

Vought Corsair

Vought Corsair I, JT145/5A of N° 1835 Squadron, FAA, Brunswick Maine, September 1944. Extra Dark Sea Grey/Dark Slate Grey/Sky, with 'B' type upper wing, 'C' type underside and 'C1' fuselage roundels. a common feature is that most serials display a gap between the first two letters and the final three digits



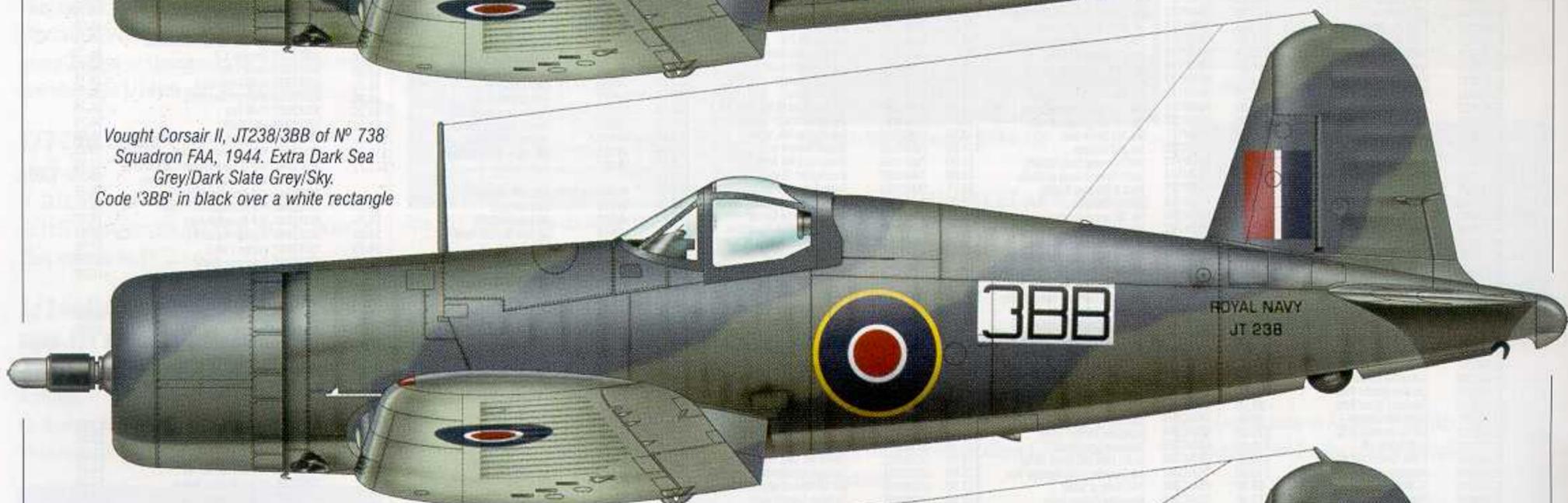
Vought Corsair I, JT162/6A of N° 1830 Squadron FAA, the first unit to be formed on this type at Quonset Point in June 1943. Extra Dark Sea Grey/Dark Slate Grey/Sky with 'B' type roundels above wings, 'C' under and 'C1' on fuselage. Note previous identity code painted over under '6A'



Vought Corsair I, JT158/9L of N° 1834 Squadron FAA, Quonset Point, July 1943. Extra Dark Sea Grey/Dark Slate Grey/Sky. While having the standard camouflage pattern, the two top colours appear to have been switched around



Vought Corsair II, JT238/3BB of N° 738 Squadron FAA, 1944. Extra Dark Sea Grey/Dark Slate Grey/Sky. Code '3BB' in black over a white rectangle



Vought Corsair III, JS853/E-3S of N° 731 Squadron, FAA, East Haven, 1945. Extra Dark Sea Grey/Dark Slate Grey/Sky; codes and spinner are also Sky



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Vought Corsair III, JS636/Y2F of N° 759 Squadron FAA, flown by S/Lt Parker at Yeovilton, September 1945. Extra Dark Sea Grey/Dark Slate Grey/Sky; codes are yellow and standard 'B' type roundels above wings. Area underneath '2F' of the code appears to have been retouched



