

# CATAPULT



**TOP**  
*Flt Lt Norman Taylor.*  
(VIA B MARSDEN)

**TOP RIGHT**  
*Plt Off George Varley.*  
(247 SQUADRON ASSOCIATION)

When airfields in western France were captured in mid-1940, the Luftwaffe began long-range patrols over the Atlantic using Focke-Wulf Fw 200 Condors of I./KG 40. Based at Bordeaux, the predatory Condors were soon making their presence felt, sinking 90,000 tons of shipping

between August and November 1940. As maritime losses mounted, a counter to the Condors was desperately needed but there was an acute shortage of aircraft carriers and none were available for Atlantic convoy escort duties. Thus, the concept of the 'catapult fighter' was born.

An interceptor would be carried atop of a heavy catapult mounted on the bow or midships on a vessel, to be fired off by rockets when the presence of an intruder was detected. After conducting its flight, the pilot would then either attempt to reach land or bale out into the sea near an attendant escort. Four merchant ships

# FIGHTERS

THE URGENCY IN PROVIDING FIGHTER COVER TO ATLANTIC CONVOYS FROM MARAUDING FOCKE-WULF CONDORS IN THE SECOND WORLD WAR LED TO SOME DESPERATE SOLUTIONS, AS **ANDREW THOMAS** OUTLINES.



were identified and adapted as fighter catapult ships (FCS). These were commissioned into the Royal Navy as HM Ships *Ariguani*, *Maplin*, *Springbank* and *Patia*, though the latter was sunk in April 1941 before becoming operational. Each carried either a pair of Hawker Sea Hurricanes or a Fairey Fulmar.

However, it was merchant ships fitted with a catapult on the bow and designated as catapult armed merchantmen (CAM) ships that saw the most service, each carrying a single Sea Hurricane of the Merchant Ship Fighter Unit (MSFU). This outfit formed part of 9 Group, Fighter Command, and so paradoxically it

was mainly pilots wearing RAF uniforms rather than Fleet Air Arm crews who flew on catapult ship operations in the Atlantic and Arctic.

## DARK BLUE BEGINNING

As a first step during November 1940, the elderly catapult training ship HMS *Pegasus* was converted as the ▶

**ABOVE**  
Sea Hurricane IA Z4867/LU-Y being loaded onto a barge for transfer to a CAM ship.  
(R C B ASHWORTH)



**ABOVE**  
Fulmar II N4065 of 804 Squadron, sitting on the catapult of HMS Springbank. On 6 June 1941, this aircraft was launched after a Condor. The ship was sunk on 27 September 1941.  
(ADMIRALTY)

**RIGHT**  
The pilot on the CAM ship Michael E was Sub Lt Maurice Birrell, who survived its sinking and was later aboard Ariguani when she was torpedoed.  
(VIA M GOODMAN)

first FCS. Initially, she embarked two Fulmar Is and three pilots of Lt Cdr James Sholto Douglas' 807 Squadron, sailing on its first Atlantic convoy escort on 9 December. The ship steamed beyond Condor range before picking up an eastbound convoy and escorting it to the UK, with this and subsequent voyages lasting for around 17 days each. On 11 January 1941, when 250 miles (400km) west of Ireland, a Condor was spotted approaching the convoy and Petty Officer Fred Shaw was catapulted off *Pegasus*. The Fulmar could not catch the German, but after the first operational catapult fighter launch Shaw managed to land at Aldergrove in Northern Ireland.

The Condors attacked 46 ships in the first two months of 1941, sinking 26 of them, further deepening the crisis. In preparation for the delivery of the modified fighter catapult ships, from 10 February 807 Squadron passed the task to 804 Squadron under Lt Cdr Pat Havers that re-equipped with a mix of Fulmars and Sea Hurricanes. In all, *Pegasus* escorted nine convoys until reverting to training duties in July. By then the Condors were mainly being used to find and shadow convoys for waiting U-boats.

The 'new' catapult ships had begun operations and, on 11 May, Sub Lt Harvey with Leading Airman (L/A) Sykes launched in Fulmar N4072 from HMS *Ariguani* after an Fw in mid-Atlantic but failed to make contact and landed at Kaldadarnes in Iceland. Also in May, the 7,600-ton *Michael E* became the only CAM ship



detachment manned by the Royal Navy. On the 18<sup>th</sup>, Sub-Lt Maurice Birrell conducted his first trial launch – the ship anchored in Belfast Lough, but as Sea Hurricane W9215 moved down the 'cat' only half the rockets

fired, yet Birrell managed to retain control. On the 28<sup>th</sup>, *Michael E* under her Master Murdo MacLeod sailed for New York as part of convoy OB 327, with Birrell and Sub-Lt E J Clarke having been 'signed on' as 5<sup>th</sup> Mates.

## TREACHEROUS WATERS

On the evening of 2 June, the ship was struck by a torpedo fired from Korvettenkapitän Karl Scholtz' U-108 and sunk. The lifeboats carrying the survivors, including RN air detachment, were picked up by friendly forces the following afternoon. After landing at Halifax, Nova Scotia, on the 10<sup>th</sup>, one of the air fitters died of his injuries – he was 804's first loss in action during catapult operations.

Two days earlier, Lt B F Cox had fired off *Pegasus* in Fulmar N4094, but could not catch the intruder, although he managed to recover safely to Sydenham near London. Then, on the 10<sup>th</sup> during escort to HX129, Fred Shaw was launched in N4065, this time from *Springbank*, but once again the Fulmar proved to be too slow; he landed at Aldergrove. As a result, *Maplin* was re-equipped with Sea Hurricanes.

