THE HAWKER SEA FURY

Though conceived during the final stages of the Second World War, the Sea Fury – like its stable-mate the Tempest – arrived too late to take an active part in the conflict. This second thoroughbred from the Hawker stable to carry the name 'Fury' was to mark the epitome of an era. While the first Fury marked the height of perfection in biplane fighters, the Sea Fury brought to an end the long line of piston-engined fighters in brilliant style.

BY RICHARD J. CARUANA

The Royal Navy (RN) had fought that war mostly on 'borrowed' equipment, finding itself at a distinct disadvantage over its counterpart across the Atlantic. This situation presented itself most dramatically especially when it was committed to a Pacific war in defence of the British Empire's outposts in that region. Japan's fighter force proved to be far superior to the 'poor copies' that many were made to believe before the war, as the United States Navy (USN) learnt at a high cost. Sea Hurricanes and Seafires were certainly no match to the light and highly manoeuvrable Japanese aircraft. Not all American equipment, which for a certain period formed an important part of the RN's inventory, could counter the threat.

Turning to the British aircraft industry, the Admiralty found that the only possible contender would be a lightened version of the Tempest, then undergoing a troubled stage in its development due to a series of teething problems with its Centaurus engine. Moreover, the RN was convinced that a 'common' fighter design for the Royal Air Force (RAF) and Navy to be used in the Pacific Theatre would certainly presented a number of advantages; commonality of spares, servicing equipment and trained technicians would have certainly eased operational pressures in an area so far away from home.

Thus, Sydney Camm proposed a Centaurus XII-powered aircraft based on the Tempest II, which would cover the needs of both services. Design details were listed in Specifications F.2/43 and N.7/43 issued in January and February 1943 respectively (the 'F' specification referring to the RAF version while the 'N' refers to the RN's). Within a short period of time, the programme began to assume gigantic proportions, with the planning of heavy mass production of the new fighters, which also involved Boulton-Paul in the construction and/or modification to naval standard of considerable numbers of aircraft.

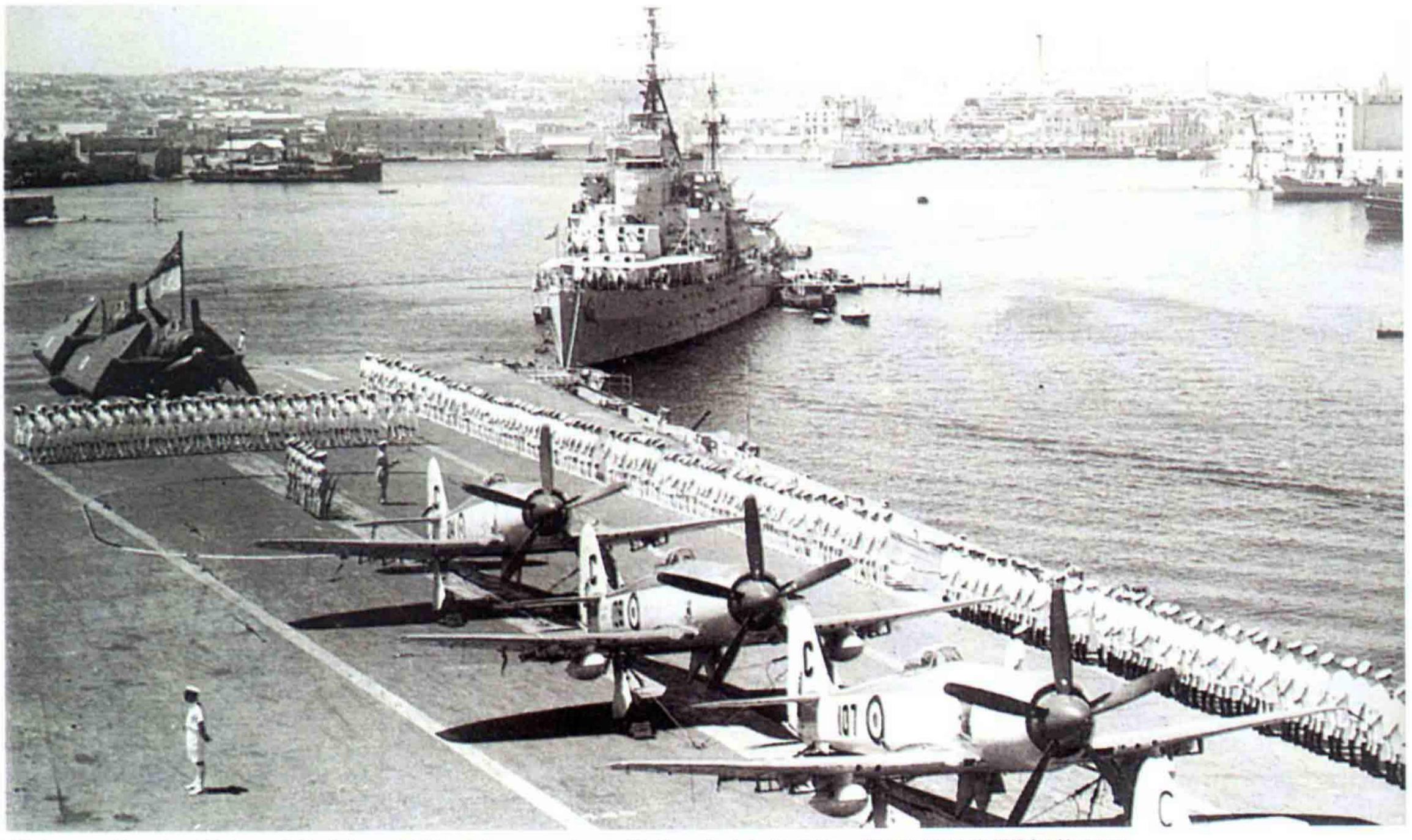
Six prototypes were ordered in June 1943 to be built in three pairs, each pair powered by a Centaurus XII, Centaurus XXII and the Rolls Royce Griffon (the latter as a backup in case the Centaurus programme failed). The naval specification was revised close to the end of that year and re-issued as N.22/43 to include full naval equipment.

