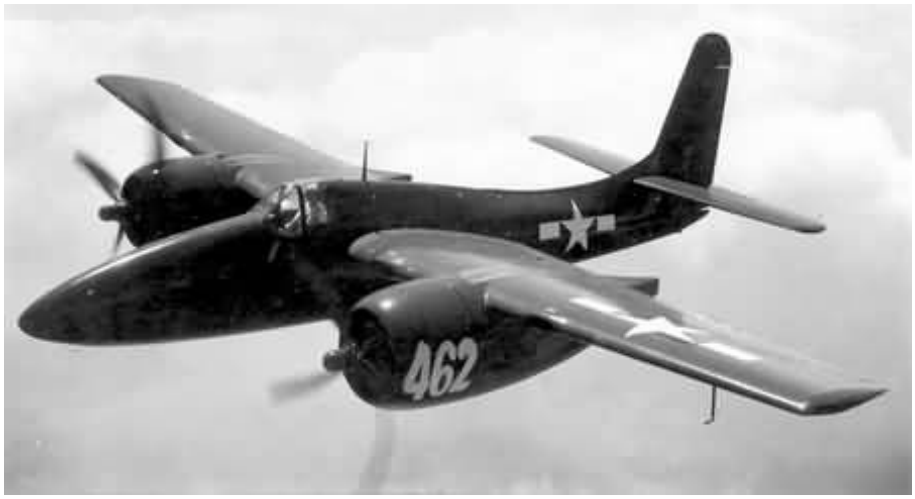
Grumman F7F-3

History: Grumman had experimented with a twin engine, single seat, monoplane fighter that led to the XF5F for the US Navy and the similar XP-50 for the US Army. Although neither version entered production the general concept proved very successful and encouraged Grumman to embark on Design 51, designated F7F by the Navy and P-65 by the Army. Concept development began around December 1940 and the US Navy ordered two prototypes in June 1941, but the US Army withdrew from the project in January 1942.

The F7F was the first twin engined fighter designed to enter service with the US Navy. It was too large and heavy to operate from existing carrier decks but designed for the next generation of Midway class carriers. Grumman's aim was to produce a fighter that could out-perform and out-gun all existing fighters, with an auxiliary ground attack facility. The prototype was delivered in October 1943 and made its first flight on 3 November. Tests continued into 1944 but it was involved in an accident on 1 May and did not fly again. However, the second prototype, that began flying on 2 March, continued the test program. The F7F proved to be one of the highest performing piston engined fighter with a top speed well over that of the US Navy's single-engined aircraft, 130 kmh (80 mph) faster than the F4U at sea level. The Nary test report commented that 'this airplane is the best medium-altitude fighter, Army, Navy or foreign, yet tested'. Before testing was completed the Navy had ordered 500 F7Fs from Grumman and the first F7F-1 was delivered on 29 April 1944.

Despite its exceptional performance, the F7F failed carrier trials because of poor directional stability on one engine, as well as a problem with the tail hook design. As a result the first F7Fs were issued to ground based US Marines units as night fighters equipped with a small radar set. The first 34 were delivered as single seat fighters but following aeroplanes were fitted with two seats and designated F7F-2N. The next F7F, the -3, was fitted with slightly more powerful engines, greater fuel capacity and enlarged tail surfaces to overcome the problems that had prevented the earlier version from gaining carrier qualification. However, during carrier trials a heavy landing caused wing failure so the F7F-3 also failed its trials and remained ground based. The final version of the F7F, the -4N, was rebuilt with additional strength and stability and did pass carrier trails. However, by then the end of the war had seen the majority of the production order cancelled and only 12 F7F-4Ns were built.