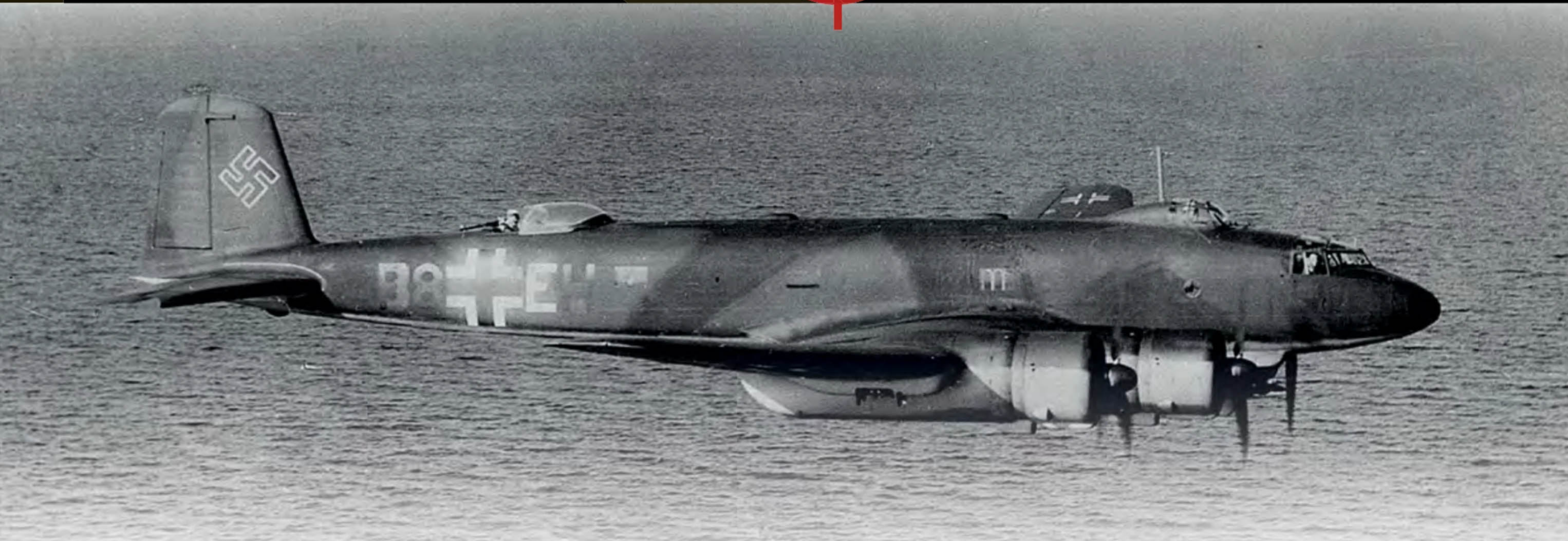
On 7 July, when *Pegasus* was covering convoys SL73/OG67, Sub-Lt Tom Parke and L/A Edwin Miller were launched in Fulmar N4038, but failed to contact the Focke-Wulf. Diverting to Aldergrove, they flew into a hill in Kintyre, Scotland, and were killed.

Up to now, success had evaded the catapult fighters. When *Maplin* was escorting a Nova Scotia-bound convoy on 18 July, she launched Lt Bob Everett's Sea Hurricane after a Condor, but anti-aircraft fire from the ships blew the wing off Hptn Fritz Fliegel's Condor, which crashed. Thwarted, Everett flew 300 miles and just managed to reach landfall in Ireland.