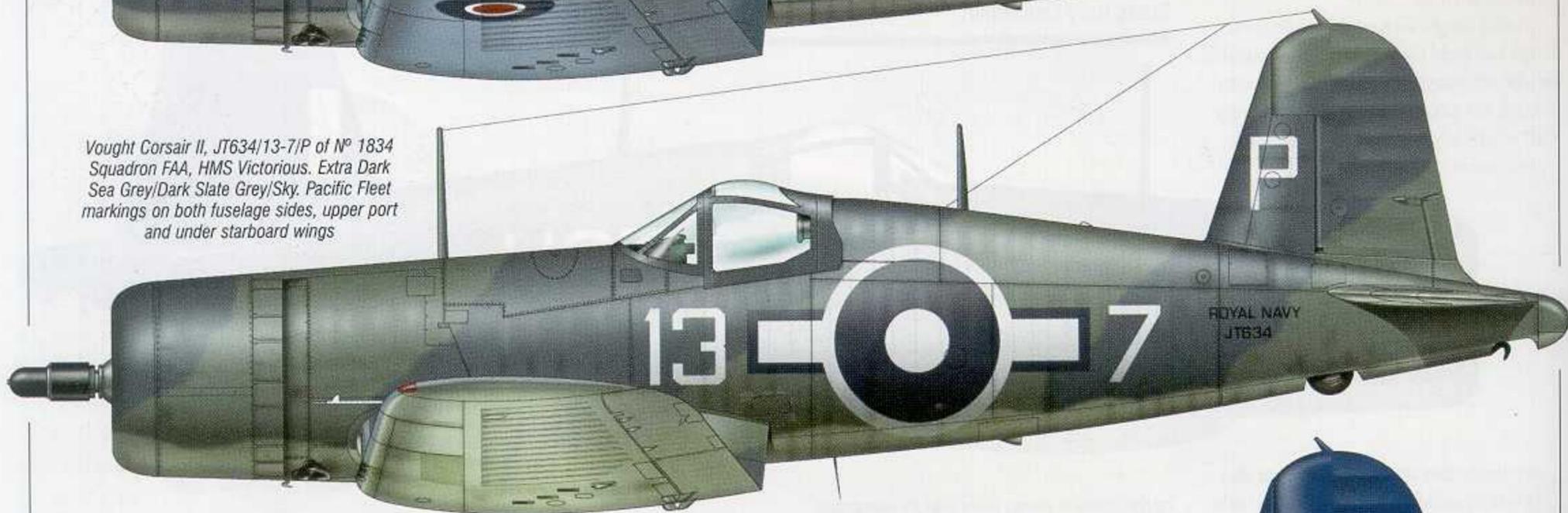
Vought Corsair II, JT260/P54 of N° 757 Squadron FAA, embarked on HMS Unicorn, June 1944. Extra Dark Sea Grey/Dark Slate Grey/Sky; camouflage colours are extremely faded and weathered. Blue/White roundel in six positions; Blue/White fin flash. Note remnants of overpainted C1 roundel on fuselage



Vought Corsair III, JS479/Q-BH2 of N° 718 Squadron FAA, Ballyhalbert, 1945. Typical USN finish of Sea Blue, Intermediate Blue and Insignia White (all Non-Specular). While undersides were White, the folding outer sections of the wing were Intermediate Blue. Yellow codes aft of the roundel over a patch of medium blue



Vought Corsair II, JT634/13-7/P of N° 1834 Squadron FAA, HMS Victorious. Extra Dark Sea Grey/Dark Slate Grey/Sky. Pacific Fleet markings on both fuselage sides, upper port and under starboard wings



Vought Corsair IV, KD345/130/A of N° 1850 Squadron FAA, HMS Vengeance, August 1945. Pacific Fleet roundels on both fuselage sides, repeated on top of port wing and below starboard wing. '130' repeated on front undercarriage door, also in white. Note blown frameless canopy



Vought Corsair

Vought Corsair IV, KD681/U7F of N° 1846, HMS Colossus, 1945. Sea Blue Gloss overall with small SEAC markings in six positions. Blown frameless canopy



Vought Corsair IV, KD206/R6S of N° 1851 Squadron FAA, HMS Venerable seen at Hal Far, Malta, in April 1945. Sea Blue Gloss overall, with 'C' roundels in six positions

