

CHAPTER 20

IMMERSION SUITS, ANTI-EXPOSURE SUITS AND THERMAL PROTECTIVE AIDS

20.1 Immersion suits and anti-exposure suits

20.1.1 General

20.1.1.1 The statutory requirements for immersion suits and anti-exposure suits are contained in Schedule 10, Parts 1 and 2 of MSN 1676(M) as appropriate.

20.1.1.2 Immersion suits and anti-exposure suits should be prototype tested as required by Chapter 11, Part I, Section 1 of Volume 2 - Testing of Life-Saving Appliances.

20.1.2 Conditions of acceptance

No immersion suit or anti-exposure suit should be passed as part of the statutory equipment of a ship unless it:

- is of an approved type;
- complies in all respects with the accepted specifications;
- is in good condition and fit for the service intended; and
- is indelibly marked as per the Regulations.

20.1.3 Material

An immersion suit or anti-exposure suit manufacturer should ensure that all materials used are of the same standard as the samples which have been tested and accepted. He should obtain a certificate of conformity from materials manufacturers for each batch of materials to be used in the immersion suit or anti-exposure suit manufacture. The certificates should be kept available for inspection.

20.1.4 Testing for acceptance

Application for testing of immersion suits or anti-exposure suits should be to the Nominated or Notified Body. On receipt of a sample immersion or anti-exposure suit arrangements will be made for tests to be carried out at an mutually convenient location in the presence of the manufacturer or his representative and a surveyor. When the tests are completed a full report together with a sample immersion suit or anti-exposure suit and specification should be submitted to the Nominated or

Notified Body for consideration. If the design and test results are accepted makers will be asked to supply copies of the materials schedule and illustrated directions for donning and adjustment.

20.1.5 Donning instructions

20.1.5.1 Manufacturers should ensure that illustrated instructions for donning, adjustment and maintenance of immersion suits or anti-exposure suits are supplied with each suit. English should be used in every case but repetition in other languages is recommended where crews using these languages are likely to use such equipment.

20.1.5.2 Instructions suitably protected from damage should be available for display and for inclusion into training and maintenance manuals see Chapter 21.

20.1.6 Production tests

Production tests and inspections of manufacturers premises by MCA surveyors should be carried out as described in Chapter 11, Part I, Section 2 of Volume 2 - Testing of Life-Saving Appliances.

20.1.7 Repair of immersion suits and anti-exposure suits

Repairs of immersion suits or anti-exposure suits should only be carried out by the manufacturers or their authorised agents.

20.1.8 Stowage of immersion suits and anti-exposure suits

The stowage position of immersion suits and anti-exposure suits must be governed by the circumstances which require their carriage. That is, in crew cabins where suits are required for every crew member, or a place where they are readily available for collection by rescue boat crews. Care should be taken to ensure that conditions in the stowage position chosen will not adversely affect the immersion suit or anti-exposure suit.

20.1.9 Immersion suits and lifejackets

The performance specifications for immersion suits and lifejackets are incompatible. This means that, to date, no approved immersion suit meets the performance required of a lifejacket. Immersion suits cannot therefore be considered to meet the statutory requirements to supply lifejackets.

20.2 Thermal protective aids

20.2.1 General

20.2.1.1 The statutory requirements for thermal protective aids are contained in Schedule 10, Part 3 of MSN 1676(M).

20.2.1.2 Thermal protective aids should be prototype tested as required by Chapter 11, Part 2, Section 1 of Volume 2 - Testing of Life-Saving Appliances.

20.2.2 Condition of acceptance

No thermal protective aid should be passed as part of statutory equipment of a ship unless it:

- is of an approved type;
- complies in all respects with the accepted specifications;
- is in good condition and fit for the service intended; and
- is indelibly marked as per the Regulations.

20.2.3 Material

A thermal protective aid manufacturer should ensure that all materials used are of the same standard as the samples which have been tested and accepted. He should obtain a certificate of conformity from materials manufacturer's for each batch to be used in the protective aid manufacture. The certificates should be kept available for inspection.

20.2.4 Testing for acceptance

Applications for testing of thermal protective aids should be made to the Nominated or Notified Body. On receipt of a sample protective aid arrangements will be made for tests to be carried out at a mutually agreed location in the presence of the manufacturer, or his representative, and a surveyor. When tests are completed a full report with a sample protective aid should be submitted to the Nominated or Notified Body for consideration. If the design and test results are accepted manufacturers will be asked to supply copies of the specification and illustrated directions for donning the thermal protective aid.

20.2.5 Donning instructions

20.2.5.1 Manufacturers should provide illustrated instructions for donning and discarding thermal protective aids with each aid. English should be used in every case but repetition in other languages is recommended where crews and/or passengers using those languages may use such equipment.

20.2.5.2 Instructions, suitably protected from damage, should be available for display and for inclusion into training and maintenance manuals see Chapter 21.

20.2.6 Production tests

Production tests and inspections of manufacturers premises by MCA surveyors should be carried out as described in Chapter 11, Part II, Section 2 of Volume 2 - Testing of Life-Saving Appliances.

20.2.7 Repair of thermal protective aids

Repair of this equipment is not generally economically viable - it should be replaced by new equipment whenever necessary.