
Section - III
SYSTEMS DESCRIPTION

Sub-section 15
EMERGENCY EQUIPMENT

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GENERAL

Emergency equipment is stored in the following compartments:

- Flight compartment
- Crew Cabinet
- Passenger cabin
- Toilet compartment

EQUIPMENT LOCATION

The location, number of and composition of the emergency equipment varies according to the furnishing options chosen and the floorplan.

The following, is a list of the emergency equipment and the typical compartments/areas in which they are stored.

FLIGHT COMPARTMENT

- *Lifejackets:* One beneath each crew seat.
- *Portable Fire Extinguisher (BCF TYPE 34H):* Secured to left bulkhead behind the pilot seat.
- *Axe:* Secured to left bulkhead behind the pilot seat.
- *Flashlight:* Secured to left bulkhead behind the pilot seat.
- *Combination Oxygen Mask and Goggles:* One above each side console.

VESTIBULE

- *Third Crew Member Lifejacket:* Stowed in the crew cabinet.
- *Therapeutic Oxygen Masks:* Two stowed in the crew cabinet.

PASSENGER CABIN

- *Lifejackets:* One in a pocket under each fore and aft facing passenger seat. Three in 3 seat divan under the forward two seat cushions.
- *Protective Breathing Equipment:* One in the underfloor document compartment between the crew seats.
- *Fire Extinguisher:* Rear face of forward LH bulkhead.
- *Passenger Emergency Oxygen Masks:* Drop down from headliner.

TOILET COMPARTMENT

- *First Aid Kit:* Stowed behind toilet backrest.
- *Passenger Emergency Oxygen Mask:* Drop down from headliner.

EMERGENCY LOCATOR TRANSMITTER (ELT)

The ELT is a compact self powered emergency locating transmitter designed to activate automatically under disabling emergency conditions, or manually from the cabin to summon assistance in other than a disabling emergency condition. The system operates on the international distress frequencies of 121.5 MHz, 243.0 MHz and 406.025 MHz. In operation, the ELT transmits a down sweep audio tone at approximately three sweeps per second.

The transmitter is self powered by an alkaline battery and is mounted inside the tailcone. An impact switch automatically activates the transmitter following a 5g nominal impact along the flight axis of the airplane. Power output is 50 mW effective radiated power on each frequency.

Controls permit a remote test and reset with manual activation remotely or from the transmitter mounted switch.

A three position, guarded switch is installed in the transmitter. For normal automatic operation, this switch is set to the ARM position. The transmitter can be tested by setting the ARM-OFF-ON switch to the ON position. This should be done with the antenna connected, and only within the first 5 minutes of an hour for a maximum of three pulses (see FAA Advisory Circular No. 4313, Chapter 12, paragraph 21).

An ELT remote control switch, located on the left side of the copilot's instrument panel, has three positions which are placarded ON, ARM and RESET. The remote control unit switch has a guard to prevent inadvertent activation. To operate, the switch lever is pulled up and pushed to the RESET or ON position. To reset the transmitter impact switch in case of inadvertent activation, set the remote switch to RESET and then back to ARM.

The tip of the remote control unit switch has a red light emitting diode. The LED will illuminate continuously any time the ELT is transmitting. A slowly flashing red light indicates that the transmitter is OFF or that the transmitter battery pack must be replaced. A quickly flashing red light indicates that the remote control unit battery must be replaced.

NOTE: Whenever the transmitter is turned off, the remote will not sense the transmitter battery pack. The remote will flash slowly to warn the pilot that the transmitter is incapable of sending a rescue signal.

WARNING: ACCORDING TO FAA REGULATIONS, THE BATTERY PACK MUST BE REPLACED IF THE UNIT HAS BEEN TRANSMITTING CONTINUOUSLY FOR MORE THAN ONE HOUR.

PROTECTIVE BREATHING EQUIPMENT (PBE)

The PBE is installed for use by crew members in the event of fire or smoke from cabin furnishings or equipment, other than from electrical/electronic sources, producing burning dripping plastic with toxic fumes. The PBE gives breathing protection for a minimum duration of 15 minutes.

The PBE unit consists of a loose fitting double layered hood constructed of Teflon coated fiberglass cloth with an overhead of Kynol fabric, a polysulfone housing assembly, a clear visor, an elastic neoprene neck seal, a scrubber unit and a life support pack.

The PBE unit is stored in a sealed fire retardent polyethylene case which is located in the underfloor document compartment between the crew seats.

When the *Pull To Actuate* ring is removed from the unit, chemical decomposition occurs within the solid state oxygen supply (generator) liberating O₂ which is fed through the primary flow nozzle of the venturi.

This creates a gas flow from the hood through the scrubber unit, which removes excess moisture and particulates, which is then mixed with the low pressure oxygen in the venturi and fed back into the hood.

Any surplus gas is vented from the hood through a vent valve, which is installed in the scrubber unit.

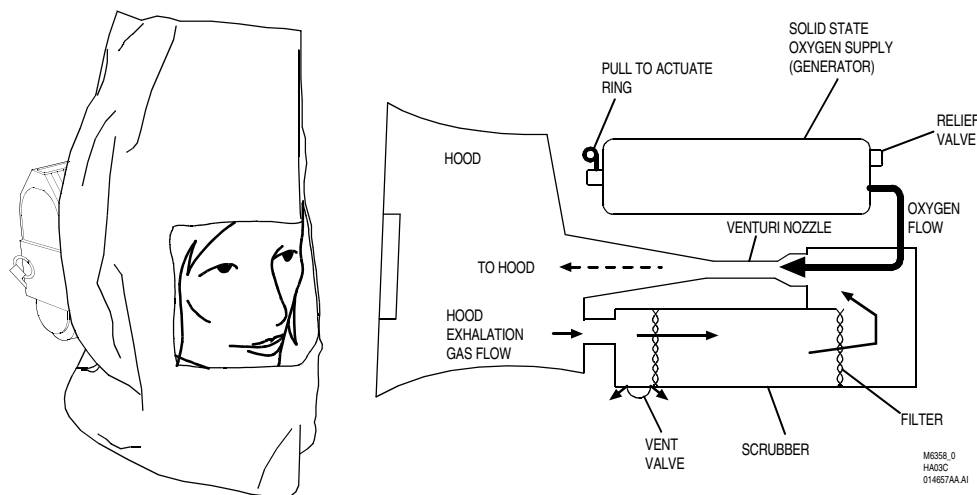


Figure 1
Protective Breathing Equipment

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