

## F4U Corsair - Operational Summary - WWII

Designed in 1938 and flown in 1940, Corsairs first tasted combat at Guadalcanal. It was at the "Canal" that Corsairs definitely established their aerial superiority over the vaunted Japanese Zero a highly maneuverable aircraft that had previously outperformed all U.S. fighters. The Corsairs were the first American fighters to top 400 miles per hour, and the first to house a 2,000 horsepower engine, making the gull-wing Corsairs the toughest foe faced by enemy pilots. Interrogation of high Japanese brass at the end of the war disclosed the fact that they considered the Corsair the top fighter in use by any service in the Pacific.



After spending most of 1944 in clean-up actions in the South and Central Pacific (during which time the Corsair came into its own as a dive bomber, attack plane and night fighter), the F4U's now were with Task Force 38, and destined to become the world's No. 1 carrier-based fighter.

On March 4, 1944, the Corsair performed its first mission as a dive bomber in an attack on Mille island, Mille Atoll, in the Marshall Islands.

During the 7 weeks following this baptism as a fighter-bomber, Corsairs dumped more than 200,000 pounds of bombs on Japanese installations in the Marshalls.

British pilots used their Corsairs as bombers in the attacks Java in April 1944. Scarcity of enemy air operation was main reason for the F4U's use as a bomber in 1944.

On May 16, 1944, a Navy evaluation board, after a series comprehensive comparisons between the F6F-3 Hellcat and F4U-1D, opined: "It is the opinion of the board that generally the F4U is a better fighter, a better bomber and equally suitable carrier airplane as compared with the F6F and it is strongly recommended that the carrier fighter and/or bomber complements be shifted to the F4U type."



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The Corsairs closed out 1944 by going aboard the fast carriers with both Navy and Marine pilots assigned to fly them. Assignment to shipboard duty was the year's supreme accomplishment for the F4U's. It came none too soon as the Japanese were threatening the entire U.S. Fleet with kamikaze attacks, and their fighters were getting better and faster.

As a result of the growing kamikaze tide, VMF-124, the first Marine squadron to take Corsairs into combat, also became the first to operate from a carrier.

The Pacific Fleet high command, in a conference at Pearl Harbor on November 24-26, 1944, expressed much alarm at the kamikaze peril. A decision was made to increase the number of fighters aboard carriers to meet the menace. To accomplish this as an interim measure, the Navy called upon the Marines and their Corsairs.

The final year of the war, 1945, was to see shipboard Corsairs venture into the China Sea, performing combat sorties over Iwo Jima, Okinawa, the Philippines, Formosa, and Tokyo.

From Guadalcanal, spearheading the drive toward Tokyo, Corsairs took part in nearly every major campaign in the Pacific. Operating from island bases and Navy flattops, Corsairs in the Pacific fought in the skies over the Solomons, Rabaul, the Carolines, Peleliu, the Marshalls, Philippines, Iwo Jima, Okinawa and Japan.

Known to the Japanese as “whistling death”, and to its Marine pilots as the “Sweetheart of Okinawa,” the Corsair also made aerial history in areas other than the Pacific, among them, the Indian Ocean and North Sea.

Corsairs were flown in combat by the U.S. Marines, U.S. Navy, Royal Navy and New Zealand Air Force.



**Rex Beisel and Lt Col Boyington**

The name “Corsair” became synonymous with the names of Marine and Navy aces including Lt. Col. Gregory (Pappy) Boyington, Lt. Ken Walsh, Lt. Bob Hansen, CDR. Tommy Blackburn, Lt. Ira (Ike) Kepford, and a host of others.

The most famous pilot to take the Corsair into action was Col. Charles A. Lindbergh. In one attack on Wotje Atoll, he took off in a Corsair with a bomb load of 4,000 pounds, the heaviest load ever carried up to that time by a single-engine fighter.

