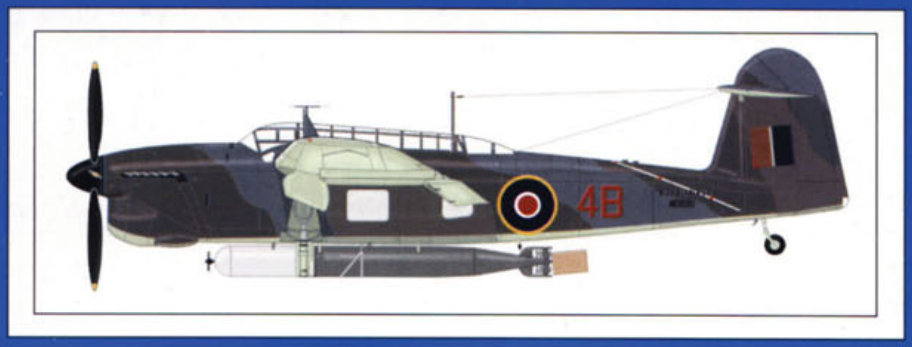
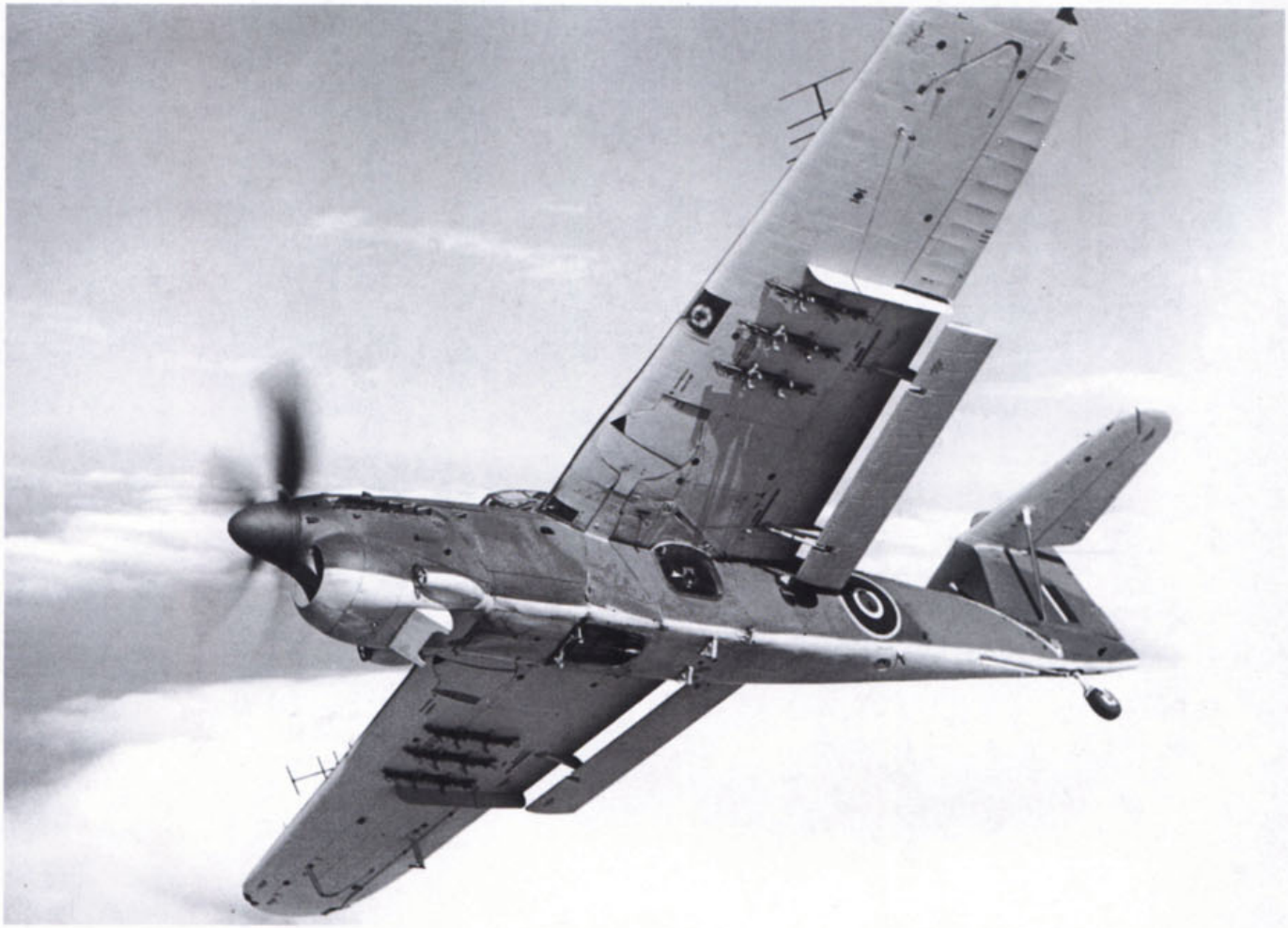


WARPAINT SERIES No. 35

# Fairey BARRACUDA

BY W.A.HARRISON

Factory fresh Barracuda I P9659 first flew on 31 October 1942. This photograph was taken by Charles E. Brown during a photographic visit to Fairey's at Ringway Airport on 2 November 1942. The pilot was Fairey production test pilot Flt.Lt. Sam Moseley. (Charles E Brown)



# Fairey BARRACUDA

By W. A. HARRISON

Historically, Fairey's Barracuda was one of the most controversial aircraft of World War 2. Protagonists state that it was ugly, underpowered, lacked performance, it broke up in mid-air, couldn't pull out of a dive, pilots and their crews hated it.

After four decades of talking to ex-Barracuda aircrew the author has yet to find one that actually hated the aeroplane, or had any misgivings about flying them, indeed many appreciated its ruggedness and operational capabilities. Its uglyness, if that is the right word, is in the eyes of the beholder and many wartime aircraft designed to do a specific role looked no better. If it appeared ungainly on the ground, and with everything folded it looked as if it had been in an accident, its appearance in the air was no worse than many other wartime combat aircraft.

**Prototype Barracuda P1767 at Boscombe Down where, between October and December 1941, it carried out performance and handling trials. At this time it had the low set tailplane, original exhaust manifold and no wing fences or aerials. (Crown Copyright)**

There were also many who felt that the Barracuda was better for the task than the American-supplied Grumman Avenger. Any in-service shortcomings were overcome gradually by progressive modifications so that early problems were eliminated.

Pilots brought through flying training on monoplanes, instead of biplanes, had no problem when introduced to the Barracuda. In fact as early as June 1943 the Ministry had identified the basic problem – incorrect handling of the aircraft and engine by pilots.

**Above: A close up of the underside and nose area of Barracuda Mk.II P9976 during trials with different exhaust manifolds. Dented spinners were common as was the weathering on the leading edge of the wings. (Crown Copyright)**

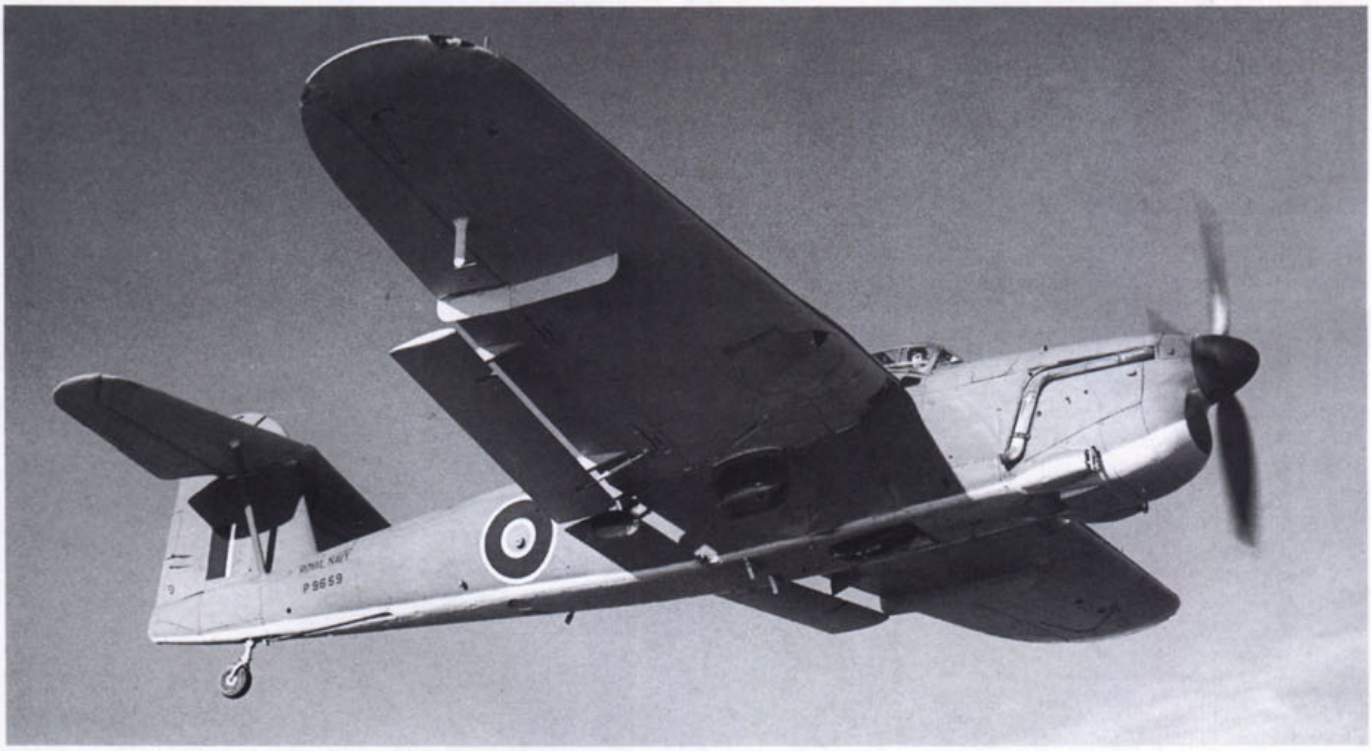
Unfortunately the aircraft suffered bad press, and the stigma attached to it was carried on by later generations who knew even less about the problems and how they were overcome. This brief history attempts to set the record straight and show that the Barracuda was in fact a valuable strike aircraft.

**Above and below:Barracuda Mk.I P9659 out on a photographic sortie for Charles E Brown in November 1942. Noteworthy are the revised shape carburettor air intakes with a grill over the front. The 'V' shape near each wingtip is a pull-down rail to facilitate ground handling by maintenance ratings. The wing fence was to prevent disturbed airflow from bombs and carriers interfering with aileron control. (Charles E Brown via Tony Buttler)**

Although the Barracuda had its gestation from plans and ideas in the mid-thirties, it was a logical progression of the naval carrier aircraft known as the TSR - Torpedo-Spotter-Reconnaissance. The Admiralty had ordered the Swordfish TSR, and its successor, the Albacore, and now informed the Air Ministry, who looked after ordering all service aeroplanes, that it would require a Torpedo-Bomber-Reconnaissance (TBR) monoplane to replace the as yet unbuilt Albacore. That was on 29 May 1937 and after protracted negotiations agreed on a Specification – S.24/37, which was sent out to the aircraft industry in October of that year.

Thirteen airframe manufacturers and four aero-engine companies were informed and a full specification was issued to them on 6 January 1938. Six companies tendered designs with five being turned down – the most suitable design being from the Fairey Aviation Co. However, the urgent need for the new strike aircraft resulted in large orders which was beyond the capabilities of the Fairey factories, already involved in other production lines and new aircraft. Consequently it was decided to farm out production to other aircraft factories with less commitments. Known as the Barracuda Group this resulted in orders being placed with Blackburn Aircraft, already building Swordfish, Boulton Paul, where Defiant production was tailing off, and Westland, who, after starting production left the Barracuda Group in 1943 to build Seafires and persue its own designs. All aspects of production in the Barracuda Group, such as production scheduling, tooling etc. was conducted by Fairey.

The design called for a shoulder-wing monoplane powered by a Rolls-Royce 'X' layout sleeve-valve high-pressure air-cooled in-line engine and incorporating a retracting undercarriage. Consideration had been given to one or two other designs, but in the event Fairey remained the only contender.



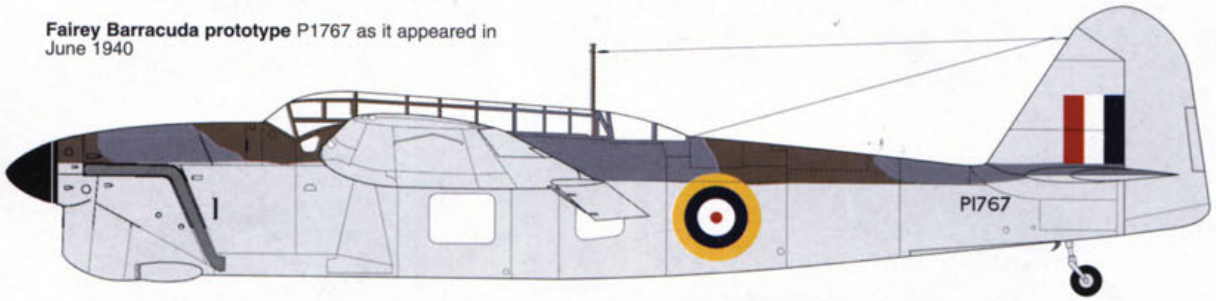
# Fairey Barracuda camouflage and markings

## Drawings by David Howley

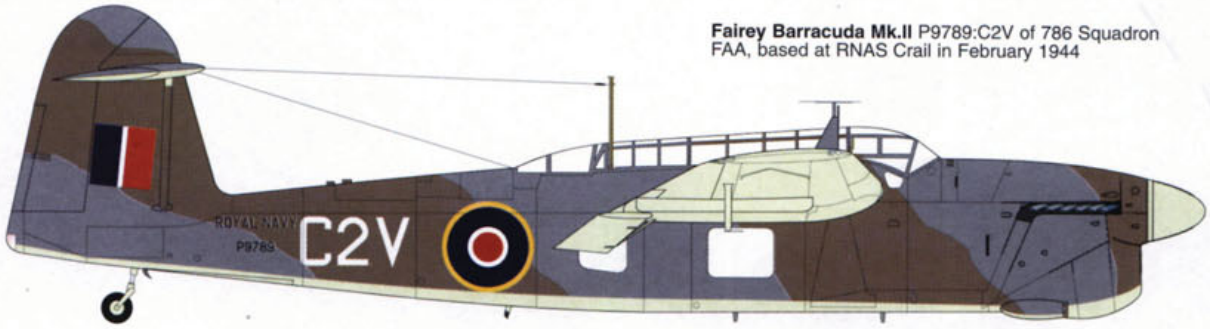
**FAIREY BARRACUDA COLOUR KEY**

Black | White | Yellow | Roundel Red Dull | Roundel Blue | Red Primer | Grey Primer | Green Primer | Aluminium | Extra Dark Sea Grey | Dark Slate Grey | Sky

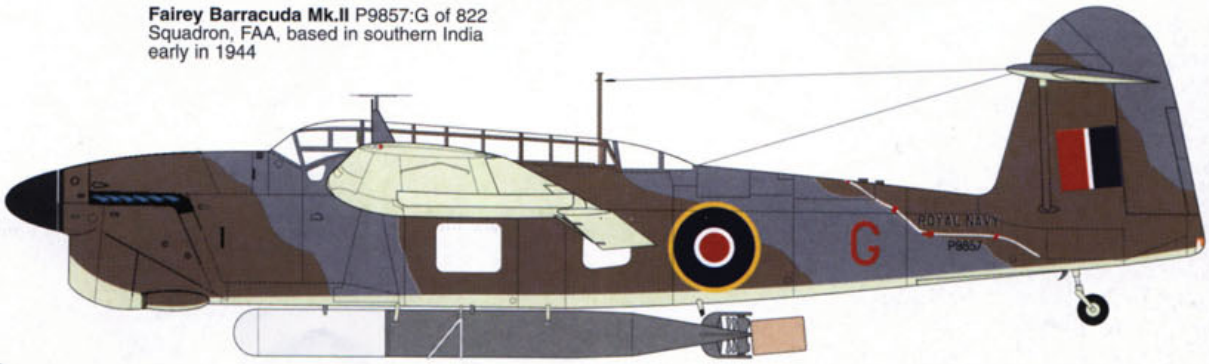
**Fairey Barracuda prototype** P1767 as it appeared in June 1940



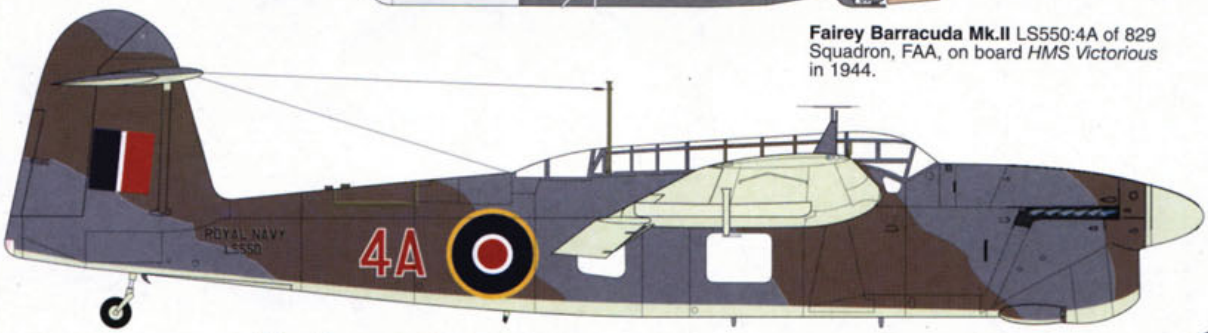

**Fairey Barracuda Mk.II** P9789:C2V of 786 Squadron FAA, based at RNAS Crail in February 1944



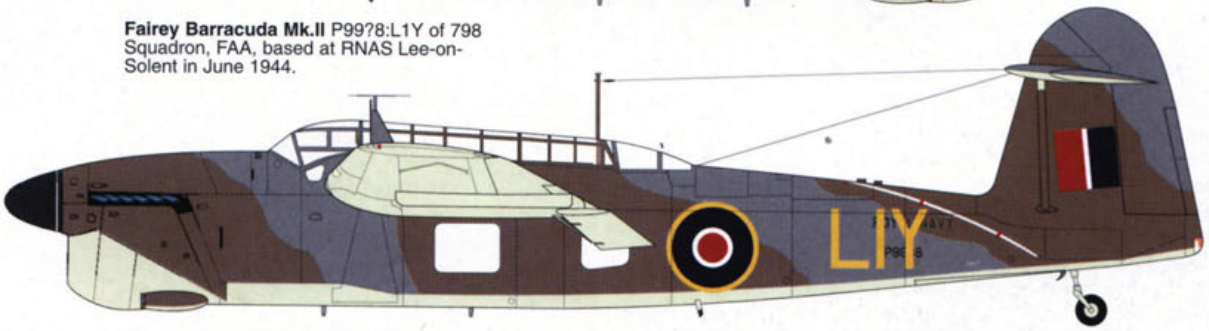

**Fairey Barracuda Mk.II** P9857:G of 822 Squadron, FAA, based in southern India early in 1944

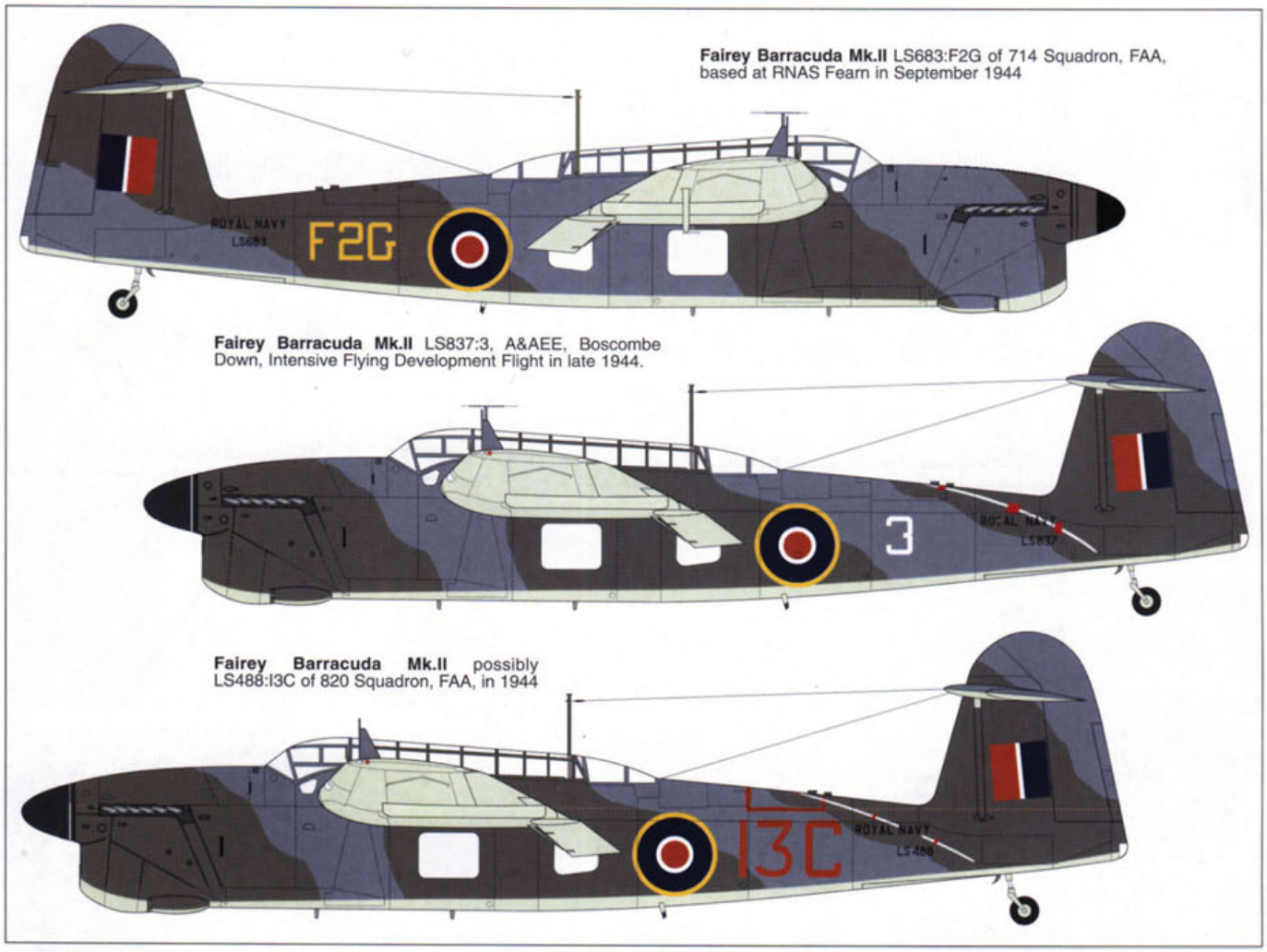



**Fairey Barracuda Mk.II** LS550:4A of 829 Squadron, FAA, on board *HMS Victorious* in 1944.




**Fairey Barracuda Mk.II** P99?8:L1Y of 798 Squadron, FAA, based at RNAS Lee-on-Solent in June 1944.






**Fairey Barracuda Mk.II** LS683:F2G of 714 Squadron, FAA, based at RNAS Fearn in September 1944

**Fairey Barracuda Mk.II** LS837:3, A&AEE, Boscombe Down, Intensive Flying Development Flight in late 1944.

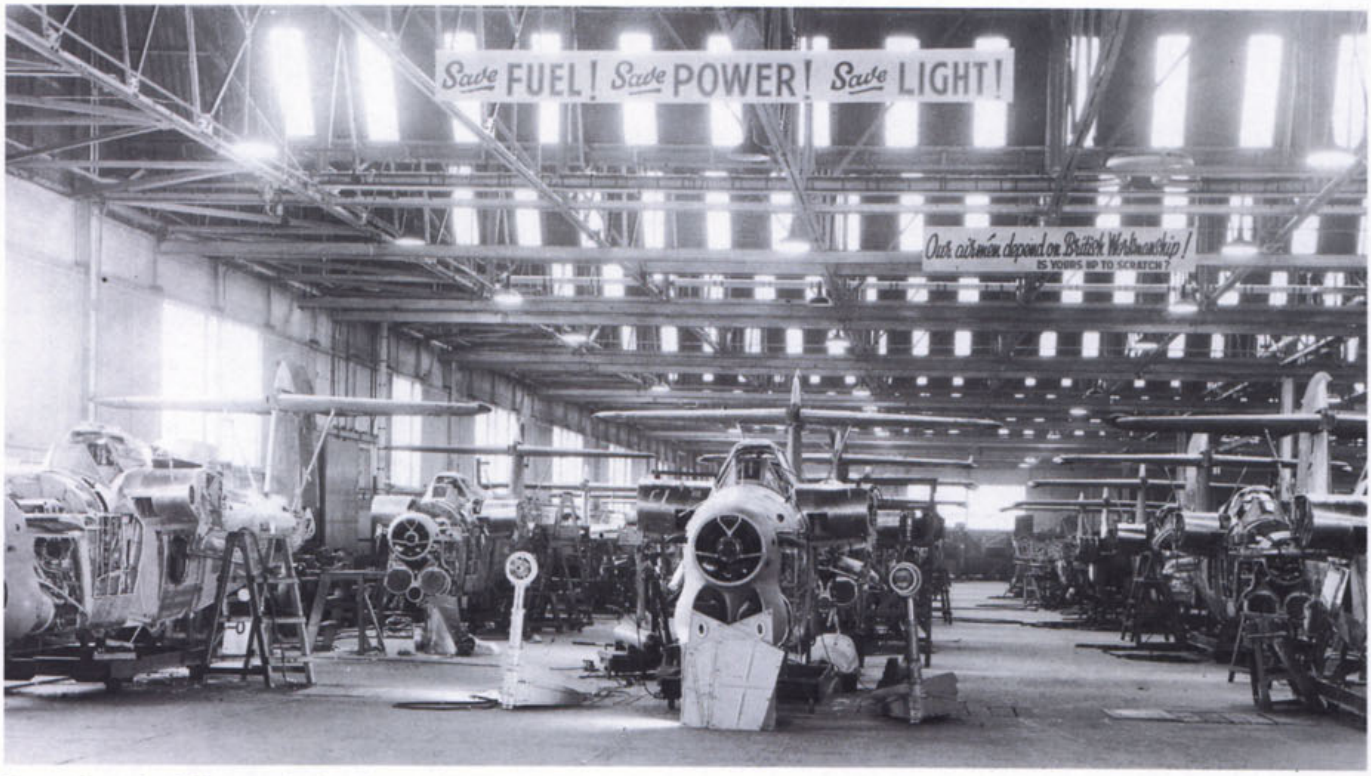
**Fairey Barracuda Mk.II** possibly LS488:I3C of 820 Squadron, FAA, in 1944

In September 1938 they were asked to provide two prototypes, P1767 and P1770. The Specification called for an aircraft capable of operating from shore bases, carrier decks and, if required, as a floatplane. The latter was aimed at the cruisers and battleships which had been fitted with heavy catapults.

Although the requirement for a Barracuda floatplane was in the Specification, by the time the aircraft entered service the need had disappeared. Between June and August 1940 water tank tests were made using scaled down versions of the Albacore's floats. Trials showed that initially the floats were 'dirty' and water fowled the propeller, a lengthened float reduced this but splashed the tailplane (still in the low position). Further refinements led to an acceptable float profile/position but by then it wasn't required.

Basic design of the new aircraft included a wingspan of 50 feet, reducing to 18 ft when folded, a length of 37 ft and a height of 14 ft 9in with the tail down. A maximum speed, surprisingly, of only 183 knots (239 km/hr) at rated altitude at a max all-up-weight (AUW) of 10,500lb. An endurance of six hours (eight hours with extra fuel) at 120 knots (123km/hr) at 2,000 ft. An automatic pilot was required for long endurance flying. Radius of action was to be not less than 230 miles at 180 mph at 6,000 ft. Tactically it had to carry a 1,500 lb torpedo or bomb load. It had to be able to dive at 70 degrees for the dive-bombing role – and it was suggested flaps should provide stability in the dive and recovery. Defensively, it was to

**Above: The second prototype Barracuda P1770 which was manufactured with the revised tailplane layout and first flew on 29 June 1941. In all other respects it was the same as P1767. It was allocated to the TRE at Defford where it served from 1942 to 1945 on ASV Mk.II development. (Ian Huntley) Below: Barracuda I P9655 was built at Fairey's Heaton Chapel works in Stockport. Aircraft were moved to Ringway for final assembly and test flying. This photograph was taken in October 1942 and shows the wing fences and torpedo crutches. (Authors collection)**




**Barracudas galore! Three production lines, at Heaton Chapel, above, showing the solid centre section to which the wings were attached. (Ian Huntley) and below, the Blackburn production line at Brough. For identification purposes, until camouflaged, the aircraft serial number was painted on the rear fuselage by hand. Once finally spray painted the serial was stencilled on next to the words Royal Navy. (BAE)**

have a puny single fixed forward-firing machine gun and one (later changed to two) for the Telegraphist Air Gunner (TAG) in the rear cockpit. Appropriate radio and navigation equipment was to be fitted in a spacious observers (FAA navigators were known as observers) position. The observer also had the advantage of bulged transparencies below the wing root to allow downwards vision for taking bearings. The crew were to be housed under a continuous transparent canopy with separate access to three crew positions. At one stage there were plans to install a four-gun turret in the TAG position, but this was short-lived. The engine was to be the new Rolls-Royce Boreas (also incorrectly known as the Exe/X).

The Fairey design office had already been working on a low-wing twin-engined monoplane of all-metal monocoque structure housing a crew of two. Its major feature was a high-speed wing fitted with an early version of the Fairey-Youngman flap. Alternative powerplants were looked at, apart from the Boreas, the Rolls-Royce Vulture, Napier Sabre and Fairey's own engines, the P.16 and the more powerful P.24 were all assessed.

The wing and flap system were rejected by the Air Ministry saying that they were too large for carrier wing folding operations. The wing trailing edge bulges that would have housed the flap linkage and provided a completely flush system was also vetoed. The Air Ministry, with a number of naval aircraft specifications in the pipeline, suggested one aeroplane that could do everything, that is, torpedo attack, dive bombing, spotter and reconnaissance roles without thought of all the equipment that a multi-role aircraft would have to carry – and operate, at higher AUWs from carrier decks. It was considered by the design office that powered by twin P.24s and the flap system, the new aircraft could just about manage. However, the Ministry did not like the idea of twin engine aircraft operating from carriers and reverted to a single-engined aircraft, and issued Specification S.24/37.

The first problem was the withdrawal of any Ministry support for the P.24 engine and offered the Sabre – already in trouble itself. In September 1939 Rolls-Royce announced that they were not continuing with the development of the Boreas and it would not be available. Fairey were forced to redesign the

**Barracuda Mk.II LS789 displaying the long crew compartment and the large flap area. (Crown Copyright)**

**Once finished in the assembly shops the aircraft was pushed out and the engine ground run. In this head-on shot the Barracuda wing positions, undercarriage and flaps are shown to good effect. (BAE)**

whole aircraft to meet the new specification and Marcel Lobelle, Fairey's chief designer at that time, came up with a low-wing monoplane but not dissimilar to the final shape. The Ministry were insisting on the 1,260 hp Merlin 30, as the new powerplant – almost half the original power available from the P.24 or Sabre.

They had suggested the Bristol Taurus and Wright Cyclone, both air-cooled engines, but neither used 100-octane fuel and it would have meant radical re-design forward of the firewall. To meet all the requirements by the Ministry the wing had to go to a shoulder position for Centre of Gravity (CG) reasons. With the low wing the CG was so critical that when all the equipment was fitted it would have moved out of the safe operating envelope. To retain it would mean moving the wing leading edge forward, robbing the pilot of a good view so necessary for deck landing. The undercarriage had to be designed to be fully retractable and at the same time allow for wing folding.