DEVELOPMENT

Immediately P. Lucas flew the prototype for the first time on 1 September 1944 by, it became evident that this was not going to be an easy beast to tame. Problems with the Centaurus engine persisted and the RAF standard prototype (NX798) suffered a wheels-up landing later in the year due to engine failure. Next to take to the air was LA610 on 27 November, this being the Griffon-engined version. Though it was to become one of the fastest piston-powered aircraft in British aviation history (re-engined with the Napier Sabre VII), its maintenance was considered to be too complicated for service use.

By that time it was also becoming very clear that the war in Europe would be over in a matter of months; in the Pacific, US forces had also started to reverse the fortunes of war, as it committed men and machines in ever greater numbers to that theatre. Another important aspect that both the military and aviation industry had to consider was the advent of the jet turbine engine; little doubt was left that this revolutionary means of propulsion was where future development lied. Hawker's project, therefore suffered a severe cutback of orders. All 200 examples that had just been ordered by the RAF were cancelled, while the RN was only allowed to retain half that number.

The first 'true' Sea Fury (SR661) performed its maiden flight on 21 February 1945. Though fitted with an arrestor hook, it lacked folding wings; Centaurus



HMS Centaur at Malta's Grand Harbour on Friday, 6 August, 1954. Sea Furies are ranged on the flight line with a bair of Avengers at the end of the deck. HMS Gambia astern



The ill-fated TF956, carrying full Korean markings, returning from a display at Greenham Common International Air Tatoo, July 1973

stoppages in the air (and even on the ground during the take-off run) continued to do the test programme. Victory in Europe (VE) Day came and passed before the second naval prototype (SR666) took to the air on 12 October of the same year. This aircraft was powered by a Centaurus XV driving a five-bladed Rotol propeller and carried full naval equipment. The following year it was this second prototype that was used for a series of tests on board HMS Victorious during which crews on board the carrier witnessed some hair-raising episodes!

By that time, the third prototype (VB857) had been built fitted with a Centaurus XXII, the engine that finally cured all problems encountered by all the previous versions and was to become a well-loved and reliable engine. Just before production went into full swing, Hawker built an experimental Fury, powered by the Sabre VII. Carrying serial VP207, this aircraft was aimed at a possible post-war export marked, which however did not materialise.

Better luck greeted NX802, which was in fact one of the RAF's prototypes powered by the Centaurus XVIII. When the RAF order was cancelled, Hawkers bought back this prototype to be used as a development hack until it was eventually sold to Pakistan (as described further on).

SERVICE USE

Notwithstanding post-war economies, the original order for 100 examples for the RN was considerably increased. This was mainly due to the fact that a real navy jet fighter had still not materialised, while another war was looming



Peter A Taylor of No. 1833 NAS emerges from his Sea Fury FB.II, on return from live rocket firing to Hal Far, September 1954

on the horizon. By the time a conflict erupted in Korea, orders for the Sea Fury had reached the 570 mark for the RN alone, while a further 100 examples were on order for Australia and Canada.

Service Clearance Trials were successfully completed in July 1947 and deliveries of the new fighter started in August of that year, as No.807 Naval Air Squadron (NAS) replaced its Seafires XVIIs with the initial production model designated Sea Fury F Mk X. Other deliveries followed, to Nos.778, 802, 803 and 805 NAS. This massive dose of powerful equipment did not, however, relegate the Seafire, which, as the FR Mk 47 was a veritable match to the Sea Fury. So much so, that the latter's role was changed from that of fighter to ground attack, receiving the designation FB Mk II.

The new version began to equip British naval units in May 1948, starting with No.802 NAS at Eglington. Deliveries continued initially to shore stations, including Lee-on-Solent, Gosport, Culham, Culdrose, Abbotsinch, Donibristle, Anthorn and Streeton. The FB Mk II was to see extensive service with Nos.801, 803, 804, 805, 807 and 808 NAS, as names like HMS Ocean, Glory and Theseus became their homes for many months while at sea. These were known as the 1st, 17th and 21st Carrier Air Groups (CAG).

First unit to see action in Korea was No.807 NAS embarked on HMS Theseus in October 1950, from where the Sea Furies performed their designated duties most efficiently in the ground attack role over the following six months. No.802 NAS embarked on HMS Ocean and Nos.801 and 804 NAS on HMS Glory where next to arrive in the combat zone while Nos.805 and 808 Squadrons flew from the Australian carrier HMAS Sydney. No.802 squadron also chalked up the first victory over an enemy jet, when a Sea Fury piloted by Lt P. Carmichael shot down a MiG-15 on 9 August 1950, becoming the first naval pilot to earn such a credit. Back in the United Kingdom (UK) Sea Furies were also issued to squadrons of the Royal Navy Volunteer Reserve (RNVR), namely Nos.1831, 1833, 1834, 1835 and 1836 NAS.



