



## KEVIN DAMIAN JOSEPH SHOPPEE

*21 February 1950 to 29 November 1973*

*“A Magnificent Man in His Flying Machine.”*



*Kevin, standing in front of a Bell 47G Sioux helicopter.  
after receiving his Wings in 1972 – Image from Chris Malpas.*

Kevin Damian Joseph Shoppee was born in Melbourne, Victoria on 21 February 1950. He was the second of three siblings born to Arthur Hendy Shoppee, a buyer of glassware and fine china for Myer Melbourne and Rachel ‘Rae’ Shoppee (nee Lowe), a legal secretary.

Kevin’s older brother Arthur, known as ‘Art’, was 12 years his senior and his younger sister Christine, was 18 months younger than Kevin.

Around 1954, the family moved from Melbourne to Dimboola, a small town in the Wimmera region of Victoria, situated approximately 330 kilometres north-west of Melbourne, where Arthur and Rae Shoppee became the Licensees of the Dimboola Hotel, which they operated until September 1961.

During the time their parents were operating the Dimboola Hotel, Art remained at school in Melbourne, Kevin was a monthly boarder at Villa Maria College in Ballarat and Chris was a weekly boarder at Brigidine Convent at Horsham.

To allow for better education options for high school and college, or university for Kevin and Christine, in September 1961, the family, except for Art who remained in Victoria, moved to South Australia, purchasing a house at Glenelg East. Art never moved to South Australia and remained in Victoria where he

became the founder of Luv-A-Duck, Australia’s biggest producer of duck products.

After moving to SA, Arthur and Rae Shoppee began operating the Adelaide Oyster Bar in Grenfell Street Adelaide. Kevin became a monthly boarder at Sacred Heart College at Somerton Park and Christine, a weekly boarder at St Dominic’s Priory College at North Adelaide.

Christine, or as she prefers to be called, Chris, described her brother Kevin as an “average student” with no significant achievements while at Sacred Heart College, but he completed Matriculation, the equivalent of today’s SACE Year 12.

Kevin was not really a sports person, but he did judo and was involved with the West Beach Surf Life Saving Club. He enjoyed playing the piano.

## KEVIN'S DESIRE TO FLY

*"Once you have tasted flight, you will forever walk the earth with your eyes turned skyward, for there you have been, and there you will always long to return." - Leonardo Da Vinci.*

Kevin had always wanted to fly, perhaps influenced by his older brother Art, who had his Private Pilot's Licence.

Chris recalled her time at Dimboola, where her mother and father, like most hotel Licensees in Victorian country towns, were involved in local football. In the VFL, their parents barracked for South Melbourne and Richmond. Kevin and Chris decided to support Essendon Bombers, with Kevin saying it was because their emblem was a plane and he just wanted to fly.



*Kevin as a Cadet Under Officer. – Image from Chris Malpas.*



*Kevin explaining the principles of flight to some budding aviation enthusiasts. – Image from Chris Malpas.*

While at Sacred Heart College, Kevin joined the Air Force Cadets and then in May 1964, he joined the No. 11 City Flight, Royal Australian Air Force Air Training Corps, where he undertook voluntary pre-entry training with the object of preparing himself for service with the RAAF. Kevin was appointed to the rank of Cadet Under Officer in the ATC on 1 February 1968.

On completion of his service with the RAAF Air Training Corps, his Commanding Officer wrote on his Certificate of Service, dated 6 December 1968:

*"Cadet Under Officer Shoppee has proved an efficient NCO and Cadet Under Officer, attending to all facets of training with zeal – including camps, rifle shoots and sports. His regular attendance speaks well for his enthusiasm and his work with each new intake of cadets has been very much appreciated."*

Kevin applied to join the RAAF but his maths was not good enough and his application was rejected. As a result, a private maths tutor was engaged so Kevin could improve his maths and hopefully assist his future endeavours to get into flying as a career.

Chris could not recall exactly when, but after leaving school Kevin had obtained his Private Pilot's Licence, with their father driving Kevin out to Parafield Airport on Sunday mornings for flying lessons.

Soon after Kevin got his Pilot's Licence, a four-seater Piper Cherokee 235 VH-PCB was hired and the family set off to visit older brother Art and his family at Nhill in Victoria. After completing their visit and when taking off from Nhill to return to Parafield, it appeared Kevin's father's door had not been closed properly and it popped open. His father was unable to close the door, so Kevin decided to return to Nhill Airport to rectify the problem.

According to Chris, when landing there was a strong cross wind which blew the aircraft sideways and into a paddock where they almost hit a large cement water trough. "The back wheel broke." Kevin switched everything off and told everyone to get out and move away from the aircraft.



*Damaged Piper Cherokee VH-PCB at Nhill Airport. Image from Chris Malpas.*

Kevin was so angry when he went around the back of the aircraft to view the damage and on seeing the broken tail wheel, he punched the tail. His licence was obviously suspended pending an investigation. Chris recalled the investigation findings were that they could understand everything that had happened and almost all of the damage, but they could not work out how the tail got dented! Kevin was free to resume flying.

Kevin's apparent attempt to impress his older brother appears to have failed! Kevin and family and the aircraft returned to Adelaide by road, with the Piper Cherokee returning to Parafield a lot slower than the outbound journey, on the back of a truck.



*Piper Cherokee VH-PCB returning to Parafield on the back of a truck. Image from Chris Malpas.*

Kevin's first job after leaving school was as a lab assistant at the Gillies Plains High School, where he made many good friends, some of whom remain friends with Chris some 50+ years later. Kevin then went to work with Elders Goldsborough Mort, in a sales role, working in the Southeast of South Australia.

## CALLED UP FOR NATIONAL SERVICE 1970



Kevin was called up for National Service in 1970. He was selected to attend the Army Officer Training Unit (1 OTU) at Scheyville in NSW, where he completed a gruelling 22-week course that was primarily designed to produce Second Lieutenant Infantry Platoon Commanders. When he graduated, on 19 December 1970, he was Number 1277 of 1696 National Servicemen who had graduated from 1 OTU Scheyville. His first posting after graduation was to the Royal Australian Infantry Corps 3<sup>rd</sup> Training Battalion at Singleton. Kevin loved the Service life and while he was prepared to go to Vietnam, that did not happen because Australian troops were being pulled out at that time.



*3/70 B Class, Junior Term. Kevin is last on the right, second row from the back. Image from Geoff Davis.*

## KEVIN'S WISH TO FLY MILITARY AIRCRAFT COMES TRUE

During 1971, Kevin was asked to join the Australian Army Aviation Corps that had been formed in 1968. According to the Australian Army website, the Corps was formed "To provide a coherent career path for aircrew and ground support personnel."

On 10 January 1972, Kevin commenced 9 months of basic fixed wing training with the RAAF at No. 1 Flying Training School (No. 1 FTS) at Point Cook in Victoria (Army Pilots' Course 13/72). After then completing the Advanced Flying Course 15/72 (rotary wing training), at RAAF Amberley, QLD, Kevin was posted to 1 Aviation Regiment on 1 December 1972.



*Kevin and his classmates on No. 13 Army Pilots' Course at No. 1 Flying Training School (No. 1 FTS) at Point Cook, VIC in 1972. Image Charlie Barnett.*



*Kevin receiving his Army Flying Badge ('Wings') from Air Commodore Clarence Haddon Spurgeon OBE DFC, Commander RAAF Base Amberley. Image from Chris Malpas.*

Kevin's father, Arthur Shoppee and Kevin's younger sister, Chris attended Kevin's graduation and watched him receiving his "Wings" at RAAF Base Amberley in Queensland.



Kevin with fellow 'Wings' recipients standing in front of a Bell 47G-3B Sioux helicopter. Left to right: 2Lt R K Harris RA Sigs, 2Lt K D J Shoppee RA Inf, Lt H R Pronk AA Avn & Capt R H Draper RAEME. – . Inset is an image of Kevin's "Wings" taken after the formal ceremony. Images from Chris Malpas.



Photograph taken after the ceremony when Kevin received his "Wings"  
Kevin and Chris are pictured alongside A17-007, a Bell 206B-1 Kiowa. Image from Chris Malpas.

According to ADF Serials, the 'A17 Serial Kiowas' (A-17-007 pictured on the last page) were selected as the Australian Army's standard light observation helicopter (LOH), as a replacement for the Army A1 Bell 47G Sioux helicopters that had first begun service with the Australian Army in 1965 in Vietnam, operated by 161 Independent Reconnaissance Flight.

Seventy-five Bell 206B-1 Kiowas were originally ordered as part of a plan for the Commonwealth Aircraft Corporation (CAC) to build a total of 191 Kiowas for the military and civil markets. The first twelve 206s were built by Bell at Fort Worth, Texas USA (Serials A17-001 to A17-012), with A17-001 being officially handed over to the Army at Brisbane Airport on 22 November 1971. In May 1972, No. 171 Air Cavalry Flight became the first unit to be equipped with Kiowas and deployed to Holdsworthy, NSW.



However, in 1973, 1st Aviation Regiment was still using the ageing Army A1 Bell 47G-3B Sioux helicopters. Kevin flew this type of helicopter during 1973. (Pictured left – Image from Chris Malpas)

Endeavours to research Kevin's brief history with the Australian Army Aviation Corps were greatly aided by the former Commanding Officer of 1 Aviation Regiment (December 1980 to December 1983) Charlie Barnett, who was then a Lieutenant Colonel, Brigadier W.J.A. Mellor, DSC, AM (Retired) and President of the Australian Army Aviation Association, and Barry Dick, who was a flying instructor (Lieutenant) at the School of Army Aviation when Kevin underwent his Advanced

Flying Training course at Amberley, QLD. Kevin's main instructor on the Advanced course was Peter Vysouth but Barry recalled flying with Kevin on a couple of occasions during Kevin's training to fly helicopters.

After completing the course, Kevin was posted to 163 Reconnaissance Flight (1<sup>st</sup> Aviation Regiment) as a qualified helicopter pilot. Barry Dick was the Pilot instructor with 163 Reconnaissance Flight and had a lot to do with Kevin during 1973.

Kevin's sister Chris was married to Geoffrey Malpas in February 1973. Chris recalled Kevin coming home to Adelaide for the wedding, arriving around 7:30 AM, and wearing a flight suit. "He had got out of a helicopter, did what he had to do, got in his car, and then drove through the night!"



Kevin alongside A1-738, dressed in a two-piece Nomex flying suit i.e. dressed as he would have been for his drive to Adelaide to attend Chris and Geoff's wedding. Image Chris Malpas

A photograph amongst Kevin's effects, provided by Chris, shows him in a course photograph for the '3/73 Air Op Course'. I was unable to find out what this course may have involved but the artillery piece appears relevant. Instructor pilot Barry Dick had not attended one of these courses but recognized a few of the pilots in the photograph. He believed the course was probably to teach pilots to direct artillery fire from the air, something Barry had not needed to learn, having been doing it almost on a daily basis in Vietnam.



*Kevin (Rear row, second from the left) attended the 3/73 Air Operations Course in early 1973. Image from Chris Malpas.*

## **FLYING WITH THE ROYAL AUSTRALIAN SURVEY CORPS DURING 1973**

Although his logbook was unavailable, it would appear most of Kevin's flying during 1973 was flown in support of Royal Australian Survey Corps operations in far-north Queensland and what was then the Territory of Papua New Guinea.

