



# ADF Serials Telegraph News

News for those interested in Australian Military Aircraft History and Serials

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  - **Message Traffic Selections:** Sadly this function ceased to operate last month due to technical issues. It will be replaced soon with a new system. Please address any questions to: [question@adf-serials.com.au](mailto:question@adf-serials.com.au) in the meantime
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## Message Board – Current hot topics

- C-27J Order
- Sabres where and what are they doing

These boards can be accessed at: [www.adf-messageboard.com.au/invboard/](http://www.adf-messageboard.com.au/invboard/)

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## News Briefs

- The Australian Government will delay the procurement of 12 Lockheed Martin-built F-35 Lightning II Joint Strike Fighters (JSF) by two years in a bid to save money. Smith said that the delayed delivery of the JSFs would save the government AU\$1.6 billion over the next four years and would be on the same schedule for delivery of the first batch of JSF for the US. Australia placed orders for the procurement of 14 JSFs initially, of which two JSF jets will be delivered to the US for testing and training in 2014 while the remaining fighters were scheduled for delivery between 2015 and 2017, now will arrive 2018-2019 period. This may fuel a follow-up order of F/A-18F Block IIs later this year as the Classic F/A-18A/B+s will airframe expire from 2017, and that the delayed arrival of F-35s will cause a resultant F-35A IOC pushed out to 2021
- The Australian Government is planning to convert the Royal Australian Air Force's (RAAF) six new Boeing-built F/A-18F+ Super Hornet fighter aircraft to the EA-18G model, dubbed Growlers, under a yet to be announced refit programme valued in excess of \$200m. Australia's Defence Minister Stephen Smith and Defence Materiel Minister Jason Clare said in a joint statement that more than \$19m will be spent for the purchase of lead item electronic equipment. The long lead item electronic equipment for the conversion include electronic systems, antennas and high frequency modulation receivers that will be procured through the US Foreign Military Sales: [Update: May 22, 2012](#) – The Defence Security Cooperation Agency notified Congress today of a possible Foreign Military Sale to the Government of Australia for 12 EA-18G Modification Kits to convert F/A-18F aircrafts to the G configuration and associated parts, equipment, training and logistical support for an estimated cost of \$1.7 billion.
- The Australian Government will hand over four ex-Royal Australian Air Force (RAAF) Lockheed Martin-built C-130H Hercules aircraft to the Indonesian Air Force later this year, Indonesian defence ministry spokesman brigadier general Hartind Asrin added that the transfer will be in line with a memorandum of understanding to be signed in February 2012 to seal the aircraft deal, which is estimated to cost \$30m. The service required 30 units of Hercules aircraft and that the latest addition will bring the existing number to

25. The Ex RAAF aircraft, intended to replace the existing ageing C-130B-model aircraft, will be used by the Indonesian Air Force to support troop deployments and perform humanitarian and disaster relief missions. With the imminent withdrawal of the remaining eight C-130H, more may be donated in the near future.

- The Australian Government has selected L-3 Communications as the prime contractor for the delivery of C-27J Spartan military transport aircraft, in support of the Royal Australian Air Force's (RAAF) battlefield airlifter programme. The foreign military sales (FMS) programme, established in the US, has an approximate contract value of \$600m and involves the supply of ten new C-27J aircraft worth about \$300m, along with contractor logistics support, spares and training. The first C-27J is expected to be delivered in 2015 with the initial operating capability (IOC) scheduled for the end of 2016. All aircraft will be based at RAAF Base Richmond. Alenia said that the aircraft will be new-build, thereby safeguarding the workforce in Italy. There had been speculation that the RAAF would be offered C-27Js being built for, or already flying with, the U.S. Air Force. 35Sqn RAAF will stand up to operate them, while 38 Sqn RAAF will continue to operate King Airs. Perhaps a top up later of ex USAF contracted C-27Js in a few years? ***At last after 35 years, the Caribou replacement is coming!***



- The two Ex US Army CH-47Ds delivered in February 2012 at Townsville are scheduled to be delivered to the Australian Army to support operations by the middle of 2012 after being modified to CH-47D+ Aus standard



*Defence has proved that a C-17A can carry a M1A1 on the 11<sup>th</sup> May 2012. For the first time, it's loaded an Abrams aboard C-17A A41-209 at Darwin then flown it across to Queensland where it participated in Exercise Hamel at the Shoalwater Bay Training Area. At 61 tonnes, the Abrams comes close to the total payload capacity of 70 tonnes for the C-17A. The C-17A arrived at Darwin during the late morning of the 10<sup>th</sup> May 2012*



## **Curtiss Corner, SWPAC 's Shark Mouths**

The P-40 Tomahawk and Kittyhawk, with their deep cooling intake cowl lent itself to be painted in one of the most aggressive looking aircraft of its time during 1941-1943. As most historians have concluded, the first use in the P-40 series was by 112 Sqn RAF in the Desert Air Force, followed by the AVG of Burma/China/India theatre.



Where it all started: a 112 Sqn RAF Tomahawk (Author)



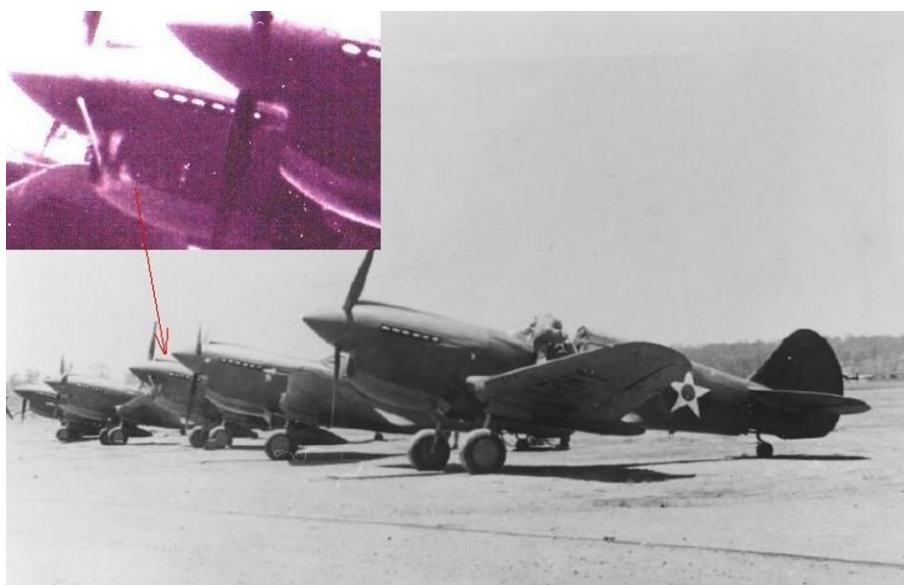
The first copy, as exemplified by AVG Tomahawk IIB #68 of Adam and Eve Sqn (Author)

It later found its way on several other Pacific locations, including at least one in the Philippines.



*One noted shark mouth painted P-40E as captured in the Philippines, in May 1942(Author)*

What is little known is the Australian connection, whereby it has been researched that it was perhaps the second theatre to have shark mouths displayed on P-40s from about January 1942 to at least 1943. The first shark mouth was displayed on the personal mount of the 17<sup>th</sup> Pursuit Squadron (Provisional) Commanding Officer's P-40E aircraft, of Capt Charles Sprague. The second one in Australia was flown by 3<sup>rd</sup> PS (Prov) pilot, 2<sup>nd</sup> Lt Robert Ostreicher though surviving the Darwin Raid, crashed his at Cloncurry on his way to the 49<sup>th</sup> PG late February 42. Thereon a gap was experienced for several weeks for shark mouths.



