

Department of Trade

ACCIDENTS INVESTIGATION BRANCH

Beechcraft D95A (Travel Air)

G-AYNM

**Report on the accident at Cotswold Hills
Golf Course, Ullenwood, near Cheltenham,
Gloucestershire on 26 August 1976**

LONDON

HER MAJESTY'S STATIONERY OFFICE

List of Aircraft Accident Reports issued by AIB in 1977

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Department of Trade
Accidents Investigation Branch
Kingsgate House
66-74 Victoria Street
London SW1E 6SJ

21 October 1977

The Rt Honourable Edmund Dell MP
Secretary of State for Trade

Sir,

I have the honour to submit the report by Mr G C Wilkinson an Inspector of Accidents, on the circumstances of the accident to Beechcraft D95A (Travel Air) G-AYNM which occurred at Cotswold Hills Golf Course, Ullenwood, near Cheltenham, Gloucestershire on 26 August 1976.

I have the honour to be
Sir
Your obedient Servant

W H Tench
Chief Inspector of Accidents

**Accidents Investigation Branch
Aircraft Accident Report No. 7/77
(EW/C 573)**

I. Factual Information

Operator: Parker Aviation Services
Aircraft: *Type:* Beechcraft D95A (Travel Air)
Nationality: British
Registration: G-AYNM
Place of Accident: Cotswold Hills Golf Course, Ullenwood,
near Cheltenham, Gloucestershire
51° 50' 48"N 02° 03' 45"W
Date and Time: 26 August 1976 at 1633 hrs

All times in this report are GMT

Synopsis

The accident was notified to the Department of Trade on 26 August 1976 by the Gloucestershire Constabulary. The Accidents Investigation Branch carried out an investigation. Operations, engineering and pathology groups were established.

The aircraft, which was on a test flight from East Midlands Airport, entered a spin during an intentional stall manoeuvre; it subsequently struck the ground without recovering. Both occupants were killed and the aircraft was destroyed.

It is concluded that the reason for the spin could not be determined but the possibility that it resulted from pilot incapacitation cannot be dismissed.

1. Factual Information

1.1 History of the flight

The aircraft, with a pilot and an observer on board, was undergoing a Certificate of Airworthiness (C of A) renewal flight test which in part entailed a check of the single engine climb performance, the stalling speeds power off and the handling characteristics at the stall. The stalling tests were to be carried out in both the clean configuration, and with undercarriage down with the flaps fully extended.

The pilot booked out by telephone with Air Traffic Control at East Midlands Airport for a flight of one and a half hours duration. Shortly after 1510 hrs an attempted take-off was abandoned because of a faulty cabin door lock which the pilot adjusted before the aircraft subsequently became airborne from Runway 10 at 1547 hrs. After take-off the aircraft flew south east to the Leicester area and the pilot attempted to obtain radar cover from Royal Air Force Wittering while carrying out the tests. This service was not available. He therefore contacted Upper Heyford Radar at 1605 hrs and advised them that he was carrying out a test flight and requested radar cover from Cotswold Radar. The aircraft was identified by Upper Heyford Radar as it passed over Daventry at an altitude of 3,500 feet. Radar cover was provided by Upper Heyford until 1610 hrs after which time Cotswold Radar took over surveillance of the flight.

Shortly after 1610 hrs the aircraft was cleared to flight level (FL) 50 on a heading of 270° (M). RTF reports from the pilot indicate that between 1614 - 1627 hrs he first completed a single engine climb then carried out stalls during which the aircraft descended to 5,000 feet. Shortly after 1628 hrs, when the aircraft position as seen on the radar screen was approximately 4nm south of Staverton Airport, he requested clearance from the radar controller to turn on to a heading of 090° (M), to climb to FL 50, 'to carry on with these tests'.

He was cleared to make a right turn, to climb to the requested FL, and to advise his flight conditions when level. At approximately 1629 hrs the pilot reported climbing through FL 55 for FL 60. No further RTF transmissions were received from the aircraft.

According to the Cotswold Radar controller, returns from the aircraft indicated it made a right turn onto a heading of 090° (M) and continued on the heading for about 5nm before radar contact was lost at approximately 1633 hrs. The controller noticed no abnormality or fading of the radar returns from the aircraft prior to losing contact. He called the pilot to advise him of a temporary loss of radar contact but received no reply to this and subsequent calls.