Things were different two weeks later when, in the early afternoon

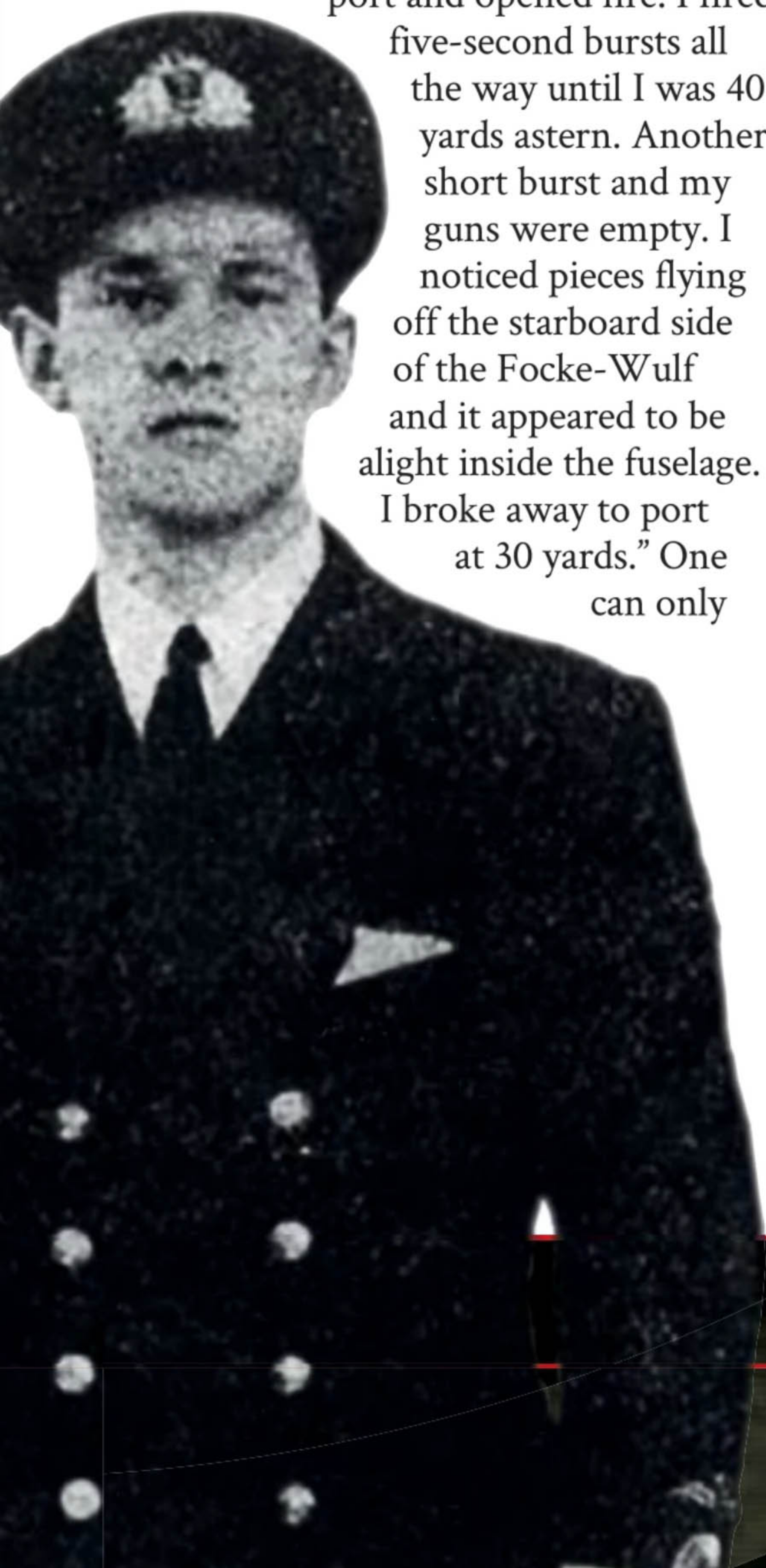
## SHIPS ARMED WITH 'ROCKET' FIGHTERS

**FIGHTER CATAPULT SHIPS:** HM Ships *Ariguani*, *Maplin*, *Patia*, *Pegasus*, *Springbank*  
**CATAPULT ARMED MERCHANTMEN:** MVs: *Daghestan*, *Dalton Hall*, *Eastern City*, *Empire Baffin*, *Empire Burton*, *Empire Clive*, *Empire Darwin*, *Empire Day*, *Empire Dell*, *Empire Eve*, *Empire Faith*, *Empire Flame*, *Empire Foam*, *Empire Franklin*, *Empire Gale*, *Empire Heath*, *Empire Hudson*, *Empire Lawrence*, *Empire Moon*, *Empire Morn*, *Empire Ocean*, *Empire Rainbow*, *Empire Ray*, *Empire Rowan*, *Empire Shackleton*, *Empire Spray*, *Empire Spring*, *Empire Stanley*, *Empire Sun*, *Empire Tide*, *Empire Wave*, *Helencrest*, *Kafiristan*, *Michael E*, *Novelist*, *Primrose Hill*.

