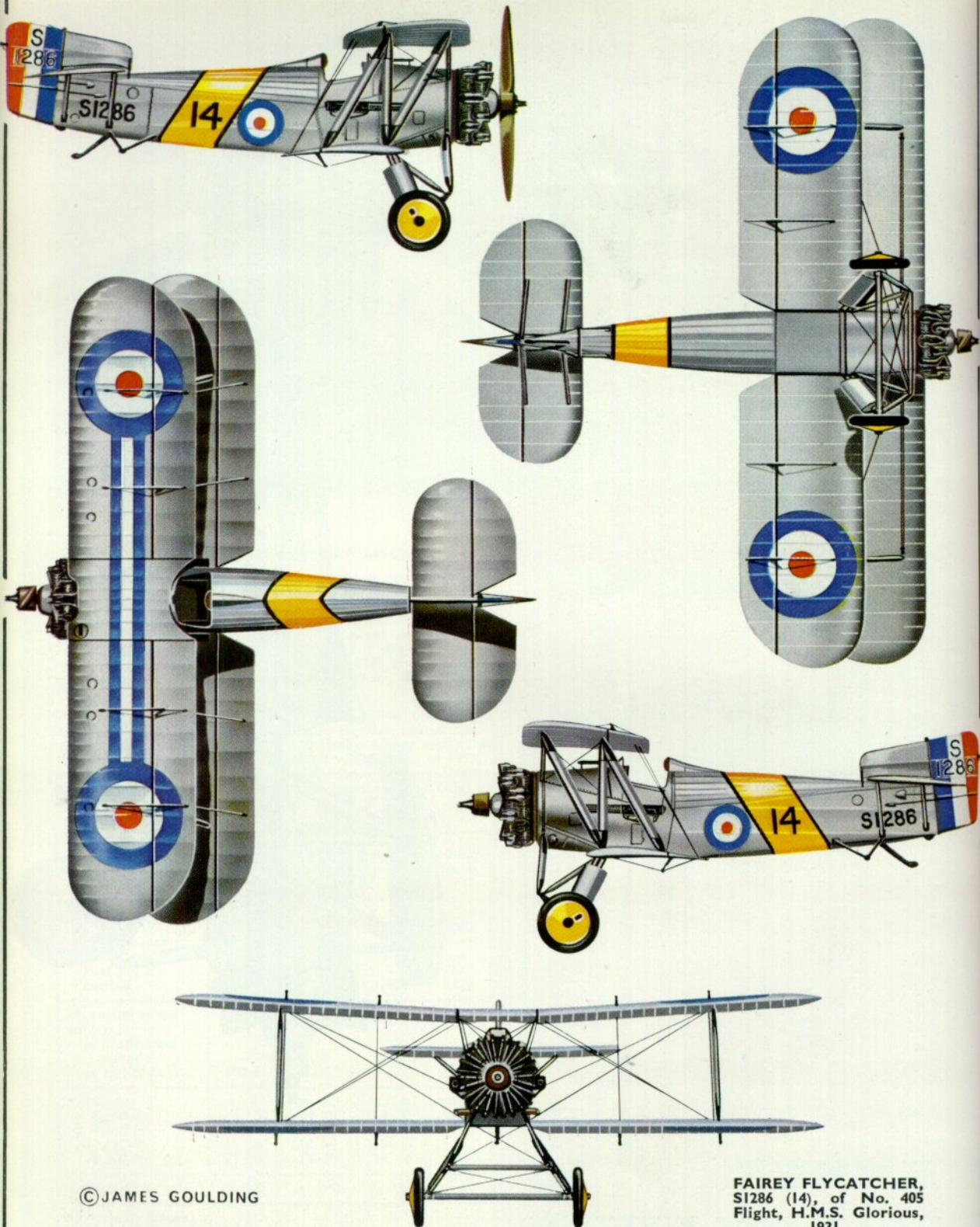


**PROFILE
PUBLICATIONS**

The
Fairey
Flycatcher

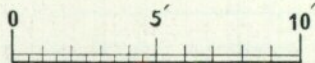
**NUMBER 56
TWO SHILLINGS**





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FAIREY FLYCATCHER,
S1286 (14), of No. 405
Flight, H.M.S. Glorious,
1931.





