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BRIEF HISTORY OF NO 9 SQUADRON AND AIRCRAFT MAINTENANCE IN VIETNAM

The advance party of 9 Sqn arrived at VungTau, South Vietnam on 3May66 ; a month later eight UH-IB Iroquois aircraft , A2-IOI8, IOI9, IO20, IO2I, IO22, IO23, IO24, IO25 arrived via HMAS SYDNEY on 6JUN66. The immediate problems facing the maintenance flight were the organisation of suitable spares arrangements through the US Army and the preparation of temporary living and working quarters. Initially there were no hangar facilities and maintenance was carried out in tents or out in the hot dusty airfield. The temporary maintenance area was located on the present position of the current aircraft revetments; the aircraft were parked on the PSP taxiway. The first SEngO of 9Sqn in Vietnam was Flt LT K J TAYLOR.

Conditions were primitive and, although morale was high members suffered numerous privations. Meals were served from a mobile kitchen, mail services were poor and PX facilities inadequate. Supply of spares from the US Army was poor and the RAAF CHRS system was difficult to relate to the US Army historical records. The arduous Vietnam climate soon had a noticeable effect on maintenance; water anddust took a heavy toll on bearings , radios and engines. In OCT66 the squadron undertook aerial spray operations over Nui Dat; these operations were to continue for over 5 years.

The first aircraft destroyed wasA2-IOI8; this aircraft was accidentally lost on I8OCT66 some I2 miles NW of Vung Tau. The wreckage was destroyed by explosives. A UH-ID aircraft, A2-04I (later known as 085) was obtained as a replacement.

The Bellman hangar was completed in NOV66 by ACS. Also during NOV66 the first reported battle damage to an aircraft occurred to IO2I when a friendly anti-personnel mine was detonated by rotor wash.

Sqn Ldr C F COTTER assumed the duties of SEngO on 27MAR67

InAPR67 compressor failures of two LII engines caused heavy damage to both aircraft. A2-IOI9 was written off in APR67 and a replacement UH-ID A2-II66 (later known as 649) obtained. A2-IOI9 was subsequently rebuilt.

In SEP67 IO23 and IO25 were badly damaged by ground fire. A2-IO25 received 7 hits and required IOO manhours of work. Revetments for the aircraft were completed in OCT67. An aerial spray rig was manufactured by the squadron in NOV67 and the equipment was successfully used until JUL7I.

The airframe and paint shop huts were constructed during JUN67. Aircraft IO24 made a very heavy landing in JUN67 and was partially rebuilt using parts of IOI9 before being shipped to No 2 AD for further repair. The Kanga Pad refuell facility became operational in JUN67

During JAN, FEB, MAR 68 RAAF maintenance personnel attended LI3 engine courses at various US Army establishments in preparation for the receipt of UH-IH Iroquois. The first of these aircraft were received by the squadron in MAR68 and numbered eight aircraft in serial no's A2-376 through A2-383. The 'B' models were then progressively dispatched to 5Sqn.

Sqn Ldr R H TUCKER became SEngO on 25MAR68. On 23APR68 Vung Tau base was subjected to a heavy rocket attack and, although squadron equipment and aircraft were not damaged, a US Caribou was destroyed some 50 yards from the 9Sqn hangar.One aircraft suffered battle damage from ground fire in JUN68.During SEP68 a further eight UH-IH aircraft were accepted by 9Sqn; the aircraft were numbered A2-766 through A2-773. In SEP68 A2-769 suffered Cat 4 damage after engine failure; the aircraft was subsequently rebuilt at a local US Army maintenance facility. A2-I49 was

In FEB69 a maintenance team supported the operation of 3 a aircraft out of Long Binh. A2-772 was built up as the first 9Sqn gunship during MAR69. Sqn Ldr D A TIDD became SEngO on I8MAR. Gunships became operational on 2IAPR69. During OCT69 the squadron lost two aircraft A2-769 and A2-38I on operations. Several [illegible] hydraulic failures attributed to the irreversible valve seal failure occurred during JAN70 Two aircraft A2-379 and A2376 suffered battle damage as a result of mine detonation; A2-376 had 32 holes patched.

Sqn Ldr K J TAYLOR took over as SEngO on 7MAR70. A2-770 received two rounds of ground fire on 26MAR70. 'E' Servicings were deleted byHQSC for 9Sqn Iroquois in APR70. On 4MAY70 A2-IIO auto-rotated onto mudflats just north of the Vung Tau airfield after engine failure; the aircraft was almost completely immersed in salt water and fortunately extracted by 'Chinook' before nightfall. On 9MAY70 I6 aircraft were flown in formation over Vung Tau and NuiDat to celebrate 4 years in country.

In JUN70 three aircraftsuffered battle damage; A2-768 received I8 rounds and required 5 days of repair work. A2-377 was hit in a fuel tank and A2-38? force-landed on the beach near the Long Hais after being hit. The aircraft could not be retrieved before nightfall and, during the night, an incoming tide broke portion of the aircraft. The damage was finally categorized as Cat 5 because of the corrosion which developed after the salt water immersion and the aircraft returned to 5Sqn as a training aid. The 40,000 hour in country was flown on 28JUN70. The Forward Servicing Party was established at Nui Dat inJUN70.