Sea Fury FB.IIs of No.1833 Squadron, based at Bramcote, flying off Malta, in May 1954

EXPORTS AND TWO-SEAT VERSIONS

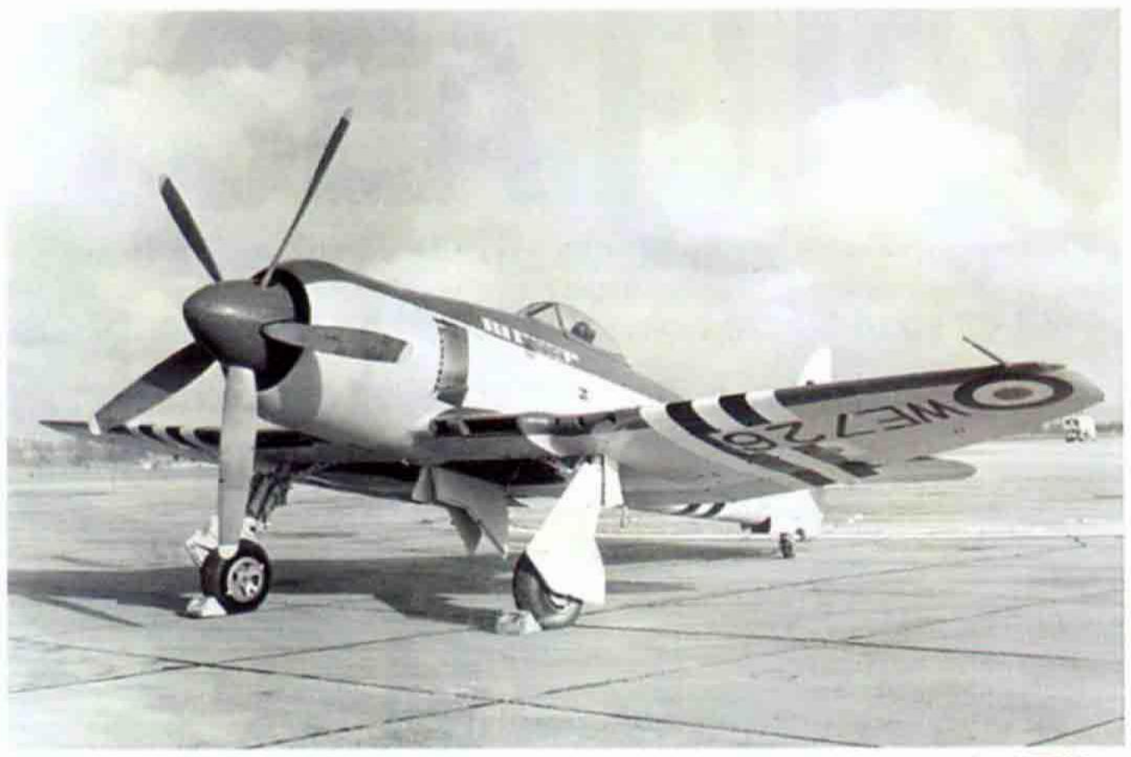
Two of the Fleet Air Arm (FAA) squadrons quoted above were, in actual fact, Royal Australian Navy (RAN) units. Nos.805 and 808 Squadrons RAN had formed in the UK in August 1948 and April 1950 respectively, later to be joined by No.850 in January 1953. The latter was the first to be disbanded, on 3 August 1954 at Nowra, while No.808 disbanded on 5 October of that same year. No.805 continued to fly the Sea Fury until 25 March 1958. Among the secondary units to use the type in RAN service was Nos.723, 724 and 725 mainly in the training role, communications and fleet requirements.

Similarly, Royal Canadian Navy (RCN) units within the Fleet Air Arm operated Sea Furies. Of the squadrons mentioned above, No.803 received its FB.IIs in August 1947 and embarked on board HMCS Warrior together with No.824 Squadron flying Fairey Fireflies, participating in operations of 19th CAG. As from September 1948, No.883 Squadron operated Sea Furies, within 18th CAG although in November it was transferred to 19th CAG embarked on HMSC Magnificent. No.883 was renumbered on 1 May 1951 as No.871, still equipped with ten Sea Fury FB.IIs and fell within 30th CAG, but not for long as in November of the following year it became VF-871 (when the RCN adopted American-style numbering for its units) and replaced the piston-engined fighters with McDonnell F2H-3 Banshees.

The first export success, however, came from the Netherlands, when Hawkers received an order for 22 Sea Fury FB.50s on 21 October 1946 as a result on the company's intensive sales campaign. The type was so →



Known as the 'Baghdad Fury, the Iraqi examples were de-navalised versions of the Sea Fury (Hawker Aircraft Ltd)



WJ231 now on static display at the Fleet Air Arm Museum, Yeovilton, was for a time painted as WE726 from HMS Ocean

"No.802 Squadron also chalked up the first victory over an enemy jet, when a Sea Fury piloted by Lt P. Carmichael shot down a MiG-15 on the 9th August 1950, becoming the first naval pilot to earn such a credit"

well-received by the Dutch Navy (Kon. Marine) that a further 25 examples were built under licence by Fokker between 1951 and 1952. After a working up period on the type at the Fighter Pilot Combat School at Valkenburg, No.860 Squadron was formed on 15 July 1950. This unit continued its training period on board British carriers, namely HMS Indomitable and HMS Illustrious over the next two years, unit it began to operate from the Dutch carrier HrMs Karle Doorman.

