

# CHAPTER 15

## LIFEJACKETS AND ATTACHMENTS

### 15.1 General

15.1.1 The statutory requirements for inherently buoyant lifejackets are contained in Schedule 9, Parts 1, 2 and 3 of MSN 1676(M).

15.1.2 The statutory requirements for inflatable lifejackets are contained in Schedule 9, Part 4 of MSN 1676(M).

15.1.3 Inherently buoyant lifejackets should be prototype tested as required by Chapter 10, Part I, Section 1 and inflatable lifejackets should be prototype tested as required by Chapter 10, Part II, Section 1 of Volume 2 - Testing of Life-Saving Appliances.

### 15.2 Conditions of acceptance of lifejackets

15.2.1 No lifejacket should be passed as part of the statutory equipment of a ship unless it:-

15.2.1.1 is of an accepted type;

15.2.1.2 complies in all respects with the accepted specification;

15.2.1.3 is in good condition and fit for the service intended; and

15.2.1.4 is indelibly marked as required by paragraph 4 Schedule 9, Part 1 of MSN 1676(M).

15.2.2 Inflatable Civil Aviation Authority lifejackets and CEN Standard 100N buoyancy aids, modified to meet the requirements of the 1999 Regulations will be issued with a Nominated Body Certificate of Inspection and Tests to indicate compliance with the Regulations.

15.2.3 The use of separate lifejackets for persons weighing 32 kg or more, and for persons under 32 kg in weight, is provided for in the Regulations.

15.2.4 Not more than two types of '32 kg or more' lifejackets nor more than two types of 'under 32 kg' lifejackets should be allowed on any ship. Any two lifejackets of '32 kg or more' or any two lifejackets of 'under 32 kg' respectively, may be regarded as being of the same type provided that there are no differences between the donning instructions for adjustment referred to in paragraph 15.5.

### **15.3 Material**

A lifejacket 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 the materials manufacturer to show that each batch of materials used in the production of lifejackets is of the correct standard. The certificate should be readily available for inspection and retained for a period of at least 5 years.

### **15.4 Proprietary lifejackets**

Application for test of proprietary lifejackets should be made to the Nominated or Notified Body. On receipt of a sample lifejacket, arrangements will be made for tests to be carried out at a mutually agreed location in the presence of the makers or their representative and a surveyor. When the tests are completed a full report together with the sample lifejacket and specification should be submitted to the Nominated or Notified Body for consideration. If the design and test results are accepted, the makers will be asked to supply copies of the specification and illustrated directions for donning and adjustment.

### **15.5 Donning instructions**

15.5.1 Lifejacket manufacturers should provide illustrated directions for donning and adjustment and ensure as far as possible that, with orders for quantities of lifejackets up to 20, one copy is supplied with each lifejacket. English should be used in every case but repetition in other languages is recommended where passengers using those languages are likely to be carried.

15.5.2 Copies of the instructions suitably protected from damage should be displayed conspicuously in both passenger and crew accommodation, in all ships required by the Regulations to carry approved standard lifejackets or their equivalent, so that they are readily available to all persons on board ship at all times.

### **15.6 Production tests**

Production tests and inspection of the manufacturers' premises by the Nominated or Notified Body's surveyors should be carried out as described in Chapter 10, Part I, Section 1 and Chapter 10, Part II, Section 1 as appropriate of Volume 2 - Testing of Life-Saving Appliances.

### **15.7 Re-covering and repairing of lifejackets**

The re-covering or repairing of lifejackets should be carried out only by lifejacket manufacturers whose products are acceptable to the Nominated or Notified Body. Lifejackets that have been re-covered should be dealt with in the same way as new lifejackets, while repaired lifejackets should be stamped 'REPAIRED BY...' and dated.

## 15.8 Cleaning of lifejackets

The cleaning of lifejackets should be carried out only by authorised contractors in accordance with a system accepted by the Nominated or Notified Body. Each batch should be inspected by a surveyor after the cleaning process has been completed.

## 15.9 Stowage of lifejackets

### 15.9.1 General

The statutory requirements for the stowage of lifejackets on ships are in Regulations 29(4), 57 and 78 of the Merchant Shipping (Life-Saving Appliances for Ships other Than Ships of Classes III to VI(A)) Regulations 1999 and in Regulation 18 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999.

### 15.9.2 Stowage

15.9.2.1 On Class I ships the recommended stowage position for lifejackets for both passengers and crew is in their respective cabins. Arrangements should always be made to ensure that child lifejackets are provided in cabins where small children are berthed.

