

circuit breakers located on a flight deck electrical panel, tripped in rapid succession.

The breakers were for a toilet flush motor in the aft lavatory. Two unsuccessful attempts were made by the Captain in a nine minute time frame to reset the breakers. The Captain assumed that the flush motor had seized and took no other action at the time. One minute later a passenger seated in the last row asked a Flight Attendant to identify a strange odor. The Flight Attendant thought the odor was coming from the aft lavatory.

Upon opening the door to investigate, she saw light gray smoke from floor to ceiling. She immediately closed the door and the flight crew was told "there was a fire in the wash-room in the back". Flight Attendants began moving passengers forward and directing air from air vents over the seats towards the rear of the aircraft. The Flight Attendant in charge open the lavatory door a second time, saw black smoke, and discharged a CO2 extinguisher into the area, and closed the door.

In the next five minutes the First Officer made two trips back to investigate. On the first trip he could not make it to the lavatory because of the amount of smoke in the last four rows. On the second trip, the door was hot to the touch, and he did not open it. While the First Officer was investigating, the aircraft began to experience a series of significant and serious electrical malfunctions.

Upon returning both times to the flight deck, the First Officer told the Captain "we better go down". After the second report from the First Officer, the Captain called the nearest ATC Center and said "Mayday, May-

day, Mayday, we have a fire and we are going down".

The aircraft was directed to the nearest major airport in the area. The airport tower personnel alerted the airport ARFF and they responded to their standby locations. ARFF was advised that "the airplane had electrical problems and that smoke was coming from the aft lavatory, and that there was smoke or fire in the rear of the airplane".

One minute later the pilots stated they had a fire in the aft lavatory and the cabin was filling up with smoke. ATC asked for the usual emergency information and the pilots said they "don't have time right now". Seven minutes later ATC again asked for the number of persons and amount of fuel on board. The pilots stated, "we don't have time, its getting worse here".

The pilots were wearing oxygen masks on 100% and smoke goggles. The Captain stated that in the later stages of the decent, he had trouble seeing the instruments because of the smoke in the flight deck and sweat causing his goggles to fog up.

The pilots opened their sliding windows several times to try to reduce the amount of smoke. During the decent, the passenger cabin filled with black, acrid smoke from the ceiling to about knee level. Cabin Crew moved all the passengers forward of row 13 and issued wet napkins to cover their faces with. Passengers were briefed on emergency evacuation procedures and a few passengers were assigned to open the over wing exits.

The passengers stated that by the time the plane landed, they could not see their hands in front of their faces. Twelve minutes after the "Mayday", the aircraft stopped on the runway. Because of the loss of the left and right a.c. buses, the anti-skid system failed to operate, and all four main gear tires blew.

After the plane stopped, Doors R1 and L1 were opened and the slides deployed. One of the left and both right over wing exits were opened. 18 passengers and the three cabin crew used these five exits to evacuate the aircraft. After the pilots completed the emergency engine shutdown checklist, they attempted to enter the passenger cabin to assist with the evacuation. They were driven back by smoke and heat and evacuated out the flight deck sliding windows.

As the last survivor left the aircraft, the interior burst into flames. 23 passengers perished in the fire. Neither the passengers, or crew, nor witnesses outside the aircraft, saw flames inside the cabin before the survivors left the aircraft. The fuselage and cabin was gutted before firefighters could extinguish the fire. Areas of the top of the fuselage were heavily damaged or burned away down to the top of the cabin windows.

Blood samples taken from the 23 deceased indicated elevated carbon monoxide levels ranging from 20-63%. Incapacitation occurs at between 40-50%. Cyanide levels ranged from .8 to 5.12 mg/ml Toxic cyanide incapacitation occurs between 0.5 and 0.7 mg/ml. Although the bodies were severely burned, the cause of death was smoke inhalation. Of the 23 fatalities, 21 never got out of their seats. This may have occurred for several reasons. They may have been incapacitated by the smoke, to frightened to move, or did not hear an order from the cabin crew to evacuate. Two fatalities were found on the floor of the aisle, aft of the over-wing exits. They had gotten lost in the smoke while looking for the over wing exits.

*Incident Example, ValuJet, June 8, 1995 Miami, Florida- Aircraft: Douglas DC-9-32, registration: N 9 0 8 V J*