To provide a better understanding of the work done by the Royal Australian Survey Corps, the following is summarised from *Royal Australian Survey Corps - Aerodist Years 1964-1975* by Peter Jensen:

The Royal Australian Survey Corps was formed on 1 July 1915 and served Australia in war and peace for 81 years. After World War II, recognising that the Australian continent could only be described as 'being very poorly mapped' with no or limited height information and many of the maps produced being of 'dubious accuracy', the focus of the Royal Australian Survey Corps changed to producing better maps of Australia.



With the post WW II commencement of the general-purpose national mapping of Australia from strips of overlapping aerial photographs, it was necessary to establish horizontal and vertical control points for the photography obtained. In the 1950s, this was still being done by century old triangulation methods, i.e. a baseline of a few kilometres was very accurately measured using metal tapes and then angles were measured to distant points from the baseline and distances were computed by trigonometry. This was a very labour-intensive process that was revolutionised in the mid-1950s by the invention of the 'Tellurometer', a portable microwave-based distance measurement system that worked like a radar. With two of these prototype devices (a master and a remote instrument), a line was measured in South Africa, between two beacons some 50 km apart on 14 June 1955.

By 1958, the Royal Australian Survey Corps was equipped with Tellurometers and soon extended geodetic surveys, mainly by theodolite and Tellurometer traverses, from the east coast of Queensland to northern Northern Territory, along the east coast of Cape York, the Northern Territory coastline, northern Western Australia including the Kimberley region, and around much of the coast of the Territory of Papua New Guinea.

The next technological challenge was to extend accurate surveys over the horizon and to infill large area existing networks without the constraints of inter-visibility between survey stations. A system called 'Aerodist' was adapted for aircraft to accurately measure distances between non-intervisible ground survey stations, using the aircraft as an intermediate station, and to accurately determine the position of the survey aircraft. The Royal Australian Survey Corps received a first generation Aerodist in 1964 and this was quickly put to use in the Territory of Papua New Guinea, to extend survey control for urgent Defence mapping along the border with Indonesia.

in the late 1950s, when operating in remote areas and rugged terrain, helicopters began being used for transporting survey parties and their equipment and for re-supply. With approval for the Army to purchase and operate light helicopters not being given until 1960, early helicopter support had to be sourced from civilian operators.

To better understand how the Australian Army Aviation Corps came to be flying helicopters and the close relationship that developed between the Australian Army Aviation Corps and the Royal Australian Survey Corps, the following is summarised from the Australian Army Aviation Association Inc website history:

1 Army Aviation Company was raised at Bankstown, NSW in 1957. This unit consisted of a small group of Army officers and senior NCO pilots and operated a wide variety of light single and twin engined civil aircraft on charter to the Army. Their role was to provide operational support to Army units across Australia and they were particularly useful in providing aerial support to the Royal Australian Survey Corps with their mapping in northern and western Australia.

In 1960, a decision was made to allow the Army to own and operate integral rotary and fixed wing aircraft that did not exceed 4,000 lbs. 16 AOP Flight and 1 Army Aviation Company were disbanded, and 16 Army Light Aircraft Squadron (16 ALA Sqn) was formed. Cessna 180 fixed wing aircraft were transferred from 16 AOP Flight and new Bell Sioux 47 G-2 rotary wing aircraft made up the original aircraft complement.

In 1965, the first permanent Army Aviation detachment to leave Australia (two Cessna 180 aircraft) were deployed to PNG Command. The aircraft operated in support of the Pacific Islands Regiment, Australian Army Engineers and the PNG Volunteer Rifles. Later that year, 182 Reconnaissance Flight (182 Recce Flt) was raised at Amberley and two Bell 47G-2 Sioux helicopters were deployed to Malaysia and then Sarawak in support of 4 RAR operations in the Malayan confrontation.

In July 1965, 161 Reconnaissance Flight (161 Recce Flt) was raised from 16 ALA Sqn at Amberley, to deploy to South Vietnam in support of 1<sup>st</sup> Australian Task Force. The flight initially operated two Cessna 180 and two Sioux G-3B-1 helicopters, which were later increased to six Sioux and three Cessnas. During more than seven years on operations in South Vietnam, the Flight operated five

types of aircraft, which in addition to the Sioux and Cessna, included Pilatus Turbo-Porter, O-1 Bird Dog and OH58-A 'Kiowa' aircraft.

On 26 April 1966, 16 ALA Sqn was renamed 1<sup>st</sup> Divisional Army Aviation Regiment and on 31 March 1967 it was retitled the 1<sup>st</sup> Aviation Regiment. On 1 July 1968, the Australian Army Aviation Corps was formed with initial Corps membership limited to only officers. There were 106 members at the start, all of whom were qualified pilots.

In 1972, the Training Squadron of the 1<sup>st</sup> Aviation Regiment at Amberley came under the command of the newly formed HQ Training Command and was retitled the School of Army Aviation. With the withdrawal of 161 Reconnaissance Flight from South Vietnam, the focus of 1<sup>st</sup> Aviation Regiment's support changed to training, and supporting Royal Australian Survey Corps operations. The survey operations were conducted in Indonesia, Papua New Guinea and on the Australian mainland, providing challenging flying conditions and valuable experience.

It was into this new era of 1 Aviation Regiment almost exclusively supporting RA Survey Corps operations that Kevin found himself in early 1973. The Army Aviation 47G-3B-1 Sioux helicopters he was flying were nearing the end of their service life with the Australian Army and were to be replaced with Bell 206B Kiowa helicopters, including A17-013 to A17-056, which were being built under licence in Australia by the Commonwealth Aircraft Corporation (CAC) as CA-32 Kiowas. However, in 1973, the Sioux remained the best available for Survey operations, with the recently returned RAAF No. 9 SQN UH-1H Iroquois helicopters from South Vietnam, albeit able to carry more than three times the payload of a Sioux and able to winch personnel and supplies into difficult locations, still restricted with lifting capacity that was reduced to an almost negligible amount when approaching 10,000 ft altitude.

The Army Aviation 47G-3B-1 Sioux helicopters had supported the Royal Australian Survey Corps well throughout the 1960s, with their main limitation being payload. After the introduction of 'Aerodist', multiple trips were required to insert and recover Remote Aerodist parties.

*Annex J to The Project Report on Plastic Flagon - Air Support* (A report on the 1973 Operation in PNG by 4 Field Survey Squadron), highlighted this under the heading 'Operating Limitations':

*The load/range characteristics of the Sioux operating in the conditions prevailing, meant that Remote Aerodist parties may only be partially inserted in one day, particularly in the case of adverse weather conditions. Two Sioux were often tasked for this insertion and with up to 5 loads to complete the task, it sometimes meant that the surveyor who went in with the first load was separated overnight from his partner who would go in with the last load.*

This aside, the report went on to praise the Sioux as an ideal aircraft for Survey operations, otherwise:

*On all other aspects of the operation, particularly barometric heighting, panelling, reconnaissance and field completion, the Sioux proved to be an ideal aircraft.*

## **OPERATION PLASTIC BANANA - ONE FIELD SURVEY SQUADRON'S PROJECT A2 (CAPE YORK)**

The Royal Australian Survey Corps' 1 Field Survey Squadron's 1973 Project A2 (Cape York), was based at Cooktown in Queensland between 16 April and 18 July 1973. The operation was conducted in four phases, commencing with reconnaissance and station marking 18 April to 17 June; Army Sioux barometric heighting 16 April to 18 July (28 traverses establishing 259 height points for photogrammetric triangulation); station identification aerial photography 29 May to 17 July and Aerodist MRB3/201 - 21 May to 18 July 1973.

This operation was supported by 163 Reconnaissance Flight (163 Recce Flt). Barry Dick, at the time a Lieutenant or newly promoted Captain, was the instructor pilot for 163 Recce Flt when they left Amberley in April 1973 to support the survey operation in northern Queensland. Kevin was one of the 163 Recce Flt pilots on the operation.

It appeared Kevin enjoyed his time working with 1 Field Survey Squadron and the operational flying required for barometric heighting. In May 1973, while on the operation, Kevin sent a postcard to his Mum and Dad showing Green Island on the Great Barrier Reef, situated about 17 miles from Cairns, QLD. On the back Kevin wrote:



*“Dear Mum & Dad, I guess this is a surprise to you. But I have not deserted from the Army. Survey is going quite well. The flying is really good and survey is quite interesting. At present we are at Mt Carbine about 90 miles NW of Cairns. As we had Sunday off, 4 of us took a Land Rover to Cairns on Saturday night and spent Sunday on the beautiful white sand - blue sea, bikini covered Green Island. Did a bit of swimming around the coral. Did a bit of sunbathing and sank a few tubes of the old N QLD lager! We have been bush since 4 days after arrival in Cooktown so it was a good day off. So far we have covered up to 150 miles W of Cooktown on a 60 mile N.S line. From Mt Carbine we start our 2<sup>nd</sup> westward move on a 60 mile front. However this time we will continue to move right across to the Gulf of Carpentaria and then finish off the western and southern areas. The total survey area is 42,700 Sq miles - Not bad eh! Apart from survey have no other news. Please write soon with all the news as the mail in the bush is quite erratic. Bye for now. Love Kevin X”*

*Front of postcard sent home by Kevin in May 1973, showing Green Island, Great Barrier Reef, QLD. Image from Chris Malpas.*



**Above Left:** Kevin at a heighting Base at Laura, QLD. **Above Right:** Kevin seated in a Bell 47G -3B-1 Sioux – Images from Chris Malpas.

Charlie Watson, at the time a Lieutenant and the O/C of the 1 Field Survey Squadron Detachment in Cooktown, identified two aircraft accidents during the Project. Both of the accidents involved Bell 47G-3B-1 Sioux helicopters.

According to ADF Serials, the first of these (A1-725) occurred at Cooktown in June 1973. In amongst the photographs provided by Chris Malpas was the image (shown over the page), on the back of which Kevin had written “A1-725 is dead.” Kevin was not flying this helicopter. Charlie Watson’s notes on this incident were: “During a heighting sortie, a Sioux with 2LT Terry Lee (pilot) and SGT Ray Lawson (surveyor) struck a sand bank in a dry river on take-off and capsized. SGT Lawson suffered ongoing back injuries.”

