



P-40N Tac/R Operations in Australia

P-40 Supplementary #5: Vers5 Finito

Earlier in 1943, there were moves to have 4 Sqn equipped with surplus P-40Es, but that was cancelled. Following the Tac/R use of Wirraways and Boomerangs for nearly 18 months from this initial consideration, it was felt that there was still a need for a faster tactical reconnaissance aircraft. It was felt that, given the greater numbers of P-40s available, that some could be modified to that role.

Prior to this, during April 1944, there was a belly tank K.17/F.24 camera installation proposed for the Boomerang Fighter. Reports back from the CO of 4 Sqn, Sqn Ldr C W Munro were encouraging on a local modification made to one of the unit's aircraft (A46-118) and a surplus belly tank.

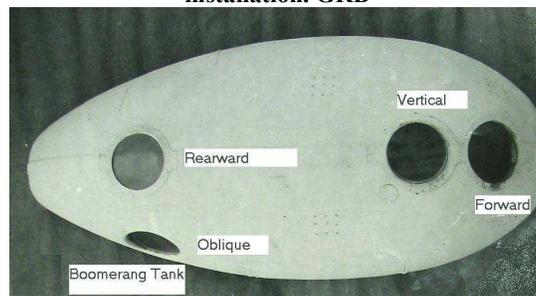
By July 1944, the proposal resulted in two aircraft being modified to accept this Belly tank installation. One further 4 Sqn Boomerang, A46-183, was modified for Tac/R trials.

The eventual trials resulted in the project being cancelled and the aircraft modification disapproved. A third Boomerang, A46-213 in Australia, was modified with only a single F.24 camera and prism aperture. This was a trial fuselage installation of a vertical F.24 camera with a prism aperture below the fuselage.

The performance results of this modification were encouraging; however space limitations in the fuselage would cause the demise of the project.



Boomerang A46-118 depicted, Code unknown, with the converted Fuel Tank Camera installation. GRB



The Boomerang tank after it was modified for the Tac/R proposal. NAA

Towards the end of 1944, several alternative proposals were put forward that eventually gave rise to yet another proposal. Given that there was Tac/R Tomahawks for nearly two years and more recently, P-40N-6's (converted P-40N-5s with oblique cameras) used by the USAAF, consideration was given to modify the P-40N for our own RAAF Tac/R requirements.

Kittyhawk Order #50, modifications for a Tac/R P-40N.

The supply of suitable Kittyhawk aircraft was dependant on the re-equipment of current squadrons with Lend-lease Mustangs being supplied from the USA, thereby releasing surplus P-40N airframes for the program. This was the airframe P-40N-40-CU production batch of 220 P-40Ns that Curtiss Wright produced last.

The P-40N-40 was powered by the V-1710-115 engine of 1360 hp and had also featured metal-covered ailerons. The model included improved non-metallic self-sealing fuel tanks, new radio and oxygen equipment, and flame-damping exhausts.

Authority was given on the 2nd March 1945 to install a single F-24 Camera under Kittyhawk Order #50. The total of sixty, to be modified, were enough for equipping two squadrons (No4 and 5 TR Sqns) with enough reserves to cover attrition, maintenance etc.

An initial six aircraft were to be modified, with three aircraft a month to be converted thereafter.

A recently erected P-40N-40 aircraft was chosen to be the prototype aircraft for the installation of one F.24 camera between station nine and ten. This location would allow for easier access to the camera for film retrieval through the existing portside fuselage radio hatch. **A29-1150 (ex 44-47900)** was allocated to 1AD for the trial installation of the F.24 Camera on 15th March 1945.

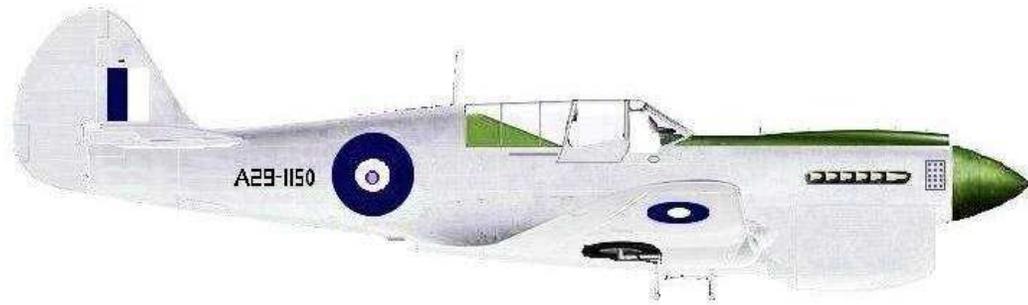
From 15th March to 14th June 1945 the installation was carried out. However changes in requirements saw the target completion date, June 1945, becoming an unrealistic expectation.



