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Some of the less publicised roles of the Army's 161 Reconnaissance Flight were Signals Intelligence gathering and Psychological Warfare. Between 1966 and 1972 it's estimated that 161 flew over six thousand hours on these missions

OF SHUSH MISSIONS, VOICE SORTIES AND PUCKER FACTORS By Don Dennis

Phuc Tuy Province, August 24, 1968 - The Cessna 180, A98-043 was patrolling at five thousand feet, about thirty clicks north of the Task Force base. The sun had slipped to the horizon as the pilot glanced at his fuel gauges.

Callsign Possum 13 decided they'd had enough - this was his fourth sortie for the day and they'd been carving a groove in the sky for almost three hours. He thumbed the intercom button on the control yoke and advised the crewman crouched over the console in the rear cabin that they were returning. Possum 13 then banked south and began descending towards Nui Dat and a cold beer. In a few minutes the day was going to end in a way he'd never anticipated.

The aircraft was flying a SIGINT sortie - or what had become known to 161 Recce Flight as a *Shush* mission. The purpose of these flights was eavesdropping on VC radio traffic to pinpoint their HQ and unit locations. This intelligence was then used by Task Force Staff in planning operations.

The aircraft used were fitted with equipment comprising an RDF receiver (a manually operated directional antennae protruded through the floor of the aft cabin), signal analysis oscillographs and tape recorders. The equipment was operated by 547 Signal Troop and was a tribute to Australian ingenuity because it worked, and worked well. The Americans had similar aircraft, usually Otters (later U-8s and RU-21s), however the Yanks seemed to neglect one essential factor the VC had eyes. The Otters especially bristled with antennas and one didn't have to be a Rhodes scholar to realise what wasn't going on when one of those clattering porcupines was around.

The Australian equipment on the other hand was crammed into the Cessna without major alterations to the aircraft's external appearance. The only feature marking 161's 'Shush' bird from the flight's other recon 180s, was a small dome housing the RDF antenna beneath the fuselage aft of the wheel struts. To the uninitiated it looked like a spare tyre. If anyone asked, that's what they were told. No one (to my knowledge) ever asked why a spare tyre was needed ...

The name 'Shush' came about when the CO was asked by a senior officer visiting the flight line: "What's the Cessna with all the electronic equipment inside it for?" The CO replied with a suitably conspiratorial nudge-wink and finger to lips: "Shush, we can't talk about it!"

Realising a deep secret was involved, the brass hat nodded sagely. 'Ah! Of course, so it's that aircraft!" He returned the all knowing look, not wanting to admit he didn't have a clue what he was talking about. The name stuck and from that day 161's SIGINT sorties were known as 'Shush Missions'.

The profile of a typical 'Shush' sortie might seem straight forward, but remember this was 1968 and the aircraft and equipment were far from sophisticated. The aim was to locate where VC and NVA units were operating, the principle being if you found their radio operators, their HQ would be somewhere close by. To do this, the 'Shush' aircraft would fly to a known enemy area and cruise around configured for maximum endurance at a comfortable altitude - generally about five grand AGL - depending on weather (navigation was all visual). Any higher and one could be run down by hoards of American fighters; any lower, you risked ground fire (enemy and friendly) or being carved up by rampant flocks of Hueys. Five thousand was a compromise that gave the radio listening equipment good coverage and allowed the pilot to concentrate on navigating.

The operator scanned known enemy frequencies until a contact was heard. The pilot then used a visual reference to fix the aircraft's position, but instead of banking the aircraft towards the signal source (as American aircraft did) the antenna was rotated until signal strength peaked. The aircraft then continued on a course which bore little relationship to the transmitting station's position. Bearings were taken several times while the aircraft remained on the same heading. The run was terminated at another visual fix.

From this series of readings, using the run as a baseline, it was possible to project signal source directional readings to intersect at the approximate point of transmission. Accuracy was estimated at about a kilometre. The Americans judged their equipment could only give them about ten, tops five kilometres accuracy and were puzzled why, because in theory they should have been able to pinpoint the signal source to within a few hundred metres. What gave them away was the fact that they used antennas on the wings and turned the aircraft towards the transmission source whenever a contact was made!

I know the last thing any Australian soldier believed was that Charley was stupid. The fact the Americans seemed to regard them so is one reason why they made such a mess of the war. (One of the basic principles of warfare is never underestimate the enemy!) The VC learned early to stay alert for aircraft and all VC units had air-watch sentries posted. Captured INT data later confirmed that the VC recognised what US 'Shush' aircraft were up to. (Let's face it, you'd have to be pretty thick not to start asking questions why an aircraft festooned with antennas turned towards you whenever your radio operator transmitted!) Once a SIGINT aircraft was sighted the VC either went off the air or used decoy radio teams to lure the Americans away into areas where it suited the VC to let them think they were based.

