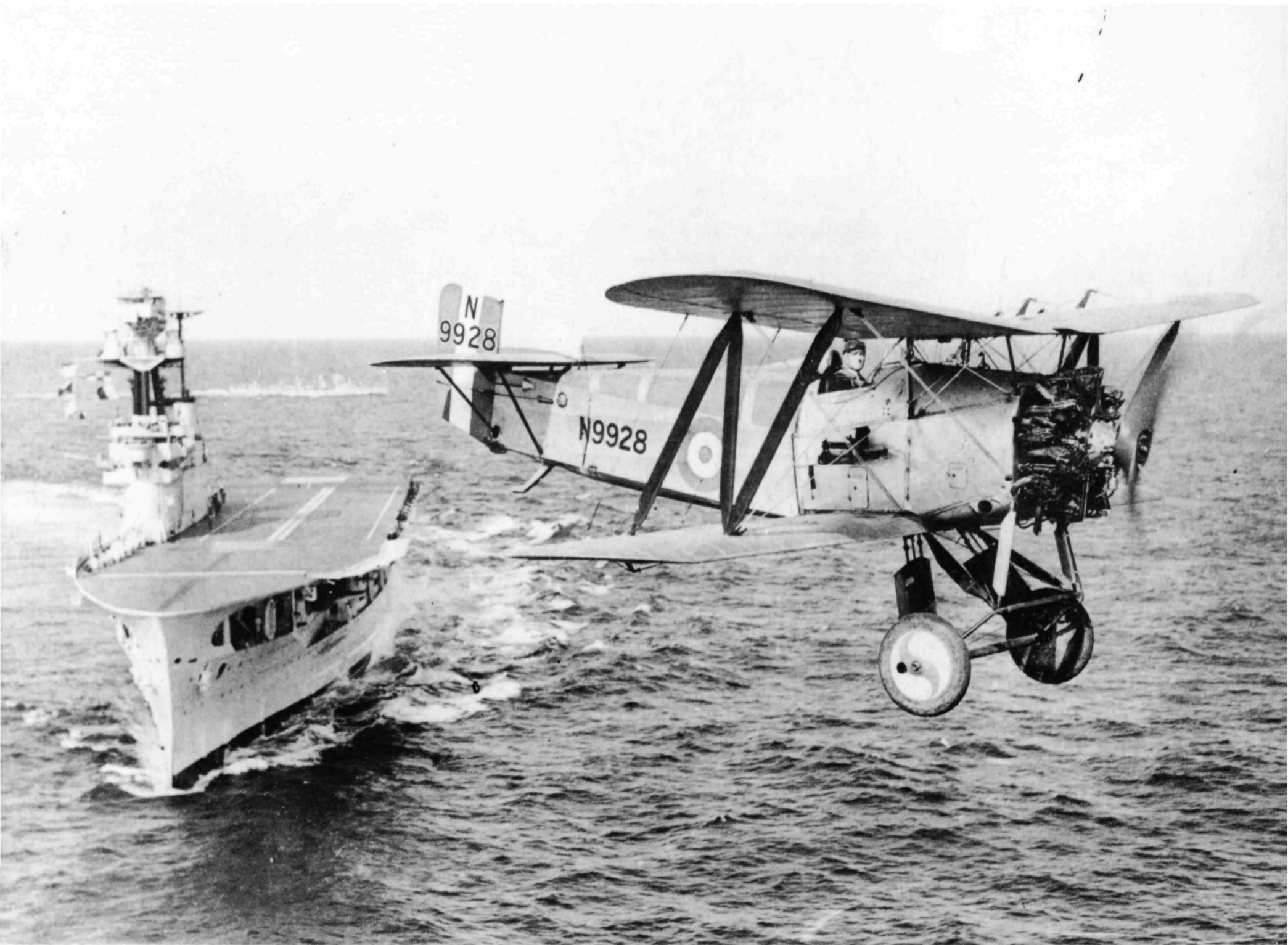


AEROMILITARIA

The AIR·BRITAIN Military Aviation Historical Quarterly



No 1
1983



AEROMILITARIA

The AIR-BRITAIN Military Aviation Historical Quarterly
 Edited by James J. Halley and Peter M. Corbell
 Editorial address: 5 Walnut Tree Road, Shepperton,
 Middlesex TW17 ORW

IN THIS ISSUE

As is now customary in the first issue of each year, we have listed the aircraft written-off by the RAF thirty years ago, the restrictions of the Public Records Act having now lapsed for that period. Although most of the Spitfires have gone, there remains a sizeable batch of Mosquitoes which were wiping their undercarriage off at regular intervals.

As it is some time since we listed the abbreviations in use for post-war units, we have used a page to list the more important of these.

A further instalment in the travels of pre-war British aircraft carriers cover HMS 'Eagle' and its aircraft. She had probably the most inviting flightdeck of them all, being beamy and most unlike 'Argus' which must have been like landing down a country lane.

Although AM tends to concentrate on Commonwealth subjects, Egypt in the 1930s was an integral part of the defence of the Empire and it seemed appropriate to present an account taken from the reports of the RAF delegation to the Egyptian air arm of its organisation and equipment.

The cover photo of a Flycatcher flying past 'Eagle' was taken by the late Charles E. Brown who died a few weeks before this issue was prepared. As with so many of his photographs, the timing is precise. No part of the aircraft obscures the carrier and even the planeguard destroyer in the background is beautifully positioned.

The back cover photograph is from the same master craftsman and shows the Short R.24/31 Knuckleduster (K3574) flying off Harwich in

July 1934. For some curious reason, a press release which stated that the armament was three machine guns in nose, dorsal and tail positions was translated as an armament of nine guns on triple mountings, an odd idea which was copied assiduously by succeeding journalists.

It has been brought to our notice that the captions for the cover photos tend to be left out - mainly because the inside back cover page is usually first to be typed and the inside front cover page last! AM.3/82 had Javelin FAW.8 XH966 on the front and a '1' formation of No.1 Squadron's Meteor F.8s over Angmering on the back. AM.4/82 showed two (look again!) Hunter F.6s of No.111 Squadron over Frencham Ponds, Surrey during a Farnborough practice while the Phantoms (two of No.6's in the foreground) were undergoing maintenance at Aldergrove.

SALES BLURB

As we have a new batch of readers this year and very welcome they are, we take this opportunity to list Air-Britain productions of interest to students of military history.

Just out is a special issue of Aeromilitaria called 'Kent's Listening Ears' and is a survey of the first British early warning system which, but for the early development of radar, would have provided warning for the fighter defences of the UK. Orders to the editorial office; £1.50 post free.

Other monographs in stock are:

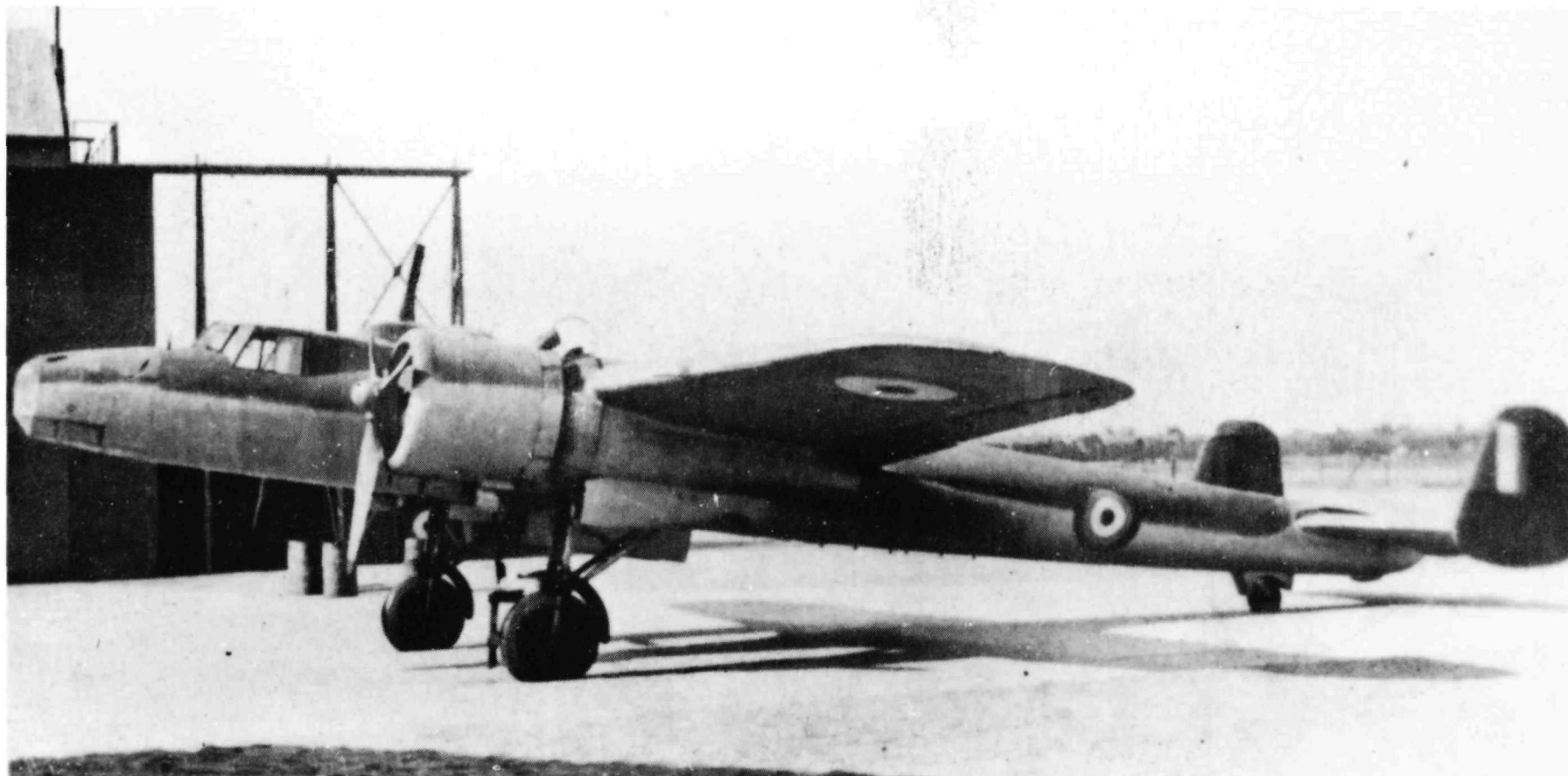
The Halifax File	£6.00
The Typhoon File	£4.00
The Stirling File	£3.00 (few left)
RAF Aircraft K1000-K9999	£2.50
RAF Aircraft L1000-L9999	£2.50
RAF Aircraft N1000-N9999	£2.00
RAF Aircraft P1000-P9999	£2.00
RAF Aircraft R1000-R9999	£2.50
RAF Aircraft T1000-T9999	£3.00
The Squadrons of the RAF	£9.00

Colour slides of military aircraft are listed the military slide catalogue and the 1982 Supplement, price 60p each. The cost of slides is 8p + VAT each and there are over 3,000 available.

Back issues of Aeromilitaria are available from Mr. A.J. Lee Wesson, Magdalene House, Wrattling Road, Haverhill, Suffolk CB9 ODE. The issues cost 75p each (1975/6/7 are bound together).

The RAF's two ex-Yugoslav Do 17Kas were AX706 and AX707 but which this one is cannot be seen

(RAF Museum P.8501)



HMS EAGLE



Fairey IIIIF S1487(86) of No.825 Squadron over HMS Eagle (RAFM 5272-4)

In common with most British pre-war carriers, HMS 'Eagle' began life as a totally different design, in this case as the Chilean battleship, 'Almirante Cochrane'. One of two ships laid down before the outbreak of World War One, she was not completed in the same way as her sister ship 'Almirante Latorre' which was requisitioned for the Royal Navy as HMS 'Canada'. 'Cochrane' was purchased from Chile in February 1918 and renamed 'Eagle' for conversion to an aircraft carrier. 'Latorre' finally reached Chile after the end of the war and some submarines and Bristol M-1Cs were also donated as compensation.

The Armstrong Whitworth yard at Walker-on-Tyne completed 'Eagle' with a large island superstructure to starboard which incorporated the bridge, a gunnery control top on a tripod mast

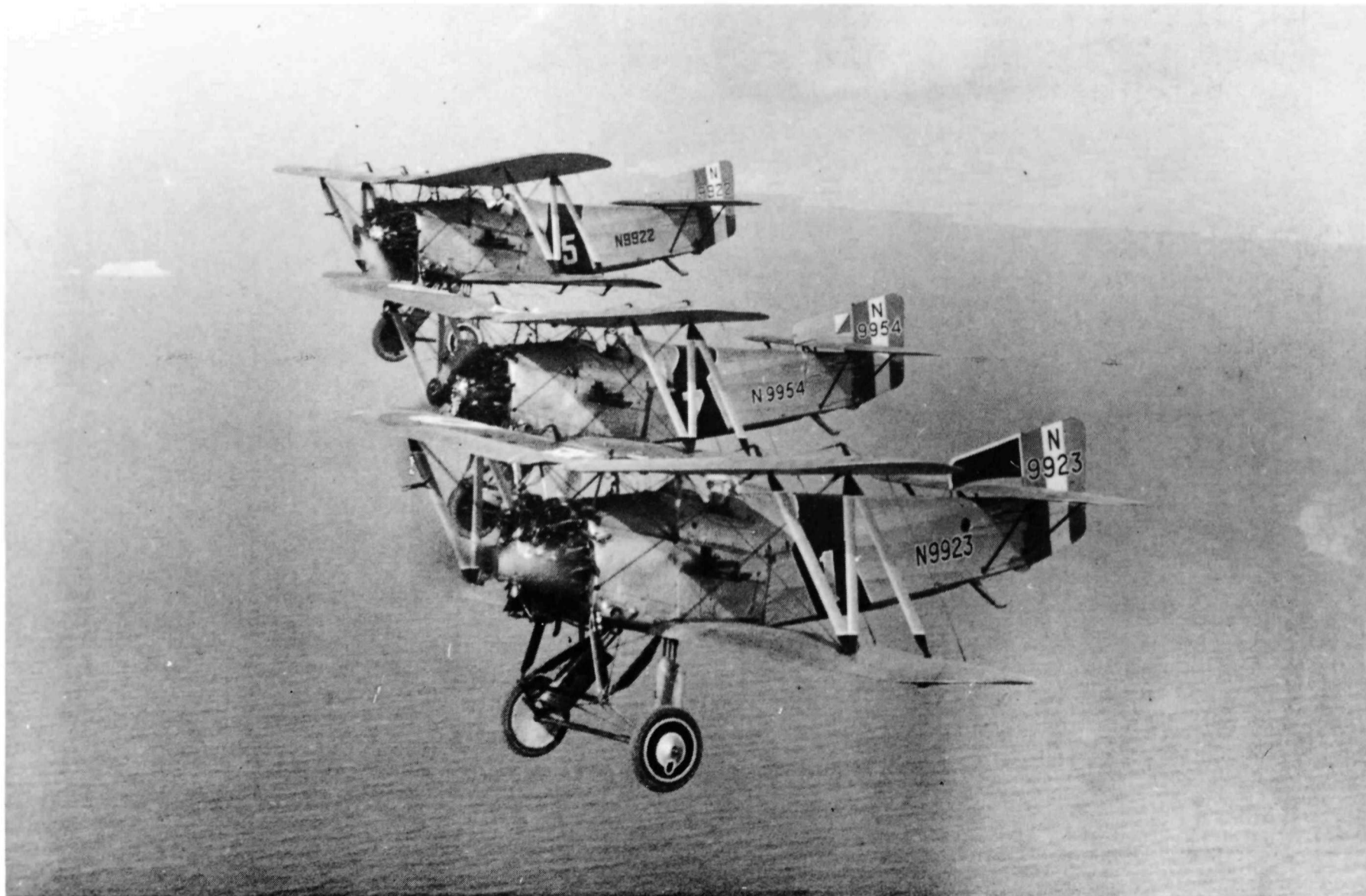
and two funnels. This was the first carrier to have an island and set the pattern for future carriers.

The 500-foot deck was wide, despite the island and two elevators were provided to give access to the hangar deck, the forward lift being shaped to permit striking down 'unfolded' aircraft while the aft lift was a normal rectangular one.

An armament of nine 6-inch guns was provided although mounting a light cruiser's armament on the massive bulk of an aircraft carrier was not likely to be of much use in action. Perhaps it might have ensured that in some future situation as yet undreamt of, the carrier might have been able to cope with an enemy gunboat which hove in sight while all the carrier's escort was elsewhere.

Flycatchers of No.402 Flight in 1928 include N9923(1), N9954(7) and N9922(5)

(RAF Museum photo P.2262)



'Eagle' was commissioned for trials on 6 April 1920 and sailed south. On 6 May, one officer and 12 airmen joined from Gosport and on the 10th taxiing trials were carried out with some aircraft while 'Eagle' was tied up to the SR Jetty at Portsmouth. Panthers and Camels were used and on 25 May a Panther was flown off.

Three days later, flying trials at sea began and continued at intervals with Panthers, Camels and D.H.9As until mid-August. These were continued in Scottish waters until the end of October. Returning south, 'Eagle' paid off on 16 November for completion.

On 26 February 1924, 'Eagle' was recommissioned for service with the Mediterranean Fleet. With a complement of 36 officers and 840 ratings, 'Eagle' was a large community, supplemented in normal times by 6 officers and 72 airmen from the RAF; added to these were the crews of the embarked flights.

Flying trials began on 10 March with Flycatchers, Seagulls, Darts and Blackburns. After sailing for Malta on 31 May, 'Eagle' lost her first aircraft on 24 June when a Blackburn crashed in the sea off Malta, followed quickly by two Darts which went over the side. Joining the Med Fleet's standard cruise circuit, 'Eagle' carried out her first major exercise on 28 July when a strike of five Darts and five Flycatchers attacked the Battle Fleet off the Montenegrin coast.

At the end of September, the fleet was off Gibraltar for combined exercises with the Atlantic Fleet. The Blackburns were in demand for spotting the fall of shot from the battleships. On return, 20 aircraft were flown off to Hal Far and 'Eagle' transported the 1st Battalion of the Gordon Highlanders to Egypt.

'Eagle' returned to Portsmouth at the end of December 1924 and 440 Flight disembarked to Lee-on-Solent to discard its Seagulls, which had not proved satisfactory, and acquire Fairey IIIDs.

Much had been learned during this first cruise. 'Eagle' had, for its time, a large complement of aircraft. Lack of radio in the fighters and torpedo bombers restricted their radius of action. On return to the Med in March 1925, 'Eagle' was engaged in exercises both independently and with the fleet during its cruises to Spain and Greece. Accidents were not frequent but on 30 April, IIID No.46 crashed near Mellieha, Malta and No.41 crashed just off the coast later in the day. Fairey IIIDs seemed more liable to accidents than the other types aboard and when Blackburn No.26 ditched on 9 June, it was salvaged as were several other Blackburns which had similar incidents. Dart No.63 on 10 July was not so lucky and sank after ditching off Corsica.

'Eagle' was fitted with a large seaplane crane and the first mention of its use was on 30 July when it hoisted out a IIID. The vulnerability of large carriers was underlined when, on 5 August, four dummy torpedoes from a submarine hit 'Eagle' as she approached Malta.

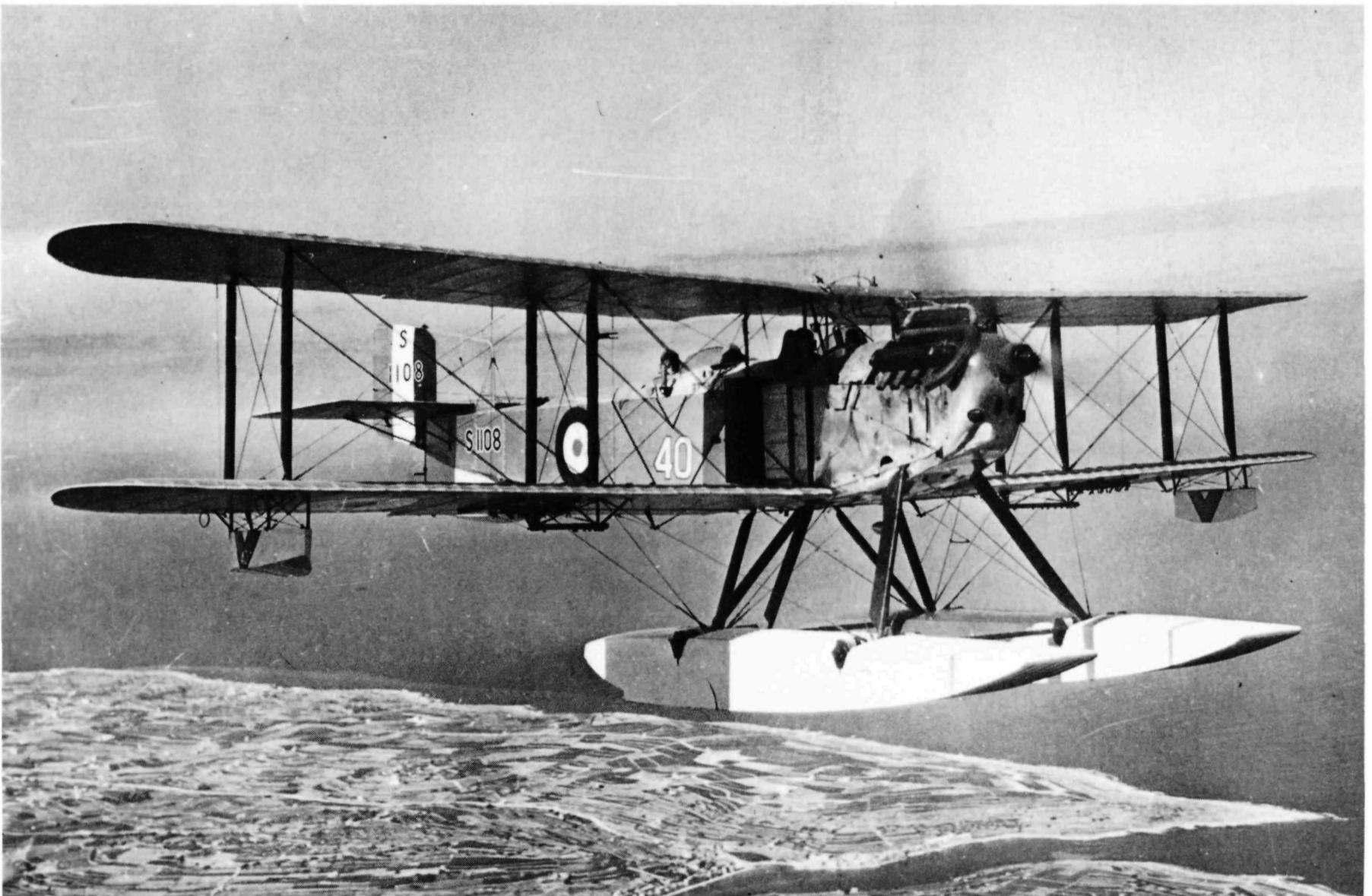
An unfortunate incident took place on 28 October when Blackburn No.24 ditched off Malta with the Commander-in-Chief aboard. The aircraft was a write-off but the C-in-C was salvaged intact.

1926 was spent in the Med until September when 'Eagle' returned to Devonport and paid off on 30 September. On 16 June, No.441 Flight had embarked with its Fairey IIIDs while on 18 September, 440 Flight left on transfer to 'Hermes'

On 1 October, 'Eagle' recommissioned with a new crew and Nos.402, 441 and 460 Flights aboard. On board, also, were Nos. 401 and 423 Flights on passage to 'Hermes' which had left 423 Flight's

Fairey IIIF floatplane S1108 (Fleet No.40) of No.440 Flight over Malta

(RAF Museum photo P.2258)





Bison II N9848, Fleet No.21, of No.423 Flight is fitted with a fixed Vickers gun for the pilot (RAF Museum P.2266)

Bisons at Malta for 'Eagle'. These first landed on deck on 14 February 1927 and the Flight embarked on the 22nd. In April, No.423 became No. 448 Flight and converted to Fairey IIIFs.

During September 1927, 'Eagle' carried the British Schneider Trophy seaplanes to Venice. Bisons were still aboard in the shape of No. 421B Flight and one of these, N9838 (24) ditched off Platea, Greece, on 26 January 1928.

During April, 'Eagle' was sent to Corinth to assist in relief work after a major earthquake, using her seaplanes for survey flights. In April 1929 she returned to Devonport for a refit, rejoining the Med Fleet in June. On 17 June, 'Eagle' sighted a light in the early hours of the morning and discovered Dornier Wal No.16 wallowing in the sea. Aboard was Major Ramon Franco and his crew, the Spanish Navy's attempt on a record flight having foundered after engine failure. The Wal was hoisted on deck via the big crane.

A visit to Palma en route to Gibraltar in March 1930 proved expensive; on 10 March IIF No.57 ditched off Majorca and sank and on the 18th, No.53 went over the side on landing. The crews were picked up.

In September 1930, No.460 Flight gave up its Darts for Ripons and these were aboard in February 1931 when 'Eagle' sailed to visit the British Industries Exhibition at Buenos Aires. Also aboard were examples of the Osprey, Seal, Nimrod, Hornet Moth and Puss Moth. On arrival seven Fairey IIIFs, six Ripons, four Flycatchers the Puss Moth and the Hornet Moth were flown off. A flying display was given at Mar del Plata on 4 April. On the way back, 'Eagle' stopped at Rio de Janeiro where the Prince of Wales landed on in Fairey IIF S1343 (57). On arrival at Devonport, all aircraft were flown off and 'Eagle' began a refit which lasted until March 1933.

When 'Eagle' recommissioned on 28 March 1933, she was assigned to the China Station. Aboard were No.803 Squadron with six Ospreys and No. 824 Squadron with nine Fairey IIIFs. Because of shortage of aircraft, the Far East had no torpedo-bomber squadron embarked in its carrier and the complement of aircraft was reduced.

'Eagle' divided her time between cruises between Hong Kong and Wei-hai-Wei in Shantung province in the far north of China. Two IIIFs, Nos.71 and 75 crashed in the sea on 12 August off Wei-hai-Wei. Cruises took the carrier to Japan, the Philippines, Singapore and ports on the Chinese mainland. No.803 had increased to nine Ospreys and until July 1933, a few Flycatchers had flown off the deck.

On 8 June 1934, night flying began from 'Eagle' using IIIFs. During the same month, the ship's log mentions reconnaissance flights to locate pirate junks. How an aircraft could tell these from the thousands of non-pirate junks is difficult to judge.