The tailplane was very much based on that of the Albacore. Lobelle's design was to say the least quite brilliant in that he managed to incorporate the Ministry's requirements into an aeroplane overweight and under-powered. That it flew throughout the war fulfilling all the roles required of it, and not only from fleet carriers but escort carriers as well, says much for the ingenuity of Lobelle and his design staff at Hayes.

Despite the problems mentioned above the Air Ministry had seen the potential of the Barracuda and during August 1939 placed large orders 'straight off the drawing board'. Two prototypes were ordered but their construction was reduced to a low ebb during the summer of 1940 when all efforts were directed towards the aircraft types necessary to fight the invading Luftwaffe.

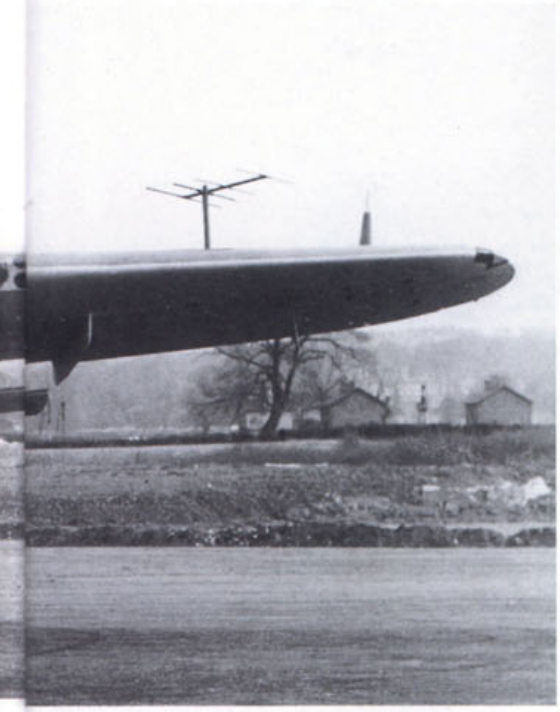
## CONSTRUCTION

The final outcome was the Barracuda Mks I, II, III and V – all being three-seat high-wing monoplanes designed for dive-bombing, torpedo-carrying and reconnaissance duties. The Mk.I was powered by the Merlin 30 with a three-blade variable-pitch propeller and constant speed unit, while the Mk.II and III had the Merlin 32 with a four blade propeller. The Barracuda V was powered by the Griffon VIII or 37.

The engine mounting and framework of the pilot's cockpit and rear bay of the fuselage were made of tubular steel, the remainder of the fuselage being of monocoque construction. A centre-section was built on to the fuselage to form stub planes with joints to receive the wings. The crew's cockpit area was housed under continuous hooding with moveable portions to allow access. Tip up hoods at the navigator's and gunner's positions also acted as windshields.

For the slightly more observant reader some aircraft show triangular wind deflector panels each side of the pilot's windscreen for when he wanted to fly with the canopy open, deleted under mod.549 so they are not shown on all Barracudas. Footsteps were provided on the port side of the fuselage for both cockpits. The wings were two-spar stressed skin structure housing the fuel tanks and undercarriage. Before each outer wing section could be folded back the trailing edge carrying the flaps had to be folded up and over to rest on a buffer stalk extending above the surface of the wing. Although hydraulically operated they could be moved manually. To lock the outer wing in a folded

**Barracuda II P9667, the first production Mk.II, in a 40 degree dive when the flaps would be set to negative incidence to give maximum drag. (via Tony Buttler)**

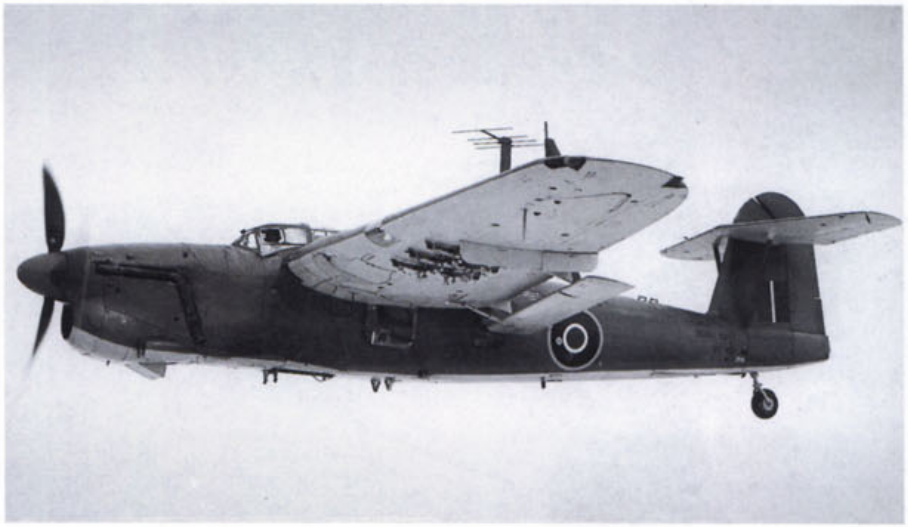


The location of the ASH radar nacelle under the port wing on LS789. (Crown Copyright)

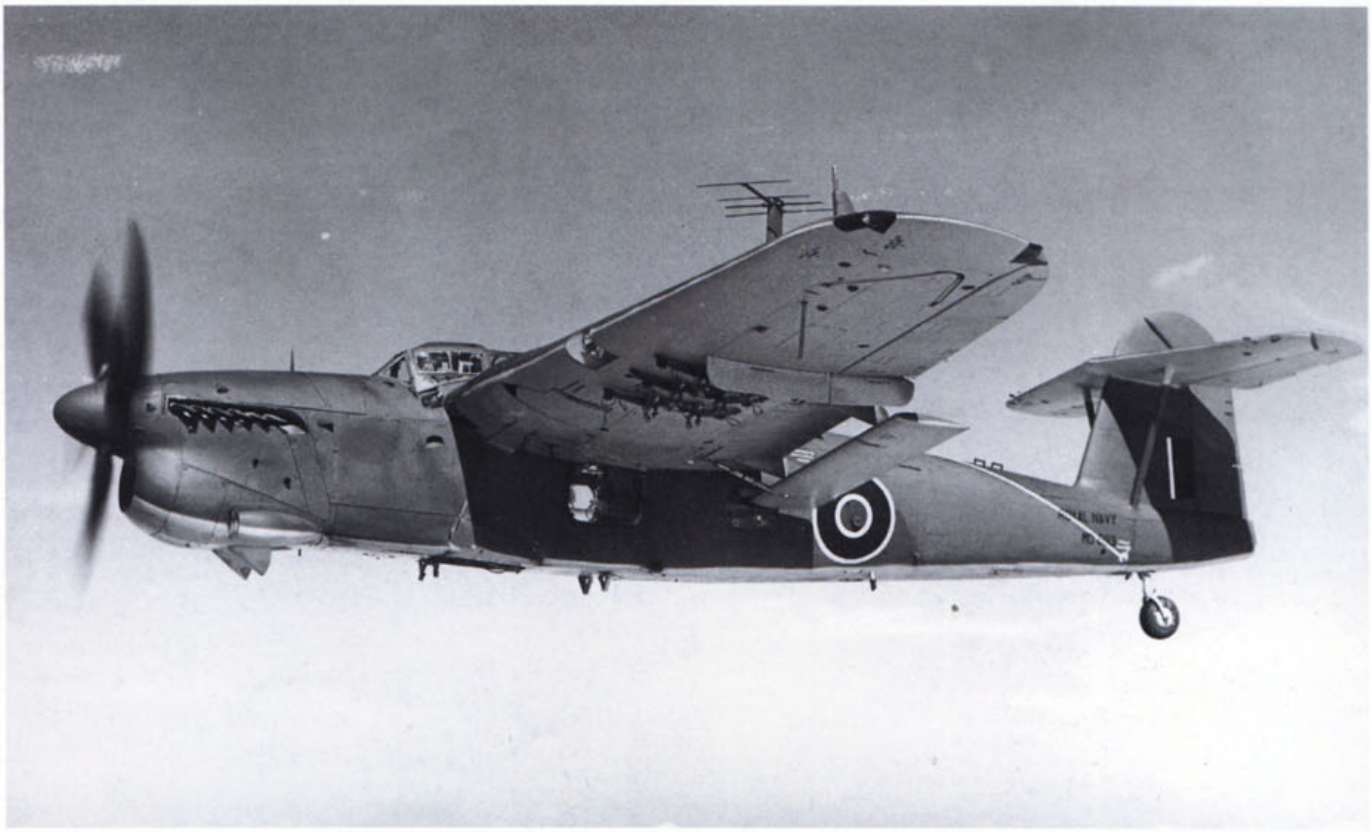
position a locking plunger was fitted above each wing surface near the tip, this engaged a catch on the leading edge of the tailplane. The flaps were mounted on outriggers built into the trailing edge of the outer wing and could be set at positive incidence for take-off and landing, or at negative incidence for diving. A hydraulically operated retractable undercarriage consisting of a torsion box, a hydraulically operated toggle strut for securing the undercarriage in the lowered position and a oleo-pneumatic shock-absorber strut. A single hydraulic jack retracted the units upward and inward.

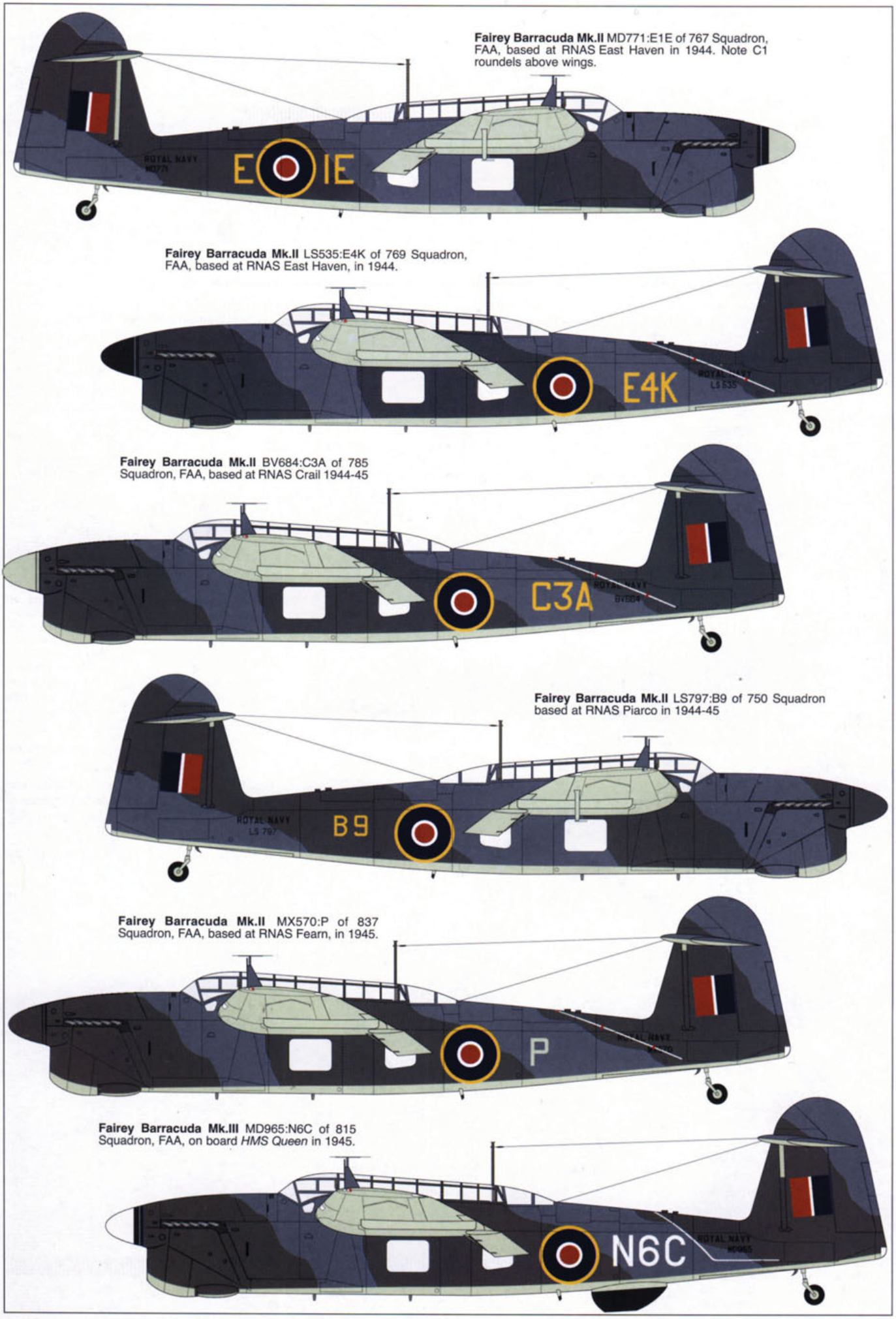
Catapult spools were fitted in the fuselage and a standard V-frame deck landing arrester hook was fitted under the rear fuselage.

The flying controls were of the push-pull rod type. Bomb racks were provided under each wing and torpedo crutches under the forward fuselage, although light series bomb carriers could also be carried in tandem in this position. Other naval weapons such as



**Right: BV760 a Barracuda II built by Blackburn up on flight test. This has the earlier type exhaust manifold. (BAE) Below: An almost identical view, but a different machine. A later production aircraft, MD693 displaying the change in exhaust manifold. A blanking plate covers where the previous type of exhaust pipe ran down the cowling. Noticeable on the rear fuselage is the white lanyard for the M-type dinghy which automatically released and inflated on entering the water. (BAE)**






**Fairey Barracuda Mk.II** MD771:E1E of 767 Squadron, FAA, based at RNAS East Haven in 1944. Note C1 roundels above wings.

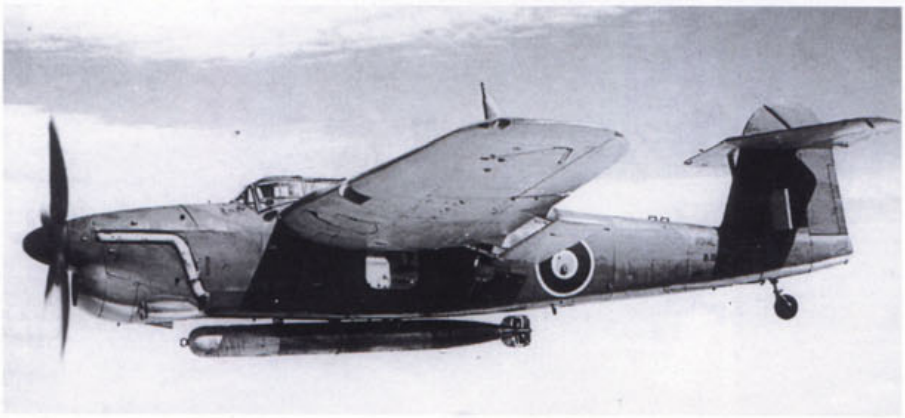
**Fairey Barracuda Mk.II** LS535:E4K of 769 Squadron, FAA, based at RNAS East Haven, in 1944.

**Fairey Barracuda Mk.II** BV684:C3A of 785 Squadron, FAA, based at RNAS Crail 1944-45

**Fairey Barracuda Mk.II** LS797:B9 of 750 Squadron based at RNAS Piarco in 1944-45

**Fairey Barracuda Mk.II** MX570:P of 837 Squadron, FAA, based at RNAS Fearn, in 1945.

**Fairey Barracuda Mk.III** MD965:N6C of 815 Squadron, FAA, on board *HMS Queen* in 1945.



**Above: Illustrating the rear crew positions on the Barracuda. Entry to both rear cockpits could be made by way of the gunner's canopy, the navigator's seat back being lowered to facilitate entry - or he could climb in using a footwell on the starboard side - or use the blister window. Left: Barracuda II P9682 carrying a practice torpedo. Dummy torpedoes, lumps of concrete weighing 1,800 lbs, were sometimes used to give the right 'feel' in training.**

depth charges, mines and smoke floats were also carried. Interestingly, the torpedo and bomb sight consisted of a black stencilled ellipse on the inside of the pilot's windscreen which was in line with a ring sight on the fuselage just in front of the pilot's windscreen. This could be adjusted for either torpedo or bomb attacks.

Provision was made for RATOG which consisted of two motors, one above the other, mounted under the wings at an angle and jettisoned by the pilot after use. On the Mk.V, mod 685 introduced an enlarged fin and rudder area to compensate for the extra power from the Griffon engine.

## DEVELOPMENT

Due to the inherent problems associated with its gestation the Barracuda was 'continuously under development' during the war with problems being fixed by modification as they appeared. There was, at one time, a campaign by certain Members of Parliament to get the programme cancelled, common sense prevailed and the orders continued to flow in. One problem was the Admiralty's insistance on trying to fit as much equipment

**A flight of six Barracudas out on a training flight. The torpedoes on the first three machines have air tails. Although hardly discernable the aircraft carry individual code letters – the first and third being A and B respectively. (IWM)**

# Fairey Barracuda production list

**Contractor** – Fairey Aviation Co., Heaton Chapel, Stockport.

| Variant | Serial range | Numbers | Contract No. |
|---|---|---|---|
| Prototypes | P1767-P1770 | 2 | 777067/38 30.1.39 |
| TBR I | P9642-P9666 | 25 | 250 993331/39 10.8.39 |
| TBR II | P9667-P9691 | 25 | |
| TBR II | P9709-P9748 | 40 | |
| TBR II | P9787-P9836 | 50 | |
| TBR II | P9847-P9891 | 45 | |
| TBR II | P9909-P9943 | 35 | |
| TBR II | P9957-P9986 | 30 | |
| TBR II | DT813-DT831 | 19 | 50 9933331/39 10.8.39 |
| TBR II | DT845-DT865 | 21 | |
| TBR II | DT878-DT887 | 10 | |
| TBR II | LS464-LS506 | 43 | 400 |
| TBR II | LS519-LS556 | 38 | |
| TBR II | LS568-LS595 | 28 | |
| TBR II | LS608-LS653 | 46 | |
| TBR II | LS668-LS713 | 46 | |
| TBR II | LS726-LS763 | 38 | |
| TBR II | LS778-LS820 | 43 | |
| TBR II | LS833-LS878 | 46 | |
| TBR II | LS891-LS936 | 46 | |
| TBR II | LS949-LS974 | 26 | |
| TBR III | PM682-PM723 | 42 | 300 Acft/2011 |
| TBR III | PM738-PM780 | 43 | |
| TBR III | PM796-PM838 | 43 | |
| TBR III | PM852-PM897 | 46 | |
| TBR III | PM913-PM958 | 46 | |
| TBR III | PM970-PM999 | 30 | |
| TBR III | PN115-PN164 | 50 | 50 |
| TBR III | RK328-RK369 | 42 | 300 Acft/2011 |
| TBR III | RK382-RK428 | 47 | |
| TBR III | RK441-RK481 | 41 | 160 Built |
| TBR III | RK482-RK529 | 48 | |
| TBR V | RK530-RK542 | 13 | 30 Built |
| TBR V | RK555-RK597 | 43 | 110 Cancelled |
| TBR V | RK613-RK658 | 46 | |
| TBR V | RK687-RK721 | 35 | |
| TBR V | RK735-RK784 | 50 | |
| TBRV | TS676-TS715 | 40 | 85 Acft/4775 31.10.44 |
| TBR V | TS739-TS783 | 45 | All cancelled. |
| TBR V | VH765-VH789 | 25 | 100 Acft/5529 9.7.45 |
| TBR V | VH805-VH843 | 39 | All cancelled |
| TBR V | VH861-VH896 | 36 | |

**Contractor**-Blackburn Aircraft, Brough

| | | | |
|---|---|---|---|
| TBR II | BV660-BV707 | 48 | 250 |
| TBR II | BV721-BV766 | 46 | |
| TBR II | BV788-BV834 | 47 | |
| TBR II | BV847-BV885 | 39 | |
| TBR II | BV898-BV922 | 25 | |
| TBR II | BV937-BV981 | 45 | |
| TBR II | MD612-MD656 | 45 | 150 |
| TBR II | MD678-MD723 | 50 | |
| TBR II | MD736-MD778 | 43 | |
| TBR II | MD792-MD807 | 16 | |
| TBR II | MX535-MX578 | 42 | 365 |
| TBR II | MX591-MX638 | 48 | |
| TBR II | MX652-MX696 | 45 | |
| TBR II | MX709-MX753 | 45 | |
| TBR II | MX767-MX808 | 42 | |
| TBR II | MX820-MX864 | 45 | |
| TBR II | MX877-MX907 | 31 | |
| TBR II | MX908-MX923 | 16 | Cancelled |
| TBR II | MX935-MX983 | 49 | Cancelled |
| TBR II | PJ649-PJ650 | 2 | Replacement aircraft |
| TBR II | RJ366-RJ409 | 43 | 300 Acft/3411 14.10.43 |
| TBR II | RJ423-RJ469 | 47 | to be built at Sherburn. |
| TBR II | RJ484-RJ527 | 43 | All cancelled |
| TBR II | RJ538-RJ584 | 46 | |
| TBR II | RJ597-RJ639 | 42 | |
| TBR II | RJ654-RJ697 | 43 | |
| TBR II | RJ720-RJ755 | 36 | |

**Contractor**-Boulton Paul Aircraft, Wolverhampton.

| | | | |
|---|---|---|---|
| TBR II | DP855-DP902 | 48 | 300 |
| TBR II | DP917-DP955 | 39 | |
| TBR II | DP967-DP999 | 33 | |
| TBR II | DR113-DR162 | 50 | |
| TBR II | DR179-DR224 | 46 | |
| TBR II | DR237-DR275 | 39 | |
| TBR II | DR291-DR335 | 45 | |
| TBR III | MD811-MD859 | 49 | |
| TBR III | MD876-MD924 | 49 | |
| TBR III | MD945-MD992 | 48 | |
| TBR III | ME104-ME152 | 49 | |
| TBR III | ME166-ME210 | 45 | |
| TBR III | ME223-ME270 | 48 | |
| TBR III | ME282-ME293 | 12 | |
| TBR III | RJ759-RJ799 | 41 | Acft/1066 for 300 aircraft |
| TBR III | RJ902-RJ948 | 51 | 96 built, 204 cancelled |
| TBR III | RJ963-RJ966 | 4 | |
| TBR III | RJ967 -RJ999 | 32 | |
| TBR III | RK113-RK158 | 45 | |
| TBR III | RK172-RK215 | 43 | |
| TBR III | RK228-RK269 | 41 | |
| TBR III | RK283-RK325 | 42 | |
| TBR III | SZ638-SZ672 | 35 | 250 Acft/4068 12.4.44 |
| TBR III | SZ687-SZ728 | 42 | All cancelled |
| TBR III | SZ743-SZ787 | 45 | |
| TBR III | SZ801-SZ848 | 48 | |
| TBR III | SZ862-SZ895 | 34 | |
| TBR III | SZ909-SZ954 | 46 | |
| TR V | TW806-TW837 | 32 | 50 Acft/5016 24.1.45 |
| TR V | TW840-TW857 | 18 | All cancelled |
| TR V | VH901-VH934 | 34 | 50 Acft/5532 9.7.45 |
| TR V | VH962-VH977 | 16 | All cancelled |

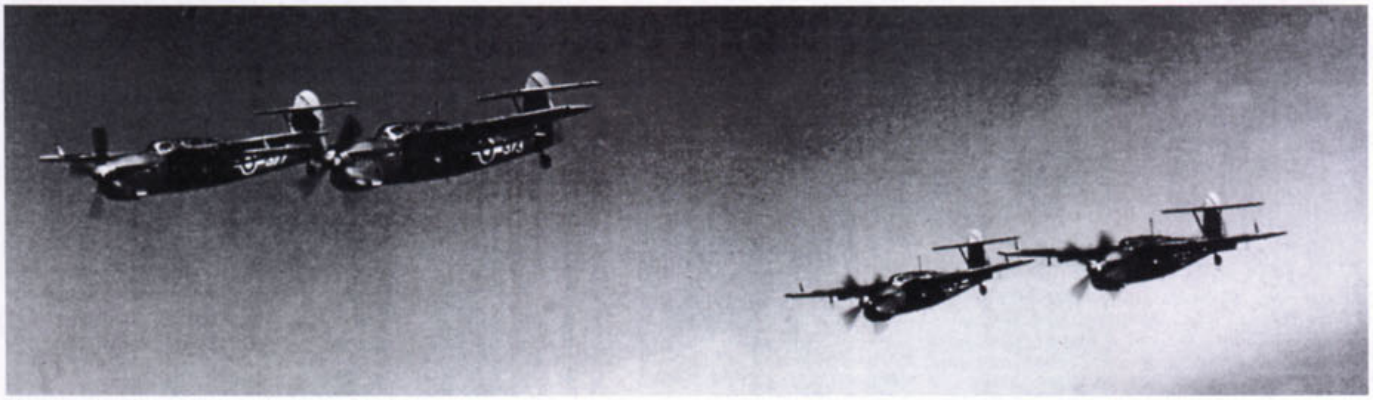
**Contractor**-Westland Aircraft, Yeovil

| | | | |
|---|---|---|---|
| TBR I | DN625-DN629 | 5 | 250 Acft/ |
| TBR II | DN630-DN642 | 13 | 18 built – 232 cancelled |
| TBR II | DN643-DN669 | 27 | |
| TBR II | DN693-DN730 | 38 | |
| TBR II | DN756-DN805 | 50 | |
| TBR II | DN839-DN874 | 36 | |
| TBR II | DN897-DN935 | 39 | |
| TBR II | DN957-DN998 | 42 | |
| TBR II | NN678-NN692 | 14 | Acft/2513 3.2.43 |

Transferred to Blackburn and cancelled

**Production summary**

| | | | |
|---|---|---|---|
| Fairey built | Mk.I | 25 | plus two prototypes |
| | Mk.II | 675 | |
| | Mk.III | 460 | |
| | Mk.V | 30 | Sub-total 1192 |
| Blackburn built | Mk.II | 700 | 700 |
| Boulton Paul | Mk.II | 300 | |
| | Mk.III | 392 | 692 |
| Westland | Mk.I | 5 | |
| | Mk.II | 13 | 18 |
| | **Grand total** | 2,602 | |



as possible into the airframe, including more hydraulic pumps, electrical generators, radios, radar and batteries than any other naval single-engined aircraft, and stay within the specification limits!

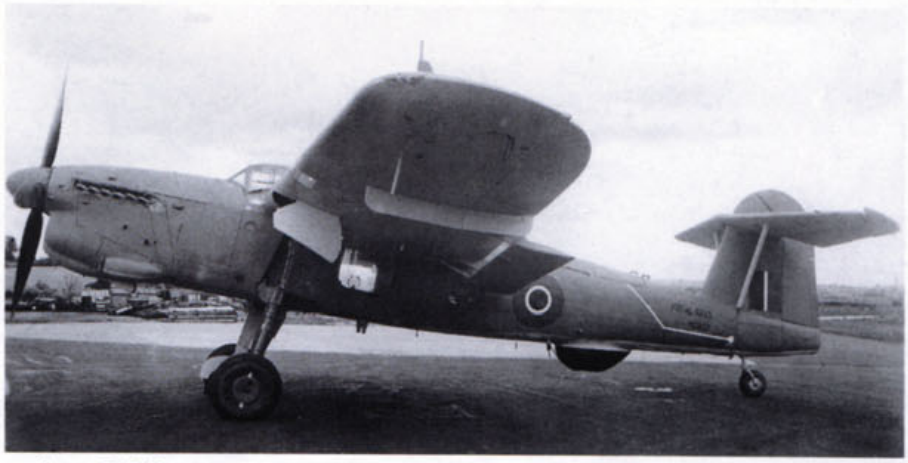
In December 1939 the first Merlin 30 to be delivered to Hayes was used in the Barracuda mock-up for installation trials. At that time the first flight of the prototype was planned for June 1940, with the second about a month later, but, as we have seen, things were delayed until later in the year. It was 7 December 1940 before the first prototype, P1767, made its maiden flight from Fairey's Great West Aerodrome (GWA) at Heathrow. Intensive flying revealed a number of problems, including CG limitations after the Merlin 30 replaced the planned Boreas engine. It was found that when the flaps were used as air brakes it created a turbulent wake which set up severe buffeting with the low set tailplane.

During 18/19 May 1941 P1767 was loaned to 778 Squadron for deck landing trials aboard *HMS Victorious*, and it fell to Lt.Cdr. James Tillard to be the first pilot to land a Barracuda on a flight deck. The problem of interactivity between flap created turbulence and the buffeting tailplane made the aircraft unsafe for deck landing under extreme conditions. It was returned to Fairey who had already come up with a redesigned tailplane which was moved higher up the fin.

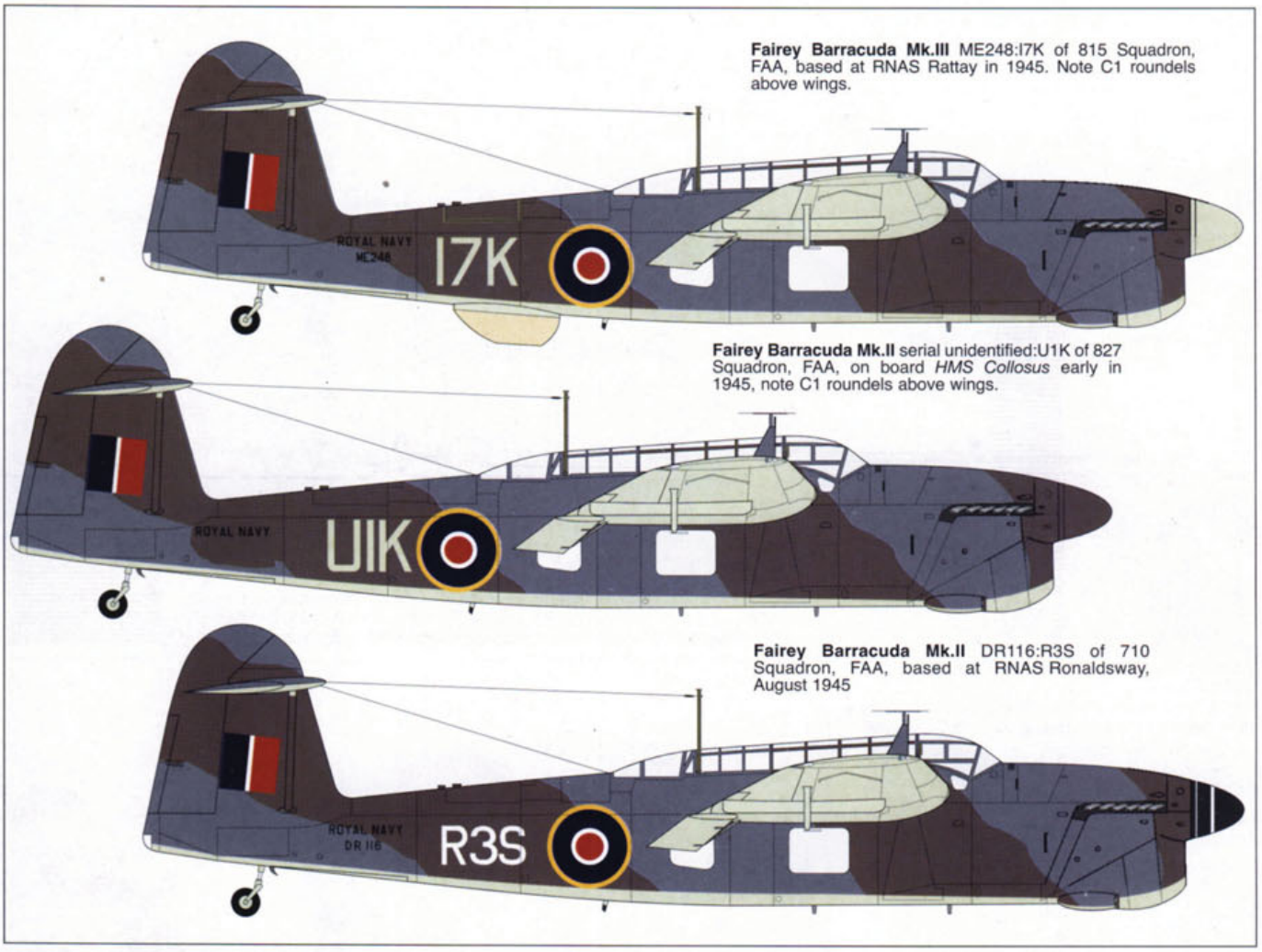
In this form the first production type Barracuda landings were made by Lt.Cdr. Torrens-Spence on 25 September 1942. The new look did nothing to enhance the Barracuda's appearance with support struts each side of the tail but did give it good deck landing characteristics. In July 1941 there was a setback when a naval pilot who had flown the aircraft retracted the undercarriage while taxying in and shock-loaded the engine. P1767 was delivered to the Aeroplane & Armament Experimental Establishment (A&AEE) at Boscombe Down for performance and handling trials on 15 October 1941. At different AUWs including bomb and torpedo loads, the main problem seemed to be an excessively long take off run and slow climb out. Completion of the trials was delayed until February 1942 due to unservicability problems and minor modifications.