Shortly before the accident, witnesses on the ground saw the aircraft in the vicinity of the Cotswold Hills golf course, heading in a south easterly direction apparently in level flight when the engine noise ceased. The engine noise was heard to increase momentarily, then cease again and the aircraft speed appeared to decrease. Almost immediately the right wing dropped and the aircraft went into a steep nose-down spin or spiral dive. Witness accounts as to the subsequent behaviour of the aircraft vary. However the aircraft appeared to have entered a spin to the right which after several turns changed into a spin to the left.

Examination of ground markings at the accident site and the wreckage indicated the aircraft was spinning to the left when it crashed on a fairway of a golf course.

Rescuers arrived at the accident scene shortly after the occurrence and were followed about ten minutes later by the emergency services which had been alerted by telephone. There was no fire and there were no survivors.

1.2 Injuries to persons

<i>Injuries</i>	<i>Crew</i>	<i>Passengers</i>	<i>Others</i>
Fatal	2	—	—
Non-fatal	—	—	—
Minor/None	—	—	—

1.3 Damage to aircraft

The aircraft was destroyed.

1.4 Other damage

There was minor damage to the grass surface of the golf course fairway where the aircraft crashed.

1.5 Personnel information

1.5.1 Pilot

Age:	41 years.
Licence:	Private Pilot's Licence (PPL) with ratings for Aircraft Groups A & B. The licence was not valid as he did not have a current medical certificate or current certificates of experience or test.
Flying experience:	
Total pilot hours:	767 hours 39 minutes.
Total hours on Group B aircraft:	In command – 294 hours 30 minutes Under instruction – 4 hours 40 minutes.
Total hours flight testing Group B aircraft	In command – 39 hours Observer – 1 hour (estimated).
Total hours on type:	None prior to accident flight.

1.5.2 Flight test observer

Age:	18 years.
Licence:	no licence held and none required.
Flying experience:	
Total hours as flight test observer:	22 hours approximately.

1.5.3 The pilot was Managing Director of an aviation maintenance organisation which undertook the inspection and flight testing of light aircraft for renewal of Certificates of Airworthiness. He was issued with a PPL on 27 October 1966 valid until 26 October 1971. The licence was renewed on 20 January 1972 for a further 5 year period.

Entries on the medical certificate contained in the licence indicated the pilot had successfully undergone a routine examination on 7 June 1975 for renewal of the medical certificate and was assessed as fit to exercise the privileges of the licence until 7 July 1976. The signature on the medical certificate was that of an authorised medical examiner who had died prior to the date on which the examination had supposedly been conducted. The records of the Civil Aviation Authority, Medical Branch showed that this examiner had conducted a medical examination on the pilot on 7 June 1971 and had issued a medical certificate valid until 7 July 1973. This was the last recorded medical examination for licence renewal purposes the pilot underwent. Forensic examination of the medical certificate revealed that the year of issue had originally read 1971 and the year of expiry 1973. A pilot is not entitled to exercise the privileges of his licence unless it includes a valid medical certificate therefore his PPL was invalid after 7 July 1973. According to his flying log books after that date until the day of the accident he had flown 198 hours 50 minutes as pilot-in-command.

Early in January 1975 he developed symptoms which led to his admission into hospital where he was detained for 15 days after a diagnosis of myocardial infarction (heart attack) had been made. On admission he gave his occupation as pilot/manager. There is no record that he reported his illness to the CAA Medical Branch and according to his flying log books he resumed flying on 3 April 1975. It is the practise in the United Kingdom, following ICAO recommendations, that a medical certificate is withheld for a period of two years from any pilot who suffers from heart disease. This precautionary action is based on statistical evidence indicating that a second heart attack, should it occur, is most likely to happen within this period after which the chances of a recurrence of an attack begin to diminish.

The pilot was briefed on 24 August 1974 by a test-pilot of the CAA on the procedures and techniques to be used when flight testing single engine and twin engined light aircraft for C of A renewal and was accepted as a person suitable to carry out such tests by the Authority. Flight test reports subsequently received from the pilot revealed some minor shortcomings in content.

On 28 April 1976 the pilot who was suffering at the time from the after effects of influenza flew as observer with a test pilot of the CAA on a flight test in a Beech 95 B55A aircraft. During this flight he completed some of the test stalls satisfactorily, but was unable to carry out further testing as he was feeling unwell.