In the course of shooting down 2,140 enemy aircraft, only 189 Corsairs were lost in combat, a ratio of better than 11 to one.

From February 13, 1942, when a handful of Corsairs first engaged the Japanese at Guadalcanal, until V-J Day, Corsairs carried out a total of 64,051 action sorties. Of this total, 54,470 were flown from land bases and 9,581 from the decks of aircraft carriers.

Marine Pilots led the Corsair onslaught. Operating from island airstrips, they shot down 1,400 enemy planes. Of that number, 1,100 were fighters and 300 bombers. Marine air losses were 141 Corsairs shot down.

A small number of U.S. Navy Corsairs accounted for 162 enemy planes with a loss of 14 of their own, giving a final tally of 1,562 enemy planes destroyed by land-based Corsairs.



Later, after being assigned to aircraft carriers, Corsairs shot down 578 enemy planes with a loss of only 34 F4U's in air combat. Although the first landing of a Corsair aboard a carrier took place September 25, 1942, the Navy did not begin carrier operations with the planes until late 1944. The first Marine Air Group, MASG-48, was assigned its first carrier, USS Block Island on February 4, 1945. A Marine Squadron, VMF 124, however, began operating from the USS Essex December 28, 1944.



One Corsair was the only airplane ever to receive an official citation. Corsair 122, operating with the Marine Devil Dogs squadron, was cited as follows:

*"In accomplishing her 100 missions, Corsair No. 122 logged more than 400 hours flying time, her total hops, including tests and reconnaissance flights, reached an amazing total of 178. Built for air combat, Corsair 122 proved her versatility by accepting 1000-pound bombs slung from her belly, and without strain or protest developed into the hottest dive bomber with wings. Were there blood in her fuel line instead of 100 octane,*

*she would be wearing the Purple Heart, for the patch on the leading edge of her wing attests the accuracy of Japanese antiaircraft fire. She has covered all the Japanese based in the Marshall Islands like the morning dew."*

By the end of the Okinawa campaign, nearly every carrier the Navy had was equipped with Corsairs, and the way was paved for the peacetime years that lay ahead.

In the final year of the war, 3,575 Corsairs were produced, 2,046 by Chance Vought Aircraft, 1,529 by Goodyear.

### **F4U Corsair - WWII Record**

The Corsair record from Guadalcanal to V-J Day showed: 2,140 enemy planes destroyed in air combat, with a loss of 189 Corsairs in air combat - a victory ratio of 11.3 to 1. Total action sorties by Corsairs amounted to 64,051.

#### **Targets of sorties**

Enemy airfields 10,210



Other military targets 32,770

Land transportation 2,818

Harbor areas 2,095

Unknown land targets 2,177

Armored warships 263

Unarmored warships 245

Merchantmen (over 500 tons) 799

Merchantmen (under 500 tons) 3,172

Ships (type unknown) 23

### **Corsair losses**

By combat 189

By enemy anti-aircraft) 349

Operation during action sorties 230

On other flights 692

On ship or on ground 164



### **F4U-1 Corsair - Production**

Vought's own production began slowly, partially due to the number of changes implemented before the program began: the cockpit was moved 3 feet aft to accommodate more fuel and the engine bay was redesigned to accommodate the up-dated R-2800-8 engine, providing 2,000 horsepower on take-off. The first production Corsair was flown June 25, 1942. The Navy accepted its first two production Corsairs in July 1942, with nine following in August. During 1943 the production rate saw a steady increase, exceeding 200 units by November 1943. The total monthly Corsair production rate peaked in May 1944 when the Navy accepted 254 F4U's (Vought), 220 FG's (Goodyear) and 122 F3A's (Brewster), for a total of 596 aircraft.



A very noticeable change was introduced in November 1942 when the fifth production aircraft was modified to raise the pilots' seat. This development brought about the frameless, clear-vision, "Bubble" canopy. This change became standard in all F4U's. Other design changes included a new, improved landing

gear oleo, a new tail-hook installation to prevent “skipping” on carrier landings, and a modified/redesigned tail hook.