The question of being seriously underpowered was found to be partly due to the Admiralty continuously adding equipment

**Above: This Barracuda of the British Pacific Fleet shows how small an area it could be folded into for deck handling and hangerage space. Below: Barracuda TR.III MD837 in August 1944 still with a three-blade propeller and the radar scanner under the rear fuselage. The white line is the revised route for the dinghy lanyard. (via Tony Buttler)**



**Below: The first Barracuda TR.III produced by Boulton Paul, DP855/G in February 1944. Parked in the background are four Barracuda IIs. It was with the TRE at Defford in 1944 for ASV Mk.II 'X' band evaluation with a rear fuselage mounted scanner and radome. (Crown Copyright) Left: A formation of four Barracuda IIs of 812 Squadron flying over China on 14 December 1945. These were part of Allied border patrols between China and the Hong Kong New Territories Frontier during November/December 1945. (J. Dickson)**




**Fairey Barracuda Mk.III** ME248:I7K of 815 Squadron, FAA, based at RNAS Rattay in 1945. Note C1 roundels above wings.

**Fairey Barracuda Mk.II** serial unidentified:U1K of 827 Squadron, FAA, on board *HMS Collosus* early in 1945, note C1 roundels above wings.

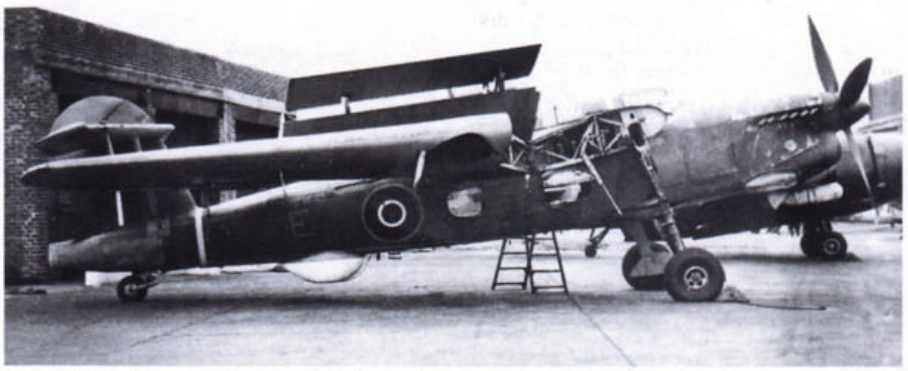
**Fairey Barracuda Mk.II** DR116:R3S of 710 Squadron, FAA, based at RNAS Ronaldsway, August 1945

not envisaged in the original Specification, the change of engine and some structural strengthening.

In December 1941 Fairey and Rolls-Royce looked into the problems of increasing take off power for the Merlin 30, and talked of possibly fitting the Merlin 20 or Griffon IIB (being developed for the Firefly). There was also talk of introducing a four-blade propeller. However, Rolls-Royce were developing the Merlin 32 which would be rated at 1,640 hp, an increase in power of 33 per cent over the Merlin 30, and enough to provide the Barracuda with a better performance. Consequently, in April 1942 the Ministry of Aircraft Production (MAP) decided to go for the Merlin 32.

With the new engine, a four-blade propeller and other changes, including redesign of things like air intake ducts and cowling lines, it became the Barracuda II and was to be integrated into production straight away. This meant only 25 Barracuda Is being built by Fairey at their Stockport factory before production switched to the Mk.II.

The initial Barracuda I P9642 first flew on 2 April 1942. Early flights showed undercarriage retraction and lateral control problems. An early forced landing resulted in P9642 going to Hayes for reconditioning and the opportunity was taken to install a Merlin 32, effectively becoming a Mk.II! To rub salt in the wounds the MAP informed Fairey they had no propellers for the Barracuda – all production had been allocated for Spitfires and Wellingtons. However, by 10 August



**Above: This picture of Barracuda TR.III coded E shows the small area required for storage when the wings were folded. (Eric Watts/Air-Britain) Below: Barracuda PM940 became the fifth TR.V prototype in October 1945. A large fin area has been added to compensate for the extra power from the Griffon. (via Ray Sturtivant)**

**Another view of Barracuda V fifth prototype PM940. Not apparent is the ASH radar nacelle, which was located under the starboard wing, later moved to the port wing. (Crown Copyright)**

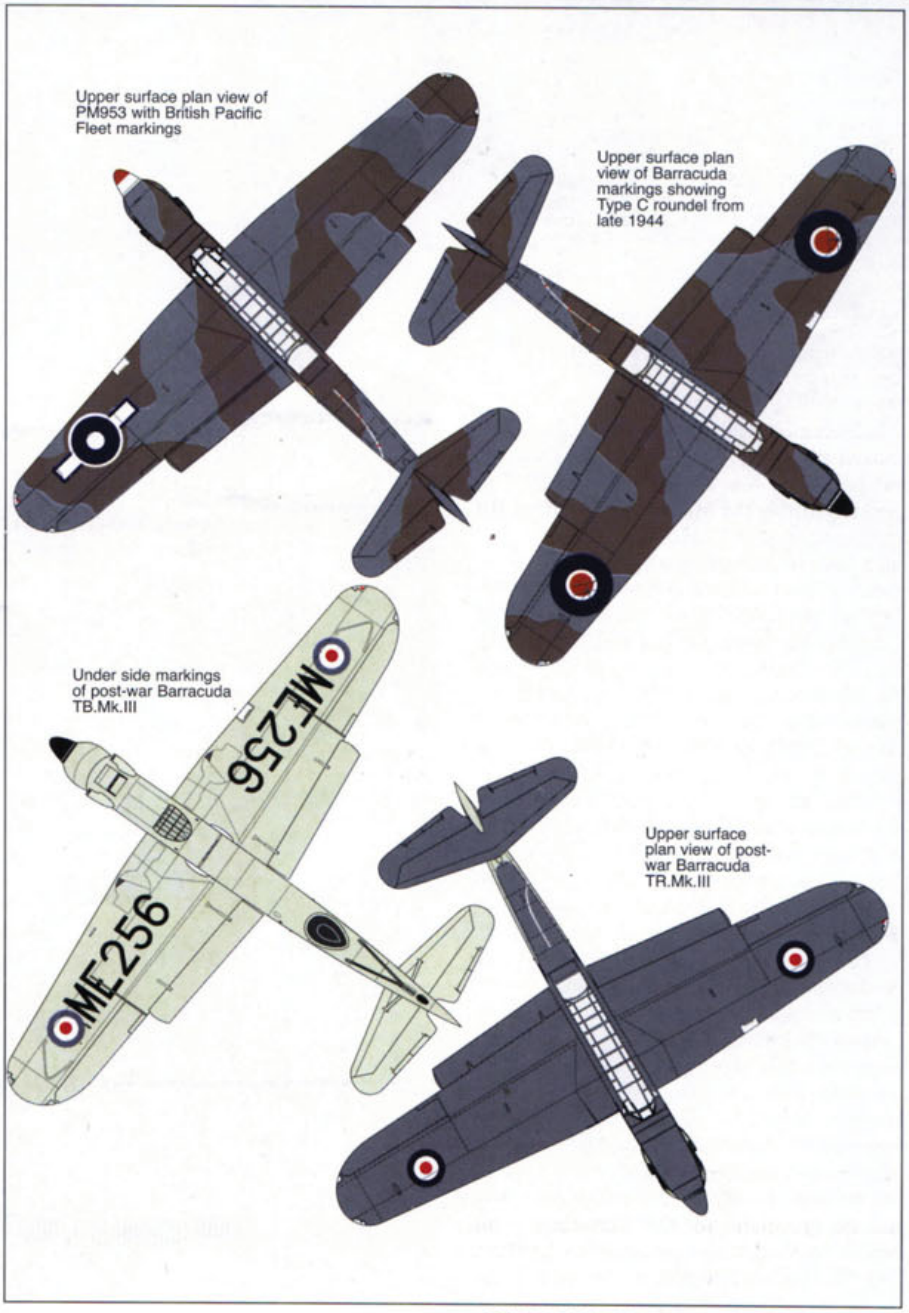
1942 there were seven Barracuda Is at Ringway with Merlin 30s, with P9642 going to the RAE Farnborough and P9645 going to Boscombe Down.

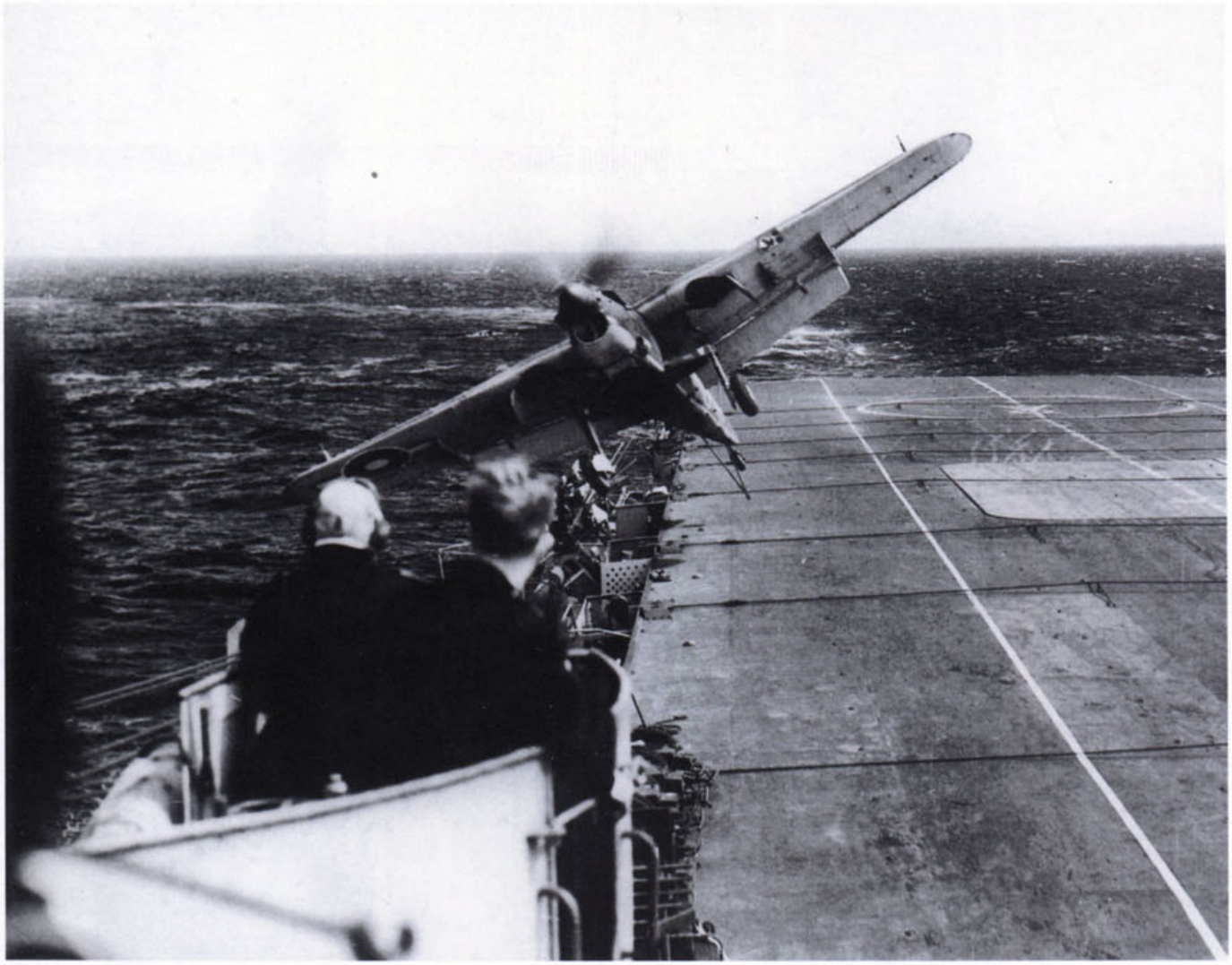
A number of problems arose concerning the radiator selection, CO (Carbon Monoxide) cockpit contamination and the exhaust system. The Barracuda exhaust manifold story could fill a book on its own; suffice to say here that it was always a problem. A study of the different types is displayed on page 33. The initial general design of the exhaust system was fixed by Fairey and consisted of three blisters running the length of the exhaust ports and a long tail pipe running to the bottom of the engine nacelle. This was to alleviate the cockpit contamination problem. However, the tailpipe was attached to the aircraft structure, while the rest of the manifold was attached to the engine – creating unforeseen problems such as cracked weld joints of exhaust stubs to exhaust flanges allowing complete failure.

During June 1943 787 Squadron, the Naval Air Fighting Development Unit (NAFDU) based at RAF Wittering evaluated P9768, which at that time was fitted with a Lancaster-type multi-ejector exhaust manifold. They found CO contamination in the pilot's cockpit and said it was heavy to fly due to being overweight. They also tested P9644, P9788 and P9917.

Another fault that emerged and which contributed to the Barracuda's reputation were stories of wings coming off in dives. This was eventually traced to below specification wing locking pins which quickly developed wear and failed due to lack of rigidity. When tested more than 80 per cent were below specification! The first signs of trouble as vibration set in were usually rivets popping at the joints when pulling out of a dive!

One of the other problems concerned stories of the aircraft taking a sudden dive for





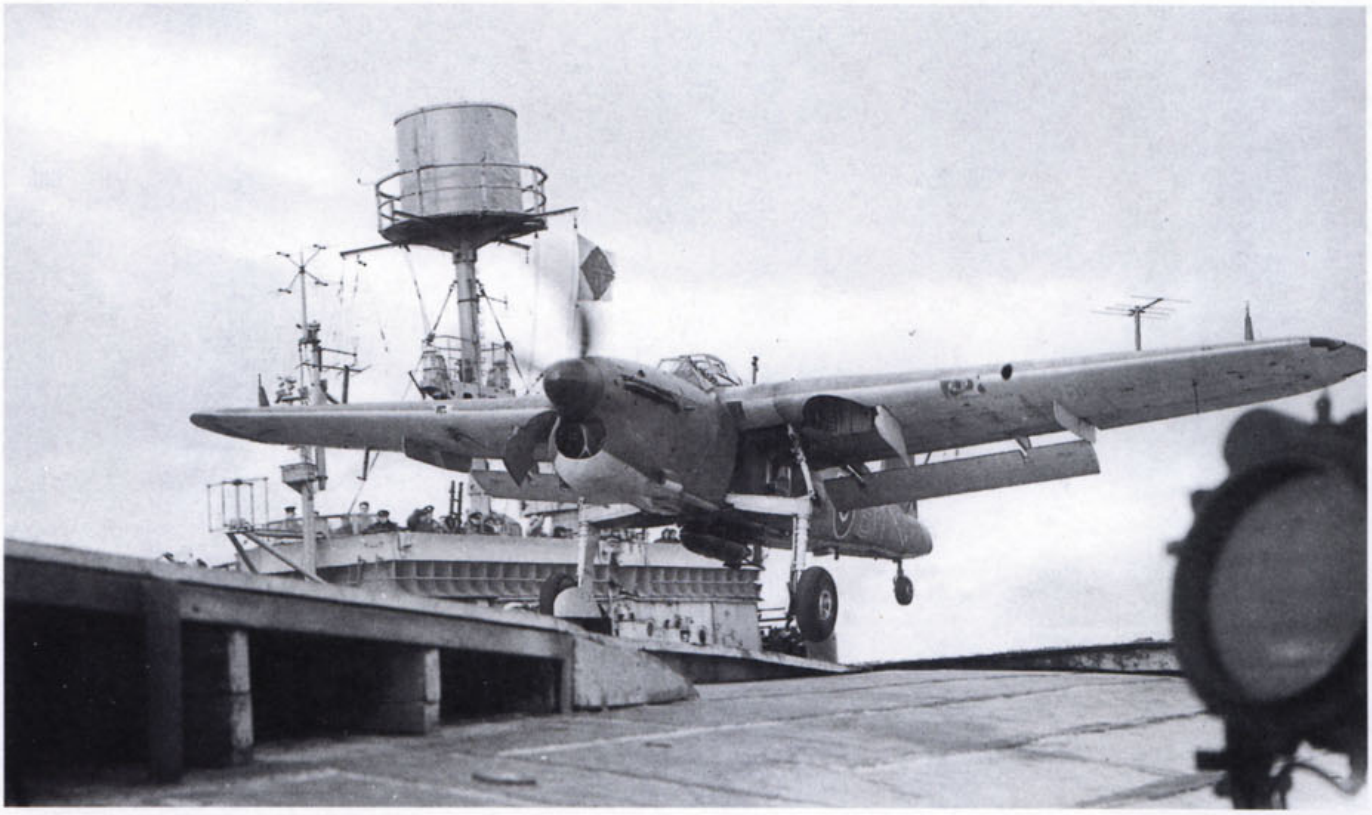
**Above: Although well known to enthusiasts this picture is so full of action it would be a pity to leave it out! This pilot of 814 Squadron has misjudged his approach to *HMS Venerable* in the Far East. On the wrong side of the flight deck with everything down, undercarriage, flaps and tail hook, he has applied full power and is literally hauling the aircraft off and up to the right in an effort to avoid hitting the superstructure on the deck. (IWM) Right: Pictures of Barracudas wearing invasion stripes are relatively rare but this one also has individual markings on the forward fuselage. (FAA Museum)**

no apparent reason. The RAE were called in to investigate after five Barracudas had been lost in strange circumstances. The pilot selected to do the investigation was Lt Eric Brown (later Captain). He had flown the Barracuda I and noticed that it appeared to have some rudder overbalance. He recalls his approach to the problem –'I was well aware that the torpedo attack technique which was to dive to low altitude using the dive flaps, level out, launch the torpedo, retract the flaps and make a rapid and evasive breakaway to one side. This latter phase of the manoeuvre seemed the obvious area for suspicion, and I recollected the rudder overbalance that I had sensed during my first flight in a Barracuda I. I therefore performed a series of sideslips at height and at various speeds, deliberately stalling the rudder. When the rudder overbalanced, the nose

**Right: A crowded flight deck with all Barracuda engines running before getting airborne. They belong to 815 Squadron aboard *HMS Illustrious* in 1948.**


**Above: Three Barracudas of 812 Squadron from *HMS Vengeance* in December 1945. They carry the British Pacific Fleet markings with PM953 371:A flown by Lt. Poole nearest the camera. (Via Ray Sturtivant) Below: Full of detail and atmosphere this picture is of WRENs and a rating as they pose for press cameras at a naval base in June 1944.**

dropped quite sharply. I also checked the change of trim when the dive brakes were retracted at the bottom of a high-speed dive and this was markedly nose down. The next stage was to try out the combination manoeuvre. I alerted the flight observer to switch in the cameras recording the instruments giving airspeed, altitude, and elevator, rudder and aileron angles, and then put the aircraft into a dive to 210 knots (389 km/hr) with the flaps in the dive position and with the elevator trimmed to hold it steady. I then



Above: Barracuda II 6M of 810 Squadron gets airborne armed with a 1,600lb armour-piercing bomb. The American bomb was cleared to be carried after trials in December 1943 with aircraft modified by units using supplied kits. (IWM)

Above: This Barracuda II 488:3C was airborne for press cameras in June 1944 when the existance of the Barracuda was first announced following the attacks on *Tirpitz*.

simulated levelling out at sea level, and when the speed had dropped below 190 knots (352 km/hr) – the restriction speed for retracting the dive flaps - I raised the flaps to cruise position and kicked on rudder as I pulled away to starboard. In a flash the aircraft was in an inverted dive.

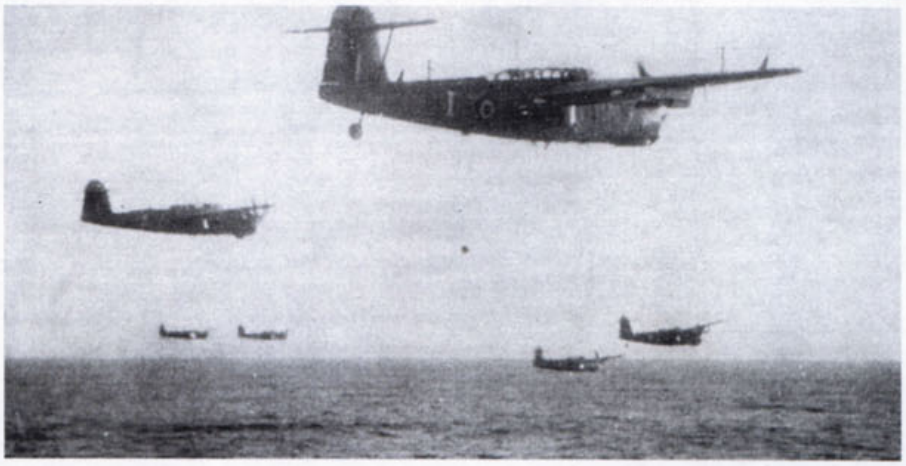
Fortunately, I had plenty of altitude in which to sort out the recovery, but I shuddered at the thought of what the inevitable consequences would have been had I actually performed the test at sea level!' And, it should be noticed, in the hands of a pilot not yet too familiar with the new aircraft.

After a number of other flights confirming this phenomenon a warning was issued to all TSR aircrew and the epidemic of crashes ended immediately. By now most of the problems giving the Barracuda a bad name had been eliminated, but the stigma remained, mostly due to the prejudice it received in those early years.

The problem of poor take off performance was still there, and concern expressed about the Barracuda's ability to operate from escort carriers.

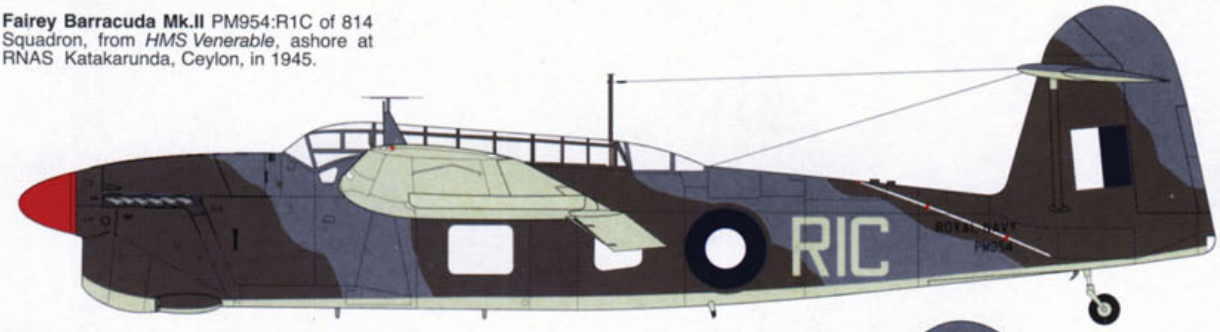
The RAE looked into this and came up with the idea of using RATOG (Rocket-Assisted Take-Off Gear). The gear consisted of two solid fuel rocket motors fitted each side of the fuselage and angled outwards so that the thrust went through the aircraft's CG and avoided excessive trim changes. The pilot fired the rockets electrically from the cockpit as he passed a white marker on the carrier deck. This would give him the optimum acceleration until the rockets petered out shortly after take-off but comfortably airborne when the gear was all jettisoned.

The first RATO was made by Lt Eric Brown in Barracuda II P9791 from *HMS Pretoria Castle* on 1 August 1944. The kit became standard operating procedure on escort carriers when heavily laden Barracudas needed a helping hand to get airborne. Catapult launching was another area investigated and improved. The British method was to use a cradle whereby four spools mounted on the aircraft fuselage were supported in this cradle and released in level flight attitude when catapulted, that is, the aircraft then had to be rotated into the climb. The American system used only two points, a single wire strop attached to the flight deck in a catapult slot with the other end attached to a single hook under the fuselage. The tail was secured (tail down) by this strop through a retaining ring which held the air-

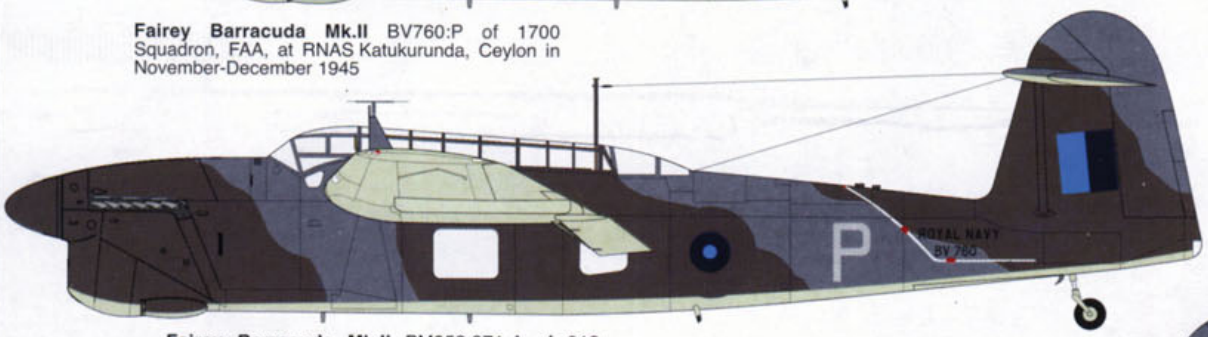


Right: Low level Barracudas hoping to achieve surprise on enemy shipping near Bodo off the Norwegian coast in November 1944. (IWM)

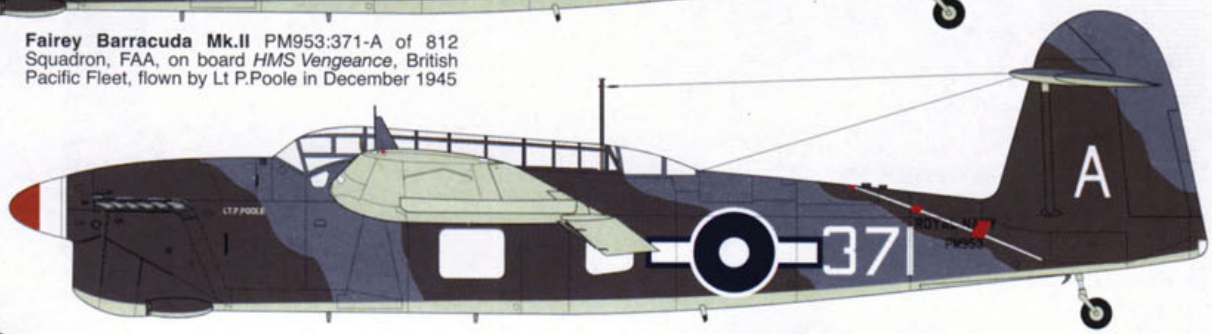
**Fairey Barracuda Mk.II** PM954:R1C of 814 Squadron, from *HMS Venerable*, ashore at RNAS Katakarunda, Ceylon, in 1945.



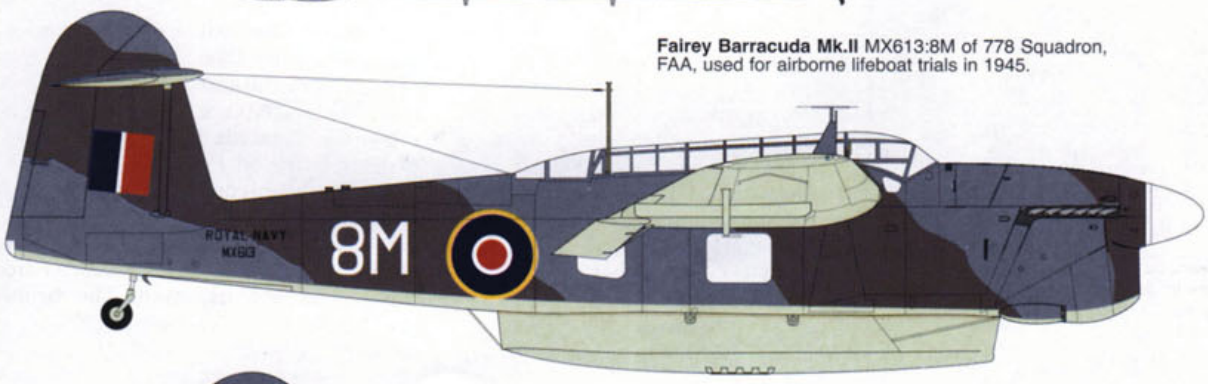

**Fairey Barracuda Mk.II** BV760:P of 1700 Squadron, FAA, at RNAS Katukurunda, Ceylon in November-December 1945



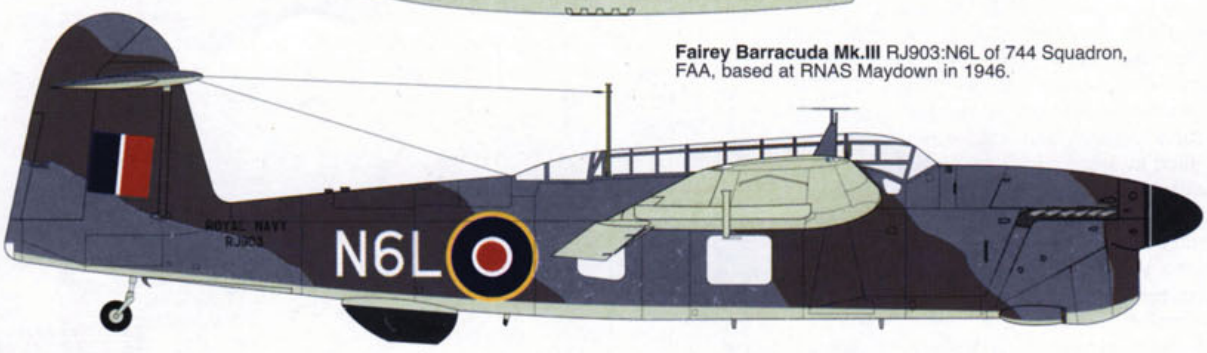

**Fairey Barracuda Mk.II** PM953:371-A of 812 Squadron, FAA, on board *HMS Vengeance*, British Pacific Fleet, flown by Lt P.Poole in December 1945



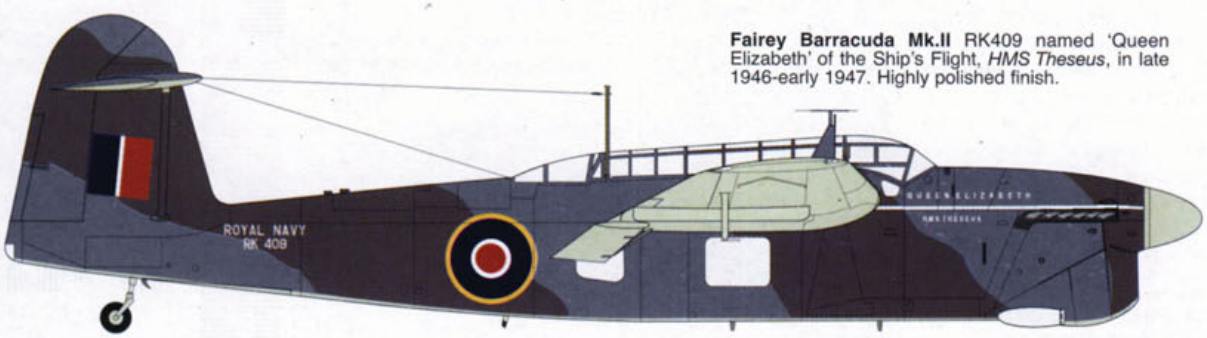

**Fairey Barracuda Mk.II** MX613:8M of 778 Squadron, FAA, used for airborne lifeboat trials in 1945.




**Fairey Barracuda Mk.III** RJ903:N6L of 744 Squadron, FAA, based at RNAS Maydown in 1946.




**Fairey Barracuda Mk.II** RK409 named 'Queen Elizabeth' of the Ship's Flight, *HMS Theseus*, in late 1946-early 1947. Highly polished finish.



