

Concerning the Use of Automated External Defibrillator (AED) for Passenger Flights

Review by Sofema Online (SOL) www.sofemaonline.com

ICAO Current Status Regarding Recommendations –

Please see the following link –

https://www.icao.int/safety/airnavigation/AIG/Documents/Safety%20Recommendations%20to%20ICAO/ICAO%20actions/02006590_Action_02.pdf

- As the response of the ICAO Medical Section indicates, the subject of the carriage of AEDs on board passenger aircraft, has been, and is under active consideration in ICAO.

What is the purpose of an AED

- An automated external defibrillator (AED) is a portable electronic device that, when its leads are properly affixed to a patient, automatically diagnoses life threatening cardiac arrhythmias of ventricular fibrillation and ventricular tachycardia.
- It will then provide simple audio and visual commands to the operator to make selections which enable the AED to treat the arrhythmias through defibrillation, the application of electrical shock therapy which stops the arrhythmia and allows the heart to re-establish an effective rhythm.
- AED's are often carried as part of an aircraft's on board emergency medical equipment.

Is there any European Regulatory Requirement by which it is required for all European aeroplanes to carry a defibrillator on board?

- By means of the ED Decision 2021/005/R the AMC/GM to CAT.IDE.A.220 and CAT.IDE.A.225 have been updated in line with the existing evidence and expert opinion.
- The use of automated external defibrillators (AED) is essential to increase the chances of survival in case of a cardiac arrhythmias such as ventricular fibrillation (VF) and non-perfusing ventricular tachycardia (VT) when used in the first 10 minutes.
- AMC1 CAT.IDE.A.220 (b) (4) stipulates that the aircraft operators **should** carry automated external defibrillator (AED) on board all aircraft equipped with a first-aid kit and required to carry at least one cabin crew.

- When operating multi-deck aircraft, operators should assess if additional equipment is needed on each deck.

What are the obligations when carrying AED's (Automated Emergency Defibrillators) on board as per CAT.IDE.A.220 and CAT.IDE.A.225?

- AED (Automated Emergency Defibrillators) can be considered as carry on board medical equipment.
- The provision where the AED will be stowed should be certified (capable to carry the load and placarded accordingly). If the AED is stowed in a stowage as for passenger luggage, we would not necessarily ask for full 25.853 compliance especially when considered as carry-on board equipment.
- If you want to certify it (being part of the modification) then compliance to the applicable CS requirements must be demonstrated.
- In addition, you should have a look into the guidance material to Part CAT 140. Here you will find some information related to the electro mechanical interference of medical equipment.
If the AED is considered as carry on board medical equipment, there is no need for a certified installation. The operator is however obliged to conduct an assessment as per AMC1 CAT.GEN.MPA.140.

Prerequisites concerning the aircraft configuration

- Before an operator may permit the use of any kind of PED on-board, it should ensure that PEDs have no impact on the safe operation of the aircraft.
- The operator should demonstrate that PEDs do not interfere with on-board electronic systems and equipment, especially with the aircraft's navigation and communication systems.
- The assessment of PED tolerance may be tailored to the different aircraft zones for which the use of PEDs is considered, i.e. may address separately:
 - The passenger compartment;
 - The flight crew compartment; and
 - Areas not accessible during the flight.

Next Steps

Follow [this link](#) to our Library to find & Download related documents for Free.
Sofema Aviation Services (SAS) and Sofema Online (SOL) provide EASA Regulatory Compliant and Vocational training including more than 20 courses specifically related to Part 21 / CS 25 – for details please see the following websites www.sassofia.com & www.sofemaonline.com or email team@sassofia.com