The P-40N-40 Tac/R Prototype when completed in 1945. Notice the wider entry door on the fuselage roundel. GRB

These changes included adding, from an order on the 6th April 1945, an additional oblique F-24 camera (at 30 degrees setting on advice from 4Sqn), following then, on the 22nd May 1945, to change the camera installation one K.17 and one oblique F.24 camera. These changes caused further delays.

They would have the apertures fitted to the underneath and starboard sides of the aircraft respectively. The starboard position aperture would be positioned nearly in the middle of the starboard side fuselage roundel. Black visual sighting markings were also painted in the starboard wing and canopy to aim this camera.



For highlighting purposes, Coloured & size approximated, the above shows the Fuselage aperture for the oblique F.24 camera on A29-1150. I may be incorrect per the oblique with the actual camera being offset at the base of the fuselage. Comments welcomed. GRB

During May 1945, given space considerations with the extra size of the K.17 camera, it was necessary to remove the T5043 Radio and replace this with a smaller SCR-274N Radio at 1AD APS.

On 25th June 1945 it was found that the cutout panel for the oblique camera was not large enough. It was enlarged with a reinforcement plate being added, as well as three extra stringers.

Concurrently, an additional eight airframes were being modified at the same time, before the prototype was completed.

A total of 77 aircraft were to be modified at this stage. These orders were broken down as 1 Prototype kit, 8 initial installations kits, and then finally, a further 68 series installations kits. Models acceptable for modification would be P-40N-20/30/35/40s.

However, a further memorandum has the original 8 Installations, followed by 60 installations, with a monthly of 6 installations being produce to give a total of 140 Installations.

Those initial eight P-40N-40 airframes were communicated as: **A29-1115, A29-1116, A29-1119, A29-1151, A29-1154, A29-1160, A29-1162 and A29-1164**

Additionally, another six P-40N-35 airframes were also included into the program on the 11th June 1945. These were communicated as: **A29-1043, A29-1053, A29-1068, A29-1069, A29-1073, and A29-1074**

Other P-40N-40 airframes dovetailed to follow from the 12th June 1945 were: **A29-1156, 1159, 1155, 1156, 1166, 1168, 1169, 1170, 1174, 1175, 1176, 1191, & 1197**

The pace of the modification at 1AD during June 1945 seemed to have slowed due to the prototype problems of incorporating all of these changes.

A29-1150 was flying its first test flight on the 20th July 1945 over Laverton, trying out the camera installation by taking photos of the airbase. A second set of tests was completed on the 26th July 1945, with the test flights ranging from Laverton to Point Cook. The results were satisfactory enough to continue the program of installations.

Very little correspondence between this date and September 1945 indicates that the prototype modification problems were still to be overcome. Thus as of the 11th September 1945, some seven Tac/R aircraft were completed, with another thirteen aircraft under modification.

However not all airframes were immediately converted new without some squadron service.

As exemplified by **A29-1116**, being received by 76Sqn on the 15th March 1945. It stayed with the squadron till it was allocated to 4 Sqn on the 16th September 1945.

The allocation was cancelled on the 27th September 1945 with it being allocated to 13 Aircraft Recovery Depot for modification into a Tac/R P-40N-40. It arrived on the 15th October 1945 for modification. No records exist as to whether it was indeed modified, but its E/E88 Card then has it to be destroyed by burning on the 18th February 1946, after the removal of salvageable equipment.

Yet other airframes mentioned above, per cards, seem to have no mention of the modification, such as **A29-1119**, therefore I had to look back to the E/E88 Cards for clues.