On 3 May, IIF No.82 went over the side on landing; on 2 July, No.86 crashed in the sea and on 2 August, another IIF flew into the mast off WHW. In all cases, the crew were rescued.

When 'Hermes' relieved 'Eagle' in January 1935, the latter's Ospreys were transferred. No.825 Squadron (renumbered from 824 on 8 October 1934) remained aboard for the homeward trip. Due to mounting tension as the Italians prepared to invade Ethiopia, 'Eagle' remained in the Med until the end of March 1935, being paid off into reserve on 31 May 1935.

'Eagle' recommissioned on 21 January 1937 and sailed on 24 February for China. The Swordfish of No.813 Squadron and 824 Squadron, the latter from 'Hermes' where it had been flying Seals, were allocated, initially with only 14 aircraft between them. More were received from Seletar.

On 22 June, deckflying at night was resumed when 14 landings were carried out. A Swordfish was lost on 30 November when K8391(952) went overboard on landing off Hong Kong. Night torpedo attacks were undertaken during December and night raids on Kai Tak practiced.

During this period, the white bulk of 'Eagle' became a well-known sight in photographs of Hong Kong and few views of the harbour were without her presence. Cruises now went to the south and the Philippines as the rumbles of the coming war in China could be heard. On a trip to Singapore in March 1939, a Queen Bee was provided for the army to fire at. After a visit to Bali, 'Eagle' lost Swordfish K8409 which crashed into the sea off Singapore on 24 April; again the crew was rescued.

A final visit to Wei-hai-Wei in June found the Japanese in charge and this was probably the last time that 'Eagle' operated floatplanes while in harbour. K8395 of 813 Squadron crashed off WHW on 26 June before the carrier returned to Hong Kong on 31 July.

'Eagle' left Hong Kong on 12 August for the last time and on the outbreak of war was sent to sea with a small cruiser force to patrol the Indian Ocean for raiders and blockade runners. K8401 of 813 Squadron crashed on deck on 19 October while K8392 crashed off Seletar on 1 November.

Reports of a 'pocket battleship' off the African coast sent 'Eagle' to Madagascar and Durban but when the 'Admiral Graf Spee' was caught off the River Plate, 'Eagle' returned to Ceylon to escort troop convoys and patrol for raiders.

While on passage from Ceylon to Singapore on 14 March 1940, a 250-lb bomb exploded in the starboard bomb room and started a fire which was quelled by sprinklers. Casualties amounted to 13 killed and 9 injured. Next day, Swordfish E4M crashed in the sea but the crew was recovered. 17 aircraft were flown off to Sembawang and 'Eagle' entered drydock for repairs.

With Italy poised to enter the war, 'Eagle' left Singapore for the Med on 28 May 1940 with Nos.813 and 824 aboard to replace 'Glorious'. Italy declared war on 10 June and next day 'Eagle' was at sea seeking the Italian Fleet. After covering a supply convoy to Malta, the carrier's Swordfish undertook their first strike on 5 July when 813 sent nine Swordfish to Tobruk. Seven succeeded in dropping and sank the destroyer 'Zeffiro' and the 15,000-ton liner 'Liguria'. Another destroyer and a transport were damaged. As 'Eagle' was often in Alexandria between forays, her aircraft were detached to landing grounds for operations.

To provide some fighter cover, 813 Squadron acquired three Sea Gladiators which were flown by some pilots with fighter experience. Off Calabria on 9 July, the Med Fleet encountered the Italian battle fleet. Only the battleship 'Warspite' was fast enough to catch the retiring Italians so 'Eagle' launched a strike of nine Swordfish from 824 Squadron to try to slow the enemy down. Two strikes were flown without success because of the smallness of the force available and 'Warspite' could only fire at extreme range before breaking off before she became part of the Sicilian landscape. Next day, at dusk, No.813 sent nine Swordfish to Augusta where the Italian squadron was expected to be but it had left before the strike arrived. A destroyer was sunk and a tanker damaged.

As 'Eagle' returned to Alexandria, there were numerous bombing attacks on the fleet. The Sea Gladiators destroyed four SM-79s and damaged three more. The squadrons were flown off on arrival and on the 20th, No.824 used an advanced

landing ground to carry out a night attack on Tobruk, sinking two more destroyers. On 22 July, three Swordfish carried out a torpedo strike on ships in the Gulf of Bomba, sinking a submarine and a depot ship.

While embarked in 'Eagle', the Swordfish squadrons took part in an attack on Maritsa airfield, Rhodes, in daylight which cost four Swordfish when Italian fighters intercepted the strike force. Aboard on this sortie were three Fulmars. The Sea Gladiators remained aboard and on 8 November, three were flown off while the carrier was at anchor at Alexandria when an air raid warning was given.

'Eagle' suffered blast damage from bombs which dropped nearby on 12 October which damaged her fuel system and she had to abandon a combined sortie with 'Illustrious' to undertake repairs. Fifteen members of her aircrews were transferred to 'Illustrious' to take part in the famous attack on Taranto on 11 November, one of her aircraft being reported missing.

'Eagle' was soon back at sea escorting convoys to Malta and attacking ports and shipping in Libya. Two Skuas were embarked to supplement the Sea Gladiators and in January 1941, Fulmars of 805 Squadron undertook deck landing training. One unusual sight on 3 March was of a Buffalo engaged in DLT.

'Formidable' relieved 'Eagle' at the end of March, freeing the unarmoured old carrier for raider-hunting in the Indian Ocean. On 25 March, 17 Swordfish were flown off to Port Sudan as 'Eagle' was delayed while the Suez Canal and its approaches were swept for magnetic mines. The squadrons sought out the destroyers of the Italian Red Sea flotilla and sank two, damaged another two so that they ran themselves aground on 3 April. A torpedo boat was sunk on 8 April before the Swordfish returned to 'Eagle' on the 13th.

After a few weeks, 'Eagle' was ordered to Gibraltar and in the South Atlantic her Swordfish located a German supply ship which scuttled herself after being bombed on 6 June while a tanker was located and captured on the 15th. After more sweeps around the seas off West Africa, based on Freetown and St.Helena. On 20 September, fire broke out in the hangar, destroying or damaging 13 aircraft. 'Eagle' headed for Gibraltar and home, entering drydock at Liverpool on 31 October 1941 for repairs and refit.

In January 1942, 'Eagle' carried out DLT in the Clyde, losing Swordfish V4638 over the side on landing on 29 January and V4628 and V4629 on 20 February, the former on landing and the latter in a crash into the sea. Arriving at Gibraltar on 23 February, she embarked RAF Hurricanes for Malta, flying these off on the 27th. During March, deckloads of Spitfires were flown off to Malta on the 7th, 21st and 29th.

Repairs to her steering gear kept 'Eagle' at Gibraltar for most of April but on 8 May she sailed in company with the USS 'Wasp' to help deliver 62 Spitfires to Malta, 17 of them from 'Eagle'. More were sent off on 18 May and during June, the log records 63 Spitfires flown off to Malta.

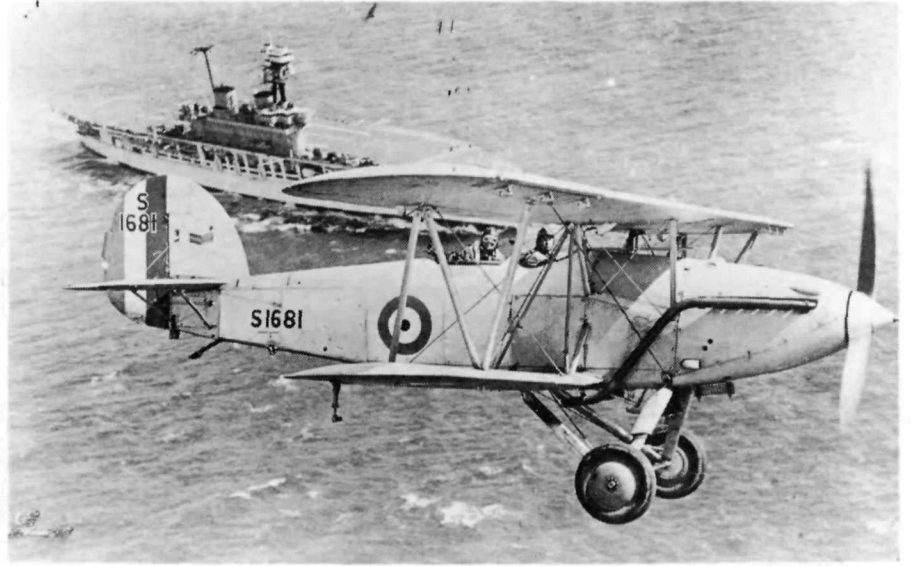
On 12 June, 'Eagle' sailed as part of the escort for a Malta-bound convoy, embarking the 12 Sea Hurricanes of No.801 Squadron to supplement No.813's four, the Swordfish being left behind. Her fighters claimed nine enemy bombers for the loss of one Sea Hurricane of No.813.

On 29 June, Nos.801 and 824 left the ship to make room for more Spitfires, 62 being flown off in two sorties during July. A new Malta convoy was assembled for August and on 10 August, it headed through the Straits of Gibraltar with air cover provided by 53 fighters from 'Indomitable', 'Victorious' and 'Eagle', the last-mentioned



HMS Eagle at sea

(RAF Museum P10672)



Osprey S1681 from Gosport over Eagle

(Charles E Brown)

having 16 Sea Hurricanes of 801 and 813 Squadrons aboard, plus four part-assembled aircraft as spares.

On 11 August, a German submarine, U-73, succeeded in evading the destroyer escort and hit 'Eagle' with four torpedoes. The damage was abeam the port engine room which immediately flooded. 'Eagle' started to list and within four minutes of being hit, the carrier sank with the loss of two officers and 158 ratings who had been trapped in the engine rooms. A total of 789 others were rescued by destroyer. Four of her Hurricanes from No.801 Squadron were airborne at the time and landed on the other carriers. One of the pilots, ironically, having survived

the sinking in this fashion, was shot down and killed during a defensive patrol on the following day.

Although obsolete by the time World War Two broke out, 'Eagle' had played an important part in her three years of war service. With her unarmoured deck, she was extremely vulnerable to air attack while operating in the Mediterranean but thanks to her improvised fighter defence, she survived all attempts to sink her in the early days of the war in the Mediterranean. As additional AA armament, a dozen 20 mm Oerlikons were provided to combat divebombers and supplement the multiple pom-poms, or 'Chicago Pianos' as they were known to the Royal Navy.

* * * *

OPERATIONAL UNITS EMBARKED

Due to the frequent periods during which *Eagle's* squadrons were based ashore and the lack of detail in the ship's log of unit movements, it has not been possible to compile a full table of unit movements.

No flights were allocated until May 1924. No.402 Flight with Flycatchers remained until about June 1931 as did No.460's Darts. No.422 with Blackburns and No.440 with Seagull IIIs also embarked but the latter were soon replaced by Fairey IIIDs until the flight was transferred to *Hermes* between 1927 and 1930, before returning to *Eagle* with Fairey IIIFs until June 1931.

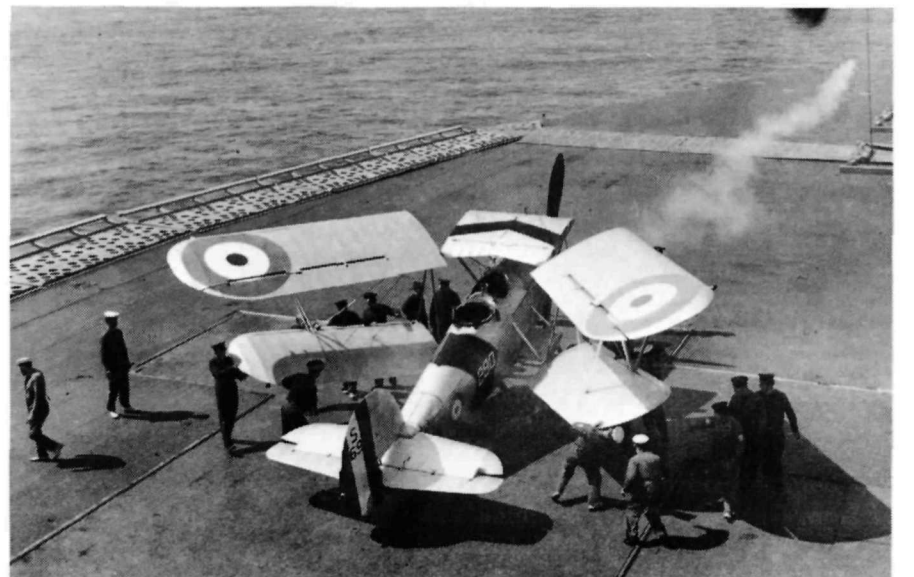
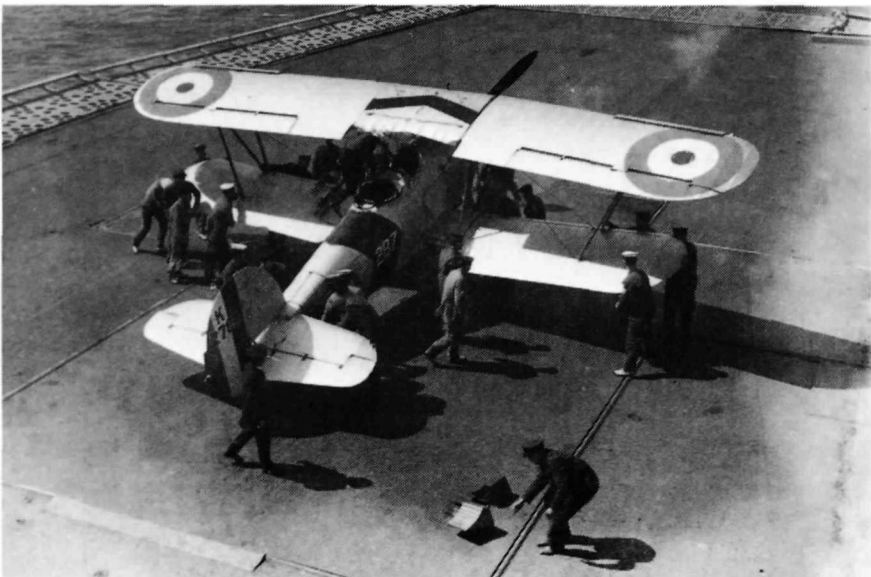
No.441 Flight joined in February 1925 with Fairey IIIDs and in March 1927, No.421B Flight's Bisons also came aboard. No.423 Flight's Bisons left behind by *Hermes* joined *Eagle* in February 1927 and in March 1929, No.423 Flight converted to Fairey IIIFs but in the next month was redesignated No.448 Flight, being transferred to *Glorious* in May 1931. No.441 had been transferred to *Argus* in February 1927. No.460 replaced its Darts by Ripons in September 1930 for a short time before moving

to *Glorious* in May 1931.

On commissioning in May 1933, *Eagle* embarked No.803 Squadron's Ospreys and a few Flycatchers and No.824 Squadron's Fairey IIIFs. No.824 was renumbered 825 in October 1934 when 803 was transferred to *Hermes*. No.824 left when *Eagle* returned for refit at the end of May 1935.

Refitted by January 1937, *Eagle* embarked 813's Swordfish and received 824's Seals from *Hermes* at Hong Kong which were exchanged for more Swordfish. These two squadrons remained with the ship until 1942, No.813 moving ashore at Gibraltar in June to make way for 801 Squadron's Sea Hurricanes. No.824, with 801, were still aboard when *Eagle* was sunk on 11 August 1942. During the time that the two Swordfish squadrons were attached, periods were spent ashore and many of their successful operations were launched from shore bases in 1940/41. Aircraft from other squadrons operated for short periods from *Eagle*, for example, No.807's Fulmars while No.813 also flew some Sea Gladiators and occasionally Skuas; later some Sea Hurricanes provided fighter cover for the ship.

Deck crews preparing to strike down Ospreys of No.803 Squadron aboard 'Eagle'. Note the mixture of RAF and naval crew. Left is K2780, Fleet No.287 (RAF Museum photo 5273-1); right is S1696, Fleet No.290 (RAF Museum photo 5272-11)



MOVEMENTS

<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>
Commissioned at Walker-on-Tyne for trials, 6.4.20		
Tynemouth	21.2.20	25.4.20
Portsmouth	26.4.20	9.7.20
Plymouth	9.7.20	12.7.20
Portsmouth	14.7.20	25.9.20
Rosyth	26.9.20	27.9.20
Invergordon	28.9.20	19.10.20
Scapa	19.10.20	28.10.20
Rosyth	29.10.20	30.10.20
Portsmouth	1.11.20	3.11.20
Devonport	3.11.20	
Paid off	16.11.20	
Commissioned at Portsmouth	26.2.24	16.4.24
Plymouth	17.4.24	28.4.24
Portsmouth	29.4.24	31.5.24
Malta	7.6.24	2.7.24
Navarino, Greece	4.7.24	7.7.24
Malta	8.7.24	17.7.24
Naples, Italy	19.7.24	26.7.24
Cattaro, Yugoslavia	28.7.24	31.7.24
Granosa, Yugoslavia	31.7.24	4.8.24
Corfu, Greece	5.8.24	7.8.24
Argostoli, Greece	7.8.24	20.8.24
Corfu, Greece	21.8.24	28.8.24
Malta	30.8.24	8.9.24
Barcelona, Spain	11.9.24	15.9.24
Valencia, Spain	16.9.24	20.9.24
Malaga, Spain	22.9.24	25.9.24
Gibraltar	25.9.24	15.10.24
Malta	20.10.24	2.12.24
Port Said, Egypt	5.12.24	6.12.24
Malta	9.12.24	10.12.24
Portsmouth	19.12.24	21.2.25
Malta	1.3.25	10.3.25
Palma, Majorca	14.3.25	20.3.25
Malta	23.3.25	2.6.25
Palma, Majorca	5.6.25	9.6.25
Valencia, Spain	10.6.25	16.6.25
Rosas Bay, Spain	17.6.25	23.6.25
Pollensa Bay, Majorca	24.6.25	2.7.25
Rapallo, Italy	4.7.25	10.7.25
St.Florent, Corsica	10.7.25	16.7.25
Palma, Majorca	17.7.25	23.7.25
Malta	25.7.25	5.8.25
Corfu, Greece	7.8.25	13.8.25
Argostoli, Greece	13.8.25	16.8.25
Mudros, Aegean	20.8.25	26.8.25
Salonika, Greece	27.8.25	1.9.25
Dentheo Cove, Greece	2.9.25	9.9.25
Thaso, Aegean	9.9.25	16.9.25
Volo, Greece	17.9.25	28.9.25
Malta	1.10.25	14.11.25
Portsmouth	24.11.25	8.2.26
Malta	17.2.26	25.2.26
Palma, Majorca	27.2.26	11.3.26
Algiers, Algeria	12.3.26	22.3.26
Malta	25.3.26	22.6.26
Argostoli, Greece	24.6.26	5.7.26
Venice, Italy	8.7.26	11.7.26
Cattaro, Yugoslavia	19.7.26	22.7.26
Trodo Bay, Yugoslavia	22.7.26	28.7.26
Dragomesti Bay, Yugoslavia	29.7.26	9.8.26
Malta	11.8.26	23.8.26
Gavrion Bay, Greece	26.8.26	31.8.26
Karystos Bay, Greece	31.8.26	7.9.26
Skiathos, Greece	7.9.26	15.9.26
Malta	18.9.26	21.9.26
Devonport	29.9.26	
Paid off	30.9.26	
Recommissioned at Devonport	1.10.26	16.10.26
Malta	24.10.26	27.2.27
Gibraltar	4.3.27	29.3.27
Jijelli, Algeria	31.3.27	5.4.27
Malta	7.4.27	27.6.27
Navarin, Greece	30.6.27	12.7.27
Skiathos, Greece	13.7.27	27.7.27
Nauplia, Greece	28.7.27	4.8.27
Argostoli, Greece	5.8.27	16.8.27
Malta	18.8.27	9.9.27
Venice, Italy	12.9.27	15.9.27



'Eagle' sailing not quite into wind with palisades down and a Fairey IIIIF on deck. Note the complex lift shape and the signalling mast over the port side (RAF Museum P.4264)

<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>
Brioni, Yugoslavia	15.9.27	22.9.27
Venice, Italy	22.9.27	28.9.27
Split, Yugoslavia	29.9.27	10.10.27
Suda Bay, Crete	13.10.27	23.10.27
Malta	25.10.27	16.1.28
Dragomesti Bay, Greece	19.1.28	31.1.28
Malta	2.2.28	12.3.28
Gibraltar	16.3.28	6.4.28
Bizerta, Tunisia	9.4.28	12.4.28
Naples, Italy	13.4.28	23.4.28
Corinth, Greece	25.4.28	29.4.28
Malta	1.5.28	26.6.28
Navarino, Greece	28.6.28	10.7.28
Skiathos, Greece	11.7.28	31.7.28
Phalerum Bay, Greece	1.8.28	6.8.28
Spezzia, Greece	6.8.28	10.8.28
Argostoli, Greece	11.8.28	22.8.28
Malta	24.8.28	6.9.28
Alexandria, Egypt	11.9.28	19.9.28
Jaffa, Palestine	20.9.28	26.9.28
Famagusta, Cyprus	27.9.28	8.10.28
Alexandretta, Turkey	9.10.28	15.10.28
Marmarice, Turkey	17.10.28	27.10.28
Malta	30.10.28	15.1.29
Phalerum Bay, Greece	18.1.29	29.1.29
Malta	1.2.29	16.3.29
Pollensa, Majorca	19.3.29	23.3.29
Gibraltar	26.3.29	31.3.29
Portsmouth	5.4.29	5.4.29
Devonport	6.4.29	14.6.29
Portsmouth	15.6.29	21.6.29
Gibraltar	2.7.29	20.7.29
Malta	24.7.29	26.7.29

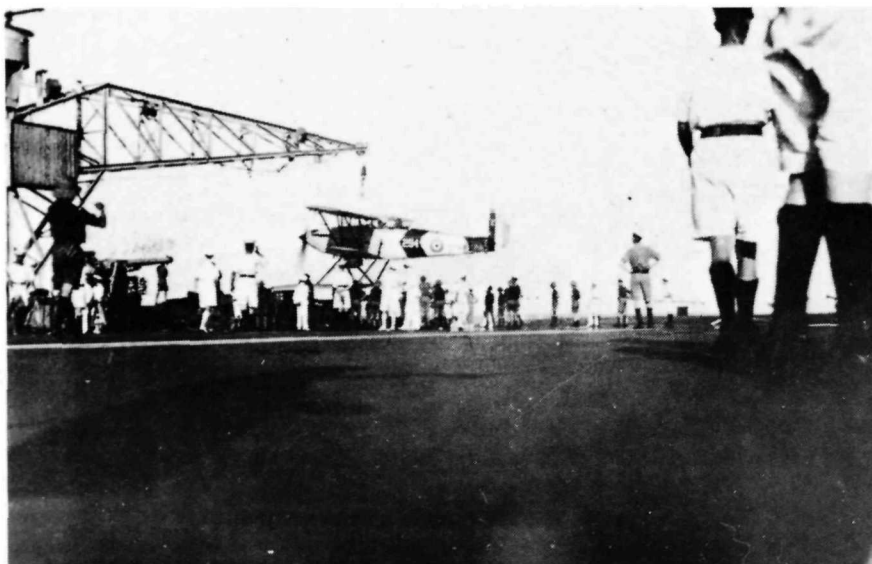


Bison N9592 of No.421B Flight carries 'Eagle's' fuselage band and Fleet Number '34'. Visible in this view are the bomb racks, the open window to the observer's cabin and the flight of steps providing access to the cockpit (RAF M P.2265)

<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>	<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>
Skiathos, Greece	29.7.29	8.8.29	Tsingtao, China	29.7.33	4.8.33
Argostoli, Greece	10.8.29	19.8.29	Chefoo, China	5.8.33	11.8.33
Malta	21.8.29	10.9.29	Wei-hai-Wei, China	12.8.33	24.9.33
Gruz, Yugoslavia	12.9.29	16.9.29	Tsingtao, China	24.9.33	27.9.33
Split, Yugoslavia	17.9.29	26.9.29	Kobe, Japan	30.9.33	12.10.33
Sibenik, Yugoslavia	26.9.29	8.10.29	Miyajima, Japan	13.10.33	16.10.33
Fiume, Yugoslavia	9.10.29	21.10.29	Beppu, Japan	16.10.33	20.10.33
Malta	24.10.29	14.1.30	Kagoshima, Japan	21.10.33	23.10.33
Phalerum Bay, Greece	16.1.30	29.1.30	Hong Kong	27.10.33	9.1.34
Malta	31.1.30	8.3.30	Singapore	15.1.34	7.2.34
Palma, Majorca	11.3.30	17.3.30	Port Swettenham, Malaya	8.2.34	14.2.34
Gibraltar	18.3.30	1.4.30	Penang, Malaya	15.2.34	23.2.34
Barcelona, Spain	3.4.30	11.4.30	Singapore	24.2.34	2.3.34
St.Tropez, France	12.4.30	22.4.30	Manila, Philippines	7.3.34	13.3.34
Malta	25.4.30	2.7.30	Hong Kong	16.3.34	4.5.34
Suda Bay, Crete	4.7.30	17.7.30	Chusan, China	7.5.34	10.5.34
Skiathos, Greece	18.7.30	30.7.30	Tsingtao, China	12.5.34	17.5.34
Vatika Bay, Greece	31.7.30	8.8.30	Wei-hai-Wei, China	18.5.34	6.7.34
Argostoli, Greece	9.8.30	18.8.30	Chefoo, China	6.7.34	10.7.34
Malta	20.8.30	3.9.30	Wei-hai-Wei, China	10.7.34	25.7.34
Limasol, Cyprus	7.9.30	18.9.30	Chefoo, China	25.7.34	1.8.34
Haifa, Palestine	19.9.30	28.9.30	Wei-hai-Wei, China	1.8.34	2.8.34
Alexandria, Egypt	30.9.30	11.10.30	Tsingtao, China	3.8.34	7.8.34
Phalerum Bay, Greece	13.10.30	20.10.30	Wei-hai-Wei, China	8.8.34	4.10.34
Corfu, Greece	22.10.30	29.10.30	Chinwangtao, China	5.10.34	13.10.34
Malta	31.10.30	13.1.31	Chusan, China	16.10.34	18.10.34
Port Drepano, Crete	15.1.31	16.1.31	Hong Kong	20.10.34	5.11.34
Malta	18.1.31	19.1.31	Manila, Philippines	7.11.34	14.11.34
Gibraltar	23.1.31	31.1.31	Jesselton, British North Borneo	16.11.34	19.11.34
Bahia, Brazil	14.2.31	16.2.31	Batavia, Java	22.11.34	29.11.34
Bahia Blanca, Argentina	25.2.31	9.3.31	Singapore	1.12.34	31.12.34
Buenos Aires, Argentina	11.3.31	1.4.31	Colombo, Ceylon	5.1.35	8.1.35
Mar del Plata, Argentina	2.4.31	4.4.31	Alexandria, Egypt	22.1.35	27.1.35
Montevideo, Uruguay	5.4.31	5.4.31	Malta	30.1.35	28.2.35
Rio de Janeiro, Brazil	9.4.31	15.4.31	Gibraltar	4.3.35	18.3.35
Gibraltar	1.5.31	4.5.31	Malta	22.3.35	28.3.35
Devonport	8.5.31	Refit	Gibraltar	31.3.35	31.3.35
Recommissioned	28.3.33	21.4.33	Devonport	5.4.35	
Portsmouth	22.4.33	29.4.33	Paid off into reserve	31.5.35	
Gibraltar	3.5.33	4.5.33	Commissioned at Devonport	21.1.37	10.2.37
Malta	7.5.33	8.5.33	Portsmouth	11.2.37	24.2.37
Aden	17.5.33	19.5.33	Malta	4.3.37	13.3.37
Colombo, Ceylon	25.5.33	29.5.33	Port Said, Egypt	16.3.37	18.3.37
Singapore	3.6.33	6.6.33	Aden	23.3.37	25.3.37
Hong Kong	11.6.33	16.6.33	Colombo, Ceylon	1.4.37	3.4.37
Wei-hei-Wei, China	20.6.33	28.7.33	Singapore	9.4.37	1.5.37

