THE LOSS OF 754

In 1991, the Australian Defence Force suffered an extraordinarily high rate of fatal aircraft accidents. Among the six accidents, which ranged from the RAAF Museum's civil-registered Tiger Moth, in which the passenger survived, but the pilot died; to the loss of a No. 33 Squadron Boeing 707, in which all five crew members died; was the loss of the RAAF P-3C, A9-754 on 26 April. That incident resulted in the death of one crew member.

At 0919 hours local time on 26 April 1991, No. 10 Squadron (10SQN) P-3C A9-754 took off from the Cocos Islands for a transit flight to Edinburgh, South Australia. The occupants of the aircraft were the crew (the captain, the co-pilot, two engineers, the navigator and one sensor operator) and 14 passengers, all of whom were aircrew members of No. 92 Wing (92WG). The captain, a qualified right-hand-seat check captain, occupied the right-hand seat. The co-pilot, a qualified P-3C captain, occupied the left-hand pilot seat.

After take-off and with the co-pilot at the controls, the aircraft climbed to 5000 ft before returning to the airfield for an over-fly at a speed of 370–380 knots indicated air speed (KIAS) and a height of 300–400 ft above ground level. At 0924 hours, after overflying the airfield, the co-pilot initiated a pullup. Immediately after the initiation of the pull-up, the crew heard a loud bang, the nose pitched up and severe vibrations shook the aircraft. The captain immediately reduced speed, climbed the aircraft to 1000 ft and turned the aircraft towards the airfield.



Despite the application of maximum power, level flight at a constant airspeed could not be maintained. In addition, the combined strength of both pilots was required to retain control of the aircraft. When it became apparent that it would not be possible to make the runway, the aircraft was ditched in the Cocos Island lagoon.

At 0928 hours, the aircraft entered the lagoon one mile short of runway 15 and some 500m from the shore. The impact was gentle and the deceleration, though rapid, was not violent, the aircraft immediately settling to the bottom of the shallow lagoon and filling with water to a depth of half a metre. One crew member was killed instantly when No. 2 engine separated and penetrated the side of the fuselage. The remaining crew and passengers, one of whom suffered minor injuries, exited the aircraft unaided and were ferried to shore by local residents.



A9-754 was one of three 92WG P-3Cs (754, 661 and 663) involved in the search for the bulk ore carrier, Mineral Diamond. Given the duration of the search, the aircraft were operating with double crews. In the case of 754 the largely 10SQN crew was augmented by aircrew from No. 11 Squadron, including the tactical co-ordinator FLTLT (later AVM) Ken Watson.

On 24 April, 661 was tasked to fly a search sortie for Mineral Diamond from Cocos to Pearce. Later that day, with the search for the ore carrier called off, 661 completed immigration formalities at Pearce, refuelled and redeployed to Edinburgh. Among those returning to Edinburgh aboard 661 was the 10SQN Executive Officer, SQNLDR (later WGCDR) David "Harry" Paterson. Twenty-nine years after the Mineral Diamond search Harry would recall that:

> "My aircraft (661) was the first to leave Cocos on 24 April and the other (754) was to leave in the next day or two. I authorised both sorties before I left. We did a standard departure from Cocos, refuelled at Pearce and returned to Edinburgh after a 14-hour flight. I expected the other aircraft to do the same. I appointed FLGOFF Willsher as captain of 661 and Paul King as the captain of 754. As we all know, the Canadian exchange pilot Buzz Burry took the left-hand pilot seat for the take-off and the rest is history."

By the night of 24 April there were two 92WG P-3Cs on the ground at Cocos: 754, after its Cocos- Cocos Mineral Diamond sortie that day, and 663, captained by FLTLT Bino Barkla, which had arrived that day from RAAF Pearce. At this time 92WG crews enjoyed a close relationship with the Cocos Island community. There was a long history of overnight stays by crews on flights to and from Butterworth and Diego Garcia, and using the airfield as a base for other Indian Ocean surveillance operations. Along with participating in Cocos Islands Anzac Day commemorations, at that time, a number of 92WG (and occasionally US Navy P-3 crews) also observed the island tradition of conducting a high-speed flypast, commonly referred to as a beat-up, on arrival or departure. Twenty-nine years later, Bino Barkla would recall that:

> "After an uneventful transit, I vaguely recall discussion about the possibility of a fly past on Anzac Day, but I only remember not being keen to do it as captain, due to a deep-seated dislike for display flying. My negative input may have put a dampener on the flypast idea momentum, sufficient that it did not proceed."

On the morning of Friday 26 April, 663 was the first aircraft to depart Cocos. Meanwhile, aboard 754, Ken Watson recalled there being discussion during the preflight about performing a flypast on departure. Displacing FLGOFF Tom Henniker, the assigned co-pilot of the flying crew, the beat-up would be flown by "Buzz" Burry, captain of the supplementary crew and right-hand seat check captain for 10SQN. Ken Watson felt that the preflight "had a bit of a bad feel about it" and in discussing the proposed beat-up with the aircraft captain, Paul King, Ken said, "I don't think we need to do it".