The actual designated Tac/r P-40N-35/40s per E/E/88 cards that did get modified or allocated for modification into Tac/r Models were as follows in serial sequence:

- **A29-1027** (Service 75F/77F Sqn, allocated 29/09/45 to modify, modification cancelled? Storage 20/11/45)
- **A29-1028** (Service 75F/77F Sqn, allocated 29/09/45 to modify, modification cancelled, Storage 25/11/45)
- **A29-1030** (Service 77F Sqn, allocated 29/09/45 to modify, modification cancelled Storage 30/05/46)
- **A29-1036** (Service 77F Sqn, allocated 25/09/45 to modify, into Storage 17/01/46) It was used with local modification of 7" vertical camera during August 1945 at Tarakan by 75Sqn Pilot Sqn Ldr Kinninmont
- **A29-1043** (allocated 11/06/45, modified, into Storage 23/01/46)
- **A29-1044** (Service 77F Sqn, allocated 25/09/45 to modify, modification cancelled. Crashed 29/09/45 on take-off Cooktown Civil)
- **A29-1046** (Service 77F Sqn, allocated 25/09/45 to modify, modification cancelled Storage 23/01/46)
- **A29-1053** (allocated 11/06/45, modified, into Storage 23/01/46)
- **A29-1055** (Service 80Sqn/77Sqn, allocated 25/09/45, modified? Off 19/11/48)
- **A29-1058** (Service 77FSqn, allocated 25/09/45, modified? burned post 18/02/46)
- **A29-1068** (allocated 11/06/45, modified, into Storage 23/01/46)
- **A29-1069** (allocated 11/06/45, modified, into Storage 23/01/46)
- **A29-1073** (allocated 11/06/45, modified, into Storage 23/01/46)
- **A29-1078** (allocated 11/06/45, modified, into Storage 17/01/46)
- **A29-1120** (allocated 21/07/45, modified, into Storage 17/01/46)
- **A29-1121** (allocated 21/07/45, modified, into Storage 17/01/46)
- **A29-1122** (Service 76F Sqn, allocated 27/09/45 to modify, Storage 17/01/46)
- **A29-1127** (allocated 21/07/45, modified, into Storage 15/11/45)
- **A29-1133** (allocated 03/07/45, modified, into Storage 19/11/45)

- **A29-1136** (allocated 20/07/45, modified, into Storage 15/11/45)
- **A29-1151** (allocated 07/07/45, modified, into Storage: 26/11/45)
- **A29-1154** (allocated 12/06/45, Modified to S.A.C.: 29/07/45) School of Army Co-operation.
- **A29-1155** (allocated 12/06/45, Modified to S.A.C.: 29/07/45) School of Army Co-operation.
- **A29-1156** (allocated 12/06/45, Modified to S.A.C.: 29/07/45) School of Army Co-operation.
- **A29-1159** (allocated 07/07/45, modified, into Storage 15/11/45)
- **A29-1160** (allocated 07/07/45, modified, into Storage 15/11/45)



P-40N-40 Tac/R. A29-1160 (ex-44-47911) delivered in Olive Drab finish. This may contradict the natural finish serial statement by Joe Baugher at the end of this story, but a actual photograph has it so. Perhaps the aircraft was actually forest green, but the tone of the picture doesn't lend it so. The Spinner colour is unknown. Notice the front cockpit panel glass compared to the usual metal panel.
GRB

- **A29-1162** (allocated 07/07/45, modified, into Storage 15/11/45)
- **A29-1164** (allocated 07/07/45, modified, into Storage 15/11/45)
- **A29-1166** (allocated 21/07/45, modified, into Storage 15/11/45)
- **A29-1168** (allocated 21/07/45, modified, into Storage 15/11/45)
- **A29-1169** (allocated 21/07/45, modified, into Storage 15/11/45)
- **A29-1170** (Service 84F Sqn, damaged. Allocated 07/08/45 to 15ARD for Tac/R Modified, Storage 22/03/46)
- **A29-1174** (allocated 21/07/45, modified, into Storage 15/11/45)
- **A29-1175** (allocated 20/07/45, cancelled, re-allocated 22/08/45 modified, Storage 26/01/46)
- **A29-1176** (Service 84F Sqn/76F Sqn, allocated 27/09/45 to modify, Storage 17/01/46)
- **A29-1191** (Service 84F Sqn, allocated 22/08/45 modified, into Storage 14/01/46)
- **A29-1197** (Service 84F Sqn/76F Sqn, allocated 27/09/45 to modify, Storage 17/01/46)
- **A29-1198** (Service 84F Sqn, allocated 29/09/45 modified, Storage 13/11/45)
- **A29-1206** (allocated 23/08/45, modified, into Storage 14/01/46)
- **A29-1208** (allocated 23/08/45, modified, into Storage 17/01/46) (Natural Metal)
- **A29-1209** (allocated 23/08/45, modified, into Storage 17/01/46)
- **A29-1212** (allocated 23/08/45, modified, into Storage 14/01/46)
- **A29-1215** (allocated 22/08/45, modified, into Storage 14/01/46)
- **A29-1217** (allocated 23/08/45, modified, into Storage 17/01/46)
- **A29-1219** (allocated 20/07/45, modified, into Storage 14/01/46)

