BOEING 737-800
TECHNICAL REVIEW - CHAPTER 8

FIRE PROTECTION

OVERVIEW

The engines, APU, FWD and AFT Cargo compartements and the Lavatory are provided with fire protection.

The engine and APU fire / overheats detection systems are powered by the battery bus.
The cargo smoke detection system is powered by the DC bus 1/2.
The wheel well fire detection system is powered by the AC transfer bus 2.

The engine, APU and cargo extinguishing system are powered by the hot battery bus.
The wheel well does not have an extinguishing system.

ENGINE

Each engine has two loops A and B to sense an overheat or fire condition.
Both loops must sense a fire or overheat condition to issue a caution or warning.
A fault monitoring system monitors both loops and can isolate a faulty loop.

Pulling a fire switche will :
- close both the fuel and spar shutoff valves
- close the engine bleed air valve
- trips the generator control relay breaker
- close the hydraulic shutoff valve
- desactivate the related engine hydraulic pump LOW PRESS light
- disable thrust reverser for that engine
- arm one discharge squib on each exctinguisher bottle

APU

APU has only one fire / overheat loop. Pulling the APU fire switch closes the APU fuel shutoff valve, closes the APU bleed air valve, closes the APU inlet door, trips the APU generator relay and breaker and arm the APU extinguisher.

CARGO

The cargo compartment has a dual loop smoke detection system.
There are 4 detectors in the FWD cargo, 6 in the AFT. One detector has to sense smoke before an alert is issued.

Illumination of the DETECTOR FAULT light indicates one or more loops have failed.

WHEEL WELL

Single loop f2ire warning system. No extinguinshing system.

LAVATORY

Smoke and heat detection. Extinguinshing system is automatically activated by heat, no indications in flight deck.