Captain (Later Major) Chuck Sprague's 17<sup>th</sup> PS (Prov) P-40E FY40-663 inset, named "Lillian" Port side (Author ex AWM)





Oestricher's #43 Miss Nadine of the 3<sup>rd</sup> PS (Prov), later 33rdPS (Prov) Note B-24A in rear. Amberley Feb 42(Author)

The 49<sup>th</sup> Pursuit Group's 9<sup>th</sup> Squadron was the next user of shark mouths with at least one Flight having the markings applied along with a single example in another. Known 49<sup>th</sup> FG Shark Mouth P-40s included Group Numbers #73/91/92/94, flown by Lt's Levitan, Smith, Harvey and Vaught respectively.





P-40E FY40-677 #73 "The Little Virgin" of 2<sup>nd</sup> Lt William Levitan: 9<sup>th</sup> PS (both above AWM via Author)



2<sup>nd</sup> Lt Robert Vaught's P-40E-1 FY 41-24872 #94 "Bob's Robin" (Author)





Pictured is 9<sup>th</sup> FS P-40E-1 #92 of Harvey at Adelaide River NT late August 1942. (Buzz Busby) One more 49<sup>th</sup> FG USAAF Warhawk, a P-40K, had shark mouth, that being Capt Frank Nichol's P-40K-5 #24 "Nip Nipper"

**RAAF Sharks: Sqn Ldr John Meehan's shark mouthed Kites: A29-148 and A29-302**



as A29-148 August 42 with 76Sqn prefix "I" painted on (Buzz Busby)



With F/Lt John Meehan in cockpit, note retouched 3AD sky spray line on A29-148 early Sept 1942. (Buzz Busby)

F/Lt John Meehan first flew up A29-148 on the 4<sup>th</sup> September 1942 to Milne Bay as one of eight replacements for 76Sqn RAAF arriving at Gurney Field for this Unit. (Those eight ex USAAF/RAAF pool aircraft were; A29-142, 144, 146, 147, 148, 149, 150, 154) It was pre-coded with 76 Sqn Prefix "I" then gained an "X" as "IX".

The aircraft was a P-40E-1, with a USAAF Serial of 41-36246. It was an ex pre-loved 49<sup>th</sup> FG 9<sup>th</sup> FS with a Group number "92", having shipped to Australia on the 5<sup>th</sup> May 1942. It was used as a 9<sup>th</sup> FS replacement, but had limited service due to an accident.

No sooner had it arrived, at 11.00hrs on the same day, F/Lt Meehan carrying 250lb 11 sec delay bombed and strafed enemy positions in this aircraft. This aircraft was also motioned filmed when returning to its hide off Gurney Strip as below still, with a smiling Meehan.



Now coded "IX" of 76Sqn F RAAF, at Milne Bay, but no starboard eye! (AWM)



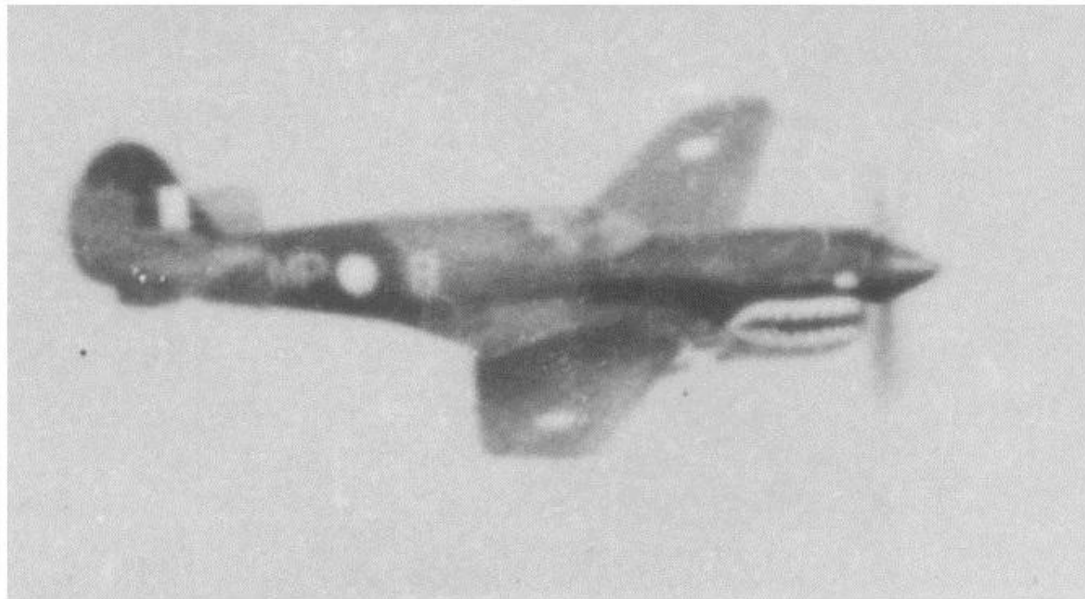
After

nearly 3 years of great service, A29-148 pictured after her final flight mishap on the 25<sup>th</sup> May 1945 sans shark mouth. NB: The shark mouth cowl was transferred to A29-83 in early 1943. (Author vis NAA)



After his tour with 76 Sqn RAAF, Meehan rested and returned to command a newly equipped Squadron, No 86 Sqn F RAAF, newly equipped with P-40M-1s and 5's. His personal mount would become A29-302 (P-40M-1 USAAF FY43-5408) and was coded "02" then later MP-B

It was received by 86 Sqn RAAF on the 11<sup>th</sup> May 1943 and remained on strength until its accident on the 6<sup>th</sup> October 1943 at Merauke in Dutch New Guinea, when F/O Donald P. Maguire Serv#401707 overshot his landing in foul weather. Meehan was on leave, and Alan Whetters was temporary Commander of 86Sqn RAAF. He was not impressed. There ended the known painting of shark mouths on RAAF P-40s



A29-302 MP-B in flight post August 43 (Author's partial scan from Peter Malone Collection)



Even the Canucks got into it as shown above as with this RCAF Kittyhawk (Author)

# In service of King and Country;

## Our sole RAAF Mohawk Pilot in 1942.



*It was widely known in 1941-1942, that the Far East command of the RAF (Malaya, Burma and India) was forced to employ aircraft which had been discarded in other theatres. Ranging from Buffalos, Blenheim, Wellington 1, Hurricane 11B and numerous other types long superseded by modern replacements or later marks. One other superseded type, the Curtiss Wright Mohawk, provided the sole fighter defence of Northeast India for some time during 1941 and 1942.*

### The Mohawk in India

At the end of December 1941 No.5 Squadron received its first Mohawk IVs, and by March 1942 it was operational with the type, providing fighter cover from its base at Dum Dum. The first clash with the Japanese came during their incursion into the Indian Ocean in April 1942. On 6th April 1942 a flight of Mohawks from No.5 Squadron found a force of three Japanese cruisers that had attacked a convoy, and claimed the destruction of a E8N 'Dave' floatplane (actually only damaged), the Mohawk's first claimed victory for the RAF.

