

No. 9

East Anglian Flying Services Ltd. (Channel Airways), Dakota C-47,
G-AGZB, accident at St. Boniface Down near Ventnor, Isle
of Wight on 6 May 1962. C.A.P. 197, Civil Aircraft
Accident Report No. EW/C/05, released by
the Ministry of Aviation (U.K.)

1. Historical1.1 Circumstances

The aircraft was operating a scheduled domestic service from Jersey to Portsmouth. Prior to the flight the pilot-in-command visited the meteorological office for weather briefing, and the co-pilot filed an IFR flight plan from Jersey to Portsmouth via Alderney and the FIR (50°N) boundary at flight level 30. G-AGZB took off from Jersey at 1354 hours GMT with 3 crew and 14 passengers aboard. At 1407 it reported to Jersey zone control that Alderney was in sight, and it was flying at 3 000 ft. At 1414 hours it notified Jersey control that it had reached the FIR boundary and was changing to the London FIR frequency. It appears that up to this point the flight had been made in clear weather. At 1415 hours G-AGZB called London FIR advising it had crossed the FIR boundary, estimated Portsmouth at 1435 and requested descent to 1 000 ft. Permission to descend was given. The aircraft then advised that it was "leaving three thousand feet for one thousand" and requested a check on the Wessex altimeter setting (QNH). London gave the setting which was repeated by the aircraft. No further communication was received from the aircraft. There was low cloud, drizzle and poor visibility 2 NM west of Ventnor, Isle of Wight when the coast guard on watch heard a low flying aircraft. He recorded the time as 1428 hours. A little later the aircraft was seen flying low towards St. Boniface Down which was enveloped in cloud. Shortly afterwards it was heard to crash on the upper slopes of the Down by a farm worker who immediately ran to the aircraft which had burst into flames. In his attempts to rescue the occupants he was successful in pulling the stewardess and a passenger clear of the burning wreckage. The accident occurred at 1429 hours GMT.

1.2 Damage to aircraft

The aircraft was destroyed by the force of the impact and the ensuing fire.

1.3 Injuries to persons

Both pilots and eight passengers were killed instantly. The stewardess and another passenger subsequently died of their injuries. Five passengers were seriously injured.

2. Facts ascertained by the Inquiry

2.1 Aircraft information

The Certificate of Airworthiness had been renewed on 18 April 1962. Maintenance of the aircraft and engines had been carried out in accordance with an approved maintenance schedule. The Certificate of Maintenance was current at the time of the accident. The aircraft's radio had been maintained in accordance with the approved schedule, and there was no record of any recent defect.

The load sheet for the flight indicated that the weight of the aircraft and its centre of gravity were within the prescribed limits.

2.2 Crew information

The pilot-in-command, age 36 years, held a valid airline transport pilot's licence, endorsed for Dakota aircraft, and a current instrument rating. He had flown over 7 000 hours of which 600 hours were as pilot-in-command of Dakota aircraft. He was familiar with the route. On the day before the accident his duty period exceeded 12 hours. His rest period of 11 hours 55 minutes was less than the minimum rest period of 13 hours determined in the Air Navigation Order, 1960. This is not considered to have had any bearing on the cause of the accident.

The co-pilot, age 37 years, held a valid commercial licence, endorsed for Dakotas, and a current instrument rating. He had completed a competency check on a Dakota aircraft on 19 March 1962.

2.3 Weather information

The weather forecast was as follows:

upper wind:	3 000 ft, 240°, 30-35 kt
temperature:	+10°C
cloud <u>lowest layer</u>	3/8 - 6/8 stratus, base 600 - 1 000 ft, top 1 500 ft, occasionally 8/8 on exposed coasts, base 300 - 600 ft
<u>second layer</u>	6/8 - 8/8 stratocumulus, base 1 500 - 2 500 ft top 4 000 - 5 000 ft
surface visibility:	6 - 10 NM but 1 - 2 NM in precipitation, 500 - 1 000 yd in hill fog

The weather at RAF Thorney Island - an airfield close to Portsmouth - was observed at 1358 and 1448 hours. On both occasions the visibility was observed as 2 000 yd and cloud 5/8 stratus at 200 ft and 8/8 stratus at 400 ft. These observations were similar to the weather forecast given to the pilot-in-command prior to the flight.