Another source believed that *“when taking off, a tree root was hooked in the skid and this flipped them over.”*

The second accident involved A1-726. According to Charlie Watson’s notes, *“a Sioux forced landed in a swamp south of Dunbar Station without injury to the pilot. The aircraft was subsequently found to be overloaded.”*

Kevin was not flying A1-726 at the time but provided significant assistance with the recovery. The recovery of A1-726 was covered in an article on the Australian Military Aviation History Association website, dated 24 April 2023 and titled *Recovery of Army Sioux Helicopter - Cape York - July 1973*. The following is reproduced from the article:

*“On 13 July 1973 an Australian Army Sioux helicopter, A1-726, was recovered from a swamp ‘well west’ of Cooktown near the west coast of the Cape York Peninsula - probably somewhere between Edward River, Pormpuraaw, and Kowanyama.”*



*Wreckage of A1-725. Image from Chris Malpas.*



*The recovery aircraft was an RAAF UH-1H ‘Huey’ helicopter from 9 SQN RAAF Amberley QLD, serial # A2-455. The crew was Rod ‘Rodus Adam (aircraft captain), Howard McGilvray (co-pilot), Monty Jesinoweski (crewman), and Dennis Freeman (flight fitter).*

*Assisting the recovery was Flight Lieutenant Bob Redman of Air Movement Training and Development Unit (AMTDU) RAAF Richmond, a joint Army/RAAF unit primarily involved in aircraft internal load rigging, delivery from aircraft of loads by parachute, and training of aircrew and load dispatch riggers. Bob was the first helicopter person posted to AMTDU to help develop helicopter external load rigging procedures and training courses.”*

*Left: Recovery of A1-726 from a swamp west of Cooktown. Image from Chris Malpas.*

*“The recovery of the Army Sioux was Bob’s first recovery job. Army engineer, Captain Mike Caldwell of 163 Recce Flight, assisted Bob Redman to attach the rigging for recovery and return of the Sioux to Cooktown. After hooking the load, Bob Redman climbed into the Huey via the skid. The Iroquois was having difficulty taking off, so after attempts to take off for five minutes, Bob climbed out to lighten the load. The Huey departed and Bob waited in a tree for several hours before the Huey retrieved him - no communications, no signalling gear, no freshwater, just a two-piece Nomex flying suit and a Swiss Army penknife. Bob was very happy that the crew found him before the local wildlife showed signs of hunger!”*



*Bob Redman is standing on the Sioux ready to hook the rigging onto the Huey. The crewman, Monty Jesinowski can be seen leaning down from the left, guiding the pilot so that Bob Redman could slip the sling onto the external load hook of the Huey.*



*Huey trying to take off after refuelling from a drum cache at an airstrip north of the recovery site. Kevin is kneeling down by the skid.  
The above black-and-white images are from the Recovery of Army Sioux Helicopter - Cape York - July 1973 article.*

The article described assistance provided by Kevin at refuelling stops along the way, due to difficulties getting the Iroquois and its load airborne:

*“After several unsuccessful attempts, the Army Sioux pilot (Kevin Shoppee), helping the recovery (seen in background just forward of the skids) held the tail of the Sioux parallel to the take-off path and let go as the Huey gained translational lift from its forward motion and flew to the next fuel cache on its path east to Cooktown. Kevin followed in his serviceable Sioux, and we repeated the process for the following refuel stops.”*

*“The weather for the transit was overcast with headwinds. The forecast for Cooktown was rain and limited visibility. The transit was slow and used a lot of fuel, so the last cache of AVTUR (aviation turbine fuel for the Huey’s jet engine) was short one 44-gallon (400 L) drum. Station hands had a 44-gallon drum of AVGAS (piston engine fuel) which was an alternative fuel (with conditions) for the Huey. We stayed at the station overnight and continued next morning to Cooktown with no additional challenges from weather etc. The engine performance seemed the same despite the mixture of Avgas with AVTUR.”*

The article concluded by saying, *“they were very sad to hear of the death of the very helpful Army pilot, Kevin Shoppee, a few months later.”*

In recent years Bob Redman said about Kevin, *“He was a good bloke and very helpful. We may have managed without him, but at considerably increased risk, and after waiting for replenishment of the string of AVTUR caches across the Peninsula.”*

Instructor Pilot Barry Dick believed the 1973 One Field Survey Squadron’s Project A2 around Cooktown to have been an excellent training opportunity for a new pilot such as Kevin to be introduced to working with the Royal Australian Survey Corps. According to Barry, *“The survey area and the work were pretty straight forward and provided good grounding for Kevin on his first job.”*

As Squadron Instructor, Barry did training flights with Kevin in March and April 1973 in Cooktown. Kevin performed well and in Barry’s words, *“He majored in enthusiasm!”* Another helicopter pilot, David Underdown, who was Kevin’s supervising officer on an exercise in Shoalhaven, QLD, described Kevin as *“a conscientious and likeable officer and a proficient pilot.”*

163 Reconnaissance Flight pilots were rotated on longer operations. Kevin had been back to Adelaide very briefly, for some leave in July 1973. He said he had been recalled to Amberley and was to go to Papua New Guinea. This was the last time Kevin’s family saw him.

## **OPERATION PLASTIC FLAGON - 4 FIELD SURVEY SQUADRON PROJECT C1 - WEST PNG**

As the 1 Field Survey Squadron Project was winding up, planning was being finalised for the movement of the six 47G-3B-1 Sioux helicopters from Cooktown to Goroka in the Eastern Highlands of the Territory of Papua New Guinea, to support 4 Field Survey Squadron’s *‘Operation Plastic Flagon.’* They were required to be ready to commence operations out of main Base Goroka on 15 August 1973. While the helicopters had originally been flown to Cooktown by RAAF C130 Hercules transport aircraft, the 163 Recce Flt Squadron Commander at Cooktown, Captain Adam Fritsch, decided to fly the six helicopters from Cooktown to Goroka, in two ‘V’ formations, with three helicopters in each formation.

The movement took place on 29 and 30 July 1973. The annotated *Google Earth Map* (over the page) shows the approximately 1350 km route taken. There was another leg between Cooktown and Weipa, the details of which Barry Dick could not recall.



While Captain Fritsch was in overall charge of the squadron, Barry Dick, as the Squadron Instructor, was looking after the flying operations side of things, including assigning the leader roles for each leg. None of the pilots had flown across the Torres Strait before, so Captain Fritsch was chosen to lead the leading contingent from Horn Island to Daru. Barry Dick, as the most experienced, was to lead the last leg from Kikori to Goroka, a distance of approximately 195 kilometres, over terrain rising from approximately 15 feet to 7,500 feet above sea level along the route.

163 Reconnaissance Flight had the call sign of 'Scorpion.' Instead of using the usual numbering system for call signs, i.e. '19' was the boss and it would then go down as 18, 17, 16, 15 and 14 for the other five aircraft, they decided to use the first letter of the pilot's surname, e.g. Barry Dick would be 'Scorpion Delta'. Because they had two pilots with the same first letter of their surname, i.e. Kevin Shoppee and another pilot, they decided to change Kevin's call sign. Barry said it came to a very easy decision to change Kevin's call sign to 'Scorpion Echo', where the 'E' stood for 'Enthusiasm.'

Kevin was very enthusiastic about taking his turn to lead the formation, which from his position in the formation should have been the leg to Weipa. Barry decided to give this leg to a more experienced pilot and then have Kevin fly the leg from Weipa to Horn Island, the majority of which was along the west coast of Cape York, thereby absolving Kevin of a lot of the worries about leading a formation, navigating and radio procedures. On the ground at Weipa, Kevin had 'berated' Barry Dick for moving his lead position but was then 'extremely happy' leading the formation from Weipa to Horn Island.

The arrival of 163 Recce Flt at Goroka created quite a stir with personnel on the ground unlikely to have seen six helicopters flying together all at once before. Just before arriving at the airfield, Barry had put the aircraft in 'echelon starboard' (a formation in which its units are arranged diagonally, with each unit stationed behind and to the right of the unit ahead).

**Right:** Six OH-6A Cayuse helicopters of the Silver Eagles US Army Aviation Precision Demonstration Team, flying in 'Echelon Starboard' formation over South Alabama, circa 1972-76. Image from [www.eaglelead.com](http://www.eaglelead.com).

Barry then had the helicopters do 'pitch and break' from over the top where each helicopter peeled off and landed in turn until all six were on the ground.

After arriving in Goroka and prior to commencing survey operations, Barry Dick conducted high altitude training with all 163 Recce Flt pilots. Goroka was approximately 5250 feet above sea level. Barry selected a hill just south of Goroka, with an altitude of around 7,000 feet ASL for this training. However, with the temperature and humidity in PNG, the 'Density Altitude' would have been probably around 9,000 feet.



The Aircraft Owners and Pilots Association website describes 'Density altitude' as:

*"Pressure altitude corrected for nonstandard temperature. As temperature and altitude increase, air density increases. In a sense it's the altitude at which the airplane 'feels' it is flying. The less dense the air, the less lift, the more lacklustre the climb, and the longer the distance needed for takeoff and landing. Fewer air molecules in a given volume of air also result in reduced propeller efficiency and therefore reduced net thrust. All of these factors can lead to an accident if the poor performance has not been anticipated."*

For the training, Barry Dick had the pilots wind back the throttle, so their RPM decayed:

*"As the RPM decayed, to stop the aircraft falling you had to raise the collective. You get to a point where you have no throttle left and a low RPM. There is no recovery option if you have let the RPM decay too much because the throttle is not powerful enough to get you out of trouble. The only way to avoid catastrophe is to fly the aircraft away and not sit it over an area you can't get away from. As soon as you fly away, everything recovers. If you can't fly away, you will probably hit the ground."*

*"At high altitude you cannot afford to lose your RPM because the high altitude does not only affect the RPM, but it also affects the power available and if you run out of power available, you can't go anywhere."*

Barry did this exercise with each of the pilots and they would then come back and do a few 'autorotations' and things like that. Overall, there was quite a bit of continuous high-altitude training with Kevin and the others in the first few days after arriving at Goroka. The high-altitude training was then followed by navigation training because none of the pilots had operated in this type of country before. At all times dealing with Kevin's training and flying, Barry described him as *"a good head, good lad and his enthusiasm was outstanding!"*

The following is taken from *Annex J to The Project Report on Plastic Flagon - Air Support*, (Written after the conclusion of the Operation:

**General.** *Six Sioux of 163 Recce Flt, under the command of Captain Adam Fritsch commenced survey operations out of main base Goroka on 15 August 1973. The policy was always to have 4 aircraft 'on line' with 2 undergoing maintenance or service. With a few minor exceptions, 4 were generally available as planned. Sioux support ceased 29 Nov 73.*

**Employment.** *While operating out of Forward Bases at Kikori and Daru, the Sioux were employed on the following:*

- a. Positioning remote parties, the average weight being 1600 lbs.*
- b. Re-supplying remote parties.*
- c. Carrying out barometric readings.*
- d. Close reconnaissance of survey stations.*
- e. Panelling survey stations for identification.*
- f. Medivacs.*

*By 16 Aug, 2 Sioux were deployed out of Kikori while 2 worked out of Goroka. As the survey stations supported from Goroka were completed, all 4 Sioux were based at Kikori. On 15 Sep they moved to Daru from where 2 were deployed at Balimo for several weeks. At this stage employment was mainly on heighting sorties.*

From an undated letter home to Kevin's Mum and Dad, it appears for the early part of the operation, Kevin was working out of Kikori, which he described as *"a tropical back water coastal mud hole"* and *"most unpleasant"* when compared with the *"pleasant Highland Climate"* of Goroka. However, he said, *'on the whole everything was going okay and he was seeing a bit of the country. (The back blocks at least!).'*



At the time of writing, Kevin was the only pilot and aircraft at the Forward base at Kikori. In spite of the 'most unpleasant' environment, he appears to have been enjoying the work, the bonds he felt with Survey personnel and his willingness to help them wherever he could. He wrote:

*"It is really good being a lone operator which makes working out of the forward base much better than the main base at Goroka. I enjoy my work very much especially when some poor digger has been sitting on a hill in the jungle taking survey readings for days on end and you get through to him with his rations and mail from home and offer him a dry smoke. The surveyors and Aviation work fairly well together, flying for these guys is a real pleasure when you see the work they do, which involves hacking pads out in the jungle, so you don't bust your chopper trying to get in and if the weather is bad they know we still try and get through and if you have to turn back which might mean NO resupply to them, they don't bitch or whinge that we didn't give it a go! The morale among the soldiers is quite good, even with the setbacks we have been having with weather and aircraft. When things start moving faster it will be even better, I hope. I guess I am pretty lucky as I am one guy who really loves and is satisfied by the job he is doing!"*

In another letter dated 31 August, Kevin had sent primarily to wish his father a Happy Father's Day, he also wrote about having forgotten what it was like to fly in good weather and the long distances in PNG required to be covered for a chopper. He mentioned his fair share of being "caught out" in little out of the way spots and not spending more than two consecutive nights in any one camp.