Place	Arrived	Sailed
Hong Kong	6.5.37	28.5.37
Wei-hai-Wei, China	3.6.37	21.7.37
Tsingtao, China	22.7.37	13.8.37
Wei-hai-Wei, China	14.8.37	17.8.37
Tsingtao, China	17.8.37	5.9.37
Wei-hai-Wei, China	6.9.37	7.10.37
Taku, China	8.10.37	10.10.37
Hong Kong	14.10.37	8.1.38
Singapore	13.1.38	26.2.38
Penang, Malaya	28.2.38	7.3.38
Singapore	9.3.38	23.3.38
Jesselton, British North Borneo	27.3.38	1.4.38
Manila, Philippines	3.4.38	11.4.38
Hong Kong	14.4.38	4.6.38
Wei-hai-Wei, China	8.6.38	12.8.38
Chinwangtao, China	13.8.38	19.8.38
Wei-hai-Wei, China	20.8.38	4.9.38
Hong Kong	8.9.38	12.9.38
Singapore	17.9.38	13.10.38
Hong Kong	19.10.38	11.3.39
Singapore	17.3.39	11.4.39
Bali, Dutch East Indies	15.4.39	20.4.39
Singapore	24.4.39	19.5.39
Hong Kong	25.5.39	29.5.39
Wei-hai-Wei, China	2.6.39	26.7.39
Hong Kong	31.7.39	12.8.39
Singapore	18.8.39	2.9.39
Colombo, Ceylon	10.9.39	12.9.39
Colombo, Ceylon	16.9.39	20.9.39
Colombo, Ceylon	5.10.39	11.10.39
Colombo, Ceylon	12.10.39	28.10.39
Singapore	1.11.39	8.11.39
Colombo, Ceylon	12.11.39	13.11.39
Colombo, Ceylon	18.11.39	25.11.39
Diego Suarez, Madagascar	7.12.39	8.12.39
Durban, South Africa	12.12.39	22.12.39
Seychelles	29.12.39	31.12.39
Colombo, Ceylon	5.1.40	15.1.40
Colombo, Ceylon	18.1.40	25.1.40
Trincomalee, Ceylon	26.1.40	31.1.40
Aden	9.2.40	18.2.40
Colombo, Ceylon	25.2.40	5.3.40
Trincomalee, Ceylon	6.3.40	12.3.40
Singapore	16.3.40	28.5.40
Alexandria, Egypt	6.40	9.4.41
Based on Alexandria until 9.4.41		
Great Bitter Lake, Egypt	10.4.41	15.4.41
Suez, Egypt	15.4.41	16.4.41
Port Sudan, Sudan	18.4.41	19.4.41
Mombasa, Kenya	26.4.41	29.4.41
Mombasa, Kenya	4.5.41	5.5.41
Durban, South Africa	9.5.41	10.5.41
Simonstown, South Africa	12.5.41	13.5.41
St.Helena	18.5.41	19.5.41
Freetown, Sierra Leone	25.5.41	29.5.41
Freetown, Sierra Leone	20.6.41	4.7.41
St.Helena	8.7.41	10.7.41
St.Helena	2.8.41	4.8.41
Freetown, Sierra Leone	10.8.41	29.8.41

An Osprey of No.803 Squadron about to be hoisted out by 'Eagle's' massive crane (RAF Museum P.10675)



Place	Arrived	Sailed
St.Helena	17.9.41	18.9.41
St.Helena	26.9.41	28.9.41
Freetown, Sierra Leone	3.10.41	4.10.41
Gibraltar	11.10.41	21.10.41
Greenock	26.10.41	30.10.41
Liverpool	31.10.41	9.1.42
Greenock	10.1.42	17.2.42
Gibraltar	23.2.42	
Based on Gibraltar until sunk on		
11.8.42		

Note: The spelling of placenames are as shown in the contemporary ship's logs and are based on then-current Admiralty charts and sailing directions. The usage is not consistent; for example, Cattaro is shown instead of Kotor but further up the coast, Split is recorded in place of Spalato, its pre-1918 name.

* * * * *

EMBARKED OPERATIONAL AIRCRAFT TYPES

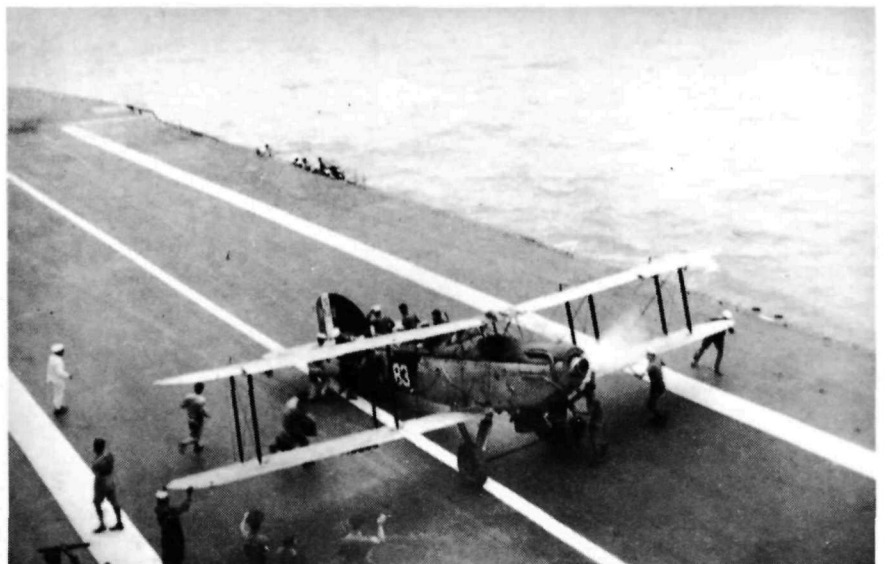
Type	Period	Rep.Serial
Flycatcher	May 1924 - May 1931	N9923(1)
Blackburn	May 1924 - March 1926	N9982(29)
Seagull III	May 1924 - January 1925	N9651(45)
Dart	May 1924 - October 1930	N9950(62)
Fairey IIID	February 1925 - August 1928	S1019(40)
Bison	February 1926 - April 1929	N9973(20)
Fairey IIIF	June 1929 - March 1935	S1820(82)
Osprey	May 1931 - January 1935	S1696(290)
Swordfish	March 1937 - August 1942	K8391(952)
Sea Gladiator	June 1940 - April 1941	
Fulmar	September 1940 - June 1942	N1860
Sea Hurricane	October 1941 - August 1942	

Other types occasionally flew from *Eagle* but the above were those types which equipped flights and squadrons assigned to this carrier.

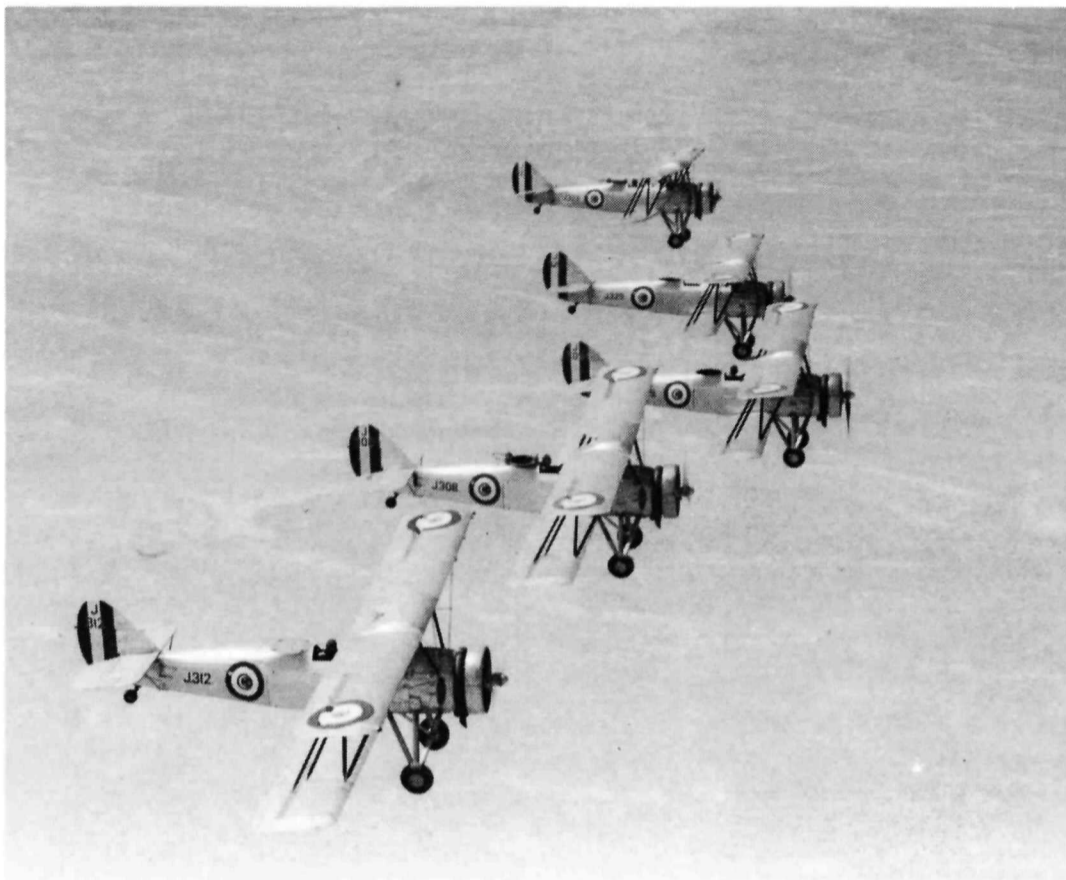
SPECIFICATION

Displacement: 22,600 tons
 Length: 667 feet
 Max beam: 105 feet
 Speed: 22½ kts
 Radius of action: 3,000 miles at 17½ kts
 Horsepower: 52,100
 Armament: Nine 6-inch in single mountings
 Four 4-inch AA
 Added later: 8-barrel 2-pdr pompom AA
 Added during war; 12x20mm AA

Fairey IIIF S1821 of No.824 Squadron comes to a halt. The chocks are rapidly positioned, just in case! (RAFM P.704)



THE EGYPTIAN AIR FORCE 1931-1945



The Royal Egyptian Air Force, known as the Egyptian Army Air Force until 1939, had a close relationship with the RAF in Egypt both before and during World War Two. The following notes are intended to give some details of this formation during this period.

A formation of Avro 626 three-seaters of the REAF flying near Almaza. J308 and J323 have gunrings fitted, J309 and J329 have open third cockpits and J312 has its third cockpit faired over by a flat plate. (RAF Museum photo 5628-3)

Since the end of World War One, the Royal Air Force had maintained an organisation in Egypt under the Anglo-Egyptian Pact which served to provide defence for Egypt against aggression, defend the vital Suez Canal which formed a life-line to India and the Far East and as a base for British military activities in the Middle East where the Royal Air Force was responsible for security of territory governed under a League of Nations mandate.

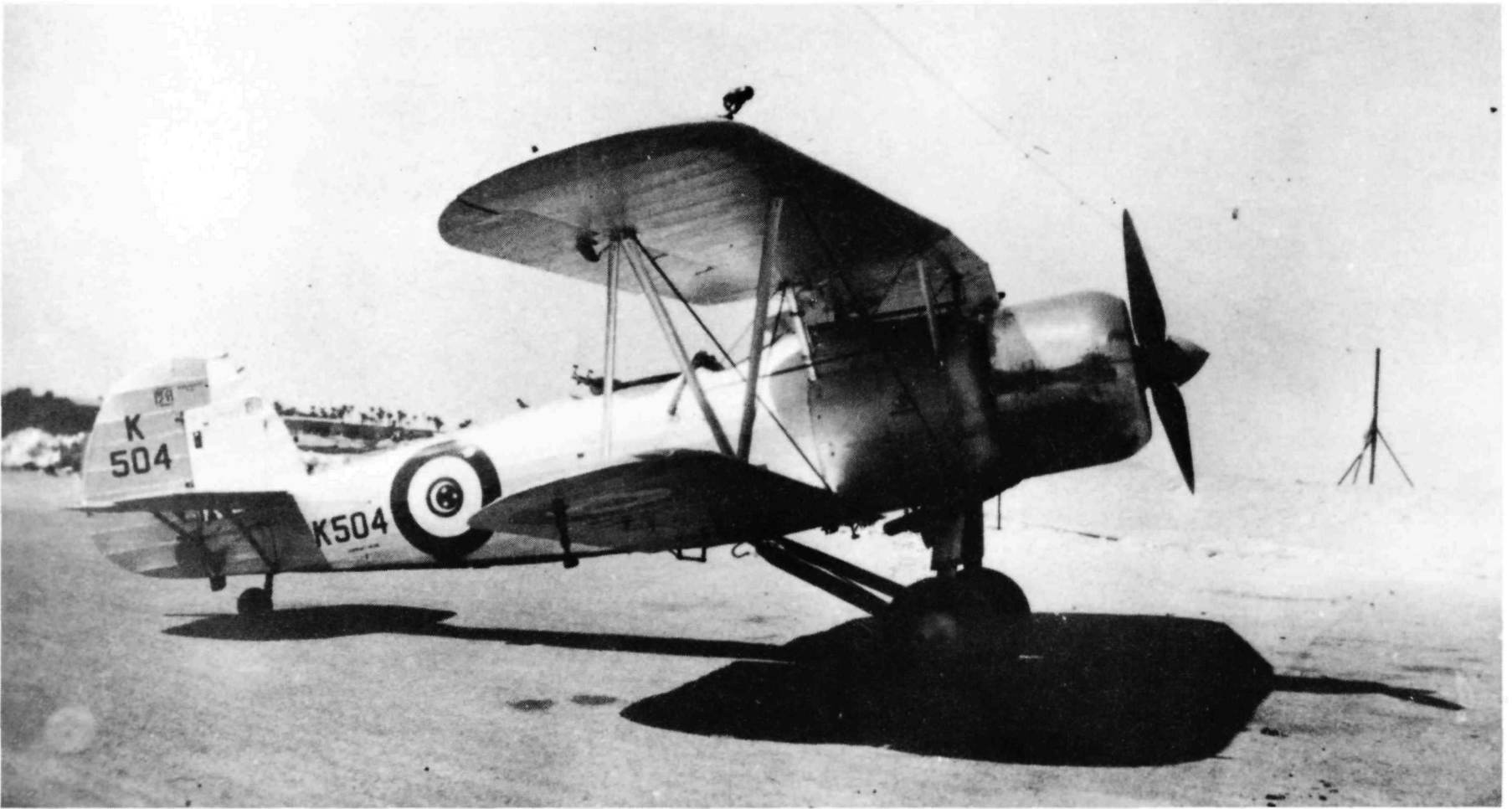
In Egypt itself, a few operational squadrons flew bomber and army co-operation aircraft but the largest unit was No.4 Flying Training School at Abu Sueir which took advantage of the normally good weather to train pilots.

The Egyptian Army provided the bulk of the land forces in Egypt but had the added responsibility of internal security in a country with a considerable degree of political instability. In 1930 the Army began to push seriously for its own air arm and on 27 May 1931, the Egyptian Council of Ministers gave permission for aircraft to be purchased and ground and buildings to be obtained for an airfield at Almaza.

The budget of £E50,000 allowed for hangars and buildings plus five aircraft. The D.H.Moth with Gipsy II engines was chosen and at a cost of £7,000, these were delivered complete with bombracks for small bombs, a camera and full dual control. Three Egyptian and two British

Although REAF Moths did not carry radio, these are not observers training in air-to-air communications (RAFM 5627-3)





First real 'operational' type with the REAF was the Hawker Audax, fitted with a Panther VI engine (RAF Museum P10796)

pilots flew the Moths out in May 1932 and the Egyptian Army Air Force was founded on their arrival, Almaza formally opening at the same time as the force's base.

Training and advice was provided by both RAF and civilian instructors since only a few low-ranking Egyptians had received any training at Abu Sueir. In July 1932, ten Avro 626 three-seaters were ordered for army co-operation, anti-smuggling patrol and training purposes. In 1934, these were supplemented by ten more plus a Westland Wessex transport; the latter was the last one produced (G-ACIJ) and, like the 626s, was flown out in March 1934 by EAAF pilots, becoming W202.

Two of the original batch of Avro 626s crashed during the delivery flight and replacements were ordered so the first batch of serials ran from J300 to J312, a third replacement aircraft bringing the total to 13. The second batch ran from J320 to J329.

The RAF mission engaged in training Egyptian pilots found that their pupils tended to be above average in flying ability and very keen to get into the air. Unfortunately, this was at the expense of other skills. There was a marked lack of decision when faced by unexpected

problems; there was little enthusiasm for such subjects as navigation and radio while the aircraft themselves were regarded as being the province of those who could not fly. All were junior ranks as it took up to 25 years to reach major; thus senior officers seldom had any real knowledge of flying and its problems.

Ground personnel were conscripts and almost always illiterate, the Egyptian education system not being capable of producing the type of person able to absorb technical training direct from school.

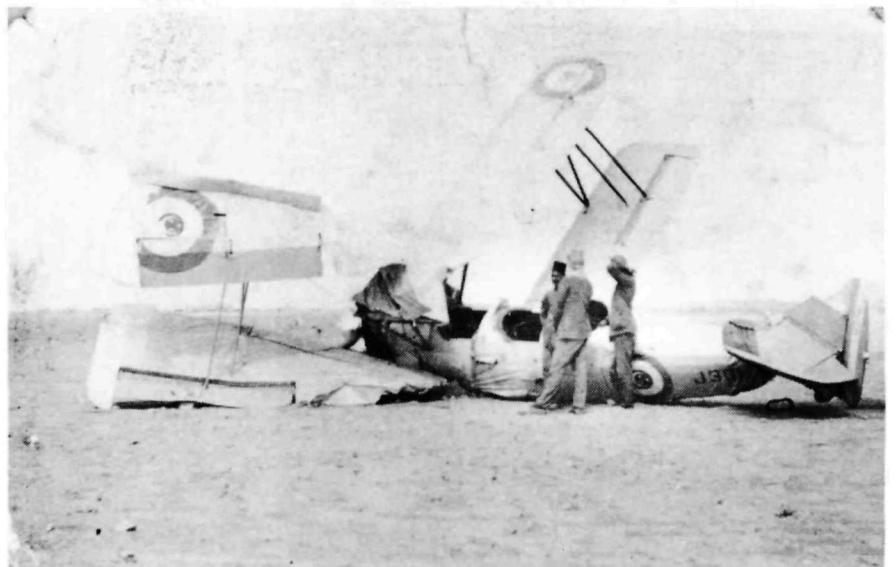
Between 1932 and 1936, two pilots were killed and two injured during training but flying training hours had risen from 1,699 in 1932 to 4,705 in 1936, the total for the five years being just of 1,600 hours.

By April 1937, the EAAF had become an established force and had decided to dispense with all RAF personnel in order to operate as a national air service. Four RAF officers and eleven NCOs had been engaged in training but there was political pressure on the Egyptian Army. The EAAF was not as anxious to lose their RAF colleagues as the politicians and insisted on Wing Cdr Tait being left as advisor, even if the others had to return to the RAF.

Close-up of the Avro 626 cockpits (RAF Museum 5627-6)



Avro 626 J301 comes to grief in a landing accident (RAF M)





Eight of the first batch of Avro 626s lined up prior to departure from the United Kingdom (RAF Museum PC71/66/503)

In April 1937, six Hawker Audax army co-operation aircraft arrived and this raised morale. All were fitted with Panther VI radials, unlike the RAF Audaxes in Egypt which had the standard Kestrels. At the end of the month, EAAF strength stood at six Audaxes, 22 Avro 626s (with Cheetah V engines), six Moths (Gipsy II), one Anson, presumably Avro 652 W204 (Cheetah IX), one Wessex (Genet Major) and one Commodore (Lynx IVC). A total of 37 included four more replacement 626s, J328, J330, J331 and J332. The first serial mentioned duplicated an earlier 626.

The force was organised into three squadrons. No.1 Squadron had nine 626s and three Audaxes and was responsible for army co-operation on the frontier. No.2 Squadron had the same complement of aircraft and No.3 had six Moths and four 626s for training, with the Avro 652, Wessex and Commodore for communications duties. All three had British officers commanding them with an Egyptian officer as second-in-command.

By the end of 1937, an expansion scheme was underway. A Flying Training School was being formed at Almaza to cater for both elementary and advanced training based on RAF training methods. This received nine Magisters and despite the politicians, a staff of one squadron leaders, two flight lieutenants and one sergeant pilot all from the RAF formed the instructional staff. The Magisters were given the serials L201 to L210, a series which eventually ran to L243.

A mechanics school was also formed at Almaza and 90 recruits obtained from trade and technical schools. An RAF sergeant fitter was employed as instructor.

An Armament and Wireless School was authorised which would take 48 pupils at one time and another RAF fitter-armourer sergeant was allotted to this task.

A new light bomber squadron was approved and 18 Audaxes with Panther Xs were ordered for delivery between December 1937 and April 1938. The civil airfield at Dekheila would be developed as a base for this unit until Mersa Matruh, on the Libyan frontier, could be built. A new army co-operation squadron was planned for 1938 and 18 Lysanders were earmarked for it.

Within four weeks of the withdrawal of the original RAF training team, there had been six accidents, one pilot being killed in a Moth.

During 1938, good progress was made. The RAF mission suggested that two fighter squadrons be formed and 36 Gladiators supplied to arm them. Unfortunately, the Egyptian Prime Minister had been told that Hurricanes were faster by some one with access to Jane's All the World's Aircraft. It was explained that Gladiators could be obtained a year earlier than Hurricanes, it was well-proven and more suited to inexperienced pilots, had an air-cooled engine and was in service with the only RAF fighter squadron in Egypt. The Prime Minister persisted in wanting Hurricanes but eventually 18 Gladiators were ordered.

The Flying Training School began operating in January 1938 with nine Magisters, four Moths, ten 626s and six Audaxes. The four British staff were supplemented by six Egyptian instructors plus a Captain as commanding officer. Of the first 22 cadets from the Royal Military Academy, four were found unsuited and 18 reached the required standard. Eight NCO pilots from existing squadrons were also taken on to the course.

No.4 (Bomber) Squadron was formed and the first Audax was delivered at the end of March, 17 having arrived by the end of May. It moved from Almaza to Dekheila on 3 May into tents, using part of the civil hangar for maintenance, Mersa Matruh being held up for lack of funds. The Panther X Audaxes were found to be a major improvement over the Panther VI versions which were increasingly relegated to training.

The formation of a Towed Target Flight was approved which would receive six Gordons from the RAF.

By the end of the year, the EAAF had become the Royal Egyptian Air Force. The FTS had been built up until there were 19 Magisters, four Moths, ten 626s and six Audaxes available for training. An order for 25 more Magisters was placed. The Mechanics School began functioning in September. No.4 Squadron found its guns unusable because of lack of mounting fittings while the Audax's fuel tanks frequently leaked due to the hot weather. The army co-op squadron formed in August and its first two Lysanders arrived in November, the remaining 16 being received by the end of February 1939. The 18 Gladiators were ordered in June 1938 but no Gordons were forthcoming for the TT Flight. A proposal to take over three Valentias from the RAF was turned down because of the age of the aircraft.

On 31 October 1938, a nose-count showed strength to be 18 Audax X, six Audax VI, 21 Avro 626s, four Moths, 19 Magisters, one Avro 652, one Wessex and one Commodore, a total of 71.

1939 opened with a crisis. The only experienced Egyptian staff officer at HQ was removed without notice and replaced by a pleasant, but totally ineffective Chief of Air Staff. The REAF wanted him replaced by an airman but REAF officers remained very junior in the military hierarchy. As always, politics intruded into the military field with complete disregard of the purpose of the forces. The air force was now separated from the army but their relationship remained ill-defined. RAF-style blue uniforms and the tarboosh became the approved ceremonial headgear.

In order to provide more advanced trainers, No.4 (AC) Squadron lost twelve of its Audax Xs to the FTS which now had 18. The terms Audax VI and Audax X were used to differentiate between the different engines and were not mark numbers in the RAF sense. Twenty-three additional Magisters had been received and had proved excellent elementary trainers. The trainers at FTS in May 1939 consisted of 43 Magisters, two Moths, 18 Avro 626s, six Audax VIs and 12 Audax Xs, a total of 81 aircraft which made Almaza a thriving training establishment. On one course, the success rate was four out of six cadets but none out of 11 NCOs. All NCO pupils had been found unsatisfactory due to their lack of basic education. Six more RAF flying instructors and two ground instructors were seconded to the FTS.

