
Tales of Flying in West Papua and in Timor, an Island of the Indonesian Nusa Tenggara Yimur Archipelago, in the Early 1970s

By Jim Charlesworth FRAeS

Introduction

Jim Charlesworth commenced his career in aviation in 1956 with an apprenticeship at Qantas in aircraft maintenance. He subsequently gained a licence on the Boeing 707 and concurrently completed a degree in aeronautical engineering at the University of NSW.

In 1962, Jim gained a scholarship that enabled him to obtain a Commercial Pilots Licence.

Having obtained his CPL, Jim applied to Mission Aviation Fellowship (MAF) and served for ten years overseas as a pilot/engineer in Papua New Guinea and in Indonesia in the provinces of Irian Jaya and Timor. MAF is a Christian organisation that provides aviation services for people living in remote areas around the world. Every four and a half minutes, a MAF plane takes off or lands somewhere in the world. These flights enable crucial work by many aid and development agencies, missions, local churches and other national groups.¹

Subsequent to his time overseas, in 1975 MAF appointed Jim to managerial posts in Ballarat and in Melbourne.

Jim Charlesworth has been a Member of the RAeS since 1975 and was elected as Fellow in 2008.

The stories that follow are edited extracts from Jim's memoirs 'Stories for our grandchildren' which he has kindly agreed to share. They are first-hand accounts from years past and are not necessarily representative of current policies or practices of MAF.

Seng Valley Expeditions

The year was 1968. There had been a tragic incident in which missionaries Stan Dale, Phil Masters and four Dani evangelists had been killed by some of the Yali People. The Indonesian administration planned a retaliatory patrol into the Yali territory along the Seng River to make clear that such slaughter of innocent people would not be tolerated. Four or five Yali men were killed to demonstrate discipline and several houses were razed. A follow up reprisal was considered during the next months.

On New Year's Eve of the same year, Menno Voht mistakenly flew into the Seng valley instead of the wider valley leading to Wamena.

¹ "Who We Are - MAF Australia". 2018. MAF Australia. <https://maf.org.au/who-we-are/>.

Being trapped in this narrow valley without room to turn around and the mountain being too high to out climb, a tragic accident and subsequent fire took the lives of the pilot and all but one member of the Newman family. We read this story while on holidays at Culburra which left me wondering about our own involvement into the future.



Dani Girl and Raincoat

Kusaho, a Yali elder who had objected to the killing of the missionaries, took the sole survivor, nine year old Paul Newman, out to Wamena to reunite him with those of the white skin tribe. For such an expression of kindness, the follow-up reprisal patrol was abandoned.

These events impacted our lives in a mysterious way. The year was now 1970 and after gaining our visas to work in Indonesia the previous year, I had been checked into flying operations in Irian Jaya. We were committed to learn Bahasa Indonesia and identify with the local culture.

A team from the Regions Beyond Missionary Union (RBMU, now called World Team) planned a survey trip to the same region to establish a good contact with the Yali people. Don Richardson, who was an insightful and gifted statesman, was to lead the team. The survey exploration would take six weeks and required hiking over many rugged mountain ranges. My role was to provide aerial support to deliver food and other supplies.

Together, the RBMU and MAF considered our strategies and outlined our respective duties. The RBMU team would set out on foot from the Ninia airstrip not far from where the Baliem River opens out into the lowlands to the south. Contact with the team would be maintained by calling in at prearranged times using a portable HF radio on the same frequency as our aircraft and their mission headquarters.

From a pilot's perspective, the Ninia airstrip is 1,500 feet (450 metres) long; the first two hundred feet rises fifteen feet for every one hundred feet of its length. The next three hundred feet rolls over and runs downhill before rising again to the initial slope. As a pilot, the procedure is to touch down on the beginning of the first upslope, dump full flap, ease back pressure on the elevators, allow the aircraft to follow the airstrip contour and then apply power as speed washes off to reach the parking bay at the top of the airstrip.

Having conducted an aerial survey of the Seng valley and the en-route terrain, it was apparent that a good airdrop site was not available. I therefore suggested that, when asking for an airdrop, the team should select a ridge that offered a clear approach and departure path for the aircraft. Further, I asked for the drop site to be cleared to give an area of one hundred feet in diameter so that I would know where to start the drop and have a clear view. Even so, such a confined space would require several passes to complete the task.