This was followed by export sales to Iraq for an order of 30 single-seat fighters and for two-seat trainers placed on 4 December 1946. It was at around this time that the RN too expressed interest in a two-seat trainer version of the Sea Fury. Iraq's request for such a trainer was probably spurred by the excellent reputation that Hawkers had gained with its two-seat dual-control Hurricane version built for Persia. Originally the T Mk 20, as the RN's version was designated, retained the front cockpit and had a second similar canopy added right behind it. Equipment usually fitted to the FB.II behind the pilot's seat was relocated to the wings, replacing the inboard pair of guns; the outboard pair of 20mm cannon was retained.

T Mk 20 prototype VX818, built from an airframe on order from Iraq, flew for the first time on 15 January 1948. Within the following couple of months the canopy arrangement was modified, the front and rear canopies being connected by a transparent 'tunnel'. This reduced considerably the instructor's field of vision from the rear cockpit; a periscope and mirror was therefore added above the central tunnel mounted on a pair of inverted 'V' struts. Following extensive tests at Boscombe Down, the prototype was transferred to the Empire Test Pilots School (ETPS), Farnborough, in March 1949. The Admiralty placed an order for 60 T.20, with the first production aircraft being delivered on 8 February 1950.

Back to the 'Baghdad' Fury, as the Iraqi version was usually referred to, did not feature any naval equipment such as folding wings and arrestor hook; in fact, the hook attachment fairing at the bottom of the rear fuselage was cleaned up and faired directly in line with the rudder. Delivery of this order was completed by March 1950, except for two of the two-seaters, one of which was retained by the Admiralty to become the prototype of the Sea Fury T.20 (as already described) while the other was sold to Pakistan. It is important to note that the Iraqi two-seaters retained the original, separate, canopies and were never modified to RN's standard.

Iraq requested a second batch of Furies (25 examples) on 21 July 1951 that, however, Hawkers could not meet due to its heavy production programme for the FAA. In May of the following year, the Admiralty relinquished ten FB.IIs from its own order to be passed on to Iraq, the balance being delivered during 1953. Finally, a request was also made for three ex-FAA T.20 two-seat trainers that were delivered with the final batch of single-seat fighters in 1953.

The other major export operator of the Fury was Pakistan initially with an order for 50 Mk.60s (L900-L949), delivered during 1950. Following the acquisition of one of the second prototype (NX802), a follow-up order was placed for 42 Fury Mk.60s and five T Mk 61 (the latter being the Pakistani designation for the two-seat trainer), all deliveries having been made by 1954.

Egypt received a total of 13 examples while Burma ordered 18, all coming from ex-FAA stocks. Cuba's Batista Government placed an order for 15 FB.IIs and a pair of T.20s in 1957 that were delivered at the time of Castro's revolution in 1958. During 1957 three ex-RN T.20s were acquired by Burma. Hawker rebuilt 15 ex-FAA T.20s for Deutsche Luftfahrt Beratungsdienst (DLB), a civilian operator performing target-towing duties for the Luftwaffe beginning in 1958. A single F Mk 50 was also acquired by DLB from the Netherlands in 1963. These scarlet-finished Furies continued to fly well into the 1970s, when they found willing civilian 'warbird' customers waiting to buy the surviving aircraft.



The FAAHF operated TF956 until it had to be abandoned off the coast of Scotland due to the failure of the undercarriage system. The flight manual said that on no account was a crash-landing with one oleo down to be attempted, so the pilot had no option but to bale out, as the leg would not retract

AND THEY STILL FLY

Single and two-seat Sea Furies survive in relatively larger numbers than contemporary propeller-driven fighters. No sooner had major operators began to retire the type from service that they were adapted, sometimes in highly modified forms, for air racing in the US. Others were painstakingly refurbished to perform in the airshow circuit.

Among the more popular Sea Furies seen at air displays is VR930, 110/O of the Fleet Air Arm's Historic Flight (FAAHF), which replaced the earlier TF956 that had for so many years thrilled crowds all over the UK. Unfortunately the latter was destroyed when the pilot, John Beattie, had to abandon the aircraft due to an undercarriage malfunction and it crashed into the sea off the Scottish coast. TF956 had been painted to represent a Sea Fur operating from HMS Theseus during the Korean War.

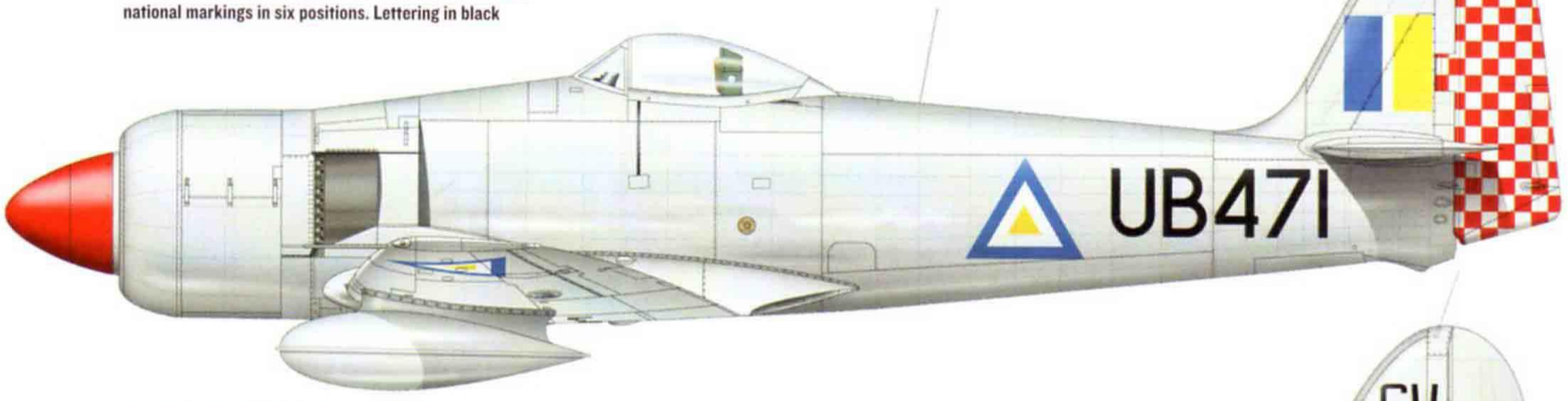
The Flight also operated a T.20, WG655/910/GN, which was written off in an accident on 14 July 1990. Remains from this aircraft went to complete WJ232 (ZK-SFR) which, being originally an Iraqi Fury, lacked folding wings and arrestor hook. The FAA Museum at Yeovilton houses another static exhibit, FB.II WJ231.