This Flycatcher, S1290 (Fairey constructor's number F 1114) was from the sixth main production batch, S1273 to S1297. Note the long exhaust pipe, not fitted to all aircraft. (Photo: Air Ministry)

The Fairey Flycatcher

by Owen Thetford

After the Armistice in 1918, economy became the watchword in all official policies concerning military aviation and nowhere was this more apparent than in naval flying. By the end of 1919, British strength in naval aviation had shrunk to a token force of one spotter-reconnaissance squadron, half a torpedo squadron, one fighter flight, one seaplane flight and one flying-boat flight. From 1919 until 1922 there was only one aircraft carrier in commission (H.M.S. *Argus*) and the handful of aeroplanes then employed on deck-flying duties, such as the Sopwith Cuckoo, Parnall Panther, Nieuport Nightjar and Westland Walrus had either originated in W.W.I or been developed from types of that period. Indeed, there were a few examples of the veteran Sopwith Camel still flying from the deck of *Argus* as late as 1920.

It was against this scene that, in 1922, the Air Ministry issued its Specification 6/22 which called for a single-seat fighter capable of operating from carrier decks, on floats, or as an amphibian, and powered by either the Bristol Jupiter or Armstrong Siddeley Jaguar radial engine. Just as in the land-based fighter squadrons of the Royal Air Force, the Jaguar-engined Siskin and Grebe were to supersede the wartime rotary-engined Sopwith Snipe to become the first examples of the post-war generation of fighters, so did the naval fighters produced to Spec. 6/22 replace the rotary-engined Nieuport Nightjar on the carrier deck.

The Fairey Flycatcher was one of two designs

produced to Spec. 6/22, the other, and far less successful, being the Parnall Plover. Both Parnall and Fairey had previous experience of naval aircraft; Parnall's with the two-seat Panther and Fairey with the Series III and other types of seaplane such as the Campania. Of identical dimensions to the Flycatcher and with a very similar appearance in plan view, the Plover had a comparable performance but lacked the rugged strength of its rival (it was all-wooden construction whereas the Flycatcher had mixed metal and wooden fuselage) and it enjoyed only a very brief Service life. Three prototypes (*N 160*, *N 161*, *N 162*) were followed by ten production aircraft (*N 9608* to *N 9610* and *N 9702* to *N 9708*) delivered in 1923. When joined by production Flycatchers in 1924 the superiority of the Fairey aircraft soon became manifest and the Plovers faded quickly from the scene.

The Flycatcher was designed by F. Duncanson and the first prototype (*N 163*, constructor's number F 406) was fitted with a 400-h.p. Jaguar III engine and made its first flight in 1922, the test pilot being Lt.-Col. Vincent Nicholl, D.S.O., D.F.C. On completion of Service trials at Martlesham Heath, it went on board H.M.S. *Argus* in February 1923 for deck-handling trials. For this purpose steel jaws were fitted on the undercarriage spreader bar to engage the fore-and-aft deck arrester wires then in use. This type of arrester gear remained standard on Flycatchers until the fore-and-aft wires were abandoned in 1926.

Left: Prototype Flycatcher, N163, fitted with a Bristol Jupiter engine. The early form of deck arrester gear (to engage longitudinal wires) can be seen on the undercarriage spreader bar. Right: Second version of the Flycatcher prototype with an Armstrong Siddeley Jaguar engine installed.





Neat formation work by Flycatchers of No. 405 Flight, then based in H.M.S. Glorious. Leading is S1278, the other aircraft being S1282 (No. 10), S1286 (No. 14), S1283 (No. 12) and S1280 (No. 9).

(Photo: Air Ministry)

Line abreast by four Flycatchers of No. 405 Flight.

(Photo: Air Ministry)

Thereafter, landings were made without any form of arrester device: by the time that transverse wires had been standardised in 1933 the Flycatcher had been largely supplanted by the Nimrod and Osprey.

The first prototype was later re-engined with a Bristol Jupiter, but the production aircraft standardised on the Jaguar. A second prototype (*N 164*, Fairey number F 407) was built as a seaplane with twin floats and fitted with a Jaguar engine and the third (*N 165*, Fairey number F 408) became the amphibian trials aircraft powered with a Jupiter engine.