Don called me by radio and we arranged a rendezvous for the airdrop, Don providing me with the coordinates and I gave him an estimated time of arrival. Having cleared such a space, the Dani and Yali members of the team could not resist building a temporary house in which to live until the next stage of their journey was to begin. They located this in the dropzone



Typical early fog in the mountains

clearing, just off centre but it still presented an obstacle for me. Given assurance that no one would be within the cleared area, I commenced a trial run followed by the real airdrops and coordinated each dispatch with my drop master on board. From the air, all looked satisfactory. The response from the ground advised the first run scored a direct hit on the roof of the temporary house. I enquired if the bag of rice actually landed on the stove.

Not long after the above mission, I was asked to check on the wellbeing of the Dani pastor and medical worker at Korupun, still within the Yali tribal area, but further to the south east. No communication had been received from them for over two weeks. There was no expatriate missionary at Korapun, but the pastor was supposed to report-in daily just to be sure that he was well and there was no trouble brewing. Korupun was a very isolated station and had only recently been established.



Irian Mountain

From a pilot's perspective, Korupun presents some interesting challenges. The airstrip is tucked into a tight valley on the southern side of the central highland range. The northern section of the valley rises steeply against the mountain wall. The airstrip cannot be seen from outside the mountain range unless the aircraft is flown a couple of thousand feet higher than the elevation of the airstrip. A tight circuit can be flown within the valley but once the aircraft is positioned on the base leg, the landing must be completed as there is no possibility of a second chance. Landings cannot be made before seven AM unless the weather is overcast because of sun glare that aligns with the runway direction.

On more than one occasion, I had flown armed police into troubled spots and I was therefore not too keen about exposing myself to risk in the event that there had been an uprising and the place had been ransacked; this could

have been the reason for the communication breakdown. I therefore decided to fly down the runway in the opposite direction to a normal landing to see whether any armed warriors had gathered and if any women with their ubiquitous string bags were casually wandering by. All seemed calm so I climbed up again to position myself for a landing.



MAF Cessna 206 Short Final

As I shut the engine down and secured the aircraft, a few dozen people gathered around. No one was strumming their bow strings and all were happy to see a visitor from the outside world. The pastor greeted me and we sat down to chat. All was well but his radio was not working. With a few minor checks, I was able to rectify the radio problem and made a simple list for the pastor should he encounter any further difficulties in making his scheduled calls.

In hindsight, I felt a bit of a wuss concerning my apprehension about going into Korupun alone. After all, normally, single missionary girls would be working and living there alone for months on end.

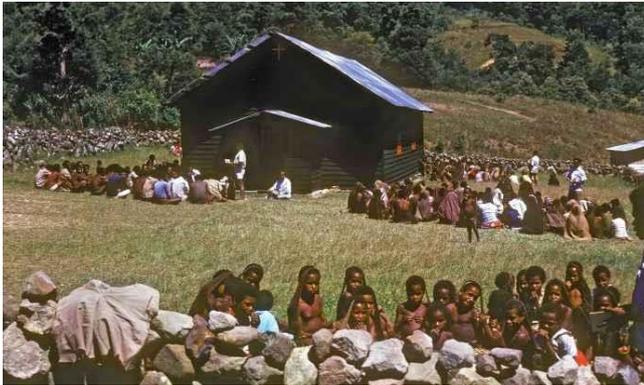


Typical welcome by local people

Nalca and the Bombing Raid Request

Christmas time was approaching in the year 1970. At the invitation of Ralph and Mel

Maynard, we planned to spend a short holiday break at Nalca with them over the Christmas to New Year period. Little did we realise that we would be faced with the most peculiar flight request we had ever encountered either before or afterwards. The Maynards were long-term serving missionaries with the North American Unevangelised Fields Missionary (NAUFM) society. Ralph had a keen wit and his sense of humour cut across every cultural nuance.



Church celebration following the first contact made with the Yali people at Nalca

How the Nalca Airstrip Was Built

The first outside contact made with the Yali tribe, where the Nalca airstrip was to be constructed, was seven years before we came on the scene. MAF conducted an aerial survey to locate tribal villages and assess the population of the region. A potentially suitable airstrip site was identified and a missionary party trekked in to establish contact with and befriend the villagers. A rudimentary airstrip was carved out of a nearby hillside using little more than picks and shovels. The ground party ascertained that the surface was fit for a first landing. MAF made observation flights to ensure that the approach path and subsequent take-off clearance would meet operational requirements before the first landing was attempted. Unfortunately, this highly anticipated first landing was not successful. One of the main wheels of the Cessna 185 dug into a soft spot in the runway, the aircraft nosed over and the propeller struck the ground. A new propeller was required and the airstrip needed to be compacted.