In all, seven major changes were made to the F4U over a span of a year and a half. Each change necessitated considerable research, engineering and testing. One noticeable change was the addition of a small spoiler on the edge of the starboard wing to reduce the accelerated stalls and ensure stall warnings. The clipped wing version for use on the British carriers was designated the F4U-1A.



By the end of 1944, Chance Vought was turning out 300 Corsairs a month, or one complete airplane every 82 minutes. Vought built 2,814 of the F4U-1's.

### **Brewster Aircraft Production**

Brewster didn't build many airplanes, its Corsairs, designated as F3A-1, were duplicates of the F4U-1 series. Delivery lasted from June 1943 to July 1944 when the contract was canceled. Only 735 Brewster-built Corsairs were delivered.

### **Goodyear Aircraft Production**

Goodyear's version was designated FG-1. In 1943, Goodyear delivered 377 FG-1's. In 1944, Goodyear boosted the production rate six-fold to 2,108 aircraft. Another 1,521 FG-1's were accepted in the 8 months of hostilities during 1945 for a wartime total of 4,006 aircraft. This amounted to over one-third of all Corsairs produced during World War II. Many of these FG-1's were built with non-folding wings during the period before Corsairs were put aboard carriers, and these aircraft went to land-based Marine squadrons.

### **Other Versions Of The F4U-1 Produced During The War Years.**

The other versions produced during WWII were as follows:

**F4U-1C.** This version was equipped with four 20-mm M2 cannons and flash hiders to hide muzzle blast visibility. 200 were built. (1944)

**F4U-1D.** Equipped with the standard number of six 50-caliber machine guns, this version had twin pylons for bombs and external fuel tanks. 1,685 were built.(1944)

**XF4U-1WM.** Also known as the XF4U-1M, it was one F4U-1 converted by Vought to mount and test a P&W Wasp Major R-4360 engine with 3000 HP. It was successfully flown on Sept 12, 1943. This led to the Navy having Goodyear generate designs that led to the aircraft designated the F2G. The F2G was principally being developed as a high speed low altitude fighter to offset the growing Kamaikazi menace in the Pacific. The initial order was for 418 aircraft. Before the end of the war eight XF2G-1s, five F2G-1s and five F2G-2s were delivered but none saw action. All FG aircraft had fixed

wings except the F2G-2s. Five of the F2G-2 fighters, described as the most powerful single engine propeller driven fighter ever built, were declared surplus by the Navy in 1946. Three were purchased by Cook Cleland. Vought overhauled one of them for him. It went on to win the Thompson Trophy Race in 1947 and 1949. The other Corsairs were purchased and appeared around the country, highly modified, to participate in various high powered racing events.

### F4U Corsair - Operational Summary - Post WWII



When the war flared in Korea, the Corsairs were ready. Assigned primarily to the low altitude, fighter-bomber phase of the action, they were on familiar ground flying close air support missions in support of ground troops, a function they had helped pioneer in WW II.

Ground Marines in Korea quickly came to accept the Corsair as a standard weapon. Corsairs operated from both carriers and fixed bases in support of infantry. The F4U-5, F4U-5N, F4U-5P, and the F4U-5NL versions of the Corsair came available during the five short years between WW II and Korea. The AU-1, the attack version of the Corsair, which was developed during the Korean conflict based on the ground support lessons being learned, became available in 1952. The AU-1 joined six other models of the Corsair in the Korean fighting. All versions of the Corsair proved their worth in the hands of an outstanding group of Navy and Marine aviators.



