



Injuries: 1 Serious, 6 Minor, 55 Uninjured.

As ValuJet Flight 597 began its takeoff roll, a 'loud Bang' was heard by the occupants, the right engine fire warning light illuminated, the crew of a following airplane reported to the ValuJet crew that the right engine was on fire, and the takeoff was rejected.

Shrapnel from the right engine penetrated the fuselage and the right engine main fuel line, and a cabin fire erupted.

The airplane was stopped on the runway, and the captain ordered evacuation of the airplane. A flight attendant (F/A) received serious puncture wounds from shrapnel and thermal injuries; another flight attendant and 5 passengers received minor injuries.

Investigation revealed that an uncontained failure of the right engine had occurred due to fatigue failure of its 7th stage high compressor disc.

INCIDENT EXAMPLES CONCLUSION

All three of these aircraft incidents had the potential to have flash over conditions in the aircraft passenger cabin. Each

one of these fires the passengers would have benefited from a rapid response and action in changing the environment inside the fuselage. Early intervention of water/agent into the cabin interior can provide a means of extending the valuable survivability time for passengers. Handline attacks are time consuming and have not shown positive results minutes after ARFF arrival.

PASSENGER AIRCRAFT CONSIDERATIONS

Still today there are many who think that the airport fire fighter role does not involve the interior of the aircraft. This thinking leads to, "All passengers who survive get out on their own", and "The mission of the aircraft firefighter effort is to provide exit paths for the passengers from the aircraft and tend to those who have exited". Sadly in most cases this thought process is cited as justification in limiting manpower and resources for aircraft rescue firefighting.

Penetrating nozzles cannot take the place of rescue teams and effective ventilation. The penetrating nozzle can only begin the process of confining the fire and possibly affecting the thermal layer and interior cabin environment. Analysis of aircraft accident involving external fuel fires has shown that al-

though external fires are effectively extinguished, secondary fires within the aircraft fuselage are difficult to control with existing equipment and procedures. Upon arrival to any accident site in which a post crash fuel fire exists the aircraft rescue and firefighting (ARFF) services immediately start applying cooling and vapor suppressing foam.

The firefighter's mission is to suppress these outside fires as quickly as possible, thus providing an escape path from the aircraft and then aid in the evacuation of passengers as necessary. These requirements often prevent a timely early interior fire suppression attempt. In many cases the cabin fire has already reached high flash over temperatures and is destroying the aircraft interior seats and furnishing materials before the fire fighters are able to enter the aircraft.

It is understandable that certain conditions may not allow you the opportunity to get to the most optimal position for your penetrator nozzle. A good operator will evaluate his options and decide what position or application point would give him the best results.

At LAX our department is fortunate to have a discrete frequency and the ability to talk to the pilot if necessary. Any information you can obtain from the pilot, flight crew, Tower/ATC can benefit the operation when the aircraft arrives.

Specific questions should be asked to get the information needed:

- Actual conditions in aircraft
- Flight crew on oxygen
- Location of smoke
- Severity of smoke
- Passengers on oxygen
- Possible intentions once on the ground

With an aircraft that has an interior fire without a pool fire,