**Torpedoes were usually dropped with a wooden air tail to provide stability. Wartime pictures were censored to remove the air tail before release to the press. This picture shows a Barracuda taking off the flight deck with an air tail still visible.**

craft back until launched. Once the pressure exceeded the breaking strength of the retaining ring the shuttle moved forward along the slot until it reached the end of its run. A brake stopped further movement with one end of the strop attached to the deck while the other end was allowed to slip clear of the spool under the aircraft fuselage allowing the aircraft to accelerate away in the flying attitude.

Barracuda II DR126 tested the American system aboard *Pretoria Castle* on 3 April 1945 with various loads, including a torpedo, and the system was accepted as standard launching procedure.

## TESTING TIME

The initial 25 Barracuda Is, relegated for training only, provided an initial wealth of knowledge as flight testing got under way. P9643 joined the programme on 16 May 1942 and was used to test a modified hood and tailplane airflow indications. P9645/G was fitted with ASV X (Air-Surface-Vessel) radar and first flew in that form on 20 July 1943; P9647 carried out a full torpedo load test on 4 August and P9648 tested metal ailerons.

The first Barracuda II P9667 flew on 8 December 1942. It was demonstrated to the press loaded with a torpedo on 4 August 1943 and on the 12th Charles Brown took some air-to-air pictures which are now the well known series of P9667.

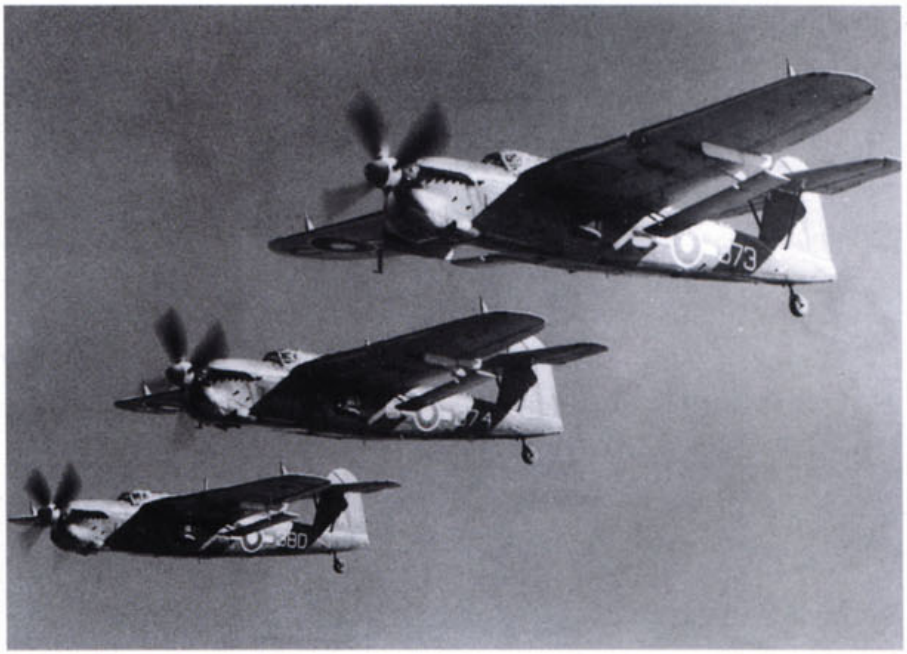
In late 1942 the programme, already late, was given a 'shove' by the Ministry to get the aircraft cleared for service as quickly as possible. Barracuda Is P9644, P9652 and P9653 were all at Boscombe Down undergoing intensive flying trials; Mk.II P9647 was there for handling and performance trials, P9667 for handling and gunnery, and P9676 with P9677 carrying out intensive flying with the Merlin 32.

In February 1943 it was suggested fitting the Merlin 24 in later Barracudas but the Admiralty rejected this as it did not offer any great advance over the Merlin 32. In fact, Rolls-Royce had been against fitting any two-stage supercharged engine in the Barracuda on the grounds that it would be inefficient at heights below 20,000ft. Fairey were told to proceed with the Griffon installation but Rolls-Royce informed them that the engine would not be available until at least Easter 1944.

Trials with the Mk.II were proving that aircraft performance and loading were only just adequate, but the Admiralty was still trying to squeeze more equipment aboard. It was said that at one stage the Barracuda had 13 radio sets so the observer could communicate with all the different ships and shore stations!

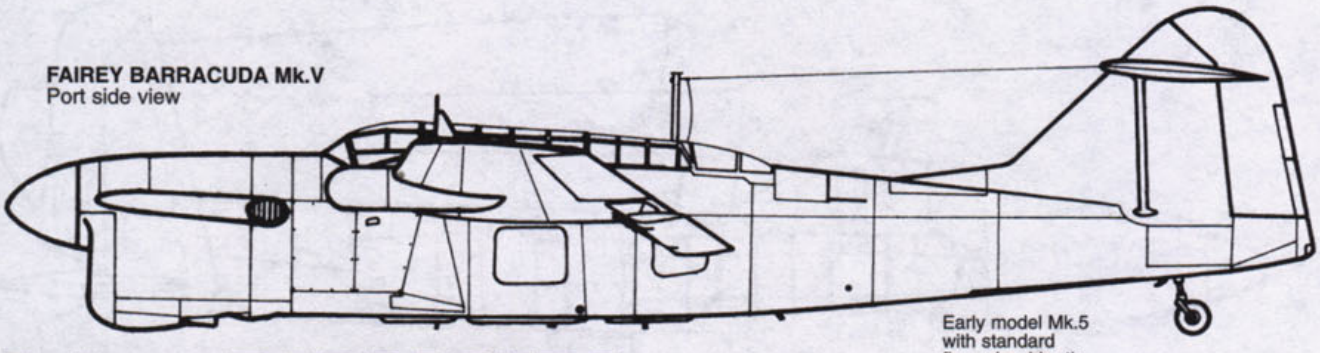
At a meeting between Fairey, MAP and Rolls-Royce it was suggested that, as the Griffon would not be available for early production machines, to (a) fit an additional 25 square feet to each wingtip of the Mk.II and (b) clean up the aircraft by moving the wing-mounted bombs to under the fuselage; ASV aerials external to the wing would now go inside the wingtip extension, made of metal and wood, and the torpedo, when required would be partially enclosed in the fuselage. To do this would require some aircraft strengthening including beefing up the main spar, in other words increase the weight yet again!

However, the trials with P1767, after fitting the Merlin 32 and a four-blade propeller, demonstrated a considerable improvement in performance and the pro-



**British Pacific Fleet markings were applied each side of the fuselage, above the port wing and below the starboard one as seen in this picture of 812 Squadron from *HMS Vengeance* in late 1945. (C.H. Wood via Ray Sturtivant)**

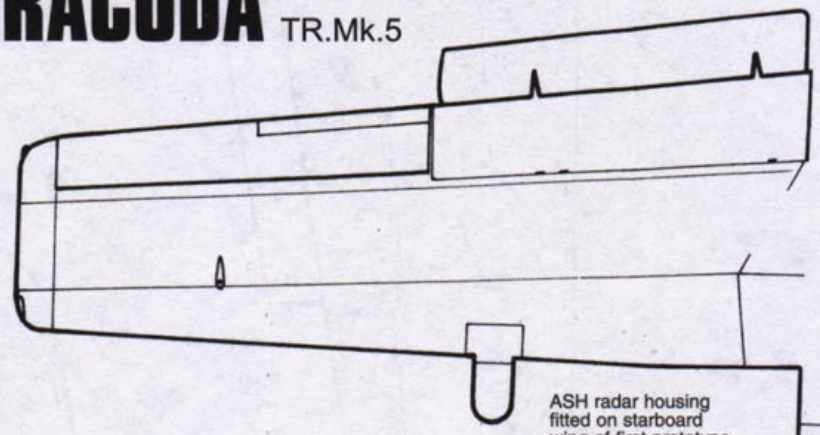
**FAIREY BARRACUDA Mk.V**
Port side view



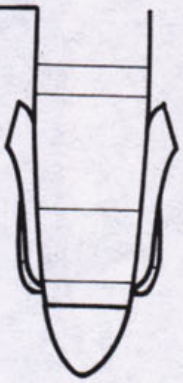
Early model Mk.5 with standard fin and rudder tip

# Fairey BARRACUDA TR.Mk.5

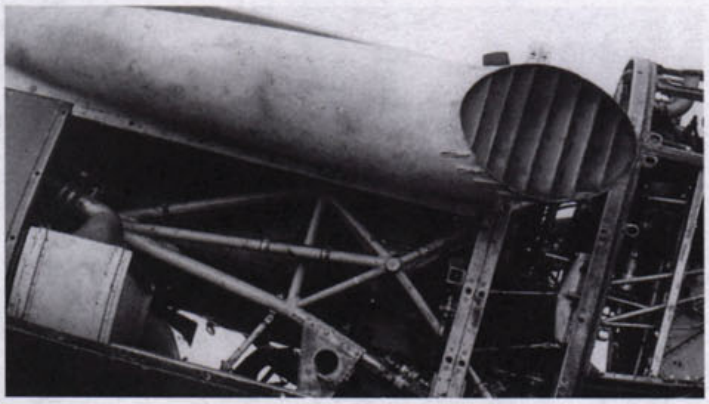
**FAIREY BARRACUDA Mk.V**
Scrap view of starboard wing and nose



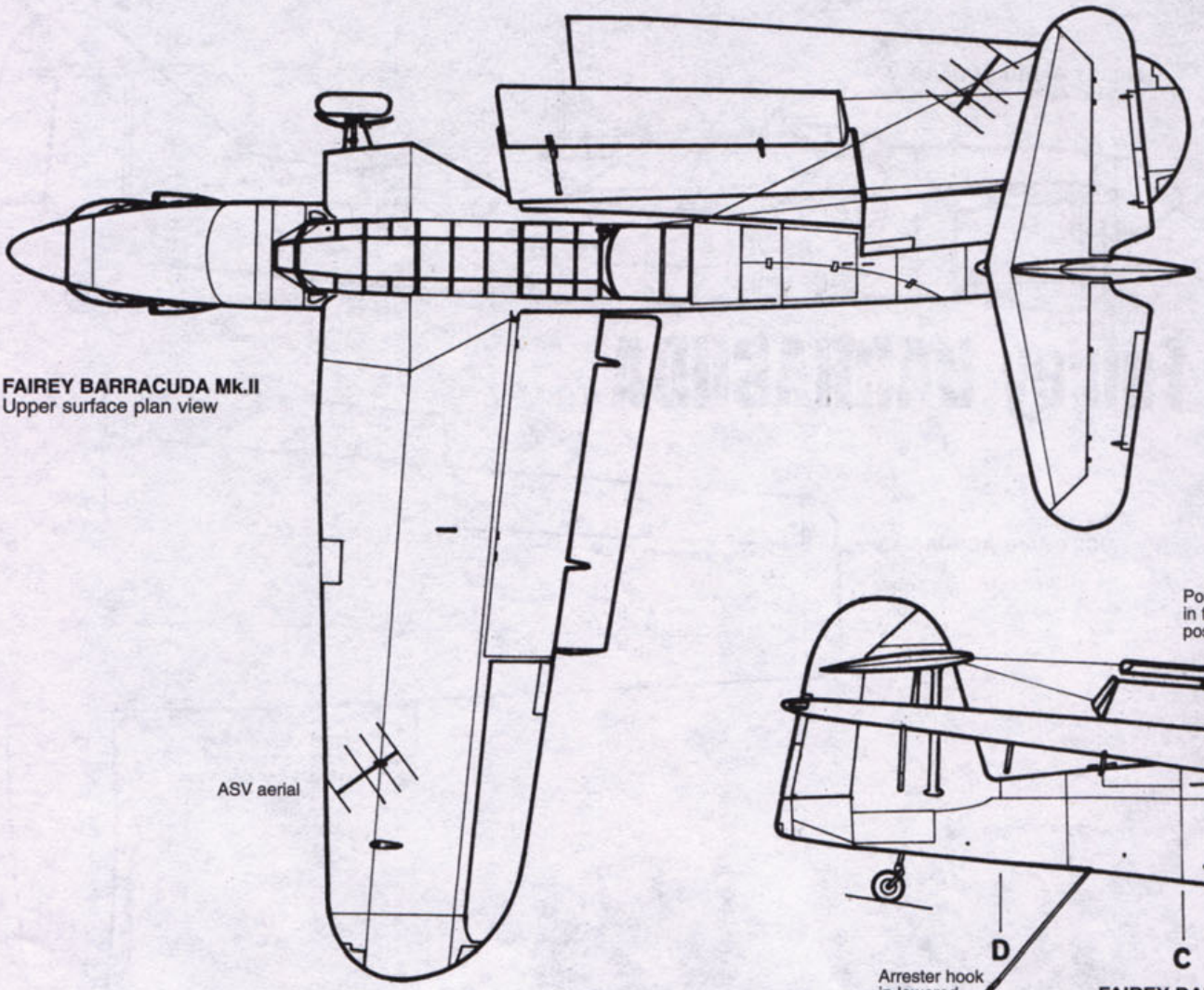
ASH radar housing fitted on starboard wing of first prototype but production aircraft were fitted on the port side



Front view of Rolls Royce Griffon engine on Barracuda Mk.5



**Above: The Barracuda Mk.V's Griffon engine installation with the cowlings removed. The exhaust manifold was one of several experimental ones tested on P9976 at A&AEE. Below: The third Barracuda TR.Mk.V prototype LS479 seen in March 1945. The changes to this version from those previous included the installation of a Rolls Royce Griffon engine, a lengthened nose, square cut wing tips and a different tail unit - yet to be added to this aircraft. (Fairey)**

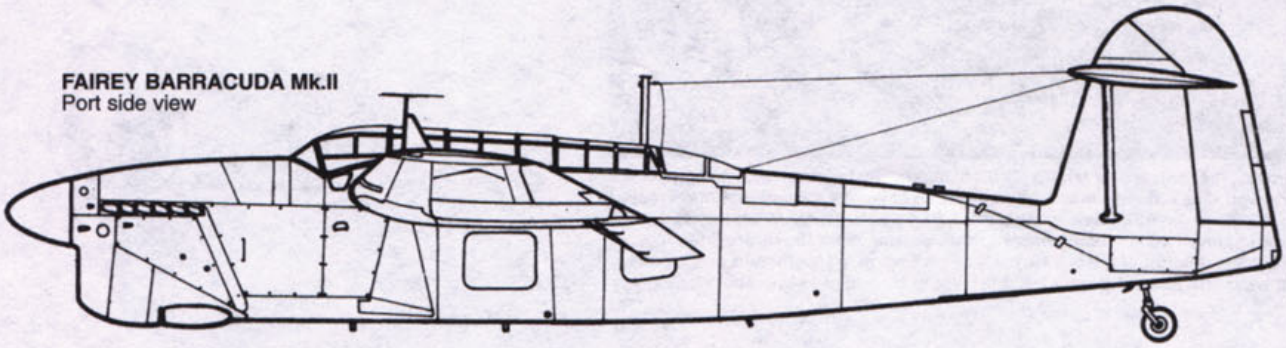


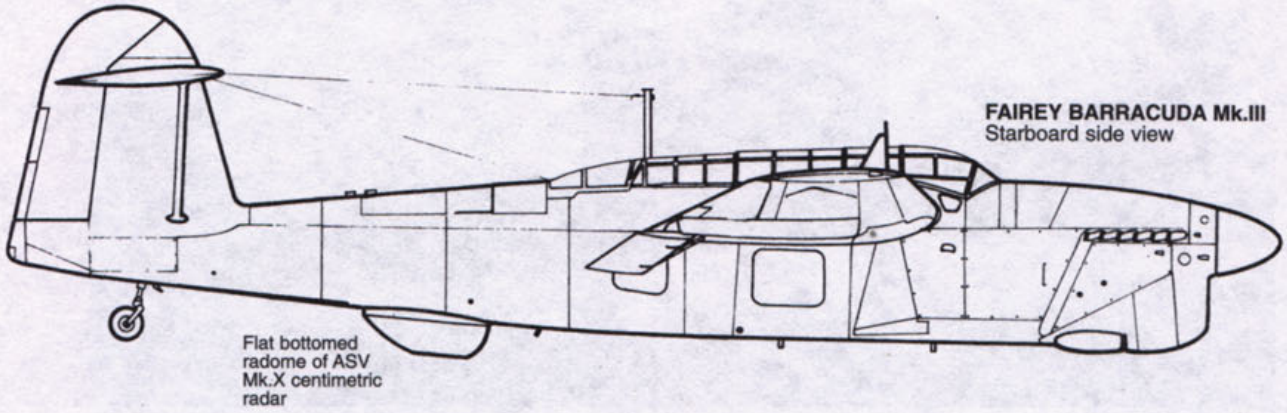

**FAIREY BARRACUDA Mk.II**
Upper surface plan view




**FAIREY BARRACUD**
Starboard side view

**FAIREY BARRACUDA Mk.II**
Port side view

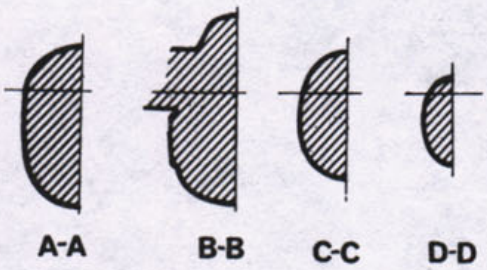




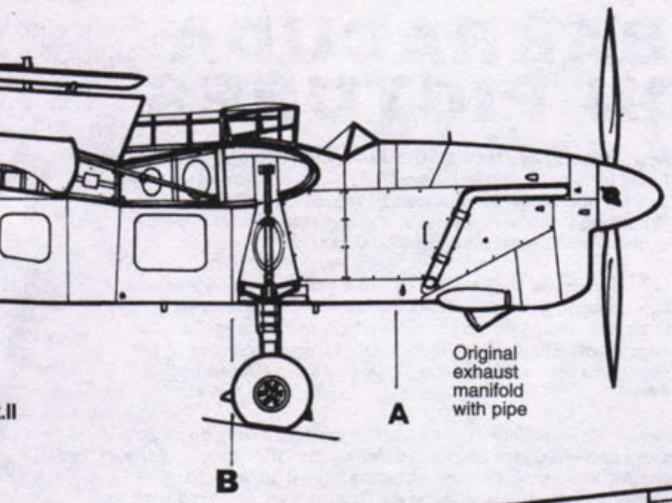

**FAIREY BARRACUDA Mk.III**
Starboard side view

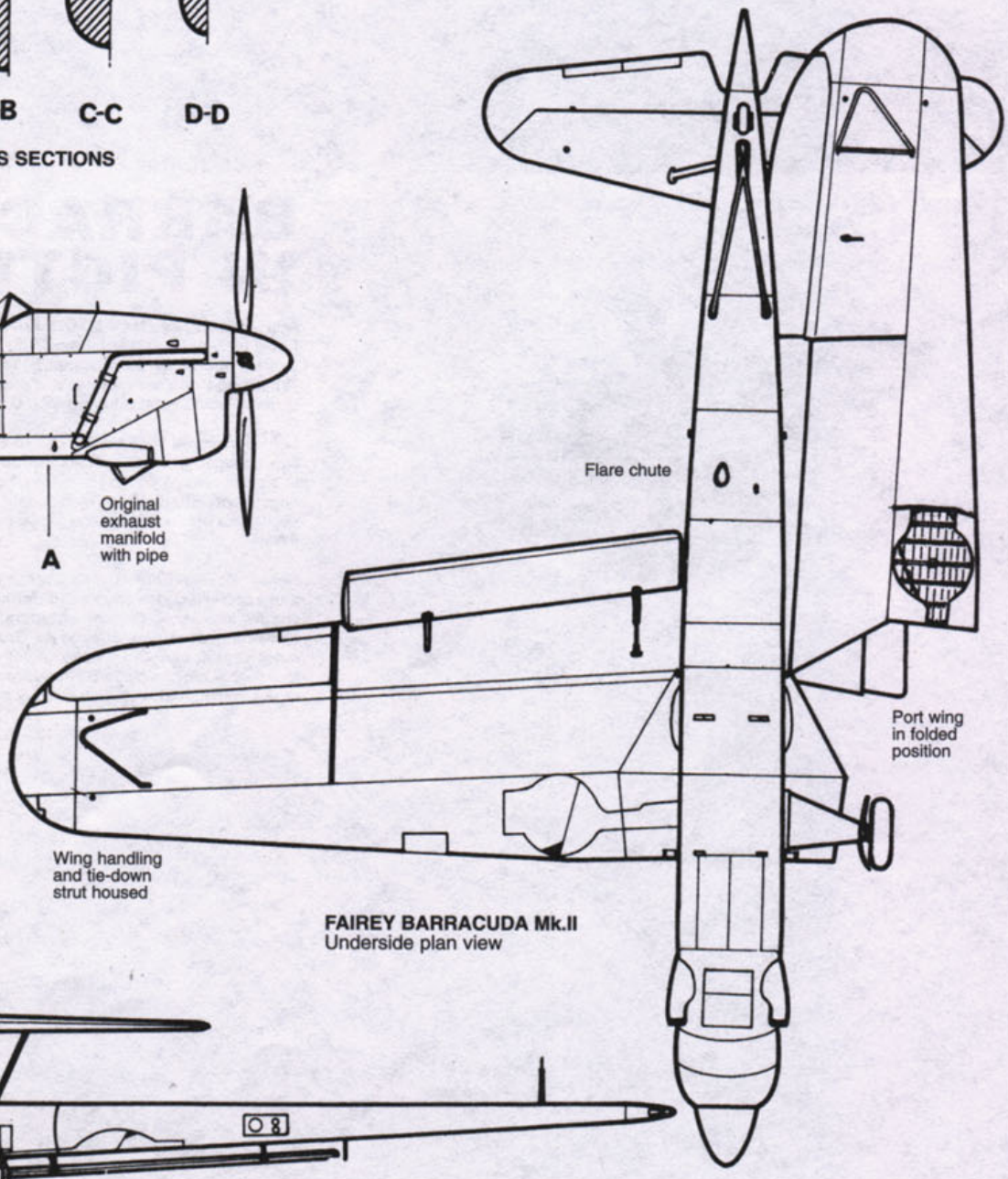
# Fairey BARRACUDA Mks.II to V

Drawings by Bob Hunt

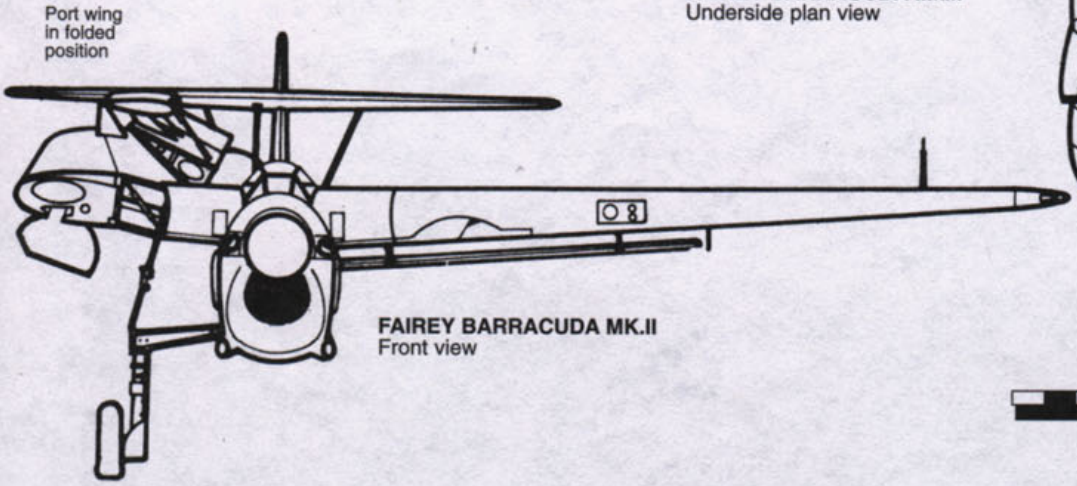



FUSELAGE CROSS SECTIONS



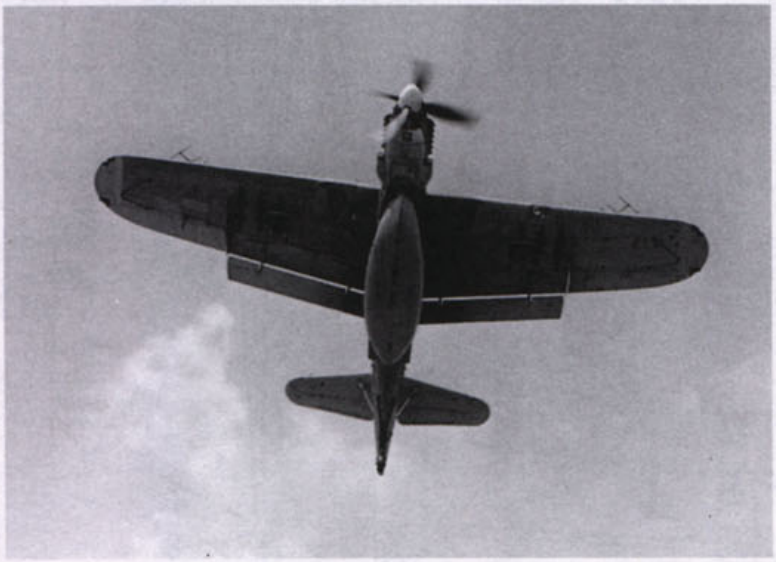

**FAIREY BARRACUDA Mk.II**
Underside plan view




**FAIREY BARRACUDA MK.II**
Front view

**1:72nd SCALE**

Feet
Metres



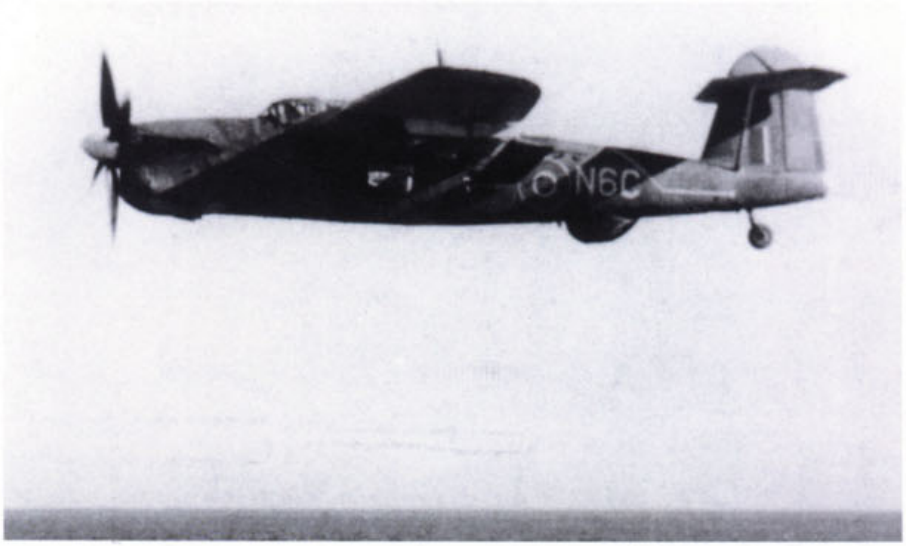
# BARRACUDA IN PICTURES

**Above: Barracuda Mk.II MX695:379-A of 812 Squadron being flown by Sub Lieutenant John Dickson as he formates on the camera aircraft on 23 November 1945. 812 were based at Kai Tak, Hong Kong at this time and the aircraft has retained its British Pacific Fleet markings. (J. Dickson)**

**Left: Barracuda Mk.II MX613 of 778 Squadron which was one of two engaged in trials of the airborne lifeboat developed for use in air-sea-rescue work. The boat which had sails and a small engine was fitted to the Barracuda's torpedo crutches. Trials proved its efficiency but the project was not carried further. (IWM)**

**Below: Several home-based aircraft carriers and their complement of Barracudas were used during the latter stages of the war for attacks on German shipping in and around the Norwegian coastline. Several Air Groups were involved with most aircraft carrying bombs whilst one or two had torpedos fitted. In this picture three Barracudas are seen forming up for a strike in which at least two aircraft carriers were involved. (IWM)**

**Right: An ASV-equipped Barracuda III MD965 coded N6C of 810 Squadron in 1945 while operating along the East Coast in support of Coastal Command. (via Ray Sturtivant) Lower right: Barracudas of 812 and 814 Squadrons ashore at Kia Tak, Hong Kong after the war in the Far East was over. (M.R.H.Shippey via Ray Sturtivant**




gramme forged ahead with more confidence.

The Barracuda III had been defined as an anti-submarine strike aircraft capable of operating from escort carriers, but retaining its torpedo and mine laying roles. Similar in all respects to the Mk.I and II it was fitted with ASV Mk.X and could be identified by the radar scanner in a bulge beneath the rear fuselage.

In May 1943 the Admiralty informed the Chairman of the Barracuda Group that they wanted 25 per cent of all Barracuda production to be TR.IIIs. Half the Mk.III (or TR.III) production was entrusted to Boulton Paul, with the first 18 TR.IIIs (DR318-DR335) being the last of a batch of 300 Mk.Is, but in fact all were produced as Mk.IIs, except for the aforementioned 18.

A contract for a further 300 TR.IIIs followed with final deliveries ending just after VJ-Day. An additional 300 had been ordered, that is 900 aircraft, but after 92 of the last batch had been built all Barracuda production was cancelled.

## LATER VERSIONS

Plans for a Barracuda Mk.IV had been drawn up at the design stage as a three-seat torpedo bomber to follow the two-seat version. When development and re-design got under way, the loss of the P.24 engined version, whose performance would not have required a TAG, gave the Admiralty something to think about. Progressive development resulted in Barracuda II P9976 becoming the Mk.IV prototype but was overtaken by events and the concentration on the Mk.III.

Planned introduction of the Fairey Spearfish into FAA squadrons in the Pacific war had run into all sorts of design and Ministry problems and it was decided that the Griffon-engined version of the Barracuda would act as an interim type until the Spearfish came along. The planned introduction of the Mk.V included the following changes – redesigned wing and centre section to increase load factors; wingspan increased from 49ft to 53 ft; Merlin 32 replaced by Griffon 37; flame damping added; dive braking propeller to be fitted; undercarriage to be beefed up; reset tailplane angle, dorsal fin and added spring trimmer to the rudder; fuel capacity increased from 225 to 300 gallons; operational weight increased to 16,250lb and general cleaning up of the airframe.

Not all of these were incorporated, the dive propeller for instance being found unsuitable for general flying.

The introduction of the Griffon was a logical and progressive step in the Barracuda story. Initially it was planned that the engine would be a Griffon VI, then the VII and finally the Griffon VIII, although most were eventually powered by the Griffon 37. The Griffon was slightly longer than the Merlin and necessitated longer engine mounts and increased petrol and oil capacity. New ailerons and extended wing tips were designed in and a small wing-mounted radome for the ASH scanner.

