

a smoke curtain between the main cargo compartment and the foyer and cockpit areas. The pilots donned oxygen masks, tried unsuccessfully to use smoke goggles, and declared an emergency. ATC asked and the pilots reported that there were hazardous materials on board. The Flight Engineer was confused by some of the items on the "Cabin Cargo Smoke Light Illuminated Checklist". He did not pull the "Cabin Air Shutoff T-Handle", which maintains air flow to the cockpit, but shuts off air flow to the cargo compartments.

Light gray smoke was visible in the foyer area. The pilots could smell smoke on the flight deck through their oxygen masks, but there was no visible smoke. ATC vectored the aircraft to the nearest airport. The aircraft landed, without problems, twenty (20) minutes after the alarms first sounded. The aircraft stopped on a taxiway with the tail still protruding onto the runway. In their haste to get out of the aircraft, the pilots did not read the "Emergency Evacuation Checklist". They did pull all three engine fire handles and turned the battery switch off.

Both the windows and doors could not be initially opened because the aircraft was still pressurized, until the Flight Engineer fully opened the outflow valve. The pilots evacuated via the sliding windows. The Flight Engineer and two passengers evacuated out the L1 and R1 doors and escape slides. They stated the smoke was so thick they could not see the smoke curtain and it had an oily, sooty, acrid smell. The Captain stated that the gray / black smoke had a horrible acrid smell and he had to hold his breath until he got the window open. Smoke coming out the escape windows and doors was immediately visible to responding firefighters.

ARFF was advised during the initial incident notification that there were hazardous materials on board. The Flight Engineer gave responding firefighters the "Notification of Dangerous Goods Loading" form. This is a compilation of the information from all the Part B forms, which are a copy of the actual shipping paper from each hazardous shipment. He also told the firefighters that the more detailed Part B shipping papers were located in a plastic folder on the outside of the cockpit door. Although firefighters entered this area, the Part B Forms were never retrieved. The firefighters were concerned about their safety and repeatedly requested hazardous material information from the air carrier. 3 1/2 hours after the aircraft landed, the air carrier provided the IC with a handwritten list of the dangerous goods on board and their UN numbers, but not the quantities.

Firefighters immediately punctured and deflated the escape slide at door L1 and used a ladder to board the aircraft. Their intent was to extinguish the interior fire, but they were prevented from moving through the upper cargo hold by the containers and the smoke curtain. As a result, firefighting operations ceased for forty (40) minutes until the fire intensified and breached the top of the aircraft. Video taken by the firefighters shows that the fire first breached at the trailing edge of the wings. This is approximately at positions 8 and 9. An air carrier mechanic stated that he saw "paint bubbling, and aluminum melting, and fingers of flames" just back of the leading edge of the wing, which corresponds with position 6.

Firefighters were able to open the main cargo deck door, using controls located in the floor of the foyer, and attempted to discharge agent through this opening. The firefighters also wanted to use a SPAAT penetrating tool to dis-

charge agent into the aircraft, but the Flight Engineer requested that they wait while he contacted McDonnell Douglas to find out ways to enter the aircraft without damaging it. The tool was never used. When the fire vertically self-vented, interior operations ceased and firefighters started discharging foam and water into the vertical openings from aerial apparatus. Approximately 50,000 gallons of water and foam was used.

Although the upper deck was badly burned, the lower compartments were relatively unaffected by the conflagration. The fire and the weight of firefighting water compromised the aircraft structural integrity, causing the lower fuselage structure to fail and a number of cargo containers fell to the ground. The tail section also separated and fell to the ground. It took several hours to control the fire and it continued to smolder for a day. The wind caused spot fires to reignite. The aircraft was a total loss of 95 million dollars. Most of the cargo was destroyed by fire, smoke, and extinguishing agent, and was valued at 300 million dollars.

The only hazardous materials were a small quantity of radioactive products used for medical research and samples of HIV positive blood. Both shipments could be transported as cargo on passenger aircraft, so they were not required to be loaded at the first position adjacent to the flight deck. The container with the radioactives was destroyed by fire. The container with the blood was not seriously damaged. 92 pounds of marijuana was found on the aircraft. Seven aerosol cans and several plastic bottles containing liquids that could be considered corrosive, as well as two samples containing flammable or combustible liquids, were found in the cargo debris. Considering the hundreds of tons of cargo being carried on this air-