MCNAIR

A2-768 [illegible]ed inJUL70 and was written off. LAC ~~McNAIR~~ subsequently di[illegible] injuries received in the incident. Replacement airc[illegible] A2-703 and A2-723 were collected from Pleiku. Afourth g[illegible]ship was put on line on3IJUL70. Tail boom cracking in 4 aircraft was a problem in JUL 70 . A 5'6" snake defied ingenious attempts using air, hot water and finally CO_2 to be forced from the hell hole of A2-IIO. The snake finally escaped into the hangar and was finally killed by shovel (KIS). The snake was 'delicious' in Dau's (foreman labourer) words. Special ground handling wheels were manufactured to enable movement of gunships with rocket pods fitted.

Aircraft were modified in NOV 70 to carry stokes Litters on underside of aircraft. Air transportable cabins were received in NOV70 for use with the FSP at Nui DAT. Sqn Ldr WELLER took over as SEngO on 30NOV70.

In DEC70 A2-773 received ground fire whilst operating in support of 7RAR some 5 miles east of Xuyen Moc. Damage to fuel and instrument and electrical systems resulted in the aircraft being extracted by ' Chinook'. In the same operation A2-377 received one hit which resulted in skin repairs and a main rotor change.

During a 'D' Servicing on A2-77I the laminated honeycomb centre work deck was found to be badly deteriorated; the item is a structural member and, in the US Army, is replaced at a Depot level facility. The deck was replaced within 9Sqn. The replacement invloved jigging of the aircraft and metalworkers, led by Sgt Jim Vanderkyl, expended many manhours on intricate, tedious repairs. The re-alignment of the engine is particularly note-worthy; three engin[illegible] fitters, led by Sgt Spike Bicker, worked continiously for over 20 hours.

FEB70 was a bad month for engine failures; three aircraft made forced landings. Two aircraft, A2-773 and A2-IIO (both [illegible] gunships) made hovering autos on Kanga Pad after compressor

A2-II0 settled very heavily and a heavy landing inspection revealed bent skids and a broken fifth mount in addition to the engine change. The working party, directed by Sgts Bob Oliver and Spike Bicker, commenced work at II AM and the aircraft was test flown and returned to Vung Tau by nightfall. A2-376 made an auto onto a paddy field about a mile from Sanford after engine failure. The aircraft was recovered by 'Chinook' to Vung Tau where the cause was finally diagnosed as FCU failure.

MAR - APR 7I was perhaps the most difficult period for the maintenance flightsince 9Sqn commenced operatios in Vietnam. attle damage, combined with acspate of tailboom failures led to some extroadinary efforts by maintenance personnel. Some people worked onloccastons all day, through the night and part of the next day. That these members were able to maintain such intensive work and high standards of maintenance reflects creditably on the individuals but also on the training and standards of RAAF maintenance personnel generally. W0ff Bruce Harris was outstanding during this period in maintaining morale and directing hangar activities. At I900 hours one particular evening seven aircraft, with varying degrees of battle damage and tail boom failures, were being worked on in the hangar; six of those [illegible] aircraft were serviceable by 0730 the following morning.

During htis period 9 aircraft received battle damage. Gunship A2-383 received I6 rounds of ground fire and caused severe damage to skin, structural components, flooring, windows; Plt Off PETTS was killed in this occurrence. A2-II0 was holdd six times in the same action in windows, flooring and skin and brought forward into a 'D' Serv. Both aircraft were recovered by 'Chinook' A2-379 also took one round. On 3IMAR7I three aircraft were severely damaged in an action some 8 miles east of Nui Dat. A2-767, whilst on a 'Dust-off' missi[illegible] received ground fire in main rotor, fuel tanks and engine com[illegible]ion chamber; LAC BLOXOM was killed in this incident. The aircraft was recovered by Chinook from FSB Veth. A2-II0, just two days out of a D Serv, was again severely damaged when a round carried away more than half of the LH fusolage tail boom attachment beam and required Chinook recovery from Nui Dat. The repair of this damage involved much work by metalworkers in designing and manufacturing a spliced structural repair; the team was capably led by Sgt Stan Moss. A2-773 was also hit in this action in the tail boom and support structure.

On I7APR7I A2-767 crashed and was completely destroyed in a subsequent fire after being hit by ground fire whilst on a 'Dust-off' mission in the Long Hais. A2-I49 and 772 received minor battle damage. The loss of A2-767 strained maintenance resources in meeting the daily on-line requirement.off I3 aircraft.

A notable feat for the maintenance flight was achieved during MAY7I when nil engine changes were carried out. On 7JUN A2-723 crashed whilst on Operation Overlordand Flt Lt Lofty Lance and LAC Dubber were killed in this incident. Duriong Operation Overlord the squadron flew all I5 aircraft on strength operationally on 5JUN; on 6JUN I5 aircraft were again serviceable. A forward servicing party, led by Sgt Kev O'Neill operated at FSB Jane. The squadron established a record serviceability of 90.4%. Roplacement aircraft A2-455 was collected at Heli 3, Saigon.