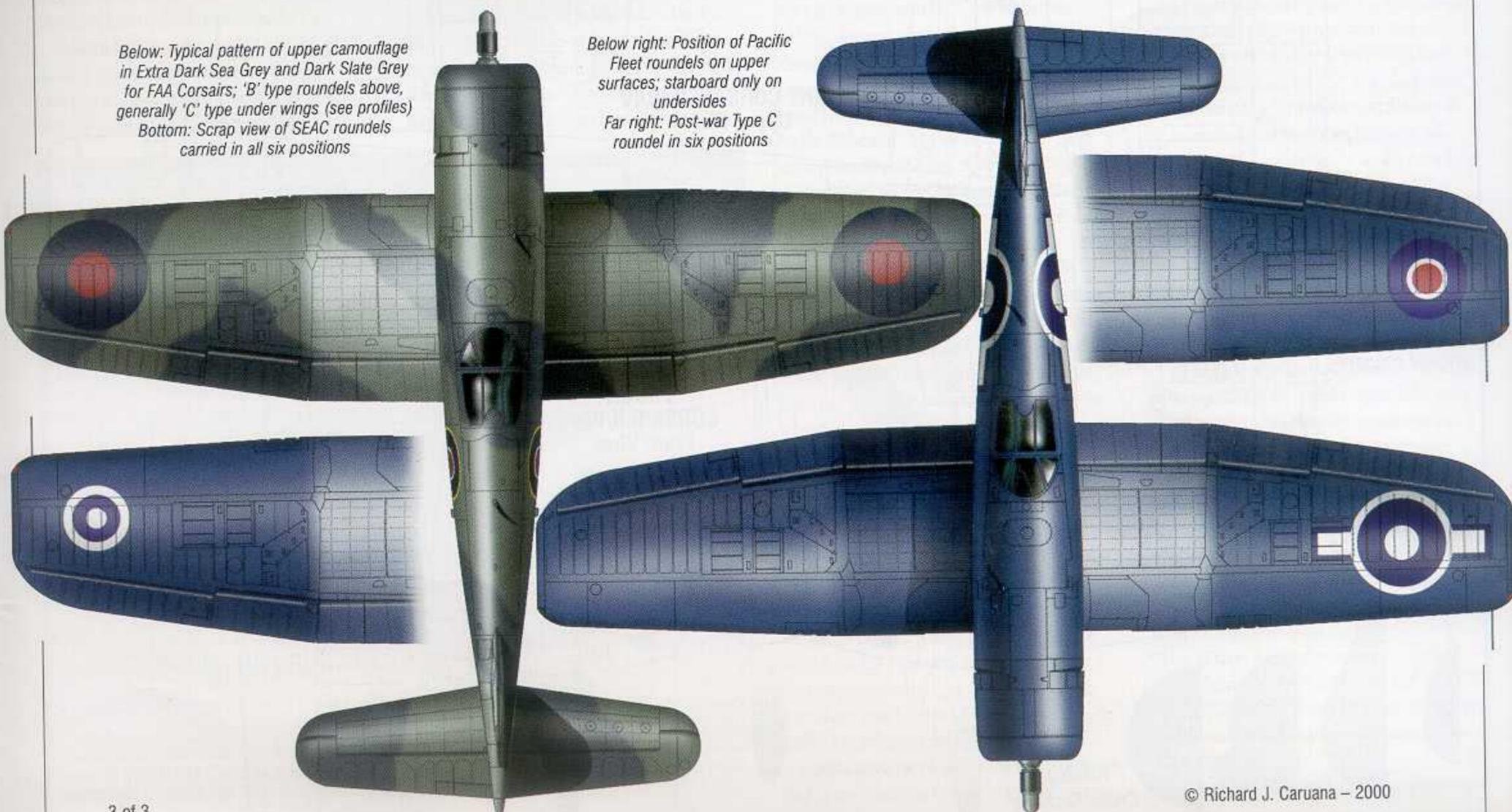


Vought Corsair IV, KD 748/4VII of N° 1853 Squadron, 1945. Sea Blue Gloss overall with 'C' type roundels in six positions



*Below: Typical pattern of upper camouflage in Extra Dark Sea Grey and Dark Slate Grey for FAA Corsairs; 'B' type roundels above, generally 'C' type under wings (see profiles)
Bottom: Scrap view of SEAC roundels carried in all six positions*