The other occupant of the aircraft was employed by the company as a trainee aircraft ground engineer. His duties on the flight were to record the test results. Prior to joining the company he had flown as observer on flight tests of light single engine and twin engined aircraft and on completion of the tests had been given handling instruction on a casual basis. However examination of the flight test schedule recovered from G-AYNM indicates he was recording data until shortly before the accident.

1.6 Aircraft information

1.6.1 Details of aircraft

Type:	Beechcraft D95A Travel Air.
Date of manufacture:	1965.

Certificate of Airworthiness (C of A): The aircraft was undergoing inspection for the renewal of the C of A in the General Purpose Category. At the time of the flight test the inspection was incomplete. The following items were unsatisfied (i) Control surface range of movement checks (ii) Fuel flow checks on a replacement fuel cell (iii) Compass swing.

Certificate of Fitness for Flight: None issued. The pilot was advised by licenced engineering personnel that the inspection was incomplete. Despite their objections and refusal to issue a Certificate of Fitness for Flight he insisted on carrying out the flight test.

Total airframe hours: 1,413.

Engines: Two Lycoming IO-360-B1B 180 HP.

Year of manufacture: Both 1965.

Total engine running time: Left 1,416 Right 1,417.

Propellers: Hartzell, two blade, constant speed, full feathering.

Year of manufacture: Both 1965.

Total propeller hours: Left 1,044 Right 1,050.

Maximum authorised take-off and landing weight: 4,200 lb (1905 kg).

Weight at time of accident: 3,965 lb (estimated).

Centre of gravity limits: at 3,965 lb; between 78.35 and 86.0 inches aft of datum.

Centre of gravity at the time of the accident: 85.08 inches aft of datum (estimated).

Fuel on board at time of accident: 75 imperial gallons (estimated).
The aircraft had been refuelled to its maximum capacity of 94 imperial gallons earlier in the day of the accident flight.

Type of fuel: Avgas 100 L.

The flight test schedule called for the aircraft to be loaded as near the maximum authorised take-off weight as practicable for the flight. As far as can be ascertained ballast was loaded onto the aircraft by the pilot and the observer. The ballast consisted of a canvas bag of gravel and stones contained in a cardboard box, 15 imperial gallons of water in three 25 litre drums and two 25 litre sealed drums of iso-propyl alcohol (de-icing fluid). Screw caps were fitted to the filling apertures of all the drums containing water ballast. The pilot insisted on using the drums of iso-propyl alcohol to make up a shortfall in the total weight of ballast required and overruled protests by licenced aircraft engineers that this was an unsuitable ballast material.

The location of the ballast in the cabin was determined from broken lashings found during an examination of the wreckage. The drums of iso-propyl alcohol had been tied on to the centre seats with nylon cord and the drums of water had been secured adjacent to the fifth seat with canvas webbing attached to the centre seat rail structures. The cardboard box and its contents had been placed behind the observer's seat and was unsecured.

1.6.2 Description

The Beechcraft D95A is a twin engined, four/five seat low wing monoplane fitted with a fully retractable tricycle undercarriage, electrically operated wing flaps, and dual flying controls. A trim tab is fitted to each elevator and to the rudder.

1.6.3 Operating limitations

The aircraft flight manual states in part that no aerobatic manoeuvres are permitted. Only manoeuvres incidental to normal flying including stalls (excluding whipstalls) and turns in which the angle of bank does not exceed 60° are permitted.

1.6.4 Stalling

The aircraft flight manual states the stalling characteristics are conventional. An aural warning is provided by the stall warning horn at speeds between 5 and 10 miles per hour (4 and 9 knots) above the stall speed in all configurations.

1.6.5 Spinning

The spin characteristics of the Beechcraft D95A are not known. Flight tests carried out by the manufacturer in August 1958 on the Beechcraft 95, an earlier version of the accident aircraft, revealed no abnormal spin characteristics. Some spins were entered from power-off stalls in 1g flight with full pro-spin rudder. Satisfactory recovery was achieved from all spins by using full opposite rudder to stop rotation and relaxing elevator control back pressure.

The use of power on the inside engine did not appear to have a significant effect on recovery. During spins made with the aircraft at maximum authorised weight, the C of G at the aft limit of the specified range, the undercarriage down and flaps fully extended, recovery action taken after one turn of the spin became effective after a further quarter of a turn. On average the total height lost from spin entry to recovery was 900 feet.