Those who have been lucky enough to see a Sea Fury in the air will confirm that it is a spirited performer, displaying its enormous power to full advantage whilst maintaining excellent handling qualities. It was, no doubt, the epitome of its genre, as witnessed by all those still flying at air races and air displays, which continue to bring to the front the aircraft's fighting spirit, still burning notwithstanding the passage of time. ■



Sea Fury FB Mk 60, L965, No.9 Squadron, Pakistan Air Force. Dark Earth/Mid Stone upper surfaces with Azure Blue undersides; red spinner, black serials. National markings in six positions (outlined in yellow); unit crest below windscreen

Sea Fury FB Mk II, UB-471, Burmese Air Force. Natural metal overall with red spinner and red/white checks on rudder; national markings in six positions. Lettering in black



Sea Fury T Mk 20, VX286, 294/CW, No.738 NAS, 1951. Silver overall with yellow bands around wings and rear fuselage; blue spinner. All lettering in black; roundels in six positions



Sea Fury TT Mk 20, D-CACU/ES3616, Deutsche Luftfahrt Beratungsdienst. Scarlet overall with all lettering in black; note fin flash bordered in white



Sea Fury T Mk 20, N924G/924, (ex-D-FAMI, D-CAMI, G-BCKH, N46690, N62147), Preserved in flying condition in the US (arrived October 1974), Dennis & Brian Sanders/Sanders Aircraft Technologies, California. Extra Dark Sea Grey upper surfaces with Sky underside; yellow spinner and bands around wings and fuselage. All lettering in black, with 'NAVY' repeated below the wings

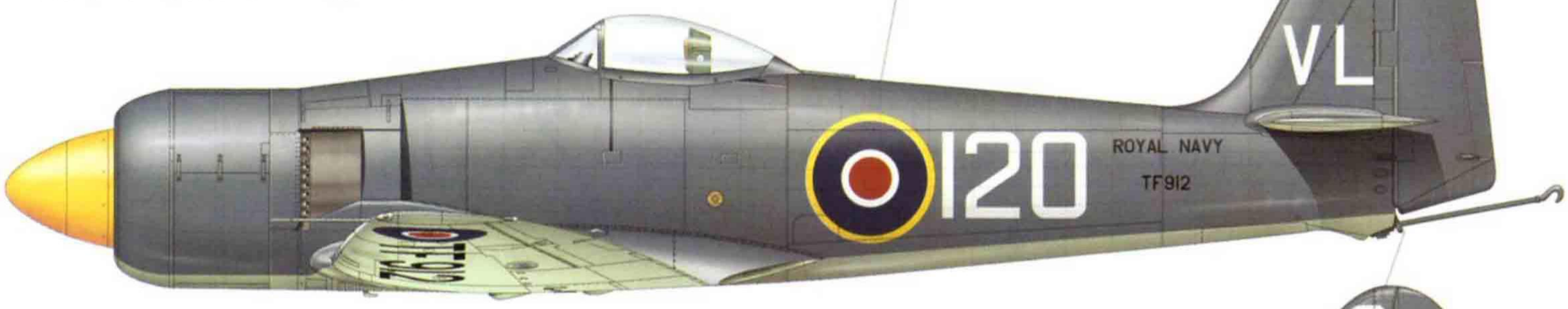


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Sea Fury F Mk X, TF952, 106/JR, No.805 Squadron RAN, Eglinton, 1948. Extra Dark Sea Grey upper surfaces with Sky undersides; white codes, black serials. 'C' type roundels in four wing positions; spinners are believed to have been red