From the outset, the Flycatcher made an enduring impression on all its pilots. It was comfortable to fly, superb for aerobatics and possessed of all the characteristics required of a carrier-borne aircraft for ease of handling. Its strongly individual appearance derived from the marked dihedral on top wings only, pronounced stagger, ungainly undercarriage and a fuselage which, with an oddly shaped fin and rudder, gave the impression of being "cocked-up" at the rear end. The structure of the aircraft was conventional for its period, the mainplanes and tail assembly being wooden with fabric covering and the fuselage a composite assembly of metal and wood, also fabric

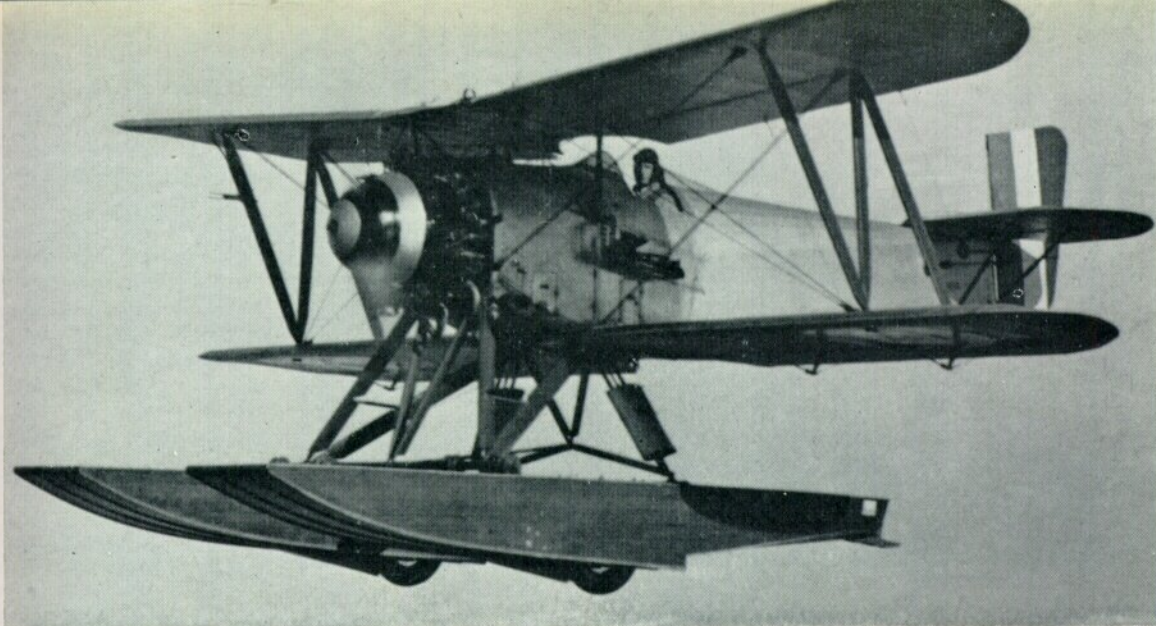


covered. One unusual feature, however, was that to aid stowage on board ship, and in the absence of folding wings, the entire airframe was built in such a way that it could be dismantled so that no section exceeded 13 ft. 6 in. in length. Another point was that its wing span of 29 ft. enabled it to go up and down the deck lift without wing folding.

Nearest the camera in this formation is S1410 (Fairey serial F1274), one of the last Flycatchers built from a batch ordered in March 1930.

(Photo: Air Ministry)





The amphibian version of the Flycatcher had wheels fitted into the planing bottoms of the twin floats. It presented a curious sight when taxiing across a land aerodrome as the wheels were scarcely visible. (Photo: Air Ministry)



Flycatcher N9680, last of the second production batch.

(Photo: Air Ministry)

The Flycatcher shared with other Fairey types such as the Hamble Baby and the IIID and IIIF the patent camber-changing mechanism on the wings. Flaps which ran along the trailing edges of both upper and lower wings (the outer sections serving also as ailerons) could be lowered for landing and take-off. This steepened the glide path and shortened both landing and take-off runs, with obvious advantages for deck-flying operations.