1.7 Meteorological information

The weather at the time of the accident was good. A witness located near the accident site estimated the surface wind as light and variable, with good visibility and small amounts of high cloud.

Staverton Airport at 1650 hrs.

Weather	Haze.
Cloud	Nil.
Surface wind	040° (M) 5 to 10 knots.
Visibility	14 km.

Aerodrome sea level altimeter setting (QNH) 1023 mbs.

An appreciation of the weather for the route East Midlands Airport – Daventry – Upper Heyford – Cheltenham covering the period 1530 - 1700 hrs prepared by the meteorological office contained the following information.

A light east-north-easterly airstream covered the route.

Winds	2,000 feet	060°	15 knots	Temperature + 17°C.
	5,000 feet	040°	15 knots	Temperature + 11°C.
Cloud	none below 8,000 feet.			
Visibility	10 to 15 km.			
Freezing level	12,000 feet.			

The accident occurred in daylight.

1.8 Aids to navigation

From approximately 1610 hrs until approximately 1633 hrs when radar contact with the aircraft was lost the pilot was provided with radar surveillance by Cotswold Radar. No radar positions were recorded and none were passed to the aircraft.

The base of radar cover provided by Cotswold Radar in the Staverton Airport area is approximately 2,000 feet above mean sea level (amsl).

1.9 Communications

Communications with the aircraft on the five frequencies used were normal. The last transmission from the aircraft was at approximately 1629 hrs when the pilot reported climbing through FL 55 for FL 60.

1.10 Aerodrome information

Not applicable.

1.11 Flight recorder

Not required and not fitted.

1.12 Wreckage

1.12.1

Inspection at the accident site revealed that the aircraft had been laterally level, in a 30° nose-down attitude and on a heading of 135° (M) when it struck the ground at a height of 850 feet above mean sea level (amsl). It came to rest relatively intact on a heading of 110° (M) about 3 feet aft of the first point of impact. The impact marks and the damage sustained by the aircraft were consistent with it having struck the ground at a high rate of descent with no forward speed while spinning to the left.

The nose section of the aircraft had been crushed by the impact. The fuselage structure had failed adjacent to the wing trailing edges and was attached to the tail only by the flying control cables. Distortion of the fuselage belly panels at impact had trapped the elevator, elevator trim, rudder and rudder trim cables.

All four wing tanks had ruptured on impact and there was evidence of fuel spillage from each tank.

The propellers which had detached and embedded in the ground showed evidence of rotation at impact and the damage sustained indicated the left propeller was absorbing more power than the right.

All five drums which had contained liquid ballast had ruptured on impact and were found outside the aircraft. The seals on the two drums which had contained iso-propyl alcohol were still intact. The stones and gravel ballast was found in a box immediately behind the front seat on the right side of the cabin.

1.12.2 A detailed examination of the wreckage was carried out and it was established that at impact,

The undercarriage was down and locked.

The flaps were fully extended.

The propeller control levers were selected to the full fine pitch position and both propellers were in full fine pitch.

The throttle on the left engine was $\frac{3}{4}$ open and that on the right $\frac{1}{2}$ open.

Both mixture controls were at full rich.

The engine fuel cocks were selected to the auxiliary tanks.

The elevator and elevator trim cables had been trapped at a position corresponding to 22° up elevator and 7° trim tab down.

The rudder and rudder trim cables had been trapped at a position corresponding to full right rudder and 3° left trim tab.

The control column sprocket had jammed at a position corresponding to 12° left aileron down.

1.12.3 The vane which actuates the aural stall warning was badly distorted and could not be tested. Discontinuities found in the wiring connecting the vane to the stall warning horn had been caused either by the impact or during the wreckage recovery. The stall warning horn functioned satisfactorily on test.

1.12.4 The measured range of 'up' elevator and 'right' rudder movements were respectively 2° and 1° in excess of the specified range of movement. No other evidence was found of any pre-cash defect or malfunction of the aircraft, its engines or flying control system.

1.13 Medical and pathological examination

Post mortem examination showed that both occupants had died from severe multiple injuries. Toxicological findings for both persons were negative. Contamination of the bodies tissues with iso-propyl alcohol had occurred when two sealed drums of this liquid, carried on board the aircraft as ballast, had ruptured at impact.

Histological examination of the pilot's heart revealed a severe degree of longstanding, active and progressive coronary artery disease with evidence of previous coronary thrombosis and myo-cardial infarction.