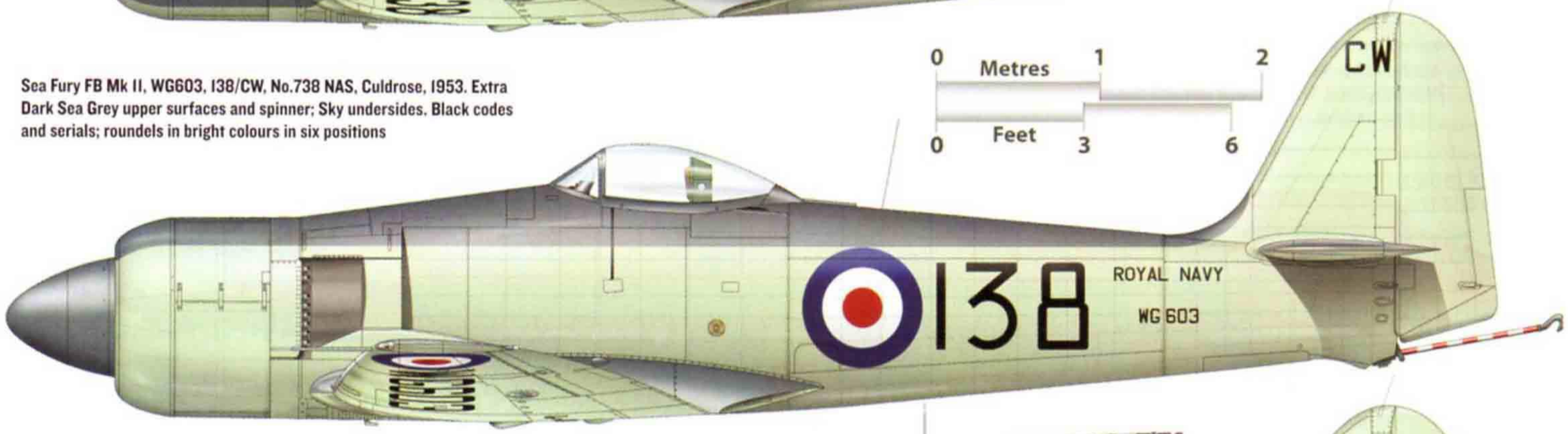


Sea Fury F Mk X, TF912, 120/VL, No.799 NAS, Yeovilton. Extra Dark Sea Grey upper surfaces with Sky undersides; white codes, black serials. Yellow spinner; 'C' type roundels in four wing positions



Sea Fury FB Mk II, VW238, 107/Q, No.802 NAS, HMS Vengeance, Cape Town (South Africa), January 1949. Extra Dark Sea Grey upper surfaces with Sky undersides; white codes, black serials. 'C' type roundels in four wing positions

Sea Fury FB Mk II, WG603, 138/CW, No.738 NAS, Culdrose, 1953. Extra Dark Sea Grey upper surfaces and spinner; Sky undersides. Black codes and serials; roundels in bright colours in six positions



Sea Fury FB Mk II, VR943, 105/R, No.801 Squadron NAS, HMS Glory, Korea, 1951. Extra Dark Sea Grey upper surfaces with Sky undersides; all lettering in black. Black/white bands around wings and rear fuselage; roundels in six positions

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Sea Fury FB Mk II, WZ632, 155, No.804 NAS, Hal Far (Malta), March 1953. Extra Dark Sea Grey upper surfaces with Sky undersides; black serials and codes. Red/white spinner wit Extra Dark Sea Grey rear plate; roundels in six positions. Unit crest on fin; '5' repeated in black on mainwheel covers



Below: Sea Fury FB Mk II, VX608, 098/FD, No.703 NAS, Ford, 1953. Extra Dark Sea Grey upper surfaces with Sky undersides; black spinner, serials and codes. Roundels in six positions

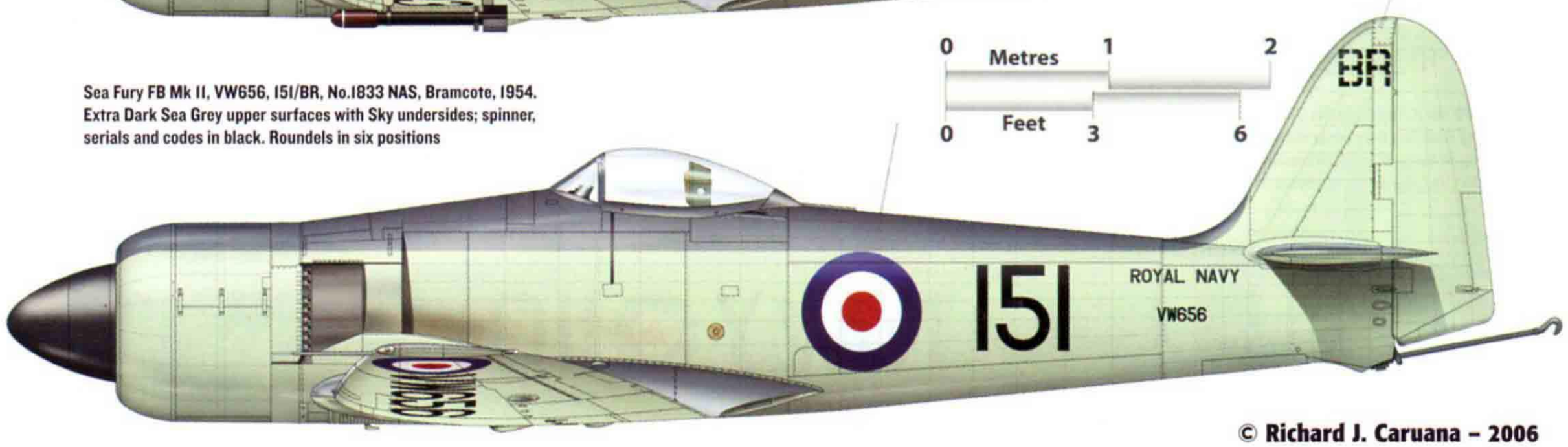
Above: Sea Fury FB Mk II, WG596, 144/T, No.898 NAS, HMS Theseus, 1953. Extra Dark Sea Grey upper surfaces and spinner with Sky undersides; black serials and codes. Black/white/black Home Waters exercise bands around rear fuselage and wings; roundels in six positions



Sea Fury FB Mk II, WE693, 106/C, No.810 NAS, HMS Centaur, 1954. Extra Dark Sea Grey upper surfaces and spinner, Sky undersides; black serials and codes. Roundels in six positions