2.4 Navigational Aids

The aircraft was equipped with ILS and a single ADF receiver. At the time of the accident no radio approach aid was located at Portsmouth. The only aids available were an NDB and a GCA located at the RAF Station, Thorney Island.

2.5 Communications

Communications were normal up until the time of the accident.

It should be noted that no radio communication facilities existed at Portsmouth at the time of the accident.

2.6 Aerodrome Installations

Not contained in the report.

2.7 Fire

Fire occurred on initial impact and subsequently much of the wreckage was destroyed.

2.8 Wreckage

Examination of the wreckage revealed the undercarriage and flaps had been retracted, and both engines were developing power on impact. There was no evidence of pre-crash mechanical failure or malfunction of the aircraft or its equipment. The aircraft struck the ground at a height of 717 ft and then travelled 840 ft along the ground before coming to rest at a point 74 ft higher than the first point of impact.

3. Comments, findings and recommendations

3.1 Discussion of the evidence and conclusions

Until March 1961 the Company's weather minima for landing at Portsmouth were: cloud base 1 500 ft and visibility 2 000 yd. At that time Channel Airways obtained permission to use the radar facility (GCA) of the RAF Station at Thorney Island. The weather minima established for this aid were: critical height 500 ft and runway visual range 1 200 yd. The aircraft of Channel Airways were to break through cloud by GCA over Thorney Island and then proceed VMC to Portsmouth. However, no details were contained in the Company's Operations Manual as to how to use the facility, and the entry for Portsmouth in the weather minima section of the Manual did not indicate that the radar was at Thorney Island, that it could not be used in the Portsmouth area and that it was not available on Sundays, the day of the accident.

In January 1962 the Ministry wrote to the Operator stating that the weather minima for landing at Portsmouth were considered inadequate as the aircraft had to proceed visually from Thorney Island to Portsmouth and visibility of 1 NM and a minimum obstacle clearance of 300 ft within 5 NM were considered to be necessary.

On 12 February 1962 RAF Thorney Island gave Channel Airways a diagram showing the ATC let-down procedures to be followed at Thorney Island. The diagram showed a safety lane extending southeastwards from overhead Thorney Island in which aircraft could let down to 500 ft, and the tracks to be followed by aircraft under GCA, on ILS and in the holding pattern. There were no instructions as to how the aids were to be used by aircraft intending to land at Portsmouth.

On 20 February an NDB at Thorney Island became operational. It was to be used with the already established safety lane. On 3 March the pilots of Channel Airways were advised of the NDB. However, the notice issued in this respect did not indicate a let-down procedure for its use, made no reference to it in the Operations Manual or mark its position on the diagram in the flight guide. The Ministry was not informed that the aid was to be used.

Following the comments of the Ministry in January 1962, the Operator, on 22 February, submitted the following revised weather minima for Portsmouth: critical height 600 ft, runway visual range 1 500 yd. The officer concerned at the Ministry maintained that he attempted several times unsuccessfully to discuss the proposals by telephone with the chief pilot. However, the chief pilot stated that he had heard nothing further regarding the draft proposals and therefore gave the order on 3 May 1962 that they should be incorporated into the Operations Manual. It was not possible to ascertain whether the manual aboard the subject aircraft had been amended.

From the meteorological information available it would appear that the flight from Jersey was commenced in clear weather and then encountered a rapid build-up of cloud which developed to 8/8 coverage with the cloud base varying between approximately 400 ft and sea level. It was noted that an IFR flight plan had been filed and that the only radio let-down aid in the Portsmouth area was the NDB at Thorney Island. As a matter of prudent airmanship the pilot-in-command should have established his position over the beacon before descending below the safety altitude of 2 300 ft. His request at 1415 hours for permission to let down to 1 000 ft, which was later followed by a further descent, suggests he decided to attempt to continue the flight by visual contact.

After the accident, the weather minima approved by the Ministry for letting-down over Thorney Island with the radar were critical height 750 ft and runway visual range 2 000 yd.