How many B-52 strikes were put into empty jungle because of this failing will never be known. What's even more tragic is that VC records have subsequently shown that entire American battalions were lured into ambushes by the VC laying a false radio scent (along with other deceptive intelligence). With inexperienced

US commanders believing a high body count was a ticket to stardom, too many Gung Ho types were suckered into killing grounds and wrapped around the axle. (Ref: *About Face* by Colonel David H Hackworth, US Army retired.)

Meanwhile, 161's little Cessna inconspicuously sniffed out VC units because someone in our big green system managed to get it right for a change. It was a cost effective solution that highlights the fact that simple equipment, efficiently used, can often out perform an expensive high tech alternative.

On that humid August afternoon over twenty two years ago, however, the last thing Possum 13 cared about was being at the cutting edge of technology. He was tired, and the image of a frosted tinny probably dominated his thoughts as he headed back to Nui Dat.

He recalls that his operator had earlier tuned into and identified the Morse 'fist' of D445s HQ - D445 were the bad guys and traditional Task Force enemy. They'd been decimated at the battle of Long Tan in'66 and now, INT assured us, prowled the jungle seeking revenge like a lost band of Oriental Flying Dutchmen. In the space of a few hours, the operator had bagged the enemy and now was about to participate in the ultimate aviation experience. For Possum 13 likewise, this mission suddenly took an unexpected and far from boring twist ...

"We were over thick jungle about twenty clicks north of the Task Force when there was a jolt and the aircraft began shaking like a spaniel out of water. Something had gone horribly wrong. The vibrations were unbelievable..."

Later inspection revealed bullet damage to the propeller hub, which caused one blade to develop a mind of its own. To Possum 13, the cause was now irrelevant, it was the effect that had him worried.

"My first reaction was one of stark terror," One-Three recalls. "With other emergencies there's generally plenty to keep you busy. For instance with engine failure you can switch tanks, apply carby heat, rap the fuel gauges, juggle the mixture, try restarting, look worried - things that keep your mind off the crunch if all else fails. But lose the fan and there's nothing to do but cut the engine, re-trim and start looking for somewhere to put down..."

With reactions honed by ten months in country and the prospect of buying the farm, Possum 13 put out a series of 'Maydays'.

"... below was thick jungle that one's imagination pictured as festering with VC clutching Ho Chi Min 'Pilots wanted' reward vouchers in one hand, and cut throat razors in the other ⁽¹⁾. I can laugh about it now, but at the time..."

043 was down to three thousand feet. Unable to feather the prop, drag was cutting the glide severely. However, there was a glimmer of hope. The jungle bordered the Michelin rubber plantation and its orderly rows of trees now filled the windscreen.

"... stalling in on top of rubber trees seemed preferable than going into the jungle canopy. We'd heard of USAF FAC pilots doing it and walking away. The problem with spearing into the jungle was that the aircraft could stall into the tree tops then sink below the canopy without a trace. I'd once flown over a downed Chinook less than an hour after it went in. There was very little to indicate that a forty thousand pound thrashing machine had slashed through the canopy. Besides, the rubber plantation looked friendlier..."

At fifteen hundred feet Possum 13 was over the rubber. He knew if he could keep the Cessna in the air just a little longer he'd make it to a paddy field a few clicks away.

"I did everything I could to extend that glide. In retrospect I should have ordered the operator to start throwing out equipment - it weighed plenty. The problem was - apart from it being bolted to the floor - the Corporal wouldn't have parted with his beloved gear. Besides, the paperwork back at Nui Dat would have been fierce. How does one explain to desk jockeys what it's like to be in a crashing aircraft? Telling them that weight equals distance would be like trying to convince the Pope that God is a Presbyterian - neither would, or could comprehend the concept. So I just sat there and flew the bloody thing..."

Possum 13 was down to a hundred feet above the trees. His 'Mayday' calls had been acknowledged and he knew that all over the province rescuers were heading his way. That was one of the most comforting things about flying in Vietnam - if you had time to get out a call there were literally hundreds of aircraft around who'd hear you.

"... I considered putting down on one of the rough provincial highways, but it was jammed with rush hour ox carts all lumbering back to their villages. So I virtually willed the aircraft to stay in the air the last few hundred metres. I carried out every check I could think of - which was mostly turning off, tightening or screwing down anything within reach. Fuel, mixture, electrics master off, harness locked - I even closed the ashtray. At the last moment I remembered the one item told me by a USAF FAC pilot who'd been into the scrub several times. The final item on his list was "pucker thy arse and pray!..."

