#### 1932 SEPTEMBER 18: FIRST SUNDAY AIR MAIL CRASHES; ALL OCCUPANTS KILLED

Captain Leslie Holden, one of Australia's foremost air pilots, was one of three persona killed on 18 September 1932 when a New England Airways De Havilland Moth, carrying mails from Sydney to Brisbane, crashed in a rain storm at Myocum, seven miles from Byron Bay. The other two were Dr George Redfern Hamilton, a Sydney specialist, and Mr Ralph Virtue, pilot, of Lismore.

## The Crash



VH-UPM crash site Byron Bay NSW, September 1932: Photo Bruce Robinson via Fred Niven

The aircraft, a DH80 Puss Moth VH-UPM *City of Lismore*, was piloted by Virtue and on charter carrying the first Sunday air mail from Sydney to Brisbane. It left Lismore shortly after 1330, and, when seen crossing the Coorabell Range, it appeared to be in difficulties. An eye witness stated that it appeared as if the pilot was searching for a landing ground. The accident happened shortly before 1400.

Witnesses reported that, just before the accident occurred, the rudder and part of the wing fell. Initially it was thought that the aircraft touched a tree on top of Coorabell Ridge while flying through rain and mist about half a mile back from where the wing collapsed in mid-air.

A subsequent investigation, made by the Byron Bay police the day after the crash, dispelled any doubts that the wing of the aircraft was damaged prior to attempting a landing. The inquiries also dispelled any theory that the aircraft hit an object on Coorabell Ridge. A young woman on the Lismore side of Coorabell Ridge saw the left portion of the wing in a damaged condition before the aircraft reached the ridge, which it just cleared. The police made an investigation to see if there was any trace of the Puss Moth having hit an object on top of the ridge, but with negative results.

Ralph's brother, Keith Virtue, wrote in his autobiography: Virtue in Flying:

At this time, Captain Les Holden, one of the Adelaide Holden transport family, and famous as a WWI air ace as well as for his rescue of Kingsford Smith and Ulm in the Kimberleys in 1929, arrived in Australia from New Guinea on a combined business and holiday trip. In New Guinea he had established an air transport service from Salamaua on the coast to the goldfields at Wau, and this venture was so successful he needed to buy extra aircraft. Captain Holden, his wife and three young daughters flew by New England Airways from Brisbane to Sydney, where they spent time with his great friend, Dr.George Hamilton, a Macquarie Street

skin specialist who had accompanied him on the Kimberleys Coffee Royal rescue trip [see Vol One 290331] as well as countless other occasions.

The two men had arranged with Brisbane friends to take a holiday cruise along the Barrier Reef in their yacht, and decided to charter a New England Airways Puss Moth to take them up to Brisbane. Ralph Virtue was the pilot.

They set off from Sydney on Sunday morning 18 September 1932 with fishing gear, rolls of camera film, luggage and a small mail bag, well under the maximum load. They arrived at Lismore at 1.30pm to refuel and took off heading coastwards because in the overcast weather with south-easterly squalls a direct flight over the McPherson Ranges was impractical. To reach the coastal route however, there was still Coorabell Ridge, a 700 feet spur of the Burringbar Range to negotiate. The plane was caught in a sudden downdraught and turbulence as it flew over the ridge at about 100 feet to keep under the cloud. According to a half dozen eye witnesses it appeared to turn a somersault in the air, the pilot managed to right it, then the left wing broke off and the rudder. It dived sideways, crashed with tremendous force, buried itself in the ground and shot forward again, splintering to pieces

#### Witness Statements

Mr. Virtue was an experienced airman. The 'plane was well clear of the hill, and was about 1,000 feet up, when the rudder and a piece of the wing were seen to fall. The 'plane somersaulted, but appeared to be under control shortly afterwards. Then it dived, and, after the impact, not one part of it remained intact. It was smashed to matchwood, and splinters and small pieces of the engine were scattered over an area of more than a- quarter of a mile. Mr George Plaster, who, with a Mr Montcastle, witnessed the crash, said that night:

...the 'plane was travelling its usual course, but appeared to be flying very low. There was a heavy fall of rain as the machine appeared over a. ridge, and it soon looked to be in difficulties, and was wobbling, but the pilot, it seemed, gained control. Then the 'plane seemed to fall to pieces, and it dived to earth with a tremendous crash, burying itself momentarily in the ground, but again shot forward for about fifteen yards, where it came to rest.

When I arrived on the scene, the men were beyond hope. Mr Montcastle and I got the bodies out of the wreckage. They were terribly mutilated.

## Mr Roy Montcastle said:

...the paddock was churned up for many yards-near the scene of the crash. Although flying low over the ridge, the place where it fell, was about 1,000 feet high. It hit the ground on its side, and the men must have been killed instantly. The bodies were put on a lorry and taken to Bangalow. They were almost unrecognisable.