In December 1944 the Fairey design office at Stockport announced that the existing dive brakes as on current production Barracudas would not be adequate when the Griffon was installed. It was envisaged that the speed would continue to increase in a dive as the extra weight overcame the effect of the dive brakes. One answer was to limit the bomb load, but this, in effect, would render the aircraft unoperational. Also, it was agreed that at this late stage of the war it was not proposed to redesign the dive brakes and the Barracuda V would not fly operationally until powered by the Griffon 37. Those Barracudas on the production line already receiving the Griffon VII would be fitted


**Barracuda coded C1M of 785 Squadron operating out of Crail, provided familiarisation and anti-submarine courses on the Barracuda. (FAA Museum)**


**Above: Sporting a post-war colour scheme Barracuda TR.III RJ921 305:GN of 815 Squadron based at Eglinton, Northern Ireland. Providing anti-submarine training the squadron occasionally joined a carrier for exercises. Below: Boulton Paul-built Barracuda II DR116 coded R3S of 710 Squadron taking off from Ronaldsway in August 1945. 710 was a torpedo training squadron. (via Ray Sturtivant)**


with the later engine retrospectively.

The prototype Mk.V was the intended Mk.IV prototype P9976, a rebuilt Mk.II which test pilot Sam Moseley took on its first flight from Ringway on 16 November 1944. At least six other aircraft joined the Mk.V programme, DT845, LS479, LS480, PM940, PM941 and PM944 and some of these had various types of fin fairing.

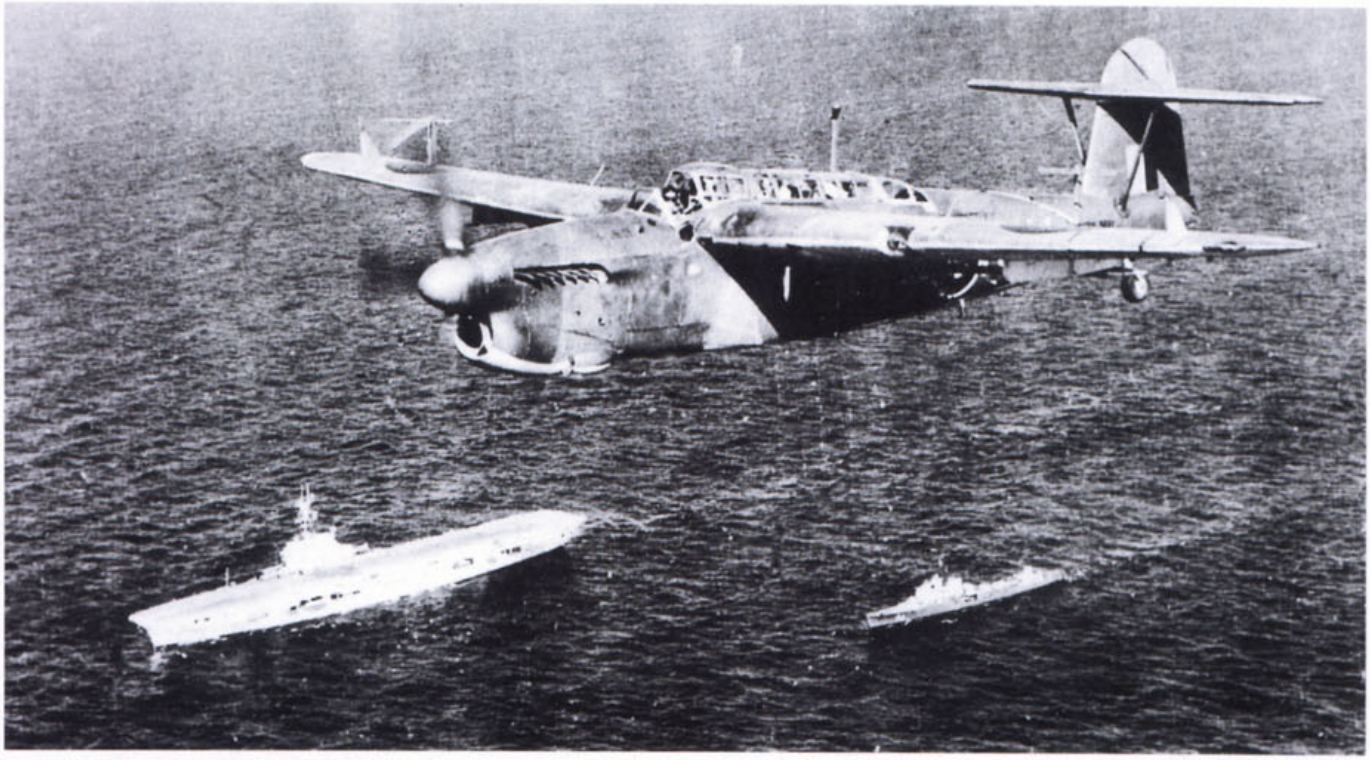
P9976 and DT845 went to Rolls-Royce where the former was test flown with a Griffon VII engine, and the latter a Griffon VIII for level speed, performance and fuel consumption tests. The first production Barracuda TR.V was Fairey built ex-Mk.II RK530 which flew from Ringway on 22 November 1945. Contracts for 140 were placed but with the end of the war only 30 were built.

Going back to the dive-brake problem a moment – the RAE conducted some trials with a dive-braking propeller. Barracuda LS708 was fitted with a four-blade Rotol unit that had the fine pitch stop set to well advanced to give a braking effect once in a dive. The idea was to close the throttle and reduce speed to 150 knots (278 km/hr) before moving the pitch lever to fully fine to avoid overspeeding. This produced a strong nose-down pitch and rapid deceleration which allowed a steep dive at 70 to 80 degrees, perfect for dive-bombing, before reaching the terminal velocity at 225 knots (417 km/hr). The trials were successful but other phases of flight were affected, such as take-off performance and high cruise fuel consumption.

## KITCHEN SINK STUFF

The Barracuda was designed to carry a wide range of ordnance with the Mk XIIB 18in torpedo as its primary weapon. Sighting was

**Barracuda II of 814 Squadron flying over *HMS Venerable*, its parent carrier. Although sent to the Far East it was too late to see action. (M.A.H. Shippey via Ray Sturtivant)**



**Fairey Barracuda TR.Mk.5** RK568:281-C named 'Pony Express' of the Ship's Flight *HMS Implacable*, early summer 1948.

**Fairey Barracuda Mk.III** RK479:302-Q of *HMS Illustrious* Ship's Flight visiting Oslo, Norway, in 1948. Overall Navy Blue.

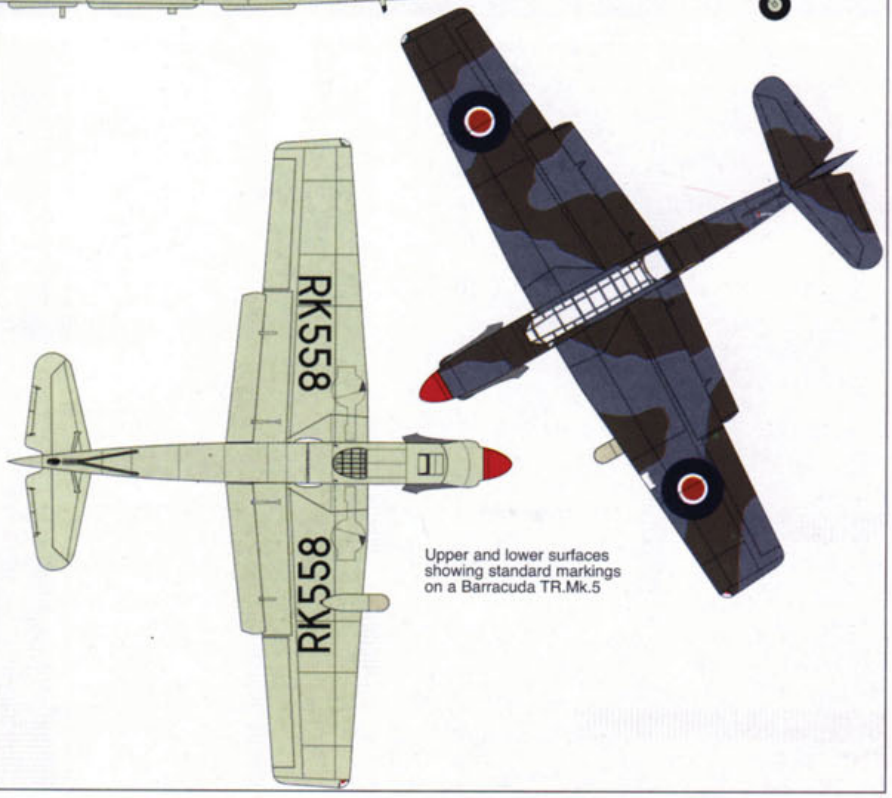
**Fairey Barracuda Mk.III** possibly ME187:311-JP of 815 Squadron, FAA, based at RNAS St.Merryn in 1947-49.

**Fairey Barracuda TR.Mk.5** RK558:325-LP of 783 Squadron, FAA, based at RNAS Lee-on-Solent, late 1940s.

via a Type F Torpedo Director computer allowing the pilot to aim directly at the bows of the ship during the last half mile of the attack. The computer then adjusted the torpedo's course gyro to give an intercept track. To provide stability during the passage from the aircraft to the water the torpedo was fitted with a wooden monoplane tail, usually deleted by the censor in wartime photographs.

A single fixed forward firing 0.303 machine gun intended for the pilot was never fitted. A single gun was supplied for the observer and fitted to all Mk.Is and a number of Mk.IIs but was removed once with the squadrons. A twin-gun mounting aft for the TAG was an adaption of the Albacore fitting. The TAG fired his guns from a standing position using, on early aircraft, a prismatic gunsight, but from 1944 a gyro gunsight was fitted which allowed more accurate deflection shooting.

Six underwing hardpoints allowed a combination of bombs up to 1,500lb. Trials with 827 Squadron in early 1943 to carry four 500lb. bombs was abandoned due to poor handling and loss of performance. Instead a 1,600lb. mine could be carried or the




Upper and lower surfaces showing standard markings on a Barracuda TR.Mk.5

# BARRACUDA SQUADRONS AND UNITS

| Squadron | Base | Dates | Marks | Examples | |
|---|---|---|---|---|---|
| **BARRACUDA FRONT LINE SQUADRONS** | | | | | |
| 810 | Lee-on-Solent | Apr 43 to Nov 44 | II | P9981 | 2X |
| | Burscough | Dec 44 to Jul 45 | II | PM767 | Q |
| | Machrihanish | Feb 45 to Aug 45 | III | ME226 | N6A |
| 812 | Stretton | Jun 44 to Jan 46 | II | PM837 | N1M |
| 814 | Machrihanish | Jul 44 to Jul 45 | II | PM714 | B1H |
| 815 | Lee-on-Solent | Oct 43 to Oct 44 | II | P9918 | |
| | Machrihanish | Nov 44 to Apr 45 | II | MD737 | |
| | Machrihanish | Jan 45 to Jan 46 | III | ME248 | I7K |
| | Eglinton | Dec 47 to May 53 | III | RJ790 | 311/GN |
| 816 | Fearn | Feb 45 to Jul 45 | II | PM739 | |
| 817 | Ceylon | Dec 43 to Jan 45 | II | P9986 | |
| | Fearn | Apr 45 to Aug 45 | II (ASH) | MX724 | |
| 818 | Fearn | May 45 to Aug 45 | II | PM776 | C |
| 820 | Indefatigable | Jan 44 to Oct 44 | II | MD807 | H |
| 821 | Puncher | May 44 to Apr 45 | II | DR219 | X |
| | | Jan 45 to Oct 45 | III | MD836 | |
| 822 | Tain | Jul 43 to Oct 44 | II | DP933 | P |
| | Manston | Jan 45 to Jun 45 | III | MD958 | A |
| | Woodvale | Jun 45 to Sep 45 | III (ASH) | PM876 | |
| 823 | Atheling | Jun 43 to Jul 44 | II | BV703 | L |
| 824 | Ceylon | Jul 45 to Sep 45 | II | MX723 | |
| 826 | Indefatigable | Dec 43 to Oct 44 | II | MD622 | 4X |
| | Fearn | Aug 45 to Jan 46 | III (ASH) | MX861 | |
| 827 | Machrihanish | Jan 43 to Jul 43 | I | P9658 | |
| | Furious | Mar 43 to Jul 46 | II | BV727 | H |
| 828 | Implacable | Mar 44 to Feb 45 | II | MD642 | |
| 829 | Victorious | Oct 43 to Jul 44 | II | LS580 | 4Q |
| 830 | Furious | May 43 to Oct 44 | II | BV937 | 5H |
| 831 | Victorious | Dec 42 to Jan 43 | I | P9657 | |
| | | Jun 43 to Nov 44 | II | LS637 | 5R |
| 837 | Glory | Sep 44 to Nov 45 | II | PM714 | J |
| 841 | Implacable | Feb 44 to Nov 44 | II | MD719 | |
| 847 | Illustrious | Jun 43 to Jun 44 | II | LS467 | B |
| 860 | Ayr | Jun 45 to Jan 46 | III | RJ773 | |
| **BARRACUDA FRONT LINE SQUADRONS STILL EQUIPPED SEPT 1945** | | | | | |
| 810 | Queen | | III | ME226 | A |
| 812 | Vengeance | | II | PM762 | N1K |
| 814 | Venerable | | III | | |
| 815 | Smiter | | III | ME248 | I7K |
| 817 | Fearn | | II | MX551 | |
| 818 | Fearn | | II | PM870 | F |
| 821 | Trumpeter | | III | ME112 | |
| 822 | Sydenham NI | | II (ASH) | MX845 | |
| 824 | Katukurunda, Ceylon | | II | PM723 | |
| 825 | Fearn | | II (ASH) | MX841 | |
| 826 | Easthaven | | III | MD901 | |
| 827 | Colossus | | II | MX637 | A1X |
| 837 | Glory | | II | PM722 | A |
| 860 | Maydown NI | | III | ME236 | |
| **BARRACUDA SECOND LINE SQUADRONS** | | | | | |
| 700 | Worthy Down | Jan 45 Mar 46 | II | DR244 | |
| | Yeovilton | May 45 Aug 47 | III | RJ763 | 300/VL |
| 703 | Lee-on-Solent | Mar 46 | II | MX797 | F |
| | Ford | Apr 45 Sep 53 | III | ME123 | D |
| 706 | Schofields NSW | Aug 45 Mar 46 | II | PM759 | |
| 707 | Burscough | Feb 45 Sep 45 | II | MD703 | |
| | | Feb 45 Sep 45 | III | ME166 | O8U |
| 710 | Ronaldsway | Oct 44 Dec 45 | II | LS958 | AR3K |
| | IOM | Oct 44 Dec 45 | III | MD895 | |
| 711 | Crail | Sep 44 Dec 45 | II | MX561 | C6C |
| 713 | Ronaldsway | Aug 44 Dec 45 | II | MX542 | |
| | IOM | Nov 44 Dec 45 | III | MD892 | R3M |
| 714 | Fearn | Aug 44 Dec 45 | II | P9744 | I2C |
| | Rattray | Oct 45 Dec 45 | III | MD967 | |
| 716 | Eastleigh | Jul 44 Aug 45 | II | DP887 | |
| 717 | Fearn | Jul 44 Mar 46 | II | DR204 | Y |
| 719 | Eglinton NI | Mar 46 May 49 | III | RJ942 | 318/JR |
| 731 | Easthaven | Jul 45 Nov 45 | II | MD722 | |
| 733 | Ceylon | Sep 44 Apr 45 | II | LS672 | C8K |
| 735 | Arbroath | Dec 44 Apr 46 | II | MD767 | |
| | | Nov 45 Apr 46 | III | MD849 | O1X |
| 736 | St Merryn | Sep 43 Jul 45 | II | LS707 | AC-G |
| 737 | Burscough | Aug 45 Dec 45 | III | ME111 | |
| 737X | Eglinton NI | Jun 51 Jul 51 | III | ME292 | |
| 744 | Maydown NI | Nov 44 Aug 45 | II | MX681 | |
| | Eglinton NI | Mar 45 Dec 47 | III | RJ938 | 306/JR |
| 747 | Fearn | Mar 43 Jul 43 | I | DN628 | |
| | Ronaldsway | Mar 43 Dec 45 | II | P9828 | K2L |
| | IOM | Jan 45 Dec 45 | III | MD901 | R3B |
| 750 | Piarco West Ind | Nov 44 Oct 45 | II | LS797 | B9 |
| | St Merryn | Apr 52 Jul 53 | III | ME281 | 311/M |
| 753 | Rattray | Dec 44 Aug 46 | II | MX655 | A5B |
| 756 | Ceylon | Dec 43 Aug 44 | II | P9971 | |

| Squadron | Base | Dates | Marks | Examples | |
|---|---|---|---|---|---|
| | Atheling | Oct 45 Nov 45 | III | ME136 | |
| 764 | Gosport | Feb 44 Aug 45 | II | DR203 | |
| 767 | Rajah | Jun 44 Aug 44 | I | P9656 | |
| | Theseus | Jun 44 Jul 46 | II | P9891 | E1U2 |
| 768 | Argus | Jul 43 Sep 43 | I | P9666 | |
| | Smiter | Jul 43 Oct 45 | II | P9887 | A |
| 769 | Ravager | Nov 43 Oct 45 | II | LS535 | E4K |
| | Rattray | Aug 45 Oct 45 | III | MD978 | |
| 774 | Rattray | Feb 44 Jul 45 | II | DR224 | G |
| 778 | Arbroath | May 42 Nov 43 | I | P1770 | |
| | Gosport | Feb 43 Nov 46 | II | LS847 | |
| | Ford | Dec 45 Apr 48 | III | MD828 | O85 |
| | | Sep 46 Jul 47 | V | RK534 | |
| 780 | Lee-on-Solent | Aug 43 Oct 43 | II | P9721 | |
| 781 | Lee-on-Solent | May 43 | II | P9807 | |
| 783 | Arbroath | Mar 45 Dec 46 | II | MD652 | AOM |
| | | Mar 46 Dec 46 | III | RK403 | |
| | Lee-on-Solent | Dec 47 Oct 48 | V | RK558 | 325/LP |
| 785 | Crail | Dec 42 Jan 44 | I | | |
| | | Apr 43 Feb 46 | II | BV684 | C3A |
| | | Jan 4 Feb 46 | III | ME135 | |
| 786 | Crail | Dec 42 Dec 43 | I | | |
| | | Dec 43 Dec 45 | II | BV684 | C3A |
| 787 | Wittering | Apr 43 Jun 43 | I | P9644 | |
| | | Jun 43 Jun 45 | II | BV778 | |
| 796 | St Merryn | Nov 49 Feb 52 | III | ME179 | 310/MF |
| 797 | Ceylon | Nov 44 | II | DP973 | |
| 798 | Lee-on-Solent | Oct 43 Oct 45 | II | LS849 | |
| | Stretton | Jun 45 | III | MD972 | |
| 799 | Lee-on-Solent | May 46 Sep 47 | III | RK446 | 787/LP |
| **Ship's Flights** | | | | | |
| Formidable | | Jun 44 Jul 44 | II | | |
| Illustrious | | 47 48 | V | RK571 | 800/D |
| Implacable | | Feb 48 Jun 48 | V | RK568 | 281/C |
| Implacable | | Aug 49 May 51 | III | RJ905 | |
| Indomitable | | Feb 51 Sep 51 | III | RJ765 | |
| Premier | | Aug 45 Sep 45 | II | DP862 | |
| Theseus | | Nov 46 | II | RK409 | |
| Vengeance | | 47 Jan 49 | III | RK479 | 302/Q |
| **Station Flights** | | | | | |
| Easthaven | | Jan 45 | II | | E8D |
| Gosport | | Nov 47 | II | RK461 | |
| **Ferry Pools** | | | | | |
| Worthy Down | | Jun 45 Aug 45 | II | ME178 | |
| Stretton FPN.5 | | Jan 46 | III | RJ965 | |
| **Aircraft Torpedo Dev Unit Gosport** | | | III | ME230 | |
| **RAF squadrons and other units operating Barracudas** | | | | | |
| 567 | | Dec 43 Jul 45 | II | P9941 | |
| 618 | Skitten | 43 45 | II | LS704 | |
| 667 | Gosport | 43 45 | II | BV725 | |
| 679 | Ipswich | 43 45 | II | DR154 | |
| 691 | Roborough | 43 45 | II | DR190 | |
| **15 ATA Ferry Pilot's Pool** Hamble | | Jul 41 Aug45 | II | P9787 | |
| **RAE Farnborough** | | | I | P9642 | |
| | | | II | DR126 | |
| | | | III | MD830 | |
| **A & AEE Boscombe Down** | | Oct 41 Jan 44 | I | P1767 | |
| Evaluated 45 different | | Oct 42 Jun 45 | II | P9667 | |
| Barracudas! | | Apr 44 Dec 52 | III | DR318 | |
| | | Sep 44 Jan 47 | V | PM940 | |
| **TRE/TRU Defford** | | | I | P1770 | |
| **Telecommunications Research Establishment** | | | II | P9645 | |
| Used 12 different Barracudas | | | III | ME283 | |
| **5 School of Technical Training, Locking** | | Aug 45 | II | LS870 | |
| **12 School of Technical Training, Melksham** | | Jul 45 | II | BV722 | |
| **ROTOL** | | | | | |
| Staverton | | May 46 | II | LS708 | |
| **Rolls-Royce** | | | | | |
| Hucknall | | Oct 42 Apr 44 | I | P9651 | |
| | | Nov 43 Sep 44 | II | P9976 | |
| | | Jun 45 Aug 46 | V | DT845 | |


**Above: Barracuda TR.V RK558 325:LP of 783 Squadron based at Lee-on-Solent during 1948. ASH nacelle is under the port wing, as is the aircraft serial number – but no roundel. The extended fin area is shown to good effect in this picture. (via Ray Sturtivant)**

American 1,600lb armour-piercing bomb. Following successful trials in late 1943, the airframe had to have some local strengthening around the suspension lugs, after which aircraft were fitted on the production line and modification kits were supplied to squadrons and other units operating the aircraft. In late April 1945 the Admiralty ordered that torpedo training was to cease, dive bombing being the preferred method of attack.

Despite the poor handling qualities of the Barracuda it found itself testing all sorts of appendages. P9667 and P9976 were only two fitted with dorsal fairings to compensate for the different rotation of the Griffon to the Merlin. P9795/G and LS631/G did handling trials with 'Cudo' floats, or under-wing containers to drop agents or airborne forces


**Above: Ground crew pose with Barracuda TR.V RK568 281:C of *HMS Implacable's* Ship's Flight in 1948. (A.E. Hughes) Below: About to take off from *HMS Illustrious* is Barracuda TR.III ME261 305:JR of 815 Squadron. The serial number is repeated under the radiator air intake. This aircraft ditched in February 1945 and was replaced by RJ909, still with code 305:JR. (Midland Air Museum/Ray Sturtivant)**


## BARRACUDA EXPORTS

**FRANCE**
Aeronavale (French Navy) aquired 10 ex-FAA Barracuda IIs equipped with ASH radar between March – July 1948.
These included: RK360, 367, 368, 400, 420, 463, 476, 477, 479 and 480

**NETHERLANDS**
Dutch Navy 860 Squadron took over 21 Barracudas from 822 Squadron in June 1945. They were operated from *HMS Nairana* until May 1946 using:

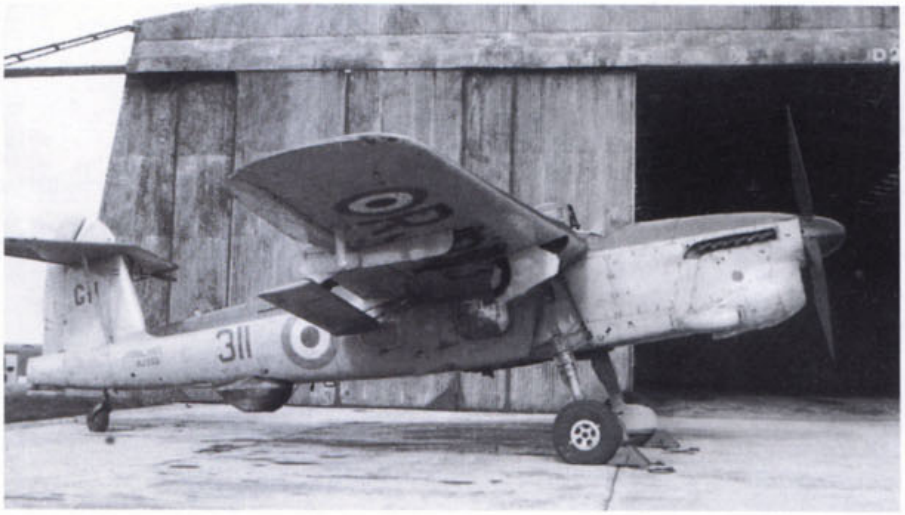
| | |
|---|---|
| Mk.II | DR344 |
| Mk.III | MD818, 819, 918, 924, 945, 958 |
| | ME104, 105, 131, 181, 185, 189, |
| | 204, 230, 231, 236 |
| | RJ773, 902, 907, 914. |

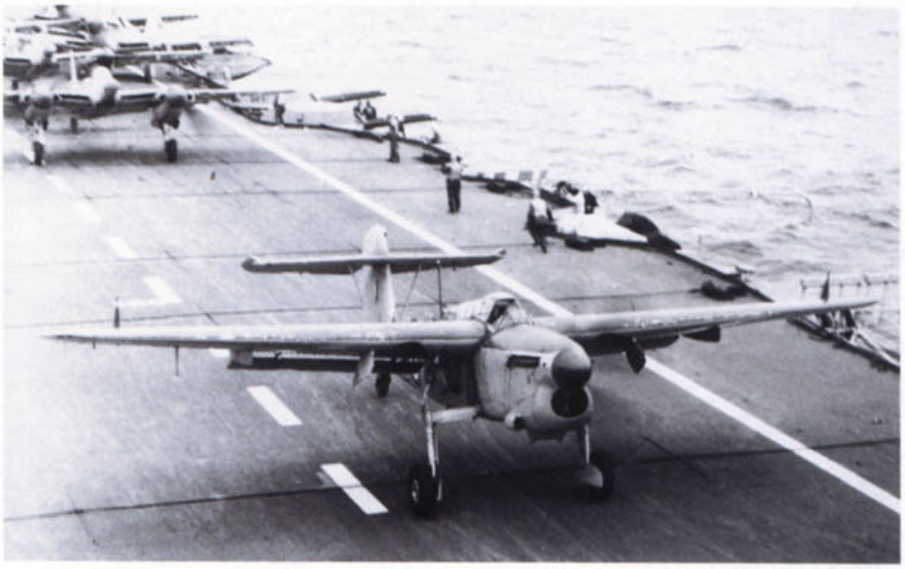
**Right: Barracuda TR.III RJ933 311/GN of 815 Squadron sporting the post-war colour scheme. (AE Hughes) Lower right: A Barracuda accelerates along the flight deck of what seems to be *HMS Vengeance*. Sea Hornet NF.21s of 809 Squadron and Fireflies of 814 line up for their turn to fly in May 1951.**

behind enemy lines after being transported near the objective by a carrier. The SOE (Special Operations Executive) expressed an interest as a way of delivering agents. The first plan was to use a pannier beneath the fuselage but this would have affected the airflow from the radiators. Faireys designed a container that would fit on the underwing bomb racks of the Barracuda and P9795 went to Heston Aircraft in April 1943, having designed the installation.

A meeting on 31 December 1943 between Fairey and the Admiralty agreed to a two-seat mock-up, the occupants having parachutes with K Type dinghies. It was planned that flying trials at Boscombe Down would be followed by deck landings and take-offs aboard *Pretoria Castle*. Testing at Boscombe had started when the war finished and although there seemed a requirement for such a method of delivering agents in the postwar era the whole idea was eventually shelved.

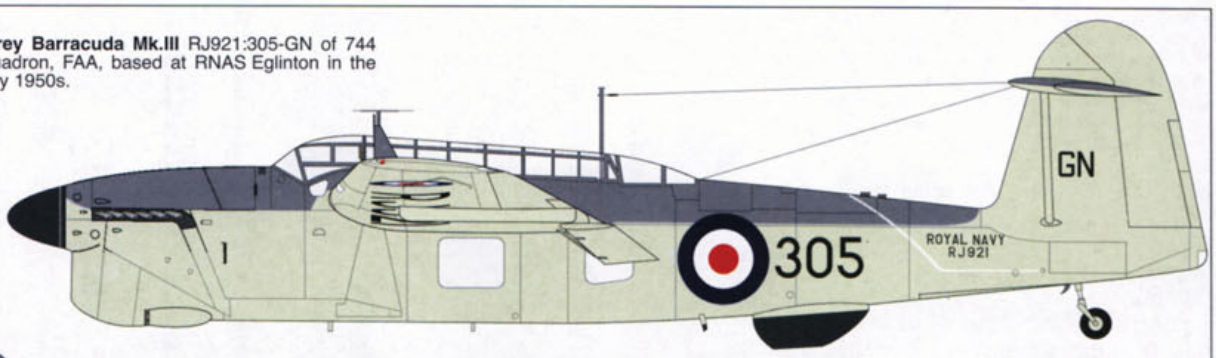
RK328 tested smoke containers; MX613 flew trials with an airborne lifeboat which BV727:8M of the Naval Air-Sea Warfare Development Unit confirmed was operable after trials aboard *HMS Vengeance*. The Type NA XV airborne lifeboat was put into limited production for use by Barracuda



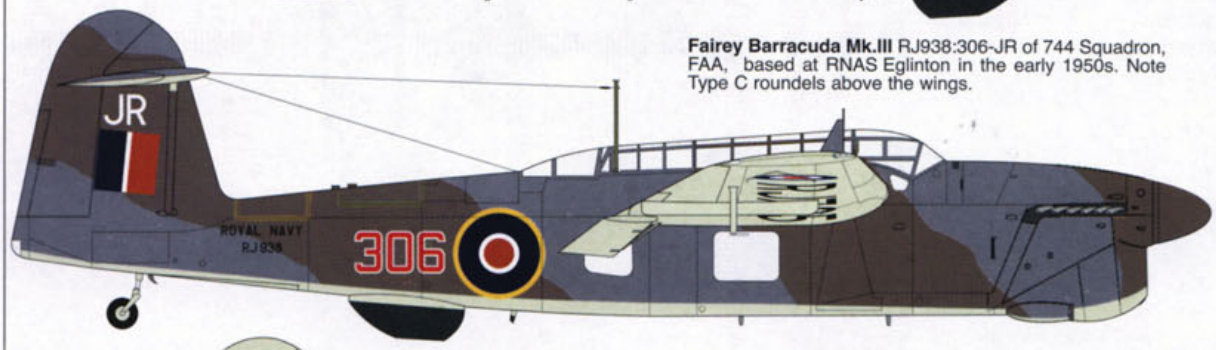



**Below: A number of Barracudas had individual markings including this one on the forward fuselage. It is 376:D of 827 Squadron from *HMS Colossus* in the Far East. The spinner tip is painted white. (via Ray Sturtivant)**

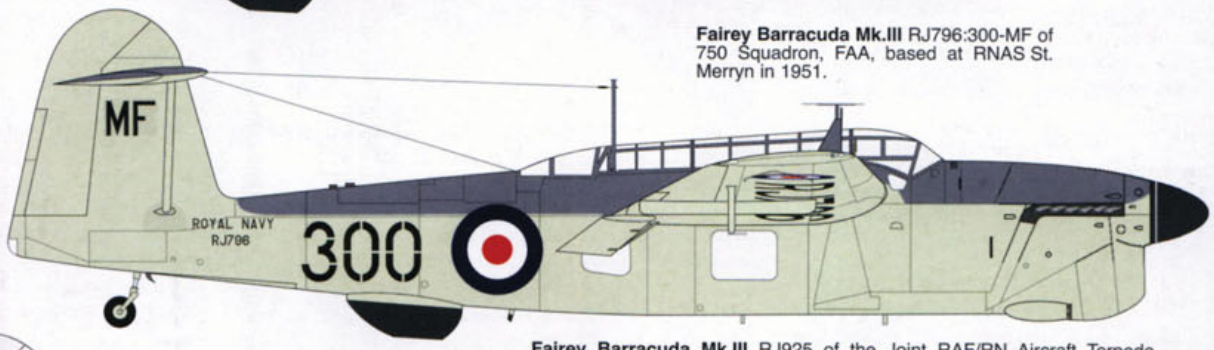
**Fairey Barracuda Mk.III** RJ921:305-GN of 744 Squadron, FAA, based at RNAS Eglinton in the early 1950s.