Possum 13 made it to a paddy field bristling with young rice ... "... the stall warning alarm was screaming as we rounded out over the muddy water. I remember wondering, am I ditching? All I could do was haul back the yoke as hard as I could..."

The Cessna seemed to drift for an impossible distance just above the water's surface. Then the wheels hit ... the wheels went into the water at about forty knots. Then things happened very quickly. Suddenly everything was spinning. Trees, road, paddy field all swapping places. We ground looped ... or was it water looped? "All I could do was hang on ... and pucker!"

043 went through three hundred and sixty degrees, pivoting on the starboard wheel strut. Observers later reported it looked very graceful, the sun glistening

from a curtain of spray as the Cessna pirouetted like a giant green ballerina. It was later discovered that the wheel had hit a pile of rocks hidden beneath the water. They'd been left when the farmer had cleared the field probably the only rock pile for miles. It's always the way.

There was a swoosh and splatter of muddy water. We came to a dripping halt facing the landing direction. The starboard wheel strut had been ripped off and the wing buckled by the impact. I found myself outside the aircraft helping the Corporal from the rear cabin. We were both unhurt. I looked back inside the aircraft and remember seeing my seat jammed up against the panel. How I'd fitted in between I'm damned if I know."

In situations like these, once on the ground, unless rescue is immediate, one's troubles have merely begun. Wading into the paddy field from the tree line were about twenty men carrying weapons and wearing black pyjamas ...

"I cranked up the URC-10 survival radio and started popping off pencil flares. I didn't like the look of the pyjama brigade heading our way ... remember this was tiger country."

Having a solid background as a platoon leader, Possum 13 did the right thing. With one M-16 and two pistols between them he ordered the Corporal to go into all round defence ...

"... it's very difficult to do anything constructive in such a situation. I was determined that if they were bad guys then we'd make a stand of it. I felt like a wet Custer..."

The soldiers approached and about a hundred metres away one of them called, "You alright Aussie?"

"They were a local South Vietnamese militia unit - we called them 'Ruffen-puffs' (2). They were on patrol looking for VC that had been sighted in the area. I was grateful we didn't have to make a fight of it - we might've hurt them ..."

A few minutes later, Possum 13 and his crewman were aboard an American Huey headed for Nui Dat. 043 was later recovered by a US Army Chinook. Unfortunately on arrival at Luscombe field the Chinook prematurely released 043 about thirty feet above the runway. The impact added more damage to an already badly stressed airframe. It was shipped back to Australia and sold as scrap.

The crew at 161 breathed a sigh of relief when word came over the radio that they were safe. Later that afternoon our OC reported cheerily after One-Three and the Corporal had been checked out by the MO. "They're both OK," the boss grinned. "One--three's a little worried though. The MO's going to have to operate to remove a seat cushion from his arse."

The contribution made to Task Force operations by 161's SIGINT aircraft was significant. One Task Force commander remarked that he "wouldn't make a

decision on any operation without first learning the disposition of enemy units using information primarily gathered by 161's SIGINT sorties."

Possum 13 is still flying, albeit in gentler airspace. These days his civilian callsign is Steve Tizzard. Steve's an examiner of airmen in CAA central office Canberra.

Note: The 547 Signal Troop Corporal was Dick Schafer.

- 1. A rumour was the North Vietnamese High Command offered rewards for every aircraft shot down. To claim the reward, the VC had to send a set of pilot's dog tags, plus proof in the form of the aviator's private parts to BOX HO HO, Hanoi.
- 2. 'Ruffenpuff' was a bastardisation of RPVNPF Republic of Vietnam Popular Forces.



ARDF equipment fitted to Cessna 180A



Australian Army - Cessna 180A

- 1. View of Luscombe Airfield, Nui Dat, from 161 Flight's tent lines. Shows one Cessna climbing the ramp from the runway to the revetted flight line area. Note the Cessna in the foreground partly 'dug in' for protection against mortar and rocket fragments.
- 2. Although the tactical ground attack role was the province of the RAAF, the Catch-22 for the soldier on the ground was the RAAF didn't have aircraft available. This 161 Recce Flight recon 180 is fitted with two pods each holding seven rockets. Each rocket carried an eight kilo warhead giving it about the same punch as a 105mm artillery shell.
- 3. 161 Flight Line. Cessna 180 in background with an 'acquired' O-1 Bird Dog in foreground. (161 operated two O-1s between '67-69)
- 4. Two Sioux refuelling at Luscombe Field. In background Nui Dat Hill (Home of the SAS) and in distance the Nui Thi Vi hills home of the VC. (All pics by Capt Bernie Forrest)