In this letter, Kevin advised that he would be rotated back to Oakey, QLD for four weeks, returning to Australia on 16 September 1973 and then back to New Guinea again on 15 October 1973.

According to Annex J to *The Project Report on Plastic Flagon - Air Support*, there were some changes after Kevin returned to PNG:

- On 18 October 1973, three RAAF Iroquois that had recently arrived and had by then completed "In-country" flight training of RAAF No.5 SQN pilots, moved to Daru, to replace the Sioux support. The four Sioux were redeployed to other aspects of the operation with two assisting with the field completion of maps in the Nomad, Lake Kutubu, Mendi, Wapenamanda areas.
- After this was completed on 13 November 1973, they were then redeployed to Morehead to assist a small heighting team with barometric heighting in the south-west of PNG.
- The other two Sioux moved into the Green River area on about 25 October 1973, to assist a barometric heighting team, operating between Green River and Telefomin. In addition to heighting, this party also panelled a number of survey points in the north-west corner of PNG and in the Wewak area.

## **CRASH OF A SIOUX NEAR DARU – 6 OCTOBER 1973**

Helicopter mishaps were relatively commonplace during Survey operations in the '60s and '70s, and if you talk to any gathering of Army Survey veterans from those times, one or more would be likely to be able to recount being involved in or witnessing such an event. To illustrate this point, in the 2023 Anzac Day March in Adelaide, several older Survey veterans took advantage of an offer to ride along in Landrovers etc. In a group of four ex-Survey passengers in one Landrover, three of the four had been involved in helicopter crashes! Fortunately, all had walked away from them.

As mentioned above, during the first Survey operation Kevin was on at Cooktown, one Sioux crashed while taking off and another had to be recovered after making a forced landing.

Two Sioux helicopters crashed during the subsequent Operation Plastic Flagon in PNG. Barry Dick, the Instructor Pilot with 163 Recce Flt recalled this accident which occurred when the Sioux hit a tree on take-off. From memory, he thought the pilot had tried to fit between two trees. Annex J to *The Project Report on Plastic Flagon - Air Support* refers to the first of these, an accident occurring on 6 October 1973, about 70 miles west of Daru.

The report goes on to say:

*Despite extensive damage to the helicopter, neither the pilot nor the surveyor passenger were hurt. On 19 Oct, following completion of the investigation, the damaged aircraft was lifted back to Daru by one of the attached Iroquois. From Daru it was back loaded to Australia by C130 on 2 Nov 73.*

## OPERATION SKAI PIKSA

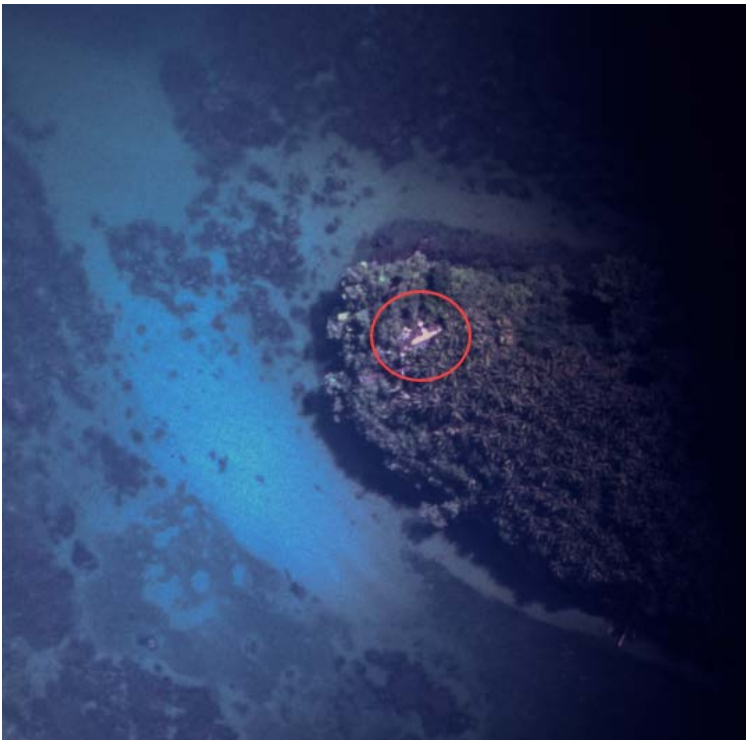
'SKAI PIKSA' was a nickname used to represent an aerial photography project in PNG, undertaken by a combined Army and RAAF Task Group. The principal aim of the project was to obtain high quality aerial photography to assist in the mapping program of PNG that was being carried out by the Royal Australian Survey Corps.

According to the Operation Report:

Aerial photography was the basic source material for topographic mapping. Prior to Skai Piksa approximately 80% of PNG had been photographed with various forms of photography, flown at various times, at various heights, at various azimuths and with cameras of doubtful or unknown calibration values. There were large cloud gaps in some areas.

As the amount of field control required is proportional to the overlapping strips of photography to be used, the previous haphazard photographic coverage greatly complicated the pattern of field control to be obtained and further, it complicated the aero-triangulation of this photography before map compilation could commence.

For Phase One of *Operation Skai Piksa*, between 1 April 1973 and 14 September 1973, using two No. 2 Squadron Canberra bombers, modified to carry Wild RC-10 aerial mapping cameras and flying at approximately 30,000 ft and 36,000 ft, 550 flying hours were logged, obtaining photographic coverage of 28,000 square miles (60%) of PNG.



*Photograph taken with a Pocket 110 Camera through a gap between the floor opening of the Porter and the RC-10 camera mount, through the open cargo bay doors. Image - the author.*

The field control obtained by ground-based surveyors during *Operation Plastic Flagon* and previously, had to be transferred to the high-altitude mapping photography to allow photogrammetric mapping techniques, i.e. stereo plotting, to be used.

To do this, plastic panels, generally white, were laid on the ground in the shape of a 'Y' 'T' or 'X' with the ground mark positioned in the centre or where the panel arms joined.

The panel configuration chosen would depend on obstacles and terrain. In the image on the left, a small Torres Strait Island, a 'T' was chosen.

The trig points were then overflown at 6,000 and 10,000 feet above ground level, using an Army Aviation Pilatus Porter in which a Wild RC-10 aerial mapping camera was mounted. Three images were taken at each altitude, with 60% overlap between images to allow stereoscopic viewing.

## MT WILHELM

Mt Wilhelm is the highest mountain in Papua New Guinea at 4,509 metres (14,793 ft). It is part of the Bismarck Range and the granite peak (shown right) is the point where Chimbu, Jiwaka and Madang Provinces meet. Often claimed as being the highest mountain in Oceania, even though close to the Equator, snow can often be found above 4,000 metres.

The peak of Mt Wilhelm is often engulfed by clouds but is home to a Survey triangulation station, used in geodetic surveying. The designation is 'NM19.' The survey beacon can just be seen in the image to the right and a close-up image appears below.



In the closing stages of *Operation Plastic Flagon*, with flying hours still available for the Pilatus Porter being used for aerial photography and for Sioux helicopters flying hours also available, it was decided to attempt to panel and photograph the trig station known as 'NM-19' on the top of Mt Wilhelm.



*The survey beacon atop Mt Wilhelm – Image Jackson Groves Journey Era website.*

On 24 November 1973, to prepare for the task of panelling Mt Wilhelm, the OC of 163 Recce Flt, Captain Adam Fritsch, had reconnoitred Mt Wilhelm and landed Sioux A1-722 on the Mt Wilhelm landing pad. According to a subsequent Accident Review into the crash of A1-722, when it was flown by Captain Fritsch on 24 November 1973, A1-722 was at a similar weight to what it was when flown by Kevin Shoppee on 29 November 1973. However, there were no details in the Accident Review report about a passenger accompanying Captain Fritsch on the earlier trip.



*Bell 47G -3B-1 Sioux A1-722 on the ground at Goroka Main base. Image – the author.*

The Accident Review noted that Captain Fritsch was able to maintain a two foot 'In Ground Effect' (IGE) hover, the condition where the downwash of air from the main rotor is able to react with a hard surface (the ground) and give a useful reaction to the helicopter in the form of more lift force available with less engine power required, but he had NO reserve power. An 'Out of Ground Effect' (OGE) hover was not possible.

Peter Cates, at the time a young Second Lieutenant with 4 Field Survey Squadron, was about the same age as Kevin. Both being young Lieutenants, they had got on very well and had been out a couple of times in Goroka for a few local beers. Peter remembered Kevin had not brought any jumpers with him and it got a bit chilly in the highlands at night, so he lent Kevin his white jumper and Kevin "*stood out like a neon sign.*"

On the morning of Wednesday, 28 November 1973, Peter Cates, with Kevin as his pilot, set off to try and panel Mt Wilhelm. Peter Cates described the attempt:

*"Kevin & I flew up to Mt Wilhelm the day before the accident to try and panel the point. However, we were at nearly 15,000 ft and it clouded in very quickly just as I jumped out with the panelling plastic. Kevin shouted at me to jump back in, so I did, and we took off back to Goroka.*

*On the way home we hovered near a hut at around 10,000 ft. I remember jumping out and running around the chopper ensuring that everything was OK. Unfortunately, that didn't go as well as planned as I had jumped into a Kunai grassed area and not being that tall, I had some difficulty in jumping back in. Kevin was able to get a skid low enough for me to jump up and grab it and I clambered aboard."*

The following morning, Thursday, 29 November 1973, Peter and Kevin were to try again. Peter Cates:

*“We were sitting in the Sioux ready to take off when young Colin Darch raced over and said that Major George Ricketts wanted me to be the supervising officer for some promotion examination being held that day. So, I jumped out and Colin jumped in with Kevin. The rest is history.”*

Colin Darch, at the time a Sergeant with 4 Field Survey Squadron and the same age as Kevin, subsequently wrote a document he called his ‘Testimony.’ When he wrote his ‘Testimony’ in 2002, the events were still etched on his memory and remain so 50 years later. The following is taken from that document:

*“We were due to return to Australia on Mon 3 Dec 73. On Thursday, 29 Nov 73, in the early morning, I was approached by Trevor Pearson (he was flying aerial photography for the operation) to see if I wanted to complete the last survey job for that year. I would be flown to Mt Wilhelm, the highest mountain in PNG standing 14,700 feet, land near the top, at approximately 14,200 ft, and be dropped off. I was to then climb the last 500 feet, complete the survey work of laying plastic photo panels then walk 2,500 feet down the mountain to an easier helicopter landing point where I was to be collected two days later. I accepted the offer even though at that late notice I could not be provided with a crash helmet, oxygen mask or fireproof clothing for the flight. It was to be an exciting adventure!*



*Colin Darch with his late wife Ester, taken in 1978 after Colin was posted to Sydney. Image Colin Darch.*

*Sitting in my tent before taking off for Mt Wilhelm, I remembered what I had been taught about the importance of prayer, and then I prayed a simple prayer “Lord, this could be a little dangerous so please bring me back safely, in Jesus’s name I pray Amen.”*

