Operation 'TROPIC SNOW' – Irian Jaya 1970

Background

Japan had signed an instrument of unconditional surrender on 2 September 1945.

On 16Sep45, a No. 38 Squadron Dakota, A65-61, VH-CUT, departed Archerfield, Queensland for a 9,600 kilometre return courier journey to Morotai via Horn Island.

On 18Sep45, the aircraft departed Morotai for Biak with 17 Army stretcher cases, including some wounded from Borneo, a RAAF Nursing Sister and a Medical Orderly, plus a deadheading 38SQN Dakota crew.

After arriving at Biak, another Army passenger embarked and the aircraft departed for Horn Island 40 minutes later, in fair local weather conditions with 28 souls on board.

CUT did not comply with customary US regional air traffic radio procedures after departure and it was presumed that the aircraft would have tracked initially southwards to conform with 38SQN Standard Operating Procedures routing, which was mainly coastal to Horn Island.

The aircraft was declared missing after non-arrival at Horn Island and 7 hours fuel duration expiry. The aircraft had just disappeared without any clues to whereabouts and subsequent searches were fruitless.

On 16Oct68, Missionary Aviation Fellowship pilot Jerry Reeder observed a sunlight glint in extremely high rugged terrain in Irian Jaya. Good visibility at the time enabled him to identify and pinpoint the wreckage of a large aircraft very close to the snow-capped peak of Mount Carstens/Puncak Jaya, the highest point on the whole rugged island.

In mid-1970, Reeder and 2 fellow Americans were able to land near the crash site in a Bell 206 Jet Ranger helicopter.

That was a special performance Bell 206 (Kiowa) version supporting mining operations in the area, which could have led those at Department of Air in Canberra driving the moral requirement to recover the remains of victims to assume that the Air Force Hotel model Iroquois could adequately accomplish the recovery mission.

The American group identified the aircraft as a C-47 A65-61 CUT and also found a woman's shoe. They duly reported their findings to Australian authorities.

At that time, Australia-Indonesian Government relations were sensitive so the matter was treated discretely pending negotiations for access to Irian Jaya to attempt recovery of the remains of casualties.

Pre-planning and Reconnaissance

Sometime during November 1970, I was informed I would be the helicopter detachment commander for a team to be tasked with recovery of human remains from a post-WW2 crash site of a Dakota in Irian Jaya.

I visited Headquarters Operational Command (HQOC) RAAF at Glenbrook, NSW for briefing by Staff Officer Operations, Group Captain 'Bay' Adams, CBE, DFC, AFC.

We had an interesting incident when flying together in Vietnam in January 1969 when he was Task Force Air Commander and he was my idol as a leader (see 'The Big Show' by Pierre Klostermann, Pages 222-224).

Although unstated, I felt he had nominated me for the task and he said to me in his quiet way: *'You are going to find this difficult'*.

I presumed that he meant the mission organization was cumbersome and top heavy.

The Air Force helicopter force in Australia was commanded from HQOC; but when deployed overseas, controlled through Department of Air in Canberra.

There were 3 Squadron Leaders with roles in Operation TROPIC SNOW; Ron Raymond, a Caribou pilot from HQOC in overall command of elements to be deployed, myself as the Iroquois detachment commander and deputy mission leader and Peter Mahood representing the Directorate of Flying Safety at Department of Air in Canberra.

Pete had recently undergone Iroquois conversion having been anointed for posting to command No. 9 Squadron in Vietnam from about mid-1971.

A Medical Officer, an Intelligence Officer and the OC of Army Airborne Platoon at RAAF Base Williamtown were also in the group.

I was among a small party to be involved in the recovery mission that deployed to PNG/Irian Jaya for a reconnaissance of the crash site and related airfields via a chartered light aircraft operated by Missionary Aviation Fellowship (MAF) and flown by Jerry Reeder.

I recall that we slept on the floor of a house at Nabire by the sea in western Irian Jaya at some stage during the reconnaissance.

It was an idyllic scenario with surf pounding in on black sand beaches while villagers in adjacent shacks near the foreshore bathed their protesting children at dusk to the accompaniment of music from transistor radios.

