1. Applicability

All Australian registered aircraft.

2. Purpose

To clarify the standards approved by CASA for life jackets and flotation devices as required for use by Civil Aviation Order (CAO) 20.11.

3. Background

Under regulation 252 of the Civil Aviation Regulations (CAR), CASA may give directions with respect to the provision in Australian aircraft of such emergency systems and equipment, and such life-saving equipment, as CASA considers necessary to safeguard the aircraft and persons on board the aircraft.

As such, CAO 20.11 requires:

5.1.6 Life jackets must:

(a) comply with a standard approved by CASA; and
(b) be of an inflatable type; and
(c) except for an infant life jacket - have a whistle fitted in a suitable stowage.

This Airworthiness Bulletin notifies the standards currently approved at the date of issue of this Airworthiness Bulletin.

4. Approved Standards

Life jacket standards approved by CASA are:

(a) CAO 103.13 ‘Equipment Standards - Life Jackets’, or
(b) Australian Technical Standards Order ATSO-1C13 ‘Life Preservers’, or
(c) Federal Aviation Administration Technical Standard Order TSO-C13f ‘Life Preservers’, or
(d) Federal Aviation Administration Technical Standard Order TSO-C13e ‘Life Preservers’, or
(e) Federal Aviation Administration Technical Standard Order TSO-C13d ‘Life Preservers’, if the Life Jacket is additionally fitted with a FAA TSO-C85 Survivor light, or
(f) a specification approved by the Civil Aviation Authority of the United Kingdom;

In addition, CAO 20.11 also requires that the life jacket:

(i) be an inflatable type; and

(ii) except for an infant life jacket - have a whistle fitted in a suitable stowage.

Flotation device standards approved by CASA are:

(a) Federal Aviation Administration Technical Standard Order TSO-C72c ‘Individual Flotation Devices’, or

(b) Federal Aviation Administration Technical Standard Order TSO-C72b ‘Individual Flotation Devices’;

Note that whilst CAO 103.13, TSO-C13e, TSO-C13d, and TSO-C72b are now cancelled, devices approved to these standards are still acceptable for use.

This guidance does not apply to Life jackets or Flotation devices for which an aircraft operator has an Exemption under Subpart 11.F of CASR.

5. Unapproved Standards

CASA regularly receives enquires regarding whether a particular brand or model of life jacket is approved. Most are life jackets seen in boating and marine retail outlets, however, some are sold in pilot shops.

Whilst there are some good marine life jacket standards, they are aimed at different scenarios and can have features that are not acceptable for the aviation environment. Additionally, a life jacket is considered to be an aircraft component due to its ability to affect occupant safety, and thus needs to be manufactured to an approved quality/traceability system and have a defined maintenance program to ensure ongoing airworthiness.

Many non-aviation standards are not acceptable because they don’t meet buoyancy, flammability, marking and naïve use requirements, and also allow for inappropriate features.

With few exceptions, life jackets made to the following standards are not acceptable for use on aircraft:

(a) Australian Standard AS2259 General Requirements for Buoyancy Aids

(b) Australian Standard AS1512 Personal Flotation Devices -Type 1

(c) Australian Standard AS1499 Personal Flotation Devices -Type 2

(d) Australian Standard AS2260 Personal Flotation Devices -Type 3
(e) Australian Standard AS4758 Personal Flotation Devices  
(f) ISO 12402 Personal Flotation Devices  
(g) International Convention for the Safety of Life at Sea (SOLAS)

CASA may approve a life jacket or flotation device based on equivalence to an approved standard. Some life jackets made to ISO 12402 or SOLAS standards may be determined to be of an equivalent standard. However, an individual exemption would be limited to special purposes on a case-by-case basis and is not likely to be cost effective unless conducted for equipment on a fleet of aircraft. Please contact CASA if you want to use life jackets or flotation devices designed and manufactured to a standard other than those of an approved standard.

6. Certain operations under CAO Part 95

General exemptions have been given to classes of aircraft against certain provisions of the CAR. For Orders that contain exemptions against regulations 207 and 252 of the CAR, life jackets are not required to be carried, or if they are, are not required to meet a standard approved by CASA. At time of publication, the following Orders contain exemptions against regulations 207 and 252 of the CAR:

- CAO 95.8 – Hang-giders  
- CAO 95.10 – Certain Ultralight and Weight Shift Aeroplanes  
- CAO 95.12 – Gyroplanes  
- CAO 95.12.1 – Light Sport Gyroplanes  
- CAO 95.32 – Weight Shift Aeroplanes and Powered Parachutes  
- CAO 95.55 – Ultralight Aeroplanes

However, CASA recommends for these aircraft that for flight beyond gliding distance to a safe landing place on land, an appropriately sized life jacket should be carried for each person onboard. Given many of these types of aircraft fly at lower altitudes or have open cockpits; operators flying aircraft under CAO 95 should consider wearing constant wear type life jackets for over water operations.

Although they are not required under these exemptions, if choosing a life jacket for those operations, CASA recommends one made to a CASA approved standard. If you would prefer to choose a life jacket made to a Marine Standard, CASA recommends one meeting ISO 12402 (SOLAS or Level 150) or AS4758 (SOLAS or Level 150) as these are standards designed for use in offshore waters. Any life jacket should be a manually activated inflatable type with a backup oral inflation means, and have location aids (reflective stripes, whistle and ideally a light).
The life jacket should not be inherently buoyant (foam or hybrid type) nor should it have an automatic inflation means (immersion sensor). In a flooding aircraft cabin, these types of life jackets can pin a person inside the sinking vehicle. Always inflate a life jacket once clear of the aircraft.

7. **Enquiries**

Enquiries with regard to the content of this Airworthiness Bulletin should be made via the direct link e-mail address:

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Or in writing, to:

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