No.1 Squadron flew two flights of five Lysanders with eight aircraft as reserves and were very short of Mercury XII spares. While operating from landing grounds in the Western Desert, they suffered a number of nose-overs due to soft sand.

No.2(Fighter) Squadron formed at Almaza in February 1939 and moved out to Dekheila in March. It had two flights of six Gladiators plus six in reserve.

No.3 (Communications) Squadron had its three transports, the Avro 652A, the Wessex and the Commodore but three Ansons were due in May. It was proposed to equip a King's Flight with a Flamingo and two Percival Q-6s.

No.4 (Bomber) Squadron had six Audaxes. An order for 18 Blenheims was placed for delivery in October 1939.

The TT Flight at Dekheila was finally formed in March 1939 with six Gordons. Unfortunately, they had no TT gear!

An Aircraft Repair Depot was mooted and a number of new landing grounds were under construction, many of which became household names to the Desert Air Force.

At the end of April 1939, the REAF had 18 Avro 626s, 43 Magisters, 24 Audaxes, 18 Lysanders, 18 Gladiators, 6 Gordons, 2 Moths, 1 Avro 652A, 1 Wessex and 1 Commodore, a total of 132 aircraft of which only 36 were first-line.

The outbreak of World War Two resulted in the three operational squadrons taking up their war stations although Egypt was not at war with Germany. Misr Airwork, which flew the country's air routes, was taken over by the Ministry of National Defence. Formation of a second fighter squadron began.

On 3 September 1939, No.1 Squadron sent one flight to Suez to fly patrols over the Gulf of Suez, protecting the approaches to the Canal. The second flight went to Baharia oasis to fly reconnaissance up to 150 miles west of the landing ground. No.2 Squadron moved to Helwan for air defence duties. No.5 Squadron had formed with Gladiators and had six on hand at Dekheila.

Eighteen Lysanders, Y500 to Y517, were ordered for No.1 (AC) Squadron in 1938

(RAF Museum P2020)





REAF Gladiators in camouflage after the outbreak of World War Two. L8028 is the RAF serial, the Egyptian serials being in the K13-- series. These belong to No.2 (Fighter) Squadron and in the background are two Ansons of the REAF (RAFM)

The remaining twelve Gladiators arrived by the end of 1939 to be supplemented during the war by 27 more. All were to Mk.II standard.

Aircraft on hand at the end of October were: 43 Magister, 18 Avro 626, 6 Gordon, 2 Moth, 24 Audax, 1 Avro 652A, 18 Lysander, 32 Gladiator, 1 Wessex, 1 Commodore = 146 aircraft.

At this time, the Chief of Air Staff fell foul of another change in government and suddenly retired. His successor was completely ignorant of anything to do with aviation but was more energetic and relations with the British remained good.

In the spring of 1940, financial problems became acute and further expansion of the REAF was curtailed. Gp Capt Tait left and a new Director of the Air Council seemed very good and energetic - but had designs on the job of the Army's Chief of Staff. Despite the political pressure to 'Egyptianise' the entire force, Tait's release back to the RAF was given with great reluctance as he was rightly regarded as the man who built up the REAF to a viable air force.

Cairo's politicians insisted on a court of enquiry into training methods in an attempt to discredit British training methods and equipment but the report completely vindicated them. Much of the trouble stemmed from the junior ranking of Egyptian squadron commanders; one squadron had to be commanded by a flying officer due to the lack of British personnel.

The unit situation was that No.1 (AC) Squadron was at Almaza, for training duties, and Suez,

for patrols over the Gulf. No.2 (F) at Dekheila had been the victim of many postings out and suffered from a shortage of experienced personnel and spare parts. No.3 at Almaza was now designated a 'Bomber-Transport' squadron and had three Ansons and two Q-6s. The Ansons were used for twin-engined training pending the delivery of Blenheims. No.4 (B) was at Dekheila awaiting Blenheims and still had six Audaxes. No.5 (F) had 18 Gladiators at Dekheila while the TT Flight had at last laid hands on some TT gear.

On 31 March 1940 there were 18 Avro 626s, 24 Audaxes, 43 Magisters, 36 Gladiators, 18 Lysanders, 6 Gordons, 2 Moths, 2 Percival Q-6s, one civil and three military Ansons, a total of 151 aircraft.

During the next year, the REAF went downhill fast. The accident rate was high, mainly due to a lack of flying discipline and bad airmanship. The number of aircraft dwindled and the only addition to strength was a batch of 14 Hart variants passed over from RAF stocks just before Italy entered the war.

The force was in a very odd situation. Egypt was at peace with Germany while He 111s and Ju 88s regularly bombed Egyptian targets. The politicians were fence-sitting as the chances of a British victory were indiscernable from a villa in Cairo. On the other hand, Nos.2 and 5 Squadrons were building up a good scramble reputation as part of the Heliopolis Sector but their old Gladiators never succeeded in catching any enemy - or perhaps they should be called 'neutral' - aircraft. One pilot shot off



No.1 Squadron's Lysanders went into camouflage after Italy entered the war and adopted RAF-style code letters 'GF'

all his ammunition at a Hurricane from Ismailia but failed to hit. All the pilots wanted Hurricanes to have a chance of catching a German or Italian but it was not until October 1941 that a Hurricane training flight was formed.

The Lysanders of No.1 Squadron suffered greatly from a shortage of spares while No.3, reverting to being an AC squadron, did little flying with its two Q-6s. No.4's motley collection of Gordons, Audaxes and Harts did little flying also. The FTS could muster 36 Magisters, and 17 Avro 626s for the intermediate training course plus 15 Audaxes and 5 Harts for the advanced training squadron. The Harts could only be used in winter since they lacked tropical equipment. Anti-aircraft co-operation work was undertaken by Misr Airlines.

Total aircraft on 31 April 1941 was 146; 33 Gladiators, 17 Lysanders, 16 Avro 626s, 4 Gordons, 1 Moth, 21 Audaxes, 36 Magisters, 2 Q-6s, 12 Harts, 1 civil and 1 military Anson, 1 Wessex and 1 Commodore.

By the end of the year, pilots were being allowed as little as two hours flying per month and efficiency was decreasing. The retired Chief of Air Staff attempted to escape to Syria but the crew of the Anson forgot to turn on the oil tap and the aircraft forced landed in the desert at night. Four Hurricanes had been received

and morale in the fighter squadrons rose but the problem was not at the REAF stations but in Cairo where the British had little regard for the vacillating politicians and felt disinclined to waste equipment on an air force which had its hands tied.

A report on 30 April 1943 listed the aircraft still in use. These were:

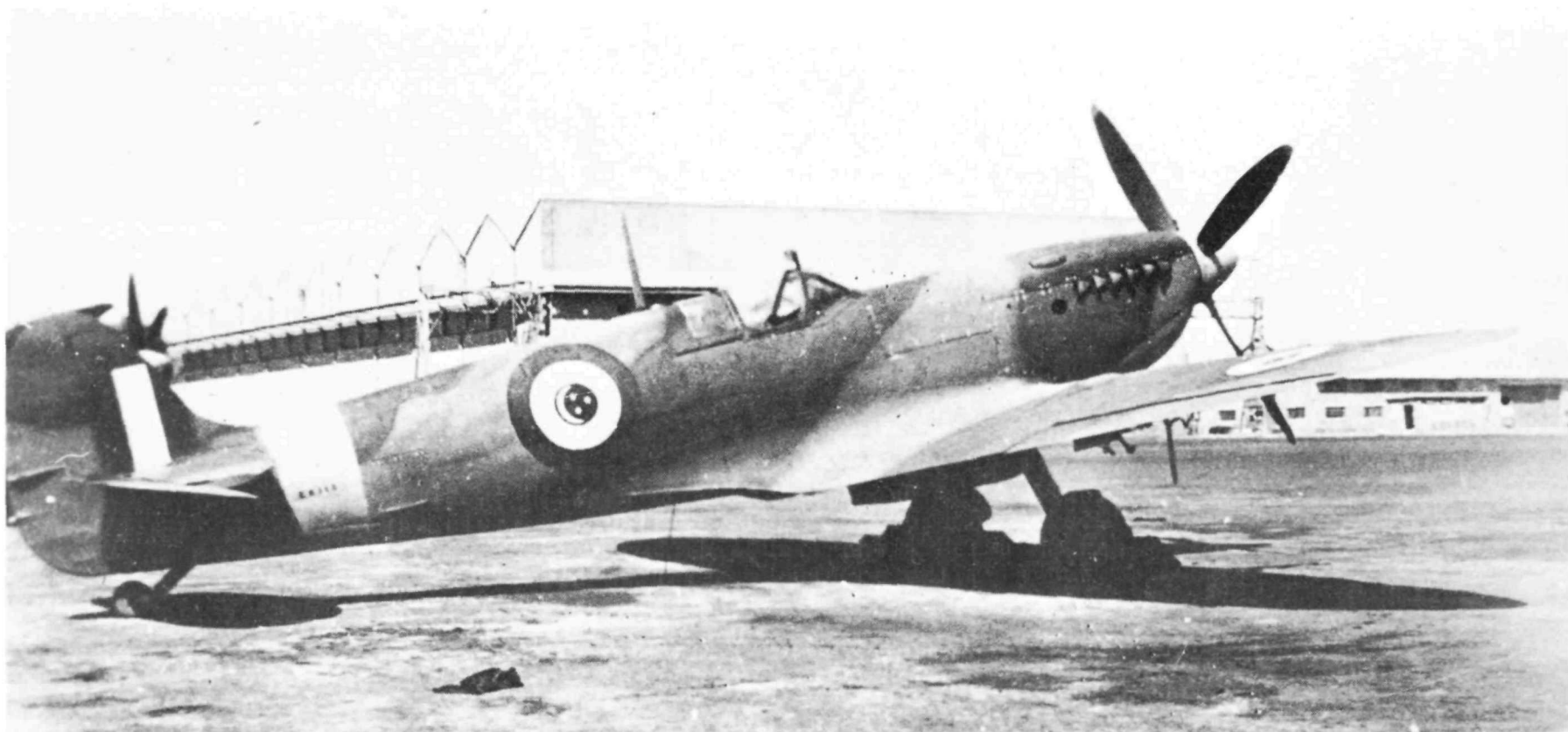
No.1 (AC) Squadron: 14 Lysanders at Almaza
 No.2 (F) Squadron: 15 Gladiators at Almaza
 No.3 (C) Squadron: 2 Ansons, 2 Q-6s, 1 Commodore, 1 Hart, 1 Moth at Almaza
 No.4 (B) Squadron: 14 Hart variants at Almaza
 No.5 (F) Squadron: 14 Gladiators at Suez
 No.17(F) Squadron: 6 Tomahawks, 5 Hurricanes, 6 Harts at Almaza
 FTS: 34 Magisters, 16 Avro 626s, 10 Audaxes at Almaza

The total came to 140 aircraft and even the 11 fighters in No.17 Squadron were obsolete. The six Tomahawks were soon discarded. The Hurricanes were used only for training while the remaining Gladiators were almost entirely grounded due to lack of spares.

The REAF was withdrawn from the Delta Defence sector and morale slumped to zero. Apart from a few pilots being given courses on Hurricanes at Nos.71 and 73 OTUs by the RAF, the Egyptian air force had declined into a state where it was only of use for communications and internal security. Not until the end of the war, when large numbers of aircraft became surplus, did the REAF begin to recover. From Spitfires, it progressed through Meteors and MiG-15s to become a major force in the Middle East. The crown vanished from the roundel rim when King Farouk and his well-heeled courtiers retired from government and Egypt became a republic.

The story of the first Egyptian Air Force was similar to many small air forces which were formed in what are now known as 'developing' countries. They all faced the same problem of providing raw material for the personnel who would fly and maintain the aircraft and equipment. Without an established educational base on which to build a training programme, it was an up-hill task. Too few educated men regarded flying as a career; most used the air force as a good flying club.

Modern equipment at last for the REAF - just as jet fighters started to flow. Spitfire F.IX at Kasfareet (D.A.Wyldes)



RAF WRITE-OFFS 1952



<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
2.1.52	Harvard T.2B	FS816	1 FTS	1m NNW of Shipton-on-Stour station, Wks.	Ran out of fuel and flew into hill at night (1)
2.1.52	Meteor F.8	WE896	1 OFU	Mingaladon, Burma	Overshot landing on delivery flight
2.1.52	Valetta C.1	VW185	110 Sqn	Off Changi, Singapore	Elevators locked on take-off; ditched
4.1.52	Hornet F.3	WB900	80 Sqn	85m E of Seletar, Singapore	Missing in raincloud on delivery flight (1)
4.1.52	Meteor F.3	EE332	206 AFS	Melbourn, Cambs	Broke up in high speed run 3m E of Bassingbourn(1)
4.1.52	Mosquito PR.34	PF621	81 Sqn	Butterworth, Malaya	Engine cut on approach; bellylanded
7.1.52	Meteor F.8	VZ453	92 Sqn	Rufforth	Collided with WA759 near Linton and overshot bellylanding
7.1.52	Meteor F.8	WA759	92 Sqn	1m W of Linton-on-Ouse	Collided with VZ453 in circuit and crashed (1)
7.1.52	Meteor NF.11	WD653	264 Sqn	Near Leeming	Ran out of fuel at night and abandoned
7.1.52	Mosquito T.3	HJ993	228 OCU	Leeming	Swung on take-off and undercarriage collapsed
7.1.52	Vampire F.1	TG446	208 AFS	1m NE of Peasedown St. John, Somerset	Ran out of fuel and abandoned in cloud
7.1.52	Vampire FB.5	VZ179	72 Sqn	Hatfield Broad Oak, Essex	Dived into ground out of cloud during GCA approach (1)
9.1.52	Vampire FB.5	WA437	185 Sqn	3608N:1414E, north of Gozo	Stalled and flicked into spin; crashed in sea (1)
10.1.52	Meteor F.8	WE854	19 Sqn	Church Fenton	Hit by jetstream from previous aircraft; under-shot runway and hit controller's caravan (0+1)
11.1.52	Wellington T.10	LN608	104 FRS	Lichfield	Lost power on take-off; undercarriage raised to stop
14.1.52	Harvard T.2B	FT415	22 FTS	Kinder Scout, Derbyshire	Followed railway on navex into tunnel; hit hill(1)
14.1.52	Harvard T.2B	KF723	3 FTS	7½m SW of South Luffenham, Northants	Hit HT wires on low-level navex (1)
14.1.52	Tiger Moth T.2	DX550	5 FTS	Thornhill, S.Rhodesia	Damaged beyond repair in heavy landing
15.1.52	Anson C.21	VP526	395 MU CF	Kumalo, S.Rhodesia	Engine cut after take-off; bellylanded
15.1.52	Proctor C.4	NP291	SF Habbaniya	Habbaniya, Iraq	Swung on landing and damaged beyond repair
18.1.52	Valetta C.1	VW823	216 Sqn	Kasfareet, Egypt	Tipped up while running-up engines; DBR
19.1.52	Vampire FB.5	WA433	612 Sqn	Turnhouse	Dived into ground on stream approach (1)
20.1.52	Meteor F.8	WE864	19 Sqn	Nr.Linton-on-Ouse	Collided with WE868 during practice attack on Lincoln; abandoned
20.1.52	Meteor F.8	WE868	19 Sqn	Nr.Linton-on-Ouse	Collided with WE864 as above; abandoned (1)
21.1.52	Meteor FR.9	VZ591	208 Sqn	Abu Sueir, Egypt	Caught by jetstream of previous aircraft and stalled on to runway; DBR
21.1.52	Meteor T.7	WG975	205 AFS	2m SW of Middleton St.George	Stalled and spun into ground on approach (1)
21.1.52	Vampire FB.5	VV443	14 Sqn	Off Sylt, Germany	Rolled and spun into sea during air-to-air firing (1)
22.1.52	Harvard T.2B	FT424	CFS	Nr.Stow-on-the-Wold, Glos.	Hit trees and crashed during low flying training
22.1.52	Lincoln B.2	RE413	97 Sqn	Hemswell	Hit ground during BABS approach in bad weather
22.1.52	Lincoln B.2	SX923	49 Sqn	Fincham, Norfolk	Flew into ground during GCA approach to Marham when engine cut (5)
22.1.52	Spitfire F.16	TE389	1 CAACU	Hornchurch	Bellylanded in error
23.1.52	Harvard T.2B	FX255	5 FTS	Thornhill, S.Rhodesia	Stalled on take-off
23.1.52	Lancaster GR.3	RF210	203 Sqn	3505N:1427E N. of Malta	Wing tip failed during dummy attack on submarine; lost height and ditched (2)
28.1.52	Vampire FB.5	WA202	93 Sqn	1m NW of Northen, W.Germany	Engine cut; bellylanded in field
30.1.52	Anson C.12	PH551	CNCS	Shawbury	Overshot landing in fog and undercarriage raised to stop
31.1.52	Mosquito T.3	TA590	201 AFS	Swinderby	Swung on take-off and undercarriage distorted
31.1.52	Vampire FB.5	WG794	185 Sqn	Hal Far, Malta	Engine shut off due to fire warning; undercarriage folded on landing and aircraft broke up
3.2.52	Auster AOP.6	TW576	1954 Flt	UK	Flew into HT cables and crashed
4.2.52	Mosquito PR.35	TH985	58 Sqn	Benson	Undercarriage collapsed on landing
6.2.52	Auster AOP.6	VX925	656 Sqn	Panang, Malaya	Engine cut; forced landed on railway line and overturned
6.2.52	Mosquito FB.6	RS530	204 AFS	Wigsley	Swung on landing and undercarriage collapsed
7.2.52	Mosquito B.35	VR795	139 Sqn	Hemswell	Overshot landing and swung into road
7.2.52	Mosquito NF.38	VT675	48 MU	Hawarden	Swung on landing and undercarriage collapsed

<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
8.2.52	Mosquito FB.6	RF966	204 AFS	½m SE of Sparkford, Somerset	Both engines cut; abandoned
8.2.52	Wellington T.10	NC719	101 FRS	Blyton	Undercarriage damaged on landing; SOC
8.2.52	Wellington T.10	RP383	1 ANS	Nr. Le Vigan, France	Flew into high ground in cloud en route to Malta (7)
11.2.52	Prentice T.1	VR233	6 FTS	Hales, Staffs.	Stalled in practice forced landing and hit ground (1)
12.2.52	Meteor F.8	WA882	222 Sqn	Ben Avon, Aberdeenshire	Flew into snow-covered hill during low flying exercise (1)
12.2.52	Mosquito NF.36	RK988	219 Sqn	3106N:3213E, E.Med	Hit water during practice interception of Beaufighter (2)
13.2.52	Wellington T.10	MF567	104 FRS	1½m E of Lichfield	Flew into ground at night
18.2.52	Meteor F.8	WA996	64 Sqn	Wattisham	Lost tyre on take-off; bellylanded on grass
18.2.52	Meteor F.8	WE860	64 Sqn	Saffron Walden, Essex	Airfields closed in by bad weather; abandoned
19.2.52	Anson T.20	VS518	1 OFU	Dijon/Longvic, France	Hit from behind by Nord 1200 while taxiing
20.2.52	Valetta C.1	VX492	114 Sqn	Khartoum, Sudan	Swung on landing and undercarriage collapsed
21.2.52	Lancaster GR.3	RF312	203 Sqn	Coltishall	Swung on landing and undercarriage collapsed
21.2.52	Meteor T.7	WH232	20 MU	Lowsmoor Farm, Glos.	Dived into ground on single-engined approach to Aston Down (1)
21.2.52	Mosquito T.3	HJ972	231 OCU	1½m NNW of Royston, Cambs.	Lost power and forced landed
21.2.52	Mosquito T.3	RR290	45 Sqn	24m W of Tengah, Sing.	Lost wing and broke up; pilot thrown clear
22.2.52	Chipmunk T.10	WB723	11 RFS	Perth	Hit ground during low-level roll (2)
24.2.52	Meteor T.7	WA726	500 Sqn	Nr. West Malling	Stalled in circuit in bad visibility (1)
24.2.52	Meteor T.7	WG948	614 Sqn	Llandow	Caught fire when starter trolley detached
25.2.52	Lincoln B.2	SX928	230 OCU	Scampton	Swung on landing in fog and burnt out
26.2.52	Meteor T.7	WF831	207 AFS	Fangfoss, Yorks.	Undershot landing at Full Sutton and hit goods train
26.2.52	Valetta C.1	VW827	30 Sqn	Nr. Abingdon	Lost power during single-engine practice and crashlanded
29.2.52	Meteor F.8	WE937	64 Sqn	Nr. Hempstead, Essex	Dived into ground out of cloud (1)
29.2.52	Meteor F.8	WH342	66 Sqn	York	Collided in formation with WE961 and lost tail (1)
3.3.52	Oxford T.2	PG953	8 AFTS	Dalcross	Crashed on overshoot
3.3.52	Valetta C.1	VW153	110 Sqn	Butterworth, Malaya	Engine cut; hit trees on approach
4.3.52	Meteor F.4	VT326	203 AFS	Nr. Malton, Yorks.	Flew into ground on low flying exercise (1)
4.3.52	Meteor F.8	WE888	56 Sqn	Nr. Horsham St.Faith	Dived into ground during aerobatics (1)
4.3.52	Vampire F.1	TG352	208 AFS	Merryfield	Overshot landing and undercarriage broke off
5.3.52	Prentice T.1	VS265	3 FTS	Nordelph, Cambs.	Abandoned after engine caught fire
5.3.52	Prentice T.1	VS645	16 RFS	1m E of East Sudbury, Staffs.	Spun into ground (2)
6.3.52	Vampire FB.5	VV446	202 AFS	Valley	Collided during formation take-off with WA290
6.3.52	Vampire FB.5	WA290	202 AFS	Valley	Collided as above
7.3.52	Auster T.7	WE543	Kuala Lumpur	Kuala Lumpur, Malaya	Sank on approach to light aircraft strip and hit main runway
7.3.52	Hornet F.3	WB910	FE Trg Sqn	Butterworth, Malaya	Overshot single-engined landing and overturned
10.3.52	Auster AOP.6	VX117	656 Sqn	Selangor, Malaya	Lost parts of prop; forced landed in mud residue at tin mine and overturned
11.3.52	Varsity T.1	WF373	201 AFS	Swinderby	Engine cut during overshoot; aircraft climbed and then dived into ground (3)
12.3.52	Anson T.21	VV910	2 BANS	Fawley, Hants.	Ailerons jammed; abandoned
13.3.52	Auster AOP.6	TW564	652 Sqn	Nr.Oynhausen, W.Germany	Engine cut; crashed in forced landing
13.3.52	Auster AOP.6	VF576	656 Sqn	Kulai, Malaya	Spun into ground on approach to strip (1)
13.3.52	Halifax Met.6	RG839	224 Sqn	Gibraltar	Undershot landing and hit sea wall; under- carriage collapsed
13.3.52	Oxford T.1	NM692	A&AEE	Boscombe Down	Lost power on take-off; undercarriage collapsed during emergency landing
14.3.52	Hastings C.1	TG562	Topcliffe	Topcliffe (?)	Crashed on take-off
14.3.52	Meteor F.4	VT283	203 AFS	Moreton-in-Marsh	Hit trees on approach and crashed (1)
14.3.52	Sunderland MR.5	PP162	MAEE	Felixstowe	Damaged on landing during rough water trials
17.3.52	Vampire FB.9	WG871	60 Sqn	Malaya	Missing on night navex; presumed crashed in jungle (1)
18.3.52	Auster AOP.6	TW567	1900 Flt	12m SE of El Adem, Libya	Wing hit ground in turn and aircraft overturned (2)
18.3.52	Oxford T.1	HN762	9 AFTS	Offchurch, Wks.	Spun during stalling practice; abandoned
18.3.52	Tiger Moth T.2	T5688	St.Mawgan		No details
19.3.52	Meteor T.7	WF859	87 Sqn	Wahn, W.Germany	Control lost during assymetric overshoot; crashlanded short of runway
19.3.52	Tiger Moth T.2	N9301	14 RFS	Broom Farm, nr.Hamble	Failed to gain height on take-off from practice forced landing and nosed over
20.3.52	Hornet F.3	WB907	80 Sqn	1m W of Stanley Point, Hong Kong	Dived into sea out of cloud (1)
20.3.52	Meteor T.7	VW437	229 OCU	Chivenor	Bellylanded due to fuel shortage and belly tank caught fire
20.3.52	Mosquito T.3	RR288	231 OCU	Bassingbourn	Swung during night landing and undercarriage collapsed
21.3.52	Harvard T.2B	FX245	3 FTS	Nr.Waldersea, Cambs.	Stalled at low altitude and dived into ground (1)
24.3.52	Tiger Moth T.2	DE678	8 RFS	Silchester, Berks.	Engine cut; overtuned in forced landing
26.3.52	Meteor F.4	VT129	203 AFS	Driffield	Undershot runway; wheel knocked off tailplane
27.3.52	Canberra B.2	WD984	617 Sqn	Nr.Binbrook	Crashed in snowstorm during GCA approach (3)
27.3.52	Meteor F.4	VT199	215 AFS	Blyton	Undershot approach and stalled into ground
27.3.52	Mosquito T.3	VA925	1689 Flt	1m W of Magor Denny, Monmouth	Crashed on sandbank in Severn (1)
27.3.52	Tiger Moth T.2	N6709	Airwork AGU	Digby	Blown over on landing