15.9.2.2 On Class II and II(A) passenger ships with little or no passenger cabin accommodation, lifejackets for passengers should be stowed in or immediately adjacent to the assembly stations.

15.9.2.3 On Class II and II(A) passenger ships engaged on day and night sailings and with significant passenger cabin accommodation it is recommended that sufficient lifejackets be provided at the assembly stations for all the passengers and in addition sufficient lifejackets in the cabins for all the passengers for whom there is cabin accommodation. Alternatively lifejackets should be provided at the assembly stations only.

15.9.2.4 The additional 5 per cent lifejackets required to be provided on Classes I, II and IIA passenger ships should be stowed in lockers on deck preferably at the embarkation stations. Crew lifejackets should be stowed in cabins, and additional lifejackets for crew use should be stowed on the bridge, engine room control room and in any working spaces where those on duty in these spaces would be unable to return to their cabins to collect their lifejackets in the event of an emergency.

15.9.2.5 Stowage of lifejackets on passenger ships of Classes III to VI(A) should be to the surveyor's satisfaction.

15.9.2.6 On other ships, lifejackets for crew members should be stowed in their cabins or sleeping spaces, but other arrangements may be agreed by the surveyor where conditions so require. Additional lifejackets should be supplied and stowed in accordance with statutory requirements.

### 15.9.3 Lifejacket lockers

15.9.3.1 On passenger ships of Classes II and II(A) whose keels are laid after February 1988 lifejackets which are stowed in or adjacent to assembly stations should be so stowed that for each assembly station there is at least one locker on each side of the ship. In a large assembly station there should be at least two lockers at each end of the assembly station. This disposition of lockers ensures that except in the most unusual circumstances there should always be some of the lockers accessible at each assembly station. Dividing the stowage up in this way also permits a more rapid distribution of the lifejackets. On passenger ships of Classes II and II(A) whose keels were laid before February 1988 the foregoing disposition of lifejacket lockers should be complied with as far as is reasonably practical.

15.9.3.2 If lockers are used on passenger ships of Classes III to VI(A) they should be sited to facilitate easy and quick access to the lifejackets.

15.9.3.3 Lifejackets for children should either be stowed in separate lockers or in lockers which have been internally subdivided.

15.9.3.4 Lockers should be clearly marked to indicate their contents, i.e. that they contain adult or child lifejackets, or both, and the number of each type as appropriate. A lifejacket donning notice should be posted on the exterior and interior of the door unless a notice posted close to the door is not obscured when the door is open. Each locker should be identified by a number.

15.9.3.5 The securing arrangements on lifejacket locker doors should combine ease of access in an emergency, deterrence to unauthorised persons and some protection from inadvertent opening due to heavy rolling or an excessive list. Where doors are locked, keys should be readily accessible in break glass boxes. Alternatively, the use of Customs seal wire, which should deter unauthorised opening of the locker, could be used to retain the door in its closed position and still allow it to be opened readily when required. It will also serve to indicate whether the door has been opened by unauthorised persons.

15.9.3.6 Where practicable, vertically hinged doors should open in a forward or aft direction rather than athwartships. All lifejacket locker doors should be provided with means for holding them in the open position when lifejackets are being distributed.

15.9.3.7 Lockers should incorporate adequate ventilation and drainage facilities and lockers stowed on deck should be so located and designed to prevent the ingress of sea or rain water.

## **15.10 Identification of child lifejackets**

Existing lifejackets which are marked "For persons of less than 32 kg" should be also marked with the word CHILD in letters at least 50 mm high. The manufacturer should be consulted to ensure that any ink or adhesive used is compatible with the lifejacket cover material or outer skin as appropriate.

## **15.11 Lifejacket lights**

15.11.1 The statutory requirements for fitting lifejacket lights are contained in Regulations 7 - 21, 42 - 48 and 63 - 69 of the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 and Regulations 5 - 9 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)), and these lights should comply with Schedule 9, Part 1, paragraph 5 of MSN 1676(M).

15.11.2 The usefulness of lifejacket lights has long been recognised in search and rescue situations when it has proved difficult during the hours of darkness to locate survivors who have been unable to make use of a survival craft.

## **15.12 British Standard BS EN 394 and 396: 1994 (CEN 150N Standard) lifejackets**

These are acceptable for use on Classes V(C), VI and VI(A) passenger ships.

## **15.13 Inflatable Civil Aviation Authority lifejackets**

These should comply with Schedule 9, Part 5 of MSN 1676(M) and Regulation 22 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999.

## **15.14 Buoyancy aids**

These should comply with Schedule 9, Part 6, of MSN 1676(M) and Regulation 22 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999.