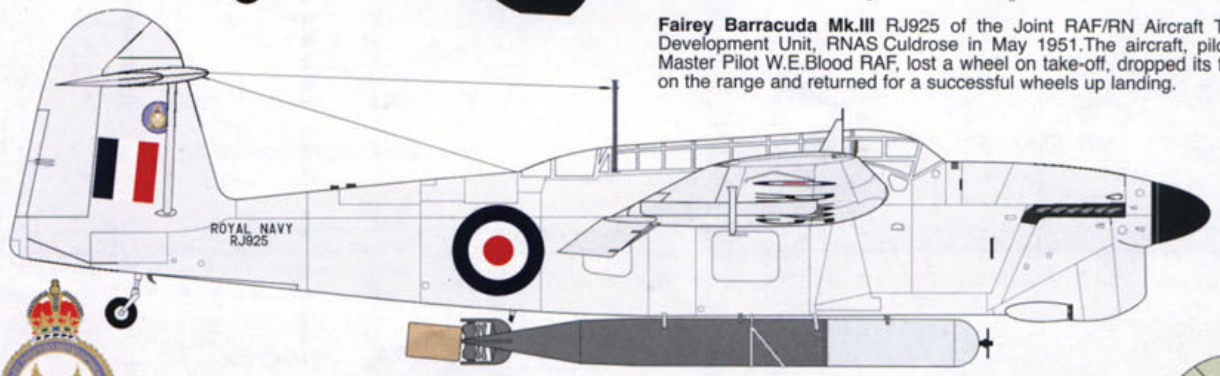

**Fairey Barracuda Mk.III** RJ938:306-JR of 744 Squadron, FAA, based at RNAS Eglinton in the early 1950s. Note Type C roundels above the wings.




**Fairey Barracuda Mk.III** RJ796:300-MF of 750 Squadron, FAA, based at RNAS St. Merryn in 1951.

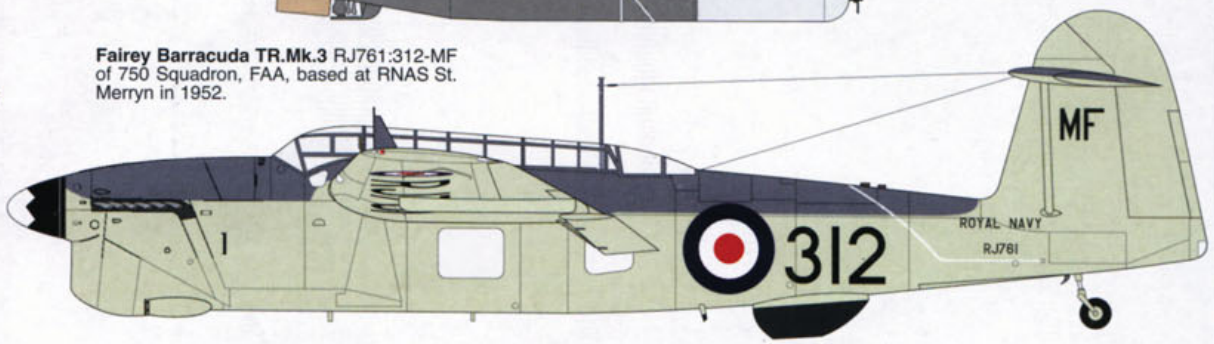



**Fairey Barracuda Mk.III** RJ925 of the Joint RAF/RN Aircraft Torpedo Development Unit, RNAS Culdrose in May 1951.The aircraft, piloted by Master Pilot W.E.Blood RAF, lost a wheel on take-off, dropped its torpedo on the range and returned for a successful wheels up landing.

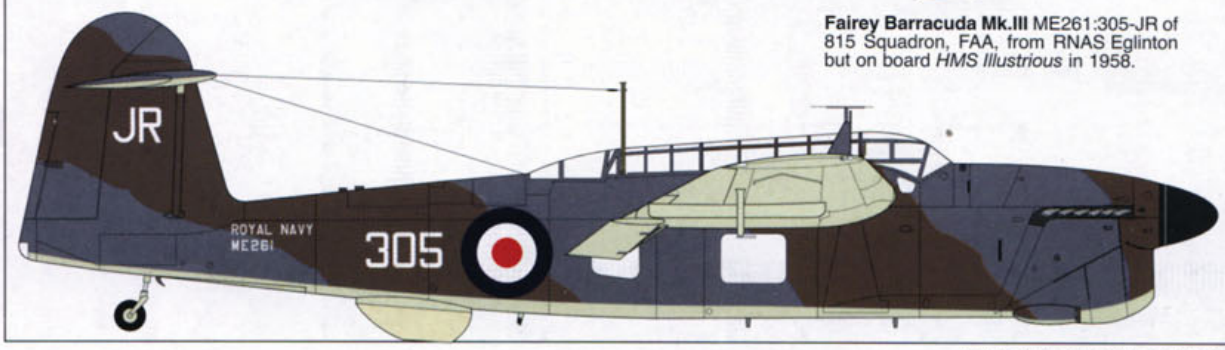


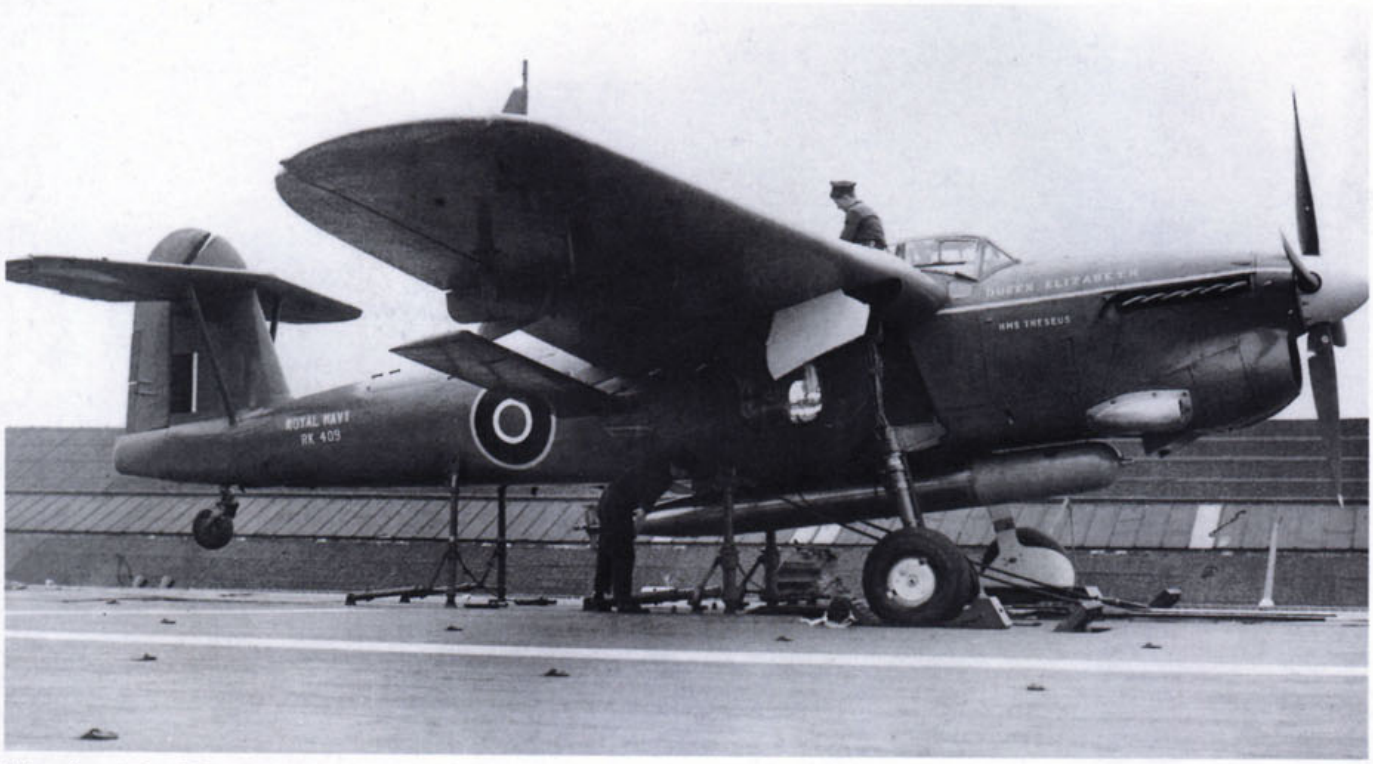

Badge of the Joint RAF/RN Torpedo Development Uint

**Fairey Barracuda TR.Mk.3** RJ761:312-MF of 750 Squadron, FAA, based at RNAS St. Merryn in 1952.




**Fairey Barracuda Mk.III** ME261:305-JR of 815 Squadron, FAA, from RNAS Eglinton but on board *HMS Illustrious* in 1958.






**Interesting study of Barracuda II RK409 of the Ships Flight *HMS Theseus* in late 1946. Marked 'Queen Elizabeth' on the upper cowling and 'HMS Theseus' below. A new type of carburettor air intake has been fitted. (Flight International)**

ASR II and III aircraft. The 'boat' was powered by a Brittania Middy motor which gave it a range of 120 miles at four knots. It had easily rigged sails and inflatable bags on each side of the boat which made it self-righting and there was a self-baling facility.

## RADIO, RADAR AND RADOMES

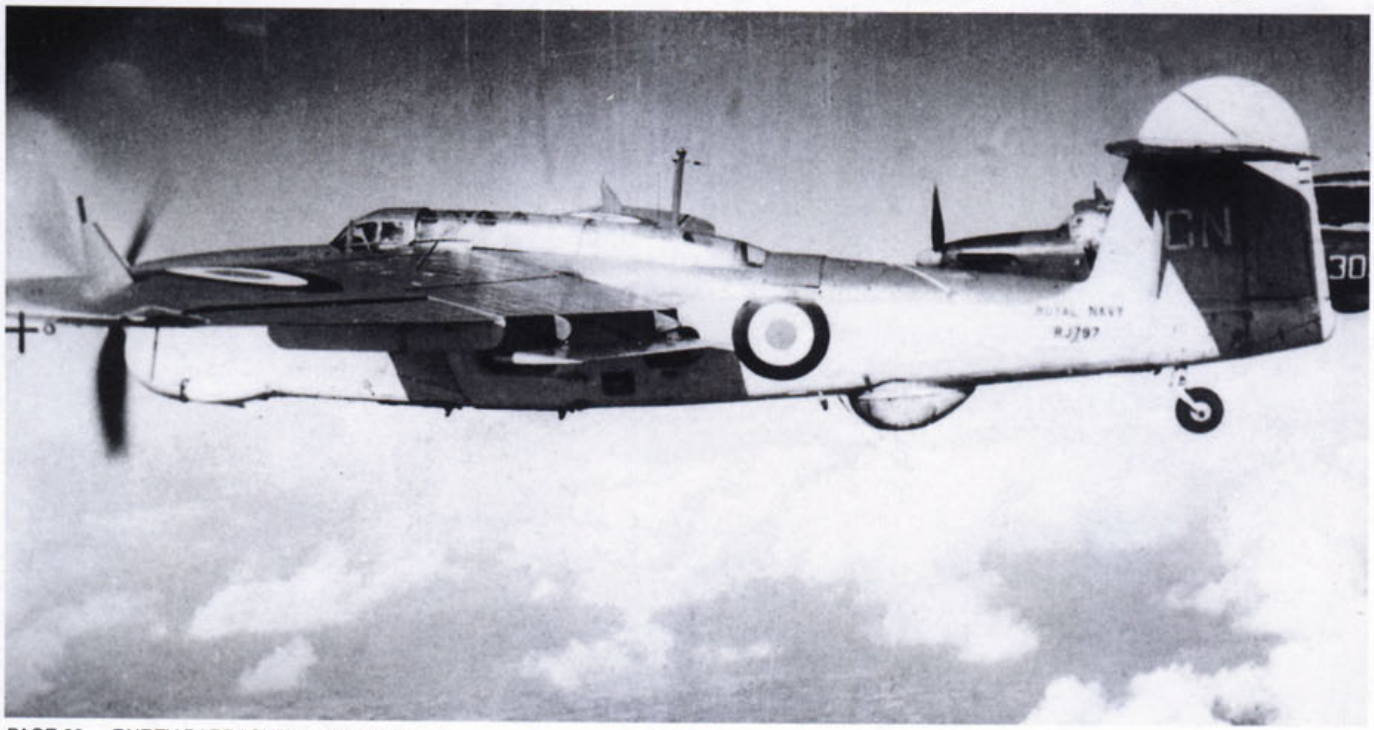
As early as December 1941 a centimetric radar was under development for use in Barracudas. It was tested in Swordfish and a Hudson aircraft and was later ordered into production as the ASV X. In the meantime the Barracuda Is and the majority of the Mk.IIs were fitted with ASV IIN, the standard naval radar. This required the fitting of yagi antennae on the upper surface of the wings and although the IIN performed well enough, it had its limitations.

The fitting of the new radar in the Mk.III resulted in a blister shaped radome under the rear fuselage housing a parabolic antenna. ASH – (Air Service Homing) an American AN/APS-4 centimetric radar, was tested in Barracuda LS789 in late 1944. It was housed in a semi-recessed mini radome below the port wing leading edge. Trials revealed that this radar was much lighter and gave better discrimination than ASV X, but lacked the latter's all round coverage. It was planned that four squadrons would be equipped with the new radar but enough sets were not available until mid-1945, by which time the need for its use had almost disappeared.

In the spring of 1944 a number of Barracuda II and IIIs were fitted with radio altimeters with the intention of being capable of night anti-submarine and torpedo attacks. However, after some trials it was found that the new radio altimeters could accept wrong signals and 'when the light came on you were as likely to be 100ft under the water as 100ft above it'!

The Admiralty's plan for a comprehensive radio set up was never really possible due to the weight problem with the aircraft. They

**Mixed colour schemes sported by Barracuda TR.IIIs of 815 Squadron when at Eglinton. RJ797 later served with 796 and 750 Squadrons at St Merryn before being retired in 1953.**



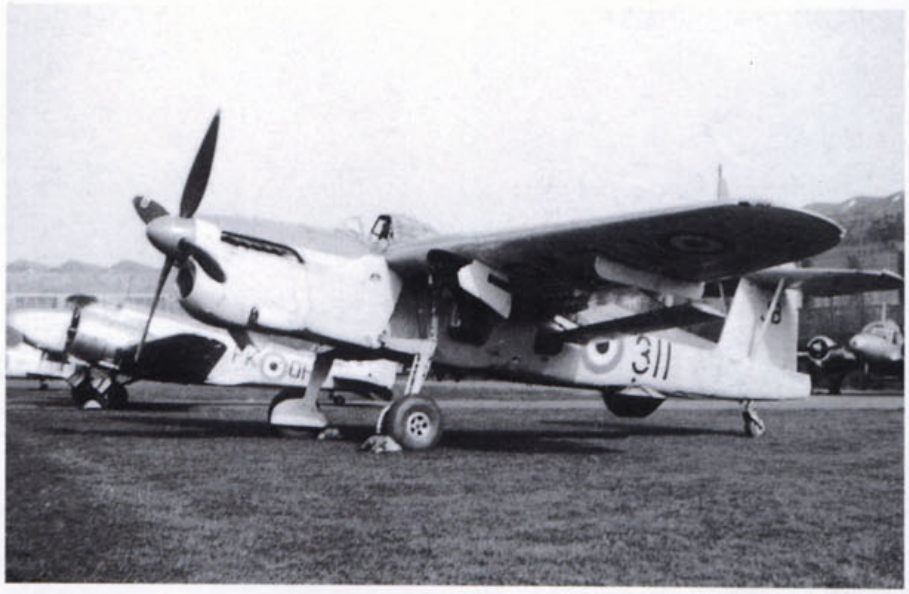
intended to fit Medium, High and Very High Frequency (VHF) radio equipment but the latter set was slow being developed and it was 1944 before any sort of alternative was available. One local modification was the fitting of fighter VHF sets so that Barracudas going on a strike could communicate with the escorting fighters. These were fitted by the squadron/unit and not standard cockpit equipment. The general radio fit was the British ARI 5206 H/F wireless telegraphy set or either the American SCR 522 or AN/ARC-1 VHF R/T, but the latter became a standard fit in Barracuda IIIs.

## THE BARRACUDA JOINS UP

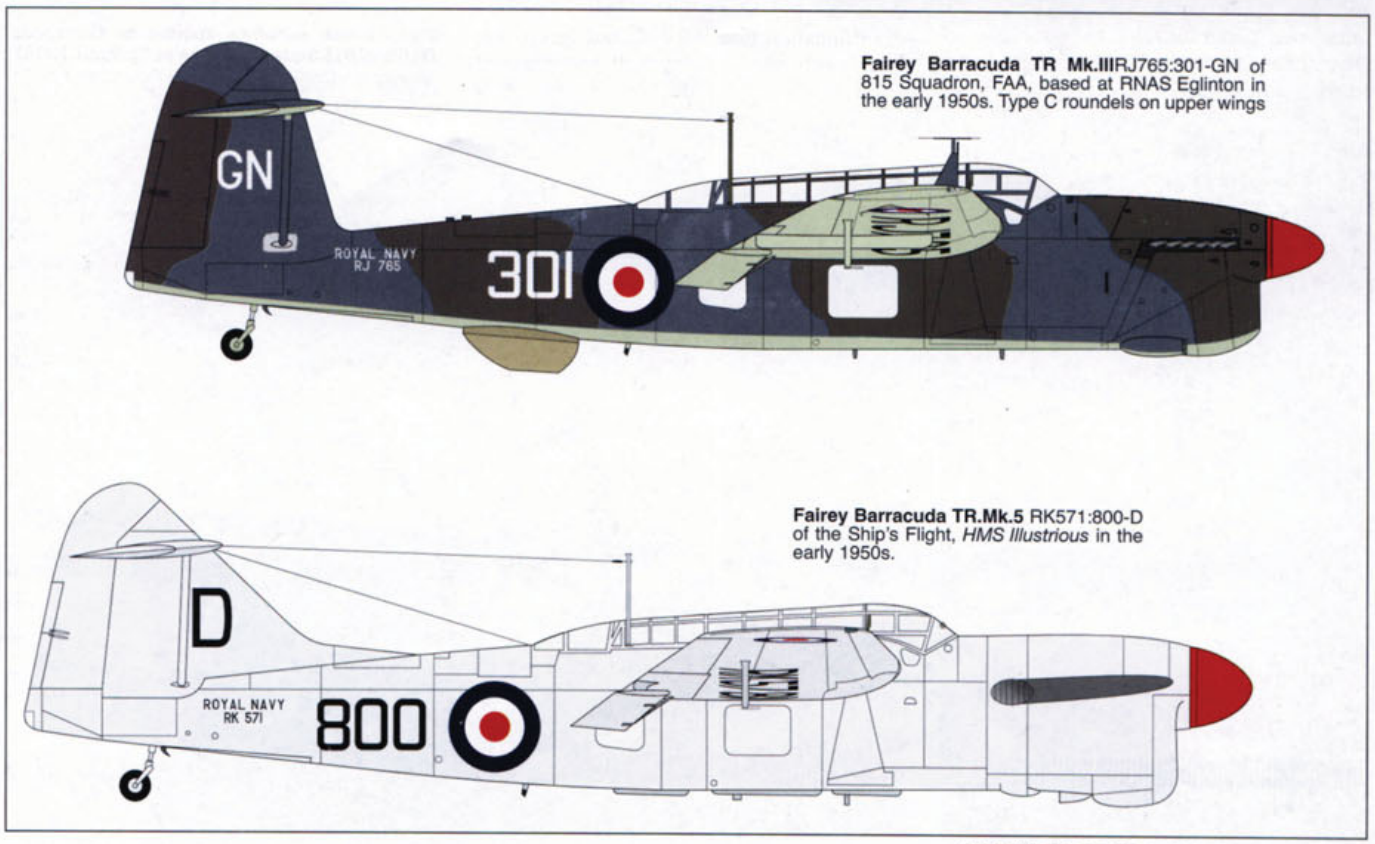
Barracuda prototype P1767 joined 778 Service Trials Unit during May 18-19 1941 for trials aboard *HMS Victorious* and then returned to Fairey for installation of service equipment and modifications. In September 1942 778 again received Barracudas, P9645 and later, P1770/G.

Initial deliveries to the squadrons did not begin until early 1943 due to the setbacks mentioned elsewhere. Second line and training squadrons began to rapidly introduce the Barracuda including the important Deck Landing Training School at Easthaven, comprising 767, 768 and 769 Squadrons, the Torpedo Training School at Crail comprising 785 and 786 Squadrons. Crail was also home to 711 torpedo training squadron with 710 providing a similar course at Ronaldsway on the Isle of Man. TBR courses were conducted by 713, 714, and 717, with 747 providing operational training.

Barracudas also found their way into numerous other wartime units, such as 700 Squadron, the Maintenance Test Pilots' Training Squadron at Worthy Down, 703 at Thorney Island hosted the Naval Air-Sea

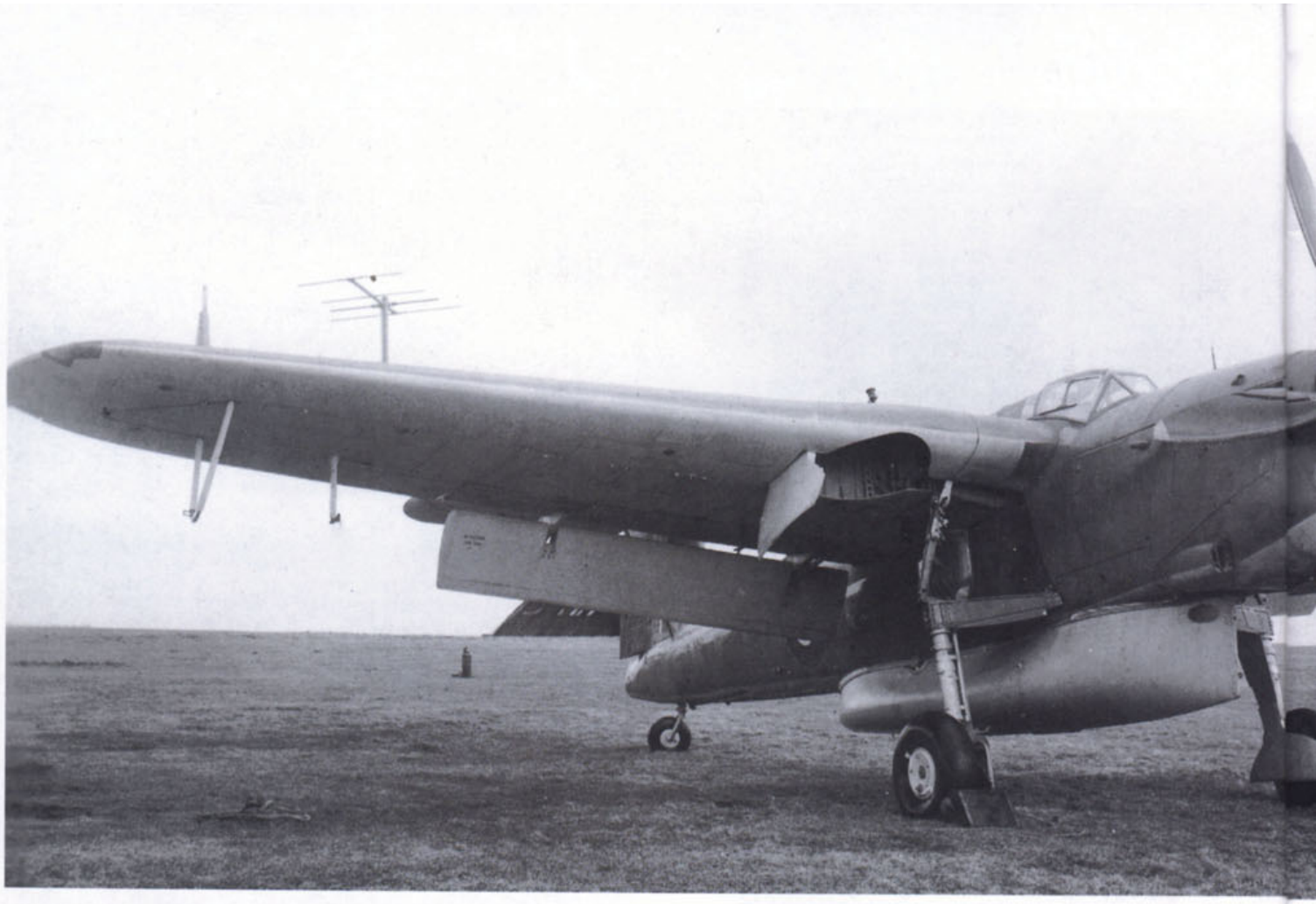


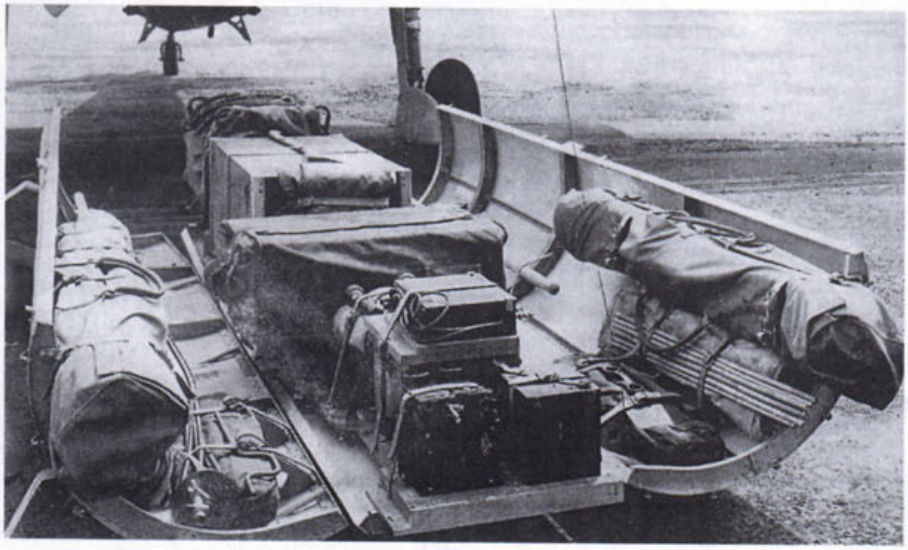

**Above: Just dropped in for a cuppa! This 815 Squadron Barracuda TR.III ME81 311/JB joins an Oxford AS709 FKO-H of 21 Group Communications Flight and Ansons of 5 ANS on the grass at Hullavington. Below: In what appears to be an overall silver finish Barracuda TR.V RK571 800:D of the Ships Flight aboard *HMS Illustrious* in 1947-48. (G.A. Jenks)**


**Fairey Barracuda TR Mk.III**RJ765:301-GN of 815 Squadron, FAA, based at RNAS Eglinton in the early 1950s. Type C roundels on upper wings

**Fairey Barracuda TR.Mk.5** RK571:800-D of the Ship's Flight, *HMS Illustrious* in the early 1950s.





Warfare Development Unit; 705 providing Replacement Crew Training at Ronaldsway; 707 a Radar Trials Unit at Burscough; 716 the School of Safety Equipment at Eastleigh; 735 and 737 Squadrons at Burscough ran the ASV courses, as did 783 at Arbroath; 736 was part of the School of Naval Air Warfare at St Merryn, also there was 774 to give armament training; anti-submarine training at Maydown was run by 744 Squadron; 753 ran the observer courses at Arbroath and later at Rattray; 764 the Torpedo Trials Unit at Gosport, and, the most important, one could say – 798 Squadron which ran the Barracuda Conversion Course at Lee-on-Solent.