<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
27.3.52	Tiger Moth T.2	T6400	Airwork GU	Digby	Blown over on landing
28.3.52	Lancaster GR.3	SW286	2 of MR	Gibraltar	Overshot landing and undercarriage raised to stop; skidded into sea
28.3.52	Meteor T.7	VZ632	205 AFS	3m W of Middleton St.George	Lost power and bellylanded in field
1.4.52	Meteor F.4	VZ411	226 OCU	Nr.Dunwich, Suffolk	Control lost in rain cloud; crashed in forest (1)
1.4.52	Oxford T.1	DF467	8 AFTS	2m NW of Dalcross	Spun into sea (1)
2.4.52	Meteor T.7	VW455	203 AFS	5m WNW of Bridlington, Yorks	Abandoned after ailerons jammed
4.4.52	Mosquito PR.35	VP183	58 Sqn	Benson	Swung on take-off and undercarriage collapsed
7.4.52	Oxford T.1	DF308	9 AFTS	Wellesbourne Mountford	Ran off taxiway and tipped up
8.4.52	Anson T.21	WD411	2 ANS	2½m WSW of Manby	Engine feathered during check flight; aircraft lost height and forced landed
8.4.52	Canberra B.2	WD985	4 FP	1m SE of Sealand	Fuel switched off in error; bellylanded
8.4.52	Vampire FB.5	WA122	4 Sqn	4½m SSW of Jever, West Germany	Dived into ground during simulated RP attack (1)
10.4.52	Athena T.2	VW892	A&AEE	Boscombe Down	Bellylanded
10.4.52	Meteor T.7	WA636	I.Av.Med.	Farnborough	Lost canopy in high speed dive; stalled on approach
10.4.52	Tiger Moth T.2	N5492	226 OCU	Stradishall	Blown over on take-off
12.4.52	Meteor F.8	WF700	41 Sqn	S.Benfleet, Essex	Caught fire and abandoned
15.4.52	Mosquito PR.34	RG235	81 Sqn	Seletar, Singapore	Lost brake pressure; bellylanded
16.4.52	Meteor T.7	WG986	207 AFS	2m S of Full Sutton	Stalled on asymmetric approach and dived into ground (2)
17.4.52	Meteor T.7	WF878	205 AFS	Middleton St.George	Undercarriage collapsed on landing
17.4.52	Tiger Moth T.2	T6399	19 RFS	Woodvale	Stalled after take-off and overturned
17.4.52	Vampire FB.5	WA141	4 Sqn	Nr.Oldenburger, W.Germany	Ran out of fuel and bellylanded in field
18.4.52	Wellington T.10	NA967	2 ANS	Thorney Island	Overshot practice flapless landing
18.4.52	Wellington T.10	PG296	2 ANS	Thorney Island	Engine cut on asymmetric approach, bellylanded
21.4.52	Buckmaster T.1	RP209	8 Sqn	Nr.Khormaksar, Aden	Lost height on single-engined overshoot and flew into ground (1)
22.4.52	Vampire F.1	TG377	208 AFS	7m SE of Chard, Somerset	Broke up in cloud (1)
22.4.52	Mosquito NF.36	RK973	39 Sqn	Nr.Khartoum, Sudan	Engine cut; bellylanded in desert
22.4.52	Tempest TT.5	EJ875	Sylt	Morsum, Sylt, W.Germany	Engine cut; forced landed in circuit
23.4.52	Harvard T.2B	FS762	5 FTS	8m SW of Gwelo, SR	Dived into ground during aerobatics (1)
24.4.52	Meteor F.4	VW269	203 AFS	3m E of Bridlington, Yks	Dived into sea after control lost in cloud (1)
24.4.52	Meteor T.7	WA665	205 AFS	Nr.Middleton St.George	Dived out of cloud after take-off and broke up (2)
24.4.52	Meteor NF.11	WD712	29 Sqn	Wahn, W.Germany	Ingested bird; engine caught fire. Returned safely but damaged beyond repair
24.4.52	Oxford T.1	NM801	9 AFTS	Long Marston	Bounced on landing, swung and overturned
25.4.52	Martinet TT.1	HN883	226 OCU	Stradishall	Taxied into drain hole on peritrack
25.4.52	Vampire F.1	TG375	208 AFS	2m W of Chideock, Dorset	Engine cut; bellylanded in field
25.4.52	Vampire FB.5	VZ869	185 Sqn	Hal Far, Malta	Engine lost power on approach; bellylanded
26.4.52	Chipmunk T.10	WB603	Edinburgh UAS	Turnhouse	Hit wires on approach and lost starboard wing
26.4.52	Vampire FB.5	VZ867	Wg Ldr Jever	Wunstorff, W.Germany	Undercarriage prematurely retracted on take-off; destroyed by fire
28.4.52	Harvard T.2B	FE609	HKAAF	9½m W of Kai Tak, Hong Kong	Hit sea while low flying and ditched
28.4.52	Meteor T.7	WA606	208 Sqn	Fayid, Egypt	Sideslipped into ground on approach; DBF
28.4.52	Meteor F.8	WA780	66 Sqn	Linton-on-Ouse	Undercarriage collapsed on landing
29.4.52	Meteor F.3	EE417	206 AFS	Nr.Hessle, Yks.	Rolled during aerobatics and dived into ground(1)
29.4.52	Meteor F.4	RA480	205 AFS	Lower Dinsdale, Durham	Collided with VW298 at night in Middleton St. George circuit (1)
29.4.52	Meteor F.4	VW298	205 AFS	as above	As above (1)
30.4.52	Tempest TT.5	NV960	Sylt	Sylt, W.Germany	Swung on landing and overturned
30.4.52	Vampire FB.9	WG892	6 Sqn	Egypt	Collided with WL576 and crashed (1)
30.4.52	Vampire FB.9	WL576	6 Sqn	Egypt	Collided with WG892 and pilot thrown out of aircraft
1.5.52	Auster AOP.6	VW997	664 Sqn	Yorkshire	Landed on strip with handbrake on; nosed over
1.5.52	Harvard T.2B	KF378	Kai Tak	Tin Ma Swaw, Hong Kong	Flew into hill in cloud (2)
1.5.52	Vampire FB.5	WA426	202 AFS	3m ENE of Bryngwran, Anglesey	Engine cut in spin; crashlanded in field
3.5.52	Brigand B.1	RH755	84 Sqn	40m SE of Butterworth, Malaya	Part of wing detached as rocket fired; rolled over and dived into ground (3)
4.5.52	Chipmunk T.10	WB646	11 RFS	1m SW of Bankfoot, Perthshire	Stalled during forced landing practice and crashed
4.5.52	Spitfire PR.19	PM549	19 RFS	Woodvale	Stalled on approach and dived into ground (1)
5.5.52	Meteor T.7	VZ643	607 Sqn	Cardigan Bay	Abandoned when lost of transit flight, Ouston-Llandow (1)
5.5.52	Meteor FR.9	WB119	79 Sqn	Nordhorn, W.Germany	Hit ground during air-to-ground firing (1)
5.5.52	Meteor F.8	WE929	64 Sqn	Wood St., Guildford, Surrey	Collided with USAAF F-86 during exercises and abandoned
5.5.52	Meteor T.7	WG992	206 AFS	Oakington	Undershot approach and hit windsock; swung and ran over railway lines
5.5.52	Tiger Moth T.2	EM836	1 RFS	Panshanger	Blown over on take-off
8.5.52	Brigand TF.1	RH773	ATDU	Gosport	Engine cut on take-off; undercarriage retracted to stop (0+1)
10.5.52	Chipmunk T.10	WB729	Aberdeen UAS	2m NW of Tarves, Aberdeenshire	Spun into ground (2)
11.5.52	Vampire FB.9	WL584	1 OFU	El Adem, Libya	Sank back on runway on take-off
12.5.52	Meteor F.4	VT145	215 AFS	Finningley	Sideslipped into ground on asymmetric approach

<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
12.5.52	Mosquito NF.36	RL237	38 Sqn	Nicosia, Cyprus	Swung on landing and undercarriage collapsed
12.5.52	Vampire F.1	VF309	208 AFS	10m SSW of Taunton, Somerset	Wing broke off when aircraft overstressed (1)
13.5.52	Meteor F.4	VT237	203 AFS	Driffield	Undershot landing
13.5.52	Meteor T.7	WH167	307 AFS	Fang Foss, Yorks	Flew into ground at night in Full Sutton circuit (1)
16.5.52	Auster AOP.6	TW632	651 Sqn	Sinai Desert, Egypt	Overturnd while landing on soft sand
16.5.52	Meteor T.7	WA679	RAFFC	½m NW of Strubby	Rolled over and dived into ground after assymetric overshoot (2)
16.5.52	Oxford T.1	AT670	14 FTS	1m NE of Brough, East Yorkshire	Spun into ground (1)
18.5.52	Harvard T.2B	FX483	Malayan Aux AF	5m WNW of Palautikus, Malaya	Dived into sea during aerobatics (1)
18.5.52	Prentice T.1	VS366	7 RFS	2m S of Shepshed, Leics.	Dived into ground (2)
19.5.52	Anson T.21	VV972	3 ANS	½m E of Bishops Court	Lost height after assymetric overshoot and bellylanded
20.5.52	Meteor F.4	VW274	203 AFS	Driffield	Bellylanded during night landing
20.5.52	Meteor NF.11	WD607	141 Sqn	20m off Gt.Yarmouth, Norfolk	Collided with WD613 during practice attack and abandoned (1)
20.5.52	Mosquito NF.36	RL211	39 Sqn	Myrtou, Cyprus	Both engines cut; bellylanded
21.5.52	Meteor F.4	VT176	203 AFS	1m N of Driffield	Dived into ground after night take-off (1)
21.5.52	Meteor F.8	WF745	CGS	Holbeach ranges, Lincs.	Dived into sea during attack on flag target (1)
21.5.52	Oxford T.1	HM650	14 FTS	Nr.Holme	Engine caught fire; forcedlanded on approach and overturned
21.5.52	Vampire FB.5	VV536	1 OFU	El Adem, Libya	Dive brakes failed to open on one wing; under- carriage jammed up; bellylanded
21.5.52	Vampire FB.5	VV724	229 OCU	Launcells Stratton, Cornwall	Dived into ground (1)
21.5.52	Vampire FB.5	WE830	CFS	Little Rissington	Stalled on approach and crashed
22.5.52	Lancaster MR.3	RE200	203 Sqn	Mereworth, Kent	Flare ignited; bellylanded near West Malling (4)
26.5.52	Brigand B.1	RH796	84 Sqn	Kuala Lumpur, Malaya	Engine cut; swung on landing and undercarriage collapsed
27.5.52	Vampire FB.5	VV615	4 Sqn	Jever, West Germany	Stalled on approach and crashed (1)
28.5.52	Meteor PR.10	WB158	231 OCU	Wendy, Cambs	Control lost on overshoot at Bassingbourn; hit tree and crashed (1)
28.5.52	Meteor T.7	WF854	65 Sqn	6m NW of Watton	Dived into ground out of cloud (2)
28.5.52	Vampire F.1	TG338	208 AFS	Merryfield	Stalled on approach and wing hit runway
3.6.52	Auster AOP.6	VF602	656 Sqn	Malaya	Unable to clear hill and crashlanded into trees
3.6.52	Meteor F.8	WH292	54 Sqn	Odiham	Undershot landing
4.6.52	Hornet F.3	WB882	80 Sqn	Kai Tak, Hong Kong	Throttle jammed; bellylanded on runway; DBF
4.6.52	Meteor FR.9	WB120	208 Sqn	Abu Sueir, Egypt	Stalled on landing; swung and undercarriage collapsed
4.6.52	Meteor F.8	WH399	500 Sqn	Istres, France	Undercarriage collapsed on landing
4.6.52	Oxford T.1	NM548	9 AFTS	2½m WSW of Wellesbourne Mountford	Spun into ground (1)
4.6.52	Tempest TT.5	SN329	Sylt	1½m SW of List, West Germany	Engine lost power; forcedlanded on beach
5.6.52	Auster AOP.6	VF664	1903 Flt	No data	No data
6.6.52	Meteor F.8	WK708	54 Sqn	Over Sussex	Ran out of fuel and abandoned
6.6.52	Meteor F.4	VT336	207 AFS	5m SSW of Manby	Dived into ground out of cloud (1)
6.6.52	Mosquito PR.34	RG176	540 Sqn	Benson	Undercarriage collapsed during assymetric landing
6.6.52	Vampire FB.5	WA130	71 Sqn	3m N of M-Gladbach, West Germany	Spun into ground off steep turn (1)
6.6.52	Vampire FB.5	WA225	229 OCU	Putsborough, Devon	Spun into ground after attack on target aircraft (1)
7.6.52	Meteor PR.10	WB161	13 Sqn	East Mediterranean	Missing between Fayid and Nicosia (1)
9.6.52	Meteor F.4	VT181	203 AFS	2½m N of Guisborough, Yorkshire	Ran out of fuel and bellylanded
10.6.52	Chipmunk T.10	WD396	4 FTS	3m NW of Bushtik Mine, S.Rhodesia	Hit tree low flying and cartwheeled (1)
12.6.52	Harvard T.2B	FX371	A&AEE	2m N of Amesbury, Wilts	Stalled and spun into ground (2)
12.6.52	Mosquito T.3	VT612	231 OCU	Bassingbourn	Swung on landing and undercarriage collapsed; DBF
12.6.52	Tiger Moth T.2	N6858	TCCF	Upavon	Overshot landing and overturned
12.6.52	Vampire NF.10	WM673	25 Sqn	West Malling	Collided with Oxford PH143 (Royal Navy) on approach and bellylanded
16.6.52	Hastings C.1	TG603	24/99 Sqn	Not known	Blown off runway and DBR
16.6.52	Meteor T.7	WL369	CFS	Little Rissington	Undershot landing, swung and hit control caravan; undercarriage collapsed
16.6.52	Vampire FB.5	WA148	16 Sqn	Sylt, W.Germany	Caught in jetstream of previous aircraft and hit runway; overshoot and crashlanded
17.6.52	Meteor F.4	VT344	203 AFS	4m S of Gt. Driffield, Yorkshire	Flew into ground after night take-off (1)
17.6.52	Meteor FR.9	VZ583	208 Sqn	Nr.El Firdan, Egypt	Ran into slipstream of another aircraft while recovering from loop and broke up; abandoned
18.6.52	Hornet F.4	WF955	1 OFU	Off Kalak, Iran	Undercarriage jammed and engine lost power; ditched in Persian Gulf
18.6.52	Mosquito FB.6	RS680	231 OCU	Bassingbourn	Swung on landing and undercarriage collapsed
19.6.52	Auster T.7	WE593	651 Sqn	3243E:2850N, Egypt	Swung on take-off from desert and overturned
20.6.52	Meteor F.8	WA777	12 Gp CF	6m NW of Newton, Notts.	Collided with Wellington NC925 while breaking cloud; pilot thrown out of aircraft
20.6.52	Oxford T.1	HM961	14 FTS	1m E of Holme	Collided with AT781 on approach (1)
20.6.52	Wellington T.10	NC925	2 ANS	Calveston, Notts	Hit by Meteor WA777 and abandoned
21.6.52	Meteor T.7	WA685	2 Sqn	Florennes, Belgium	Undershot landing and undercarriage torn off

Date	Type	Serial	Unit	Location	Cause
23.6.52	Mosquito NF.36	RL126	219 Sqn	Kabrit, Egypt	Overshot asymmetrical landing and undercarriage collapsed
23.6.52	Vampire F.1	TG298	208 AFS	Chudleigh, Devon	Dived into ground from high altitude (1)
24.6.52	Meteor F.3	EE414	206 AFS	Melon Green, Essex	Broke up in air (1)
24.6.52	Meteor T.7	WH229	215 AFS	Finningley	Undershot landing and hit edge of quarry
25.6.52	Mosquito T.3	HJ982	231 OCU	Bassingbourn	Undercarriage collapsed on asymmetrical landing
25.6.52	Shackleton MR.1	VP261	120 Sqn	12m off Berwick-on-Tweed	Lost height after attack on submarine and hit sea (11)
26.6.52	Beaufighter TT.10	RD855	1 CAACU	Berwickshire 3m NW of Sheerness, Kent	Hit by shells while towing target; ditched
26.6.52	Chipmunk T.10	WK571	RAF C	7m W of Boston, Lincs	Overshot forced landing and hit dyke
26.6.52	Hornet F.3	WB881	33 Sqn	Butterworth, Malaya	Swung on landing and hit drain
26.6.52	Meteor F.8	WE861	226 OCU	Nr.Ridgewell, Essex	Rolled and dived into ground during practice attack on another aircraft (1)
27.6.52	Auster AOP.6	VF567	661 Sqn	West Germany	Engine cut while overshooting field; hit fence
28.6.52	Harvard T.2B	KF627	6 FTS	Nr.Ternhill	Hit by KF959 while in line astern formation; crashlanded
30.6.52	Meteor F.3	EE465	206 AFS	Bassingbourn	Engine flamed out on approach; bellylanded
30.6.52	Meteor F.4	RA483	2 FU	Shepton Beauchamp, Somerset	Ran out of fuel and abandoned
30.6.52	Valetta C.1	VW164	114 Sqn	Khartoum, Sudan	Overshot abandoned take-off and hit hut
1.7.52	Harvard T.2B	FX416	5 FTS	1½m S of Indiva, S.Rhodesia	Dived into ground after take-off (1)
1.7.52	Tiger Moth T.2	R5241	Dyce	Dyce	Hit by T7737 while parked
1.7.52	Tiger Moth T.2	T7737	Dyce	Dyce	Swung on overshoot and hit R5241; overturned
2.7.52	Brigand TF.1	RH753	A&AEE	Bremerton Heath, Wilts.	Engine cut on take-off from Boscombe Down; lost height, hit trees and crashed into houses (2)
3.7.52	Mosquito NF.36	RL186	22 MU	Anthorn	Bellylanded after engine overspeeded
3.7.52	Valetta C.1	VX537	110 Sqn	5m E of Oya, Sarawak	Engine cut; lost height and forced landed on beach
5.7.52	Auster AOP.6	VF559	652 Sqn	West Germany	Hit trees in steep turn
8.7.52	Meteor F.4	VT190	203 AFS	Driffield	Undercarriage collapsed on landing; DBF
8.7.52	Spitfire F.16	TE384	9 MU	Cosford	Swung on landing and undercarriage collapsed
11.7.52	Vampire F.1	VF300	208 AFS	Stoke-under-Ham, Somerset	Broke up in dive (1)
11.7.52	Vampire FB.5	VV224	93 Sqn	3m W of King's Lynn, Norfolk	Collided with WA189 while attacking F-86s; lost booms and abandoned
11.7.52	Vampire NF.10	WP241	23 Sqn	Coltishall	Undercarriage retracted prematurely on take-off
12.7.52	Vampire FB.5	WA366	72 Sqn	Nr.North Weald	Collided with VV683 during formation aerobatics (1)
12.7.52	Vampire FB.5	VV683	72 Sqn	Nr.North Weald	As above (1)
13.7.52	Anson C.19	VL333	Spec CS	10m SW of Larnaca, Cyprus	Engine cut; bellylanded on shore
13.7.52	Vampire FB.5	WA343	112 Sqn	Wahn, West Germany	Caught in jetstream on take-off and crashed
14.7.52	Vampire F.3	VF265	208 AFS	Cardiff	Collided with VF297 and abandoned; crashed on hotel in Cardiff (0+1)
14.7.52	Vampire F.3	VF297	208 AFS	Llandaff, Glam.	Collided with VF265 and abandoned
14.7.52	Vampire FB.5	VV227	93 Sqn	Nr.Broekzetel, W.Germany	Spun into ground out of cloud (1)
15.7.52	Meteor F.4	RA380	203 AFS	Kings Mill, Driffield, Yorkshire	Collided with Anson VP515 in circuit and crashlanded on approach
15.7.52	Oxford T.2	RR339	8 AFTS	Dalcross	Wing hit runway on landing
16.7.52	Anson C.19	VM381	CSE	4m SE of Watton	Stalled after asymmetric overshoot (2)
16.7.52	Meteor T.7	WH130	203 AFS	1½m S of Ottringham, Yorkshire	Collided with VW275 and abandoned (1)
18.7.52	Harvard T.2B	KF704	3 FTS	1m S of Downham Market airfield, Norfolk	Stalled while recovering from dive and dived into ground (1)
19.7.52	Meteor NF.11	WD716	228 OCU	1m E of Whitby, Yorks.	Both engines cut; ditched in Saltwick Bay (2)
21.7.52	Harvard T.2B	KF338	CFS	Little Rissington	Stalled on roller take-off and DBF
21.7.52	Wellington T.10	NA868	2 ANS	Emsworth, Hants	Stalled on asymmetric overshoot and crashed (2)
22.7.52	Hornet F.4	WF968	OFU	20m E of Muharraq, Bahrein	Engine caught fire; dived into sea (1)
22.7.52	Tiger Moth T.2	DE141	141 Sqn	1m ESE of Coltishall	Flew too low over cornfield and lost speed
22.7.52	Meteor F.4	VT141	RAFFC	St.Athan	Undershot landing and undercarriage collapsed
22.7.52	Meteor F.4	VT264	215 AFS	Castle Donington	Ran out of fuel and hit tree on approach (1)
22.7.52	Meteor FR.9	WB139	79 Sqn	4m NE of Gutersloh, West Germany	Both engines failed; abandoned and crashed in wood (1)
22.7.52	Wellington T.10	PF966	6 ANS	Lichfield	Wing hit building while taxiing
23.7.52	Mosquito T.3	TV983	39 Sqn	Abu Sueir, Egypt	Swung on landing and undercarriage strained
23.7.52	Vampire FB.5	WA264	202 AFS	7m SW of Valley	Spun into sea out of cloud (1)
24.7.52	Meteor F.4	RA369	215 AFS	3m W of Donna Nook, Lincs	Dived into sea (1)
24.7.52	Meteor NF.11	WD608	141 Sqn	15m E of Happisburgh Light, Norfolk	Dived into sea while attacking towed target (2)
25.7.52	Meteor F.8	WA821	222 Sqn	Aberdeenshire	Flew into ground in bad visibility (1)
27.7.52	Vampire FB.5	WA283	112 Sqn	2m SW of Haywards Heath, Sussex	Dived into ground during practice dogfight (1)
28.7.52	Harvard T.2B	FS822	CFS	1m S of Calmsden, Glos	Collided with KF948 during instrument flying (2)
28.7.52	Harvard T.2B	KF948	CFS	As above	As above (2)
28.7.52	Meteor F.8	WK647	54 Sqn	Hook, Hants.	Rolled and dived into ground (1)
28.7.52	Oxford T.2	RR382	9 AFTS	Wellesbourne Mountford	Hit by LX431 on taxiway at night
29.7.52	Chipmunk T.10	WK519	5 BFTS	Desford	Hit by WK547 while parked
29.7.52	Chipmunk T.10	WK547	5 BFTS	Desford	Collided with WK519 on take-off
30.7.52	Prentice T.1	VS413	1 FTS	1m WNW of Paxford, Glos.	Spun into ground
30.7.52	Spitfire F.21	LA225	3 CAACU	Devon	Rolled and flew into ground on low-level attack exercise (1)

Date	Type	Serial	Unit	Location	Cause
31.7.52	Anson C.19	VP527	APS Flt	Khormaksar	Taxied over edge of seawall at night
31.7.52	Meteor F.8	WA789	226 OCU	Rayne, Essex	Collided with WE957 and abandoned
31.7.52	Oxford T.2	EB746	14 FTS	2½m SE of Holme	Flew into ground at night in circuit (1)
31.7.52	Tiger Moth T.2	T7753	Horsham	Horsham St.Faith	Hit by T5369 after landing
1.8.52	Harvard T.2B	KF322	6 FTS	4m SW of Ternhill	Smoke came from engine; hit hedge in forced landing
2.8.52	Valetta C.1	VX540	52 Sqn	Malaya	Dived into jungle during supply drop (7)
6.8.52	Meteor T.7	WF828	226 OCU	1m W of Stradishall	Control lost on assymetric overshoot; flew into ground (2)
6.8.52	Vampire F.1	TG305	208 AFS	Nr.Steep Holme, Bristol Channel	Flew into sea during practice tail chase (1)
7.8.52	Meteor F.8	WE947	1 Sqn	Nr. Horndean, Hants	Flew into ground out of cloud (1)
7.8.52	Meteor T.7	WF789	16 Sqn	Billerbeck, W.Germany	Ran out of fuel and abandoned
7.8.52	Meteor T.7	WF793	228 OCU	2m N of Leyburn, Yorks.	Flew into high ground in cloud during GCA letdown (2)
7.8.52	Mosquito B.35	TH983	139 Sqn	Wunstorf, W.Germany	Overshot abandoned take-off across road
11.8.52	Anson C.19	VM407	23 MU	Snowdon	Flew into mountain in cloud (3)
11.8.52	Meteor F.4	RA376	215 AFS	Firbeck, Yorks.	Dived into ground out of cloud (1)
12.8.52	Mosquito NF.36	RL234	39 Sqn	Kabrit, Egypt	Overshot night landing and undercarriage raised to stop
13.8.52	Auster AOP.6	VF561	1903 Flt	No data	No data
13.8.52	Meteor F.3	EE491	206 AFS	Nr.Oakington	Dived into ground at night (1)
13.8.52	Prentice T.1	VS750	3 FTS	Nr.Feltwell	Spun into ground (1)
13.8.52	Vampire FB.5	WA418	202 AFS	Valley	Lost height on approach; hit ground and broke up
14.8.52	Balliol T.2	VR596	CFE	1½m E of Castle Rising, Norfolk	Engine cut; crashed in forced landing (1)
14.8.52	Meteor F.8	WK657	92 Sqn	Dogdykes, Lincs.	Hit ground during aerobatics near Coningsby (1)
15.8.52	Harvard T.2B	FT336	3 FTS	Feltwell	Collided with KF372 during formation aerobatics (1)
16.8.52	Vampire FB.5	WA355	14 FTS	Fassberg, W.Germany	Hit trees on approach in bad weather; undercarriage jammed; bellylanded
17.8.52	Vampire NF.10	WM663	151 Sqn	30-40m NE of Leuchars	Flew into sea during practice low level interception at night (2)
19.8.52	Harvard T.2B	FS844	5 FTS	Thornhill, S.Rhodesia	Hit by FT250 after landing
19.8.52	Meteor F.8	WA894	263 Sqn	Debenham, Suffolk	Collided with WA779 in cloud and abandoned
19.8.52	Meteor NF.11	WD714	228 OCU	3m NE of Stanhope, Co.Durham	Collided during night interception; abandoned
19.8.52	Meteor NF.11	WD772	228 OCU	As above	Collided with above (2)
19.8.52	Oxford T.2	V4192	8 AFTS	In Moray Firth	Ditched (1)
19.8.52	Vampire FB.5	VV533	67 Sqn	Tangmere	Yawed on take-off and crashlanded in ditch
19.8.52	Valetta C.1	VX559	30 Sqn	2m N of Benson	Flew into ground after night take-off (3)
20.8.52	Brigand B.1	RH793	8 Sqn	Khormaksar, Aden	Undercarriage jammed; crashlanded
20.8.52	Canberra B.2	WE116	231 OCU	Nr. N.Thirfield, Herts	Flew into ground returning from night navex (3)
20.8.52	Harvard T.2B	FS742	6 FTS	Mickley, Salop	Hit ground after take-off from Ternhill (1)
20.8.52	Meteor F.4	RA429	205 AFS	Nr.Darlington, Co.Durham	Dived into ground out of cloud (1)
20.8.52	Meteor T.7	WA691	CFS	¾m S of Little Rissington	Engine cut on approach; hit wall
20.8.52	Vampire FB.5	VV541	4 Sqn	3m SW of Jever, West Germany	Collided with VX988 during formation change and crashed (1)
20.8.52	Vampire FB.5	VX988	4 Sqn	As above	Collided as above (1)
20.8.52	Wellington T.10	PG136	2 ANS	Thorney Island	Undercarriage retracted after landing
21.8.52	Meteor F.8	VZ547	74 Sqn	Horsham St.Faith	Overshot abandoned take-off
21.8.52	Vampire FB.5	VZ189	229 OCU	Chivenor	Flew into ground on approach (1)
22.8.52	Vampire FB.9	WL556	60 Sqn	Tengah, Singapore	Hit ground on approach and broke up (1)
23.8.52	Vampire FB.5	WA367	98 Sqn	1½m S of Westerland, Sylt, West Germany	Shot away target flag which wrapped around jet intake; forcelanded
25.8.52	Auster AOP.6	TW532	1912 Flt	W.Germany	Swung on take-off from field and undercarriage collapsed
25.8.52	Hornet F.3	WB903	80 Sqn	5m ENE of Waglan Is., Hong Kong	Collided with WF958 in formation and dived into sea (1)
25.8.52	Hornet F.4	WF958	80 Sqn	As above	Collided as above (1)
26.8.52	Prentice T.1	VS394	CFS	Fairford, Glos.	Collided with VS293 in formation and abandoned
28.8.52	Hornet F.3	WB912	45 Sqn	6m E of Seremban, Malaya	Stalled recovering from firing dive and hit trees (1)
28.8.52	Tiger Moth T.2	T5828	Honiley	Honiley	Swung on take-off and hit obstruction; DBF
28.8.52	Vampire F.1	VF313	208 AFS	2½m SSW of Gt.Torrington, Devon	Dived into ground out of cloud (1)
28.8.52	Vampire FB.5	WG827	202 AFS	Valley	Overshot landing
29.8.52	Prentice T.1	VS632	1 FTS	2½m W of Broadway,Worcs	Lost height and hit trees
30.8.52	Chipmunk T.10	WK579	Manchester UAS	North Weald	Hit by Tiger Moth T7265 while parked
30.8.52	Tiger Moth T.2	T7265	N.Weald	North Weald	Swung on take-off and hit Chipmunk WK579
31.8.52	Auster T.7	VX929	656 Sqn	Selangor, Malaya	Engine cut; crashed in forced landing
31.8.52	Tiger Moth T.2	NL702	8 RFS	Nr.Woodley, Berks	Dived into ground on overshoot
1.9.52	Chipmunk T.10	WB576	2 RFS	Barton	Undershot approach and hit boundary post
1.9.52	Meteor NF.11	WD755	228 OCU	Leeming	Overshot abandoned take-off; DBF
1.9.52	Vampire FB.5	WA150	202 AFS	Valley	Sank back on to runway on overshoot
2.9.52	Mosquito T.3	RR270	80 Sqn	Kai Tak, Hong Kong	Undercarriage retracted in error after landing
3.9.52	Harvard T.2B	FX282	Malaya AAF	Tiger Lane, nr. Ipoh, Malaya	Stalled on approach and dived into ground (1)
3.9.52	Lincoln B.2	RF343	61 Sqn	¾m W of Waddington	Crashed on three-engined overshoot; DBF
4.9.52	Brigand B.1	RH777	8 Sqn	Khormaksar, Aden	Bounced on landing, swung and undercarriage collapsed