The squadron scored its first aerial victory on 20th August 1942, when Sergeant Stuart Garnett shot down a Ki 27 'Nate' while returning from a mission over Burma. No.5 Squadron retained the Mohawk until June 1943, using for a mix of fighter defence, bomber escort and ground attack missions (using 20lb bombs). No.146 Squadron was the second RAF squadron to operate the Mohawk in India, but it only used the type from March to April 1942, providing fighter defence for Assam, before passing the aircraft onto No.5 and No.155 Squadrons.

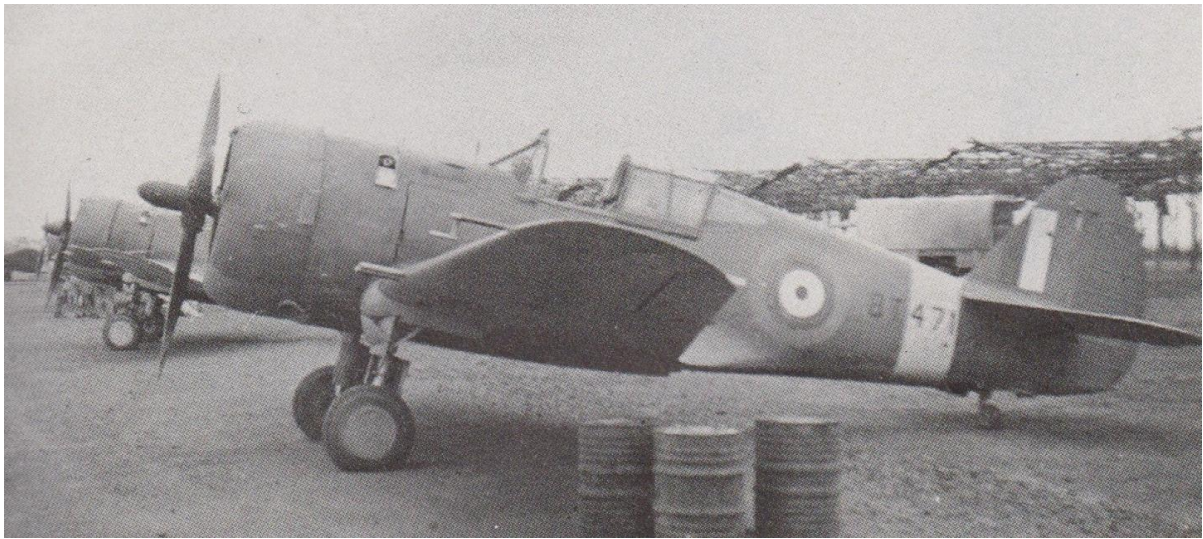
Finally No 155 Squadron was reformed at Peshawar in India on the 1<sup>st</sup> April 1942. It was commanded by S/Leader D.W.A. Stones DFC and Bar (RAF) and formed into two flights at No 1 Hill Depot. In July 1942, the Squadron moved to St Thomas Mount, near Madras. Six pilots went off to Drign Road, Karachi by train to collect its first aircraft, Mohawk MkIVs. Included in this group was Pilot Officer Allan H Haley, Serv#402054, their sole RAAF pilot in the Unit.

In the meantime the other pilots, having been trained on Hurricane IIs, witnessed the first batch of six Mohawks, led by A Flight commander, F/Lt Rathie, when they arrived on the 20<sup>th</sup> August 1942 at Madras. Further ferries of aircraft completed the Squadron strength by the 11<sup>th</sup> September 1942.

Within days, the Squadron was operational, performing its first scramble on the 17<sup>th</sup> September 1942. This however proved to be 'friendly' aircraft. On the 20<sup>th</sup> September 1942, "A" flight detached to Vizagapatnam for convoy patrol over the Bay of Bengal for a few weeks.

During October 1942, the squadron moved to Alipore, near Calcutta whereupon "A" Flight rejoined the squadron. Together with No 5 Squadron RAF, No 155 Squadron formed No 169 Fighter Wing led by S/Leader W. Pitt-Brown.

On the 30<sup>th</sup> October 1942, the wing made its first operational mission to strafe the Japanese Shwebo Airfield, located 113 km northwest of Mandalay between the Irrawaddy and the Mu Rivers in central Burma, with eleven aircraft from No 155 Squadron and a further two aircraft from No 5 Squadron.



*Pictured is Mohawk BT471 of 155Sqn RAF at Madras during August 1942. Later lost with F/Sgt Potter on the 14<sup>th</sup> January 1943, who along with Sgt Boulton in BT472, collided over Magwe Burma. (Author)*

Thereafter No.155 Squadron used its Mohawks for reconnaissance, bomber escort duties and increasingly, for ground attack.

### **The battle of Arakan**

In November 1942, the 14<sup>th</sup> Army, commanded by General William Slim (who would later become the Governor General of Australia) launched his first ground offensive on the Japanese in the Arakan District of Burma.

On the morning of the 10<sup>th</sup> of November 1942, eight Mohawks of 155 Squadron escorted six Blenheim bombers of No 60 and 113 Squadrons RAF on a mission on the Akyab Docks. On approach, they were attacked by five Ki-43 Oscars of the IJ Army's 64<sup>th</sup> Senti. Immediately, two Mohawks were shot down (F/O Dawson-Smith in AX898 and P/O McClumpha in BB929) by Lt Nakamura of the 64<sup>th</sup> Senti. However, the 64 Senti then lost two of its own Oscars, each claimed separately by P/O Buddle (RAF), and by P/O Allan Haley (RAAF). These were the first two recorded kills for No 155 Squadron (RAF), **which in retrospect, were the first confirmed kills for the Curtiss Wright Mohawk in RAF (Far East) service.**

### **Our RAAF Loss**

On the 24<sup>th</sup> November 1942, the squadron moved to Agartala, India, and the CO, S/Leader D.W.A. Stones DFC and Bar (RAF) was replaced by S/Leader C. G. St.D "Porky" Jefferies DFC (RAF).

A twenty-four aircraft raid was picked up inbound to bomb Chittagong during the afternoon of the 5<sup>th</sup> December 1942, and six 155 Squadron Mohawks were scrambled to intercept. During the brief fight, F/Lt Rathie managed to shoot down one Oscar, with a second damaged by P/O McGregor, while later on P/O Dunford in Mohawk AR638, who was damaged in the fight, manage to force land



at the strip. Patrols and strafes continued into the New Year, when on that day, P/O Allan Haley was shot down by enemy Flak near Chindwin Burma in Mohawk III BK584 "L".



*Mohawk III BK584 as flown by Pilot Officer Allan Henry Haley, No 155 Squadron RAF India on his last flight*

It seems that, on checking NAA records, it seems to confirm that this wreck was never found and that P/O Haley is still missing. If anyone can update me on any new result, I would be appreciative. A fortnight later, on the 14<sup>th</sup> January 1943, a further two Mohawks were lost in a collision during a flight over Magwe Burma. F/Sgt Potter in BT471 along with Sgt Boulton in BT472, were both lost, never to be found.