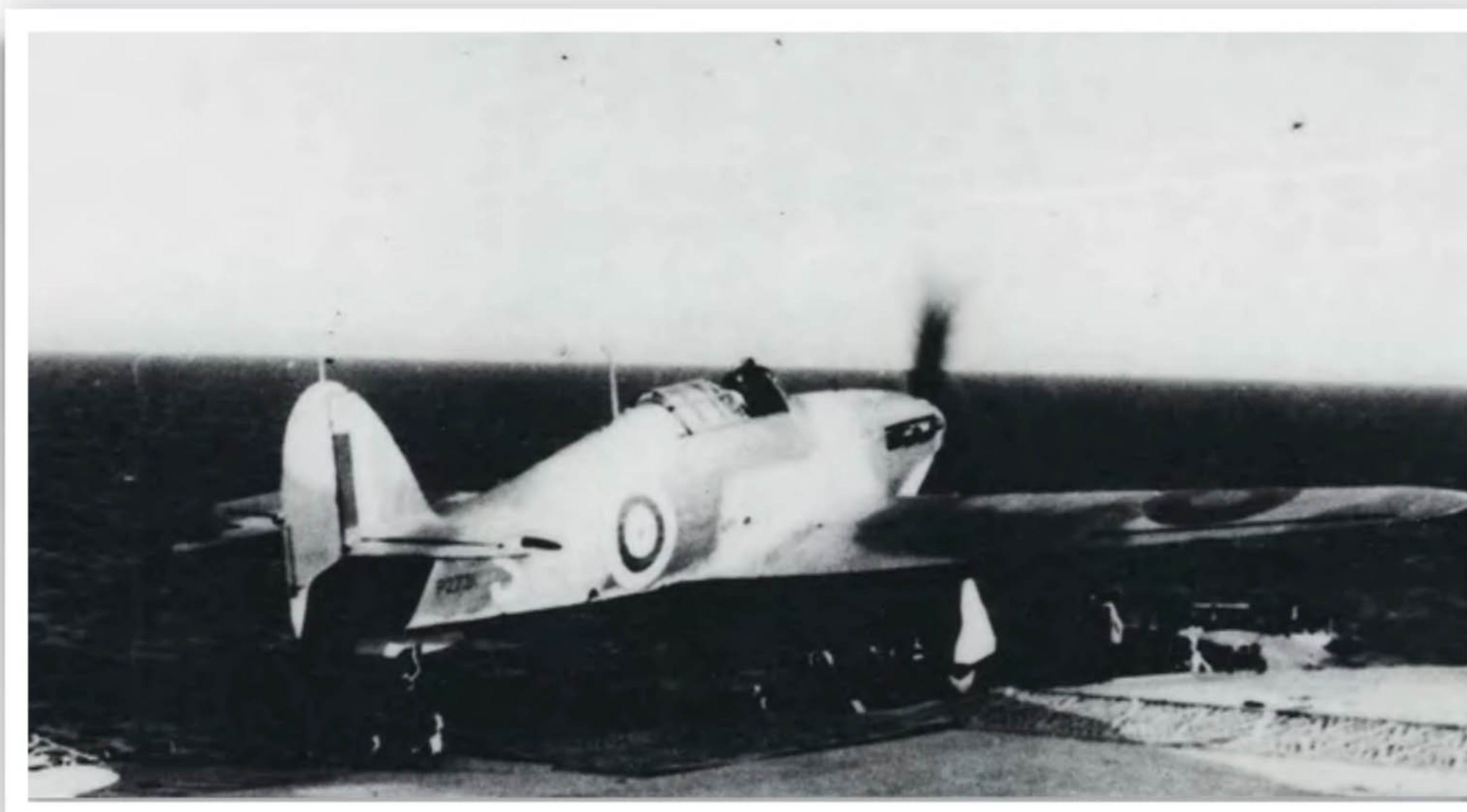


of 3 August, *Maplin* was escorting a convoy from Gibraltar. Fw 200C-3, 0066/DE+OO was sighted and, six minutes later, Sea Hurricane W9277 was launched with Everett at the controls. He described the subsequent events, which took place in the face of heavy defensive fire: "I intercepted it after nine minutes' flying and ranged up alongside at 600 yards and slightly above. The Focke-Wulf then turned sharply to port, but seemed to change its mind and turned back onto its original course. By this time, I had reached its starboard bow and three machine guns opened up, as well as the forward cannon. I did a quick turn to

port and opened fire. I fired five-second bursts all the way until I was 40 yards astern. Another short burst and my guns were empty. I noticed pieces flying off the starboard side of the Focke-Wulf and it appeared to be alight inside the fuselage. I broke away to port at 30 yards." One can only



**"ONE CAN ONLY IMAGINE THE HORROR OF THE GERMAN CREW AT ENCOUNTERING A SINGLE-SEAT FIGHTER IN MID-ATLANTIC AND WHOSE FIRE SENT IT TO A DITCHING, WITH TWO OF ITS CREW DEAD AND ONE WOUNDED"**



**ABOVE**  
The Focke-Wulf Condor ravaged shipping in the Western Approaches and was the *raison d'être* for the catapult fighter ships.  
(VIA JOHN WEAL)

**LEFT**  
Sea Hurricane Ib P2731/S7F was part of 804A Flt at Gibraltar that formed a reserve pool. It is seen shortly after 804 Squadron returned to carrier duties in late 1941.  
(R C STURTIVANT)

imagine the horror of the German crew at encountering a single-seat fighter in mid-Atlantic and whose fire sent it to a ditching, with two of its crew dead and one wounded. Everett then landed in the sea and was eventually picked up by the destroyer HMS *Wanderer*. He subsequently received a well-deserved DSO.

After survivor's leave, Maurice Birrell joined *Ariguani* and on 26 August, when escorting OG84, was catapulted off in Fulmar N4072 with L/A Sykes. They spotted the Condor and chased it for 50 miles, but were unable to overtake it. Eventually, they broke off and headed for Ireland and force-landed out of fuel on a beach

near Clogher in neutral Eire. The enterprising pair managed to obtain some petrol locally and then took off and landed at Eglinton, Northern Ireland.

### IN DEMAND

Early the following month, 804 Squadron established a reserve 'pool' of five Sea Hurricanes at Gibraltar as 804A Flight. There were further sorties against shadowing Condors over the next month. On the 14<sup>th</sup>, when covering HG72 Sub-Lt Cecil Walker in Sea Hurricane W9215 launched from *Maplin* and drove off an Fw 200, after which he baled out and was picked up by HMS *Rochester*. ▶

**LEFT**  
Sub Lt Tom Parke launched from HMS *Pegasus* after a Condor on 7 July 1941, but crashed when trying to land afterwards.  
(R C B ASHWORTH)



**ABOVE**  
Karl Scholtz was the commander of U-108, and sank the *Michael E.*  
(VIA ALFRED PRICE)

**RIGHT**  
This CAM pilot, thought to be Plt Off Michael Lyne, takes a precarious perch as a Hurricane is extended out over the port side.  
(R C B ASHWORTH)

chase a Focke-Wulf when the ship became the third victim that day for Oberleutnant zur See Adalbert Schnee in U-201.

A week later, on 4 October, Lt Ronald Bird ignited his rockets and powered Sea Hurricane V6649 off *Ariguani* when escorting OG75 some 400 miles west of Ireland. He managed to close in on the *Condor* and opened fire, driving the Nazi off, claiming it damaged. He then ditched and was eventually picked up in poor shape almost an hour later. The convoy battles on the Gibraltar route continued and in the early hours of 26 October, when escorting HG75, *Ariguani* was torpedoed and severely damaged by U-83.