*When I arrived at the Bell Sioux helicopter sitting on the landing pad, I saw that the pilot, Lt Kevin Shoppee was not happy with the situation concerning my support equipment. I found out much later that he was also upset with his boss who allocated the flight to him. He was specifically annoyed that I did not have a headset for in-flight communications to speak with each other during the flight. I also did not have a crash helmet, or Nomex – the fire-retardant clothing that pilots always wore. As I had previously flown many times in this type of aircraft, his pre-flight briefing was short. Kevin was anxious to depart as another Sioux was warming up close by and was piloted by his boss, Capt Adam Fritsch. He was going to observe Kevin’s landing on Mt Wilhelm. His passenger was Capt Caldwell who oversaw the Aviation Ground Crew servicing the aircraft at Goroka.*

*We took off and the day was bright and blue with some white puffy clouds forming towards our destination. We flew to the mountain and completed an overpass at about 16,000 feet to see what the conditions looked like. To me, it appeared quite foreboding, extremely high, very steep, very dangerous, and it was partially snow-capped...*



**Right:** *The approach to Mt. Wilhelm that day. Image Colin Darch.*

*We then attempted to land on the north-eastern side of the mountain, approximately 500 ft below the summit. Something went wrong! We were approximately 30 ft above the identified landing pad when the helicopter started shaking violently. We then spun through almost 100 degrees, facing away from the summit towards the NE. Kevin yelled out that we were “going in!”, a phrase that meant we were going to crash. I looked down at the terrain and the boulders we were descending towards, and the thought which came to my mind was “Colin! you are dead.”*

*Kevin attempted to gain altitude to clear the edge of the mountain, but the further we moved away from the mountainside the higher we were from the ground. We were about 150 feet from the ground when we fell like a rock from the sky. I do not know why but I looked at my watch and subconsciously noted the time, it was 0830 hrs. Looking down at the harshness of the terrain I wondered where I was to end up. I then tucked my thumbs into the shoulder straps of my safety harness and watched the ground rushing towards me. I cast one brief look at the pilot and saw that he was concentrating on flying, leaning forward, and searching for a safer place to land. It was at that moment that it seemed like an arm went around my shoulder, like a father putting his arm around a son, and it seemed like a quiet little voice spoke deep into my left ear and said, “Colin, don’t worry, you are going to be all right.” The truth of God’s word comes to mind as I recount that moment and the verse is: PSA 23:4 “Yes, though I walk through the valley of the shadow of death I will fear no evil; for you are with me; your rod and your staff they comfort me.”*

*With that little inner voice came a peace upon me which I cannot describe in words. Any fear I had was washed away with the feeling of pure love. I was later to understand from the Bible that this was: PHIL 4:7 “The peace of God which surpasses all understanding will guard your hearts and minds through Christ Jesus.”*

*I already had “peace with God” through salvation, but now I was experiencing the “peace of God” in a very real and practical way. For the first time in my life, I felt the arms around me of a Father who deeply loved me and would protect me the way a wonderful father would want to do. At last, I was home!*

*We hit skids first on a 70-degree slope, broke the entire tail off the helicopter, bounced further down the mountainside and landed on the nose, disintegrating the front of the helicopter. I was knocked unconscious on the first impact with the ground. We then bounced and rolled over and over, crushing the remainder of the tail against the engine, destroying the main rotor blades, and generally compressing the remains of the helicopter into a six-foot cube. The helicopter ended up perched on its nose.*

*When I came to, the toes of my boots were about five centimetres from the ground. My head was about one metre from the ground. I was coughing up blood and thought I had broken some ribs and punctured a lung. There was a puddle of blood on the ground in front of me. I then looked at my watch and estimated I had been unconscious for three minutes. I was not feeling very well at all. Breathing was extremely difficult and the pain throughout my body was terrible. As I regained full consciousness, I looked up and saw one of the helicopter’s fuel tanks in front of me, approximately two metres from my head. Fuel had leaked out from the filler cap, and flames were dancing around it. An explosion appeared imminent.*

*My first thought was to escape the wreck before I was incinerated. I released my safety harness, and in extreme pain, crawled out through the shattered door. I found my survival back-pack next to the wreck, as if someone had carefully placed it upright on the ground. I could hardly walk on my right leg, could not breathe properly, could not use my right arm, and the pain in my back was excruciating. I dragged my pack behind a huge boulder that was close by, to protect me from any possible explosion.*

*There was freezing water running over the rocks near the boulder, and I was able to scoop some up and splash it on my face. That revived my senses, and then I thought of Kevin, who was still trapped*

*in the aircraft. I hobbled around to the front of the helicopter, checked that the flames on the fuel tank were extinguished, then checked on Kevin, who incidentally, was the same age as me, 23 years old, and called out his name – Kevin! He was still hanging in his safety harness. He lifted his head, turned to the left, looked at me, then rolled up his eyes and died. At that moment I felt so alone. I could not extract Kevin from the wreck as I could not support his body, or my own. Over the next hour I checked Kevin for signs of life but there were none.”*



*The wreckage of A1-722. Images taken by Captain Caldwell with Colin Darch's camera which was found nearby. Images from Colin Darch.*

*“The other helicopter that was spotting our landing, saw the crash, radioed a mayday to the authorities, then landed approximately 1,000 - 2,000 ft lower down the mountain and disembarked the passenger, Captain Caldwell. He made his way up to the crash site, arriving approximately one hour later. He was very exhausted because of the climb and the effects of the rarefied atmosphere. He checked on me to see how badly I was injured, he then removed Kevin's body from the wreck. He called out that the pilot was still alive - he had a heartbeat! I assured him that I had checked Kevin at least three times over the last hour, and he was deceased. He was hearing the beating of his own heart in his ears when he listened on Kevin's chest. He then searched for my camera that had been torn from around my neck during the crash. He found the camera further up the mountain and began taking photos for the investigation which would inevitably take place in the immediate near future.*

*The weather suddenly changed, and we were covered in cloud, and it became very cold. We heard planes flying overhead, trying to drop emergency supplies, but it was too dangerous, so they returned to base.*

*A rescue party was eventually deposited about 3,500 ft further down the mountain, below the cloud cover, and arrived at the crash site around 1300 hrs. They had no stretcher to carry me off the*

mountain, and the medic only carried a small 10cm medical kit. So much for a rescue! I began moving around, using as much of my body as was practicable, and the pain began to ease, my breathing improved, and I realised I had not punctured my lung. The rescue party consisting of a sergeant, two corporals, and one private, began discussing how to get me off the mountain. That discussion became somewhat animated, then heated as time lengthened. Clouds still covered the top of the mountain, and to add to the misery, it began snowing at 1600 hrs.

I then decided to walk down to the rescue point which was approximately 2000 – 3000 ft further down the mountain, and simply told the rescue party that I was moving out and they could do whatever they wanted. They were left with no choice so followed me down to two chalets, one of which was used by the Sydney University for seclusion when writing their thesis for degrees etc. God gave me a strength I never knew existed. Three times on the way down, I fell, and each time almost passed out with pain all through my body. No one could help or support me on that narrow mountain goat track.

We eventually made it to the chalet at about 1900 hrs. The rescue party then began to argue about where they were going to sleep for the night. I became angry, picked up an iron bar with my left hand and smashed a window. Well! that was it! The damage was done! The team then broke in, and we found beds, blankets, tinned food, a kerosene heater, tea and coffee, plus a half bottle of brandy. We stayed overnight and, although the guys tried to make a comfortable bed for me, I had a most uncomfortable sleep, being awoken many times throughout the night, mostly by pain, and thoughts of the events of that day.

Early next morning we were awoken by the sound of a helicopter, (a civilian Aerospatiale Alouette) which first circled the cabin, then flew to the top of the mountain and retrieved Kevin's body, delivering him to an airstrip further down the mountain where he was loaded onto an Air Force Iroquois helicopter.

The French Alouette helicopter then flew back to where we were located, collected me, and flew me down to the Iroquois. When I disembarked the helicopter, my friend, Graham Parks, put his arm around me to help me sit down on the stretcher, but the pain in my chest was unbearable, so they stood the stretcher up on end, held me against it and gently lowered me to the ground. They loaded the stretcher onto the Iroquois helicopter and flew to the Goroka Base Hospital.

I was off loaded into an ambulance, taken to the in-patient section of the hospital, and deposited in an examination room. A doctor entered the room and asked me what was wrong with me??? He stood about three metres away from me, and apparently made his final diagnosis of my injuries from observation only, and from what I told him about my injuries. There was no physical examination at all, no x-rays, nothing at all!! After three minutes he declared he had an autopsy to perform, and promptly disappeared. A nurse then wheeled me into the ward where they injected me with something, and I did not wake up until the next afternoon (Saturday). I did not see that doctor again."

Post crash on 29 November 1973, back at the Main base at Goroka, Peter Cates had been upset when hearing that Kevin's helicopter had crashed:

"I got fairly upset when the chopper went down and wanted to jump into an Iroquois with a few guys, fly up to a basic campsite and hut located at 10,000 ft, and walk up to the crash site. The OC had immediately put a ceiling of 10,000 ft on all his military helicopters, so the RAAF helicopters were not allowed to fly up to the camp. I wasn't happy and let him know in no uncertain terms. He had me marched off to my tent and not allowed out until the problem was solved. The next day I was fronted to the CO and told that I would escort Kevin's body back to Adelaide. It was the longest and loneliest Hercules flight that I have ever had."



Peter described Kevin as “a terrific young man”, and said, “we could have continued to get up to more mischief if things had of been different.”

Monday, 3 December 1973 was the first pre-programmed C130 Hercules extraction from Goroka back to Australia. Kevin and Colin were flown back to Adelaide on that flight. Colin wrote about this experience in his ‘Testimony’:

*“The Air Force kindly provided a stretcher on board for my journey home. I boarded the aircraft with help from my comrades and heard the engines start, but before the doors closed, the administration sergeant rushed on board, declaring that the doctor had made a mistake with my accident report, and would I sign a new one? The sergeant gave me the old report for posterity’s sake. When I eventually looked at the old report it was a revelation. The doctor who treated me, and who performed the autopsy on Kevin, mixed up our paperwork, and I still have the distinction of holding on file at home, my own Death Certificate. I was deceased due to head injuries.”*

For the 4 Field Survey Squadron personnel accompanying Kevin home on the Hercules, apart from the engine noise, it was otherwise a quiet trip with a sombre mood pervading throughout the aircraft.

## NEWS OF KEVIN’S LOSS RECEIVED BACK IN AUSTRALIA



*A poignant photograph of a group of Kevin’s fellow Squadron members back in Australia, who were assembled to advise them of Kevin’s accident. There were tears of sadness and disbelief. The loss of any fellow pilot is always a sobering event. Words by former Army Aviation pilot Ken Grant. Image from Andrew Westman. **Left to Right:** Tony Selvi, Bernie Gleeson, Roger Dundas, Ned Kelly, Steve Ormerod, Tub Mathieson, Dick Neville and unknown pilot (obscured).*

## MILITARY FUNERAL AT CENTENNIAL PARK, 5 DECEMBER 1973

Kevin was farewelled on 5 December 1973 and laid to rest in Derrick Gardens at Centennial Park Cemetery at Panorama in Adelaide. Unlike traditional upright headstones, Derrick Gardens uses 'sloping Dutch footstools', which means that instead of a headstone, veterans are interred with a memorial marker at the foot of their grave, ensuring that the fallen soldiers are laid to rest facing the morning sunrise.



*Kevin's Grave at Centennial Park. His memorial marker appears in the centre of the bottom row above. Image from the author.*



Kevin was provided with a military funeral with his coffin conveyed on a gun carriage and escorted by a funeral guard of honour. Over the page are some images from the funeral provided by Chris Malpas.