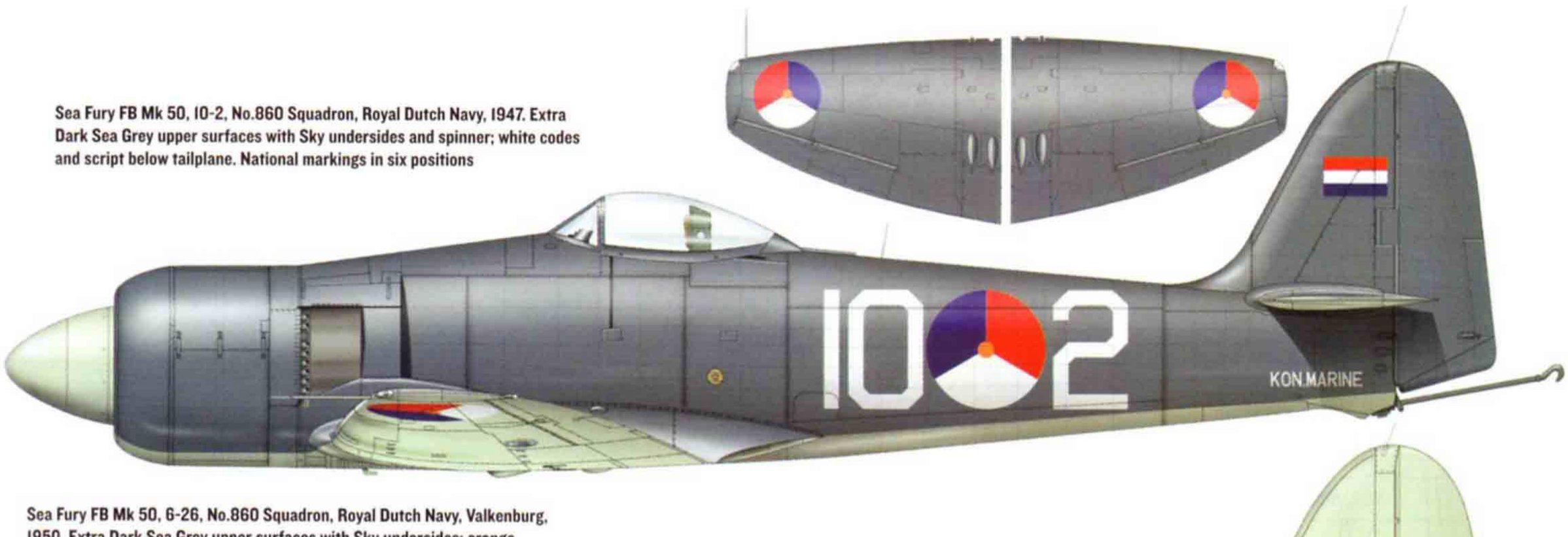


Sea Fury FB Mk II, VW656, 151/BR, No.1833 NAS, Bramcote, 1954. Extra Dark Sea Grey upper surfaces with Sky undersides; spinner, serials and codes in black. Roundels in six positions



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Sea Fury FB Mk 50, 10-2, No.860 Squadron, Royal Dutch Navy, 1947. Extra Dark Sea Grey upper surfaces with Sky undersides and spinner; white codes and script below tailplane. National markings in six positions



Sea Fury FB Mk 50, 6-26, No.860 Squadron, Royal Dutch Navy, Valkenburg, 1950. Extra Dark Sea Grey upper surfaces with Sky undersides; orange spinner with Sky rear plate. All lettering in black; national markings in six positions



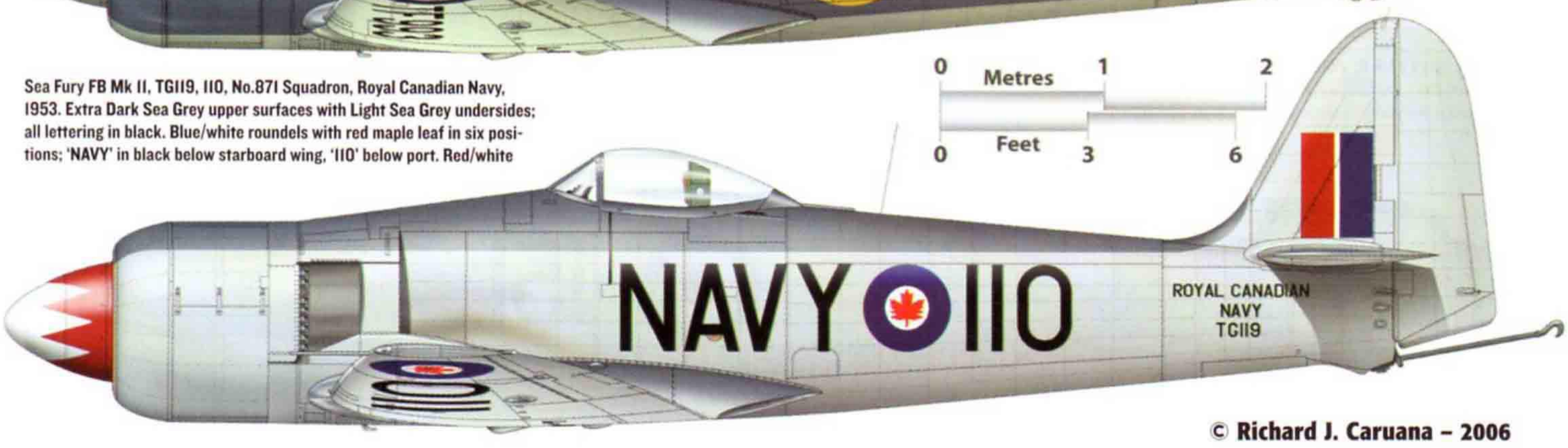
Sea Fury FB Mk II, 6-29/860, No.860 Squadron, Royal Dutch Navy, HrMs Karel Doorman. Extra Dark Sea Grey upper surfaces with Sky undersides; all lettering in black. Orange cowling and spinner; national markings in six positions