Some interesting detailed figures are available from a Martlesham Heath test report dated 9th February 1923 which illustrate just how efficient these flaps were. The tests in question were with the prototype

N 163 and the pilots Flight-Lieut. Orlebar (later of Schneider Trophy fame) and Flying Officer Bird. With no wind, and a zero flap setting, the unstick distance was 121 yards: this was reduced by a half to 63 yards with the flaps set at 8 degrees. The slowest speed possible with this flap setting was 47 m.p.h., compared with a maximum speed of $133\frac{1}{2}$ m.p.h. at 5,000 ft. Other characteristics noted during these trials were that stability was very good in a steep dive, that both lateral and longitudinal control was good, but there was a tendency to swing after landing with flaps fully lowered. It was also found that the position of the starboard gun required modification as it was



A No. 403 Flight Flycatcher from the aircraft carrier H.M.S. Hermes.
(Photo: Charles E. Brown)

that the prototype had made its debut in the New Types Park at the annual Hendon Air Display. Flight-testing of land-planes took place at Northolt, seaplane and amphibian testing being conducted at Fairey's Hamble works. Repeated orders from the Air Ministry kept the type in production until 1930 and total deliveries to the Fleet Air Arm totalled 193 aircraft as detailed below:

inaccessible from the cockpit. The report went on to say that "the type has many excellent features as a deck-landing scout, the following being worthy of special mention: 1. View of pilot. 2. Slow landing speed and efficiency of flap gear. 3. Controllability at slow speeds. 4. Shock absorber gear of undercarriage."

After deck-landing trials by Flight-Lieut. Fletcher in H.M.S. *Argus* the following report was written:

"The type appears to be highly satisfactory from a deck-landing point of view. Stability is good and it is neither too light nor too heavy on the controls. No dangerous peculiarities and the majority of pilots will have no difficulty in flying the type. An approach speed of 70 to 75 m.p.h. is recommended. The view from the pilot's seat is the best I have ever experienced for deck landing."

A more recent tribute came from Air Commodore G. J. Christopher Paul, Manager of *Air Pictorial*, who included the Flycatcher among the ten aeroplanes he had best enjoyed flying throughout his Service career.

"It was a small and very responsive aeroplane, in which the pilot seemed only to have to think a manoeuvre for the Flycatcher to follow his thoughts."

There is no doubt about it, the Flycatcher was one of the most popular fighters ever in British service, a service which extended from 1923 to 1935. As previously mentioned, it superseded the Nieuport Nightjar, was briefly a contemporary of the Parnall Plover, and then remained the standard Fleet Air Arm fighter until the arrival of the Hawker Nimrod (naval version of the Fury) in 1931-32. Together with its equally famous stablemate, the Fairey III F*, it served in every aircraft carrier of its day, with the Home Fleet, the Mediterranean Fleet and on the China Station. These were the years of almost complete Fairey ascendancy in the Fleet Air Arm. In 1930, for example, no less than 17 out of 24 F.A.A. Flights were equipped with Fairey aircraft.

Full-scale production of the Flycatcher was started by the Fairey factory at Hayes in 1923, the same year

Serial Number	Quantity	Contract Placed
N 9611 to N 9619	9	1923
N 9655 to N 9680	26	
N 9697	1	
N 9854 to N 9895	42	August 1924
N 9902 to N 9965	64	
S 1060 to S 1073	14	August 1925
S 1273 to S 1297	25	
S 1409 to S 1418	11	March 1930
S 1590	1	
Total	193 plus 3 prototypes	



Flycatcher N9859 from a batch of 42 ordered by the Air Ministry in August 1924.

Showing the flag! Flycatchers of the Mediterranean Fleet over Egypt.





A number of these aircraft call for special mention. Flycatcher *N 9678* was the first production amphibian, flown at Northolt on 19th February 1924 by Capt. Norman Macmillan, the well-known aviation writer who was then a Fairey test pilot. The second amphibian (*N 9953*) flew at Hamble in October 1925. The Flycatcher seaplane *N 9913* was used for catapult trials on board H.M.S. *Vindictive* in 1925. Another Flycatcher worthy of special mention is *S 1288* which was used for the training of pilots for the R.A.F. High Speed Flight in 1929.