<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
8.9.52	Meteor T.7	WA621	226 OTU	Stradishall	Undercarriage leg jammed up; crashlanded
8.9.52	Vampire FB.5	VX982	608 Sqn	Takali, Malta	Caught in jetstream and bounced off runway on take-off; undercarriage jammed; bellylanded
9.9.52	Meteor F.4	EE401	206 AFS	Swavesey, Cambs	Collided with VZ405 and lost tail; abandoned
9.9.52	Meteor F.4	VZ405	206 AFS	As above	Collided as above and abandoned
9.9.52	Meteor F.8	VZ542	SF Tangmere	Nr. Tangmere	Flew into ground during aerobatic practice (1)
9.9.52	Meteor F.8	WA822	66 Sqn	Nr.Coxwold, Yorks	Dived into ground out of cloud (1)
9.9.52	Meteor F.8	WH294	226 OCU	50m S of Bridport, Dorset	Ran out of fuel and ditched in English Channel
9.9.52	Vampire FB.9	WL567	6 Sqn	Markab ranges, Iraq	Hit ground during firing dive (1)
10.9.52	Prentice T.1	VR234	7 FTS	Cottesmore	Bounced on landing and stalled
10.9.52	Spitfire PR.19	PM576	81 Sqn	Seletar, Singapore	Engine cut on approach; ditched
11.9.52	Vampire FB.5	VV458	5 Sqn	2½m NE of Hildesheim, West Germany	Hit ground during tail chase (1)
12.9.52	Anson T.21	VV987	CNCS	The Wrekin, Salop	Flew into high ground in cloud (1)
12.9.52	Harvard T.2B	FS914	1 FTS	Moreton-in-Marsh	Hit by KF397 on runway
12.9.52	Vampire FB.5	VV526	608 Sqn	El Aouina, Tunisia	Stalled after take-off and dived into ground (1)
15.9.52	Anson T.22	VS598	RAFTC	3m S of Debden	Collided with VS603 during formation practice for display and crashed (1)
15.9.52	Anson T.22	VS603	RAFTC	As above	As above (1)
15.9.52	Tiger Moth T.2	T7396	Binbrook	1m NNE of Wragby, Lincs	Overshot forced landing and overturned
16.9.52	Hastings C.1	WD492	Topcliffe	Greenland	Flew into icecap during supply drop
16.9.52	Meteor F.4	VT127	203 AFS	Carnaby	Mushed into ground out of cloud during aerobatic practice (1+1)
16.9.52	Sycamore HR.12	WV782	ASWDU	St.Austell,Cornwall	Lost power and crashed in speedway car park during Battle of Britain demonstration (1+1)
17.9.52	Meteor T.7	WF883	1 OFU	Bassein, Burma	Ran out of fuel after radio failed; bellylanded
17.9.52	Meteor T.7	WL454	20 MU	Cranham, Glos.	Flew into ground in cloud and rain (2)
18.9.52	Chipmunk T.10	WD307	12 RFS	Coaley, Glos.	During instrument flying, both pilots thought other in control; aircraft hit ground
18.9.52	Meteor F.8	WH276	616 Sqn	Finningley	Overshot landing at dusk
19.9.52	Meteor F.4	VW294	215 AFS	Finningley	Undershot landing and undercarriage collapsed
20.9.52	Anson C.19	VP530	E.Africa CF	Eastleigh, Kenya	Hit obstruction avoiding Vampires while landing with both engines feathered; DBF
21.9.52	Meteor NF.11	WD666	87 Sqn	Fassberg, W.Germany	Canopy misted up; flew into ground on overshoot
21.9.52	Meteor NF.11	WD685	87 Sqn	3½m E of Fassberg	Canopy misted up; flew into ground on approach
22.9.52	Proctor C.4	NP332	1 Gp CF	Waddington	Swung on landing and undercarriage collapsed
24.9.52	Meteor T.7	WL409	266 Sqn	Stadtdoldendorf, West Germany	Flew into hill in cloud after radio failed (2)
25.9.52	Harvard T.2B	EX358	4 FTS	2010S:2924E, S. Rhodesia	Dived into ground during electrical storm (1)
25.9.52	Harvard T.2B	KF482	5 FTS	Nr.Thornhill, S.Rhodesia	Hit trees on hill after overshoot (2)
25.9.52	Harvard T.2B	KF498	5 FTS	1953S:3015E Southern Rhodesia	Crashed during night navex (1)
25.9.52	Vampire F.3	VF279	208 AFS	4½m NE of Merryfield	Flew into ground out of cloud (1)
25.9.52	Vampire FB.5	VZ813	229 OCU	Nr.Two Bridges, Devon	Dived into ground during practice dogfight (1)
26.9.52	Dragonfly HR.2	WZ749	Casevac Flt	Negri Sembilan, Malaya	Rolled over while landing in jungle clearing
26.9.52	Harvard T.2B	KF922	7 FTS	3m NE of Cottesmore	Engine cut; crashed in forced landing
26.9.52	Meteor F.4	EE528	205 AFS	3m off Seaham, Durham	Spiralled into sea during aerobatic practice (1)
26.9.52	Mosquito NF.36	RL189	199 Sqn	Nr.Hemswell	Engine cut on take-off; hit tree (2)
28.9.52	Valetta C.1	VX507	114 Sqn	Tabora, Tanganyika	Lost wheel on landing and undercarriage collapsed
29.9.52	Meteor F.8	WH472	263 Sqn	9m S of Middleton St.George	Flew into hill in cloud after take-off (1)
29.9.52	Spitfire F.24	PK683	Singapore Ftr Sqn	Tengah, Singapore	Hit by PK681 while taxiing
3.10.52	Mosquito FB.6	TA369	231 OCU	Bassingbourn	Swung on landing and undercarriage collapsed
3.10.52	Vampire FB.5	VZ834	4 Sqn	Jever, W.Germany	Ran out of fuel and overshoot emergency landing (1)
8.10.52	Oxford T.1	PH419	8 AFTS	Dalcross	Stalled on landing and undercarriage collapsed
8.10.52	Shackleton MR.1	VP286	236 OCU	Off Tarbat Ness, Cromarty	Flew into sea; cause unknown (14)
9.10.52	Meteor T.7	WH217	CFS	Enstone	Stalled during night landing and undercarriage collapsed; swung and hit building
10.10.52	Meteor NF.11	WD648	CFE	1½m SW of West Raynham	Sank into ground after night take-off
10.10.52	Oxford T.2	BG630	GCA Sqn	Wyton	Brakes failed while taxiing; hit trees
11.10.52	Proctor C.4	NP234	64 Gp CF	Newton	Hit ground marker on landing
11.10.52	Vampire FB.5	VV698	229 OCU	On beach north of Burnham-on-Sea, Som.	Engine blew up; forced landed on beach
12.10.52	Auster AOP.6	WJ361	Lt A/c Sch	6½m S of Middle Wallop	Engine failed to pick up after practice forced landing; hit hedge
13.10.52	Brigand B.1	RH792	8 Sqn	Khormaksar, Aden	Swung on landing and undercarriage collapsed
13.10.52	Wellington T.10	RP387	6 ANS	Nr.Lichfield	Flew into ground at night in circuit (1)
14.10.52	Anson C.12	PH708	2TAF CS	Wildeshausen, W.Germany	Radio failed at night in bad weather; hit house during forced landing (1)
15.10.52	Harvard T.2B	EX359	4 FTS	Bushtik, S.Rhodesia	Collided with EX700 and lost tail; abandoned
15.10.52	Wellington T.10	RP319	1 ANS	Hullavington	Swung off runway during instrument take-off in fog and hit hangar (4)
17.10.52	Harvard T.2B	FX388	7 FTS	Nr.Folkingham, Lincs.	Collided with KF688 in formation and abandoned
17.10.52	Harvard T.2B	KF138	3 FTS	12m N of Kings Lynn, Norfolk	Hit sandbar during roll and crashed in sea (2)
17.10.52	Harvard T.2B	KF688	7 FTS	Folkingham, Lincs.	Collided with FX388 and abandoned
17.10.52	Meteor F.8	WK749	72 Sqn	1m E of Witham, Essex	Collided with WK749 during practice interception (1)
17.10.52	Meteor F.8	WK690	72 Sqn	As above	As above (1)
21.10.52	Oxford T.1	PH173	1689 Flt	7m ENE of Ludlow, Salop	Prop blade detached and hit nose; abandoned (1)

<i>Date</i>	<i>Type</i>	<i>Serial</i>	<i>Unit</i>	<i>Location</i>	<i>Cause</i>
22.10.52	Meteor F.4	VT224	215 AFS	Finningley	Lost height on approach and cartwheeled (1)
22.10.52	Meteor F.8	VZ563	63 Sqn	Westley Waterless, Suffolk	Flew into ground while descending in cloud (1)
22.10.52	Meteor F.8	VZ461	43 Sqn	Off Amble, Northumberland	Artificial horizon failed; dived into sea out of cloud (1)
22.10.52	Wellington T.10	MF627	6 ANS	Rod Hill, Ughill, Derbyshire	Flew into high ground during let down
23.10.52	Chipmunk T.10	WK510	5 BFTS	4m SW of Loughborough, Leics.	Hit tree during practice forced landing (1)
24.10.52	Auster AOP.6	VF616	656 Sqn	Port Dickson, Malaya	Swung on overshoot and hit building
24.10.52	Vampire FB.9	WL613	213 Sqn	Deversoir, Egypt	Ammunition exploded during firing practice and destroyed hydraulic system; bellylanded
27.10.52	Meteor F.4	VW268	205 AFS	3m N of Hawnby, Yorks.	Dived into ground at night (1)
28.10.52	Harvard T.2B	FS773	6 FTS	4m W of Ternhill	Engine cut; bellylanded in field
30.10.52	Vampire FB.5	VV225	16 Sqn	Buckeburg, W.Germany	Engine cut; bellylanded
31.10.52	Vampire FB.5	WA216	CFS	Little Rissington	Brakes failed on landing; undercarriage raised to stop
4.11.52	Harvard T.2B	FT321	7 FTS	2m NE of Cottesmore	Engine cut in circuit; forced landed
4.11.52	Meteor F.8	WF687	226 OCU	Stradishall	Collided with WH362 over Norwich and bellylanded on return to base
4.11.52	Meteor F.8	WH362	226 OCU	Thorpe Road Station, Norwich, Norfolk	Collided with WF687 and lost wing (1)
4.11.52	Varsity T.1	WF324	201 AFS	Wigsley	Outer wing broke off after heavy landing
5.11.52	Vampire FB.5	VV232	266 Sqn	3½m E of Fassberg, West Germany	Stalled recovering from air-to-ground firing dive and hit ground (1)
6.11.52	Meteor F.4	VT245	205 AFS	Topcliffe	Ran out of fuel and bellylanded
6.11.52	Meteor T.7	WF875	208 Sqn	3m N of Abu Sueir, Egypt	Both engines cut; bellylanded
6.11.52	Tempest TT.5	SN871	Sylt	Sylt, West Germany	Engine cut on take-off; overshoot and overturned
7.11.52	Meteor T.7	WF823	504 Sqn	8m ENE of Cottesmore	Canopy detached but jammed; spun into ground (2)
7.11.52	Meteor T.7	WL433	209 AFS	2m ESE of Baltonsbury, Somerset	Dived into ground during assymetric training (2)
7.11.52	Mosquito PR.34	RG265	81 Sqn	Nr.Seletar, Singapore	Undershot single-engined approach and ditched
7.11.52	Vampire FB.5	WG798	202 AFS	Pembrey	Ran out of fuel; overshoot landing into wood
8.11.52	Oxford T.1	LB474	10 AFTS	Pershore	Swung on landing and undercarriage collapsed
10.11.52	Canberra B.2	WD994	12 Sqn	Sixhills Church, Lincs.	Flew into hill after abandoning GCA approach to Binbrook (3)
12.11.52	Dakota C.4	KN438	82 Sqn	Nr.Merowe, Sudan	Engine cut; bellylanded on disused airstrip
13.11.52	Chipmunk T.10	WD392	4 FTS	8m SW of Bushtick, S.Rhodesia	Engine cut; crashed in forced landing
13.11.52	Vampire FB.9	WG881	60 Sqn	14m NNE of Kota Tinggi, Malaya	Collided with WG882 during practice interception (1)
13.11.52	Vampire FB.9	WG882	60 Sqn	As above	As above; abandoned
13.11.52	Wellington T.10	RP328	6 ANS	Nr.Lichfield	Flew into ground in circuit at night
17.11.52	Anson C.19	TX197	FTC CF	1m NE of Woodley	Lost power on take-off; stalled and dived into ground (3)
17.11.52	Meteor NF.11	WD723	228 OCU	1m E of Roker, Durham	Seen in shallow dive trailing smoke; blew up 500 yards offshore (2)
17.11.52	Meteor F.8	WE914	245 Sqn	Horsham St.Faith	Stalled on assymetric approach (1)
18.11.45	Mosquito T.35	TJ135	236 OCU	Kinloss	Swung on landing and undercarriage collapsed
19.11.52	Meteor T.7	WL372	203 AFS	1m SW of Driffield	Stalled on approach
19.11.52	Vampire FB.5	VV547	202 AFS	Not known	Missing on aerobatic exercise (1)
20.11.52	Vampire FB.5	VV481	145 Sqn	Nr.Dreilingen, W.Germany	Engine cut in bad weather; abandoned
21.11.52	Anson C.19	VM327	31 Sqn	1½m S of Luton airfield	Engine cut after take-off; lost height and hit trees; DBF (3)
21.11.52	Meteor F.4	VT341	215 AFS	1½m N of Middleton, Lancs	Ran out of fuel and crashed in forced landing
21.11.52	Meteor F.4	VZ428	215 AFS	Off Faxfleet, Yorks	Flew into mudflats in Humber (1)
24.11.52	Vampire FB.5	VZ863	202 AFS	1m N of Mona, Anglesey	Abandoned in spin
24.11.52	Vampire FB.9	WR174	78 Wg RAAF	Believed Malta	No data
25.11.52	Meteor T.7	WG944	206 AFS	Oakington	Stalled and dived into ground on approach (1)
25.11.52	Tiger Moth T.2	T7046	2 GU	Kirton-in-Lindsey	Damaged in heavy landing
25.11.52	Valetta C.1	VW203	30 Sqn	1½m W of Boscombe Down	Collided with Venom WE258 and crashed
25.11.52	Venom FB.1	WE258	A&AEE	2m W of Boscombe Down	Collided with Valetta VW203 and crashed (1)
26.11.52	Harvard T.2B	EX696	4 FTS	8m NE of Bulawayo, S.Rhodesia	Engine cut on overshoot; bellylanded in field
26.11.52	Proctor C.4	NP169	Mauripur	Mauripur, Pakistan	Bounced on landing; main spar fractured
30.11.52	Tiger Moth T.2	R5123	25 RFS	Nr.Stafford	Hit tree low flying
1.12.52	Vampire FB.5	WG802	202 AFS	Valley	Brakes failed on landing; swung and hit building
1.12.52	Vampire FB.9	WL512	28 Sqn	3m S of Waglan Island, Hong Kong	Ran into jetstream and crashed in sea during practice attack on HMS Opossum (1)
2.12.52	Lancaster PR.1	RA803	82 Sqn	Benson	Flew into ground on approach in bad visibility (4)
2.12.52	Meteor F.4	VT306	206 AFS	Oakington	Hit railway embankment on overshoot after control column jammed
2.12.52	Meteor NF.11	WD761	228 OCU	3m SE of Boroughbridge, Yorkshire	Both engines cut at night; abandoned
2.12.52	Oxford T.1	PK294	8 AFTS	Morar Forest, Rosshire	Hit trees low flying (2)
2.12.52	Wellington T.10	LN376	1 ANS	2m S of Tangmere	Crashed while overshooting Thorney Island (1)
3.12.52	Vampire FB.5	WA387	185 Sqn	Baghdad West, Iraq	Engine cut; bellylanded
4.12.52	Auster AOP.6	TW525	1903 Flt	Korea	Engine cut; crashed in forced landing
4.12.52	Meteor T.7	WL402	211 AFS	3m N of Retford, Nottinghamshire	Dived into ground during assymetric training (2)

Date	Type	Serial	Unit	Location	Cause
4.12.52	Spitfire F.21	LA253	CFS	Llandow	Prop hit ground on take-off; overturned
5.12.52	Auster AOP.6	VF619	656 Sqn	Nr.Kluang, Malaya	Engine cut; overturned in forced landing
5.12.52	Vampire FB.9	WR130	249 Sqn	Deversoir, Egypt	Hydraulics failed; overshot flapless landing
6.12.52	Brigand B.1	VS856	8 Sqn	Kamaran Island, Red Sea	Engine cut; undercarriage collapsed on landing
9.12.52	Canberra B.2	WD964	617 Sqn	Nr. Tealby, Lincs.	Tail actuator failed; dived into ground and blew up (3)
9.12.52	Meteor NF.11	WD757	228 OCU	Linton-on-Ouse	Bellylanded in bad visibility at night
10.12.52	Harvard T.2B	FX306	6 FTS	Foolow, Derbyshire	Engine cut; hit wall in forced landing
10.12.52	Tempest TT.5	NV965	233 OCU	Templeton, Pembroke	Engine lost power; stalled on approach to disused airfield
11.12.52	Meteor F.8	WH455	616 Sqn	23m NNE of Whitby, Yorkshire	Collided with WH473 during night interception (1)
11.12.52	Meteor F.8	WH473	616 Sqn	As above	As above (1)
11.12.52	Oxford T.2	LW865	9 AFTS	Wellesbourne Mountford	Taxied into EB805 at night
12.12.52	Harvard T.2B	FT271	1 FTS	Nr.East Noyle, Wilts.	Flew into ground at night (1)
12.12.52	Meteor T.7	WF774	66 Sqn	Linton-on-Ouse	Rolled and dived into ground after take-off (2)
12.12.52	Meteor T.7	WH234	205 AFS	1m E of High Worsall, Yorkshire	Lost height after night take-off; cartwheeled and blew up (1)
12.12.52	Meteor F.8	WH425	CGS	Leconfield	Stalled on landing and undercarriage torn off; overshot and bellylanded
14.12.52	Chipmunk T.10	WG325	22 RFS	6m NNE of Cambridge	Hit birds and tree during forced landing practice
14.12.52	Washington B.1	WF570	WCU	5m ENE of Marham	Flew into ground on let-down (4)
15.12.52	Anson T.21	WD418	2 BANS	1m NW of Usworth	Engine cut after take-off; forced landed in field
18.12.52	Meteor F.4	VT218	206 AFS	5m S of Boston, Lincs.	Collided with WG978 and lost tail; abandoned
18.12.52	Meteor FR.9	VW365	2 Sqn	Gutersloh, W.Germany	Rolled and dived into ground in circuit (1)
18.12.52	Meteor F.8	WG978	206 AFS	5m S of Boston, Lincs.	Collided with VT218 and crashed (1)
18.12.52	Meteor F.8	WH424	247 Sqn	Odiham	Collided with WH442; returned but DBR
18.12.52	Meteor F.8	WH442	247 Sqn	¼m W of Alpheton, Suffolk	Collided with WH424 and spun into ground; unsuccessful ejection by pilot (1)
18.12.52	Vampire NF.10	WM669	25 Sqn	6m SE of Dungeness	Flew into sea during night interception (2)
19.12.52	Canberra B.2	WF888	231 OCU	Steeple Morden, Herts.	Engines cut after take-off from Bassingbourn; dived into ground (3)
19.12.52	Lincoln B.2	RF453	7 Sqn	Nr.Upwood	Engine caught fire on take-off; second engine feathered in error; aircraft crashlanded
19.12.52	Sabre F.1	XB534	1 OFU	3m SE of Prestwick	Dived into ground during let-down after ferry flight (1)
20.12.52	Brigand B.1	RH823	84 Sqn	8m S of Kota Tinggi, Malaya	Starboard outer mainplane broke off; dived into ground (3)
20.12.52	Chipmunk T.10	WD320	19 RFS	Great Altcar, Lancs.	Engine cut; overturned in forced landing
22.12.52	Meteor PR.10	WB173	541 Sqn	Gutersloh, West Germany	Wheels selected up in error during roller take-off
22.12.52	Meteor F.8	WK651	54 Sqn	1m SSE of Odiham	Undershot landing; flew into wood during attempted overshoot
23.12.52	Lincoln B.2	RE424	61 Sqn	Nr.Waddington	Hit tree during BABS approach and crashed; DBF
24.12.52	Auster AOP.6	VF556	656 Sqn	Seremban, Malaya	Caught in downdraught on take-off and crash-landed off end of runway
24.12.52	Harvard T.2B	EX532	4 FTS	4m E of Bushtik, S.Rhodesia	Abandoned in spin
30.12.52	Lancaster GR.3	SW344	37 Sqn	Luqa, Malta	Engine caught fire on take-off; crashed in Luqa village (3+1)
30.12.52	Vampire FB.5	WA131	20 Sqn	Oldenburg, W.Germany	Undercarriage jammed; bellylanded
31.12.52	Meteor T.7	WF852	CFS	Little Rissington	Spun into ground out of cloud (1)
31.12.52	Oxford T.1	MP287	9 AFTS	Nr.Temple Guiting, Glos.	Flew into ground; possibly iced up (1)
31.12.52	Oxford T.1	HM733	10 AFTS	Long Marston	Undercarriage collapsed on landing
31.12.52	Vampire FB.5	WA390	118 Sqn	2m N of Steinhuder Meer, W.Germany	Engine cut; forced landed in field

* * * * *

The aircraft listed above, totalling 505, were written-off during 1952 and consisted of 18 Ansons, 1 Athena, 22 Austers, 1 Balliol, 1 Beaufighter, 9 Brigands, 1 Buckmaster, 6 Canberras, 15 Chipmunks, 1 Dakota, 1 Dragonfly, 1 Halifax, 37 Harvards, 3 Hastings, 10 Hornets, 6 Lancasters, 6 Lincolns, 1 Martinet, 150 Meteors, 32 Mosquitos, 21 Oxfords, 9 Prentices, 5 Proctors, 1 Sabre, 2 Shackletons, 7 Spitfires, 1 Sunderland, 1 Sycamore, 5 Tempests, 20 Tiger Moths, 11 Valettas, 82 Vampires, 2 Varsities, 1 Venom, 1 Washington and 15 Wellingtons.

One of the Vampires was with the RAAF at the time of its demise and in a few cases, the accident reports are missing. The Hastings reports are, as in previous years, entirely absent from the records.

Casualties in these accidents totalled 315 killed plus six more killed on the ground. The accident to Meteor WB161 on 7 June claimed the life of probably the highest-ranked pilot lost to the RAF in the person of AVM D.F.W. Atcherley. All 25 aboard the two Shackletons lost were killed, the largest casualty list being 14 from one of these aircraft.

The high casualty figures from accidents to fighters resulted in enquiries from Winston Churchill, then Prime Minister. From these he had calculated that a fighter pilot's chances of being killed over an eighteen-month period were one in sixteen and wanted to know what was being done about it. He was assured by the service Minister that the figures were not abnormal and that there was no cause for alarm (presumably in Ministerial circles at least).