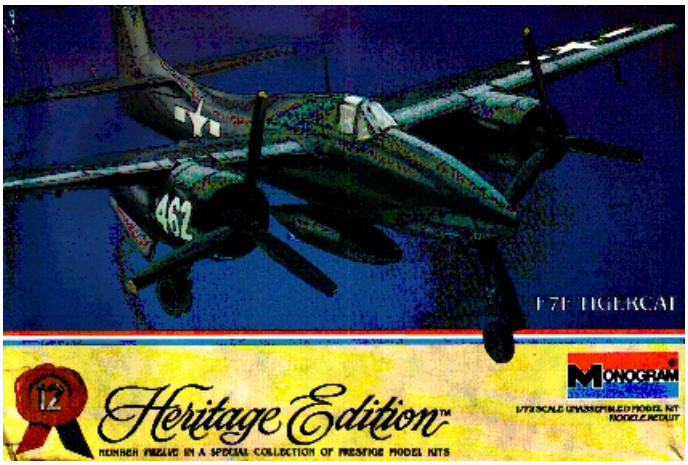
In all only 354 F7Fs were built. Like many aeroplanes developed during World War II it was never needed to demonstrate its full potential and the rapid evolution of the jet engine soon eclipsed its performance. In 1945 two F7Fs were evaluated by the Royal Navy, which rejected them in favour of the deHavilland Sea Hornet. The final F7Fs were delivered in November 1946 and they remained in service into the early 1950s. In the 1960s and 1970s a number were used

as water-bombers and twelve remain in existence today, six of them airworthy.

Data: *Engine* Pratt & Whitney R-280-34W Double Wasp radial piston engines of 1600kW (2100hp) each. *Wing span* 15.7m (51ft 6in). *Length* 13.8m (45ft 4in). *Maximum Take-off weight*: 11,670kg (25,720lb). *Maximum speed* 740km/h (460mph). *Range* 1931km (1200miles). *Armament* four 20mm cannon, four 12.7mm (0.5in) machine guns and 907kg (2000lb) of underwing weapons.

The kit: Monogram 1:72

What a magnificent looking aeroplane! It has everything an aeroplane should have; elegant lines, a sense of brutal power and, being US Navy, that wonderful late-war deep sea blue colour scheme. I've actually seen one in the metal too. I was wandering through a hangar at Duxford where some men were working on a large aeroplane and, when I stepped back to take it all in, it was a F7F. I just about had a heart attack and orgasm at the same time, and I stood there for a long time taking it all in. Unfortunately I'd forgotten to take my camera. The only thing better was when I was walking through the RAF Museum at Hendon when I saw a ..., but that's another story.



There was a period in the mid to late 1960s when Monogram produced some very simple but also very beautifully moulded 1/72 kits. Memorable among them were kits of the F7F and F8F that have nothing by way of unnecessary embellishments and the complexity of many modern kits, but also go together easily to make finely detailed models. There are no cockpit details and the undercarriage units are very simple but so finely moulded that they achieve the same effect that another kit might achieve with half a dozen parts. I have an Aoshima kit of the F7F and all I can say about it in comparison is 'yuck'. In the mid 1970s I made a model from the Monogram kit and lavished upon it all the skills I possessed at that time. It's not bad but by now it is showing its age and the varnish over the decals has yellowed something shocking, so it was time to make a new one.

Being a basically simple kit, there are almost no problems in putting it together. The only difficulty comes in putting enough weight in the nose to prevent the model from being a tail sitter and, while the kit provides a little clear plastic post for the tail to stop that happening, I preferred to take care of that problem the hard way. I fitted as much lead and epoxy putty into the nose as I could, using it to also shape the nose undercarriage bay and cockpit in the process. Even so, the result was still marginal so I fitted some more into the engine nacelles with the result that, although the completed model sits firmly on its nose wheel, a week of weight training is recommended before trying to pick it up.

Apart from being a magnificent colour scheme, the nice thing about the late-war deep sea blue scheme is that it was applied over the entire aeroplane, including the undercarriage doors and legs. No masking is necessary, just spray on a couple of coats and it's all done. Then came the difficult part. The decal sheet, being something like 40 years old, was in dreadful condition and totally unusable. The stars and bars are easily sorted out but the other markings on the F7F-3, all white and all very small, are virtually impossible to duplicate. I searched around for after-market sets but found nothing. I tried looking at decals sheets of tiny white lettering, but that proved to be just as unsatisfactory. In the end I decided to leave the model without them, and while it means that the model is a little incomplete, you'd hardly notice. How magnificent!