INTO SERVICE

The first Flycatchers entered service with the R.A.F. when No. 402 Flight was equipped with the type in 1923. In the following year, Flycatchers were also issued to No. 401 Flight, replacing Nightjars, and to Nos. 403 and 404 Flights where they supplanted Parnall Plovers. The gradual build-up in Flycatcher strength is best illustrated by the following tables which show the Fleet Air Arm's order of battle for single-seat fighters at regular intervals:

September 1923
 No. 401 Flight 6 Nightjars
 No. 402 Flight 6 Flycatchers

Above and below: *An interesting contrast in floatplane (S1276) and landplane (S1277) variants. Both pictures are believed to have been taken at Hal Far, Malta.*



No. 403 Flight } 6 Plovers
 No. 404 Flight }

September 1924

No. 401 Flight } Flycatchers Leuchars
 No. 402 Flight } H.M.S. *Eagle*
 No. 403 Flight } Leuchars
 No. 404 Flight } Leuchars
 No. 406 Flight } Leuchars

September 1925

No. 401 Flight } Flycatchers Leuchars
 No. 402 Flight } Malta
 No. 403 Flight } Mediterranean
 No. 404 Flight } Leuchars
 No. 405 Flight } Leuchars
 No. 406 Flight } Leuchars

September 1927

No. 401 Flight } China Station
 No. 402 Flight } H.M.S. *Eagle*
 (Mediterranean)
 No. 403 Flight } H.M.S. *Hermes*
 (China Station)
 No. 404A Flight } Flycatchers Donibristle
 No. 404B Flight } H.M.S. *Argus*
 (China Station)
 No. 405 Flight } H.M.S. *Furious*
 (Home Fleet)

September 1928

No. 401 Flight } H.M.S. *Argus*
 No. 402 Flight } H.M.S. *Eagle*
 (Mediterranean)
 No. 403 Flight } H.M.S. *Hermes*
 (China Station)
 No. 404 Flight } Flycatchers H.M.S. *Courageous*
 (Mediterranean)
 No. 405 Flight } H.M.S. *Furious*
 (Home Fleet)
 No. 406 Flight } Donibristle
 No. 407 Flight } H.M.S. *Courageous*
 (Mediterranean)

September 1929

As above, with addition of No. 408 Flight at Donibristle.



The prototype N163 on display at the R.A.F. Hendon Display in July 1923.

(Photo: "Flight")

September 1930

- No. 401 Flight
- No. 402 Flight
- No. 403 Flight
- No. 404 Flight
- No. 405 Flight
- No. 406 Flight
- No. 407 Flight
- No. 408 Flight

} Flycatchers

- H.M.S. *Courageous*
- H.M.S. *Eagle*
- H.M.S. *Hermes*
- H.M.S. *Courageous*
- H.M.S. *Glorious*
- H.M.S. *Glorious*
- H.M.S. *Courageous*
- H.M.S. *Glorious*

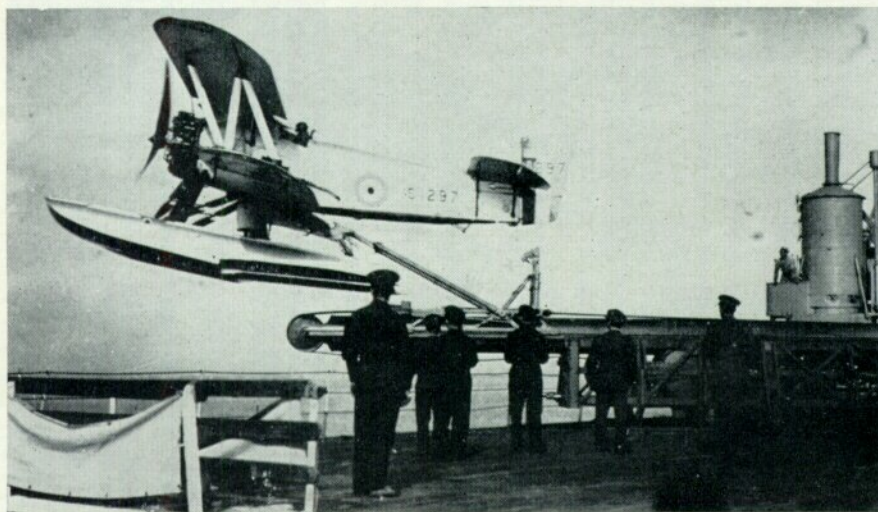
By September 1932, Flycatchers were still in service with Nos. 401 to 407 Flights, but had been replaced by the first of the new Hawker Nimrods in No. 408 Flight, H.M.S. *Glorious*. By the time that, in April 1933, Fleet Air Arm Flights began to be merged into squadrons by Air Ministry Order, the Nimrod and Osprey were in the ascendancy, but Flycatchers remained for a while alongside Nimrods in the new No. 801 Squadron (formerly No. 401 Flight) in H.M.S. *Furious*. Flycatchers also continued to serve with No. 403 Flight on the China Station and with No. 406 Flight of the East Indies Squadron. The latter two units were catapult flights operating from

battleships and cruisers of the Royal Navy. Such units retained flight status until 1939. The five Flycatchers of No. 403 Flight and the two of No. 406 Flight were finally replaced by Osprey seaplanes in June 1934.