Discussion with the Irian Jaya experienced MAF pilot revealed that the crash site about 13,200 feet above mean sea level had been enveloped in cloud for much of the past 2.5 years.

The awesome nature of the high terrain, performance limitations of the Hotel model Iroquois and the persistent cloud in the area made me circumspect that we could successfully accomplish the task.

High altitude performance data for the Hotel model aircraft was dubious and we anticipated no ability to be able to hover out of ground effect at the crash site; so it would be necessary to land to put very light loads on the ground, if a clear reasonably level landing point was accessible.

I was equally concerned re meteorology and sought out a couple of the old Air Force Met men who had served in PNG.

One of them emphasized to me that large air masses with differing temperature and moisture content swirl around in the mountainous regions.

A temperature drop of only half a degree Celsius can rapidly transform clear sky to cloud and he advised: *'If you begin seeing spots before your eyes, cloud will form virtually in a blink so get out of there quick!'*

By November 1970, the mission had gained substantial albeit unpublicized political momentum and halting planning and preparations for a helicopter capabilities review would have been unpalatable in Canberra.

Aircrew oxygen was mandatory for flying operations above 10,000 feet.

At 5SQN in Canberra, we rounded up suitable aircrew communicable oxygen masks and as many portable oxygen bottles as possible, which only gave about 20 minutes duration per bottle.

Considering Dakota A65-61 had collided with a hill (now termed Controlled Flight Into Terrain), there was no merit in any cursory examination of the aircraft at the site and recovery of human remains was the principal objective.

Deployment and the Mission

Several Indonesian agencies were present when we arrived at Biak via 2 RAAF C-130s. 3 Indonesian Air Force (AURI) people were somewhat surly and showed interest in our Iroquois when disembarked. One of them was furtively photographing so I opened a cockpit door to let him view the aircraft interior and he seemed peeved.

As on the earlier reconnaissance, Indonesian Police were co-operative, but there seemed some animosity toward them from their own military. Kopassus (their equivalent of the Australian SAS) drifted on and off the scene at all ports of call.

The sequence of happenings after deployment from Biak to Nabire then Enarotali and all aspects of exactly how we accomplished the recovery are somewhat foggy 50 plus years after the mission, but a few aspects have stuck in my mind.

A base for operations was established at Enarotali on 3 December 1970 and Iroquois flying operations directed toward the recovery of human remains were conducted over the following 3 days (4, 5, 6 December 1970) involving between 6 and 7 hours flying for each of the 2 aircraft.

We were venturing into a somewhat unknown realm for Iroquois operations at altitudes where the Hotel model of the aircraft was not designed to operate.

When the weather allowed, we climbed the aircraft to about 16,500 feet atop some small glaciers and the most awesome rugged terrain that I have ever seen anywhere in the world, including flight over Afghanistan.

The Huey really did not want to be at that altitude with thumping from the 2 rotor blades quite frightening. Had we encountered engine failure, it may not have been possible to control the rotor RPM in autorotation with likely fatal consequences.

I cannot recall whether we were able to view the crash site on early recce flights although located a suitable smallish landing area at about 10,800 (or maybe 11,200) feet within reasonable proximity to enable refuelling and oxygen replenishment as necessary.

This small staging area was above a distinct line where there was little vegetation with temperatures being below freezing level at times. While small glaciers were then viewable at the higher levels, there was little snow evident at about the beginning of the southern hemisphere summer season.

The staging landing pad was covered with short tufted grass and on touchdown, there was an almost overpowering smell of Formic Acid which emanates from some species of ants when squashed; but no insects were observed so any nests were seemingly sub-surface.

We trialled restarting the Iroquois at this high level intermediate landing site. There was of course risk if we could not get it restarted then it may have had to be abandoned at the site and personnel recovered by the other aircraft.

Starting of the small engine powered aircraft refuelling rig was also accomplished and that was positioned at the landing site with some drums of AVTUR fuel and an oxygen trolley.

At some stage on 4th and 5th December, we were able to view the crash site when breaks in cloud allowed and the forbidding nature of the task ahead was reinforced.

