

Moreover, on airports equipped with one or more RVR installations, a ten-minute mean of RVR values of all runways reporting RVR is contained in the hourly weather sequence reports. This is shown on the sequence report as a Visual Range and is given in feet. This value does not pertain to, nor control operations on any individual runway but is given as an information item to assist in the overall appraisal of airport conditions. It is anticipated that the highest and the lowest one-minute value recorded during this period will also be given, together with the ten minute average.

Also, it is planned that RVR equipment will serve all runways equipped with an instrument landing system, and take-off runways where deemed necessary. All presently installed Runway Visibility Systems will be converted to Runway Visual Range Systems as soon as computers and digital readout equipment become available.

No. 16

Philippines Air Lines DC-3C, PI-C489, accident at Mt. Boca, Sitio Kiniledan, Philippines, on 2 March 1963. Report released by the Philippine Aircraft Accident Investigation Board on 7 July 1966.

1. Investigation1.1 History of the flight

Flight 984 was on a scheduled domestic flight from Zamboanga to Davao, with an intermediate stop at Cotabato. It departed Cotabato at 0940 hours, with a crew of three and twenty-four passengers, estimating Davao at 1025 hours. At 1002 hours the flight reported to the Company radio station at Cotabato that it was halfway to Davao, at Flight level 60, descending. Later on, it contacted the Company radio station at Davao and requested the Davao weather. After having received weather information the flight advised that its arrival would be delayed on account of bad weather. No aircraft difficulty was reported and this was the last message from the flight. When the aircraft failed to arrive, 30 minutes after its ETA a search was started. The aircraft was subsequently found on Mt. Boca, approximately 50 miles SE of Davao Airport, where it had crashed at an altitude of 3 000 ft around 1130 hours.

1.2 Injuries to persons

Injuries	Crew	Passengers	Others
Fatal	3	24	
Non fatal			
None			

1.3 Damage to aircraft

The aircraft was destroyed.

1.4 Other damage

None reported.

1.5 Crew information

The pilot-in-command held a valid Airline Transport Pilot's Licence rated for the DC-3C; his last proficiency check took place on 22 February 1962. His medical certificate, Class 1, was current without waivers. He had flown a total of 10 320 hours, including 6 500 on DC-3C. He had been flying on the same route for almost nine years, five of which were as DC-3C and Otter pilot-in-command; and was very familiar with the route and with the prevailing weather conditions.

The co-pilot held a Commercial Pilot's Licence with a DC-3C rating, and had a total flight time of 870 hours. His medical certificate was current with no waivers

1.6 Aircraft information

The past history and records of the aircraft disclosed nothing of an unusual nature. No malfunction was reported by the pilot at Cotabato. It was testified that at the time of take-off from Cotabato the aircraft was airworthy and that its gross weight and center of gravity were within the prescribed limits. The type of fuel used was not mentioned in the report.

1.7 Weather information

Weather en-route was not furnished to the pilot, since this was the first flight of the day on the Cotabato-Davao segment and that the only source of information on en-route weather in that area was weather reports by pilots.

The Company radio operator at Davao testified that the prevailing weather over the area was:

500 to 1 000 ft overcast, visibility 1 to 2 miles, wind 5 to 8 kt, altimeter setting 29.94 in Hg.

1.8 Aids to navigation

Not mentioned in the report.

1.9 Communications

Communications with the Company radio stations were normal until just prior to the time of the accident.

1.10 Aerodrome and ground facilities

Not of significance.

1.11 Flight recorders

No mention of flight recorders was made in the report.

1.12 Wreckage

See 2.1.

1.13 Fire

No fire took place.

1.14 Survival aspects

All aboard were fatally injured at impact.

1.15 Tests and research

No information in this respect was contained in the report.

1.16 NIL

2. Analysis and Conclusions

2.1 Analysis

The aircraft was on a heading of 030° approaching the shoreline of Digos when it hit tree tops, both wings separated and finally the aircraft crashed in an upside down attitude after hitting a tree, three feet in diameter. The landing gear was down and locked at the time of impact and engines were developing power. The Board believed that the pilot was not flying at normal cruising power on account of the bad weather.

The probable flight path of the flight was reconstructed. It was believed that the aircraft had drifted inland due to the easterly 8 - 12 kt wind. When the pilot asked for Davao weather, he probably believed that he was over Digos shoreline, however, he was 3-miles off the route in poor visibility and approximately 5-miles inland of Digos when he started his descent. The Board believed that the pilot having flown that route for almost nine years was too confident of his position without necessarily taking into account the existing crosswind.

2.2 Conclusions

Findings

The aircraft and flight crews were properly certificated.

There was no evidence that the aircraft was not in an airworthy condition prior to the accident.

The pilot did not report any operational difficulty en-route, except the weather.

The Manifest showed that the aircraft's weight and balance were within the approved limits.

The visibility over the area was one mile, with easterly wind at 8 - 12 kt, overcast.

The flight crew and passengers died instantaneously.

The aircraft was destroyed.

Cause or Probable cause(s)

The probable cause of the accident was due to navigational error, en-route and during let-down. Contributory factors were the limited visibility and the crosswind, all existing on the final phase of the flight.

3. Recommendations

The Board recommended that an Air Traffic Control Service be established in Davao Airport; and that in the interim, all airline pilots be enjoined to strictly adhere with the established let-down procedure when the weather is IMC.