The Yali people came to the party to compact the runway. To a drum beat, many of the warriors performed a celebratory dance and jumped up and down on the spot along the full length of the airstrip. The Yali people excelled at this and enjoyed themselves immensely.

Dispatching another propeller in safe condition was another matter entirely. Various methods were considered and tried. A propeller, extremely carefully packaged, and airdropped was the chosen and successful method. The new propeller was fitted to the damaged aircraft and it was returned to service later. Without incident, a subsequent check landing was made with the aircraft ballasted with lead to achieve the most aft weight and balance limit. One other thought had been to utilise Whittaker landing gear fitted to the main landing leg of a Cessna 185. This Whittaker gear was a bogey of two wheels in tandem to aid in the load distribution on the runway surface. To my knowledge, this Whittaker gear, although successful on other occasions previously, was not used because of its cumbersome nature.



Note the Whittaker Gear fitted to the Cessna 180. Vic Ambrose, Harold Morton and Max Flavel in foreground, leaders of MAF and early pilots circa 1959.

An improved method to ascertain the load bearing properties of a runway surface was developed. This comprised a simple penetrometer which was constructed from a five centimetre diameter pole (sharpened to a point over the last 15 centimetres) and a cross beam upon which a person could stand. So used, penetrations of less than five centimetres deemed the airstrip to be safe for landing.



MAF Cessna 206 Landing

With the mission at Nalca growing, a missionary named Kuijt, from the Nederland's Reformed Church and working with the Geredja Kristen Injil (Evangelical Christian Church) began pioneering a new work to the south over the Moake Range (also known as Pengungan Jayawijaya) into a hitherto uncontacted region. This was not without a level of danger to those on the ground. For three months, I had been assisting Kuijt by dropping supplies to him from a Cessna 206, an excellent aircraft to use for this purpose. It has large double doors toward the rear of the cabin that can be removed to facilitate the egress of food supplies, building materials and equipment. Fresh eggs, well packed, can be safely dropped and live chickens can be released in free flight from the cabin.

The drop site needs to be free of stumps or protruding rocks and should be a minimum of thirty metres in diameter, the approach and departure flight path must be clear of obstructions. An assistant is required on board to act as the drop master.



Preparing to air drop supplies

Kuijt continued to carve out the proposed airstrip and the increased length gave a much better opportunity for air dropping. Kuijt was assisted by a team of Yali people and those from other tribes with whom a good rapport was evident. Pioneering this solid work from the bridgehead of Nalca required Kuijt and his team to be away from home for a month or more at a time. This outreach was not without trauma or risk for those on the ground.

A Most Unusual Christmas

Now back to the peace and quiet of our Christmas time. Our children's presents had been mailed to us from caring parents, family and friends. These gifts had all been brought in discreetly with us by aircraft. Special food treats and fresh vegetables and fruit had also accompanied us on the flight. We all enjoyed a happy time of celebration.

The following day, a battle was waged between two warring tribes. I am not sure what the grounds for this particular engagement were but fights usually centred on disputes over pigs, women or land. The chosen stage for the battle was the airstrip. Airstrips are the place of choice for sustained fighting because the grass is short and arrows can be retrieved by either side and reused. Normally, a premature end to such a skirmish occurs when all the arrows are lost in the tall kunai grass. There is a good level of chivalry associated with the rules for such engagements. It is based upon warrior against warrior whereby arrows are directed from one's bow to the chosen opponent who protects himself with a shield. Less civilised cultures may choose to send a barrage of arrows to rain down upon the leader and systematically scatter the remaining fighters.

The battle proceeded with the warring parties moving up and down the airstrip; we stayed inside our house for protection. The airstrip had quite a significant slope and if the laws of physics had been applied, those on higher ground should have had a distinct advantage. However, on this occasion those on the lower side were winning and those on the higher ground retreated. My consternation was raised when the uphill side sheltered under the wings of our aircraft. The wings were an excellent shield indeed, but they were not designed to repel a barrage of sharp and barbed arrows.