The impact point was extremely rugged with wreckage scattered among fissures in rocks that would be extremely difficult to traverse on foot. Fragments of the aircraft and perhaps even human remains would likely have dropped into fissures/crevices that could not be easily accessed.

It seemed possible to airland individuals of a recovery team on a large flat rock maybe about 200 metres from the wreckage, but the uphill terrain in between would be difficult, slow and energy consuming to negotiate.

After the earlier reconnaissance by light aircraft, it was concluded that a ground party could only be very lightly equipped due principally to aircraft performance limitations at high altitudes, but also the physically debilitating effects of movement with oxygen deprivation.

Weather was the principal restrictive variable concerning available time on the ground and whether the ground party could in fact be recovered or become marooned on the mountain.

Beacon radios, spare batteries, pencil flares, space blankets and some water were essential needs for wearable survival kit, which of necessity had to be minimized for physical endurance considerations.

Previously, the crash site had been virtually weathered in for about 2.5 years and if the ground party got marooned for that reason, there was very low probability that a Caribou or the Army Porter aircraft in support would be able to accurately drop stores in cloud – the Australian military were not equipped with GPS in those days.

Longer term survival without more comprehensive kit was problematic.

As previously mentioned, it was impractical and unnecessary in my view to attempt any degree of crash site investigation and recovery of human remains should be the sole objective.

The foregoing considerations convinced me that we could only safely insert a 2 man party which should desirably involve smallish fit men who could cope with the physical exertion involved at high altitude.

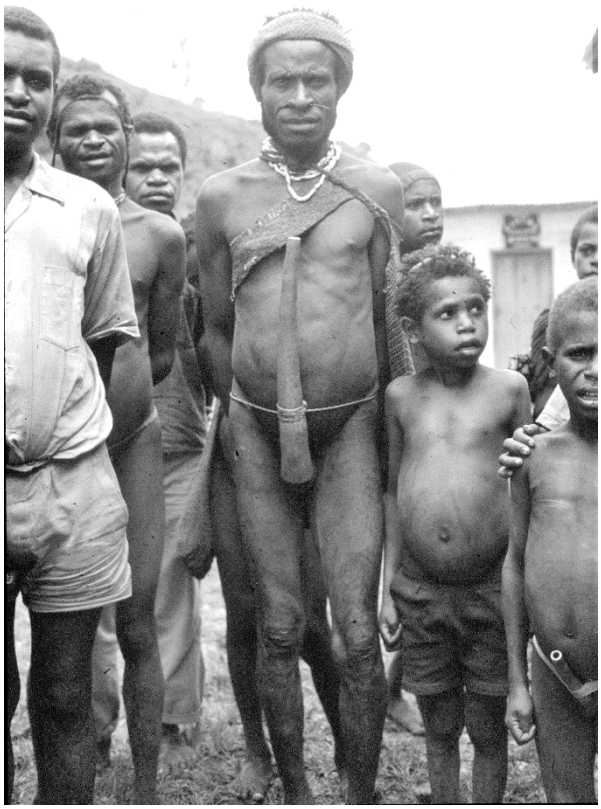
Since deploying to Enarotali on 3rd December, the very amiable 2Lt. Mick Mummery, Oi/c of the Army Airborne Platoon at RAAF Williamtown had done a good job in establishing base facilities, assisted of course by all deployed Air Force personnel.

Some of us were to serve again with Mick in Vietnam in 1971 when he became a Platoon Commander with 9RAR.

Weather had precluded any attempt to lodge a ground party at the crash site on 4th and 5th December.

The deployed forces were surviving mainly on combat rations because somebody overlooked loading a quantity of tinned foods on C-130s before departing Canberra; but they did remember to load some beer, so a limited social gathering transpired on the evening of 5 December.

The tribal natives of the surrounding area were very primitive and almost naked, with many males sporting a penile gourd. A sizeable group of them were congregated on a slope maybe 50 metres from our socializing.