*Kevin's coffin being loaded onto a gun carriage.*



*The gun carriage flanked by a funeral escort.*



*Kevin's coffin being carried at Centennial Park. The Army Aviation Captain, second from the right, wearing a blue Army Aviation beret and a black armband, escorting the coffin, is Captain Barry Dick. Image Chris Malpas.*

## THE INTERVENING YEARS AND REMEMBERING KEVIN 50 YEARS ON



*Kevin's father, Arthur Shoppee, at Kevin's grave.  
Image Chris Malpas*

29 November 2023 was the 50<sup>th</sup> anniversary of Kevin's death but he has not been forgotten in the intervening years by family, friends, or those he served with in the Australian Defence Force.

Kevin's father, Arthur, pictured left, passed away in 1986 and Kevin's mother, Rachel "Rae", 10 years later in 1996. Kevin's brother 'Art' passed away in 2009, leaving Chris as the sole surviving immediate family member. Chris and her husband Geoff have had children and grandchildren and still live in the Shoppee family home at Glenelg East. Chris and Geoff's son is named Kevin in honour of his uncle.

Officer Training Unit graduates, Army Aviation pilots and Army surveyors who knew and worked with Kevin continued with their military careers or moved on to civilian life, some have passed away since and almost all have retired by now, but those who are still with us remember Kevin.

When researching and writing this profile, meeting people like Chris, reacquainting myself with Colin Darch, who I had not spoken to for four decades, corresponding with and talking to so many people whose lives were touched by Kevin and who had stories to tell and memories to share, it seemed important to tell Kevin's story to those who didn't know him and while he had clearly not been forgotten, to also remember him at a Commemoration Service 50 years on.

Kevin's memorial marker refers to him being "*A Magnificent Man in his Flying Machine.*" Over 50 years ago, Kevin and his family had been close friends with Fred and Liz Silz and Kevin was Best Man at their wedding. Liz and her late husband Fred had visited Kevin's grave regularly over the years and Fred is now buried nearby, so Liz visits both of them. Liz said she will always remember the band playing "*Those magnificent men in their flying machines,*" as they marched from Kevin's grave after the funeral service.

With the help of Ian Smith, Chair, Anzac Day Committee, RSL (SA & NT), a graveside Commemoration Service was held at Centennial Park on Wednesday, 29 November 2023, to remember and celebrate the life of "*A Magnificent Man in his Flying Machine.*"

The service was attended by approximately 40 people. Family members attending were Chris and Geoff Malpas, their adult children, Kevin (named after his uncle), Jenny and their partners, and Chris and Geoff Malpas' two nieces from Victoria, Theresa and Kim and their partners. Former members of 4 Field Survey Squadron, some of his classmates from the Officer Training Unit, Scheyville, a former Army Aviation helicopter pilot from 183 Recce Flt and others, joined Kevin's family at Derrick Gardens, Centennial Park in Adelaide, to remember Kevin on the 50<sup>th</sup> Anniversary of his death on Mt Wilhelm, PNG, during Operation Plastic Flagon in 1973.

A special guest was Colin Darch, who travelled from Perth to be at the service. Colin recited the Ode of Remembrance.

David Lyas, a close friend of Chris and Geoff Malpas was the Master of Ceremonies.

Chaplain Paul Ghanem of 10/27 Battalion led the Reflection & Prayers of Remembrance, Lord's Prayer and Benediction.

The Commemorative Address was given by the author.

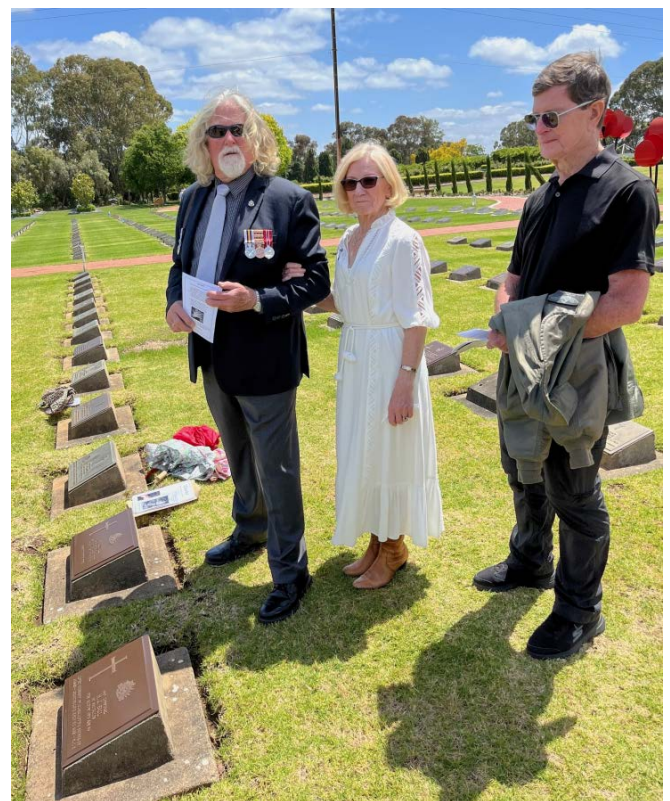


Above: Part of the group attending. Far left is Chris and Geoff's son Kevin. Holding the umbrella to shade her mother is their daughter Jenny. Below: (Left) Colin Darch, wearing his Survey beret, reciting the Ode of Remembrance, and David Lyas, who was the MC. In the background is the bugler, Corporal Aaron Madden of the Australian Army Band, who played the Last Post. (Right) The Commemorative Address was given by the author. Images from the author and Ian Smith RSL SA & NT.





Above: Chris Malpas led the placing of tributes by placing flowers on behalf of the family. This was followed by guests who were invited to place sprigs of rosemary. Image the author.



Above: Kevin's beret on his grave marker. Right: Geoff and Chris Malpas. On the right of the picture is former 183 Recce Flt helicopter pilot David Allan. Images the author.

## MEMORIALS

Because Kevin died during an Army Operation in Papua New Guinea, between 1947 and 1975, he has been included on the Roll of Honour at the Australian War Memorial in Canberra. His name is located on Panel 1 in the Commemorative area at the War Memorial.

Kevin has also been included on a separate memorial located at the rear of the National War Memorial (South Australia). This memorial commemorates service personnel with close links to South Australia who made the supreme sacrifice as a result of their service overseas or operation involving the Australian Armed Forces or the Australian Defence Force since the end of the Second World War.



*Adelaide Post Second World War Memorial, located at the rear of the National War Memorial (South Australia), commemorating service personnel with close links to South Australia who made the supreme sacrifice because of their service overseas or operation involving the Australian Armed Forces or the Australian Defence Force since the end of the Second World War. Image the author.*

In 1994, Kevin, with others, was added to the Memorial Honour Board at Sacred Heart College, Somerton Park, SA. Kevin and the others included were celebrated during a Rededication Ceremony on Sunday 10 April 1994.

## EPILOGUE

4 Field Survey Squadron returned to PNG in the second half of 1974, on *Operation Sea King*, supported by Army Aviation Kiowa and RAAF 9 Squadron UH-1H Iroquois helicopters. During the operation, an Iroquois, A2-383, came to grief on Mt Bosavi (elevation 8,500 ft). According to a RAAF pilot Trevor Moxham, 'high density altitude' had again taken its toll. The helicopter was positioning an Aerodist Remote Party on Mt Bosavi at the time. After a difficult landing, the aircraft slid off the helipad down the side of the mountain. Fortunately, everyone survived.



During *Operation Sea King*, Mt Wilhelm was panelled without incident and the panels were photographed from about 20,000 ft and 25,000 ft AMSL (Above Mean Sea Level). The aircraft used was an Army Aviation Pilatus Turbo-Porter which was unpressurised and had a Zeiss MRB 9 or Wild RC 10 aerial camera, weighing approximately 100 kilograms, mounted in an opening in the floor, separated from the elements only by two cargo bay doors that could be released and swung open when using the camera.

The camera operator's position was behind the floor opening and very draughty! I still remember this task vividly as it was the coldest I have ever been in my life. I remember the aircraft creaking, my Parker pen ceasing to work, shaking some ice out of my oxygen mask when we returned and stamping my boots to try and warm my feet up when back on the warm ground! On each pass over the peak, I imagined how forbidding and cold it must have been down below for Kevin and Colin Darch.

There was a saying amongst the lower ranks in 4 Field Survey Squadron about us only having a security clearance to "rumour level." With nothing forthcoming officially about what had gone wrong with Kevin's last flight, there had been quite a lot of talk and speculation over the years amongst the surveyors on the operation, including rumours that the Bell Sioux should not have been operating over 10,000 ft. There had also been talk about whether Kevin and his passenger should have been on oxygen above 10,000 ft. While none of us were aircraft engineers qualified to comment on the first point, the latter point seemed clear amongst those of us who had attended hypoxia training at the RAAF School of Aviation Medicine at Point Cook, where it was drummed into us that we should be on oxygen when working above 10,000 ft in an unpressurized aircraft.

As a result, on the only information available, most of us were left with the belief that the helicopter should not have been over 10,000 ft and both Kevin and Colin Darch should have been on oxygen to avoid the symptoms of hypoxia (low levels of oxygen in the body tissues) a symptom of which includes confusion.

When researching to write this profile, these points were discussed with former 163 Recce Flt Instructor Pilot, Barry Dick.

Barry Dick disagreed with the first point. He said,

*"From memory, the manual said you can maintain normal outside air pressure to 12,400 feet. At sea level you would have 30 inches of pressure, and with a turbocharger, you should still be able to get this at 12,400 feet. With Mt Wilhelm at approximately 14,800 feet above sea level, Barry believed it took more power to actually hover at that altitude, so you really had to use a technique where you fly the aircraft in, hold your power and then bleed the speed off, raise the power and settle into ground effect. It was a little bit of a balancing act there and there was very limited power at that altitude (probably only 28 or 29 inches of power available). Barry believed landing at that sort of altitude was 'possible', but you had to be careful, or you would come to the hover and then crash."*

As for oxygen above 10,000 ft:

*"Barry believed this would be the normal case, but for short excursions they never did. On this tasking, it was intended to drop off the surveyor and then come down to a lower altitude. He was unsure whether it was acceptable or not to fly without oxygen over 10,000 feet but it was common practice not to at that time."*

Barry had left PNG about a week before the accident and was doing training back in Australia when he heard what had happened. His experience with Kevin during both operations in Queensland and PNG had not raised any concerns about Kevin's flying ability. There had been no issues or incidents involving Kevin. Barry described Kevin as, *"Good head, good lad and his enthusiasm was outstanding!"*

When asked if he had any idea what may have happened, Barry said he believed it was “pretty straight forward”:

*“When making an approach at that altitude, you can’t actually fly the aircraft straight in, slowing it down a little bit, pulling in more power until you come to a hover over the pad, because you don’t have enough power to hover if you don’t have translational lift or ground effect. That is, you have either got to be moving or you have got to be right over the pad and stationary, so you build a little bit of a cushion under the helicopter.*

*But there is a little area between those two that is critical. You fly the aircraft in very slowly, knowing what your power is and knowing that if you slow it down anymore, you are going to crash. So, you have to keep the speed going until you are guaranteed of getting onto the pad. And then what you have to do is slow the aircraft down in this ‘no man’s land’ and convert your speed into ground effect.*

*If at any stage you lost RPM or got out of the in ground effect before you lost your translational lift, you are going to crash. Even then, if the pad is big enough, you may be able to ‘flare it out’ and drop onto the ground.*

*That was the delicate teaching I went through with all pilots after arriving at Goroka.”*

Barry was unsure what the terrain was like where Kevin was landing, “but if it was rough, there was a good chance you would get the tail into a rock or something like that.”

