FLASHBACK

## Misadventure at Mauritius

A lucky escape for the

Macarthur Job

passengers and crew of a

Qantas Super Constellation that

never made it home to Sydney.

HE 1960S – THE DECADE IN WHICH Qantas commenced building its world-wide reputation as one of the safest international airlines – began as something of an anti-climax for the pioneer Australian company.

Already Qantas had established an enviable record for safe and reliable transoceanic operations.

In June 1943, at the height of the Pacific war, Qantas began what was at that time the longest non-stop air route in the world – a weekly service in both directions between Perth and Ceylon. Requested by the British Government, the service was an attempt to break the Japanese blockade in southeast Asia and re-establish the Australia-Britain air link the war had severed.

Operating twin-engined Catalina flying boats, crews spent up to 30 continuous hours in the air on each leg, the near-impossible distance of 3500 nautical miles requiring a 25 per cent overload on take-off and a payload reduction to a mere 1000 pounds to carry sufficient fuel for the trip. The two years of near-faultless operations that followed, all flown in radio silence over a vast area of enemy-patrolled Indian Ocean, was a fine tribute to Qantas' professionalism and the skill of its crews.

In the last weeks of the the war, faster converted Liberator bombers, then Avro Lancastrians (a "civilianised" version of the Lancaster bomber), replaced the "double sunrise" Catalinas on the non-stop Perth-Colombo route. With the cessation of hostilities, an intermediate refuelling stop was introduced at Cocos Island, enabling payloads to be increased. Sadly, less than a year later, on 23 March 1946, a British-registered Lancastrian, G-AGLX, operated by Qantas, with five crew and five passengers aboard, failed to arrive at Cocos Island on a flight from Colombo. No trace of that aircraft was ever found.

Two months later, in May 1946, the traditional pre-war Australia-England route via Singapore was resumed, with Hythe flying boats replacing the original Empire boats, most of which had succumbed to risky wartime military transport work or enemy action. Even so, the Lancastrian service, now jointly operated by Qantas and BOAC through to London, was retained as a faster alternative, taking only four days for the trip to Britain, as against nine days by flying boat.

In the post-war years the flying boats and the Lancastrians were replaced, firstly by Lockheed Constellations and then Super Constellations, as Qantas expanded its services across the world. The airline's famed "round the world" service in both directions began in 1958 and a year later Qantas moved Australia into the jet age, introducing the futuristic new Boeing 707s to its trans-Pacific services.

But for a company that had established a reputation for superb operations and maintenance, a rude shock lay in store.

Ironically, the incident occurred almost at the same time as the Minister for Civil Aviation, Senator Shane Paltridge, was tabling the Qantas Annual Report for 1959-60, declaring that the nation's overseas airline had flown 148 million miles since 1946 without a major accident or fatality. On 25 August 1960 the Lockheed Super Constellation, VH-EAC Southern Wave, was preparing for departure from Plaisance

Airport, Mauritius, a stop-over on the

Super Constellation VH-EAO, Southern Aurora axies for take-off from Sydney in the late 1950s The wing-tip tanks were the source of <u>Southerr</u>

Vave's wing fire.

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company's fortnightly service from Johannesburg to Sydney.

Under the command of Captain EW Ditton, and carrying 12 crew and 38 passengers, VH-EAC was scheduled to leave Plaisance at 5.30pm local time. Light rain falling at the airport eased shortly before the passengers were ushered aboard.

Twenty minutes before sunset, the doors were closed, the steps rolled away, the engines were started, and VH-EAC taxied to the threshold of Runway 13, the only runway adequate for the Super Constellation's take-off at its all-up weight of 133,000 pounds. The wind was from 110° at 10 to 15 knots, and the temperature 20° Celsius.

The lengthy run-up and pre-take-off checks characteristic of Super Constellation operations followed. Cleared at last for takeoff, the captain opened the throttles, continuing to 35 inches of manifold pressure as the aircraft accelerated. At this point,



following normal procedure, the flight engineer took over the duplicate throttles at his console, quickly increasing the power to 57 inches. As the airspeed rose through 112 knots, the captain anticipated the engineer's  $V_1$  call at 115 knots. Instead the flight engineer suddenly called: 'Failure No 3!'.