***Against the Japanese, Allan Haley was one of a few select RAF/RAAF/NEIAF and USAAF Pilots that scored Kills in the aircraft in 1942 in a Curtiss Wright Mohawk/P-36 type.***



*A 155Sqn RAF Mohawk shown mid 1943, with 1942 markings and yellow panels*

### Post January 1943 Mohawk Operations

Both main squadrons found that the Mohawk had a smaller turning circle than the Japanese Army's Ki-43 'Oscar', but direct clashes with Japanese fighters became less common during 1943, and the Mohawk was increasingly used for ground attack missions. One problem was that the aircraft was often mistaken as an Oscar, thus yellow ID panels and wing tips were introduced to reduce this problem in mid 1943. The type remained operational on the Burma front until finally replaced by more modern types in December 1943, in this case, Spitfire MkVIII, in No 155 Squadron service.



*Still without forward yellow panel, but with yellow tips, a 155Sqn Mohawk get's "wound-up"*



*Mohawk IV BB928 "Cymru" of No 155 Sqn RAF in mid 1943 with SEAC roundel and "Yellow" recognition panels, personal mount of S/Leader "Porky" Jefferies RAF, CO of 155 Sqn RAF*

***There's a fare amount of information on the Mohawk and I'll attempt to condense it in a readable format***

Anyone wishing to see actual **colour** footage of 155Sqn RAF Mohawks can click on the following U-Tube address: <http://www.youtube.com/watch?v=ShRekbtRpU0>

**India Mohawks**

In April 1941, the British government of India ordered 48 Cyclone-powered Hawk 75As to be built by Hindustan Aircraft. The first Indian-built machine was test flown on 31 July 1942. Four additional machines were completed before the project was abandoned. The Indian-built machines were absorbed into the RAF as Mohawk IVs.

However, 75As other than A-4s became Mohawk IVs, including the 10 A-9s originally intended for Persia, and least six of the former Chinese A-5s assembled in India. The Chinese Cyclone-powered Model H75A-5 was to have been assembled in China by the Central Aircraft Manufacturing Company from kits produced by Curtiss. One complete aircraft was built by Curtiss to act as a model, and this and some of the kits did reach China. Soon after this the company moved to Bangalore, India, where it was renamed the Hindustan Aircraft Ltd. At least six A-5s were built in Bangalore, and taken over by the RAF where they became Mohawk IVs.

The government of Persia (now Iran) had ordered 10 Hawk 75A-9s with Wright R-1820-G205A, which arrived shortly before that country was occupied by British and Russian forces on the 25th August, 1941. These Hawks were discovered there still in their shipping crates and taken over by the British, who transferred them to India as Mohawk IVs for the No 5 and No 155 Squadron. **RAF Mohawk IV** RAF s/ns of record were **AR630/694, BB918/937, BB974/979, BJ434/453, BJ531/550, BJ574/588, BK876/879, BL220/223, BS730/738, BS744/747, BS784/798, BT470/472, LA157/158, and LA163/165.**

**Prequel History of RAF Mohawks**

Although Britain decided not to purchase the aircraft directly, they soon came in possession of 229 Hawks comprised of diverted shipments to occupied France and aircraft flown by escaping French pilots. The aircraft received the designations Mohawk I through IV, mirroring French Hawk 75A-1 through A-4, and were fitted with 0.303-cal. Vickers K machine guns and conventional throttles (forward to increase power). Obsolete by the standards of the European theatre, 72 Mohawks were sent to the South African Air Force, and a number served in India and Burma.

In April 1941, as stated above, the British government of India ordered 48 Cyclone-powered Hawk 75As to be built by Hindustan Aircraft. Similarly, Chinese license production of the Hawk 75A-5 was moved to India, and these machines were also absorbed into RAF as Mohawk IV.

Hawk 75As which had not yet been delivered to France before the surrender (most of them A-4s), plus those whose pilots had flown them to England to escape the German occupation were taken



over by the RAF and given the name Mohawk. The total number of Mohawks impressed by the RAF was 229 planes. Most of them were former French machines, but a few former Persian Hawks and even some Indian-built machines were included in the Mohawk total, as well.

There were four RAF sub-variants—Mohawk I, II, III, and IV. Former French Hawk 75A-1s were named Mohawk I by RAF, with Hawk 75A-2s named Mohawk II. There were a total of 29 of these planes. Yet it is difficult to track which planes were A-1s and which were A-2s, since Mohawk I and Mohawk II aircraft were intermixed with each other and with Mohawk IVs in the RAF s/n blocks **(AX880/898, BK876/879, and BL220/223)**.

More than 20 former French Hawk 75A-3s were taken over by Britain as Mohawk IIIs. RAF s/ns for these were **(BK569/588)**, but some A-3s were mixed with Mohawk IVs in serial block **(AR630/694)**.

The name Mohawk IV was assigned to the remainder of the French Hawk 75A-4 order which was taken over by the RAF. The exact number of Mohawk IVs diverted to Britain cannot be determined from RAF serial numbers alone, since some blocks were applied to both IIIs and IVs without distinction. The total number of Mohawks appearing as IVs total 190, only six less than the total of Hawk 75A-4s built.

### **SAAF Mohawks in Afrika**

RAF decided that its Mohawks were not suitable for the European theatre and sent 72 of them to the South African Air Force, where they were flown by the 3rd, 4th, 5th, 6th and 7th Squadrons which operated in East Africa.

The Mohawk IV was used by five squadrons of the South African Air Force. No.5 Squadron received the Mohawk when it formed in South Africa in May 1941, before converting to the Curtiss Tomahawk at the end of the year when it moved to Egypt. No.7 Squadron followed the same pattern, receiving the Mohawk in January 1942 but converting to the Hurricane when it moved to Egypt in April-May 1942. No. 4 Squadron received a few Mohawks while it was based in Kenya in the summer of 1941, but replaced them with the Tomahawk when it moved to Egypt in September.

No.41 was the first South African squadron to use the type in combat. Most of the squadron was an Army Co-operation unit, equipped with the Hawker Hartbee, but starting on 1st September 1941 it gained one flight of Mohawks, which were used to form No.41 Squadron Fighter Detachment. On 5th October 1941 this detachment scored the only Mohawk victory in Africa. On 16-18th September three Mohawks from the detachment had moved up from Nairobi to the Kenya border town of Aiscia, to intercept Italian transport aircraft. After a series of unsuccessful missions on 5 October Captain Jack Parsonson found and destroyed a Savoia S.75 on the ground at Djibouti. This detachment achieved the only Mohawk victory in Africa, before later in the same month becoming 'B' Flight, No.3 Squadron. By 1943 the squadron had converted to the Hurricane I.

Soon after this the detachment became 'B' Flight, No.3 Squadron. On 11th December 1941, a Potez 63 from Djibouti was damaged by Lt Gazzard, flying a Mohawk. Soon after that the squadron returned to South Africa.

No.4 Squadron SAAF was formed at Waterkloof towards the end of March 1941, and in the following month moved up to Kenya, to protect against possible Italian attacks from Somaliland. While in

Kenya the squadron received a number of Curtiss Mohawks, aircraft taken over from French orders. On 1st September 1941 the squadron began a move to Egypt, where it converted to the Curtiss Tomahawk, before becoming operational as part of No.262 Wing, Air Headquarters Western Desert, in November 1941.

Twelve ex RAF Mohawks were sent to Portugal in 1943, while the USAAF sent ten to Brazil also in 1942.

