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C I V I L A E R O N A U T I C S B O A R D

BUREAU OF SAFETY INVESTIGATION

PRELIMINARY STATEMENT OF FACTS THUS FAR DEVELOPED CONCERNING
ACCIDENT TO AMERICAN AIRLINES' DC-6 AT DALLAS,
TEXAS, ON NOVEMBER 29, 1949

December 28, 1949

American Airlines' Flight 157 of November 28, 1949, a DC-6, N 90728, crashed and burned during a scheduled landing at Love Field, Dallas, Texas, on November 29, 1949, about 0549 CST. Of 46 occupants, 28 received fatal injuries. Survivors included the captain, who was slightly injured, and the first officer and flight engineer, both of whom were seriously injured.

Flight 157 originated at LaGuardia Field, New York, for Mexico City, Mexico, with stops scheduled at Washington, D. C., and Dallas, Texas. Between LaGuardia and Washington the flight was uneventful with all of the aircraft's components functioning normally.

At Washington the aircraft was fueled to a total of 2,696 gallons of gasoline. The crew included Captain Laurens Claude, First Officer Robert E. Lewis, and Flight Engineer William Stephan Forbes. All three were properly certificated and the captain was qualified over the route. At Washington a flight plan was filed with, and approved by, Airway Route Traffic Control. It specified Instrument Flight Rules and a cruising altitude of 18,000 feet. Takeoff from Washington was at 0028 EST, November 29, 1949. The gross weight of the aircraft was within the allowable gross take-off weight and its center of gravity was located within prescribed limits.

Turbulence with hail and lightning was encountered shortly after leaving Washington, and the aircraft was climbed to slightly more than 21,000 feet

altitude in an attempt to avoid the turbulence. The crew reported that static conditions made all the aircraft's radio apparatus inoperative. This condition persisted until clear weather was encountered at a point about 100 miles northeast of Nashville, Tennessee, where radio reception and transmission again became normal.

The altitude had been changed until the aircraft was at 16,000 feet when it entered clear weather. Near Nashville, the flight requested and received permission to descend to 8,000 feet and then changed the flight plan from IFR to VFR, passing Memphis at 6,000 feet. In the vicinity of Nashville, Number 1 engine started backfiring at intervals of about 20 seconds. Various corrective measures were applied but they were not successful. The captain and the flight engineer decided to feather Number 1 engine.

This feathering occurred at a point about 25 miles southwest of Nashville and was subsequently reported to the company from the vicinity of Altheimer, Arkansas, a routine position reporting point about 125 miles beyond Memphis, with a request for an equipment change at Dallas.

Flight 157 contacted Love Field Control at a point over Garland, Texas, about 15 miles northeast of Dallas. It was given permission to enter the traffic pattern with a right-hand turn and to land on Runway 36. The altimeter setting and weather, which included unlimited ceiling, a visibility of 15 miles and a north-northeast wind of 5 mph, were given the flight. Landing gear and wing flaps were extended.

The right-hand turn into the final approach, as executed, placed the aircraft in misalignment with the runway. The result was that at the conclusion of that turn the aircraft was to the left of the runway and an "S" turn was made to effect proper alignment. During this "S" the airspeed

dropped sharply and the aircraft drifted to the left and settled. Additional power was applied to engines Numbers 2, 3 and 4, which was made necessary by the loss of airspeed.

During the latter part of the approach to Runway 36 the flight engineer reported to the captain that there was a loss of fuel pressure to Number 4 engine. The captain, meanwhile, had rapidly applied full power to Nos. 2, 3 and 4 engines because of critical loss of speed and ordered gear and flaps up, as he was crossing the obstruction adjacent to the field. On learning of the trouble with Number 4 engine he instructed the flight engineer to apply fuel boost to that engine. This was done with a resulting power surge of Number 4 engine. The left wing dropped sharply and the aircraft swerved about 40 degrees to the left. At this time the first officer, unbeknown to the captain, feathered Number 4 engine. The aircraft continued in this direction in an increasingly stalled attitude until it struck a hangar and other buildings on the northwest side of the airport approximately 3/4 mile beyond the approach end of Runway 36. All airport lighting facilities were operating normally at the time.

A public hearing on this accident was held at Dallas, Texas, on December 12, 13 and 14, 1949, at which 33 witnesses testified and 24 exhibits were accepted. As soon as this evidence has been studied, the Board will issue a final report on this accident.