



Issue 41 Sep - Nov 2017

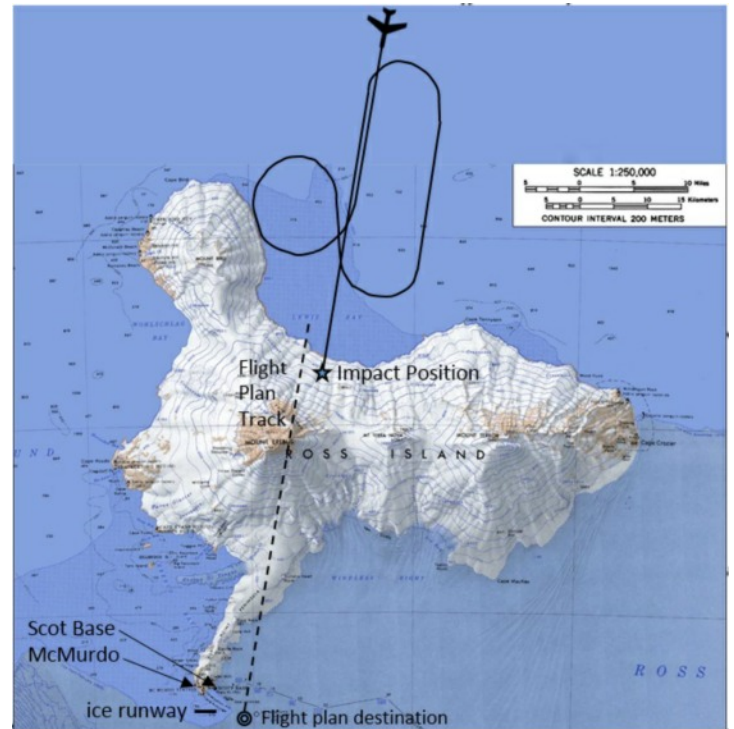
Contrails

Newsletter of the Christchurch Aviation Society

CAvSoc

DC10 Crash in Antarctica by Dr James Mason

Our September talk was by Dr James Mason and concerned the Air New Zealand aircraft crash in Antarctica on 28 November 1979. Antarctica is the 5th largest continent, it covers 9% of the world's surface, contains the largest desert and 98% is covered in ice. The Antarctic Treaty System was signed in December 1959 by 12 nations (including UK) but signatories now total 53 countries. Ross Island is a volcanic island discovered and named from the expedition by James Ross in 1840. Two of the volcanic peaks are named after his ships HMS Erebus and HMS Terror, and a third peak is Mount Bird. In 1957 the Commonwealth Trans-Antarctic Expedition successfully crossed the continent for the first time. It was led by Vivian Fuchs and included New Zealander Edmund Hillary and his friend and colleague, Peter Mulgrew. With the general interest in Antarctica, in the late 1960s Air New Zealand started considering commencing tourist flights. However, the concept would not become economic until the introduction of the DC10 aircraft in the 1970's and 1977 saw the first flight by Air New Zealand; Qantas had made the first sightseeing flight a few days earlier. Marketed as a unique sightseeing experience, each flight carried a knowledgeable guide and Sir Edmund Hillary was scheduled to be the guide on the fateful flight but due to another commitment Peter Mulgrew stood in for him. The two pilots, Captain Jim Collins and co-pilot Greg Cassin, were experienced on type although neither had flown the Antarctic route before. Preparation included viewing the previous flight plan and the approved route, along with a simulator run using the navigation techniques with IMC at 16,000 ft until VMC at 6,000 feet could be used for sightseeing (Mt Erebus was 12,448ft). The route was designed to leave Erebus well to the East with a flight path down McMurdo Sound. The 1977/78 navigation co-ordinate used was 166.48 east but in 1978/79 the heading was changed to 164.48 east. However, on the day of the flight a modified version of the 1977/78 co-ordinate (166.58 east) was entered into the navigation system by the ground navigation staff without the flight crew being informed. Consequently, the flight crew were expecting to fly over McMurdo Sound but the navigation system was set to fly directly over Mt Erebus. To provide a better experience for the passengers, on nearing the area a descending figure of eight was commenced but the crew had misidentified the terrain. The pilots continued descending in a peculiar and little known white out situation despite the engineer questioning their position. The aircraft



Map from Wikipedia - Crew expected to be approx 30 mile west of track above so as to be in Mc Murdo sound

impacted at approximately 1,500 ft on the lower slopes of Mount Erebus. The initial enquiry report in June 1980 by the accident investigator, New Zealand's chief inspector of air accidents, Ron Chippendale, cited pilot error as the prime cause of the accident because the captain descended below the minimum safe altitude level, even when the crew was unsure of the aircraft's position. Subsequently a Royal Enquiry was set up with a highly respected Judge, Peter Mahon. He reported in April 1981 that he was in disagreement with the chief inspector's opinion and that the dominant reason for the accident was that the flight path originally given to the crew was subsequently altered without their being told. He also spoke of having had "to listen to an orchestrated litany of lies". However, two years later an appeal meant that the Mahon Report was overturned following a combined legal action by Air New Zealand and its employees.

Meetings - at Drui Hall commencing 8pm

Wed 01 Nov - Initial Flight Trials of the BAC 1-11
by John Thorpe

Wed 03 Jan - The Air Training Corps
by Ernie Ball

Wed 07 Mar - The Bahrain DC4 Air France Disasters
by Kevin Patience

MH370 - the search continues

Following the disappearance of the aircraft on 8th March 2014 an international underwater search was made in the Indian Ocean in the areas of high probability. In January 2017 this search formally ended but work continued analysing satellite data and this, combined with the areas searched so far, has led to a renewed focus for a search. This time a no find no fee arrangement has been set up between Malaysia and Ocean Infinity, a company specialising in hydrographic & geophysical survey.