Although its primary rôle was that of a Fleet fighter, the Flycatcher was also equipped to carry four 20-lb. bombs on racks below the lower mainplanes and, in accordance with official Fleet Air Arm policy which was continued in its successors, the Nimrod and the Skua, operated as a dive-bomber. Such was the strength of the Flycatcher's airframe that it could be dived vertically with its Jaguar engine at full throttle until it reached its terminal velocity: it was the first aircraft to be required to undergo such a stringent test by the Air Ministry. Demonstrations of the Fleet Air Arm's proficiency in dive-bombing tactics made Flycatchers of No. 405 Flight the star turn at the R.A.F. Hendon Displays of 1928 and 1929. The famous "Blue Note" of the engine in a dive delighted the spectators during the converging bombing displays in which three Flycatchers attacked the same

target simultaneously by diving from 2,000 ft. from three different sides of the aerodrome.

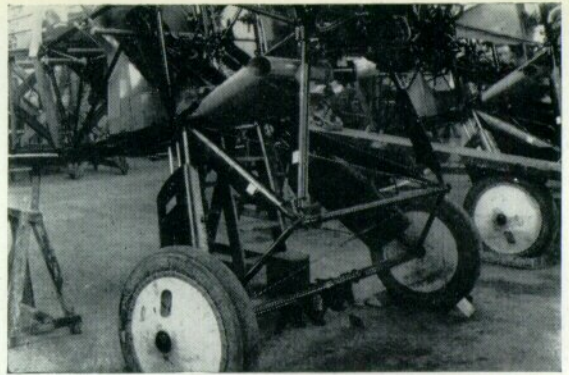
The versatility of the Flycatcher has already been stressed: it could operate from aircraft-carriers with or with-



Flycatcher seaplane being launched by catapult.

out arrester gear, from the surface of the sea with twin floats, or from land or water as an amphibian; it could also be fitted with skis. As well as this, however, it was the first Fleet Air Arm fighter to be stressed for catapulting from the deck of a ship (and hence operated as a seaplane from cruisers and other warships as well as carriers) in addition to being the last to be flown from a platform mounted above the gun turret of a battleship. This latter technique was first developed by the R.N.A.S. in W.W.I, using Sopwith 1½-Strutters and Pups, but eventually fell into disuse with the development of a successful catapult.

As a twin-float seaplane, the Flycatcher retained all the lively aerobatic qualities of its landplane counterpart. The lengthy "boat-built" floats provided sufficient stability on the water to enable the traditional third float beneath the tail to be deleted. In the late 1920s, Flycatcher seaplanes of No. 403 Flight were very active against Chinese pirates raiding coastal shipping at Hong Kong and these operations are well described by Owen Cathcart-Jones in his book *Aviation Memoirs*. Lieutenant Cathcart-Jones, Royal Marines, is celebrated in Fleet Air Arm annals as the Flycatcher pilot who, whilst operating from H.M.S. *Courageous* in 1929, outraged the Commander-in-Chief of the Mediterranean Fleet by dropping thousands of sheets of brown paper on the bridge of his flagship under the mistaken impression that he was

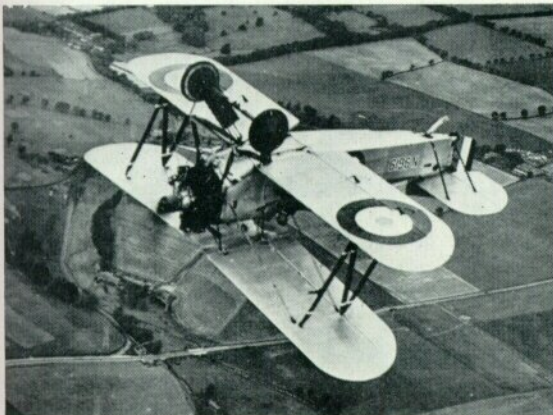


The rugged undercarriage of the Flycatcher: a scene on the production line at Fairey's Hayes factory. (Photo: "Flight")

playing a practical joke on some Fleet Air Arm colleagues temporarily serving in H.M.S. *Revenge*.