### **The Origin: Curtiss Hawk Model 75, ala P-36 Hawk**

The Curtiss P-36 Hawk, also known as Curtiss Hawk Model 75, was a U.S.-built fighter aircraft of the 1930s. A contemporary of the Hawker Hurricane and Messerschmitt Bf 109, it was one of the first fighters of the new generation sleek monoplanes with extensive use of metal in construction and powerful piston engines. Obsolete at the onset of World War II and best known as the predecessor of the Curtiss P-40, the P-36 saw only limited combat with the United States Army Air Forces but was extensively used by the French Air Force and also by British Commonwealth and Chinese air units. Several dozen ex French/German Mohawks also fought in the Finnish Air Force against the Soviet Red Air Force.



*Even captured ex-French Air force Mohawks, were used by the Luftwaffe for advanced training.*  
(Author)

With around 1,000 aircraft built, the P-36 was a major commercial success for Curtiss. This article also covers the YP-37 and the XP-42 prototypes based on the P-36.

The Air Corps was so impressed by the performance of the P-36 that it ordered 210 of the aircraft, the largest military order of a single airplane type since World War I. Including 30 P-36G export models seized by the U.S. government in 1942 because of the German occupation of Norway, the Army Air Forces possessed a total of 243 P-36s (three P-36s (**S/N 37-68 to 70**); 210 P-36As (**S/N 38-001 to 210**); 30 P-36Gs (S/N **42-38305 to 38322 and 108995 to 109006**)). Norway ordered an additional 36 75A-8s with 1200hp Wright R-1820-G205A Cyclones just before the German occupation. The German occupation caused the planes to be impounded by the US government before delivery, and 6 were delivered to Free Norwegian forces training in Canada in Feb 1941. The remaining 30 were requisitioned by the US Army as P-36G(S/N 42-38305 to 38322 and 108995 to 109006)). Armament was four 0.30 and two 0.50 machine guns.

### USAAF Career

The P-36 served with ten Pursuit Groups and one Composite Group of the Army Air Corps. The 1st, 8th and 20th Pursuit Groups all used it in the United States, but had replaced it with more modern aircraft before December 1941, as had the 18th Pursuit Group on Hawaii.

The 16th and 32nd Pursuit Groups both operated the P-36 in the Panama Canal Zone. The 16th replaced in it 1941, but the 32nd may have kept some into 1943 when it was disbanded. The 35th and 36th Pursuit Groups operated the P-36 while they were training up after being formed, but both replaced it before moving overseas - the 35th to the Philippines and the 36th to Puerto Rico. The P-36 was the standard Air Corps fighter of 1939. It, the A-17 and the B-18 accounted for 700 of the 800 first line aircraft in the corps. Even by 1939 it was obsolescent, with a lower service ceiling, top speed and weaker armament than the Spitfire of Bf 109. Worse, the P-36 was at the peak of its development while both the British and German fighter had plenty of scope for further improvements. Even re-engineering with Allison V-1710 V12's and later Packard Built Merlins in its P-40 Models, it never quite caught up.

Only two groups were operating the P-36 on 7th December 1941. The 28th Composite Group, in Alaska, was equipped with twelve B-18As and twenty P-36s. The 15th Pursuit Group, on Hawaii, was equipped with a number of P-36s, alongside more modern P-40s. All of these modern aircraft had only recently arrived on Hawaii. Its thirty-one P-36s with their pilots and crew chiefs had departed for Hawaii on the carrier *Enterprise* in February 1941, soon followed by the P-40s.

46th Pursuit Squadron of the 15<sup>th</sup> Pursuit Group was able to get into the air. They attacked a Japanese formation near Bellows Field, shooting down two Japanese aircraft for the loss of one P-36. The 47th Pursuit Squadron at Haleiwa airfield was the most successful unit on the day. Their base wasn't subject to the same heavy attacks as Wheeler Field, and between 08.15 and 10.00 a small number of pilots were able to fly repeated sorties, often alternating between the P-36 and P-40. After the attack was over the surviving P-36s took part in the unsuccessful attempts to locate the Japanese fleet. After Pearl Harbor the P-36 rapidly went out of service. By the summer of 1942 VII Fighter Command on Hawaii had 28 P-26s, of which 22 were serviceable, but had five times more P-40s, with 101 serviceable out of a total of 134. The only combat with U.S.-operated P-36s took place during the Pearl Harbor



attack on 7th December 1941, with Lt Brown claiming the first Japanese aircraft shot down by a USAAF Pursuit Aircraft.



*P-36 FY38-191 #22 in flight (Author)*

Five of the 39 P-36A Mohawks at Pearl Harbor were able to take off during the attack and were credited with shooting down two Japanese Mitsubishi A6M2 fighters for the loss of one P-36, **the first U.S. aerial victories of World War II.**





*Two views of a Curtiss P-36 Hawk as displayed in the USAF Museum, replicated as Lt Brown's 46<sup>th</sup> PS P-36 in Hawaii, 7/12/41 who shot down the first Japanese Aircraft of the Pearl Harbour Raid .*

*The P-36 is actually is P-36A#1, FY38-001 (USAFM)*

## **French Use**

The aircraft exported to France were given the Curtiss designation Model H75A, with successful versions given dash numbers. The first one hundred aircraft were thus the H75A-1. These aircraft were powered by a 1,050hp Pratt & Whitney R-1830-SC3G engine and were armed with four French 7.5mm guns, two in the nose and two in the wings. Their French-standard throttles operated in the opposite direction to those of most other nations, with forward reducing power. Deliveries of the H75A-1 began in December 1938. A small number escaped north to Britain at the end of the Battle of France, where they were renamed as the Mohawk I.

A second order for 100 more aircraft soon followed. These were powered by the 1,050hp Pratt & Whitney R-1830-S1C3G engines and carried two extra guns in the wings, for a total of six 7.5mm machine guns. Deliveries began in May 1939. Those aircraft that reached Britain became the Mohawk II.

The third order, for 135 aircraft, came too late for all of the aircraft to reach France. These aircraft had the same six guns as the A-2, but used a more powerful 1,200hp R-1830-S1C3G engine. Sixty reached France, while others were delivered to French Morocco. Finally twenty were taken over directly by the RAF, where they became the Mohawk III.

Only six of the 795 aircraft in the fourth order ever reached France. They carried the same six guns as the A-2 and A-3, but saw a change of engine to the 1,200hp Wright R-1820-G205A Cyclone. The new engine had a short-chord cowling with a slightly greater diameter than on the Pratt & Whitney powered machines, and had no engine cowling flaps. Of the 795 aircraft ordered a total of 284 were completed. Six reached France, four were lost at sea and 23 reached Martinique. This left 251 which were taken over by the British as the Mohawk IV.

## **French Phoney War 1939-1940**

On 1st September 1939 the Armée de l'Air had eight Escadres de Chasse (fighter wings). Of these the 4th and 5th (made up of GC I/4, II/4, I/5 and II/5) were equipped with the Hawk 75, and 172 aircraft were on strength. Two more wings were equipped with the Dewoitine 510, which by 1939 was verging on being obsolete, while four used the Morane Saulnier Ms 406, with 573 aircraft on strength. The Bloch 152 had entered service in small numbers, and the excellent Dewoitine 520 was on the verge of appearing. Of the French aircraft only the Dewoitine would prove to be superior to the Hawk.