Immediately the captain pulled off the power, braked hard, and pulled the reverse thrust levers up and back, applying maximum reverse thrust and full braking as soon as he sensed the aircraft was not decelerating as it should. Meanwhile, the flight engineer feathered No 3 engine and pulled its emergency shut-off valve.

Skidding on the concrete surface made slippery by the rain, and still moving at about 40 knots, the Super Constellation overran the end of the runway. It ploughed its way through the grassed safety strip, bounced jarringly over a low embankment, and plunged nose-first into a rocky gully about three metres deep, finally coming to a violent stop about 100 metres beyond the end of the concrete.

Alerted by the tower controller, the airport's four fire tenders began racing towards the accident scene as soon as it was evident the Super Constellation was in trouble.

Mauritius-based Qantas staff – company representative Jim Cowan, a former navigation officer, and engineers D J Kennedy and R P Barrett – had been watching the takeoff from a balcony on the terminal building. Hearing the sudden scream of reverse thrust and seeing the Super Constellation skidding off the end of the runway, they dashed down the stairs to their car. Appalled at the sight of thick black smoke mushrooming from the direction in which the aircraft had disappeared, they sped down the runway, passing the fire tenders on their way.

Though all on board the now burning aircraft were badly shaken, no one was hurt. But through the cabin windows, the wings could be seen ablaze. The captain shouted 'all out', and the flight crew ran back into the cabin to help with the evacuation of passengers. For a time bedlam reigned – some of the doors were jammed, and children were hysterical.

Those who left the burning aircraft through the forward emergency exit and loading door had to jump nearly three metres down on to rocks; those who went out the rear main door not only had to jump, but had then to run through burning scrub before they were clear of the fire. The captain and the first officer were the last out, leaping from the forward door after they had ensured no one was left on board.

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On the ground below the rear fuselage, the three Qantas staff came upon crew members struggling to lift an overweight woman passenger who had broken her ankle when she fell from the cabin door. While Cowan assisted them to move her clear, Kennedy and Barrett courageously climbed into the cabin through the rear emergency exit. Meanwhile, the airport firemen had begun spraying foam on the aircraft in an attempt to restrain the wing fire that had erupted when the fuel tanks ruptured in the impact.

Running the length of the smoke-filled fuselage as the fire crew continued to fight the flames, Kennedy and Barrett made a final check of the first class and tourist cabins to ensure no passenger had been left behind. Fire was now licking in through the open starboard emergency exit, and there was an ominous rumbling sound. Kennedy yelled that it was 'time to go' and they left the way they had come. The rough ground beyond the end of the runway made it impossible for the fire tenders to reach the forward section of the aircraft, and the 5000 gallons of high octane fuel on board proved too much. Except for the tail section, the aircraft burnt to destruction.

Though it was now dusk, within a few minutes all the passengers had been brought to the end of the runway. When the airline's coach reached the scene they were ushered aboard and driven to a hotel. The woman who had broken her ankle was taken to hospital by car. A six year old child who had fractured an arm, and a number of passengers suffering from burns, abrasions and bruises, were later treated at the hotel by the local Red Cross.

The accident was investigated in detail on site by the Australian Department of Civil Aviation's Super Constellation specialist, Senior Examiner of Airmen, Jim Brough. He finally attributed it to the fact that, because of No 3 engine's inability to achieve full take-off power, VH-EAC had not accelerated in accordance with its rated performance. As a result, with the incipient engine failure not being called until shortly before  $V_1$ , there was insufficient runway left to stop.

The flight engineer's indecision in not calling the engine failure immediately – as the partial loss of power became apparent – had contributed to the accident, as had the captain's delay in applying full braking and full reverse thrust. These factors pointed to inadequacies in both training and operating procedures. The instantaneous wing fire had evidently broken out when the port wing tip tank burst on impact. Fuel pouring on to the rocky ground from other ruptured wing tanks then spread and intensified the blaze.

Forwarding Brough's comprehensive report to DCA's Director-General DG Anderson (later Sir Donald Anderson), the Department's Director of Air Safety Investigation commented: "This was a 'cheap' accident for Qantas...the important thing is to ensure the company acknowledges the weaknesses involved in bringing it about and is made to see it was completely avoidable."

Spared what could so easily have been tragic consequences by a frighteningly slim margin, Qantas's public composure seemed unaffected. But behind the scenes the accident was a serious affront to the airline's pride after so many years of accident-free flying – especially so in the light of its expanding jet network.

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