## **15.15 Lifejackets on passenger ships of Classes I, II and II(A)**

15.15.1 Passenger ships of Classes I, II and II(A), regulations 42 and 43 of the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999, require the number of child lifejackets to be at least 10% of the number of passengers the ship is certified to carry. Passenger ships of Classes I, II and II(A), built before the 1st of July 1986, the proportion of adult to child lifejackets can continue to be left to the discretion of the Owner who from experience should know what proportion is appropriate for the particular trade on which the vessel is engaged.

15.15.2 The minimum number of adult lifejackets required on passenger ships of Classes I, II and II(A), post 1986 will be equal to 105% of the total number of persons the ship is certified to carry, plus, some additional lifejackets for persons on watch and for use of remotely located survival craft stations. The minimum total number of lifejackets on passenger ships of Classes I, II and II(A), built before 1 July 1986 will be equal to the number of persons the ship is certified to carry plus 5% of that number. The additional 5% will be for persons of 32 kg and over.

### **15.16 Lifejackets on ships issued with a Cargo Ship Safety Equipment Certificate**

Ships issued with a Cargo Ship Safety Equipment Certificate are required to be provided with lifejackets for all on board, plus, additional lifejackets, regulation 42(11) of the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 refers. Ships to which regulation 10(15) of the Merchant Shipping (Life-Saving Appliances for Ships Other Than Ships of Classes III to VI(A)) Regulations 1999 also refers.

### **15.17 Lifejackets and buoyancy aids on passenger ships of Classes IV, V, VI and VI(A)**

15.17.1 The 1999 Regulations permit those ships in Classes V(c) and VI to carry either lifejackets or buoyancy aids. In the case of lifejackets these may be of the DOT/SOLAS, BS EN 394 and 396:1994 or CAA type, buoyancy aids being to BS EN 395:1994 (CEN 100N Standard). It is noted that some of these classes of ships are also certificated to operate as either Class IV or Class VI(A) ships and for these classes the Regulations require:

15.17.1.1 Class IV ships to carry only DOT/SOLAS type lifejackets, and

15.17.1.2 Class VI(A) ships to carry either DOT/SOLAS type or BS EN 394 and 396:1994 type lifejackets.

15.17.2 It may be commercially attractive to shipowners to provide a ship with the type of lifejackets stated above for the permitted passenger and crew numbers when operating the ship as Class IV or Class VI(A) and to provide the additional number of lifejackets/buoyancy aids, required for the additional number of passengers associated with Class V or VI operations, in the form of buoyancy aids or CAA type lifejackets. The MCA has no objection to this provided these additional buoyancy aids or CAA lifejackets are only available on board the ship when she is operating as a Class V or VI ship i.e. with the greater passenger numbers so permitted by her passenger certificate.

15.17.3 The advice given in paragraph 15.2.4 regarding limiting the types of lifejacket (buoyancy aids) is still relevant and should be adhered to.

15.17.4 Surveyors are reminded that the MCA have approved buoyancy aids for persons of body weight range - 18 kg and upwards. These are suitable for children and adults (as are CAA lifejackets) and their provision obviates the need to provide additional lifejackets for children when the ships operate as a Class V or VI. Additional "child" lifejackets will, however, need to be provided for the ship when operating as a Class IV or VI(A) ship.

### **15.18 Lifejackets on small passenger ships of Class V operating on inland lakes in the United Kingdom**

15.18.1 Passenger ships of Class V, operating on inland lakes in the United Kingdom, must carry the scale of Life-Saving Appliances as per the requirements of Regulation 7 of the Merchant Shipping (Life-Saving Appliances for Passenger Ships of Classes III to VI(A)) Regulations 1999.

15.18.2 Existing Class V passenger ships operating on inland lakes in the United Kingdom have been exempted from compliance with Regulation 7(4) of the 1992 Regulations subject to conditions listed in the General Exemption Order issued on 19 October 1993. (See Appendix K.)

### **15.19 Servicing of inflatable lifejackets**

Shipowners and masters should be reminded of the need to have inflatable lifejackets regularly serviced at an approved service station. See Marine Guidance Note MGN62.

### **15.20 Compatibility of lifejackets with lifeboats**

15.20.1 When totally enclosed lifeboats are fitted on board ships, surveyors should ascertain that the lifejackets supplied are compatible with the lifeboat seating arrangements. This is very important with regard to head protection and lengths of the restraining straps of the four-point harness fitted.

15.20.2 When free-fall lifeboats are fitted on board ships only inflatable type lifejackets are acceptable.