In the early months of the Second World War most aerial clashes involving the Hawk came when it was used to escort French reconnaissance aircraft. The first such clash, and the first fighter clash on the Western Front, came on 8th September 1939 when five Hawks of GC II/4 were attacked by four Bf 109s, shooting down two at no cost. Similar fights took place on 20th and 24th September, and by the end of the month the French had lost six Hawks and four MS.406s, and claimed to have shot down 20 Bf 109s. However the reconnaissance aircraft they were protected had suffered heavier losses, and from October most French reconnaissance aircraft were forbidden to fly deep into German territory.

October and the first part of November 1939 were quiet, but one of the largest aerial battles yet seen took place on 6 November, when nine Hawks of GC II/5 clashed with around 27 Bf 109Ds. The French scored four confirmed and four probably victories at the cost of one aircraft and no pilots. The rest of November 1939 was busy, and saw the Hawk hold its own, but bad weather in December kept most aircraft on the ground.

The first Hawk victory of 1940 came on 2nd January 1940, when a group of twelve aircraft from GC II/5 shot down a Bf 109E from I./JG 53. During the next few months the Luftwaffe gained in strength as most of the units based in Poland moved west. The introduction of larger numbers of Bf 109Es also caused problems for the Hawk units, which had fared well against the Bf 109D. The weather intervened for most of February and March, and the pace of activity didn't begin to pick up until April. Even then the start of the month saw little activity on the Western Front as the Luftwaffe concentrated on the invasion of Denmark and Germany. After a burst of activity in late April the Luftwaffe went quiet for the first nine days of May 1940.

## **Invasion of the West and the Battle of France**

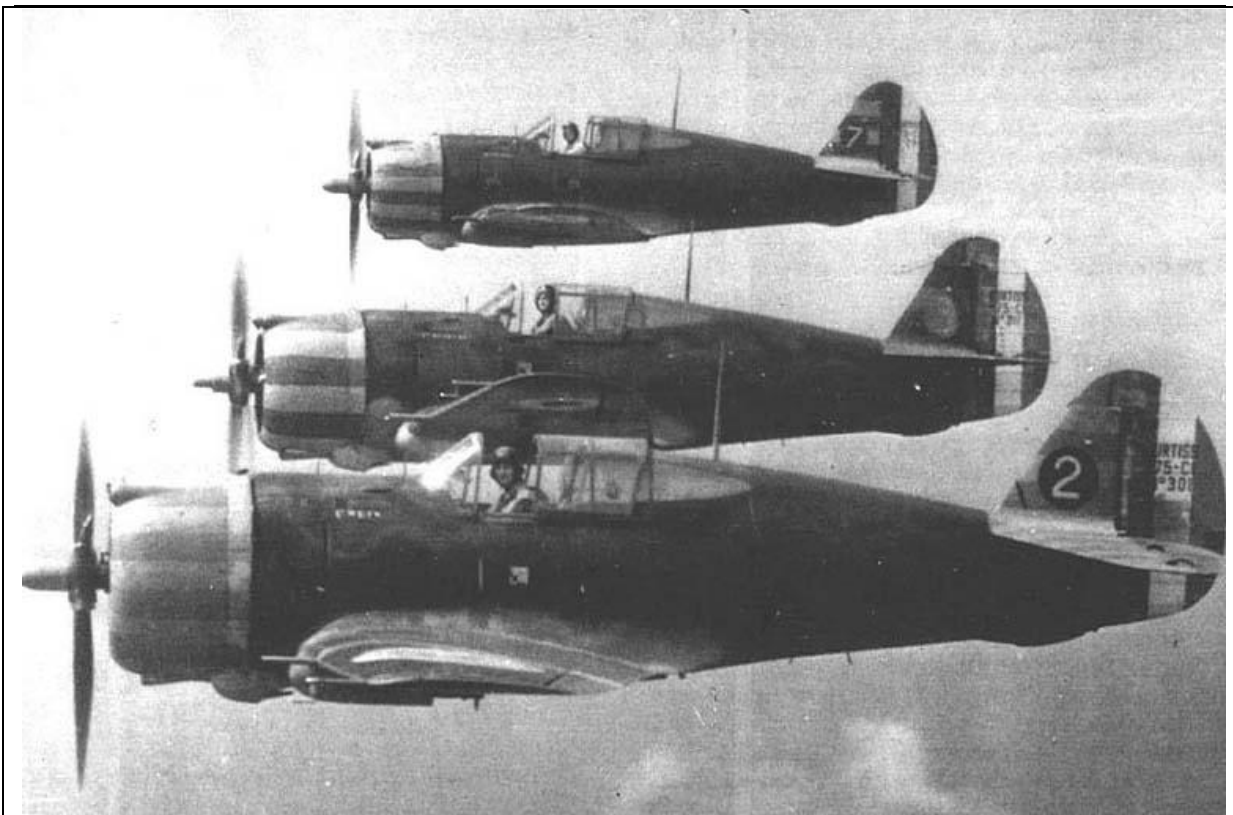
By 10th May 1940 the Armée de l'Air had reorganised its fighter groups into large Groupes de Chasse, splitting up the Escadres of 1939. The same four units were operating the Hawk 75, but they were now split between Groupement 23 at Laon, Groupement 25 at Avie sur la Lys and Groupement 22 at Velein en Haye (two groups). During the fighting GC III/2 'Alsace' would convert to the Hawk 75, which replaced its MS 406s.

On the morning of 10th May 1940 the Germans began their great offensive in the west, and the empty skies were suddenly full of German aircraft. The Hawk units had very different days. GC I/5 claimed eight Dornier Do 17s. GC II/4 was caught on the ground and lost six Hawks to German bombs. GC II/5 was also caught off the ground. Two pilots were able to get off the ground, and shot down two Heinkel He 111s, but damage was still done.

Over the next few days the Hawk groups were used to provide fighter cover for the French armies, operating against German bombers and dive-bombers, while attempting to fend off the Bf 109s. Losses on the ground and in chaotic moves cost them more aircraft than they lost in combat. In the few days of June the French fighter groups were repeatedly forced to retreat by

approaching German ground groups, often abandoning their aircraft. Eventually those aircraft with the range were ordered to retreat to North Africa. Amongst them were a significant number of Hawks.

By the end of the Battle of France the top three French fighter aces were all Hawk pilots. Top was Edmond Marin la Meslée of GC I/5, with fourteen confirmed and three probable victories (16 and 4 in some sources). Joint second were Captain Michel Dorance (also of GC I/5) and Sous Lt Camille Plubeau, both with 14 confirmed and 3 (4 in some sources) probable victories. The five Hawk units had a total of 230 confirmed and 81 probable confirms, second only to the larger number of MS 406 units, with 269 confirmed and 81 probable victories.



*French Vichy Mohawks in Flight*

### **Vichy**

The Hawk 75 remained in service with the Vichy air force in North and West Africa until the end of 1942. They were very quickly involved in fighting against their former allies, beginning during the British attack on the French fleet at Mers el Kebir (near Oran in Algeria) on 3 July. GC I/5 and GC II/5 took part in the fighting, claiming four victories over Blackburn Skuas - two confirmed and two probable's, although the British actually only lost one aircraft during this fighting. Soon after this the fighter units left Algeria. GC I/4 moved down to Dakar while GC I/5 and II/5 moved to Morocco.

