



## ON-BOARD MEDICAL SUPPLIES

### SECTION 1 GENERAL

#### 1.1 PURPOSE

The purpose of this advisory circular is to provide information regarding the medical supplies that should be carried on-board the aircraft during flight operations.

#### 1.2 STATUS OF THIS ADVISORY CIRCULAR

This AC is an original issuance.

#### 1.3 BACKGROUND

- A. First aid kits have long been a requirement on all types of transportation to cope with the injuries that potentially may occur
- B. The requirement for universal precaution kits has become necessary due to the increased likelihood of blood-borne pathogens and other types of contagion which be experienced.
- C. The medical kit has become a requirement in situations where there is a large number of passengers and the likelihood of available and trained medical personnel to use and administer the items contained in the kit.

#### 1.4 APPLICABILITY

This advisory circular is applicable to the operation of all aircraft, the operators and crew.

#### 1.5 RELATED REGULATIONS

The following regulations are directly applicable to the guidance contained in this advisory circular—

- VAR Part 6, Instruments & Equipment
- VAR Part 10, Operations of Aircraft

#### 1.6 RELATED READING MATERIAL

- A. International Civil Aviation Organization (ICAO)

This advisory circular and copies of these regulations may be obtained from the Flight Safety Standards Department.

- Advisory Circulars are intended to provide advice and guidance to illustrate a means, but not necessarily the only means, of complying with the Regulations, or to explain certain regulatory requirements by providing informative, interpretative and explanatory material.
- Where an AC is referred to in a 'Note' below the regulation, the AC remains as guidance material,
- ACs should always be read in conjunction with the referenced regulations.

- Annex 6, Part 1, International Operations of Commercial Air Transport

## 1.7 ACRONYMS

The following acronyms and abbreviations are used in this advisory circular—

- 1) **AC** – Advisory Circular
- 2) **AED** – Automated External Defibrillator
- 3) **CAAV** – Civil Aviation Administration of Vietnam
- 4) **VAR** – Viet Nam Aviation Regulations

## SECTION 2 MEDICAL SUPPLIES

### 2.1 TYPES OF MEDICAL SUPPLIES

The different types of medical supplies should be provided as follows—

- 1) First-aid kit(s) for carriage on all aircraft;
- 2) Universal precaution kit(s) for carriage on all aircraft that require a cabin crew member; and
- 3) A medical kit for carriage where the aircraft is authorized to carry more than 100 passengers on a sector length of more than two hours.
- 4) Automated external defibrillator for carriage based on a risk assessment.

### 2.2 FIRST-AID KITS

#### 2.2.1 NUMBERS, LOCATIONS & ACCESSIBILITY

- A. All aircraft are required to carry the minimum number of first-aid kits specified in VAR 6 (refer to the excerpted table provided here).
- B. The first-aid kit(s) should be installed in locations that are—
  - 1) Readily accessible for the crew members;
  - 2) Distributed evenly throughout the passenger cabin; and
  - 3) Near exits to provide for the possible use outside the aircraft in an emergency.
- C. All crew members may access and use the contents of the first-aid kit.

Number of Passenger Seats Installed	Number of First-Aid Kits Required
0 to 100	1
100 to 200	2
200 to 300	3
300 to 400	4
400 to 500	5
More than 500	6

The first aid kit(s) should be sealed, indicating that it contains all prescribed contents.

#### 2.2.2 CONTENTS OF FIRST-AID KITS

- A. The following items should be included in a first-aid kits—
  - 1) List of contents;
  - 2) Bandages (adhesive strips);
  - 3) Bandage: gauze (7.5 cm x 4.5 m);

- 4) Bandage: triangular; safety pins;
  - 5) Dressing: burn (10 cm x 10 cm);
  - 6) Dressing: compress, sterile (7.5 cm x 12 cm);
  - 7) Dressing: gauze, sterile (10.4 cm x 10.4 cm);
  - 8) Tape: adhesive (2.5 cm roll);
  - 9) Steri-strips (or equivalent adhesive strip);
  - 10) Pad with shield, or tape, for eye;
  - 11) Scissors (10 cm);
  - 12) Tape: Adhesive, surgical (1.2 cm x 4.6 m);
  - 13) Tweezers: splinter;
  - 14) Hand cleanser or cleansing towelettes)
  - 15) Antiseptic swabs (10/pack)
  - 16) Disposable gloves (multiple pairs);
  - 17) Thermometers (non-mercury);
  - 18) A mouth-to-mouth resuscitation mask with one-way valve;
  - 19) First-aid manual (current edition);
  - 20) Incident record form.
- B. The following medications should be included in the first-aid kits—
- 1) Mild to moderate analgesic;
  - 2) Antiemetic;
  - 3) Nasal spray decongestant;
  - 4) Antacid;
  - 5) Antihistamine;
  - 6) Ophthalmic ointment;
- C. First aid kits intended for use for use outside the aircraft during an emergency should include—
- 1) Splints;
  - 2) Insect repellent;
  - 3) Sunburn creme;
  - 4) Materials for the treatment of extensive burns;
  - 5) Air-ground visual ground-to-air signals

The medical kits may contain oral drugs to include analgesic, antispasmodic, central nervous system stimulant, circulatory stimulant, coronary vasodilator, antidiarrheal and motion sickness medications

### 2.3 UNIVERSAL PRECAUTION KIT

Such kits may be used to clean up any potentially infectious body contents such as blood, urine, vomit and faeces and to protect the cabin crew members who are assisting potentially infectious cases of suspected communicable disease.