The severity of his cardiac condition was such that it could have led to incapacitation or death at any time. There is no pathological evidence to indicate he suffered a sudden incapacitation in flight. Nevertheless he could well have experienced an incapacitation within the last few minutes of flight without this being evident in any subsequent examination.

Examination of the hands of the pilot and the flight test observer revealed no injuries compatible with either occupant holding the control column firmly at impact.

1.14 Fire

There was no fire.

1.15 Survival aspects

The occupants were wearing lap straps which remained intact. However the nature of the impact was such that the accident is considered non-survivable.

1.16 Tests and research

None.

1.17 Flight testing of light aircraft

1.17.1 It should be noted that there is no legislation to prevent the holder of a current United Kingdom Pilot Licence flight testing an aircraft for renewal of the C of A provided the pilot's licence is appropriately endorsed for the aircraft type or group.

The CAA, which has the responsibility for establishing the airworthiness standards of aircraft, normally requires all light aircraft to be flight tested as part of the inspection procedure for renewal of the C of A. The Authority delegates responsibility for flight testing to suitable pilots and monitors the standards achieved by examination of the flight test reports and sample participation in flight tests.

Delegated pilots must be in flying practice, have recent experience on the aircraft type and must have received the agreement of the Authority that they are acceptable to conduct flight tests on the aircraft type.

In general, pilots who are considered to have the necessary experience and skill to carry out flight tests are briefed by a test pilot of the Authority on flight testing techniques and the reasons for carrying out the tests. It is stressed during the briefing that the pilot is responsible for the integrity of the conduct of the test and of the test report submitted. The Authority lays down as a guideline that pilots accepted for flight testing light twin-engined aircraft should have a minimum of 1,000 flying hours experience although this criterion cannot always be met. There is no mandate for test pilots of the Authority to check whether or not a pilot's licence is current when he or she is accepted as a suitable person to carry out flight tests.

1.17.2 The CAA Airworthiness Division flight test schedule for light twin-engined unpressurised aircraft requires, in part, a check to be made of the aircraft's stalling speed and handling characteristics at the stall, both in the clean configuration and with undercarriage down, flaps fully extended. It calls for the stalls to be carried out clear of cloud, with the throttles closed and propeller pitch fully fine and recommends that each stalling procedure be commenced at an altitude not below 5,000 feet above the terrain.

The flight test schedule recovered from the wreckage of G-AYNM contained, in the relevant section, written entries indicating the aircraft had been stalled in the clean configuration, that the speed and handling characteristics at the stall were satisfactory, and that a further stall was being carried out with undercarriage down, flaps fully extended.

1.17.3 *Privileges of the Private Pilot Licence*

The Air Navigation Order 1974, Schedule 9, Part A, in force at the time of the accident contains in part the following:

'Private Pilot's Licence (Aeroplanes)

Privileges: The holder of the licence shall be entitled to fly as pilot in command or co-pilot of an aeroplane of any of the types specified in the aircraft rating included in the licence; Provided that:

(a) he shall not fly such an aeroplane for the purpose of public transport or aerial work, other than aerial work which consists of the giving of instruction in flying in an aeroplane owned, or operated under arrangements entered into, by a flying club of which the person giving and the person receiving the instruction are both members;

(b) he shall not receive any remuneration for his services as a pilot on a flight other than remuneration for the giving of such instruction as is specified in paragraph (a) of the proviso.'

1.17.4 Information received from the aviation maintenance organisation of which the pilot was Managing Director indicates that it had charged a fee for carrying out flight tests for renewal of the Certificate of Airworthiness on any aircraft on which it had completed the necessary inspection procedures and that approximately 95 per cent of the flight tests had been carried out by the Managing Director.

1.18 **New investigation techniques**

Nil.

2. Analysis

2.1 General

There is no doubt that the accident was the result of a failure to recover from a spin. The only pre-crash defects found in the aircraft and its systems were the excess range of movements of 'up' elevator and right rudder, neither of which are considered to be causal factors for the entry into the spin or the failure to recover from it, as the evidence indicates that a test stall and recovery had been carried out satisfactorily on the aircraft in the clean configuration. This implies that the spin was either pilot induced deliberately, or inadvertently, or that it resulted from a loss of control due to pilot incapacitation.