Mick, as the contingent 'Jester', decided to entertain them and marched into public view giving them a very pucka Army salute while wearing only a strategically positioned beer can secured with masking tape. The natives went almost hysterical with mirth and Canberra would not have been impressed at our 'diplomacy' efforts!

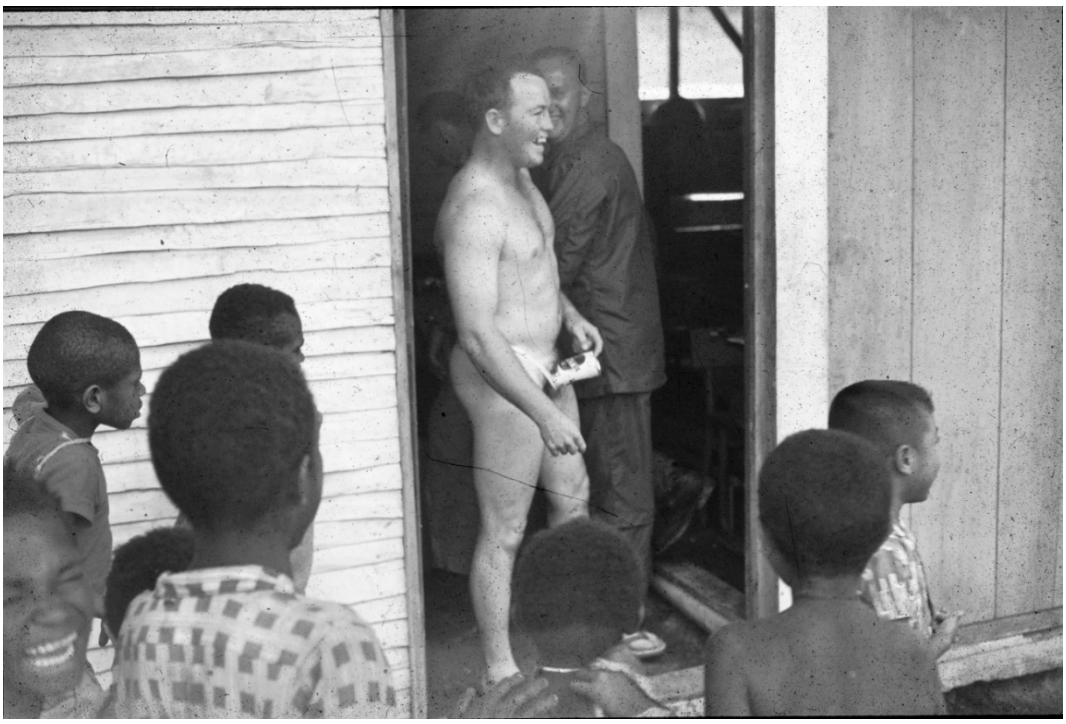


Image published with consent of Mick Mummery

Sometime later, Ron Raymond and Peter Mahood jointly approached me seeking to involve in a ground party, if weather would permit insertion at the crash site the following day.

There had been no prior discussion of this aspect that I recall, but my inclination was to involve Mick Mummery and possibly Bevin Pettitt (one of our pilots) who were both smaller fitter men.