**Below: Apart from agent nacelles under the wings a Barracuda II was used to flight test an airborne delivered radio station in a large pod mounted under the fuselage. Left: A view of the interior of the radio station pod.**

**Above: Barracuda II MX813 fitted with an airborne lifeboat in January 1945. Note the handling struts down from each wingtip. (Crown Copyright)**

## BARRACUDA SPECIFICATIONS

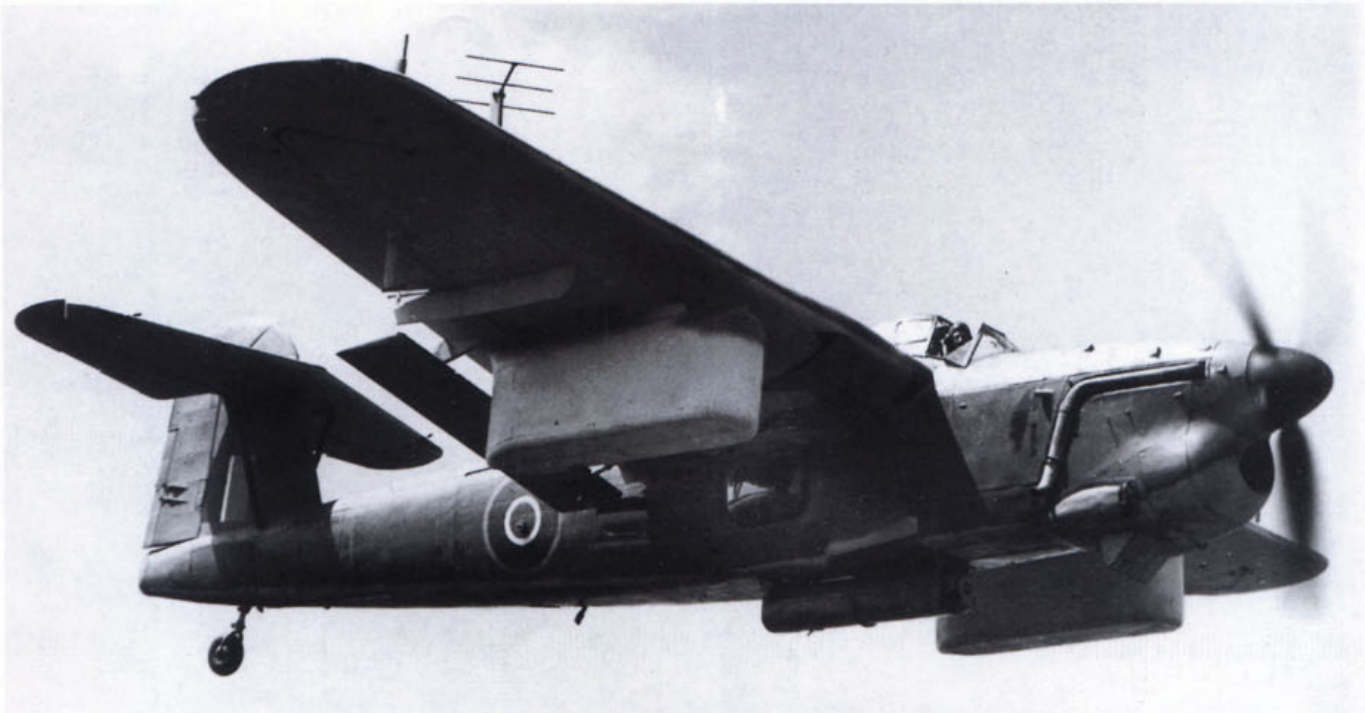
| Details | Mk.I | Mk.II | Mk.III | Mk.V |
|---|---|---|---|---|
| Engine | Merlin 30 | Merlin 32 | Merlin 32 | Griffon 37 |
| Rating | 1,260hp | 1,640 | 1,640 | 2,020 |
| RPM | 2,850 | 3,000 | 3000 | 2,850 |
| Rated altitude(ft) | 8,750 | 1,750 | 1,750 | 2,000 |
| **Dimensions** | | | | |
| Wing span | 49ft 2in | 49ft 2in | 49ft 2in | 52ft 5in |
| Folded | 17ft 9in | 17ft 9in | 17ft 9in | |
| Wing area | 414 Sq ft | 414 Sq ft | 414 Sq ft | 480 Sq ft |
| Length | 39ft 9in | 39ft 9in | 39ft 9in | 41ft 1in |
| Height | 12ft 3in | 12ft 3in | 12ft 3in | 13ft 2in |
| Weight empty | 10,012 lb | 10,818 lb | 11,113 lb | 12,120 lb |
| loaded | 12,064 lb | 12,600 lb | 12,895 lb | 14,466 lb |
| inc torpedo | 13,177 lb | 14,112 lb | 13,762 lb | 15,900 lb |
| **Performance** | | | | |
| Max speed clean | 250 mph | 240 mph | 239 mph | 270 mph |
| Inc torpedo | 221 mph | 228 mph | 220 mph | 256 mph |
| Max cruise | 193 mph | 205 mph | 145 mph | 217 mph |
| Inc torpedo | 191 mph | 193 mph | 190 mph | 203 mph |
| Radius recce | 300 miles | 290 miles | 210 miles | 255 miles |
| With torpedo | 270 miles | 230 miles | | 210 miles |
| With bombs | 200 miles | 190 miles | | |
| Time to 5000ft | 5 min 20 sec | 4 min 12 sec | 4 min 30 sec | 4 min 42 sec |
| Ceiling at AUW | 21,300 ft | 18,200 ft | 18,200 ft | 27,000 ft |
| Take off distance into 20 knot wind | 430 ft | 520 ft | 565 ft | 450 ft |
| **Weapons** | | | | |
| Torpedo | 1,568 lb | 1,620 lb | 1,572 lb | 1,672 lb |
| 500lb bombs | 3 | 3 | 2 | 4 |
| 250lb bombs | 6 | 6 | 6 | 4 |
| 1,600lb bomb | 1 | | | |
| 2,000lb bomb | | | | 1 |
| Depth charges | 3x450lb | 6x250lb | 4x250lb | 4x250lb |
| Mines | 1,500lb | 1,640lb | 1,640lb | 4x400lb |

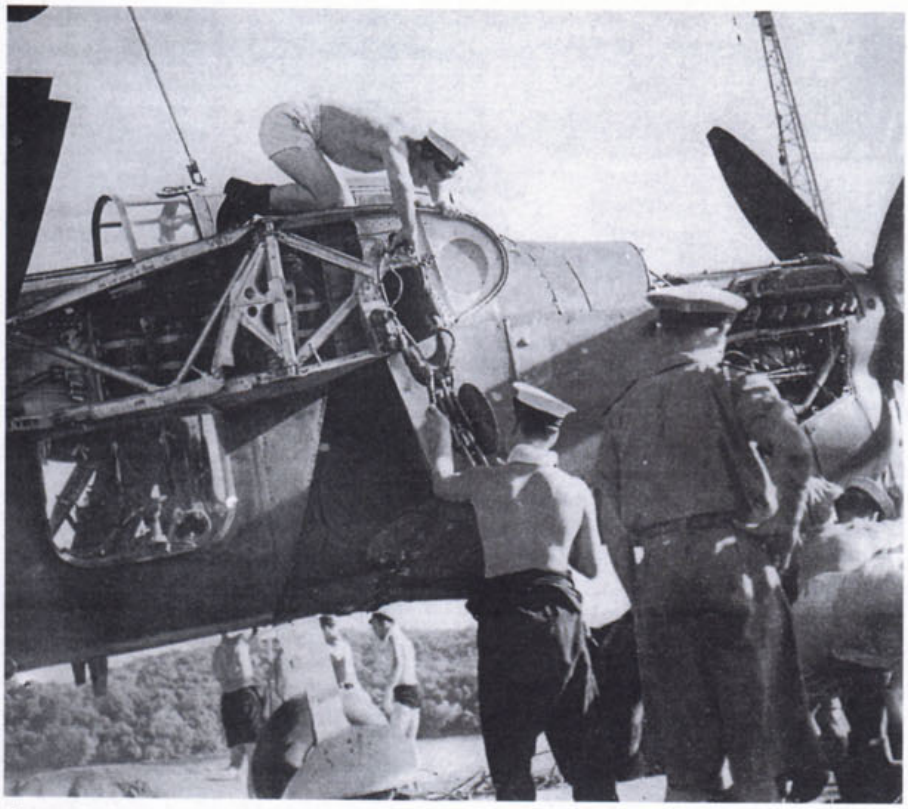
**Fixed armament**
The Mk.I, II and III all had one 0.303in Vickers gas operated machine gun with 200 rounds per gun, plus two 0.303in Vickers for the TAG with 500 rpg. The Mk.V had a single 0.50in Colt-Browning with 200 rpg.

No.827 Squadron was the first operational unit to receive Barracudas when they replaced their Albacores at Stretton in January 1943. The squadron received a mixed bag of Mk.I and II Barracudas, moving south to Lee-on-Solent in early April to work up. Here it was joined by 810 Squadron, which changed its Swordfish for Barracudas the same month. Other squadrons quickly followed – 830 in May, 823, 831 and 847 in June, 822 in July, 815 and 829 in October and 817 with 826 in December.

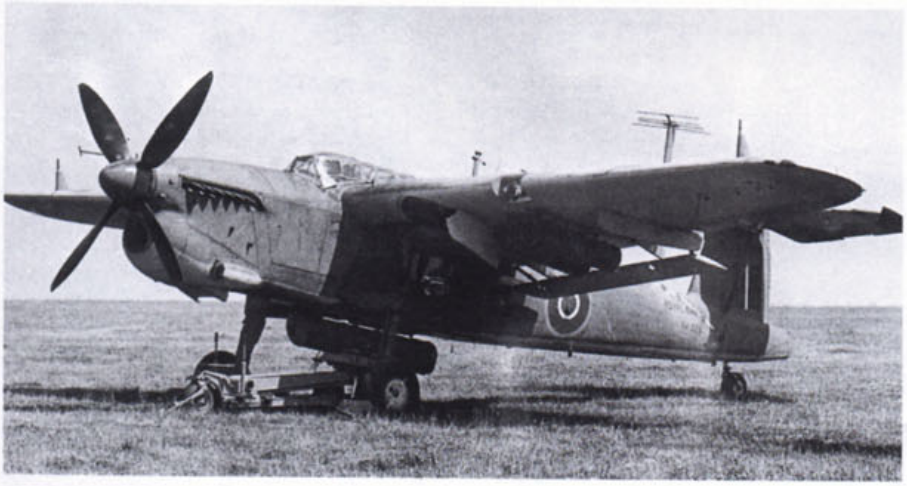
These squadrons were formed into TBR Wings to operate as part of a carrier force. The 8th TBR Wing comprised 827 and 830 Squadrons embarked aboard *HMS Furious*; 826 became part of the 9th TBR Wing and joined *HMS Indefatigable;* 810 and 847 joined *HMS Illustrious* as the 21st TBR Wing; 822 and 823 became the 45th TBR Wing intended for *Indefatigable* and no less than four Barracuda squadrons, 815, 817, 829 and 831 formed the 52nd TBR Wing for *HMS Victorious*, but 815 and 817 left to

**The mysterious 'spy' Barracuda II P9795/G with two 'Cuda' floats to carry the agents. (IWM)**





Above: An interesting view of a Barracuda II undergoing maintenance. Lots to observe, wing fold, locking pins in undercarriage leg, observer's panel and hooding. Below: Loading a mine on Barracuda II RK328. These could be carried on the torpedo brackets. (Air-Britain)



form the 12th TBR Wing.

One early strike by Barracudas fell to 827/830 Squadrons on 5 February 1944 when they dive-bombed and destroyed a beached freighter near Stadtlandet, Norway. In fact Norway, and in particular the shipping lanes, known as the Leads, off the coast of Norway, provided an excellent training ground for the Barracuda.

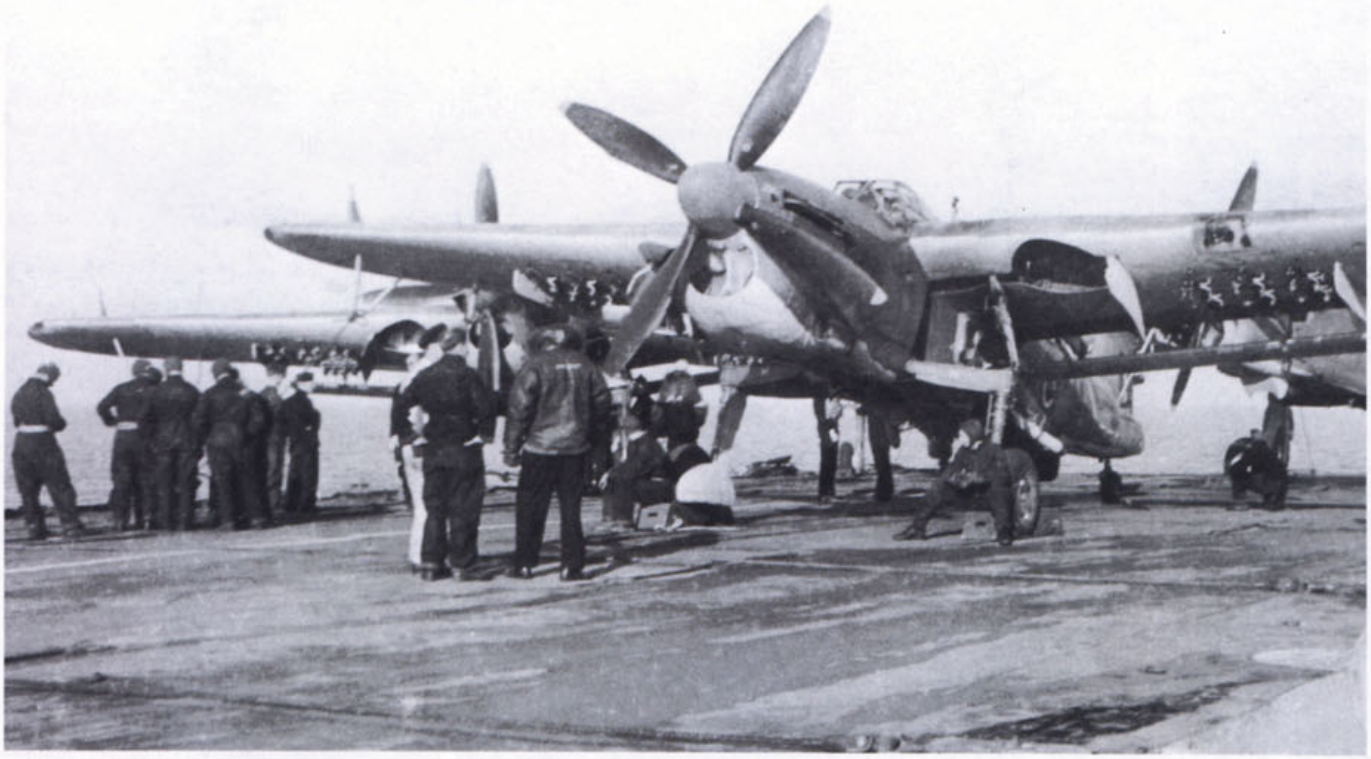
Contrary to popular belief Barracudas did carry out torpedo attacks off the coast of Norway and some 16 strikes were made. Usually the attacking force would have one or two Barracudas with torpedoes and the rest with bombs.

An anti-shipping strike on 26 April by the 8th and 52nd TBR Wings was the start of a series of such attacks to test out the Barracuda, the TBR Wings and 'blood' the new naval aviators. During operations over the next seven months or so only one Barracuda was lost in action. This was BV950 flown by Sub.Lt. (A) J. D. Herrold, RNZNVR, of 827 Squadron when his aircraft was hit by flak and dived into the sea.

On 6 May 1944 two enemy convoys off Hoy and Kristiansund were attacked by the 8th TBR Wing in ideal weather conditions. In the first strike three of the Barracudas carried bombs and the forth a torpedo. Fighter cover was provided by Grumman Wildcats. The torpedo machine, P9960 flown by Sub.Lt. (A) J. A. Brown, RNVR, of 827 was shot down by flak before he could release his weapon. Two merchantmen were attacked and damaged, one left burning, by the other three Barracudas. A second strike against three large merchant ships, escorted by several flak ships, was made using torpedoes and bombs, leaving two ships on fire.

One aircraft was lost, Barracuda BV937 flown by Sub.Lt. J. A. Grant, RNVR, of 830 Squadron. During the period October 26 to 28 the 2nd TBR Wing, operating from *Formidable* carried out a further series of

Below: Rocket-assisted take-offs were commonplace for heavily loaded Barracudas. Here a TR.III pilot has just lit the fuse and the aircraft is accelerating away smartly. The RATOG was jettisoned after take-off and had an elastic cord to ensure they fell clear of the torpedo tail, when fitted. (RNN)



**Barracudas of 860 Squadron RNNAS aboard *HMS Nairana* in 1945. These had been handed over by 822 Squadron and retained their FAA markings. (RNN)**

strikes, the most notable being on the 27th when the Wing bombed U-boat U-1060 at Rorvik.

During this period some 14 enemy ships were sunk and 18 damaged – there was no doubt that the Barracuda had now proved itself to be a formidable strike aircraft – and continued to do so until the end of the war.

Only one more operation was flown in Norwegian waters. No.821 Squadron, embarked in escort carrier *HMS Puncher,* flew off nine Barracuda IIIs on 22 February, 1945 to lay mines in Haugesund Fjord, escorted by 16 Wildcats to suppress flak batteries. In poor visibility the Wildcats lost touch and in the confusion two Barracudas were shot down – MD838 flown by Lt.(A) A. D. L. Payne, RNVR and MD846 flown by Lt. (A) L. W. E. Maffey, RNZNVR.

## TIRPITZ OPERATIONS

On 3 April 1944 'Operation Tungsten' the planned series of strikes to destroy the German battleship, *Tirpitz*, was launched from two Fleet and four escort carriers. For this operation 831 Squadron joined 830 aboard *HMS Furious*, and 829 joined 827 aboard *HMS Victorious*. The Barracudas from *Furious* took off at 04.30 hours to attack the ship which was known to be anchored in Kaa Fjord. However, *Tirpitz* was under way after repairs to damage caused by midget submarines.

The strike surprised the ship and caused considerable damage, compounded an hour later by the strike force from *Victorious* and contributing to more than 400 casualties.

**The moment of truth! The pilot of this Barracuda TR.III has arrived over the deck of *HMS Nairana* in an almost perfect arrival attitude. Many didn't! (RNN)**

Two Barracudas were shot down during the attack, Sub.Lt. (A) H. H. Richardson, RNVR, of 829 Squadron flying LS551:4M, and Sub.Lt. (A) T .C. Bell, RNVR, of 830 flying LS569:5M.

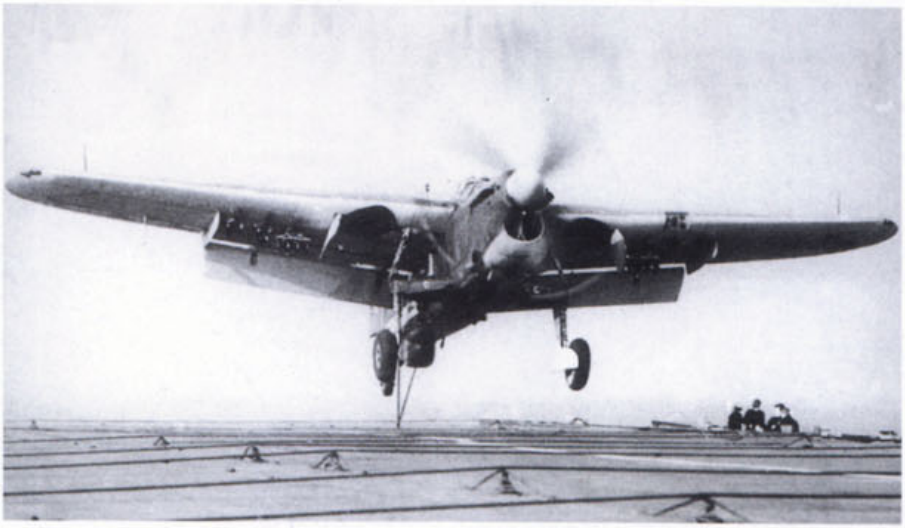
Two planned strikes against the *Tirpitz* were planned for May but bad weather forced their cancellation. It was July before a force could be assembled for another series of strikes. On 17 July 'Operation Mascot' formed up with 44 Barracudas and 48 escorting fighters to have another go. The Barracudas were provided by 820 and 826 Squadrons of the 9th TBR Wing aboard *HMS Indefatigable*, with 827 and 830 Squadrons of the 8th TBR Wing aboard. With such a large formation the enemy heard the approaching armada long before they got there and smoke screens covered the ships. The Barracudas dropped their bombs blind and sunk an armed trawler but *Tirpitz* escaped. One Barracuda LS653 of 826 squadron flown by Sub.Lt. E. S. Falwasser, RNZNVR, was hit by flak, losing fuel he managed to ditch near *Indefatigable* and was picked up by a destroyer.

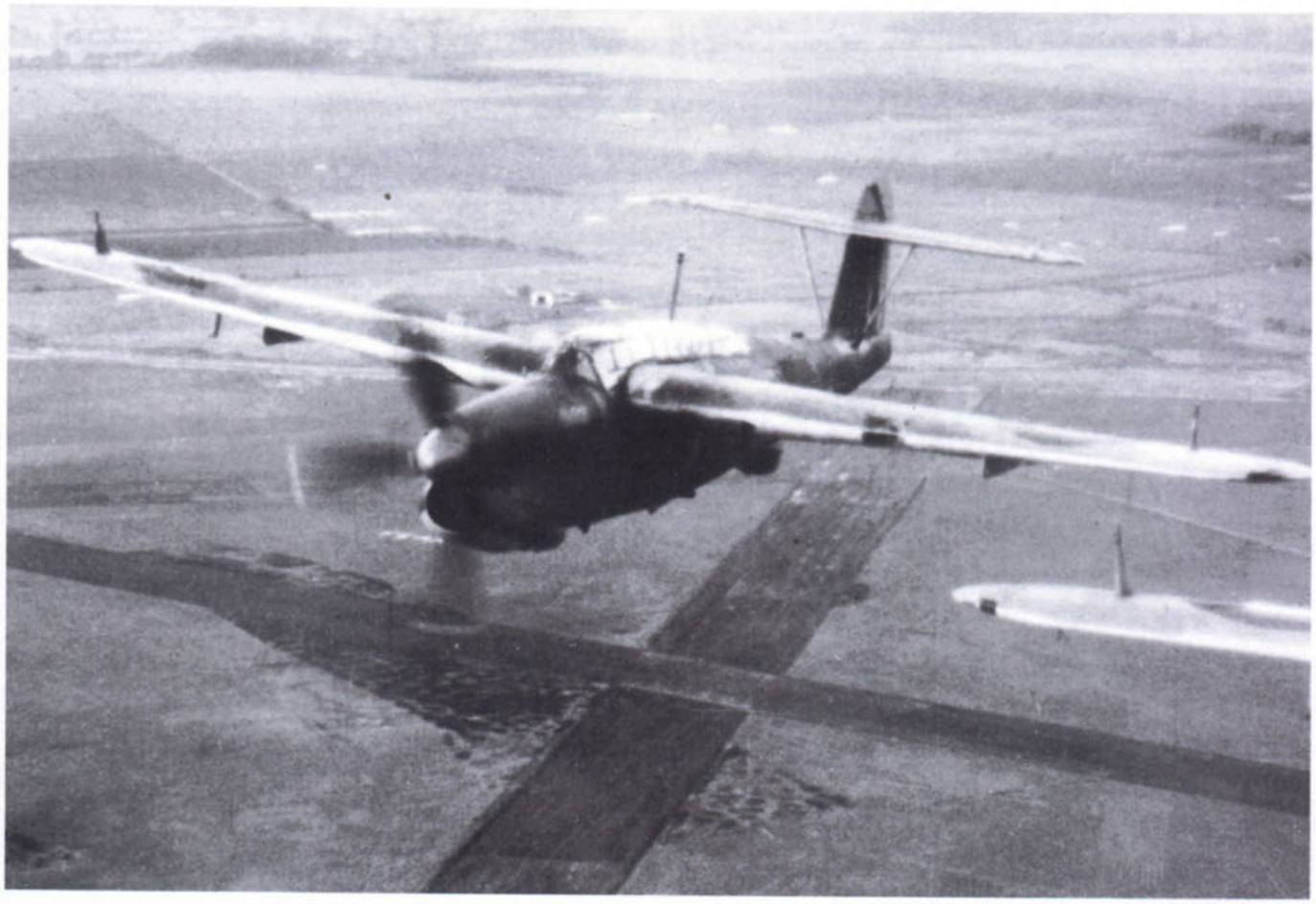
Determined to destroy this thorn in their side the Admiralty planned another series of attacks for 22 August. Although four Barracuda squadrons were again to be deployed they were 826 and 828 in *Formidable*, 827 in *Furious* and 820 from *Indefatigable*. Once again the enemy were forewarned and the attackers found a smoke screen.

They returned two days later with one Barracuda scoring a direct hit with a 1,600Ib armour-piercing bomb which went through the armoured deck but failed to explode. An escorting Hellcat scored a hit with a 500Ib bomb but damage was light. The final series of attacks on August 29th also failed to hit the battleship and it was left to the RAF to finally sink the *Tirpitz* when No.617 Squadron bombed her with 12,000Ib 'Tallboy' bombs on 12 November.

## IN THE PACIFIC

During February 1944 intelligence sources



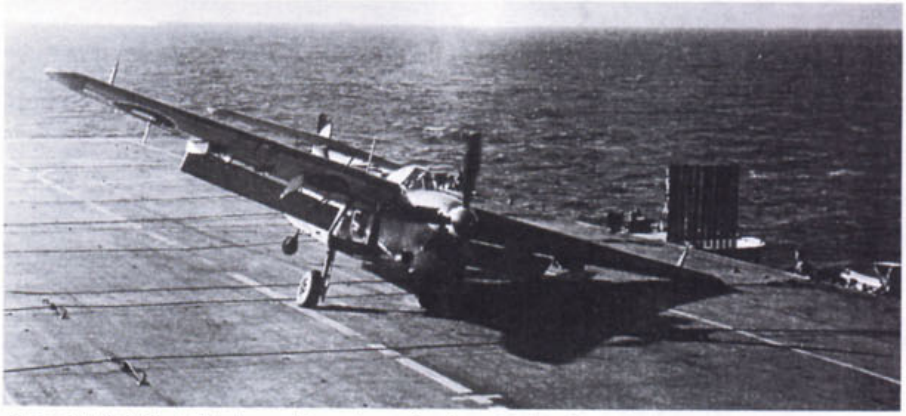


**A Barracuda Mk.III of the RNNAS flying over Ayr in 1945. (RNN)**

in the Far East indicated that there appeared to be a possibility of a Japanese fleet attack on Allied targets. An emergency force consisting of 822 and 823 Squadrons embarked in escort carrier *HMS Etheling* with 815 and 817 aboard *HMS Begum*, all equipped with Barracudas was despatched to Madras, India. Arriving on 12 April it was planned to use cranes to put the aircraft ashore where they would be towed by RAF tractors to St Thomas Mount, a beach take-off strip to the south of the town.

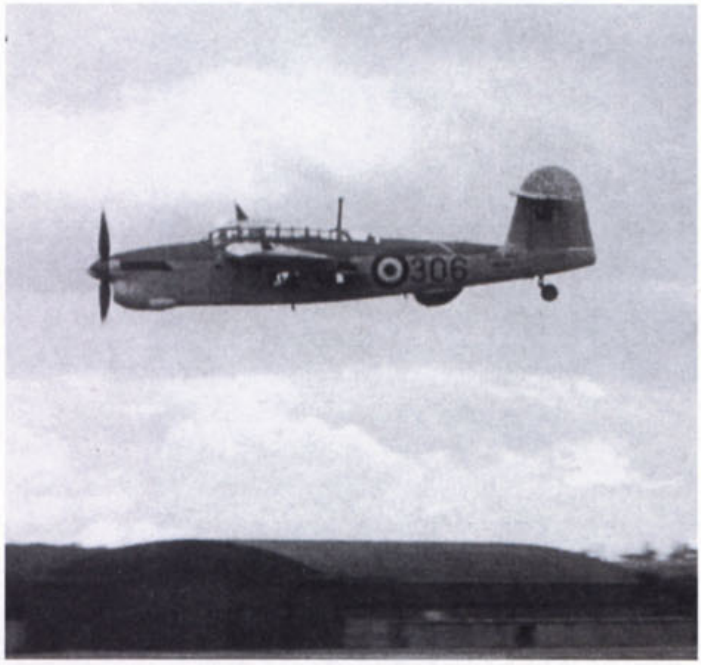
With no sign of the RAF the Commanding Officer of 823 Squadron, Lt.Cdr. (A) L. C. Watson, DSC, RNVR, led a procession of taxying Barracudas for two miles through the streets, with wings folded they provided an interesting spectacle. All reached the strip without damage and took off for RAF Ulunderpet. Shortly afterwards the fear of a Japanese attack abated and the aircraft returned to the UK.

However, a carrier force was required in the area and in April *HMS Illustrious* arrived at Ceylon (now Sri Lanka) with 810 and 847 Barracuda squadrons of the 21st TBR Wing embarked. The *Illustrious*, accompanied by the USN carrier, *Saratoga*, sailed from Trincomalee on 16 April and three days later 17 Barracudas took part in an attack against Japanese oil installations on Sabang Island, Sumatra. Bombing attacks were made



**Above: Lt. (A) 'Mush' Taylor making a heavy landing which collapsed the port undercarriage leg of Barracuda II PM757 381:A landing aboard *HMS Vengeance* off Hong Kong 28 November 1945. The aircraft was a write off. (J. Dickson)**

**French Navy Barracudas had their markings blanked out for clandestine operations in Algeria in the late 1950s. At least one was seen flying with a container under the starboard wing in 1958. Was this for delivering agents as originally intended by the 'Cudo' floats? (J. Thiebaut)**



**Above: Barracuda TR.III 306:MF making a low pass during an air day. Below: A smart looking TR.III RJ796 300/MF serving with 750 Squadron at St Merryn in 1951. Stencilled coding was in wide use at the time on naval aircraft. (APN)**

against oil, port and radar positions, without loss to the attacking force.

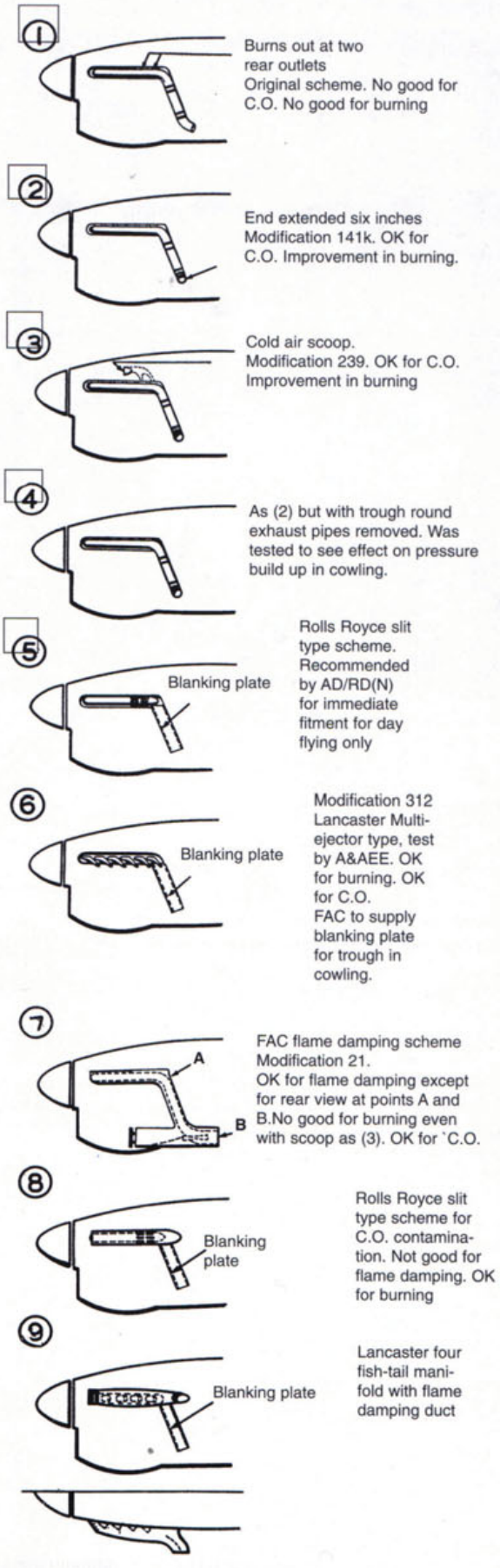
Barracudas were aboard carriers involved in making a series of strikes against Sourabaya and Sabang but because of their limited range were not used. During July 1944 *HMS Indomitable* with 815 and 817 Squadrons embarked, and *Victorious* with 831 joined the fleet.