This just about ended 804's time in the catapult role and, with the build-up of MSFU, it was returned to conventional carrier duties. In all, 804 and 807 Squadrons had conducted ten combat launches each, all of which had at least driven off the shadower.

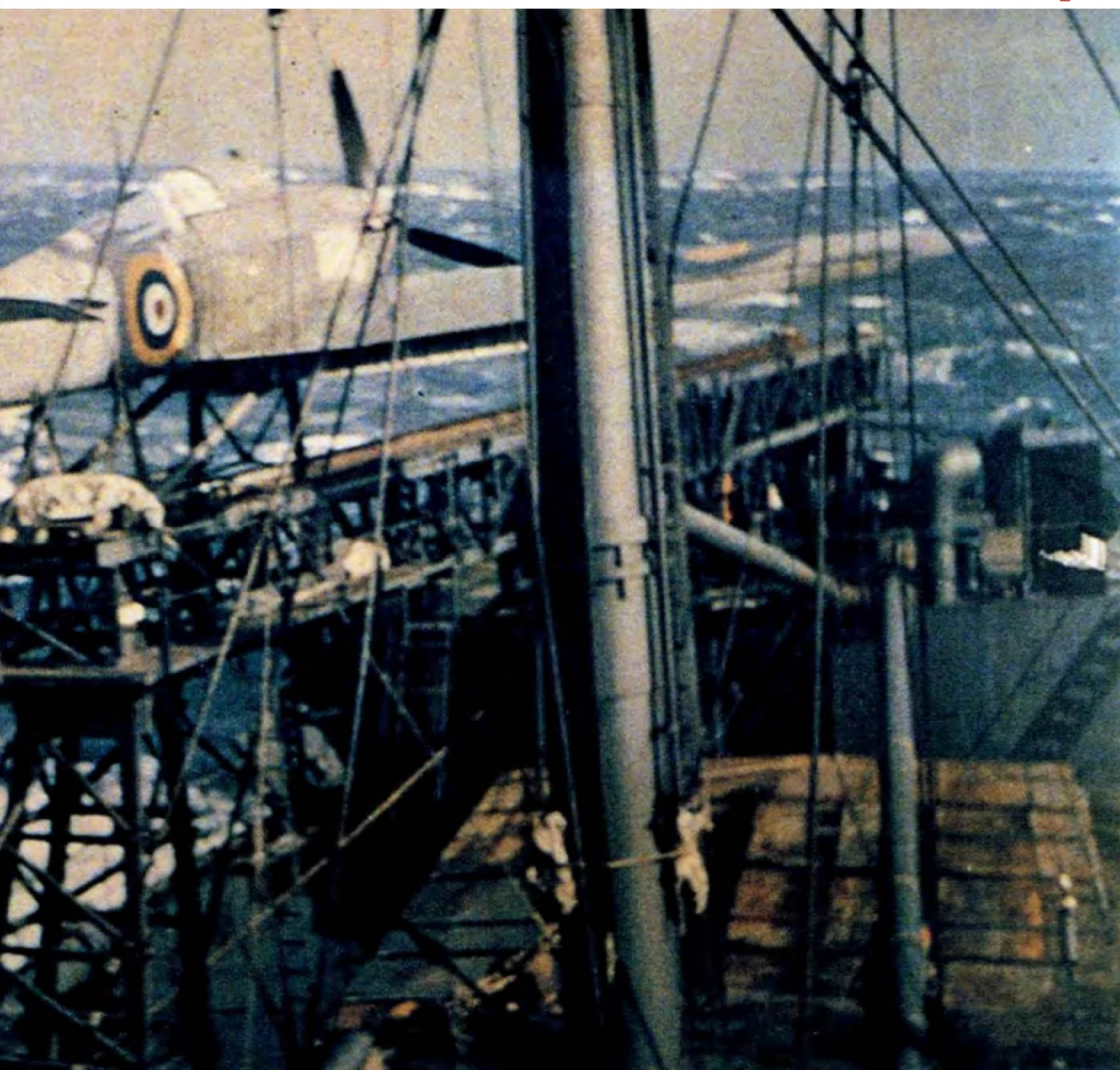
## ATLANTIC CROSSINGS

The RAF-manned MSFU was formed at Speke, Merseyside, on 5 May 1941



**“EVENTUALLY, THEY BROKE OFF AND HEADED FOR IRELAND AND FORCE-LANDED OUT OF FUEL ON A BEACH NEAR CLOGHER IN NEUTRAL EIRE. THE ENTERPRISING PAIR MANAGED TO OBTAIN SOME PETROL LOCALLY AND THEN TOOK OFF AND LANDED AT EGLINTON, NORTHERN IRELAND”**





(4,536kg) maximum weight at 60 knots. Each vessel carried a Sea Hurricane modified for catapult firing and a sea party comprising RAF pilots and maintenance crew of a fitter, a rigger an R/T operator and an armourer. The RN provided a fighter direction officer, a radar operator and a seaman for servicing the catapult. At the end of each voyage, the aircraft would be catapulted off to shore for maintenance and eventually the MSFU established permanent detachments at Dartmouth, Nova Scotia and Gibraltar, to give during convoy turnaround support.