### **Vichy Dakar**

In September 1941 a French and British force attempted to capture the West African port of Dakar. They had not expected to encounter any real resistance, but the pro-Vichy forces at Dakar put up a stiff fight, and the invasion ended in failure. GC I/4 and its Hawk 75s played a major role



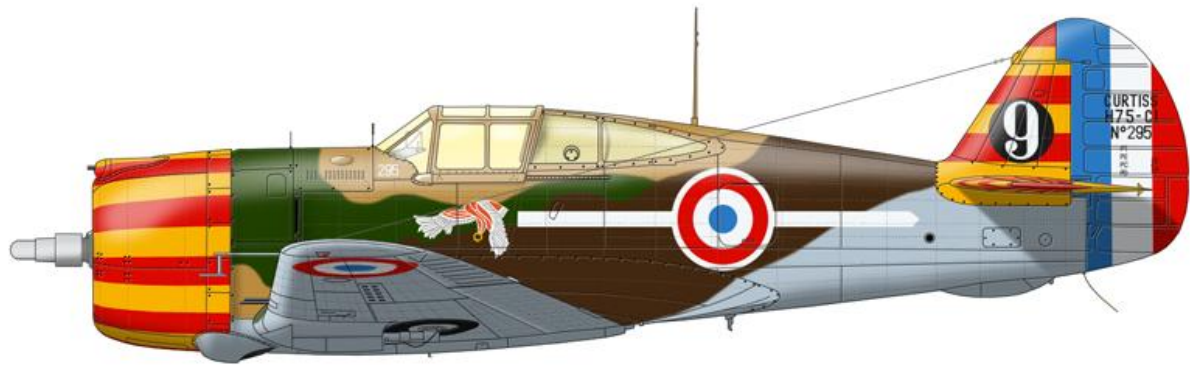
in the fighting, shooting down a number of Fairey Swordfish torpedo bombers, part of a total of eight Swordfish, two Skuas and one Walrus lost during the fighting.

### Operation Torch versus Vichy

When the Allies invaded North Africa on 8th December 1942 the two Hawk-equipped units were based around Casablanca (Morocco). There they came up against US Naval aircraft, including the Grumman F4F Wildcat and the Dauntless.

On the first day of the fighting GC II/5 was involved in a lengthy dogfight with Wildcats over their own airfield, losing seven dead (five in combat and two in take-off accidents) and four wounded. Amongst the dead were several of their best pilots. A total of 13 Hawks were destroyed. On the next morning five Hawks from GC II/5 took part in an attack on American landing craft at Fédala, all five aircraft returning safely. GC I/5 were less fortunate. Its first battle of the campaign was an attack on the American fleet later on 9 November, in which the Wildcats shot down four of the fifteen Hawks involved.

On 10th November 1942 the remaining French aircraft retreated into southern Algeria, effectively ending the Hawk 75's French combat career. When GC II/5 re-entered the battle on the Allied side it had been re-equipped with Curtiss P-40F Warhawks, and the surviving Hawk 75s were moved to training units.



Vichy H75-C1 #290 Morocco

### Dutch Nederland's Hawks

The Dutch Hawks were A-7 models equipped with 1200 hp Wright Cyclone R-1820 G-205 engine, the same as in the Brewster Buffalo. The aircraft reached the Netherlands East Indies during July and August 1940, and some sources indicate the engines were worn out by the time hostilities began nearly a year and a half later. Three of the Hawks were damaged in accidents, leaving 17 available to face the Japanese.

The Dutch wanted to buy an additional 28 undelivered French A-4s, but these were given to Britain instead.

Three Hawks were lost during a long-range bombing mission against railroad yards in Thailand 17<sup>th</sup> December 1941. **Later in December 1941 the Hawks escorted convoy reinforcements to Singapore.**

By the end of January 1942, 12 were left. These were scrambled 3rd February 1942 to blunt an attack on Surabaya, losing three machines destroyed and two others damaged beyond repair. The remainder rose to oppose another assault on 5th February 1942, and another Hawk was destroyed and a second damaged. Following these actions the remaining Hawk pilots regrouped as part of a new Hurricane unit. It is believed that three Hawks survived the fighting, and these may have been captured at Andir along with a number of other Allied types, although never seen any photos or text to indicate the Japanese evaluated any.

The small number of Hawks committed to the Java campaign, combined with the chaos and confusion of the Japanese advance, makes it difficult to draw many conclusions about its capabilities. Even over Surabaya the 12 Hawks were divided into three patrols, limiting whatever impact they might have had. Other equipment, including the Buffalo, Hurricane, P-40 and Curtiss-Wright CW-21B Demon - a lightweight, fast-climbing interceptor that might have posed a threat to the Japanese under better circumstances - also fared poorly in the East Indies campaign.



The Hawk is nearly always described as outclassed by the Zero. The Cyclone Hawk's climb rate was inferior to the Zero 21, as were nearly all fighters of that era, but speed was almost identical. While the Zero excelled in slow speed manoeuvre, the Hawk far surpassed it in high-speed controllability. The reasons for the Hawk's poor reputation versus the Zero 21 may be due to several questionable but widely-circulated accounts that told of Hawks falling in droves before the victorious Japanese. For example, the JAAF's 64th Senti reported encountering nine Hawks over Djakarta on 14 Feb. 1942 and shooting down seven, despite the fact that all Hawks had been destroyed or were unserviceable -- and the squadron disbanded -- by that date. On the 19<sup>th</sup> February 1942, Saburo Sakai's Tainan Air Wing reported encountering 50 Allied fighters over Surabaya, with Hawks supposedly making up a large part of the formation. Sakai personally claimed three Dutch Hawks during that action.

## The Fins

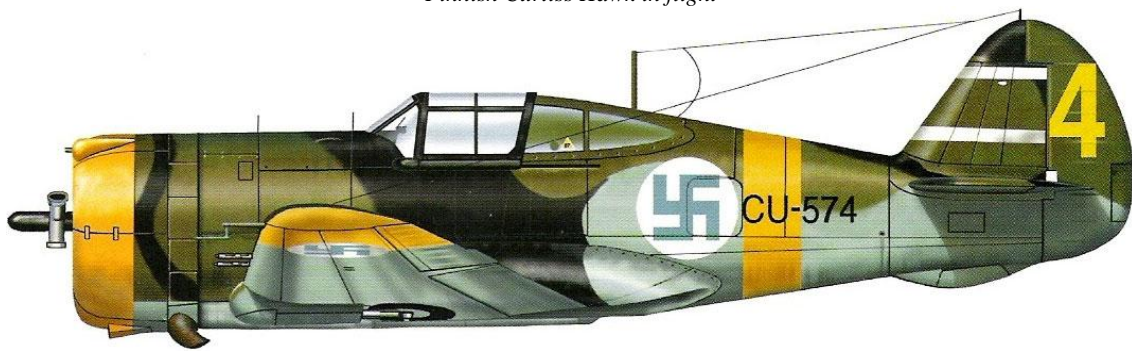
Hawks arrived too late for the Winter War against the Soviet Union in 1939-40, but were in action for almost all of the "Continuation War" beginning 25th June 1941.