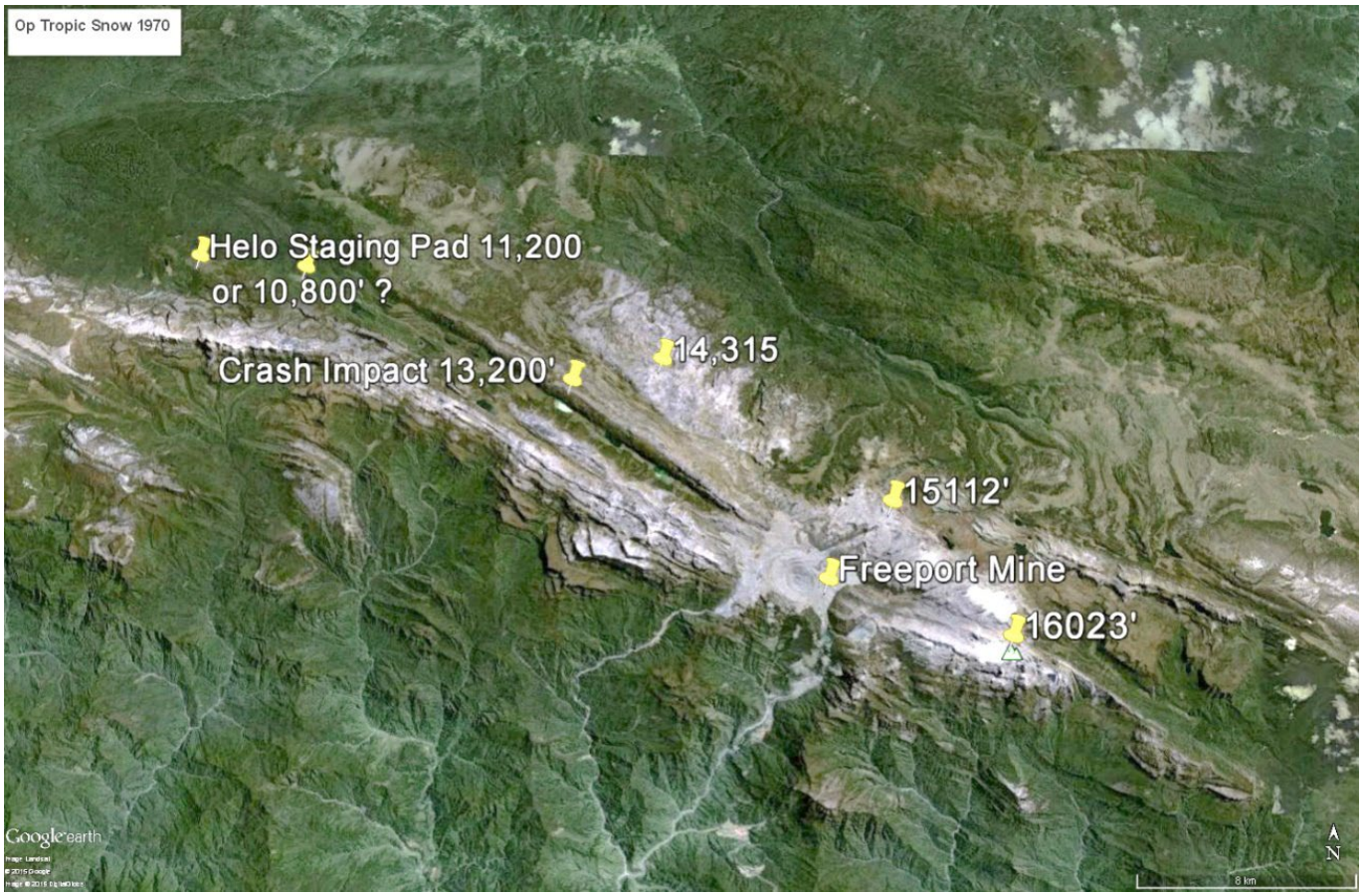
It was an unseemly discussion in the presence of other ranks with both of the other Squadron Leaders pushing for prominence.

Pete Mahood was insistent that it was a Directorate of Flying Safety function for him accompanied by Flight Sergeant Ken Maley (5SQN Engine Fitter) for technical guidance, albeit it could only be a somewhat limited recovery of human remains operation with no accident investigation functions possible.

I relented to his insistence to curtail the inappropriate public discussion although was quietly concerned re the physical capacity of both men.

There was torrential rain overnight and Mick Mummery starred again with infantry engineering skills. A pit latrine had been dug a bit distant from where we were camped, but the toilet was now a dam!

On the brighter side, it was largely a cloud free day enabling us to quickly deploy to the intermediate landing pad and recce the crash site.



We ascertained it seemed possible to airland at minimized aircraft operating weight within about 200 hundred metres of the crash site by flying the aircraft right onto a big flat rock. But take-off would be more problematic due to marginal aircraft performance.

We may have deposited the 2 man recovery party singly and/or flown the aircraft single pilot.