The missionary, who by now had a good level of fluency in the Yali language, bravely called the leaders together. He told them that the pilot was not happy with arrows falling around his aircraft and it was making him upset. The leaders considered this new development for a while and agreed to continue the fight elsewhere. That same arrow-consuming kunai grass brought an end to activities shortly thereafter. Wounded warriors walked back past our house proudly displaying their injuries. Some were treated and I thought that that was the end of the incident, but it was not so.

The next morning, in the peace and quiet, I went to inspect our aircraft for any possible damage from the flying arrows. I was surprised to find a huge pile of rocks alongside the aircraft. Perplexed, I sought an explanation from the gathering crowd which only the previous day had been sheltering under the aircraft wings. Their leader approached me and said, "Bapak Pilot, we have an idea and some money. We want to load these rocks on your aircraft and have you fly over that village. It is not far away

and will not take long. We want to drop the rocks just the way we have heard you do with things.”

With some difficulty, I explained that we came to Papua to help save lives, not kill people and their proposed activity would not meet compliance with MAF’s Standard Operating Procedures (SOPs). I could not help thinking to myself just how creative, adaptable and imaginative these people were. Sometime later, one of these people told the pilot of a helicopter that there was a crack in his main rotor blade. This was amazing. The pilot said that he could have missed seeing that crack in his pre-dawn inspection.

Recently, NAUFM celebrated the fiftieth anniversary of the very first contact with these Yali people. People had turned from their warring ways and now rejoiced. An indigenous church had been established. Peace had prevailed and the sons and daughters of former enemies had inter-married.

Figure 1 is a typical Airstrip Operational Chart that had been developed over the years and was current as of 1986. This step is to be applauded. In earlier days, less detailed information was available to the pilot and much depended on local knowledge. The airstrip has been extended and the surface has been compacted from earlier times so that it can be used by the Cessna 208 Caravan aircraft.

Maybe this is a philosophical perspective, but one needs to guard against over prescription with instructions, if such takes away from the pilot, the ability to exercise sound judgement, the application of good airmanship, knowledge of the aircraft and sound aerodynamic principles.

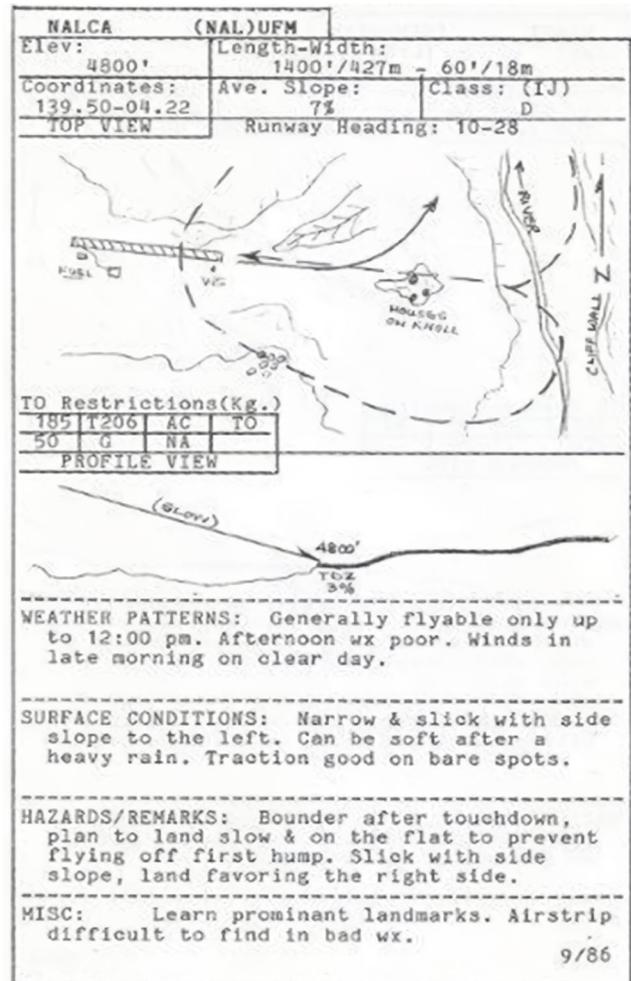


Figure 1 - Airstrip Operational Chart for Nalca.