Back at Edinburgh, 10SQN Commanding Officer Bob Grey, had no reason to suspect that a flypast at Cocos was under contemplation by members of his squadron. His first executive action upon taking command in May 1988 had been to issue to his flight commanders the instruction that:

> "I encourage you to fly with the crews assigned to your charge as often as you can. You are to authorise all flights by the crews assigned to your charge with the following limitations. You shall not authorise any type of flying display or beat-up. There is to be no unnecessary low flying. Specifically, crews shall not be authorised to fly low over Adelaide beaches or other beaches in close proximity to populated areas. In light of the recent USN P-3 incident at Cocos Island, only standard visual and published instrument arrivals and departures may be authorised there."

Ken Watson later recalled that, sitting at the tacco station on 754 after take-off:

> "At the point of impact, it was fairly benign. There was a big bang, and a lot of debris fell down around me. When we stopped, I checked in, arms and legs all serviceable—right, we can flee now. As I turned around, one of the propeller blades had penetrated the aircraft skin into the cabin just behind my head. I remember looking at it and thinking huh, the prop came through the wall! So, another foot or so I would have been in the same boat as Tom. That was an arresting moment. At that stage you were just so happy to be alive. It's in the quiet moments afterwards that you contemplate those situations."

Back in Australia, speed and G limits were initially imposed on RAAF P-3Cs, a board of inquiry (BOI) was convened, and an investigation conducted by the DSTO's Aeronautical Research and Maritime Laboratory (ARML). To some observers at least, both investigations seemed more focussed on why the wing leading-edges had failed, rather than why the wing leading-edges had been placed in a circumstance where they would fail.



Despite numerous other flypasts having been performed at Cocos by 92WG crews, this was the only occasion resulting in such a disastrous outcome. Wing corrosion, which was starting to emerge as a 92WG fleet maintenance issue at this time, was one of the factors advanced as contributing to 754's demise. Notwithstanding that other aircraft suffering from the condition would likely have been involved in flypasts in the lead up to the corrosion issue being identified, no other 92WG aircraft suffered 754's fate.

Commenting on the investigation into the loss of 754, and any link with the US Navy P-3C, Lockheed Field Service Representative, Jack Miller would later recall that:

> "I think the common factors for the only two P-3 aircraft in the world to have suffered a WLE (wing leading-edge) collapse, were that they were both taking off from the same uncontrolled airport, and both performed a fast spectacular flyby pull-up with a heavy P-3 for local residents. The USN accident investigation concluded there were no material defects with the USN P-3's WLEs. 160284 was transferred to the USN on 21 February 1977. 754 was transferred to the RAAF on 27 May 1978, 16 P-3s and more than a year later. None of the aircraft in between had any leading-edge losses or collapses."

The crash of 754 resulted in death, injury and great trauma to those in the aircraft, and their families, and the total loss of the aircraft. It also ended the careers of good Air Force officers not directly involved.

Fortunately for Air Force at least, the flying safety culture that saw six fatal flying accidents in 1991, was about to dramatically change for the better. Sadly, it would not be until much later that similar cultural changes would take place in both the Army and Navy.

References & Notes

1. The long-term fatal accident rate for 1972–92 was 2.2 aircraft.

2. Released in May 1993, by Defence Minister Robert Ray.

3. Subsequently Mineral Diamond was assumed to have foundered with the loss of all hands in a position 1500 miles to the west of Perth.

4. The comments attributed to Ken Watson are extracts from an interview conducted with him by Dr Stephen Mugford in 2011 and subsequently edited by Ken in correspondence with the author.

5. By coincidence, Paul King was the co-pilot of the No. 10 Squadron crew which refused to fly a sortie from NAS Moffett Field in December 1989 with a captain they deemed unfit for flying duties. The slightly notorious incident is remembered by those involved as 'The Mutiny of Moffett Field'. Arguably, in the prevailing circumstances, the unusual position taken by the crew was correct and later vindicated by the captain's posting from No. 10 Squadron shortly after the incident.

6. A US Navy VP-46 P-3C, 160284 suffered wing leading-edge separation after take-off at Cocos on 13 February 1988. 160284 made it back to the runway and was subsequently able to continue its service life.

7. Having been displaced from his co-pilot's seat, Tom Henniker was assigned to ditching station 18, the outer of the pair of emergency ditching stations on the port side of the aircraft, aft of the tacco station between electronic racks B3 and D1. Significantly, this location is in line with the arc of the port side propellers. Realising the fears expressed by Tom Trinder after seeing the damage caused by propeller ingress to A9-296, Tom Henniker was killed when struck by the propeller from No. 2 engine penetrating the fuselage. Off-duty flight engineer, Warrant Officer Davey Jones, occupying ditching station 19, the inner ditching station alongside Tom, suffered arm injuries. In the mid-1990s, Project Air-5140 modifications removed those two ditching stations from RAAF P-3Cs to incorporate the new Sensor Station 4.

8. Arguably the flying safety cultures in Navy and Army did not similarly change until the loss of Sea King N16-100 at Nias on 2 April 2005, and for Army, the loss of Black Hawk A25-221 off the deck of HMAS Kanimbla on 29 November 2006.



https://dasa.defence.gov.au/sites/default/files/SpotlightSpecial-2021.pdf