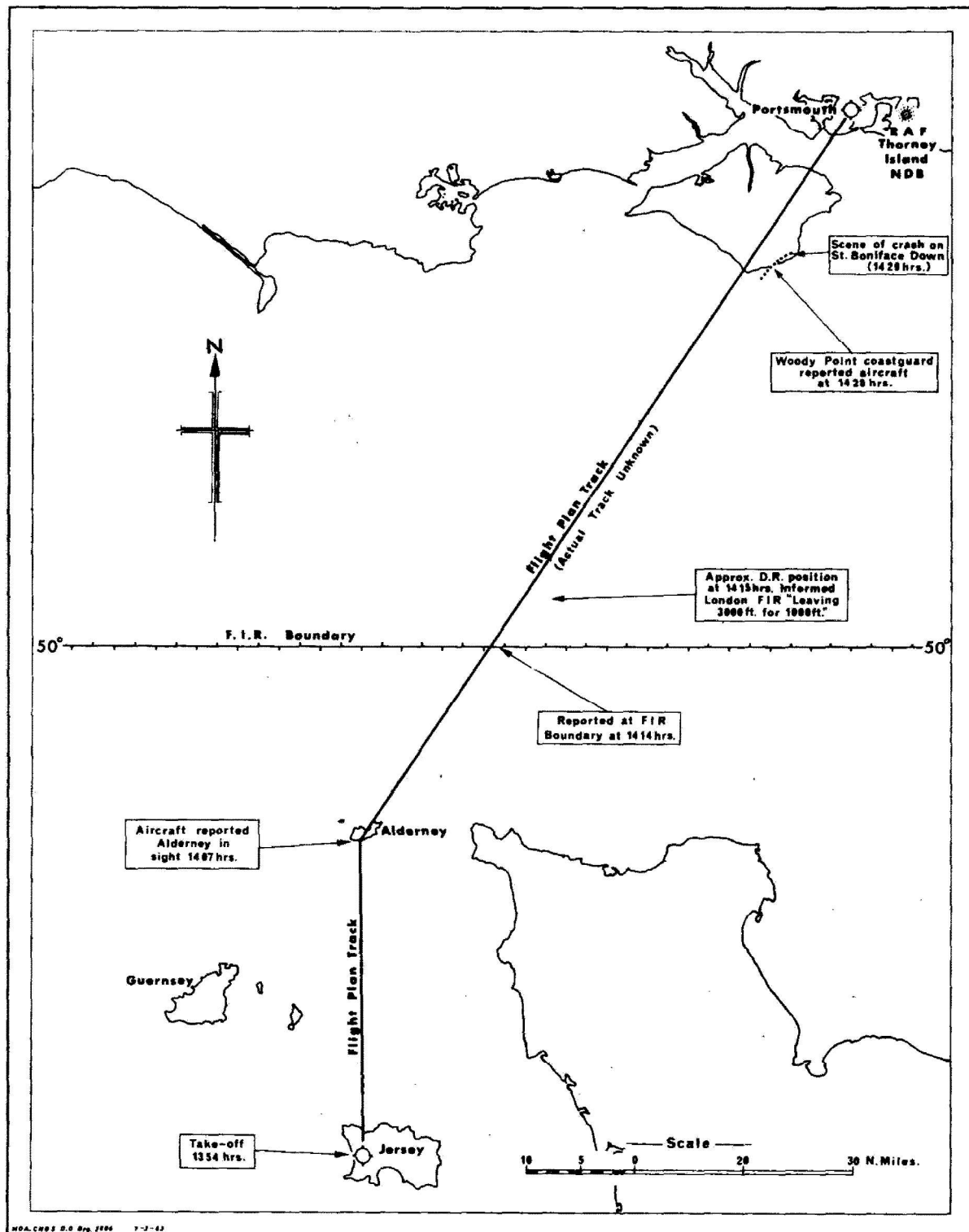
3.2 Probable cause

As the result of an error of airmanship, the aircraft was flown below a safe altitude in bad weather conditions and struck cloud-covered high ground.

3.3 Recommendations

It was recommended that scheduled passenger transport services should be restricted to aerodromes which have radio communication facilities.

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ACCIDENT TO C-47 OF CHANNEL AIRWAYS AT ST. BONIFACE DOWN,
Near VENTNOR, ISLE OF WIGHT, 6 MAY 1962

FIGURE 4