*Below right: Position of Pacific Fleet roundels on upper surfaces; starboard only on undersides
Far right: Post-war Type C roundel in six positions*





Vought Corsair IV, KD431/E2-M of the Fleet Air Arm Collection (R.J. Caruana Archives)

Pacific Pirate

The birth of the 'Corsair' stemmed from a United States Navy (USN) contest announced in February 1938. Specifications requested a single-seat seaborne fighter of much higher performance than any of its contemporaries, especially in service ceiling and speed. Armament was to consist of a pair of .3in machine guns in the fuselage with 500 rounds per gun (rpg), and another pair in the wings with 200 rpg which could be exchanged for Madsen 23mm cannon. An unusual request was for internal bomb cells for a total of 167lb.

Chance Vought took on the challenge to design and build the fastest machine possible and the company's proposals were presented in April. The aircraft was designed around a Pratt & Whitney R-1830 Twin Wasp which represented one of the most powerful

The Vought Corsair in Fleet Air Arm Service

Nicknamed 'The Bentwing Bird' and 'Whispering Death', the Chance Vought Corsair is definitely among the very best naval fighters produced during World War II. The Fleet Air Arm acquired hundreds of examples for its campaign in the Pacific Ocean, where it became its standard fighter equipment for many years. Richard J. Caruana takes a close look at the exploits of this warbird in service with the Royal Navy, a story often neglected, being overshadowed by the highly publicised successes of its United States Navy counterpart.



First prototype of the Corsair, the XF4U-1, during one of its initial flights. Note the original cockpit position, which later was moved back to make way for fuselage fuel tankage (Vought)



Vought Corsair II, JT410/T8H of N° 1836 Squadron, HMS Victorious, 1945. FAA fighter aces are a rarity, and this machine was flown by Canadian pilot Lt. D.J. Sheppard (RCNVR), on which he scored four of his kills, the fifth kill being achieved in a Corsair IV, coded 13-6 © Richard J. Caruana - 2000

power plants then available. However it also proposed a parallel design which could make use of the Pratt & Whitney XR-2800-2 Double Wasp, the most powerful engine envisaged for future production.

These proposals, designated V-166A and V-166B respectively, were the most impressive to emerge from the Navy contest and in June 1938, Vought received approval for the design and construction of a prototype under the designation of XF4U-1. A full-size mock-up completed in February 1939 for inspection, revealed for the first time the characteristic gull-wing design which was to become such a unique recognition feature. This kinked wing was an ideal solution for the design problems posed

by the massive power plant and its enormous propeller. Undercarriage length and ground angle were kept to a minimum.

The prototype, fitted with the Double Wasp, flew for the first time on March 29, 1940 piloted by Lyman A. Bullard. A speed of 405mph (considered sensational for its time) made it the first American fighter to surpass the 400mph mark. Although the Navy knew it had a winner in its hands, the aircraft's entry into production was by no means straightforward. A series of modifications and additions were asked of an aircraft which already presented a considerable engineering challenge for mass production. All armament was moved to the wing which meant that the

wing centre-section fuel cell had to be moved to the fuselage. Thus the cockpit was moved back some three feet, to a position from which the pilot's view forward was practically blocked by the massive wings while manoeuvring on the ground. Armour plating amounting to a total of 170lb was also added, including a 5mm laminated sheet windscreen front, and heavy aluminium plate protection for the fuel tanks.

On June 30 1941, Chance Vought received a contract for an initial production batch, the first of which flew for the first time on June 25 1942, obtaining a top speed of 415 mph. Carrier trials about USS

Sanagamon were performed three months later by the seventh production example, when a number of problems which considerably delayed the Corsair's entry into carrier service were exposed. Modifications were so extensive that a separate unit was set up to convert aircraft coming off the Stratford production line to combat standard. This enabled VMF-124 to be the first Corsair-equipped unit when twelve 'combat-ready' machines arrived at Henderson Field (Guadalcanal) on February 12, 1943. Trials permitting full fleet service, however, were only concluded by VF-301 in April 1944.