**LEFT**  
Plt Off Lyne's Sea Hurricane, P3979, sitting on the bow of Empire Faith in relatively calm seas.  
(M J LYNE VIA P H T GREEN)

The Air Ministry had requested volunteers for the new unit in early 1941 and the first pilot to be assigned to the MSFU was the experienced Plt Off Henry Davidson, who arrived on 5 May. He joined the first CAM ship, the SS *Empire Rainbow*, from which he made the first trial launch on the 31<sup>st</sup> that almost ended in disaster. As the ship sailed into the Clyde at ten knots, only half the rockets fired and he sped down the rails – to the dismay of those watching, his port wing dropped and the Hurricane staggered away, low on the water. Fortunately, Davidson recovered to land at Abbotsinch near Glasgow and the experience resulted in a change in procedures.

**LEFT**  
Sea Hurricane Ia V6756/NJ-L on Empire Tide in August 1941. The ship was a survivor of the PQ 17 disaster.  
(ADMIRALTY)

He sailed with the ship for Halifax, Nova Scotia, on the first operational run by the MSFU on 8 June. The second ship was *Empire Moon*, with Plt Off Alan R M Campbell, which sailed shortly afterwards. By the end of the month, six CAM ships were at sea and in early July, MSFU had 25 modified Sea Hurricane IAs.

Among the other pilots was Fg Off John Greenwood, another Battle of ▶



to 'provide merchant shipborne fighter aircraft for the protection of shipping against air attack'. All the MSFU pilots were volunteers and it was a large unit commanded by Wg Cdr Edward S Moulton-Barrett, who had colourful former First World War pilot Sqn Ldr Louis Strange as his training officer. The adventurous Strange, then aged 49, made the first launch off the practice catapult at Speke, declaring: "If an old boy can do it, so can you!"

The 'P' type catapults fitted to the ships were designed by the Royal Aircraft Establishment at Farnborough to launch an aircraft up to 10,000lb



**LEFT**  
Sea Hurricane V6803/LU-B in October 1942. It was allocated to the CAM ship *Daghestan* and was flown by Plt Off Alec Lumsden.  
(A S C LUMSDEN)

**RIGHT**  
An MSFU Sea Hurricane aboard Empire Lawrence.  
(M POSTLETHWAITE)

**BELOW**  
The MSFU's CO in latter part of its existence was Wg Cdr George Pinkerton.  
(G C PINKERTON VIA D CAMERON)

Britain veteran, who joined *Empire Flame*, a newly completed 5,000-ton wheat carrier. He recalled his first trip to Halifax as being 21 days of tremendous boredom, with watches only held until the convoy passed 30° west. Another pilot was Fg Off 'Stapme' Stapleton, who described a launch: "A series of 13 solid fuel rockets fired in sequence. As each set of rockets fired the Hurricane flew down the ramp with the throttle open before the latches were released and the aircraft took off. The ship's mate was responsible for controlling the release and started the first rockets as the ship was on a downward roll. By the time the Hurricane reached the end of the ramp the roll would have reached its pinnacle and with the speed of the aircraft at about 80 mph the Hurricane was propelled into the air in an upward trajectory." Like many others, Stapleton never had an operational launch.



By early September, 39 pilots and 164 groundcrew had been passed by Strange's training programme and there had been 37 CAM ship sailings, including 15 round-trips to North America where three pilots under Flt Lt Tony Linney were detached to Dartmouth, Nova Scotia, to form a reserve pool.

Later that month, it was decided to transfer six CAM ships to the Gibraltar route as they had to run the gauntlet of the Bay of Biscay and a reserve pool was established on the Rock. The first Gibraltar-bound CAM vessel, *Empire Gale*, sailed in in early October.

## CONDOR CLASHES

Action for the MSFU eventually came on 1 November during a return journey from Halifax. When 550 miles west of Ireland, Plt Off George Varley was launched in Z4865 off *Empire Foam*. He immediately spotted a Condor with its bomb doors open off to his right, but he was also seen by the German crew and they sped away into the safety of cloud. After keeping the enemy at bay for almost two hours, Varley baled out and was soon picked up by the destroyer HMS *Broke* whose crew had a hot bath ready.

By the end of November, the CAM ships had completed 60 round-trips with MSFU sea crews tolerating the Atlantic winter with little action. Fg Off 'Spud' Spurdle described the Atlantic in winter: "I have seen the propeller forced around against the

compression of a 12-cylinder motor in a gale and actually screwing up and tearing off the canvas engine covers. Salt corrosion and dampness were an unending battle for the ground crews on the ships." CAM sailings were suspended on 3 January and not resumed until March 1942, by which time Wg Cdr George Pinkerton had assumed command of the MSFU.

Weather was not the only hazard – the spirit of frustrated young pilots could also cause problems, as was evidenced on 10 February 1942. Fg Off Jack Sheppard, having been goaded by the Merchant Navy crew of *Kafiristan* after being catapulted off for Speke in Z4569, decided '... to show them'. However, as he sped past the ship at very low level, his controls jammed and he dug a wing into the water – he was lucky to survive.

## NON-SWIMMING PILOT

CAM ships on the Gibraltar run began to see action and, on 14 June, Plt Off Vernon 'Sandy' Sanders from *Empire Moon* attacked and drove off a shadowing Condor. It was on the Gibraltar route on 1 November during a returning convoy that Fg Off Norman Taylor DFM was the duty pilot aboard *Empire Heath* with V7070. Just before 10am, 'action stations' was sounded when a Condor was sighted and began circling some eight to ten miles away from the convoy. When the bow rose in the heavy swell, Taylor launched just as the enemy aircraft began an attack run onto the CAM ship.