The actual breakdown for the three fighter types was:

Meteor: 94 killed in 150 write-offs, 38 being from squadrons. The losses consisted of 41 T.7s (12 belonging to squadrons), 52 single-seaters and 7 night fighters from training and ferry units and 50 from operational units.

Vampire: 40 killed in 82 accidents: 46 with operational units plus three night fighters and 33 with training units.

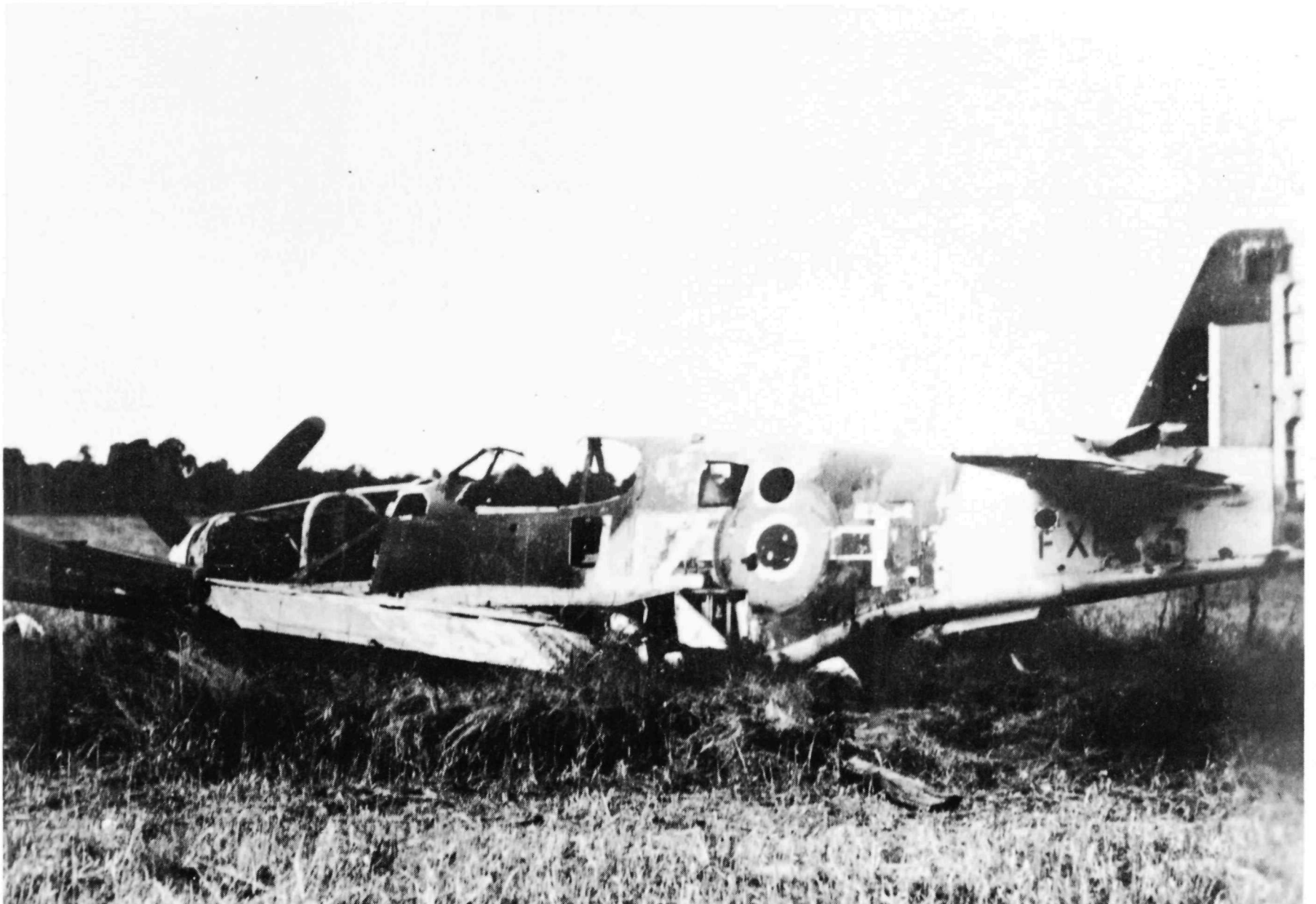
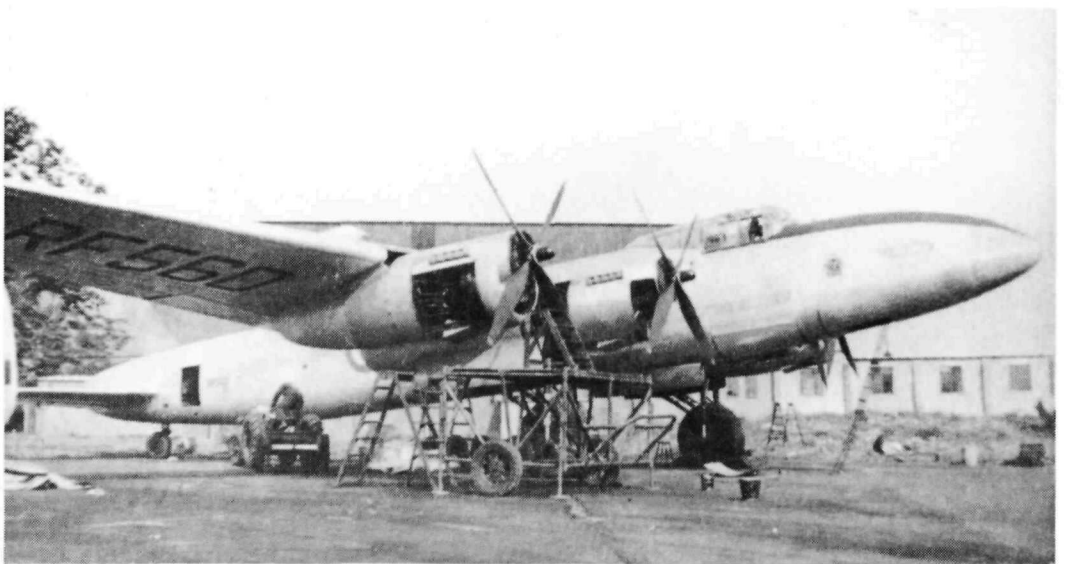
Hornets: 7 killed in ten accidents, all but one being with squadrons.

In AM.2/82 we surveyed the Lincoln and in the tables were listed RF560 and RF561 belonging to, respectively, the Aeroplane & Armament Experimental Establishment and the Telecommunications Research Establishment. Armament was removed and 'Lancastrian' fairings were fitted in nose and tail. Unlike the 'Aries' Lincolns of the Empire Air Navigation School, these Lincolns had more ungainly fairings, especially RF560.

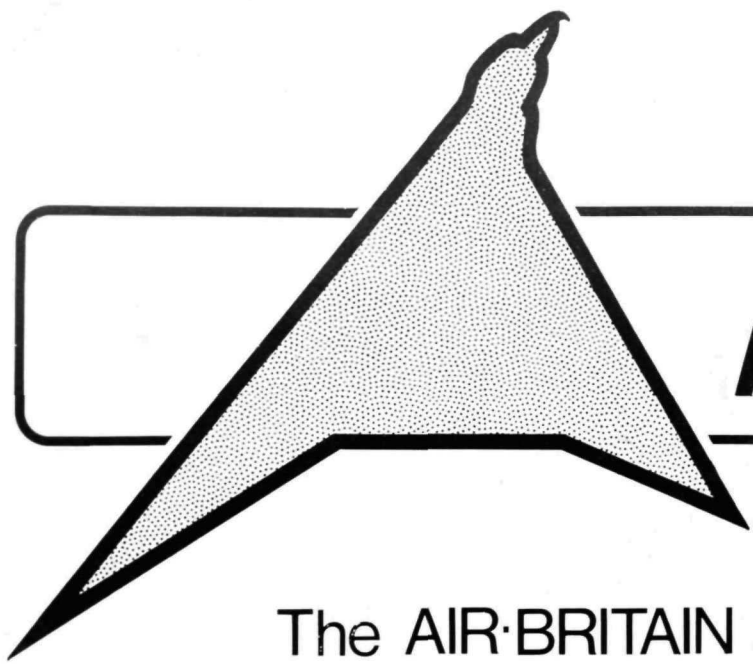
Both photographs were kindly supplied by the Royal Air Force Museum and are referenced P.13029 (RF561 above) and P.13025 (RF560 below).

In AM.1/82 we covered the Mustang III in RAF service. The bottom photograph has come into our hands by an unknown route and we would like to hear from the donor.

The aircraft would appear to be FX873 of No.306 Squadron which became involved in a battle with German fighters near Dreux on 24 June 1944 and failed to return to base. The code letters 'UZ-T' are visible and the serial FX8-3 and as FX873 is the only serial which fits a 306 Squadron Mustang III, we have put two and two together. Any other suggestions would be unwelcome. The aircraft shows signs of major gunfire damage and several panels and the canopy are missing. Possibly the work of German souvenir hunters who had not yet appreciated their situation?







AEROMILITARIA

The AIR-BRITAIN Military Aviation Historical Quarterly



No 2
1983



AEROMILITARIA

The AIR-BRITAIN Military Aviation Historical Quarterly

Edited by James J. Halley and Peter M. Corbell
 Editorial address: 5 Walnut Tree Road
 Shepperton, Middlesex TW17 ORW

After a lengthy period of gestation, a further volume in the Air-Britain series of Royal Air Force Aircraft registers is now available. As the numbers of cancelled and naval aircraft increased, many serial batches were not used for RAF aircraft so we decided to combine the V and W-series in a single volume. This comes out thicker than the earlier volumes and runs to 97 pages.

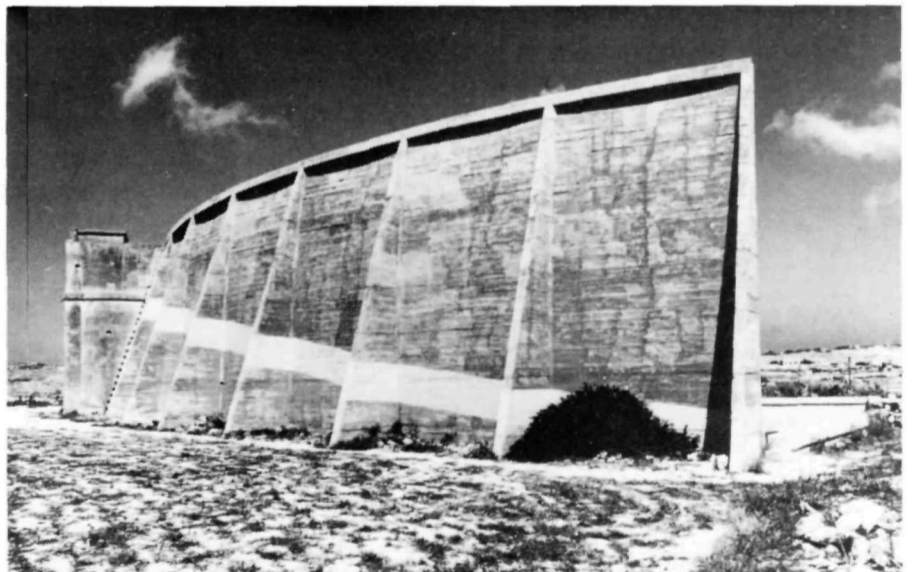
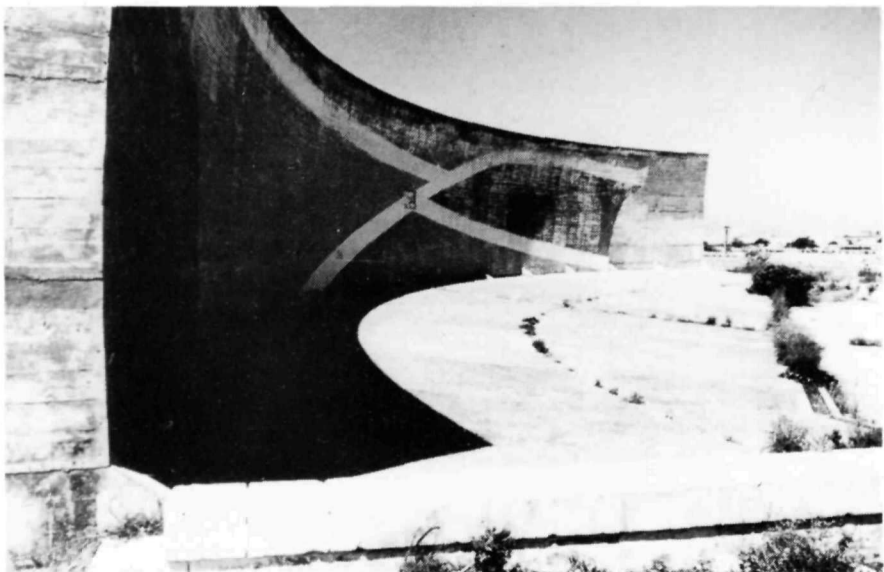
The format remains the same as used in the earlier registers and in AM. The cost is £4.00 to members post free (£6.00 to non-members if you know any) and copies can be obtained from the Sales Dept at Stone Cottage, Great Sampford, Saffron Walden, Essex, CB10 2RS.

Another smaller monograph will also become available in June. This is 'The Washington File' compiled by Michael Fopp, our Meteor specialist (sic) and is a review of the service of the B-29A with the Royal Air Force with many nice photographs of this rather neglected, if short-lived, aircraft in RAF markings. The price is £2.00 post free (£3.00 to non-members) from the Sales Dept.

The photographs below show that one of the now-famous acoustic mirrors is still alive and well and living in Malta. It is on the western side of St. Paul's Bay facing towards Sicily and still seems to be waiting for the SM-81s so that No. 74 Squadron's Demons can scramble from Hal Far in time. Intending visitors should have narrow cars or good walking boots (or a helicopter).

In case any reader is still unaware of what we are talking about, the full story of the mirrors and bowls which were to form the first line of defence against enemy air attacks on Britain is told in 'Kent's Listening Ears', an Aeromilitaria Special which is available from the Sales Dept at £1.50 post free.

This has been received with appreciative noises from a variety of directions, most of them expressing the view that this is an ideal example of proving that military aviation does not end, or begin, with aircraft and serial numbers alone.



ABINGDON HISTORY

Recently produced is a useful little history of RAF Abingdon from its Gordon days in 1932 to the present day when it is an engineering base for Jaguars, Hawks and other aircraft. It runs to 64 pages and is well-illustrated.

Copies are available from Sqn Ldr C.W. Callister, Royal Air Force, Abingdon, Oxon, OX13 6JB price £1.25 post free.

LOST TRACK

Would the person who discussed US Navy aircraft with the editor at the 1982 Annual General Meeting please get in touch. We seem to be minus his name and address!

Also seeking identities is Robert Poynton of Aero Yondee in Australia. He has acquired four ex-Iraqi Hawker Furies (the one-wingers unfortunately) and is seeking information on these aircraft. On the photograph below are Nos. 233, 232, 231 and, probably, 261 which is obscured. He would like to know the location and date of this photo and any details of who the ferry pilots in the foreground were. Any ideas to JJH please.



COVER PHOTO

Saro Lerwick L7250 runs up on the slipway at Calshot shortly before the outbreak of the Second World War. Visible is the well-glazed cockpit which gave the pilots a good view of the whirring propellers in a position to neatly decapitate them if a blade came loose, a not-unknown event in any aircraft of the time. The portly hull had aerodynamic (and hydrodynamic) problems and the purposeful appearance of the Lerwick gave little hint of its rapid demise.

(Flight photo 17459)

The St. Paul's Bay sound mirror today (photo by R.W. Mack)

RAF MARAUDERS



When the first Martin B-26 took off on its maiden flight on 25 November 1940, it already had the promise of large production orders. The very fact that it was a B-26 and not an XB-26 marked the urgency of the entry into service of a new medium bomber. A total of 139 B-26As and 791 B-26Bs had already been contracted for before the first aircraft flew.

Produced in parallel with the North American B-25 Mitchell, the B-26 offered a major advance over its predecessor which filled the gap between the four-engined B-17s and B-24s and the light A-20s. This had been, in effect, the Douglas B-18, a bulky twin-engined bomber variant of the DC-3 fit only for coastal patrol, the smaller B-23 not having been built in any numbers.

When the specification for a new medium bomber had been issued in January 1939, only the patchy experience gleaned from the Spanish Civil War was any guide to future tactics. The fast Russian SB-2s had proved elusive to the Nationalist fighters, mostly Fiat CR.32s and Heinkel He 51 of an earlier generation. Thus the design of the B-26 reflected a desire for speed to the detriment of defensive armament. A dorsal turret with a pair of 0.50-in machine guns was the main defensive armament, a hand-held gun of the same calibre being mounted in the cramped tail position and 0.30-in guns in the glass nose and firing through a hatch in the lower fuselage. By American standards of the time, this was a heavy armament.

The B-26 entered service in February 1941 with the 22nd Bombardment Group (Medium) at Langley Field, Virginia, alongside B-18s. The name 'Marauder' had been approved by the company and was confirmed as an official type name in October 1941 as the USAAC moved away from the previous practice of using only numerical designations for its aircraft.

British interest in the B-26 paralleled that in the B-25. At a time when every modern aircraft was needed to build up the operational strength of the Royal Air Force, the British Purchasing Commission was on the look-out for any likely reinforcement. Both the B-25 and B-26 seemed likely contenders and in the event, both types entered service with the RAF and Commonwealth air forces.

Of the two, the B-25 engendered the most confidence and it was this type which was assigned to No.2 Group in the United Kingdom. The B-26s were sent to squadrons in the Middle East, initially replacing Blenheims. The name Marauder I was applied to 52 B-26As which were allocated serials FK109 to FK160. Four of these came to the UK for trials, Cunliffe-Owen at Southampton being designated the parent company for the type.

The Marauders were ferried by No.45 Group to the Middle East via the West Indies, Brazil and West Africa, a process that took its toll

of aircraft due to weather and the lack of navigational aids.

No.14 Squadron began to receive Marauders at Landing Ground 224 in August 1942 and managed to get them into operations without writing any off, a not-inconsiderable feat in view of the experiences of the USAAC during the introduction of the B-26. Its sleek lines also made it a handful to fly until pilots acquired experience. The squadrons location in the desert was also not the most suitable place to introduce a brand-new type to operational service. However, on 28 October 1942, No.14 flew its first operation.

Although designed for formation bombing, the RAF's initial operations were confined to single-plane missions. At that time, the Axis forces were making every effort to reinforce and supply their armies in North Africa and the Marauders were used for reconnaissance sorties over the Eastern Mediterranean, the squadron later moving west to cover the sea approaches to Tunisia as the German and Italian forces fell back from Libya - or, according to contemporary German radio broadcasts, continued their advance towards Tunisia!

These reconnaissance missions carried bombs and sometimes torpedoes to attack any enemy shipping spotted. Another task undertaken was minelaying off enemy harbours. Because of the nature of these lone flights, often in daylight, interception by enemy fighters was a constant hazard and eighteen of No.14's Marauders were posted missing after setting out on reconnaissance missions.

The next batch of Marauders were Mk.IAs, short-winged B-26Bs (FK362 to FK380) for No.14 Squadron, followed by a batch of B-26Cs as Marauder IIs (FB418 to FB522, confusingly predating the Mk.Is). Most of these went to SAAF squadrons.

The SAAF squadrons were mainly in No.3 (SAAF) Wing and it was these which undertook most of the traditional Marauder formation bombing raids in daylight on a variety of targets in Italy. No.24 (SAAF) Squadron converted to Marauder IIs in December 1943 at Gambut and undertook some shipping reconnaissance missions before moving to Italy in June 1944. No.12 (SAAF) Squadron followed in January 1944, both squadrons having replaced their Bostons.

In Italy, No.21 Squadron became operational with Marauders in August 1944 and was joined by No.25 (SAAF) in November when it converted from Venturas. No.30 (SAAF) also formed part of No.3 (SAAF) Wing with the Desert Air Force in Italy. One more RAF squadron also re-equipped; No.39 replaced its Beaufighters with Marauder IIIs in February 1945 when targets for Beaufighters in Greek waters dried up and further-ranging aircraft were required to operate over Yugoslavia and the Adriatic coast. Most of these squadrons received Marauder IIIs, equivalent to the USAAF B-26F and B-26G.

As might be expected, most of the operational losses suffered by Marauders in 1944 and 1945 were from flak. Daylight bombing of bridges, rail marshalling yards and enemy supply dumps required Marauder formations to run the gauntlet of heavy flak, notably the deadly 88mm dual-purpose guns of great accuracy. By 1944, little was seen of enemy fighters and most raids had fighter cover in case these put in an appearance. Many more losses were incurred through accidents, the Italian airstrips being both crowded and weather-prone.

No.1 (Middle East) Check and Conversion Unit at Bilbeis was responsible for converting pilots and aircrews to the Marauder, handing over this task to No.1330 Conversion Unit which replaced it in July 1944.

Aircrews sent to the Middle East after training in the UK were dealt with by No.70 Operational Training Unit at Shandur.

At the end of the war, the Marauder rapidly disappeared from service with the SAAF and RAF, the former preferring to retain Venturas in the post-war years as both reconnaissance and transport aircraft. The suspension of Lend-Lease meant that spares dried up rapidly and since the USAAF did not want any Marauders returned, the survivors were scrapped in Egypt. No.14 had converted to Wellington GR.XIVs in November 1944 and No.39 began to receive Mosquito FB.VIs in February 1946 after moving to Khartoum.

Specification

Engines: Two Pratt & Whitney R-2800-43 of 1,920 hp driving Curtiss four-blade propellers

Span: 71 ft (II and III)

Length: 58 ft 3 in

Height: 21 ft 6 in

Wing area: 658 sq ft (II and III)

Weights: 24,000 lb empty; 37,000 lb loaded

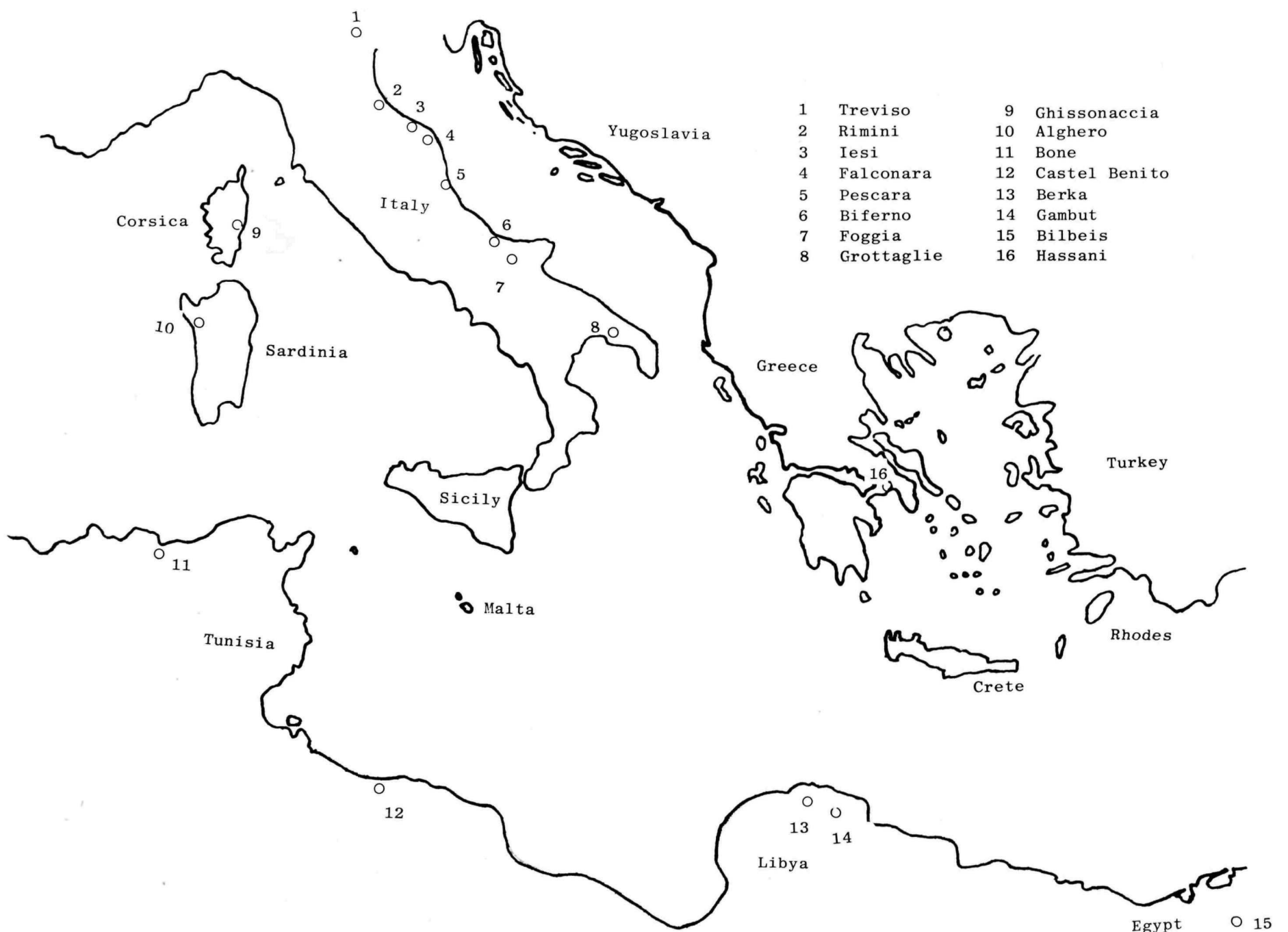
Performance: Max speed: 282 mph at 15,000 ft (305 mph in Mk.III)

Service ceiling: 21,700 ft (II) or 28,000 ft (III)

Range: 1,150 miles at 214 mph

Armament: Mk.II Martin 250CE dorsal turret with two 0.50-in machine guns. Two waist gun positions, each with one 0.50-in gun; one 0.50-in gun in nose; two 0.50-in guns in tail position. Four 0.50-in guns could be fitted, two on each side, on the fuselage sides below the cockpit but in RAF and SAAF service, two of these were sometimes removed for aerodynamic reasons.

Bomb load could comprise four 1,000 lb or sixteen 250 lb bombs but other combinations were possible depending on type of racks fitted.



