



Cabin interphones

Background

One of the basic tools required to co-ordinate the optimum use of the crew of a transport aircraft in both normal and emergency situations is a good inter-crew communications system.

A hands-free mobile communications system can improve communications in case of an in-flight incident in the cabin, such as a fire, medical emergency, or disruptive passenger requiring timely and effective co-ordination between flight crew and cabin crew, facilitating the decision process.

Moreover, during or after an emergency situation where an evacuation of the aircraft is required, but where damage to the aircraft has severed the communications links of a fixed system, a communications system able to function without reliance on fixed links would be invaluable, for example for crowd control

To fulfil this functionality, a multi-purpose integrated fixed and hands-free mobile communications unit is required at every crew station.

Requirements

All aircraft must be fitted with an interphone system able to support the following functions:

- ▶ A normal interphone system.
- ▶ An emergency hands-free mobile interphone system forming part of the emergency equipment.

Capabilities

The normal function of the interphone system should enable:

- ▶ Operation independently of the public address system except for signalling devices;
- ▶ Two-way communication between the flight deck and all cabin crew stations to:
 - i. Each cabin crew station;
 - ii. Each passenger compartment and/or support personnel compartment;
 - iii. Each remote galley not located on a passenger deck;
 - iv. Each remote crew compartment not located on a passenger deck.
- ▶ Easy access and use from each of the above stations;
- ▶ An alerting system incorporating aural and/or visual signals which can be used by the flight crew and the cabin crew to alert each other;
- ▶ Easy distinction between a normal call and an emergency call;
- ▶ Two-way communication between ground personnel and the flight deck, when the aircraft is on the ground.

The emergency hands-free mobile function of the interphone system meet all of the above requirements and, in addition, enable:

- ▶ Hands-free communications without the need for physical attachment;

Note: The normal mobile function of the interphone system should provide one open interphone channel capable of supporting partyline functionality, which is clearly identifiable and accessible for all stations.

- ▶ Automatic recharging of batteries at the normal base unit stowage position. Equipment must include a battery life indicator;
- ▶ Operation independently of any aircraft electrical power system for at least 30 minutes of continuous use after removal of power. This selected power supply should be independent of that used by the normal system function.
- ▶ Activation of the functions and the emergency power supply by a single action under all conditions of light, for example through an illuminated switch on each unit.
- ▶ Operation independently of any central base unit.

Note: The emergency hands-free mobile interphone system should provide one open interphone channel only, providing priority function, an elevated volume level, and be accessible to all stations.

- ▶ Secured and/or encrypted communications.