The crash site was not visible from the landing point and the ground party required navigation assistance from the air which was provided by the Army Porter pilot who did not appreciate the ruggedness of the terrain that had to be traversed by the ground team.

For obvious considerations regarding physical exertion, oxygen lack and unpredictable weather, we had estimated between 90 minutes and 2 hours on the ground at maximum and

a fair amount of this time was taken up trekking to and from the crash site with bagged human remains.

We were of course very closely monitoring any cloud development and informing the ground party as necessary to hasten their activities appropriately.

I cannot definitively recall how extraction of the ground party developed, but think we first winched up bagged human remains from a very low hover in ground effect, being unable to land.

It was then later in the day with higher temperatures and cloud developing more widely.

Aircraft performance was more limited and we flew single pilot and recovered the ground party individuals by directing them to climb onto a large flat rock bordering a very steep gorge.

I recall hovering just above a ground party member while he fitted the rescue sling. The control column (cyclic) was almost at full left travel and left tail rotor pedal virtually fully extended with rotor RPM bordering on bleeding.

As power (collective) was increased to lift the 'survivor', rotor RPM bled down and we moved forward, dropping into a chasm to recover performance while reeling in the party on the rescue hoist, a nerve tingling exercise!

Frank Riley was flying the other Huey and he may have recovered the other ground party member beforehand.

I vividly remember that as we departed the crash site location for the intermediate landing pad about 2,000 feet lower, I began seeing spots before my eyes precisely as the old Air Force Met man had described.

We descended pretty rapidly to the staging pad, minimally refuelled and recovered remaining equipment before heading to base at Enarotali.

On looking back toward the crash site, it was then completely enveloped in cloud.

Epilogue

At Enarotali, we viewed the human remains that had been recovered, knowing that some remained behind for reasons already mentioned.

Bones were all covered with a green moss and one bone which had been broken previously had been joined by a metal strip about a centimetre wide and around 70mm long, affixed with screws at either end.

The metal strip and screws were as bright and shiny as the day they had been inserted by a surgeon, which was testimony to the quality of some of the medical componentry available during the WW2 years.

Subsequently, Pete Mahood twice tried to engage me regarding the recovery operation by saying *'I (meaning he) would have done it differently.'*

He had only minimal Iroquois operating savvy and I opted not to respond as I would have expressed the view it may have been better not to involve the RAAF Directorate of Flying Safety at all considering no crash investigation was feasible.

I felt it would have been more efficient to assign operational control of the entire task to 5SQN as the unit was accustomed to organizing and conducting detachment operations in remote areas.

Rear: John Parsons, Peter Amos
Front: Ken Maley, Peter Mahood, Frank Riley, Brian Dirou, Joe Driver, Bevin Pettitt
At April 2025, all deceased except BD and Joe Driver

Operation TROPIC SNOW 1970 could be adjudged successful in that some human remains were recovered although limited by weather, Iroquois Hotel model operating performance and physiological factors relating to the crash site altitude and ruggedness of the terrain.

The RAAF was morally committed to attempting recovery of casualty remains, **although the risks involved were extreme.**

December timing of the 1970 operation was seasonally fortuitous as snow covering the ground around mid-year would have made the task infinitely more difficult and hazardous.

It would have been more prudent to charter higher performance civilian helicopters that were available at that time operating in support of foreign mining industry. This eventuated some years later in June 2005. The goal was to recover more human remains although had my advice been sought, I would have recommended later in the year when there was absence of snow covering.

Ironically, very cost-effective upgrade of Hotel model Iroquois to as new Huey II available from early 2008 has since made that platform far superior to Blackhawk helicopters for high density altitude operations; but the very versatile Iroquois were unwisely cast aside from ADF service in 2007.

Considering the Dakota A65-61 crash site had often been shrouded in cloud for around 2.5 years before and about 6 months after Operation TROPIC SNOW, it seemed there was Divine intervention facilitating favourable weather to attempt recovery of casualty remains on 6th of December 1970.

That enabled our return to Fairbairn at Canberra on the 10th, a day later than planned; much to the relief of my waiting wife to be Diane, as we were to be married on Saturday, 12th of December 1970!

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April 2025