Specification

Corsair II

Type: Shipboard single-seat fighter

Manufacturer: Chance Vought

Powerplant: One Pratt & Whitney R-2800-8 Double Wasp, 18-cylinder air-cooled radial rated at 2,000hp at 2,700rpm for take-off, 1,675hp at 2,550rpm military rating, driving a three-bladed Hamilton Standard constant speed propeller

Fuel: 237 USgal (897lt) in fuselage tank. Additionally 62 USgal (235lt) in each of two integral wing leading edge tanks on Corsair I and early Corsair II; 175 USgal (622lt) external centreline drop tank or two 137 Imp gal (623lt) underwing tanks

Performance: Max speed - 320mph (616km/h) at sea level; 392mph (631km/h) at 24,000' (7 315m); range - 1,070 miles (1 722km) cruising at 177mph; service ceiling - 37,100' (11 310m)

Dimensions: Span (open) - 40' 11.75" (12.49m); span (folded) - 17' 0.58" (5.20m); span (clipped) - 39' 9.6" (12.13m); length - 32' 9.5" (9.99m); height - 15' 0.25" (4.58m); wing area - 314 sq ft (29.17m²)

Weights: Empty - 8,873lb (4 025kg); loaded - 11,878lb (5 388kg); max loaded - 13,846lb (6 280kg)

Armament: Six 0.5in (12.7mm) Colt Browning M-2 machine guns with 400 rpg on inboard pairs and 375rpg on outer pair; two 1,000lb (453kg) bombs



A Corsair II creates vortices with its prop wash on its take-off run. This view is a rare opportunity to study the upper surface camouflage pattern, and the areas of weathering and grime (R.J. Caruana Archives)

approved for fleet use nearly a year before the USN. Production tempo of the F4U-1 had reached considerable levels not only by the parent company, but also by Brewster and Goodyear. 95 F4U-1s (serialised JT100-194), fitted with the original 'birdcage' cockpit canopy, so much disliked by USN pilots, could therefore be supplied to the RN, these being designated Corsair I in FAA service. In order to avoid duplication and delays in training and formation of operational units, such operations were performed at either Quonset Point or Brunswick Maine, in North America. Rather than complicate matters by transferring existing FAA units for conversion, Corsair squadrons were formed as new units starting with N° 1830 Squadron at Quonset on June 1, 1943. Three more units were formed by the end of the following month, these being N° 1831, 1833 and 1834 Squadrons; N° 1835 and 1836 were formed in August, N° 1837 in September and N° 1837 in October. Eventually 19 squadrons were to be equipped with the bentwing fighter by 1945.

The second version to be acquired by the FAA was the Corsair II, equivalent to the F4U-1A on which a bubble-canopy replaced the earlier framed contraption, allowing the pilot's seat to be raised thus affording an improved forward view. This version introduced

wingtips clipped by 9 inches each to permit storage below deck on RN carriers. The first batch of 370 were serialised JT195-564, and were followed by a second batch of F4U-1Ds (still known as Corsair II in FAA service) which totalled 140 examples (JT565-704). The Corsair III consisted of 430 Brewster-built F3A-1s (JS469-888, JT963-972). A final supply came from Goodyear, whose 957 FG-1s became Corsair IVs. The latter versions are easily identified by their serial block letters which start with 'K' (KD161-KE117). A further batch on order (KE310-429) were cancelled with the cessation of hostilities.

Into Action

FAA Corsairs saw their European debut on April 3, 1944. Aircraft from N° 1834 Squadron embarked on HMS Victorious provided part of the fighter cover for Fairey Barracudas attacking the Tirpiz at Kaafjord, Northern Norway (SAMI Vol.5/5, May 1999). Other Corsair IIs from 1841 and 1842 (6th Naval Fighter Wing, HMS Formidable) flew escort missions during attacks against Tirpiz during July and August, with the latter squadron suffering several losses during these sorties. Meanwhile, N° 1830 and 1833 Squadrons formed part of the 15th Naval Fighter Wing on board HMS Illustrious which sailed for the Pacific. In March 1944 these units flew their first sweeps over the Bay of Bengal, performing their first operational sorties on April 19, dropping 250kg bombs against shore and shipping targets at Sabang.

While most USN Corsairs were mostly confined to land bases, the FAA continued to operate its aircraft from all kinds of carriers with very effective results, especially in the Pacific Theatre. Though the aircraft's landing vices had been somewhat tamed through the introduction of a number of modifications, its tendency to bounce on hitting the deck persisted, sometimes with disastrous consequences, especially when an aircraft ended over the barrier into the deck park!