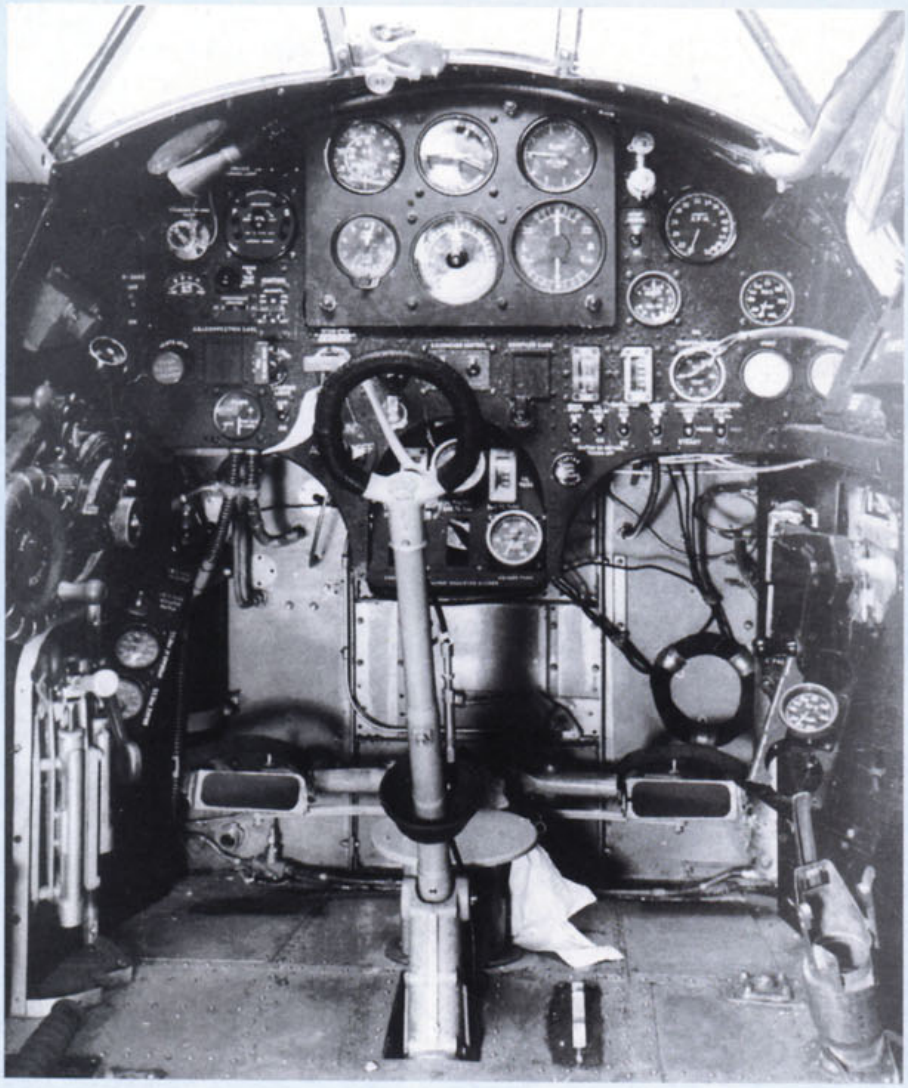
No less than 32 Barracudas carried out a series of strikes in the area on 24 August. The port of Emmahaven was bombed including two enemy ships and an important cement works at Indaroeng damaged. The rail centre at Sigli was bombed by Barracudas of 815, 817 and 822, which had replaced 831, on 18 September. Of the 20 aircraft sent out 18

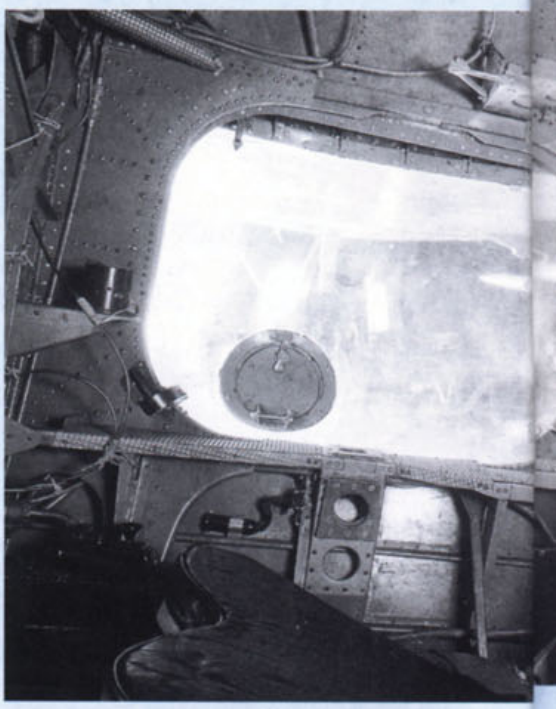
*Continued on page 36*

**Below: Barracuda II LS837 was used by Rolls-Royce for brief performance tests and is seen here at their test airfield, Hucknall.**

## Barracuda experimental exhaust systems

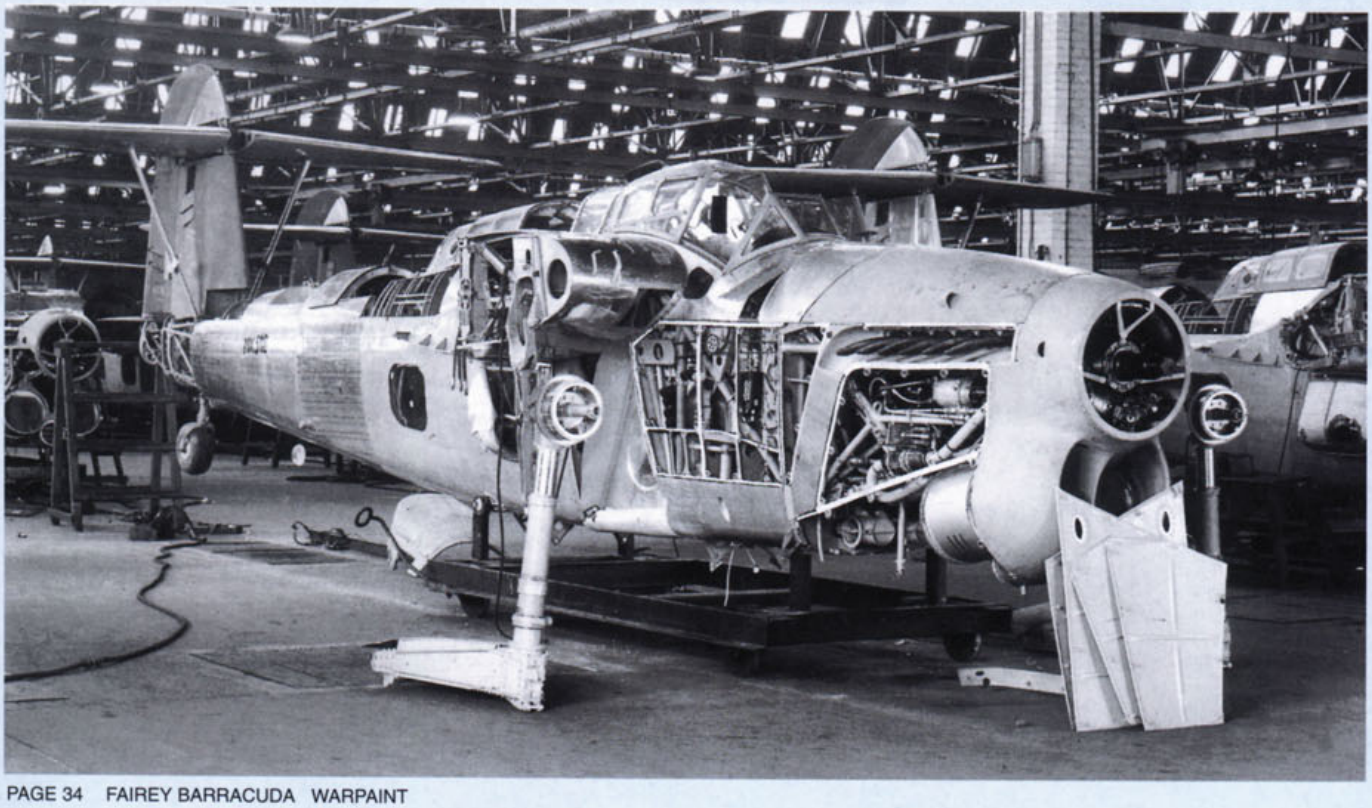






# Fairey Barracuda in Detail

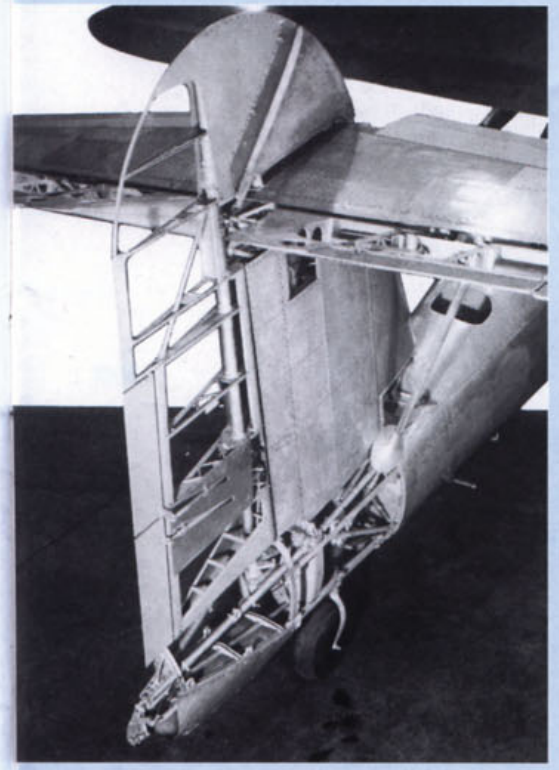
**Above: The pilot's cockpit of a Barracuda. All control functions are normal as is the blind flying panel above the spade grip. The wheel just behind the throttle box was the elevator trimmer, and the rudder trim control was below this. Early aircraft had their aileron trim set on the ground but Mod.235 gave the pilot adjustments in flight. Below:Barracuda IIs on the production line at Blackburn with MX518 prominent. The serial number has been roughly painted on the rear fuselage and in chalk on the rudder – all aids in a busy factory.**



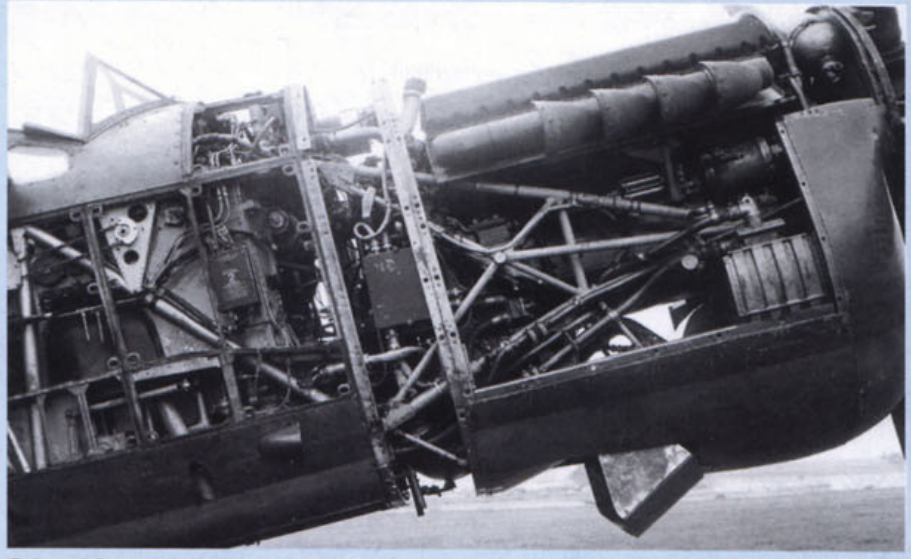
Above: The observer in the Barracuda had an excellent view out of both sides below the wings. The headrest could be swung up out of the way and quick release pins allowed the observer's seat back to be lowered so that he could sit facing rearwards when the aircraft was using RATO. A small instrument panel fitted with an altimeter, air speed indicator, air temperature gauge and clock was mounted on the starboard side just forward of the hinged window.

Fairey Aviation pictures from the archives of Ian Huntley

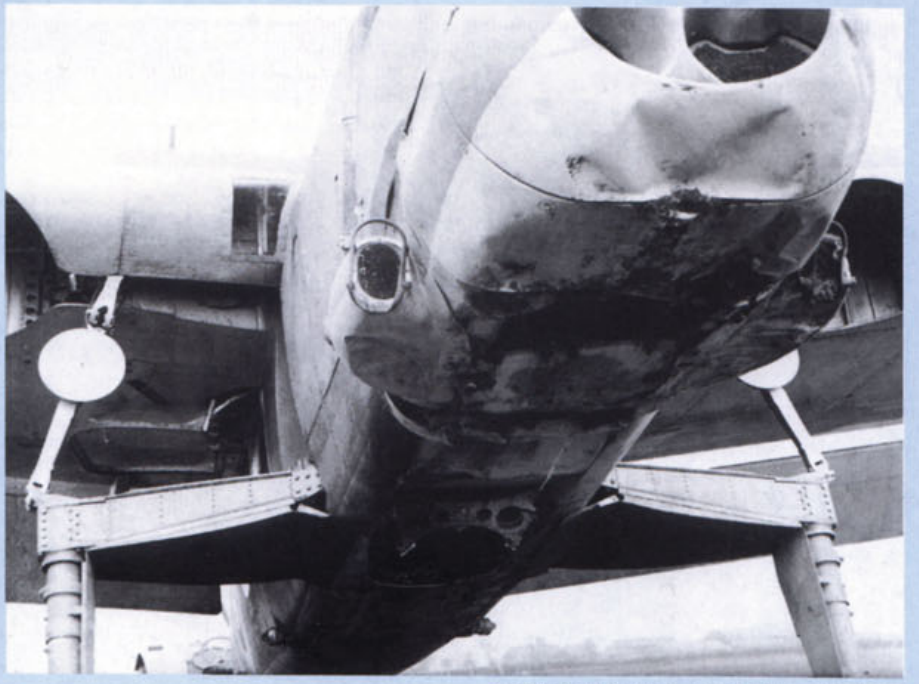
Detail shot of the tail area which was covered by alclad skinning. Control surfaces were fabric covered. When the wings were folded back the kingposts holding the stowage locking bolt engaged a tailplane catch located on the outer portion of the tail leading edge. This is actually a picture of the prototype P1767 after the tailplane had been moved up the fin.

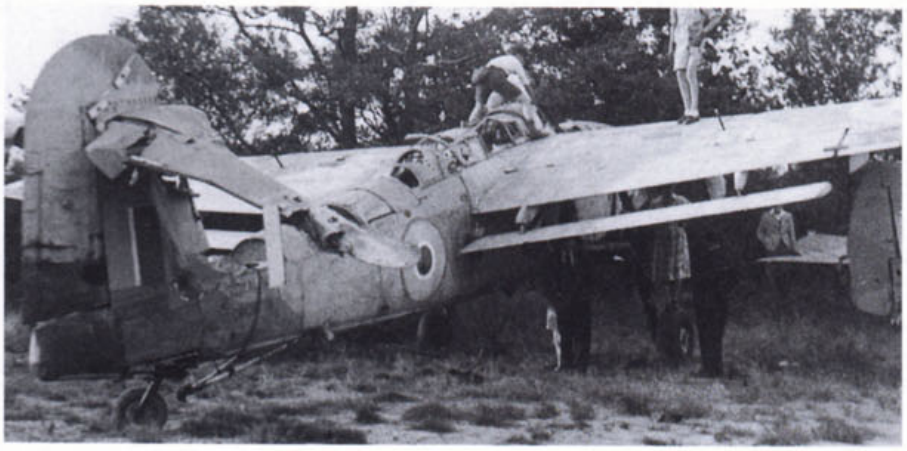


Above: Close up of the torpedo crutches and release mechanism. The front clutch had adjustable pads with the main bracket carrying the electro-magnetic release unit and tensioning gear for the torpedo sling after being hoisted into position. Below:Close up detail of the engine installation of Barracuda Mk.V P9976 when testing different exhaust manifolds at Boscombe Down. (Crown Copyright)



Below: A Barracuda II after a force landing, possibly on 20 April 1942. Noteworthy are the undercarriage, open observer's window. The round circles are locking pins for the folding part of the undercarriage.





**A sad note to end on. This picture shows Barracuda DR126 in a dilapidated condition, probably at Farnborough after it was used for trials there. People stand around while kids play on the wing and in the cockpit. Adjacent is Airacobra AH574, also used by RAE Farnborough.**

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returned, the other two being non-combat losses.

The last Far East operation by Barracudas was on 1 September, 1945, when enemy shipping, defying the cease fire off Hong Kong were attacked in conjunction with Avengers, Hellcats and Corsairs.

In the Indian Ocean Barracudas struck at Japanese positions in the Nicobar Islands. These were 815 and 817 operating from *Indomitable* on 17 and 19 October completing 20 sorties but losing one Barracuda each day.

As Grumman Avengers, with longer range arrived in the area the Barracudas were withdrawn and stored at Coimbatore in India. Although the last operational sorties had been made Barracudas again returned to carriers when a force of four light fleet carriers, *Colossus* with 827, *Glory* with 837, *Vengeance* with 812 and *Venerable* with 814 began to work up for operations in the Pacific on VJ-Day in the event of a cease fire and subsequent surrender not happening.

Interestingly, during November 1945 the Barracudas of 812 Squadron provided border patrols between China and the New Territories frontier, that is the mainland area handed over to Hong Kong at that time during the partition between National and Communist Chinese forces.

During these patrols Sub.Lt .John Dickson was tasked with flying the Bishop of Hong Kong and his cross bearer to Canton in Barracuda PM757. On landing he was informed that he could not switch his engine off and the poor Bishop and associate had to climb out, (not an easy job from a Barracuda anyway), through the propwash gale!

Corsairs from *Vengeance* provided an escort and circled the airfield at low level, just in case anything went wrong. Supporting air patrols were provided as British and Dominion forces re-occupied Rabaul, northern Formosa and Hong Kong.

Only one squadron, 827, retained the Barracuda II until July 1946 when *Colossus* returned to Portsmouth.

## PEACE TIME POLICIES

A number of Barracudas found their way into RAF units between 1943 and 1945, none of them operational. The squadrons were mainly anti-aircraft co-operation units – Nos. 567, 618, 667, 679 and 691 Squadrons. Numbers were few and survivors were returned to Admiralty charge during 1945.

With the end of hostilities in Europe and the Far East many FAA squadrons returned to the UK and were quickly disbanded. In a 1946 census only five squadrons were equipped with the Barracuda – 812, 814, 826, 827 and 860, although the latter was in effect a Royal Netherlands Navy squadron which had operated the Swordfish.

The Barracudas, all handed over from 822 Squadron on 30 June, 1945 were an interim type until their new Firefly Is were ready.

The squadron flew to Ayr on 1 September and then embarked in *HMS Nairana* on 30 October. This carrier had already been sold to the Dutch and was soon renamed *Karel Doorman.* The squadron flew ashore to Fearn and later to St Merryn where they exchanged the Barracudas for Fireflies.

Despite efforts to get the Barracuda V into front line service before the end of the war it arrived too late. It was only used for training by 750 Squadron at St Merryn, 778 Squadron at Ford and 783 Squadron at Lee-on-Solent.

The Admiralty issued a note on 19 November 1948 that said, 'Barracuda Mk.V aircraft are being withdrawn from service for disposal' but most lingered on until 1950.

However, in December 1947 744 Squadron became 815 Squadron at Eglinton, Northern Ireland, and was equipped with the Barracuda TR.3. Its role as Naval Joint Anti-Submarine Squadron included working with the Joint Anti-Submarine School at Londonderry. Although shore-based the unit occasionally participated in exercises which included operating from carriers. The Barracudas were finally phased out in May 1953 in favour of American-supplied Avengers.

Many of the surviving Barracuda II and IIIs in the post war era were sent to Fairey for refurbishing, repair and/or modification updates. As late as May 1949 some 28 were at Ringway for such work.

A few were retained by the FAA as trials aircraft, Mk.IIIs RJ769 was at Boscombe in April 1949 for Sonobuoy tests, RJ916 did similar work between July and September 1951 and in December 1952 RJ781 was testing a ASR Type G lifeboat.

Plans for a Barracuda Mk.VI never got beyond the drawing board stage. At a meeting with Fairey and the MAP in September 1945 it was stated that any work now being done on the planned Mk.VI would not be time well spent.

The French Navy, the Aeronavale, eager to equip its post war squadrons with interim types until their own industry got going again purchased 10 Barracudas fitted with ASH radar and delivered between March and July 1948.

These were used for clandestine operations until 1956 by Escadrille de Liaison Aerienne (ELA 56) 'Vaucluse' providing aerial support for the French counter-intelligence service – the SDECA. The aircraft were based at Persan-Beaumont, Algiers, for use by French paratroops and commandos. Some were still in British markings although poor attempts had been made to hide any markings of previous units or ownership. Very little is known about their actual operational use.

Unfortunately no complete Barracuda has survived to be seen in a museum. In June 1946 the Fairey factory at Heaton Chapel, where so many Barracudas had been built, were informed that RJ926 would be transported by road for static display at the factory.

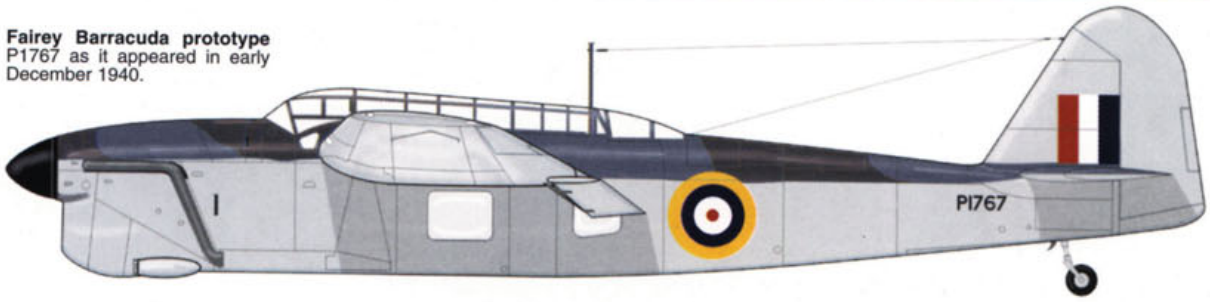
There were still plenty of Barracudas about into the 1950s that could have been preserved – there were at least a dozen at Balado Bridge in March 1952, and the remains of 15 at Milnathorpe nine years later.

There are a number of wrecks from which parts have been obtained, MD963 in the Peak District, DR314 on Great Whernside and so on, from which the Fleet Air Arm Museum hope to build one complete example using the remains of DP872. ■

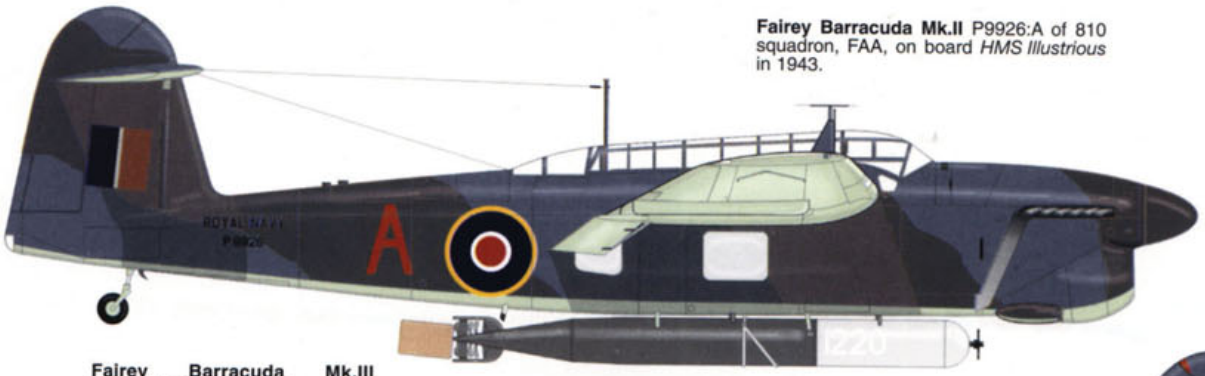
## Fairey Barracuda kits and accessories

| Scale | Type | Manufacturer | Reference | Remarks |
|---|---|---|---|---|
| 1:72 | Barracuda | Aeroclub | ABV124 | Metal wheels |
| 1:72 | Barracuda | Airwaves | AES72131 | Wing folding mechanism |
| 1:72 | Barracuda II | Chematic | CH72161 | Former Frog kit |
| 1:72 | Barracuda V | Magna Models | MAG7226 | Complete kit |
| 1:72 | Barracuda V | Maintrack | MK7222 | Conversion for Frog kit |
| 1:72 | Barracuda II | MPM | MPM72078 | Injection moulded kit |
| 1:72 | Barracuda II | Novo | NOV161 | Former Frog kit |
| 1:72 | Barracuda II | Plastyk | PYS122 | Complete kit |
| 1:72 | Barracuda II | Russian Frog | RF161 | Former Frog kit |
| 1:48 | Barracuda | Aeroclub | ABP426 | Propeller blades |
| 1:48 | Barracuda | Aeroclub | ABV178 | Detail set |

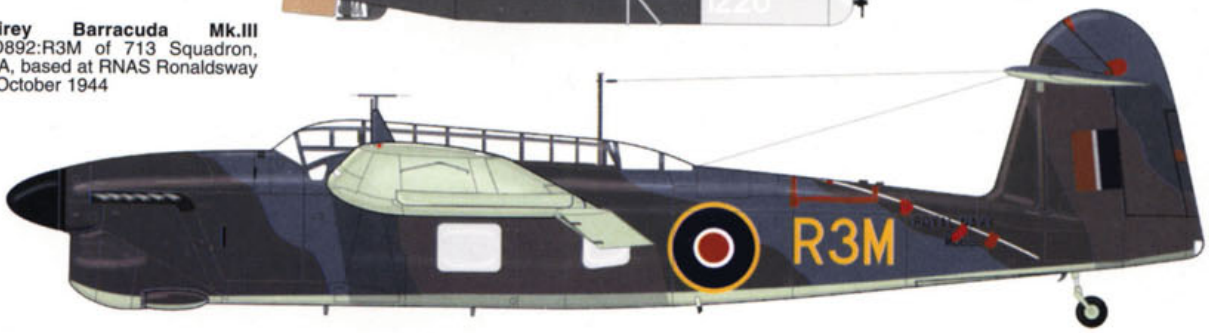
**Fairey Barracuda prototype** P1767 as it appeared in early December 1940.



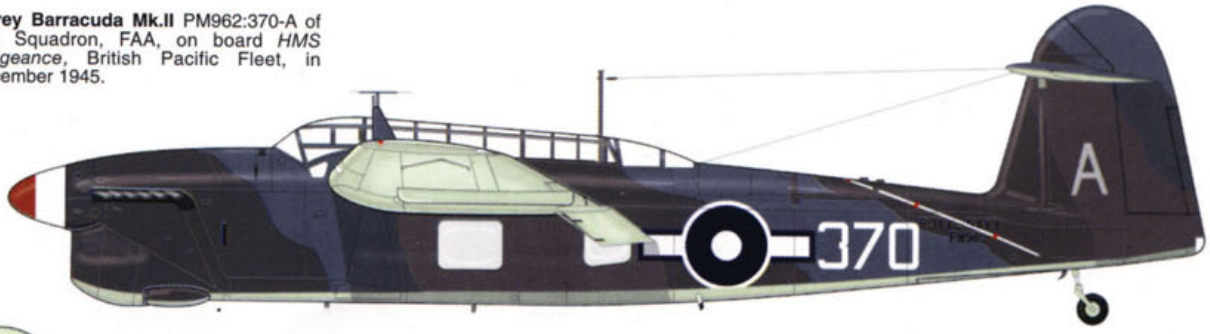

**Fairey Barracuda Mk.II** P9926:A of 810 squadron, FAA, on board *HMS Illustrious* in 1943.



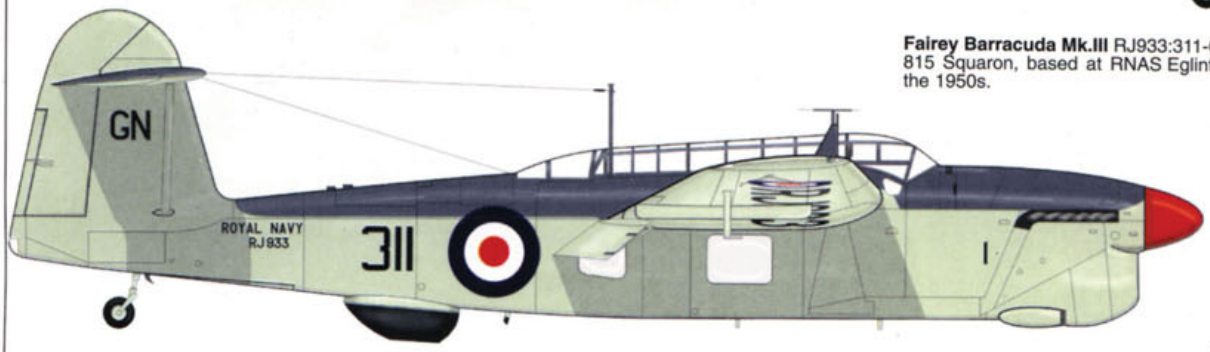

**Fairey Barracuda Mk.III** MD892:R3M of 713 Squadron, FAA, based at RNAS Ronaldsway in October 1944



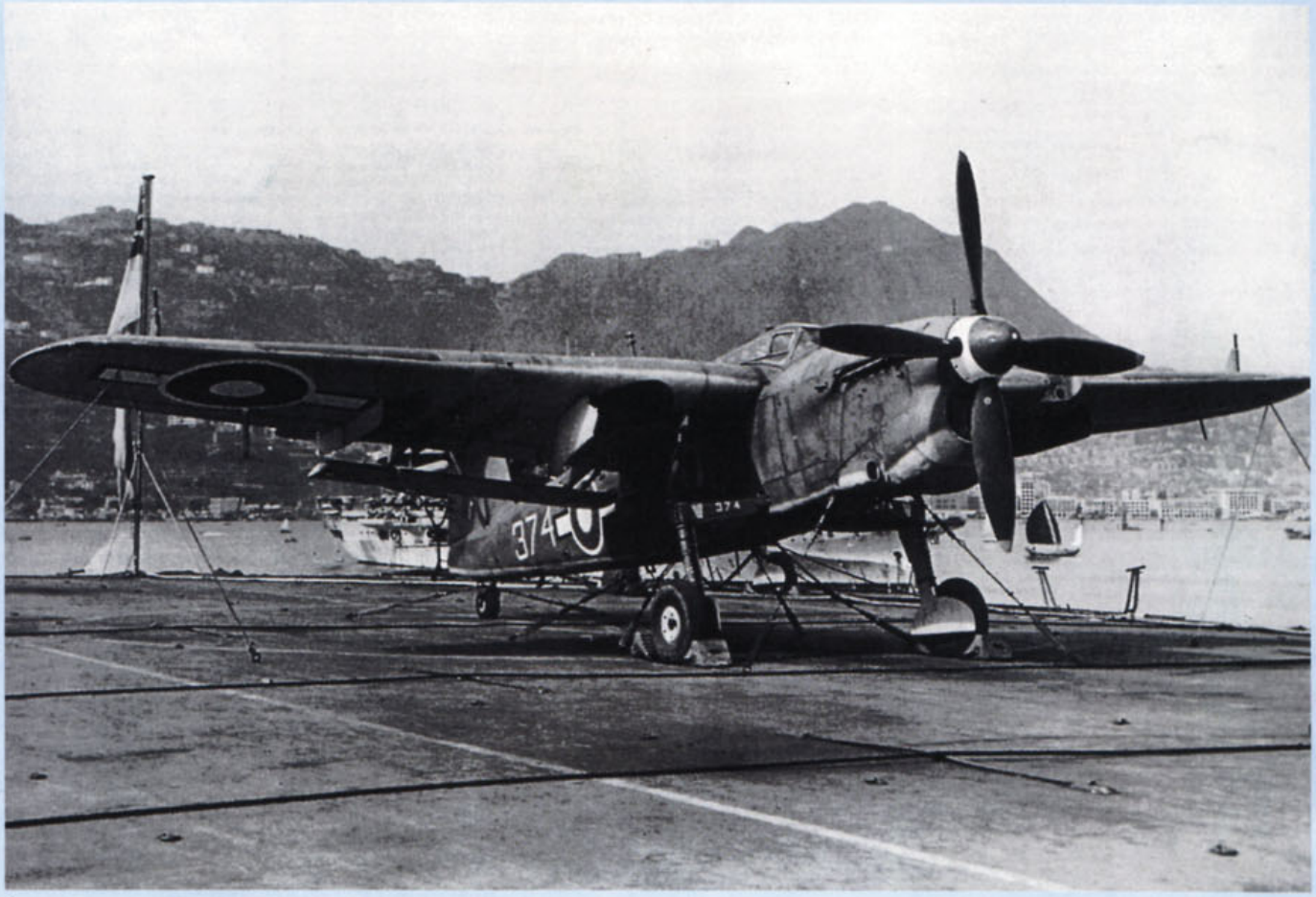

**Fairey Barracuda Mk.II** PM962:370-A of 812 Squadron, FAA, on board *HMS Vengeance*, British Pacific Fleet, in December 1945.




**Fairey Barracuda Mk.III** RJ933:311-GN of 815 Squaron, based at RNAS Eglinton in the 1950s.




**Fairey Barracuda TR.Mk.5** RK532:323-LP of 783 Squadron, FAA, based at RNAS Lee-on-Solent, in 1948. Appears to have a replacement rudder in aluminium.



**Above: Barracuda II PM978 374:A of 812 Squadron tied down on the flight deck of *HMS Vengeance*, September 1945 in Hong Kong harbour. Spinners were red and white. (J. Dickson) Below: Blackburn-built Barracuda II MD893 up on flight test. The coolant tank was just aft of the spinner and 'COOLANT' was usually stencilled on the panel. (BAE)**



**The end of an era. The last Barracuda to be built by Blackburn, MX907, being prepared for its first flight. Test pilot Hugh P. Wilson can be seen entering the cockpit. The bracket attached to the rear fuselage is a tail wheel jury rig which was normally used to position the aircraft when making an assisted take-off but this one has the wheel removed and is acting as a brake. (BAE)**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# FAIREY BARRACUDA Mk.II

MD690:4B of 826 Squadron, FAA, *HMS Formidable*, during Operation Goodwood III held on 24 August 1944.

**Drawings by David Howley**