In the end it seems that a round 30-31 airframes are identified as being modified, out of a total of 45 airframes selected for modification, excluding the prototype.

Colours of the later P-40N-40s appear to be Olive Drab in most cases, such as A29-1160, as with the earlier P-40N-35s, but inclusive of a few natural metal examples as camouflage finish was being dispensed with at Curtiss Wright Factory from serial **44-47860** (quoted from Joe Baugher). Given the photos seen, all did not have the white theatre recognition white tails in Australia.

For additional reading refer RAAF Technical order - Aircraft general instruction part 3, section C - Instruction No 17 "Removal of paint from aircraft and polishing of metal surfaces"

As for the P-40N-40 Tac/r Prototype, **A29-1150 (ex-44-47900, ex MacAir A29-1526)**, it was placed into storage on the 15th November 1945, at 1AD Storage, following the completion of its tests.

Issues to the Army Co-op Squadrons

As per a memorandum of the 8th June 1945, it was decided that an initial allocation of four un-modified aircraft be made each to 4 and 5 Sqns.

Should no previously converted P-40 pilots were on strength; two ex 2OTU Pilots would be assigned to each squadron for conversion purposes.

Due to the delays, this order was rescinded, though P-40N-35/40 E/E-88 cards do show some allocations, which were cancelled, to 4Sqn.

However 4Sqn (AC) did receive some P-40N-30s in August 1945 in theatre.

One of these, **A29-607** flown by F/Lt K H Stanfield, crash landed at Labuan Strip on the 24th August 1945. This aircraft was previously **BU-G** of 80F Sqn, the personal aircraft of Sqn Ldr John Waddy.

For 5 Squadron (AC), the first four Kittyhawks P-40N-1s, for training & conversion, arrived at Bougainville, on the 9th of September 1945. They were **A29-403, A29-412, A29-480 and A29-495** from 13ARD.

For the next few months, the unit would operate three types, Wirraway, Boomerang and Kittyhawk aircraft, pending arrival of their new P-40N-35/40 Tac/Rs. Three of these aircraft, except **A29-495**, would be disposed of and burned in accordance with the Lend-lease agreement in February 1946, never returning to Australia.

However through 75Sqn A50 History sheets and several 78Sqn Combat Reports it does seem that one P-40N Tac/R was used by 75 Sqn and was flown by Sqn Ldr Kinninmont. On more than three reconnaissance missions flown by the pilot, there was always four 78Sqn Kittyhawks to escort it during August 1945 period. Though the E/E88 card states that it was to be inducted into the Tac/R modification programme, it is recorded that on these mission it was equipped with a 7" vertical camera installation.



A29-1036 GA-R depicted as flown on ops 09/08/45 from Tarakan. GRB

In any event, with the war soon finishing at the beginning of September 1945, the full re-equipment of P-40N Tac/Rs for each squadron was held in abeyance till their

return to Australia. Numerous airframes were placed in flyable storage pending the outcome of the Post War Structure that would be finalised in 1946.

In the end post war, the units would be re-equipped, but with CAC Tac/R Mustangs. As for all of the remaining P-40N-35/40 Tac/Rs conversions, they would be held initially in storage, pending the result of post war requirements and eventually in all cases, be scrapped.

The research would not have been possible without the RAAF Museum E/E88 Cards, the National Archives of Australia records and to those people who added "important" bits, here and, to make this story possible. Special thanks to Buz Busby for his help and support as always. Thanks to Joe Baugher, concerning the type's details and finish.

Please note: My Aircraft Profiles that are depicted in any story are representations only, though every effort is made to be accurate given the information available. This is my first venture into natural metal profiles as well!

Gordon R Birkett complied @2005