By the end of 1944, Corsairs from several squadrons were hitting targets hard in Sumatra and the Sakishima Gunto group of islands in the East China Seas as part of the British Pacific Fleet, where they had to face a new, unprecedented type of warfare: Kamikaze attacks. HMS Illustrious was to suffer a near miss, forcing it to retire to Australia on April 14. While the war in Europe had come to an end in May 1945, Corsairs in

Royal Navy Interest

With the intensification of the war at sea after the mild, initial skirmishes the Royal Navy (RN) found itself without a major fighter aircraft on its inventory. Initial Lend-Lease supplies consisted of Martlets Mk I (later renamed Wildcat), and as from August 1940 these were being assembled by Scottish Aviation at Prestwick. A batch of some 70 examples was followed by Martlets Mk II (with folding wings), most of which were immediately transferred to India. This aircraft, however, was only a stop-gap measure, as something 'beefier' was required to take over the duties rendered by the ageing Sea-Hurricane. The types on offer from across the Atlantic were mainly two - the Hellcat and Corsair - and both were procured.

It would appear that the RN needed all the fighters it could lay its hands on, for the Corsair's shipboard shortcomings were literally brushed aside, the type being



Corsair IIs from N 738 Squadron showing a variety of coding styles. The closest aircraft is JT238, which is reproduced on sheet 1 of the colour art (R.J. Caruana Archives)

Colours

FS595 Colour Equivalents

FAA:	
Sky Grey	36463
Extra Dark Sea Grey	36118
Dark Sea Grey	36173
Dark Slate Grey	34096
Light Slate Grey	34159
Ident Yellow	33538
Ident Red (Bright)	21105
Ident Blue (Bright)	25056
Ident Red (Dull)	30109
Ident Blue (Dull)	35044
Medium Sea Grey	36270
Sky	34424
Grey-Green Primer	34226/34227
Ident White	37778

Colours of USN Origin:

Non Specular Sea Blue	35042
Intermediate Blue	35164
Underside White	37778
Sea Blue Gloss	15042

the Pacific were fighting on, some units becoming part of the 1st Carrier Air Group (CAG) performing operational sorties against Toyko just before the Japanese surrender.

Corsair pilot Lt Robert Hampton 'Hammy' Gray, a Canadian, was to earn a posthumous Victoria Cross (VC). He had trained at Yeovilton in 1941 and by August 1945 had become Senior Pilot with N° 1841 Squadron flying from HMS Formidable. On the day of the second nuclear attack on Japanese soil, August 9 1945, he took off for a sweep over the Japanese coast where he spotted a small flotilla of ships at Onagawa Wan. Despite meeting intense flak, he bombed an escort ship (the Amakusa) before his blazing Corsair plunged into the sea. His VC was only the second awarded to an Allied fighter pilot during the Second World War.

As from September 1945, most of the '1800' range squadrons were disbanded; some units - such as N° 1853 - flew the Corsair for less than five months before their aircraft were handed over to 'older' established squadrons in the '700' range (with the exception of N° 885 which received some Corsair IVs) and with which they continued to operate up to 1946-47. Lend-lease terms had stipulated the eventual return of all aircraft to the US; however, like most naval aircraft of US origin, Corsairs were dumped overboard from the stern of carriers under steam, a most indecorous end to an aircraft which had carved such a unique niche in the Pacific air war.

Richard J. Caruana

VOUGHT CORSAIR I
Port Profile

CHANCE VOUGHT *Corsair*

This Corsair IV version shown with the frameless canopy

VOUGHT CORSAIR IV
Port Profile

VOUGHT CORSAIR II/III
Port Profile

A

B

C

D

U/c shown in fully loaded position

VOUGHT CORSAIR II/III/IV
Inverted Plan

shown shaded

DRAWINGS BY
RICHARD J. CARUANA
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VOUGHT CORSAIR II/III/IV
Upper Plan

Note clipped wing (original shape)

These intakes seen on some RN Corsairs

VOUGHT CORSAIR II/III/IV
Front View

0 metres 1 2
0 feet 3 6
Scale: 1/72

Wing in folded position shown shaded

Fuselage
Cross-Sections