Sea Fury FB Mk II, TF993, BC•B, No.803 Squadron, Royal Canadian Navy, 1948. Extra Dark Sea Grey upper surfaces with Sky undersides and spinner; codes and serials in white, the latter repeated in black below wings. 'C' type roundels above wings (note all roundels carry a black maple leaf on the red sector)



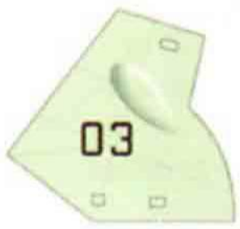
Sea Fury FB Mk II, TG119, 110, No.871 Squadron, Royal Canadian Navy, 1953. Extra Dark Sea Grey upper surfaces with Light Sea Grey undersides; all lettering in black. Blue/white roundels with red maple leaf in six positions; 'NAVY' in black below starboard wing, '110' below port. Red/white



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Sea Fury FB Mk II, WH589, 115/NW, No.805 Squadron, Royal Australian Navy (RAN), Bankstown, 1968. Oxford Blue overall with all lettering and spinner in white; national markings in six positions. Canopy frame unpainted

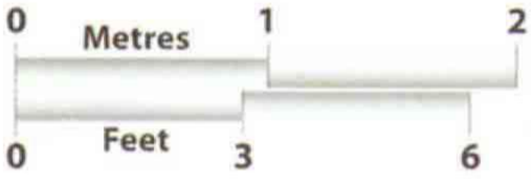




Sea Fury FB Mk II, WZ645, 103/K, No.805 Squadron Royal Australian Navy, HMAS Sydney. Extra Dark Sea Grey upper surfaces with Sky undersides; black lettering and red spinner. Aircraft written off in May 1955 after colliding with WZ642

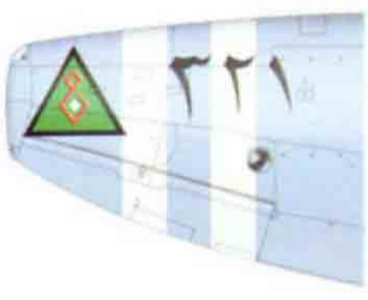


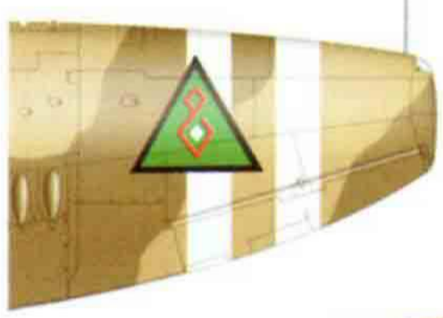
Sea Fury FB Mk II, WE674, 105/K, No.805 Squadron Royal Australian Navy, HMAS Sydney, Korea, 1951. Extra Dark Sea Grey upper surfaces with Sky undersides and spinner; black lettering. Black/white bands around wings and rear fuselage; roundels in six positions. Lt (P) Clarkson (DFM) killed in this aircraft on 5 November 1951 whilst attacking enemy transports in the Han river area

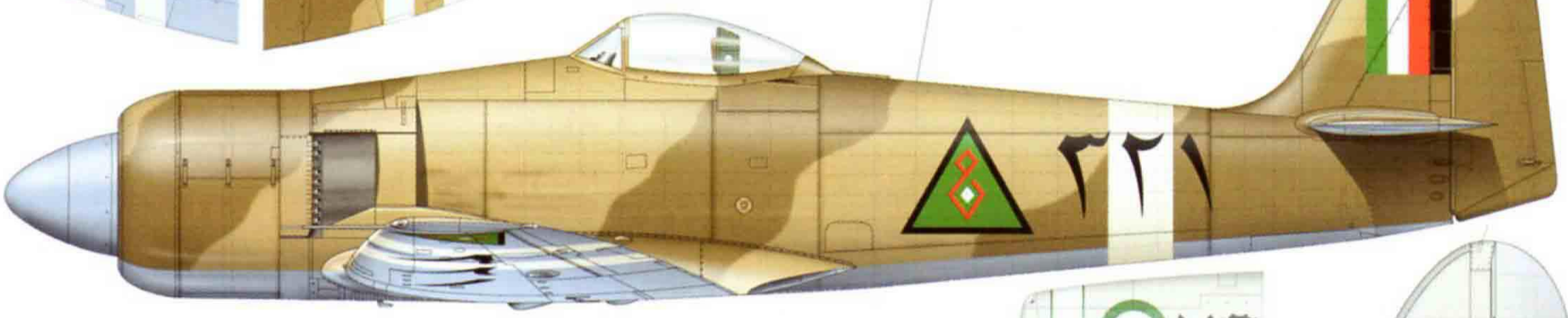




Fury, 321, Royal Iraqi Air Force. Dark Earth and Mid Stone upper surfaces with Azure Blue undersides and spinner; white bands around wings and rear fuselage. National markings in six positions; serials in black, repeated below wings







Sea Fury FB Mk II, 703, Royal Egyptian Air Force, 1960. Silver overall with white bands, edged in green, around wingtips (not overlapping onto ailerons) and rear fuselage; all lettering black. Roundels in six positions; serial in arabic script repeated below wings



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