Meikraft Models Vought F6U Pirate

The first jet fighter built by Chance-Vought, the F6U-1 Pirate was destined to be forgotten by most of the people who follow the history of aircraft development. This early Navy jet was rather undistinguished in both performance and capability, never reaching squadron service, but does rate an important footnote in the annals of Aviation history.

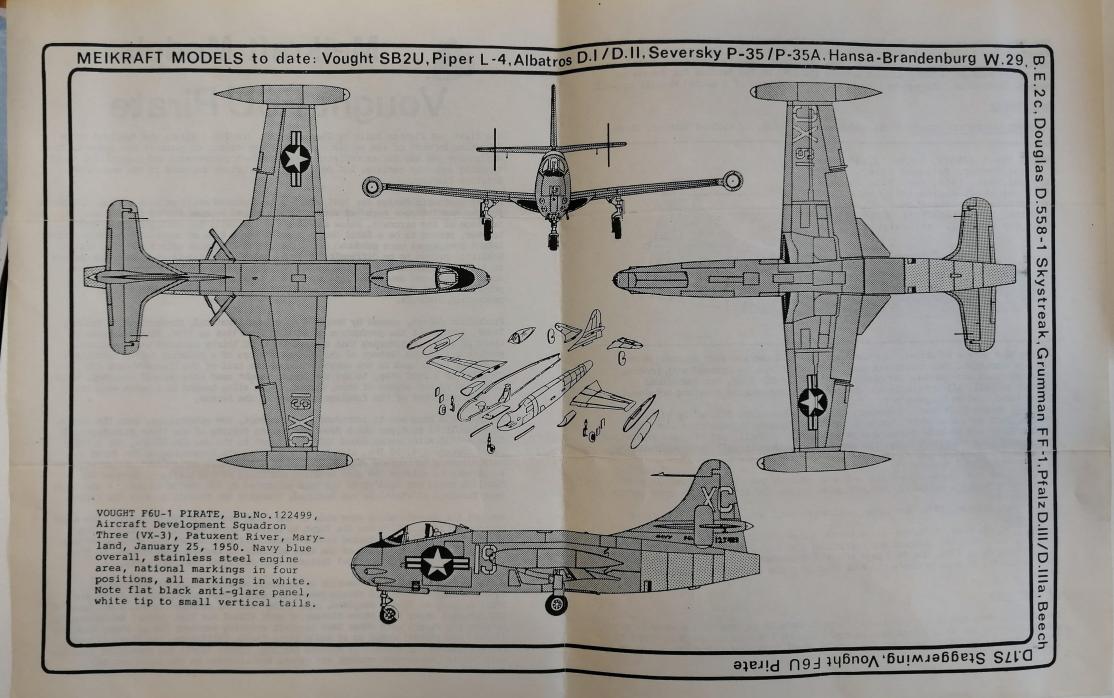
A very aesthetic design for 1946, the Pirate featured small intakes at the wing roots for the Westinghouse turbojet with a nicely faired exhaust buried in the rear fuselage of the aircraft, below and ahead of the tail. The straight wing pattern, however, proved to be a fatal design flaw during a time of swept-wing success. Three XF6U-1 prototypes were produced using the J34-WE-22 engine with 3,000 lbs. thrust. Stability proved to be difficult, at best, handling difficulties leading to changes in tail configuration. With the second prototype, this took the form of a large acorn fairing and developed into an all new tail with large filet on the third prototype. This design, with some modification, was carried through to the production aircraft.

Production delays, caused by Vought's move from Stratford, Connecticut to Dallas, Texas, spread out the production of Pirates from 1946 to 1950. This was quite a chunk of time, considering that a grand total of thirty aircraft were eventually produced. A unique feature of the F6U was the use of a material called Metalite, which was first used in the construction of the tail of the Chance-Vought F4U Corsair. In a bold step, to say the least, Vought used this unusual material, which consisted of two layers of thin, strong, light alloy bonded to a balsa wood core, to construct most of the fuselage and wing of the Pirate.