The North Korean and Chinese enemy soon learned that the appearance of an aircraft with a distinctive bent wing configuration meant 50 caliber and 20 millimeter rounds, bombs, rockets and Napalm in their midst with devastating accuracy. They were also to learn that being in close proximity to American troops offered no protection because the American flyers operated at point blank range! The Marines could call in air strikes within 50 yards of their position, knowing that their aerial comrades in the rock steady F4U would deliver with pinpoint accuracy. The winterized version, (F4U-5NL's), performed well in the frigid winters and the night fighter version,

(F4U-5N's) hit enemy troops and convoys after dark.

Although most of the Corsairs in Korea were late-type models, with more horsepower and firepower than WW II versions, some of the planes seeing action were like their pilots, veterans of the last war. A number of Corsairs aboard the Essex and Bon Homme Richard in Korean waters fought at Okinawa and in Tokyo raids.

In the first 10 months of the Korean war Corsairs accounted for 82 percent of all close support missions flown by the Navy and Marines. Marine Fighter Squadron 323, flying WW II type cannon equipped F4U-4B's, in 1952, set an effective combat record of 1,160 effective sorties in one month. Ninety-one sorties were flown in one day, with 100 percent availability recorded for the Corsairs. More than 120 tons of ordnance were dropped on the enemy in one day.





A Corsair flown by Marine Capt. Jessie G. Folmar shot down one of the highly-touted, Russian-built MIG-15's in September of 1952. Jumped by five of the fast jets, Folmar sent one of the MIG's down in flames before his own plane was hit and he baled out to safety.

A number of factors contribute to the value of the Corsairs in the job they did in Korea.

- a. Ability to carry an exceptionally heavy bomb and rocket load for a fighter. Records show that the Corsairs have carried as much as 5,000 pounds to their targets.
- b. Ability to stay on target for extended periods. Endurance of the plane was such that it could cover infantry troops for a length of time impossible for jets, which consume tremendous amounts of fuel.
- c. Ability to take punishment.
- d. Operational availability, Corsairs established an outstanding record of being available for combat when needed. Some Squadrons in Korea averaged as high as 95% availability.

After the Korean conflict was over in 1953, the F4U was gradually phased out of active service and placed in use with the Navy Reserve units. By mid 1957, the Corsair was no longer in the US Navy; however the F4U-7 Corsair was still in active service with the French Navy.

The F4U-7 was the last of the Corsairs. The F4U-7 was manufactured specifically for the French and to their requirements. In 1952 the French Navy took delivery of 94 F4U-7's. The French were extremely proud of their new Corsairs as it was the first new fighter they had purchased in many years. It was badly needed as they had been engaged in a war with French Indo China, then a French colony now known as Viet Nam since 1946 and needed all the help they could acquire. While the French war effort was not successful, the mighty bent-wing bird served admirably and was considered the "star of the action."



The French were availed still another opportunity to exploit the Corsair when they joined the British against Egypt during the 1956 Suez incident. The venerable Corsair served the French for still another eight years of sterling service and is fondly remembered by those who were involved in their operation. One beautiful example of the F4U-7 still flies in England as part of the Duxford collection. Resplendent in French Navy markings, it is a star in numerous air shows performed each year.

Still another conflict was to provide the F4U with it's most unusual opportunity for combat. This was in South America with aircraft furnished to El Salvador and Honduras in 1951-1961, When war erupted between the two countries, it was Corsair against Corsair. Fortunately, the war was short lived but not before some Corsairs were shot down in aerial combat.

The most recent duty for the Corsair was simulated combat during the filming of the popular series Blacksheep Squadron which starred Robert Conrad. The film told the story of Pappy Boyington's

VMF-214, and how they became the scourge of the Pacific as they methodically destroyed large numbers of Japanese aircraft with little loss to themselves.

To this day, the "Hog," as it was affectionately called, is still a favorite, whether seen as a static display or in an exciting air show. Residents of the Dallas-Ft Worth area are often treated to the sight of the Confederate Air Force F4U flown regularly by the company's former Chairman of the Board and CEO, Paul Thayer or former Chief Test Pilot, John Conrad.