Contributed by Greg Weir from the Ron and Rae Boon collection.

# The Deceased Pilot and Passengers

Captain Holden, who was educated in Sydney, was an early volunteer for the Royal Air Force at the outbreak of war. He was awaiting a place in that establishment when the Royal Australian Air Force was formed, and it was with the latter squadron that he went overseas. His machine was shot to pieces on more than one occasion. He always turned up safely, however, and earned for himself the nick names of the *Homing Pigeon* and *Lucky Holden*. One of his adventures when he was a comparative youth was with the famous German airman. Baron Von Richthofen. Captain Holden was one of the original members of the New South Wales Aero Club. Mrs. Holden was to accompany her husband in the ill-fated 'plane, which left Mascot early morning on the 18th, but she cancelled the trip. One of the reasons Captain Holden was proceeding to Brisbane was to negotiate for the purchase of additional aircraft before returning to New Guinea.

In the death of Captain Holden, said Mr Claude Smyth, secretary of the Aero Club, Australia has lost one of its most brilliant and courageous airmen. Captain Holden has left a widow and several children. Dr George Redfern Hamilton, who practised in Macquarie-street, and was one of Sydney's best-known specialists, had devoted himself to flying as a hobby for some years. Although not a pilot, he was an enthusiastic member of the Aero Club, and lost no opportunity to further the cause of aviation. He has left a widow and two children. Mr Ralph Virtue, the pilot of the 'plane, lived at Lismore, and was a cousin of Mr Keith Virtue, also an airman, who was one of the first on the scene of the crash. Mr Ralph Virtue was a single man, aged 27 years. He had had considerable flying experience.

# **Detailed Investigations**

Following the fatal in-flight structural failure of VH-UPM on 18 September, the Civil Aviation Branch grounded all Australian Puss Moths five days later, by cancelling their Certificates of Registration and Certificates of Airworthiness. On 27 February 1933, New England Airways agreed that the wreckage of VH-UPM could be shipped to the Royal Aircraft Establishment (RAE) at Farnborough. Investigations into the airworthiness of the type took place in Australia, United Kingdom and by the manufacturer, de Havilland, concentrating on wing *flutter*, tailplane strength and wing structural integrity. Testing by the RAE at Farnborough recommended a stabilising strut be fitted to the forward leg of the wing V struts, and this was one of many modifications adopted. No wing failures occurred in Puss Moths so modified.

In Australia investigations were carried out by the Air Accident Investigation Committee (AAIC). In all cases investigations by local authorities had shown that the accident had been caused by the inflight failure of one or both wings. The type remained grounded until the following year when mandatory modifications to strengthen the wing structure were finalised. When installed, each Puss Moth had its certification renewed individually.

The Puss Moth accidents led to the first mathematical analysis of *flutter* reported in the now-famous Air Ministry Report: *Reports and Memoranda R & M No. 1699, Report on Puss Moth Accidents*, (HMSO 1937). *Flutter* had occurred in earlier aircraft but had not been recognised as such. This Report examined nine instances of wing separation accidents on DH80 Puss Moths. These were as follows:

10 10 00	THETTO	D 11 D D 1 1774
13.10.30	VH-UPC	Darling Ranges, near Perth, WA
5. 5.31	ZS-ACC	Van Reenen, South Africa
13.11.31	ZS-ACD	Sir Lowry's Path, South Africa
21. 5.32	G-CYUT	Ottawa, Canada
27. 7.32	G-ABDH	Churt, Surrey, UK
18. 9.32	VH-UPM	nr Byron Bay, NSW
29.10.32	G-ABFU	Grenoble, France
7. 1.33	CF-APK	Tuscan Mountains, Italy (Hinkler)
22. 6.33	HS-PAA	between Khonkaen and Udorn, Siam

The Air Ministry Report confirmed beyond doubt the findings of the AAIC, that the port wing separated in flight, causing the accident.

### The Mail



Cancelled Sydney 3-P 17SE32

A bag of special mail, which was being carried on the *City of Lismore*, was recovered, and was delivered to postal officials in Brisbane by aeroplane in the afternoon of 19 September.

# The Aircraft

The Puss Moth was a conventional high-wing cabin monoplane with vee strut bracing. Designed by De Havilland as the DH80A, 260 were built in the UK, and 25 were assembled in Canada. First flown

on 25 August 1930, construction number 2052 was shipped to Australia and assembled at Eagle Farm airfield, Brisbane. VH-UPM was registered, number 410, on 7 November 1930 to New England Airways Limited, Lismore, NSW, and named *Miss Lismore*. Following the crash its registration was cancelled on 23 September 1932.

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