Parts Failure Seen in Mexican Crash

By RICHARD WITKIN

Investigators seeking the cause of the March 31 crash of a Mexican jetliner have found strong evidence that it could have been caused by an explosion in a wheel well for the landing gear, according to sources close to the inquiry.

Indications are that the explosion would more likely have been caused by a mechanical problem with the gear, possibly an exploding tire, than by a bomb or other terrorist's device, they said. None of the indicators that normally point to sabotage, such as residue of explosives or telltale patterns of structural rupture, have been detected so far, the informants added.

The Mexicana Airlines jet was on a flight to Los Angeles, with two domestic intermediate stops, when the crew declared an emergency and asked permission to return to Mexico City, the takeoff point. Minutes later the plane, on fire and shedding debris, smashed into a 9,000-foot mountain 100 miles northwest of the capital. All 166 people on board were killed.

A senior Mexican aviation official said last week that the crash had apparently been caused by an explosion but cautioned that not enough was known to determine if sabotage was involved.

Attention was initially directed to the landing-gear stowage area, other sources said, by identifiable parts that fell from the plane miles before the crash site.

These included a door and a hydraulic-system component, both from a wheel well into which the main landing gear is retracted after takeoff, the sources reported. On a Boeing 727, the wheel-wells for the main gear are in the belly of the plane under the passenger cabin. Both identifiable parts were found some seven to nine miles back along the plane's flight path, the sources added. A wing panel from near the wheel well was said to have fallen to earth as much as 35 miles back.

The suspicions about the gear area were strengthened when it was learned that trouble with a wheel brake had been noted in the plane's maintenance log after a previous flight, the sources said. It was thought this might have been after the trip from Chicago that the plane had made just before taking off on the final flight.

The report said that when the pilot took pressure off the brake while maneuvering on the ground the brake remained partly engaged.

Speculation was that a brake dragging in this fashion would have overheated during taxiing and taking off from Mexico City. The abnormal heat, increasing pressure inside the tire as external pressure decreased with altitude, could have caused the tire to explode.

Aircraft tires normally have a number of "fuse plugs" to act as safety valves. They should pop out of a tire surface when internal pressure builds to a certain point and thereby prevent a huge increase in pressure that could produce a dangerous explosion of the tire. But, as one expert noted on the basis of incident reports, "fuse plugs do not always work."

"The scenario about a tire explosion makes some sense," said one authoritative informant. "The only problem is finding out how the on-board fire was ignited." The inquiry has established that a severe fire broke out on the plane.

But, so far as is known, previous tire explosions did not cause any fires. One line of thinking in the Mexican accident is that, if no bomb was involved, the fire could have been caused by a spark igniting fuel from a ruptured fuel tank or hyrdraulic fluid sprayed from a punctured hydraulic line.