## UNIT IDENTITY CODES

The Sea Hurricanes of 804 Squadron were identified by the unit code letters 'S7'. The Fulmars appear to have been uncoded. The size of the MSFU saw it allocated four unit identification codes for concurrent use on the Sea Hurricanes: KE, LU, NJ and XS.



In spite of R/T difficulties, he turned in the correct direction and at full throttle chased after the retreating Condor. Despite being blinded by the dazzle off the sea, he closed into a furious curtain of defensive fire that hit his port wing. The low-flying bomber

then pulled up to try to reach cloud, Taylor calling: "He's pulled up in front of me. I think I've got him."

Closing to 200 yards, he opened fire hitting the cockpit area, though the Condor kept climbing before suddenly entering a shallow dive and crashing

into the sea. Taylor announced over the R/T: "He's down. He's gone down!" There was no sign of survivors of 7/KG 40's 'F8+DS' or its crew.

Taylor then flew back to the convoy where every ship sounded its siren in salute, before he baled out into the sea. But, unknown to anyone, he was a non-swimmer! Barely able to stay afloat, he was fortunate to be picked up and later received a well-earned DFC for this feat.

### A FINAL FLING

In March 1943, the remaining CAM ships were concentrated on the Gibraltar and North African runs. However, this was no easy task as several succumbed to mines or torpedo attack. Escorts on the Gibraltar route countered threats from Condors and the larger Junkers Ju 290s, which were also employed on long-range reconnaissance duties over the Atlantic by this time. With the increasing availability of escort carriers, the MSFU's purpose ceased and the unit was officially disbanded on 8 June. ▶

**LEFT**  
Sea Hurricane P2921/XS-V flying near to the MSFU's Canadian station at Dartmouth.

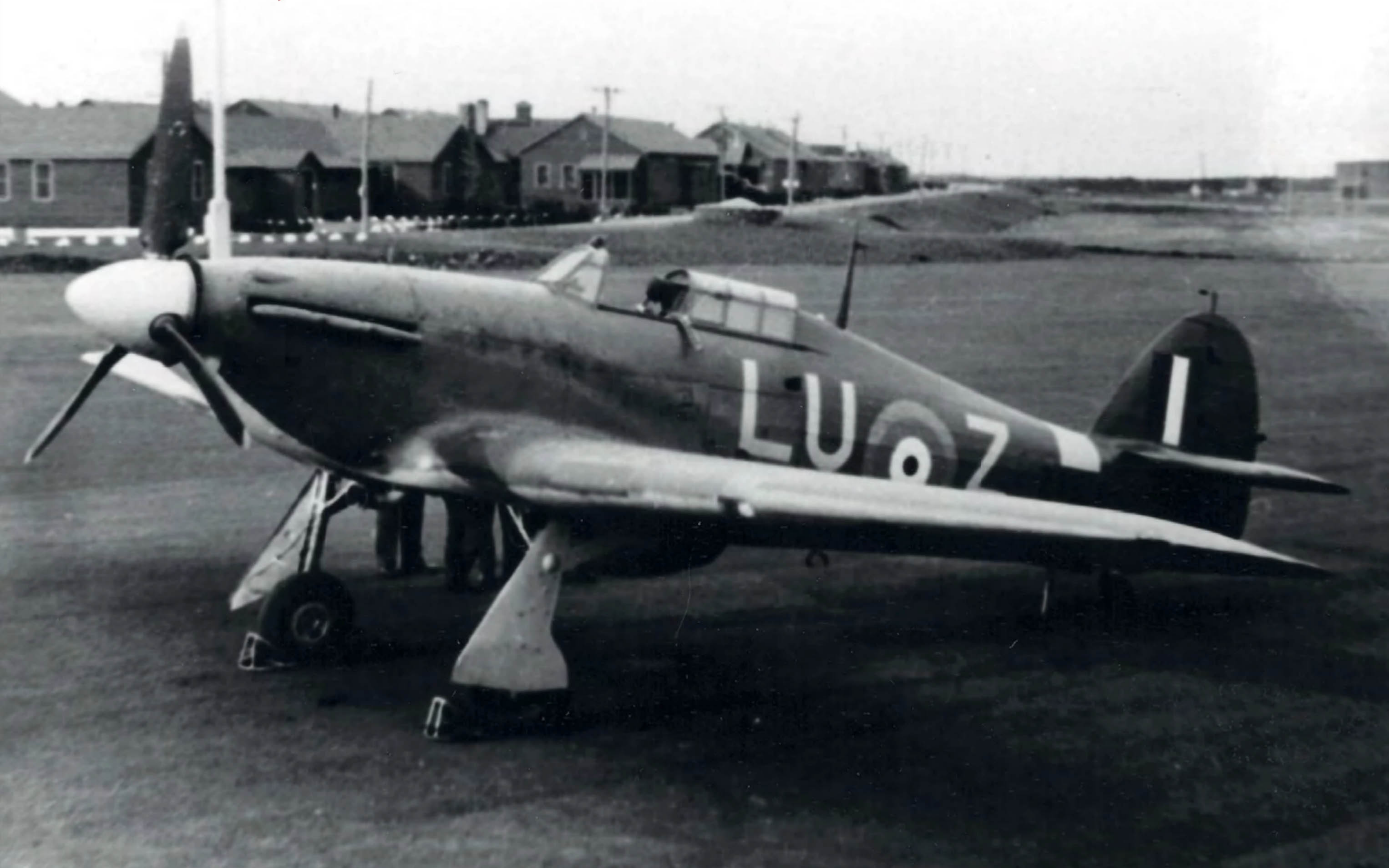
(J J HALLEY)