In the heyday of the Flycatcher, their pilots regarded themselves (not without some justice) as the *élite* of the Fleet Air Arm and anecdotes concerning their escapades are legion. One of the more serious of these concerns Flying Officer P. D. Cracroft (now Air Vice-Marshal Cracroft, C.B., A.F.C., R.A.F. (Retd.)), a Flycatcher pilot from H.M.S. *Glorious* who, whilst serving in the Mediterranean in April 1931, deliberately ditched his aircraft alongside a flotilla of destroyers to prevent them colliding with other vessels in a fog-bank ahead. The impending disaster was clear to see from the air, though not on the surface, and Flying Officer Cracroft, with no radio communications at his disposal, took the only action possible to draw the attention of the Royal Navy to the danger ahead. It is probably the only case in history when a single-seat fighter aircraft has been employed for such a purpose!

No account of the Flycatcher would be complete without a reference to the spectacular operations of the "slip-flights" serving in the carriers *Furious*, *Courageous* and *Glorious*. In these ships it was customary to house six Flycatchers in a forward hangar, below the main flying deck, from which the fighters took off from a 60 ft. tapered "runway", straight out of their hangar and over the bows. As the engines were run up to full power inside the confines of the small hangar the noise must have been indes-



In its element! Flycatcher N9619 from R.A.F. Leuchars caught at the top of a loop in October 1939.

Flycatchers ranged on the flight deck of H.M.S. *Glorious*. The aircraft behind are Fairey IIIFs.

(Photo: "Flight")





Flycatcher landing on H.M.S. Glorious.

(Photo: "Flight")



"Take-off" from H.M.S. Glorious.

(Photo: "Flight")

A "slip-flight" Flycatcher takes off from the forward hangar of H.M.S. Glorious.

(Photo: "Flight")

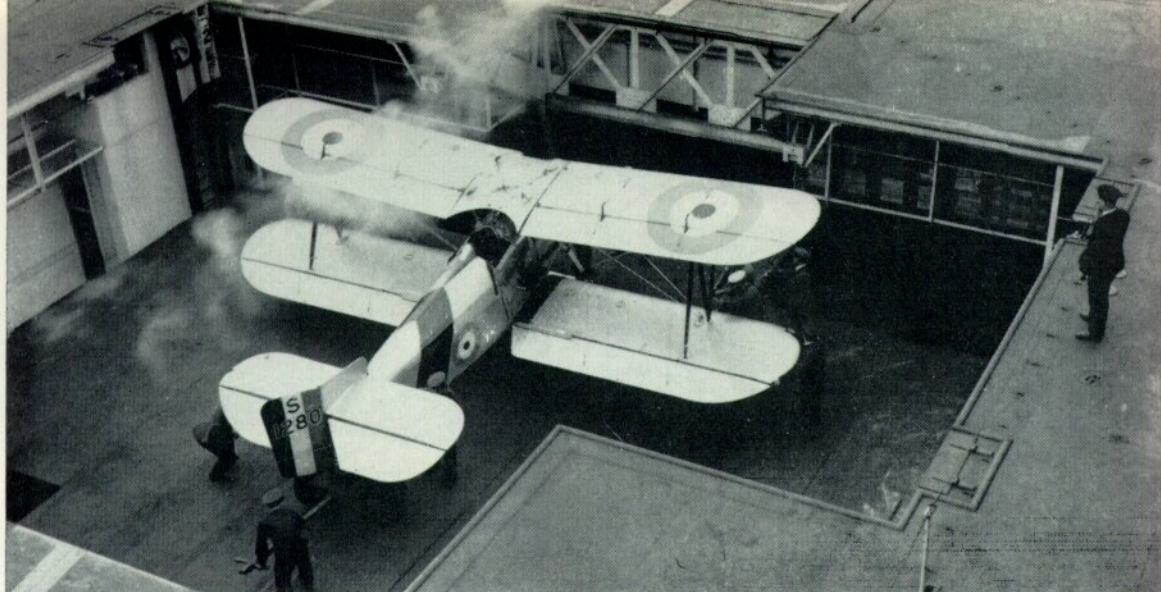
cribable. Flycatchers of the "slip-flight" invariably dropped out of sight below the bows and almost touched the water before gaining height. Meanwhile, other aircraft were being flown off from the main carrier deck above.