I left the Army in 1978 and joined the South Australian Police (SAPOL), starting a career of investigating, in one form or another, spanning about 45 years. Once retired, it seemed a natural progression to continue using these skills for a lifelong interest in military aviation and to do research on aviators from WWII and later, many of whom have been almost forgotten with the passing of time. Kevin had always been on my to do list. After meeting with Chris and Geoff Malpas and talking to Army Aviation experts like Barry Dick, retired Brigadier Bill Mellor and retired Colonel Charlie Barnett, it was felt the Accident Investigation Report was vital to try and confirm what had actually happened.

Attempts were made to obtain a copy of the Investigation Report, a copy of which could not be found in the National Archives or other databases available to the public. Enquiries with Air Force History and Heritage suggested the report would most likely be with the Defence Aviation Safety Authority, but a request would most likely be declined or come back heavily redacted because a Defence Force Member had been killed. At the time of writing, I am still waiting for someone to contact me ‘at their first available opportunity’ in response to my request of 29 August 2023.

Fortunately, Colin Darch had obtained a copy of *RAAF Flight Digest Vol 2 No 9, Accident Review – Major Accident Sioux A1-722 Mt Wilhelm PNG, 29<sup>TH</sup> November 1973 (Restricted)*, which Colin had used to support a 2021 Department of Veterans Affairs claim for injuries and ongoing medical issues resulting from the crash. Colin provided a copy of the report and copies of photographs that were taken at the crash site, using his camera.

### ***RAAF Flight Digest Vol 2 No 9, Accident Review – Major Accident Sioux A1-722 Mt Wilhelm PNG, 29<sup>TH</sup> November 1973:***

According to *Annex M to Project Report on Plastic Flagon*, the Investigation Team arrived at Goroka on 30 November 1973. The team comprised Major Monteath, Captain Bibby, Captain Emery and Wing Commander Robinson.

The following is summarised from the ‘Accident Review’ with actual quotes indicated by inverted commas:

#### **The Pilot**

- Kevin had accumulated a total of 755 hours and 50 minutes flying time, of which 620 hours and 35 minutes were on Sioux 47G-3B-1 aircraft. His assessment was Category C and he was in current flying practice. A current medical category was held by Kevin and he was considered ‘fit to fly.’

## Aircraft Serviceability

- All relevant inspections and servicings had been carried out and the aircraft was serviceable to fly.
- A1-722 had been free of major unserviceabilities and had operated in the Mt. Wilhelm area on two occasions prior to the accident.
- The aircraft's weight and balance were within limits.

## Weather

- The area forecast indicated local morning fog on mountains and in valleys.
- Visibility was 30 nautical miles, reducing to 5 nautical miles in patches of rain and drizzle.
- The forecast wind at 14,000 feet was 300/10.
- Witnesses stated that the weather was fine at Mt. Wilhelm, with a few wispy clouds forming on the summit.

## The Mission

- To re-panel a survey station on the summit of Mt. Wilhelm (14,790 feet) 28 nautical miles north-west of Goroka, PNG.
- Two Sioux aircraft were tasked for the mission, A1-722 and A1-726.
- Aircraft A1-722 (flown by Kevin) was to land on Mt. Wilhelm, insert a surveyor (Colin Darch) who was to re-panel the point, and extract him at a later time.
- If poor weather had made the pick-up impossible later in the day, Colin Darch was to have walked down off the mountain to the "Lakes" area, approximately one nautical mile east and 3300 feet down from the landing area.
- Aircraft A1-726 (flown by Captain Adam Fritsch) was to accompany A1-722 on the task and the passenger in A1-726, the unit Engineering Officer (Captain Mike Caldwell), was to observe aircraft performance at the high altitudes involved in the operation. The tasks required several approaches and landings to be made at high altitude.

## Flight Authorisation and Briefing

- The task was briefed and authorised by the OC 163 Recce Flight (Captain Fritsch). The pilot of A1-722 (Kevin) was thoroughly briefed by the OC on all aspects of the task and also on general aircraft operation. The following points were specifically covered:
  - the area;
  - location of the pad;
  - method of approach;
  - recommended approach routes;
  - departure areas; and
  - weather.
- **However, several orders and instructions were contravened when the task was authorised:**
  - Army Flying Order 3.1.1 was contravened by:
    - a. the carriage of passengers above 13,000 feet pressure altitude: and
    - b. not having oxygen equipment available for passengers.
  - 1 AVIATION REGIMENT Ops Instruction 1/73 was contravened by:
    - a. the carriage of passengers who had not received the appropriate high altitude briefing;
    - b. the carriage of passengers who had not completed the prescribed decompression test; and
    - c. not having oxygen equipment available for passengers.
  - 163 Recce Flight pre-flight check requirements were also contravened in that A1-722's passenger (Colin Darch) was not provided with a headset.

## **Description of the Flight**

*“The two aircraft departed Goroka for Mt. Wilhelm at 0718 hours local on the 29 November 1973. They departed in formation and the lead aircraft, A1-726, was captained by the OC 163 Recce Flight [Captain Fritsch]. The aircraft climbed to 10,000 feet and remained at or below this altitude until overhead Keglsugl (five nautical miles south-east of Mt. Wilhelm) where a further climb was commenced.*

*Although communications had been checked on VHF FM before take-off, air to air communications could not be maintained by that means. HF communication was established with MADANG Flight Service when clear of the Goroka Control Zone, and air to air communications were then established on VHF AM.*

*During the climb the lead pointed out the “Lakes” area to the pilot of A1-722 [Kevin] and asked him to show his passenger one of the proposed pick-up points to be used in the event of bad weather.*

*The section arrived and overflew the landing pad, situated on the pinnacle, at approximately 0750 hours. A1-726 [Fritsch] then held to the north-east and completed a power check while the pilot of A1-722 [Kevin] positively identified the pad.*

*Although there was some wispy clouds forming in the general area of the landing pad, the pilot of A1-722 [Kevin], when queried by the lead, stated that he was completely clear and visual. The first pass by A1-722 [Kevin] was estimated to be at 500 feet AGL, straight level, on a heading of approximately 160°. The aircraft was then banked to the left and the turn continued until the aircraft was approaching the pad from the same direction as the first pass, at about the same height. During the second pass when passing over the pad, the pilot [Kevin] remarked to his passenger [Colin Darch] that the approach was too fast and they would have to try again. Once again, the aircraft was turned to the left until approaching from the same direction as before, only this time at a much lower height. The pilot [Kevin] flew a very shallow, possibly flat approach heading approximately 160°, until about two aircraft lengths short of the pad, where a left-hand turn was commenced in an attempt to overshoot from the approach. The aircraft descended rapidly, still turning to the left, until the bottom of the vertical stabiliser struck rocks about 100 feet below the level of the pad. Subsequently, the aircraft rotated nose down about its lateral axis, striking the front of the skids, then smashing the bubble before spinning to a halt 120 feet further down the slope.”*

## **Eyewitness Reports**

*“The pilot of A1-726 [Fritsch] had observed A1-722’s final approach, but lost sight of the aircraft because its silhouette blended with the hillside. He did state however, that A1-722 had completed at least 90° of the left turn and appeared to be travelling in the opposite direction to the approach. Attempts were made to establish radio contact, but without success. As A1-726 approached the pad area, the pilot observed ‘day glo’ marked debris scattered on the mountainside. MADANG Flight Services were advised that A1-722 had crashed on Mt. Wilhelm at 0755 hours. The passenger from A1-726 [Captain Caldwell] was dropped 900 feet down slope (nearest suitable landing area) and he reached the crash site approximately 50 minutes after A1-722 had crashed.*

*The evidence tendered by this witness, and that tendered by the passenger of A1-722 [Colin Darch], confirms the events as described.”*

## **Examination of the Wreckage**

*“The main airframe came to rest on its nose, facing East into the slope. The cabin area was severely distorted and was fractured in several places. The main rotor was still attached but the entire tail boom assembly had completely separated.*

*The main fuel cock was in the ON position, but all other engine switches were selected OFF.*

*A1-722's passenger [Colin Darch] stated that a small fire had started when the aircraft came to rest, and this was confirmed by a small area of scorching and deformation around the right-hand fuel tank filler cap. The fire had extinguished itself shortly after the crash.*

*Throttle linkages from the correlation box to the carburettor appeared to operate normally and the turbocharger could be spun freely by hand. There is no evidence to suggest aircraft or engine malfunction, and the fuel was found to be free of water and other contamination."*

## **Discussion of Evidence**

*"The performance chart contained in the Sioux Flight Manual indicated that the aircraft engine was capable of generating sufficient power to maintain an in ground effect (IGE) hover on Mt. Wilhelm, but with little appreciable reserve. The fact that the chart required extrapolation to obtain A1-722's hover ceiling, and the discovery of the height error on the chart (hover ceiling for 2850 LB AUW -5° and +5° maximum heights transposed, are not considered relevant to the cause of the accident in view of the comprehensive briefing given by the OC before the flight.*

*Five days before the crash, the OC [Captain Fritsch], flying A1-722 at a similar weight to that of the aircraft on the 29<sup>th</sup> November, landed on the Mt. Wilhelm pad and was able to maintain a 2 foot IGE hover, but with no reserve power. An out of ground effect (OGE) hover was not possible.*

*On the day of the accident the pilot of A1-722 flew a very shallow, possibly flat approach to the pad. The passenger stated in his evidence that the aircraft began to shudder when just short of the landing point. This shuddering, which the passenger described as being like the vibrations present before a normal landing, would indicate the loss of translational lift. If translational lift was lost, a flat or shallow approach would have demanded OGE hover power - power which the engine was not capable of producing, and thereby inducing an overpitch condition short of the pad.*

*A further point to consider with the selected approach path is the forecast wind of 330/10 at 14,000 feet - a tail wind. Winds on Mt. Wilhelm are normally generated thermally and inconsequential before 1000 hours local. Despite the fact that the pilot of A1-726 [Captain Fritsch] had observed no local wind in the area, it is still possible that A1-722 encountered a tailwind on late final. If a tailwind was encountered, OGE hover power would again have been required short of the pad.*

*The onset of overpitching appears to be the most likely reason for the overshoot action short of the pad. The rapid loss of height and left turn after the overshoot was initiated suggests that the aircraft was in an overpitched condition.*

*Cloud on the approach path could have been a reason for the attempted overshoot. This situation is discounted in view of the pilots call that he was "clear and visual" during his first approach and the passenger's statement that on the last approach he saw the white plastic on the pad as the overshoot was initiated.*

*The pilot was certainly aware that he could not complete the overshoot manoeuvre once it was commenced because he told his passenger he was "going in", and he had almost completed the crash actions."*

## **Conclusion**

*"From the evidence available the cause of the accident is attributed to the pilot's inexperience and his lack of the particular skills required for a pinnacle approach at 14,790 feet, coupled with the limited aircraft performance at this altitude. The question arises as to whom was the most suitable pilot available to perform the task at such a high altitude. The authorisation could be viewed as being*

ill judged considering that the pilot's most demanding mountain flying task prior to the accident had been the extraction of personnel at 8500 feet. Furthermore, the unit's Notes on High Altitude Operations explicitly warn that high altitude operations in the Sioux aircraft require a high degree of skill and knowledge. Since the OC [Captain Fritsch] was at Mt. Wilhelm at the time of the accident, and as he had previously landed on the pad, one would consider that he should have completed the task on the 29<sup>th</sup> November.