Another bold step was to introduce a new concept, the afterburner, into the design as a result of problems which developed during testing of the three prototypes. A Solar A-103B afterburner added 900 lbs. thrust to the new J34-WE-30A, for a total rated thrust of 4,100 lbs. With this application the Pirate became the first U.S. Navy aircraft to operate with an afterburner. Even this major modification was not sufficient to salvage the poor handling qualities of the airframe. Because the Metalite could not hold up to the heat generated by the engine exhaust, a new lower rear fuselage of stainless was designed, changing the overall look of the Pirate.

Most of the above changes were made to the first prototype (Bu No.33532). The second prototype (Bu No.33533) was the first to operate using wingtip fuel tanks. The third (Bu No.33534) was tested with a longer tail pipe before the afterburner was installed and was the first of the test aircraft to feature dive brakes. In the final production form the F6U-1 featured twin outrigger vertical tails.

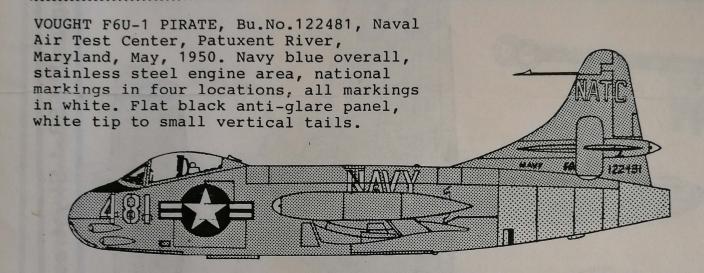
While no F6U-1 Pirates saw carrier or squadron service, Aircraft Development Squadron Three (VX-3) did obtain twenty aircraft. These were based at Naval Air Station Patuxent River, Maryland, some being used for ordnance tests. Also based at NAS Patuxent River were three Pirates of NATC (Naval Air Test Center) being used to compare the Pirate with other Navy aircraft entering service. Two of these aircraft (122483 and 122491) ended up at NAS Moffett Field, California, the third (122481) being retained for electrical systems testing. Pirate 122483 was converted into the only F6U-1P photo-recon variant via camera installation in the large qun bay.



The first three production F6U-1s were retained by Vought for further testing. By the first months of 1951 not a single Pirate remained flying, all having been withdrawn in favor of faster, more manueverable types with fewer teething problems. Today, only one Pirate remains, a badly damaged example (122479) at the Bradley Air Museum in Hebron, Connecticut. The museum retains the nose and wing of a second example as well.

BIBLIOGRAPHY

1. CHANCE VOUGHT F6U PIRATE, Naval Fighters Number Nine, by Richard Koehnen. It is



amazing that such a relatively obscure aircraft would receive such impressive and thorough attention. This thirty-six page, soft cover book is crammed with photos, detail sketches and the detailed history of not only the type, but individual aircraft as well. All components are covered, even the unusual kneeling nosewheel system (also used on the Navy's FJ-1 Fury).

2. <u>WINGS</u>, Volume 7, Number 6, December, 1977. "The Reluctant Pirate" by Richard Koehnen. Same author as above, but with enough difference to make this worth the search. There are scads of photos and an excellent, if small, set of plans backed up with a very nice color side view. The large photo of an aircraft under maintenance which was printed backwards in the book is done correctly here. Great text.

3. AIR INTERNATIONAL, Volume 10, Number 5, May, 1976. In the "Plane Facts" section one will find some nicely done plans and seven photos, two of production aircraft.

4. AEROPLANE MONTHLY, December, 1981. "Pioneer Pirate" by Art Schoeni. Seven photos and a good text.

5. KOKU FAN, October, 1976. Six large, well reproduced photos of the first three prototypes.

6. KOKU FAN, November, 1976. Five large photos and one smaller photo of production aircraft, including two aircraft not reproduced elsewhere.

7. AIREVIEW, July, 1972. One full page photo of a production aircraft. Taken from the right side, this is probably the best quality photo published to date of the Pirate.

MODELING NOTES

Check photos when modeling a particular subject. Details may not be the same from one airframe to the next. Added details could include the barrier guard in front of the windscreen, arresting gear and the parking wheel used when the aircraft was in "kneeling" position.