Recovery of Flycatchers on the main deck was effected with equal dash and verve. As the aircraft came in line astern at approximately one minute intervals they were immediately taken down the lift and the skill of the deck-handlers was such that six Flycatchers were once landed on board and stowed in their hangar in the astonishingly short time of 4 min. 20 sec. It was, incidentally, a Flycatcher which made the first successful night landing on a carrier deck by a single-seat fighter. This was on board H.M.S. *Courageous* on 26th November 1929, the Flycatcher having flown from Hal Far in Malta.

The Flycatcher was built exclusively for the Fleet Air Arm; none was ever sold to a foreign country and, so far as is known, no example has survived. The type was finally declared obsolete by the Air Ministry in April 1935 and with its passing what was probably the most romantic era of British naval aviation came to an end.

© Owen Thetford, 1965.





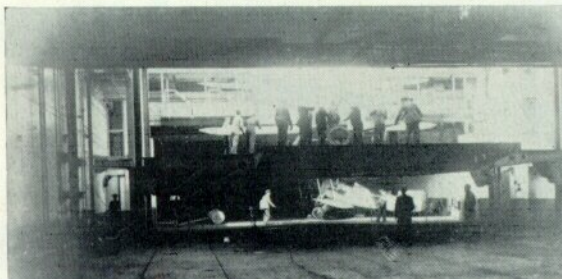
Flycatcher S1280 goes down the deck-lift of H.M.S. Glorious.

(Photo: "Flight")



Man-handling a Flycatcher on H.M.S. Glorious.

(Photo: "Flight")



A scene inside the hangar of H.M.S. Glorious. (Photo: "Flight")

Flycatcher lifting off from H.M.S. Glorious.

(Photo: "Flight")



SPECIFICATION

Engine: 400 h.p. Armstrong Siddeley Jaguar III or IV. Span: 29 ft. Length: 23 ft. (29 ft. with floats). Height: 12 ft. (13 ft. 4 in. as amphibian). Wing Area: 288 sq. ft. Dihedral (Top Mainplane): 3 deg. 5 min. Loaded Weight: 2,979 lb. Empty Weight: 2,106 lb. Petrol Tankage: 53 gal. Oil Tankage: 6½ gal. Military Load: 301 lb. Wing Loading: 10.32 lb./sq. ft. Power Loading: 7.52 lb./b.h.p. Airscrew Diameter: 9 ft. 6 in. Speeds: 133½ m.p.h. at 5,000 ft. (126 m.p.h. as seaplane); 129½ m.p.h. at 10,000 ft.; 117½ m.p.h. at 15,000 ft.; 110 m.p.h. at 17,000 ft. Climb: 5 min. 55 sec. to 5,000 ft.; 9 min. 29 sec. to 10,000 ft.; 18 min. 5 sec. to 15,000 ft.; 25 min. 23 sec. to 17,000 ft. Service Ceiling: 19,000 ft. (14,000 ft. as seaplane). Est. Absolute Ceiling: 20,400 ft. Range: 263 miles at max. speed at 10,000 ft. (1.82 hr.); 311 miles at 110 m.p.h. at 10,000 ft. Construction: Wooden wings with fabric covering and composite wood and metal fuselage, metal and fabric covered. Centre fuselage structure of steel tubes uniting in spool joints to which they were attached by bolts. Fireproof bulkhead between engine and fuel tank immediately ahead of cockpit. Jettison valve to enable tank to be emptied to improve buoyancy in event of forced landing in sea. Hoisting sling fitted to upper mainplane. Oleo shock-absorbing undercarriage legs adjustable, with variable damping arrangement to suit local conditions. Boat-built floats of either wooden or duralumin construction. Armament: Two 0.303 Vickers machine guns synchronised to fire forward through the airscrew and mounted one each side of the fuselage so as to be accessible from the cockpit. Racks for four 20-lb. bombs below the lower mainplanes.



Flycatcher, No. 403 Flight, H.M.S. Eagle.



Flycatcher, No. 405 Flight, H.M.S. Furious.



Flycatcher, No. 404 Flight, H.M.S. Courageous.



Flycatcher, No. 405 Flight,
H.M.S. Glorious
with Command pennants.



Flycatcher, showing fuselage stencil details.
Manufacturer's serial number F 474.



Flycatcher floatplane version.