The accident has been categorised as:

Primary Cause - Aircrew Error – Aircraft operations outside flight envelope.

Contributory Cause - organisational fault - faulty supervision.”

## Safety Aspects

- a. **Headsets.** The passenger in A1-722 [Colin Darch] was not wearing a headset. There are inherent dangers involved when a pilot is unable to communicate with his passenger, particularly in this type of operation.
- b. **Use of Oxygen.** The only person to have oxygen available to him was the pilot of A1-722, and this was a Porter Emergency oxygen bottle. The bottle is not designed for use in Sioux aircraft. The pilot had the mask clipped to his helmet, but it was fastened on one side only because he had to shout to his passenger who did not have a headset. Thus, the free flow of oxygen from the emergency bottle would have been used in a “sniff now and then” capacity. The oxygen supply expires after about 15 minutes of operation and this would have been insufficient for the completion of the Mt. Wilhelm task. What is even more alarming is that no-one in the accompanying aircraft, A1-726, was using oxygen at all.
- c. **Passenger Briefing.** The passenger in A1-722 [Colin Darch] was not the person originally scheduled for the Mt. Wilhelm task and was a last-minute substitute. There was no briefing to his passenger by the pilot before departure and any briefing in the air would have been difficult because the passenger did not have a headset.

## **AUTHOR'S COMMENTS:**

- It is interesting to note that the Accident Review reports Captain Fritsch provided evidence, within a day or two of the accident, to the effect that he had lost sight of the aircraft “because its silhouette blended with the hillside” and his next observation appeared to have been seeing scattered debris, yet in a subsequent report signed by Captain Fritsch, dated 18 July 1975, prepared for a Commonwealth Employee's Compensation Act Injury Claim made by Colin Darch, Captain Fritsch completed a section titled ‘State Exactly What You Saw of the Accident (Complete Only If You Were an Eyewitness to the Actual Injury)’, on which Captain Fritsch wrote:

*“The Sioux Helicopter was attempting to overshoot the landing point at 14,400 feet when the tail roter [sic] struck the ground and the aircraft crashed on the slope of Mt WILHELM approximately 300 feet below the landing point.”*

- Captain Caldwell completed a report, dated 21 May 1975, also prepared for Colin Darch's claim. In the same area of the form to be completed by an ‘eye witness’, Captain Caldwell appeared to have started to write his observations which were crossed out and he then wrote:

*“NOTE: The cause of the accident was determined by the Court of Inquiry to be inexperience and lack of skill on the part of 2LT K. D. Shoppee coupled with the limited performance of the Sioux helicopter at the altitude of 14,000 feet AMSL.”*

- Captain Caldwell had then made an entry in the area of the form titled *“If You Are Not an Eye Witness to the Injury What Did You See or Hear Immediately before or after or during the Accident?”* He wrote in the two lines he had crossed out from the previous section and continued. The full entry was:

*“I was flying as a passenger in Army helicopter A1-726 and I was watching A1-722 as it attempted to land on Mt Wilhelm. It made two runs across the landing point and on the third run attempted to land. Just as it was coming up to the pad it turned away and the aircraft hit the hillside and rolled down the hill. I was landed from the other helicopter and reached the wreckage an half an hour later where I saw Sgt Darch. He had bruised ribs and had trouble walking due to a sore ankle from the crash.”*

- Captain Caldwell’s inclusion of the ‘NOTE:’ about the cause of the accident only referred to the *“inexperience and lack of skill on the part of 2Lt K.D. Shoppe, coupled with the limited performance of the Sioux helicopter at the altitude of 14,000 feet AMSL”*, and failed to mention the Accident Review conclusions that Captain Fritsch’s ‘authorization’ for Kevin Shoppee to undertake the task requiring ‘a high degree of skill and knowledge for high altitude operations,’ which he did not appear to have, could be viewed as ‘ill judged,’ comments that the more experienced Captain Fritsch should have completed the task and the apparent contravention of Army Flying Orders and 1 Aviation Ops Instruction 1/73 and pre-flight check requirements (‘Safety Aspects’), appear to have all been omitted by Captain Caldwell.
- According to the Accident Review, the role of A1-726, piloted by Captain Fritsch with the Unit Engineering Officer, (Captain Caldwell) as passenger, was to ‘observe aircraft performance at the high altitudes involved in the operation.’ It could therefore be reasonably assumed that they would have always positioned themselves to be in the best position to view the approach and landing of A1-722. However, according to the Accident Review, Captain Fritsch observed the final approach *“but lost sight of the aircraft because it’s silhouette blended with the hillside.”* His reported observation a day or two following the accident appears to be in conflict with his report approximately 18 months later, i.e. *“...the tail rotor [sic] struck the ground and the aircraft crashed on the slope of Mount WILHELM...”* The information appearing on the form completed by Captain Caldwell, approximately 18 months after the accident, appears to be an eyewitness account, yet there is no mention of his evidence or of him being an apparent ‘eye witness’ in the Accident Review.

Unfortunately, there was no summary of Colin Darch’s evidence in the ‘Accident Review’ report or access to a transcript from the proceedings, to be able to compare the evidence he gave at the time, compared to his ‘Testimony’ written many years later, as to the following points:

- When Colin Darch arrived at the helicopter, Kevin was not happy with Colin’s lack of support equipment that would have been ideally a two-piece fire-retardant Nomex flying suit and a flying helmet, or at least a headset to allow in flight communications.
- Colin found out much later that Kevin was also upset with his boss who allocated the flight to him.
- The pre-flight briefing was short. Kevin was anxious to depart as another Sioux was warming up close by, piloted by Kevin’s boss, Captain Fritsch, who was going to observe Kevin’s landing on Mt Wilhelm.

Regardless of whether Kevin requested to perform the task or was ordered to do it, there was apparent additional stress caused by the late change of passenger and his lack of support equipment, Kevin being anxious to depart because his boss was already warming up his aircraft, inability to communicate with the passenger to give instructions in flight and having to leave his oxygen mask unclipped to be able to shout instructions, all added to what was already an apparently very difficult task, *‘requiring a high degree of skill and knowledge’*, with an aircraft at almost the limit of its performance at the required altitude.

While the ‘Primary Cause’ was given as *‘Aircrew Error – Aircraft operations outside flight envelope,’* the former being attributed to Kevin’s *‘inexperience and his lack of the particular skills required for a pinnacle approach at 14,790 feet’*, these were obviously outside of his control. The ‘Contributory Cause’ – *‘Organisational Fault – Faulty supervision’*, appears far more concerning, particularly when there appears to have been at least one pilot (Captain Fritsch) with far

more experience and skills than Kevin, who was available and who had achieved an in-ground effect (IGE) hover on Mt Wilhelm five days before, albeit with no reserve power remaining.

As to the findings of Kevin's *'inexperience and his lack of the particular skills required for a pinnacle approach at 14,790 feet'*, the former CO of 1 Aviation Regiment, Lieutenant Colonel (Retired) Charlie Barnett, provided information during the research phase of preparing this profile to the effect Kevin's death was *"A very sad occasion, so young and unnecessarily."*

Lt Col Barnett had started Army flying in PNG in 1965 and was *'well aware of the hazards.'* At the time of Kevin's death, Lt Col Barnett was the OC of 183 [Independent] Recce Flight, based at Lae Airport, PNG. The Flight provided support to the PNG Defence Force, other units of the Australian Army operating in the Territory of PNG, such as Survey and Engineer units, as well as Search and Rescue missions and civil aid support, including civil disasters.

According to Lt Col Barnett, *'Before that Survey commenced, I recommended to the Regiment that the pilots be split and those less experienced come to 183 on Detachment to be familiarised and I would detach PNG experienced pilots to the Svy Flt in return. Too hard for some apparently. Sadly, I never met Kevin.'*

Tragically, with the benefit of hindsight and considering all of the known surrounding circumstances, Kevin appears to have embarked on a task that odds would tend to suggest he was unlikely to achieve, and as a result, he lost his life, doing what he loved.

The 'Accident Review' has raised a lot of unanswered questions which will hopefully be answered one day. However, at this time, nothing appears to have come out of the 'Accident Review' to suggest Kevin was anything but;

***"A Magnificent Man in his Flying Machine."***

***R.I.P. Kevin***





## SOURCES:

**Note: With the exception of Brigadier Mellor and Lt Colonel Barnett, where ranks are shown, it applies to the rank of the source at the time of the events in 1973.**

- Christine Malpas nee Shoppee (Kevin's sister) and her husband Geoff Malpas.
- Colin Darch (Sgt 4 Fd Svy Sqn and crash survivor) 'Testimony' and DVA Claim.
- Barry Dick (Captain and Instructor Pilot 163 Recce Flight).
- Lt-Colonel (Retd) Charlie Barnett (Former CO 1 Aviation Regiment)
- Brigadier William Mellor (Retd), President, Australian Army Aviation Association Inc.
- David Underdown (Pilot and Kevin's supervising officer on a Shoalhaven exercise)
- Charlie Watson (LT and the O/C of 1 Fd Svy Sqn Detachment at Cooktown in 1973)
- Peter Cates (2LT 4 Fd Svy Sqn)
- Phil Bannister who located and provided excerpts from archived 4 Field Survey Sqn Operation Reports.

## Books & Publications:

- *The Royal Australian Survey Corps Aerodist Years 1964 – 1975* by Peter Jensen.
- *Operation Plastic Flagon Project C1 Report – Royal, Australian Survey Corps, 4Fd Svy Sqn, West PNG-1973.*
- *Operation SKAI PIKSA Report* by Major Arthur Henson.
- *RAAF Flight Digest Vol 2 No 9, Accident Review – Major Accident Sioux A1-722 Mt Wilhelm PNG, 29<sup>TH</sup> November 1973.*
- *Australian Government – Australian Transport Safety Bureau –ATSB Transport Safety Investigation Report – Aviation Research and Analysis Report – B2004/0321 Final – Human factors analysis of Australian aviation accidents and comparison with the United States (2007).*

## Other Documents:

- *Department of the Army Commonwealth Employer's Compensation Act – Report by a Witness – Captain A Fritsch.*
- *Department of the Army Commonwealth Employer's Compensation Act – Report by a Witness – Captain M Caldwell.*

## Wikipedia:

- *Royal Australian Survey Corps:* [https://en.wikipedia.org/wiki/Royal\\_Australian\\_Survey\\_Corps](https://en.wikipedia.org/wiki/Royal_Australian_Survey_Corps)

## Other Websites:

- Fourays, the Australian Army Aviation Association website:  
<https://web.archive.org/web/20060711172940/http://www.fourays.org/home.htm>
- Officer Training Unit Association 1 OTU Scheyville - <https://www.otu.asn.au/>
- ADF Serials – Australian & New Zealand Military Aircraft Serials and History – [www.adf-serials.com.au](http://www.adf-serials.com.au)
- Australian Military Aviation History Association website.  
<https://raafdokumentary.com/recovery-of-army-sioux-helicopter-cape-york-july-1973/>
- Aircraft Owners & Pilots Association  
<https://www.aopa.org/training-and-safety/active-pilots/safety-and-technique/weather/density-altitude>
- *Helis.com How they Fly? – IGE, OOG & Recirculation* by Glen Beare. <https://www.helis.com/howflies/igeoge.php>

Gary Petts  
December 2023