In JUL7I A2-9I5 was collected as a replacement aircraft from Tuy Hoa. A2-455 had a tail boom severed by ground fire and A2-772 had a fuel tank holed by a friendly. On 28JUL the squadron

In OCT the squadron achieved a record serviceability of 90.7?%. Also the first scheduled engine change was made in country on A2-766; the engine had run maximum TBO hours of 1030 hours. Sixteen aircraft were flown in formation on 9NOV to mark the departure of 9Sqn from Vietnam.

Records show that seven aircraft were destroyed during the 5½ years of service of 9Sqn in Vietnam. There were 23 recorded incidents of aircraft receiving ground fire; more than half of these occurred in period NOV70-NOV71. A total of 250 'D' Servicings and 22 'E' Servicings were performed in country. The 50000 hour was flown in country on8MAR71 by Albatross 01; the crew were Plt Off CHRISTIAN pilot and Flg Off REDMAN co-pilot.

Generally the oppurtunity of serving with 9Sqn in Vietnam has provided maintenance personnel with very worthwhile experience of activities in a wartime environment. Maintenance personnel have generally given outstanding performances in maintaining aircraft to high standards of serviceability in difficult and demanding conditions; the efforts really validate the standard of training given to maintenance personnel and reflect creditably on the overall standards. Airmen and NCO's have shown great great resourcefulness and ingenuity in developing modifications for local conditions and repair schemes for battle damage. An EngO finds himself in technical isolation as he does not have ready access to HQSC technical information, research laboratories or aircraft depots. He learns very in a tour the need to accept final responsibility for local mods and repairs schemes. The assistance of local Lycoming and Bell Helicopter representatives has been of value in this regard. The ability of members to work hard under difficult conditions and live in relative harmony reflects creditably on the moral fibre of the RAAF.

The working conditions for 9Sqn were always difficult. In the early stages the conditions were most primitive with tents as living and working quarters. Through ' self-help' the squadron personnel gradually built up a reasonable level of living and working conditions. The notion of self-help has been most noticeable and effective whether it has been directed to construction of an engine repair section or in the improvement of one's small domain in a living quarter. Air conditioners were essential for the servicing of airframe, instrument and radio components. Three air transportable air conditioned cabins were of inestimable value in this regard.

9Sqn was logistically supported for aircraft spares by the US Army. Generally the quantity of spares available was satisfactory; in fact during the period 70-71 the supply was outstanding although this could also be attributed to the ingenuity of the 9Sqn equipment staff in obtaining the spares. The quality of spares was another story; they were consistently of a poor standard particularly for radios, engine, airframe and armament components and led to many petty unserviceabilities and, at times, more serious failures of engine fuel systems. The effect was to force 9Sqn to increase the personnel establishment and to obtain GSE and test equipment so that these items could be either checked or serviced to ensure freedom from fault. The underlying reason for the different standards of serviceability is simple; the US Army will perhaps put half aircraft strength on line daily whereas 9Sqn had to get 88% serviceabilityto meet IATF tasks. 9Sqn demanded therefore a far greater degree of aircraft and component reliability.

engine and airframe test rigs and general engineering facilities.

Morale was normally good amongst the troops. Certainly they consumed vast quantities of alcohol and some made frequent visits to the pleasure spots of Vung Tau, but generally no major problems occurred. R&R andR&C leave was beneficial and some consideration ought to be given to the idea of six month tours on future occasions; in the last few months of a tour members seem to become dis-associated from the task at hand. Morale was not helped by the requirement for technical personnel to do guard duty; they already had duty crew, forward servicing party and stand-by duty. The RAAFshould have a sufficient defence establishment in an operational area without resorting to taking maintenance personnel for defence duty.

Some 9Sqn Statistics.

Aircraft Destroyed:

A2-1018 - 18OCT66
A2-381 - 15OCT69
A2-769 - 26OCT69
A2-382 - 30JUN70
A2-768 - 2JUL70
A2-767 - 17APR71
A2-723 - 7JUN71

50,000 hours flown in country on 08MAR71

Highest serv rate for UH-1H 90.72% OCT71

Maximum number of unscheduled engine changes : 10 in MAY69.
Minimum number of engine changes : Nil MAY71
First scheduled engine change in country :OCT71

Maximum recorded aircraft load:
21 PAX
450 lbs freight
1100 lbs fuel 40CT69 28deg OAT

100th engine change A2-770 - 17NOV69

Maximum number of hours run by 113 engine 1030.20

16 aircraft serviceable and flown in formation; 9MAY70 and 9NOV71

16 aircraft serviceable and flown operationally: 27JUL71

Aircraft every day of JUN71 : A2-376 & 379

Maximum number of rounds expended by M60 : 200,504

Maximum number of rounds expended by M134 : 645,940

Value of M134 ammunition usage over 6 months $512,640

Value of M60 ammunition usage over 6 months $84,690