The Germans sold them as war booty from the France and Norway and 44 eventually were delivered, with the first arrivals going to recon unit TLeLv 14 to replace Gloster Gladiators and Fokker C Xs and C.VEs. The Hawks were thought to be suited for the recon role due to their fairly long range and 311 MPH speed, which was considered adequate for 1941. In August they replaced Fokker DXXIs in fighter unit HLeIV 32, which used them for the remainder of the war. Hawks were credited with 190 kills during the war against eight air combat losses and six due to AA. It boasted the FAF's third-highest victory tally, trailing the BF-109 (663 kills) and Buffalo (477) but edging out the D.XXI (187), a respectable tally considering most of the best FAF "honchos" were selected for the BF-109s and Buffaloes.

Its best day was 28<sup>th</sup> March 1942 over Susaari when 12 Hawks encountered 29 Soviets and claimed 17 without loss. The most recent research indicates the top Hawk scorers were Alto Kalevi "Kale" Tervo with 15.75 kills followed by Kyosti Keijo "Kossi" Karhila with 13.25. Lt Jaako Hillo (9) and Capt Paavo Berg (7) were other top guns.



*Finnish Curtiss Hawk in flight*



*Finnish Curtiss Wright H75A4 CU574*



*Most German ex French H75s went to Finland. As many as 40 plus.*

**Sources:**

Rickard, J (21 December 2009), *Curtiss Mohawk I* , [http://www.historyofwar.org/articles/weapons\\_curtiss\\_mohawk\\_i.html](http://www.historyofwar.org/articles/weapons_curtiss_mohawk_i.html)  
 Rickard, J (21 December 2009), *Curtiss Hawk 75A-C1 (France)* , [http://www.historyofwar.org/articles/weapons\\_curtiss\\_hawk\\_75.html](http://www.historyofwar.org/articles/weapons_curtiss_hawk_75.html)  
<http://curtisshawk75.bravepages.com/>  
[www.aviationspectator.com/resources/aircraft-profiles/curtiss-p-36...](http://www.aviationspectator.com/resources/aircraft-profiles/curtiss-p-36...)  
 No 155Sqn RAF ORB  
 NAA: P/O Allan Henry Haley Casualty File





# Corner



*A16-160 pictured after Drysdale overrun of strip: 21/12/43 (Author)*

**A16-160**      c/n6421      USAAF FY41-23604 RAF#BW742    FF15/01/1942 Crated and shipped  
7/02/1942      Rec 16/03/1942 2 Sqn RAAF, Coded KO-X

**History:** Indent 911: Rec USAAF as **RA-29** 15/01/42. **Originally NZ (Alhambra) Defence Aid** consigned ex USAAF 06/02/42. Redirected Australia: Rec 2AD ex Overseas 16/03/42. Allotted 32 Sqn RAAF 02/04/42. Arrived Archerfield for fitment of Boulton Paul Turret and operational equipment fitted by 2AD, 24/04/42. With 32 Sqn RAAF 27/04/42. Rec 5AD ex 32 Sqn RAAF 02/06/42. Rec 32 Sqn Horn Island 15/06/42 and provided navigation escort to several USAAF P-39s to Port Moresby.

Damaged in port main plane in air raid 29/07/42 Port Moresby. Rec 5AD 07/08/42. Rec 2 Sqn RAAF 08/09/42. Accident 1842 Zulu 25/10/42 when as BAT 32-10, returning as one of two survivors of a raid on Penfoei Airstrip, low on fuel, forced landed on a beach near Cape Ford NT with gear down. F/O Overheu flew the Hudson off the beach the next day after being lightened, and returned to Daly Waters on the 26/10/42. The crew were picked up by RAAF Launch. Crew P/O K R Mills Serv#405637, Sgt F R Winsor Serv#404524, Sgt H Hadley Serv#411904, Sgt T W Bassan Serv#411965.

Rec 1RSU 19/11/42. Rec 2 Sqn RAAF 12/01/42. Rec 5AD 07/03/43. Rec 2 Sqn RAAF ex 5AD 28/03/43. Now coded KO-X, at Milngimbi. Rec 4RSU 02/06/43 for engine change. Rec 2 Sqn RAAF 20/06/43. Rec 5AD for 240hrs Service 26/08/43. Rec 2 Sqn RAAF 09/12/43.



**Accident 1440 Hrs 21/12/43** when aircraft was on a shipping reconnaissance duties in Timor Sea, when starboard engine seized at 3500 feet. Bombs, ammunition and guns were jettisoned and the pilot made for Drysdale Mission at 1500 feet. Forced landed at Drysdale Mission at 1549Hrs near end of strip with the aircraft rolling into clearing with stumps, causing damage to flaps, wing root and straining both oleos and wheels. **(Pictured above)**Crew: Captain, F/O L E Coleman Serv#414905, F/Sgt Baulch, F/Sgt Craig, F/Sgt Evans and F/Sgt Dixon, were not injured. To 4RSU. Rec 2Sqn RAAF 18/01/44. Rec 2AD ex 2Sqn RAAF 26/03/44. Rec 1OTU ex 2AD 05/06/44. Allocated to ANA for conversion to Ambulance Aircraft Transport 05/12/44.

Rec ANA Parafield 18/12/44.Rec 2AAU 12/05/45. Accident on landing at Dagua PNG when aircraft landed with u/c retracted due to hydraulic failure. Crew: F/Lt W J Aitkenhead Serv#416403, W/O R J Boyd and Sgt C F Munchenburg were un-injured. Rec 10RSU 15/06/45 for conversion to components. Allocated to 37OBU for destruction in July 1945.

A16-160 Ambulance conversion as it may have looked in 1945 (Credit:unk)

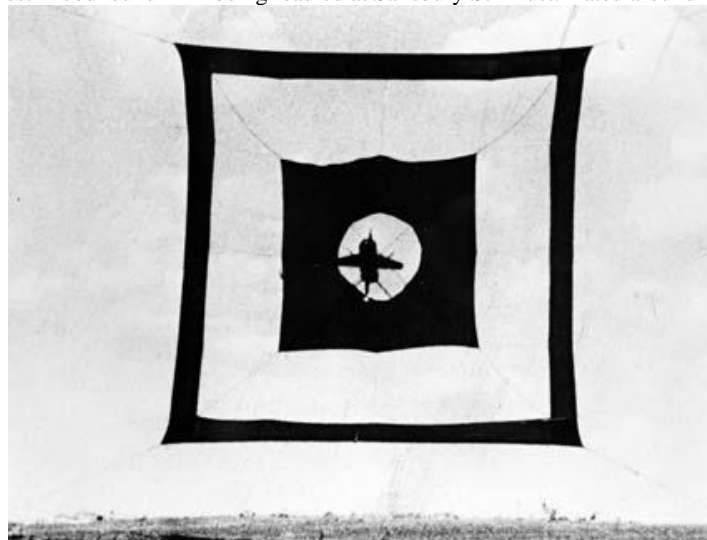


GRB

## Odd Shots



A Test Bloodhound Mk2 being readied at Salisbury Sth Aust. Dated around 1959



Prototype of the Australian designed and manufactured Malkara being put through exhaustive tests at the Woomera Rocket Range, South Australia. It was rated almost 100 per cent accurate. Malkara is a short-range, wire-controlled, line-of-sight missile, capable of destroying heavy tanks, bridges, concrete fortifications and landing barges. Dated around 1959.

**Next Issue, spring 2012, will be out circa August 2012.**