchor and tripping line with a hawser of adequate strength not less than 10 m in length;

.5 a painter of sufficient length and strength, attached to the release device complying with the requirements of regulation 41.7.7 and placed at the forward end of the rescue boat;

.6 one buoyant line, not less than 50 m in length, of sufficient strength to tow a liferaft as required by paragraph 1.6;

.7 one waterproof electric torch suitable for Morse signalling, together with one spare set of batteries and one spare bulb in a waterproof container;

.8 one whistle or equivalent sound signal;

APPENDIX V (cont'd)

- .9 a first-aid outfit in a waterproof case capable of being closed tightly after use;
- .10 two buoyant rescue quoits, attached to not less than 30 m of buoyant line;
- .11 a searchlight capable of effectively illuminating a light-coloured object at night having a width of 18 m at a distance of 180 m for a total period of 6 h and of working for at least 3 h continuously;
- .12 an efficient radar reflector;
- .13 thermal protective aids complying with the requirements of regulation 34 sufficient for 10% of the number of persons the rescue boat is permitted to accommodate or two, whichever is the greater.

2.3 In addition to the equipment required by paragraph 2.2, the normal equipment of every rigid rescue boat shall include:

- .1 a boat-hook;
- .2 bucket;
- .3 a knife or hatchet.

2.4 In addition to the equipment required by paragraph 2.2 the normal equipment of every inflated rescue boat shall consist of:

- .1 a buoyant safety knife;
- .2 two sponges;
- .3 an efficient manually operated bellows or pump;
- .4 a repair kit in a suitable container for repairing punctures;
- .5 a safety boat-hook."

Regulation 41.7.7 reads as follows:

APPENDIX V (cont'd)

“7.7 Every lifeboat shall be fitted with a release device to enable the forward painter to be released when under tension`

Regulation 34 reads as follows:

“ Regulation 34

Thermal protective aids

1. A thermal protective aid shall be made of waterproof material having a thermal conductivity of not more than 0.25 W/(m.K) and shall be so constructed that, when used to enclose a person, it shall reduce both the convective and evaporative heat loss from the wearer's body.
2. The thermal protective aid shall:
  - .1 cover the whole body of a person wearing a lifejacket with the exception of the face. Hands shall also be covered unless permanently attached gloves are provided;
  - .2 be capable of being unpacked and easily donned without assistance in a survival craft or rescue boat;
  - .3 permit the wearer to remove it in the water in not more than 2 minutes, if it impairs ability to swim.
3. The thermal protective aid shall function properly throughout an air temperature range -30°C + 20°C.”