

Subject: **Emergency equipment**

Date: 25 December 1997

AC43-6

Author: **David Pattie**

Authorised: Peter Blackler
Assistant Director
Rules & Standards

1. GENERAL. Civil Aviation Authority advisory circulars (AC) contain information about standards, practices and procedures that the Authority has found to be acceptable for compliance with the associated rule.

Consideration will be given to other methods of compliance which may be presented to the Authority.

When new standards, practices or procedures are found to be acceptable they will be added to the appropriate advisory circular.

In addressing a subject the use of the imperative *must* or *is to*, terms not normally welcome in an AC, is because it is associated with mandatory provisions of the Rule itself.

Each reference to a number in this AC, such as 43.15, is a reference to a specific rule within Part 43.

2. PURPOSE. This Advisory Circular (AC) provides methods acceptable to the Authority for showing compliance with the general maintenance rules set out in Part 43.

3. CANCELLATION. The data in this advisory circular supersedes that information in AC43.6 of AC43-1A. AC43-1A – Aircraft Maintenance is hereby cancelled.

4. FOCUS. This material is intended for persons responsible for maintenance on New Zealand registered aircraft. It provides acceptable techniques, methods, and practices in relation to the maintenance of emergency equipment.

5. RELATED CAR. This AC relates specifically to Part 43 - General Maintenance Rules.

Published by
Civil Aviation Authority
PO Box 31441
Lower Hutt
ISBN 0-478-10912-1
©New Zealand Government
Printed by:

Introduction

The objective of Part 43 is to establish, for all aircraft, the minimum standard of maintenance considered necessary to ensure the continued validity of their Airworthiness Certificate. The rule will also ensure that all aircraft are maintained to a standard that assures safe operation.

This is achieved by prescribing—

- the minimum standard of maintenance required for aircraft
- the minimum standards for the performance of maintenance
- the persons who may certify maintenance
- the manner in which maintenance is to be recorded and certified

This advisory circular provides acceptable methods, techniques, and practices for the maintenance of emergency equipment.

Table of Contents

General	2	
First aid kits.....	2	2
Flotation equipment.....	2	
Portable fire extinguishers.....	3	

General

This Advisory Circular, which is to be read in conjunction with Part 43, prescribes particular maintenance requirements for—

- safety equipment
- flotation equipment
- portable fire extinguishers

Except as otherwise specified in an approved maintenance programme or operator's maintenance manual, safety equipment should be maintained in accordance with appropriate aircraft manufacturer's instructions or, in the absence of these, in accordance with the equipment manufacturer's instructions.

All emergency equipment should be examined for general condition, including examination for corrosion and other deterioration.

Maintenance performed on safety equipment should be recorded in the logbook of the aircraft in which the equipment is installed. For equipment which is not regularly carried on the same aircraft, either—

- maintenance may be recorded in a separate maintenance record
- the date of the last test or check required by the maintenance programme should be indelibly marked—
 - on each item of equipment
 - on a CAA Form Two attached to the equipment
 - for a fire extinguisher, on the attached metal tag

First aid kits

First aid kits are required to be fitted to all air transport aircraft and any aircraft with greater than 10 passenger seats.

First aid kit contents should be checked against the required scale of items—

- every 12 months
- when reported as used by the crew
- when a component item has reached its expiry date

First aid kit contents should be defined by the operator of the aircraft and included as a list in the kit, taking into account—

- operating environment
- routes to be flown
- types of operation carried out
- number of passengers
- likely medical requirements

The inspection of the kit should confirm—

- the contents against the operators requirements
- the contents against each particular item requirements such as expiry dates
- the security of the kit in the aircraft
- the location and placarding of the kit and the aircraft such that the kit is located to minimise—
 - damage to the kit as a result of an accident
 - injury to the aircraft occupants if the kit becomes detached
 - contamination during normal operations

Flotation equipment

Life preservers are required on all flights that cannot maintain 1000 feet altitude more than gliding distance from shore. To be effective when used these items should be regularly serviced.

The CAA is examining the current marine standards for life preservers, including constant wear jackets, with a view to accepting marine jackets to appropriate specifications for aviation use.

Unless otherwise detailed in manufacturer's procedures all flotation equipment should be tested as detailed in this advisory circular.

Inflation tests

Inflation tests should be performed at intervals not exceeding 12 months. Tests should require the inflation of each chamber and a check for the rate of leakage from that chamber.

Test pressure

When an equipment manufacturer does not specify a test pressure, inflatable safety equipment should be tested for leaks at 14 kPa.

Chambers

Floatation equipment should be checked for general condition of the material and seams.

Fitted equipment

All items fitted to the equipment should be assessed for their serviceability, including—

- strobes, for operation and battery life
- whistles, for operation
- lifting handles, for security and condition of stitching
- reflecting tape, for security and clarity
- inflation valves, for operation
- CO₂ cylinders, for weight and valve operation

Packaging

The packaging of the equipment should be checked to ensure that it provides the equipment adequate protection to prevent in service damage.

Flotation cushions

Flotation cushions should be tested in accordance with the manufacturer's instructions at intervals not exceeding six months.

Portable fire extinguishers

Unless otherwise approved, each portable fire extinguisher should be weighed at intervals not exceeding 12 months. The weight should not be less than that specified by the manufacturer for a fully charged extinguisher.