### 2.3.1 NUMBERS, LOCATION & ACCESSIBILITY

A. All aircraft with a passenger capacity of more than 19 shall carry at least one unopened universal precaution kit.

Additional kits should be carried at times of increased public health risk, such as during an outbreak of a serious communicable disease having pandemic potential.

B. The universal precaution kit(s) should be distributed evenly throughout the cabin in locations that are easily accessible for the cabin crew members.

The universal precaution kits should be sealed, indicating that it contains all prescribed contents.

C. All crew members may access and use the contents of the universal precaution kit.

### 2.3.2 CONTENTS OF UNIVERSAL PRECAUTION KIT

The following items should be included in the universal precaution kit—

- 1) Dry powder that can convert small liquid spill into a sterile granulated gel;
- 2) Germicidal disinfectant for surface cleaning;
- 3) Skin wipes;
- 4) Face/eye mask (separate or combined);
- 5) Gloves (disposable);
- 6) Protective apron;
- 7) Large absorbent towel;
- 8) Pick-up scoop with scraper;
- 9) Bio-hazard disposal waste bag;
- 10) Instructions for use.

## 2.4 MEDICAL KIT

### 2.4.1 NUMBERS, LOCATIONS & ACCESSIBILITY

A. An aircraft with a passenger configuration for more than 100 passengers on flight sectors of more than 2 hours shall carry a medical kit.

B. Based on security considerations, the medical kit should be located and installed within the flight deck compartment of the aircraft.

C. While all crew members may access the medical kit, use of the contents of the kit should be limited to trained medical personnel.

The medical kit containing all prescribed contents should be incased in shrink-wrap to prevent unauthorized access.

### 2.4.2 CONTENTS OF MEDICAL KITS

A. The following items should be included in the medical kit—

- 1) List of contents;
- 2) Stethoscope;
- 3) Sphygmomanometer (electronic preferred);
- 4) Airways, oropharyngeal (three sizes);
- 5) Disposable syringes (appropriate range of sizes);

- 6) Disposable needles (appropriate range of sizes);
  - 7) Sterile scissors;
  - 8) Hemostatic forceps;
  - 9) Hemostatic bandages or tourniquet;
  - 10) Sterile equipment for suturing wounds;
  - 11) Disposable scalpel handle and blade;
  - 12) Intravenous catheters (appropriate range of sizes);
  - 13) Antiseptic wipes
  - 14) Gloves (disposable)
  - 15) Needle disposal box
  - 16) Urinary catheter
  - 17) System for delivering intravenous fluids
  - 18) Venous tourniquet
  - 19) Sponge gauze
  - 20) Tape (adhesive)
  - 21) Surgical mask
  - 22) Emergency tracheal catheter (or large gauge intravenous cannula)
  - 23) Umbilical cord clamp
  - 24) Thermometers (non-mercury)
  - 25) Basic life support cards
  - 26) Bag-valve mask
  - 27) Flashlight and batteries
- B. The following medication should be included in the medical kit—
- 1) Epinephrine 1:1000
  - 2) Antihistamine (injectable)
  - 3) Dextrose 50% or equivalent (injectable: 50 ml)
  - 4) Coronary vasodilators (such as nitroglycerin tablets or spray)
  - 5) Major analgesic
  - 6) Sedative anticonvulsant (injectable)
  - 7) Antiemetic (injectable)
  - 8) Bronchial dilator (injectable or inhaler)
  - 9) Atropine (injectable);
  - 10) Adrenocortical steroid (injectable)
  - 11) Diuretic (injectable);
  - 12) Medication for postpartum bleeding
  - 13) Sodium chloride 0.9% (minimum 250 ml)

If a cardiac monitor is available, add to this list Epinephrine 1:10000 (can be a dilution of epinephrine 1:1000).

- 14) Acetyl salicylic acid (aspirin) for oral use
- 15) Oral beta blocker

## 2.5 AUTOMATED EXTERNAL DEFIBRILLATOR

- A. AEDs offer the only effective treatment for cardiac fibrillation. The likelihood of use, and therefore of potential benefit to a passenger, is greatest in aircraft carrying a large number of passengers, over long duration sector lengths.
- B. The AOC holder of aircraft with passenger configurations of more than 100 passengers should at least carry at least one AED on—
- 1) Flight sectors of more than 5 hours;
  - 2) Extended range operations; and
  - 3) Other flight operations where alternate airports may not have adequate emergency medical facilities.
- C. The AED shall be installed securely within the flight deck.
- D. Accessibility and use of the AED shall be limited to crew members and medical personnel with current qualification for its application.

Based on security considerations, the AED should be located and installed within the flight deck of the aircraft.

The carriage of AEDs for other flights should be determined by operators on the basis of a risk assessment taking into account the particular needs of the operation.

*End of Advisory Circular*