**BELOW**  
Nova Scotia-based Sea Hurricane Z4934/LU-Z in early 1942.

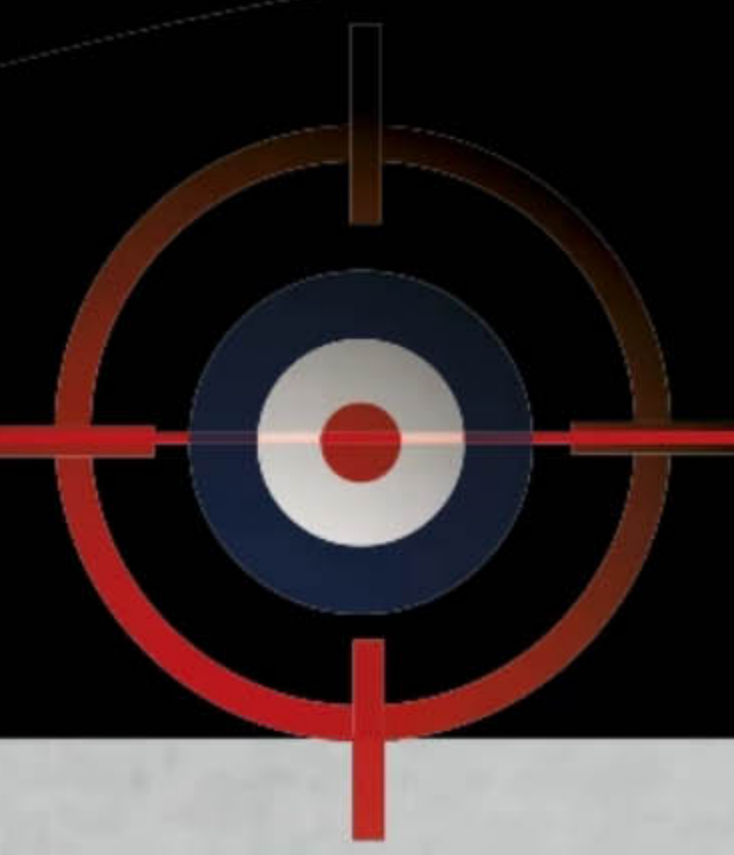
(N S MACGREGOR)



**"TAYLOR THEN FLEW BACK TO THE CONVOY WHERE EVERY SHIP SOUNDED ITS SIREN IN SALUTE, BEFORE HE BALED OUT INTO THE SEA. BUT, UNKNOWN TO ANYONE, HE WAS A NON-SWIMMER!"**







**RIGHT**

The training catapult was at the MSFU's main base at Speke and was pointed out over the Mersey, above which Sea Hurricane I W9115/KE-H is flying in late 1942.

(P H T GREEN COLLECTION)



**“WITH SMOKE POURING FROM AT LEAST ONE ENGINE, THE GERMAN STAGGERED AWAY, LOSING HEIGHT, TO CRASH SOON AFTERWARDS”**

**RIGHT**

Among the Sea Hurricane pilots with 804 Squadron in 1941 was Sub Lt David Wright.

**BELOW**

MSFU Sea Hurricane IA Z4852/XS-K, from the CAM ship MV Empire Foam, is seen at Dartmouth, Nova Scotia, on 22 January 1942. The flight's pilot was Fg Off Basil Tatham.

(J FRIEDLANDER)

But, it still had elements at sea as en route from Gibraltar was convoy SL122 from Sierra Leone that included the last of the CAM ships, *Empire Tide* and *Empire Darwin*. On 23 July, Condors attacked and Fg Off Jimmy Stewart launched off *Empire Darwin* and shot down one of the predators, driving off another.

He wrote in his combat report: “I recognised it as a Fw 200 flying at 1,000ft and gave chase, he was flying north but turned and flew south for a minute then proceeded eastward and reducing height to about 200ft. I had no difficulty overtaking at 6¼ boost, 2,600 revs and approximately 250mph and made my attack on the port quarter out of sun. My attack was delivered from 40° to 15°, opening

fire at 300 yards and closing to almost point blank.

“I aimed at the cockpit giving 1½ to 1 ring deflection and gave a five second burst. I could see strikes in the sea round the nose, then a vivid white flash from near the turret, return fire was very heavy and uncomfortably close, but I could not see any strikes on my aircraft. Having broken away to port I repeated the attack.” Stewart baled out and was picked up by the escort HMS *Leith* after 15 minutes in the water. He was then given a well-deserved hot bath and a glass of whiskey.

Shortly afterwards, the sea crew of *Empire Tide* launched Fg Off ‘Paddy’ Flynn just 84 seconds after the alert had been sounded. In a very short



time he found an Fw 200, which he attacked, raking the rear upper turret, lateral gun position and the cockpit before concentrating on the port engines. He too was subjected to heavy return fire that shattered the canopy near his head, before the Focke-Wulf jettisoned its bombload. With smoke pouring from at least one engine, the German staggered away, losing height, to crash soon afterwards. Returning to the convoy, Flynn also baled out and was picked up safely by HMS *Enchantress*. Although it only had a brief existence, the MSFU's final action had ensured that it had ended in a blaze of glory. ☉