Final 20 sec. of Flight 553 outlined in crash probe here

By William Braden

A United Air Lines 737 that crashed here Dec. 8 apparently was well below its expected altitude when it broke out of low clouds during a descent for landing at Midway Airport.

A burst of engine power failed to prevent the accident, according to testimony Tuesday at a National Transportation Safety Board hearing in the Sheraton-O'Hare North.

The crash, which killed 45 persons, occurred less than 12 seconds after a radio transmission from the co-pilot to the Midway control tower indicated all was normal aboard the aircraft.

Evidence indicated that the crew made a futile effort to keep the two-engine jetliner from stalling by raising the landing gear and applying full power to the engines. A stall occurs when an aircraft's nose is lifted to a point at which the angle of attack of the wings causes the wings to lose their lifting power. The aircraft then drops rapidly.

The aircraft, UAL Flight 553 from Washington National Airport to Midway, went down in a residential area about 1½ miles southeast of Midway's Runway 31 Left, killing the 3 crewmen in the cockpit, 40 passengers and 2 persons on the ground. Three stewardesses and 14 passengers survived the crash.

The accident occurred as the aircraft was making a nonprecision instrument approach in bad weather. Testimony showed that there was a ragged ceiling, with a maximum of 500 feet and fog, and that visibility was one mile.

The crew was using a localizer beacon, which indicated whether the aircraft was to the left or right of the proper course for Runway 31 Left. The pilots were unable to use glidescope equipment aboard the 737, which could have told whether they were at the proper altitude, because Midway is not equipped for glidescopes.

Testimony on Tuesday outlined the following final 20 seconds in the flight of the doomed aircraft:

At 2:27:04 p.m. the local controller at the Midway tower observed that Flight 553 was not maintaining the proper three-mile separation behind a twin-engine Aero Commander corporate aircraft that was cleared to land ahead of it. He ordered Flight 553 to execute a "missed approach," turn left to a heading of 180 degrees (due south) and climb to 1,000 feet.

At 2:27:06 tapes from the tower and the cockpit recorder picked up the sound of a "stick shaker," a rattle that warns that the aircraft is close to a stall. The rattle continued until the end of the recording.

At 2:27:12 the co-pilot replied to the order to execute a "missed approach," telling the tower, "OK, left turn to one eight zero—left turn, OK?"

At 2:27:15 the tower replied, "Yeah, make left turn to 180."

At 2:27:20 the tapes recorded the sound of the landing gear lever being moved to the up position, almost immediately followed by the landing gear warning horn, which indicated that the landing gear was raised. The warning horn continued until the end of the recording.

At 2:27:24 the tapes recorded "sounds of impact and unintelligible voice."

During the crucial 12 seconds from the co-pilot's last radio transmission at 2:27:12 indicating that he thought all was well aboard the aircraft until the impact, the tapes picked up one conversation in the cockpit.

The second officer began the conversation by asking, "Want more flaps?" An unidentified voice replied, "Flaps 15." A few seconds later, an unidentified voice said, "I'm sorry." Those were the last words recorded in the cockpit.

According to a Boeing 737 flight manual introduced into evidence Tuesday, the standard operating procedure for a "missed approach" calls for "takeoff thrust, flaps 15, gear up."

The crew executed all three of those maneuvers after being ordered by the tower to make a "missed approach," opening speculation at the hearings that the crew might have been taking routine steps for a "missed approach" rather than desperate emergency measures after seeing the ground.

Marvin E. Anderson, assistant research director at the Illinois Institute of Technology Research Institute here, testified that he heard the pilot rev up the engines as soon as the aircraft broke through the clouds. He said that the power was "like on takeoff" and that as soon as it began the aircraft's nose pitched up at an angle "sufficiently great to be a stall angle."

Other testimony showed that the plane broke through the cloud deck at an extremely low altitude.

Documents introduced at the beginning of the hearing showe that the captain on Flight 553, Wendell L. Whitehouse, 44, flunked a flight test on a 737 on April 29, 1970, but passed a recheck test on May 13, 1970. He had logged 18,000 hours of flight time, including 2,435 hours in 737s, and had no other unsatisfactory remarks in his training folder.

The co-pilot, Walter O. Coble, 43, had an unsatisfactory proficiency check in a 737 on June 19, 1972, but passed a recheck on June 21.

Legal researcher Sherman Skolnick appeared outside the hearings, but was not scheduled to testify.

An eyewitness to the Dec. 8, 1972, crash, Louis Stalec uses a model plane as he tells investigators how the aircraft tilted upward just before it plunged to the ground. (Sun-Times Photo by Howard Simmons)