2.2 Deliberate spin

The pilot's failure to comply with the relevant air legislation in the matters of his Private Pilot's Licence and the aircraft's fitness for flight indicates a disregard of authority on his part. However it is unreasonable to suppose he would have been so foolhardy as to deliberately induce a spin in an aircraft not certificated for spinning.

2.3 Inadvertent spin

There is ample evidence to indicate that at the time the accident sequence started the aircraft was being deliberately stalled with the undercarriage down and the flaps fully extended. In this configuration, a degree of mishandling by the pilot or his incapacitation could have generated sufficient sideslip to have produced conditions favourable for the development of an inadvertent spin. However if a spin had ensued a competent and fit pilot should have experienced no difficulty in effecting a recovery provided that sufficient altitude was available.

2.4 Pilot incapacitation

Although the pathological evidence shows that the pilot's death was due to multiple injuries his cardiac condition was such that death or incapacitation could have occurred at any time. For stalling tests to be carried out safely a reasonable degree of pilot competence is required together with prompt and precise control inputs to effect a recovery. Had the pilot suffered a heart attack and become incapacitated during a stall manoeuvre it is entirely possible that the aircraft could have entered an inadvertent spin. Any incapacitation may have been subtle or severe. A subtle incapacitation may not have been apparent to the flight test observer although it may have resulted in the pilot being unable to maintain control, whereas a severe incapacitation may have resulted in an application of pro-spin control inputs.

2.5 Attempted recovery

It is apparent that some attempt was made to recover from the spin resulting in a change of direction of the spin rotation. However it has not been possible to determine whether this action was taken by the pilot or the observer. It is considered unlikely that the flight test observer with his extremely limited flying experience would have been able to effect spin recovery.

2.6 Pilots licence

The Pilot's PPL did not contain a current Certificate of Experience or Certificate of Test and the Medical Certificate contained in the licence was seriously out of order. There is little doubt that he had not fulfilled the medical requirements of his licence in as much as he had not submitted himself either to the standard medical renewal examination or to the particular procedure that would have been necessary following his heart attack; had he done so it is improbable that his licence would have been renewed. It is considered that the alteration of the dates of the medical certificate were most probably made by the pilot as the only person to benefit from so doing. The dangers of acting as pilot in command of an aircraft while medically unfit are widely appreciated and the attempt to do so by the pilot of G-AYNM on this occasion must be considered as a causal factor in the accident.

2.7 Airworthiness

2.7.1 *C of A inspection*

The action of the pilot in flying the aircraft before all the mandatory inspections had been completed was high-handed, irresponsible and potentially dangerous. Although the absence of a Certificate of Fitness for Flight is not considered to have been a causal factor in the accident it is disturbing that such a state of affairs could exist within a professional organisation serving the public.

2.7.2 *Ballast*

The selection of drums of iso-propyl alcohol, a material totally unsuitable for use as ballast, was apparently symptomatic of the pilot's state of mind as highlighted in paragraph 2.7.1, in which a determination to complete the test flight whatever the obstacles transcended all reason.

3. Conclusions

(a) Findings

- (i) The aircraft was undergoing inspection for renewal of the Certificate of Airworthiness;
- (ii) The pilot insisted on flight testing the aircraft knowing the inspection for renewal of the Certificate of Airworthiness was incomplete, and that no Certificate of Fitness for Flight had been issued.
- (iii) The centre of gravity of the aircraft was within the prescribed limits.
- (iv) No evidence was found of defects in the aircraft considered to have had a bearing on the cause of the accident.
- (v) During a test stall carried out with the undercarriage down and flaps fully extended the aircraft entered a spin from which recovery was not effected before ground impact.
- (vi) The pilot did not have a current Certificate of Experience or Certificate of Test in his licence or log book.
- (vii) The pilot had last undergone a medical examination for licence purposes on 7 June 1971 and had been assessed as fit to exercise the privileges of the licence until 7 July 1973.
- (viii) The dates on his medical certificate had been altered indicating that the certificate was valid from 7 June 1975 to 7 July 1976.
- (ix) The pilot suffered a myocardial infarction in January 1975 but did not disclose this to the CAA medical authorities.

(b) Cause

The accident resulted from the failure to recover from a spin which occurred during a stall. The reason for the spin entry could not be determined but the possibility that the pilot became incapacitated cannot be dismissed.

G C WILKINSON
Inspector of Accidents

Accidents Investigation Branch
Department of Trade
October 1977