DELIVERIES

FB418	12 SAAF	DBR when FB451 blew up, Biferno, 7.4.44	FB476		SOC 31.5.45
FB419	1 MECCU/1330 CU	SOC 26.4.45	FB477	70 OTU	SOC 14.3.46
FB420	12 SAAF	SOC 26.4.45	FB478	1330 CU	Missing 4.2.44
FB421	70 OTU	Props ran away on take-off; crashed near Geneifa, 22.8.44	FB479	24 SAAF	Damaged by flak and crashlanded at Gambut, 24.2.44
FB422		Lost 17.4.44	FB480	24 SAAF	Hit by flak, Suda Bay, and ditched, 4.3.44
FB423	1330 CU	SOC 26.4.45	FB481	24 SAAF	Shot down by fighters off Milos, 6.3.44
FB424	1 MECCU/70 OTU	Undercarriage collapsed on landing, LG211, 14.10.44; to instr.airframe	FB482	AAEE/Cunliffe-Owen	SOC 29.11.45
FB425	12 SAAF	SOC 14.3.46	FB483	12 SAAF	SOC 26.4.45
FB427		SOC 31.5.45	FB484	12 SAAF	SOC 31.5.45
FB428	70 OTU	SOC 14.3.46	FB485	70 OTU	SOC 14.3.46
FB429		SOC 30.6.44	FB486	70 OTU	SOC 26.4.45
FB430		SOC 14.3.46	FB487	12 SAAF	Lost nose when FB437 blew up; crashed west of Montevarchi, 13.7.44
FB431	12 SAAF	Lost power on take-off and ditched off Biferno, 21.4.44	FB488	12 SAAF	SOC 22.2.45
FB432	12 SAAF	SOC 2.6.45	FB489	161 MU	Engine cut; unable to clear hills and bellylanded 10m W of Fayid, 4.12.43
FB433		SOC 23.11.44	FB490	12 SAAF	SOC 26.4.45
FB434		Not delivered	FB491	24 SAAF	Shot down by Fw 190s off Leros, 25.2.44
FB435	24 SAAF	Engine cut in circuit; belly- landed at Gambut 3, 11.2.44	FB492	1 MECCU/12 SAAF	Shot down by flak, Giulianora, 16.3.44
FB436	Cunliffe-Owen	SOC 23.11.44	FB493	70 OTU	SOC 26.4.45
FB437	12 SAAF	Blew up on bombing run, Montevarchi, 13.7.44	FB494	1440 CU/70 OTU	SOC 26.4.45
FB438		SOC 31.5.45	FB495	12 SAAF	SOC 26.4.45
FB439	12 SAAF	SOC 22.2.45	FB496	24 SAAF	Shot down by fighters off Milos, 6.3.44
FB440	-	Not delivered	FB497	1 MECCU	SOC 26.4.45
FB441	-	Not delivered	FB498	24 SAAF	Crashed on take-off, Gambut, 3.4.44
FB442	12 SAAF	SOC 31.5.45	FB499	1 MECCU/156 MU	Landed with one leg up, Blida, 6.12.44; not repaired
FB443		SOC 8.44	FB500		SOC 14.3.46
FB444			FB501	12 SAAF	SOC 26.4.45
FB445			FB502	12 SAAF	Shot down by flak, 4.9.44
FB446		SOC 5.45	FB503		
FB447	12 SAAF	SOC 29.3.45	FB504	1 MECCU/24 SAAF	Shot down by fighters off Milos, 6.3.44
FB448		SOC 22.2.45	FB505		Crashed 14.4.44
FB449		SOC 26.4.45	FB506	12 SAAF	Shot down by flak, Pesaro, 25.4.44
FB450	70 OTU	SOC 26.4.45	FB507	24 SAAF	Shot down by fighters off Santorini, 6.3.44
FB451	12 SAAF	Caught fire when FB452 blew up at dispersal, Biferno, 7.4.44	FB508	24 SAAF	Missing, presumed shot down by flak at Maleme, 8.5.44
FB452	12 SAAF	Blew up at dispersal, Biferno, 7.4.44	FB509		Crashed 18.5.44
FB453	24 SAAF	Crashed in sea presumed iced up off Crete 21.2.44	FB510		SOC 31.5.45
FB454	113 Wg	Engine caught fire; dived into sea 1m off Nassau, Bahamas, 13.10.43	FB511	1 MECCU/1330 CU	SOC 26.4.45
FB455	113 Wg	Undercarriage collapsed on landing, Nassau, 15.9.43	FB512	12 SAAF	SOC 14.3.46
FB456		To 4715M	FB513		Crashed 1.6.44
FB457	113 Wg	Undercarriage prematurely raised on take-off, Nassau, 1.10.43	FB514		SOC 26.4.45
FB458	12 SAAF	SOC 30.11.44	FB515	3 ADU	Flew into high ground on ferry flight near Enfidaville, Tunisia, 25.5.44
FB459	12 SAAF	Shot down by flak, Montesecuro, 16.7.44	FB516	12 SAAF	SOC 28.9.44
FB460	1 MECCU/24 SAAF/	SOC 31.5.45	FB517		Lost 5.7.44
FB461	12 SAAF	Crashlanded at Perugia and hit Spitfire, 13.7.44; DBF	FB518	12 SAAF	SOC 26.4.45
FB462	70 OTU	SOC 26.4.45	FB519	12 SAAF	Skidded on runway, Iesi, 5.12.44; not repaired
FB463	24 SAAF	SOC 5.45	FB520	70 OTU	SOC 26.4.45
FB464	12 SAAF		FB521	70 OTU	SOC 22.6.45
FB465	12 SAAF	SOC 26.4.45	FB522	1 MECCU/1330 CU	SOC 26.4.45
FB466	24 SAAF	SOC 29.3.45	FK109	AFDU/BDU/RAE/ 304 FTU/14	Bellylanded at Alghero, 13.9.44
FB467	24 SAAF	Undercarriage collapsed on take-off, Gambut, 19.2.44	FK110	14	Missing from reconnaissance, 9.5.44
FB468	70 OTU	SOC 14.3.46	FK111	AAEE/301 FTU/14	Ditched after take-off, Bone, 21.4.44
FB469	12 SAAF	SOC 31.5.45	FK112	14	Missing from reconnaissance, 3.6.43
FB470	70 OTU	SOC 26.4.45	FK113	-	Crashed in transit
FB471	12 SAAF	Shot down by flak, Pontelagoscuro, 14.8.44			
FB472	70 OTU	SOC 26.4.45			
FB473		SOC 5.45			
FB474	12 SAAF	SOC 26.4.45			
FB475	12 SAAF	SOC 30.4.44			

FK114	-	Crashed before delivery	FK364	14	Engine cut; crashed at Tingley, 24.4.43
FK115	45 Gp CS	SOC 12.7.45	FK365	14	SOC 30.11.44
FK116	14/Ferry	Control lost; crashed near Accra, Gold Coast, 30.10.43	FK366	14	Missing from minelaying off Tunis, 20.12.42
FK117	14	Engine cut; crashed on approach, Fayid, 18.3.43; DBF	FK367	14	Shot down in sea by Spitfires 15m off Benghazi 16.12.42
FK118	14	FA 21.4.44	FK368	-	Lost in transit
FK119		Missing on ferry flight, 17.8.42	FK369	-	Lost in transit
FK120	14	Missing from reconnaissance mission, 7.5.44	FK370	14	Nosewheel collapsed during run-up; engine caught fire, Blida, 3.12.43
FK121	14	SOC 29.3.45	FK371	14	Missing on reconnaissance over Tyrrhenian Sea, 25.4.43
FK122	14	Tailplane broke off in air; crashed near Shallufa, 23.11.42	FK372	-	Crashed before delivery
FK123	14	SOC 20.7.45	FK373	14	Missing from reconnaissance mission, 26.8.43
FK124	AAEE/301 FTU/14	Flew into hill after take-off, Alghero, 13.9.44	FK374	14	Ran out of fuel and forced landed in Western Desert, 20.7.43
FK125	-	Crashed in transit	FK375	14	Missing from attack on convoy off Aghios Giorgios Is., 3.1.43
FK126	14	Crashed on landing, Ghisonnaccia, 3.2.44	FK376	14/2 METS	Tail unit broke off; spun into ground 2m SW of Abu Sueir, 10.5.43
FK127	14	Ditched in Adriatic after engine failure, 19.10.43	FK377	14	Missing from attack on ships in Milos harbour, 21.2.43
FK128	14	Damaged by Bf 109s and crash-landed at Protville, 27.9.43	FK378	14	Missing from reconnaissance mission, 12.4.43
FK129	-	Crashed in sea on ferry flight 25m W of Borinquen, Puerto Rico, 22.6.43	FK379	-	Crashed before delivery
FK130	14	FA 11.2.44	FK380	-	Crashed before delivery
FK131	14	Missing on navex, presumed crashed in sea 15.12.43	HD402	AAEE	SOC 30.5.46
FK132	14	SOC 26.4.45	HD403	21 SAAF/12 SAAF	Bellylanded at Iesi, 14.8.44
FK133	14	Missing on reconnaissance mission, 28.12.43	HD404	70 OTU	Engine caught fire; dived into ground on approach, El Shatt, 27.9.44
FK134	14	Tyre burst on landing; swung and broke back, Blida, 5.6.43	HD405	12 SAAF	SOC 14.3.46
FK135	14	SOC 20.7.45	HD406	12 SAAF	SOC 14.3.46
FK136	-	Crashed before delivery	HD407	70 OTU	SOC 19.3.45
FK137	Cunliffe-Owen/304 FTU/ME	Lost 22.9.44	HD408		SOC 14.3.46
FK138	14	Hit cables on take-off, Grottaglie, 21.9.44	HD409	21 SAAF	Bomb exploded while being fused, Pescara, 9.9.44
FK139	14	Missing from attack on ships in Melos harbour, 21.2.43	HD410		SOC 14.3.46
FK140	-	Lost in transit	HD411	21 SAAF/24 SAAF	SOC 21.3.46
FK141	14	Swung on landing and undercarriage collapsed, Castel Benito 8.7.43	HD412	AAEE	SOC 6.5.46
FK142	14	Missing on reconnaissance mission, 1.2.44	HD413	70 OTU	SOC 14.3.46
FK143	14	Engine cut; forced landed in Turkey and interned, 15.2.43	HD414	70 OTU	SOC 14.3.46
FK144	14	SOC 20.7.45	HD415	70 OTU	SOC 14.3.46
FK145	14	SOC 29.3.45	HD416		FA 4.7.44
FK146	-	Crashed before delivery	HD417	45 Gp	Caught fire in air and crashed on approach to Khartoum, 3.6.44
FK147	14	Missing on reconnaissance mission, 24.7.43	HD418		SOC 14.3.46
FK148	-	Crashed in transit	HD419	113 Wg	Engine cut on take-off; crashed in jungle near Atkinson Field, British Guiana, 11.4.44
FK149	14	SOC 29.3.45	HD420	1 MECCU/70 OTU	SOC 14.3.46
FK150	14	Missing on reconnaissance over Aegean, 15.2.43	HD421	70 OTU	SOC 14.3.46
FK151	14	SOC 20.7.45	HD422		SOC 14.3.46
FK152	14	Engine cut; crashed in forced landing and DBF, Bou Fícha, 10.7.43	HD423	70 OTU	SOC 14.3.46
FK153	14	SOC 20.7.45	HD424	70 OTU	SOC 14.3.46
FK154	14	Crashed in Bay of Algiers on ferry flight, 10.3.43	HD425	70 OTU	SOC 14.3.46
FK155	14	Missing on reconnaissance mission, 9.5.43	HD426		SOC 14.3.46
FK156	14	SOC 20.7.45	HD427	70 OTU	SOC 14.3.46
FK157	14	Hit truck on landing, LG.224 20.8.42	HD428	70 OTU	Bellylanded at Kasfareet, 18.6.45; DBR
FK158	-	Crashed before delivery	HD429	21 SAAF	SOC 14.3.46
FK159	14	Missing on reconnaissance mission, 19.4.44	HD430	70 OTU	SOC 14.3.46
FK160	14	Undercarriage collapsed on landing, Bone, 26.5.43	HD431		SOC 14.3.46
FK362	14	Crashed in sea between Italy and Algeria, 8.2.44	HD432	-	Crashed on take-off, Accra, on ferry flight, 23.4.44
FK363	14	Missing on reconnaissance mission, 27.6.43	HD433	21 SAAF	Lost 6.7.44
			HD434		SOC 14.3.46
			HD435	1 ADU	Crashed on take-off, Accra, 30.4.44
			HD436	24 SAAF	Engine cut in circuit; overshot forced landing, Iesi 2.12.44,
			HD437	70 OTU	Crashed on take-off and blew up, Kabrit 6.7.44
			HD438	70 OTU	SOC 14.3.46
			HD439	25 SAAF	SOC 21.3.46
			HD440		SOC 21.3.46
			HD441		SOC 14.3.46
			HD442		SOC 14.3.46

HD443	70 OTU	SOC 14.3.46	HD504	70 OTU	SOC 14.3.46
HD444	1 MECCU/70 OTU	SOC 14.3.46	HD505	12 SAAF	SOC 28.3.46
HD445	21 SAAF	SOC 14.3.46	HD506	70 OTU	SOC 14.3.46
HD446	70 OTU	Collided with HD559 during formation flying training, El Shatt, 9.2.45	HD507	30 SAAF	SOC 28.3.46
			HD508	14	SOC 14.3.46
HD447	30 SAAF	SOC 28.3.46	HD509	30 SAAF	Hit by flak and abandoned 4m S of Forli, 11.12.44
HD448	70 OTU	SOC 14.3.46	HD510	21 SAAF	SOC 28.2.45
HD449	30 SAAF	SOC 28.3.46	HD511	30 SAAF	SOC 28.3.46
HD450	70 OTU	Collided with HD407 during fighter affiliation exercise and crashed, Great Bitter Lake, 19.9.44	HD512	113 Wg	Engine cut; bellylanded at Abechu, 30.5.44
HD451	24 SAAF	Hit by Mustang FB246 while parked, Iesi, 16.11.44	HD513	21 SAAF	SOC 14.3.46
HD452	12 SAAF	Crashed in sea after take-off, Pescara, 14.8.44	HD514	1 MECCU	SOC 14.3.46
HD453	1 MECCU/70 OTU	SOC 14.3.46	HD515	70 OTU	SOC 14.3.46
HD454	21 SAAF/12 SAAF	SOC 14.3.46	HD516	12 SAAF	SOC 14.3.46
HD455	12 SAAF	SOC 14.3.46	HD517	21 SAAF	SOC 14.3.46
HD456		Cv to instructional airframe, 28.9.44	HD518		SOC 14.3.46
HD457	14	SOC 14.3.46	HD519		SOC 28.3.46
HD458	39	SOC 27.6.46	HD520	21 SAAF	Hit by USAAF B-24 which swung on take-off, Iesi, 16.10.44
HD459	30 SAAF	SOC 28.3.46	HD521	12 SAAF	Overshot landing at Rimini returning from Gorizia, 8.2.45
HD460		SOC 14.3.46	HD522		SOC 21.3.46
HD461	30 SAAF	Collided with HD547 during raid on Pontebba and crashed, 14.3.45	HD523		SOC 14.3.46
HD462	70 OTU	To instructional a/f, 22.2.45	HD524	70 OTU	SOC 14.3.46
HD463	70 OTU	Swung on take-off and broke up, Kabrit, 14.8.44	HD525	24 SAAF	SOC 14,3,46
HD464	30 SAAF	Dived into ground out of cloud 8m SE of Iesi, 20.2.45	HD526	12 SAAF	SOC 14.3.46
HD465	24 SAAF	Shot down by flak, Ponte lagoscure, 14.8.44	HD527		SOC 30.11.44
HD466		SOC 14.3.46	HD528	70 OTU	SOC 14.3.46
HD467		SOC 14.3.46	HD529		SOC 14.3.46
HD468	14	Swung in take-off and undercarriage collapsed, Ciampino, 19.9.44	HD530	21 SAAF	SOC 14.3.46
HD469	70 OTU	SOC 14.3.46	HD531	39	SOC 27.6.46
HD470	70 OTU	SOC 14.3.46	HD532	70 OTU	SOC 14.3.46
HD471	21 SAAF	SOC 14.3.46	HD533	12 SAAF	SOC 28.3.46
HD472	70 OTU	SOC 14.3.46	HD534		SOC 28.3.46
HD473	70 OTU	SOC 14.3.46	HD535	21 SAAF/70 OTU	SOC 14.3.46
HD474	21 SAAF	SOC 14.3.46	HD536		SOC 14.3.46
HD475	70 OTU	SOC 14.3.46	HD537	21 SAAF	SOC 14.3.46
HD476	70 OTU	SOC 14.3.46	HD538		SOC 11.4.46
HD477	70 OTU/21 SAAF	Shot down by flak, Irsa, 8.3.45	HD539	21 SAAF	SOC 14.3.46
HD478	1330 CU/70 OTU	SOC 14.3.46	HD540	30 SAAF	SOC 28.3.46
HD479	70 OTU	Missing on navex, 6.1.45	HD541	12 SAAF	SOC 28.3.46
HD480		SOC 14.3.46	HD542	70 OTU	SOC 14.3.46
HD481	24 SAAF	Shot down by flak 12m NW of Ferrara, 21.4.45	HD543	12 SAAF	Damaged by explosion of HD501 and crashed, 29.12.44
HD482		SOC 14.3.46	HD544		SOC 14.3.46
HD483	70 OTU	SOC 14.3.46	HD545		SOC 14.3.46
HD484	30 SAAF	SOC 28.3.46	HD546	70 OTU	SOC 14.3.46
HD485		SOC 14.3.46	HD547	30 SAAF	Collided with HD461 and crashed near Pontebba, 14.3.45
HD486		SOC 14.3.46	HD548		FA 4.6.44
HD487	14	SOC 14.3.46	HD549		SOC 28.3.46
HD488	14	SOC 18.3.46	HD550	21 SAAF	SOC 28.3.46
HD489		SOC 14.3.46	HD551	12 SAAF	SOC 5.45
HD490	12 SAAF	Shot down by flak near Rimini, 4.9.44	HD552	25 SAAF	Overshot abandoned take-off and undercarriage collapsed, Biferno, 5.6.45
HD491		SOC 14.3.46	HD553	12 SAAF	SOC 14.3.46
HD492		SOC 14.3.46	HD554	70 OTU	SOC 14.3.46
HD493	1 MECCU/70 OTU	SOC 14.3.46	HD555		Crashed at Maidaguru, 6.12.45
HD494	1 MECCU/1330 CU	Engine failure; crashed in forced landing 3m E of Bilbeis, 13.2.45	HD556		SOC 14.3.46
HD495		SOC 14.3.46	HD557	21 SAAF	SOC 14.3.46
HD496	30 SAAF	Engine caught fire; blew up on ditching 3m S of Senegallia, 26.12.44	HD558	39	SOC 27.6.46
HD497		SOC 28.3.46	HD559	70 OTU	Collided with HD446 during formation practice, El Shatt, 9.2.45
HD498	21 SAAF	SOC 28.3.46	HD560		SOC 14.3.46
HD499		SOC 14.3.46	HD561	21 SAAF	SOC 21.3.46
HD500	70 OTU/30 SAAF	SOC 14.3.46	HD562	24 SAAF	SOC 14.3.46
HD501	12 SAAF	Blew up on bombing run, 29.12.44	HD563		SOC 14.3.46
HD502		SOC 14.3.46	HD564	21 SAAF	SOC 14.3.46
HD503	14	SOC 14.3.46	HD565	21 SAAF	SOC 14.3.46
			HD566	21 SAAF	SOC 14.3.46
			HD567	30 SAAF	SOC 28.3.46
			HD568		SOC 14.3.46
			HD569	30 SAAF	Swung on take-off and blew up, Iesi, 11.1.45
			HD570	21 SAAF/39	SOC 14.3.46
			HD571	70 OTU	SOC 14.3.46
			HD572	21 SAAF	SOC 28.3.46
			HD573		SOC 14.3.46
			HD574	25 SAAF	SOC 28.3.46
			HD575	21 SAAF	SOC 28.3.46

HD576		SOC 28.3.46	HD638		SOC 14.3.46
HD577	25 SAAF/21 SAAF	SOC 28.3.46	HD639	39	SOC 29.3.46
HD578		SOC 14.3.46	HD640	39	SOC 27.6.46
HD579	21 SAAF	SOC 28.3.46	HD641		SOC 28.3.46
HD580	24 SAAF	Lost power and crashed on approach, Pescara, 27.9.44	HD642		SOC 14.3.46
HD581	39	SOC 28.3.46	HD643		SOC 14.3.46
HD582		SOC 14.3.46	HD644	39	SOC 25.7.46
HD583	21 SAAF	SOC 28.3.46	HD645	12 SAAF	SOC 14.3.46
HD584	30 SAAF	SOC 28.3.46	HD646	12 SAAF	SOC 14.3.46
HD585	24 SAAF	Damaged by flak and abandoned, Castelfranco, 27.1.45	HD647	39	SOC 29.3.46
HD586		SOC 14.3.46	HD648	25 SAAF	SOC 20.7.45
HD587		SOC 14.3.46	HD649	12 SAAF	SOC 14.3.46
HD588		SOC 14.3.46	HD650	25 SAAF	SOC 28.3.46
HD589	12 SAAF	Blew up on bombing run during raid on Gothic Line, 31.8.44	HD651		SOC 14.3.46
HD590		SOC 28.9.46	HD652	25 SAAF	SOC 14.3.46
HD591	21 SAAF	Hit by flak and crashed in sea 5m SE of Rimini, 13.9.44	HD653	12 SAAF	SOC 14.3.46
HD592		SOC 28.3.46	HD654		Crashed before delivery
HD593	30 SAAF	Nose wheel collapsed on landing, Ariano, 18.5.45	HD655	12 SAAF	SOC 14.3.46
HD594	25 SAAF	SOC 28.3.46	HD656		SOC 14.3.46
HD595		SOC 14.3.46	HD657	25 SAAF	SOC 28.3.46
HD596	30 SAAF	Hit by flak, Rimini, and abandoned, 4.9.44	HD658		SOC 14.3.46
HD597	21 SAAF	SOC 14.3.46	HD659		SOC 14.3.46
HD598	14	SOC 14.3.46	HD660		SOC 14.3.46
HD599	30 SAAF	SOC 28.3.46	HD661	12 SAAF	SOC 14.3.46
HD600		SOC 22.2.45	HD662		SOC 14.3.46
HD601	24 SAAF	Drifted off runway during single-engined landing and crashed, Fano, 18.1.45	HD663	24 SAAF	Both engines cut; crashed 9m S of Iesi, 4.3.45
HD602	12 SAAF	SOC 14.3.46	HD664	113 Wg	Engine cut after take-off; ditched off Nassau, 17.10.44
HD603	25 SAAF	SOC 28.3.46	HD665	39	SOC 27.6.46
HD604	12 SAAF	SOC 14.3.46	HD666		Crashed before delivery
HD605	45 Gp	Undershot landing at Ascension Island and undercarriage collapsed, 22.8.44; DBF	HD667	25 SAAF	Shot down by flak near Zagreb, 4.5.45
HD606	39	SOC 28.3.46	HD668		SOC 14.3.46
HD607	39	SOC 14.3.46	HD669	25 SAAF	Abandoned after engine fire over sea off Split, 1.4.45
HD608	12 SAAF	SOC 14.3.46	HD670	12 SAAF	SOC 14.3.46
HD609		SOC 27.6.46	HD671	3 FU	Hit rising ground after take-off in fog, Bilbeis, 28.10.44
HD610	39	SOC 27.6.46	HD672		SOC 14.3.46
HD611	39	SOC 27.6.46	HD673		SOC 14.3.46
HD612	12 SAAF/21 SAAF	SOC 4.3.46	HD674	39	SOC 29.8.46
HD613	21 SAAF	SOC 4.3.46	HD675		SOC 14.3.46
HD614	12 SAAF	Swung on take-off, Iesi, 25.12.45; not repaired	HD676		SOC 28.3.46
HD615		SOC 28.3.46	HD677		SOC 14.3.46
HD616	113 Wg	Lost power on take-off and crashed, Kano, 29.8.44; DBF	HD678		SOC 28.3.46
HD617		SOC 11.4.46	HD679		SOC 27.6.46
HD618	25 SAAF	SOC 28.3.46	HD680		SOC 14.3.46
HD619	39	SOC 27.6.46	HD681		SOC 14.3.46
HD620	12 SAAF	Damaged by explosion of HD501 and crashed, 29.12.44	HD682		SOC 14.3.46
HD621		Crashed before delivery	HD683		SOC 14.3.46
HD622	12 SAAF	Hit by flak and crashlanded, Rimini, 23.4.45; DBF	HD684		SOC 14.3.46
HD623		SOC 14.3.46	HD685		SOC 11.4.46
HD624		SOC 28.3.46	HD686		SOC 28.3.46
HD625	39	Wrong prop feathered during single-engined practice; crashlanded at Talmassons, Italy, 30.6.45	HD687		SOC 14.3.46
HD626	25 SAAF	Lost hydraulics and crashlanded, Madana, Italy 4.11.44	HD688		SOC 14.3.46
HD627	25 SAAF	Engine cut on take-off; stalled and crashed 4m NW of Hassani, 24.6.45	HD689	24 SAAF	Hit by USAAF B-24 278239 while parked, Bari, 4.6.45
HD628	12 SAAF	SOC 14.3.46	HD690		SOC 14.3.46
HD629	25 SAAF	DBR in heavy landing, Biferno, 4.6.45	HD691		SOC 14.3.46
HD630		SOC 14.3.46	HD692		SOC 14.3.46
HD631		SOC 14.3.46	HD693		SOC 14.3.46
HD632		Crashed before delivery	HD694		SOC 14.3.46
HD633		SOC 14.3.46	HD695		SOC 14.3.46
HD634		SOC 14.3.46	HD696		SOC 14.3.46
HD635		SOC 14.3.46	HD697		SOC 14.3.46
HD636	39	SOC 27.6.46	HD698		SOC 28.3.46
HD637		SOC 14.3.46	HD699		SOC 14.3.46
			HD700		SOC 14.3.46
			HD701		SOC 11.4.46
			HD702		SOC 14.3.46
			HD703		SOC 14.3.46
			HD704		SOC 14.3.46
			HD705		SOC 14.3.46
			HD706		SOC 14.3.46
			HD707		SOC 14.3.46
			HD708		SOC 14.3.46
			HD709		SOC 14.3.46
			HD710		SOC 11.4.46
			HD711		SOC 14.3.46
			HD712	25 SAAF	SOC 28.3.46
			HD713		SOC 14.3.46
			HD714		SOC 14.3.46

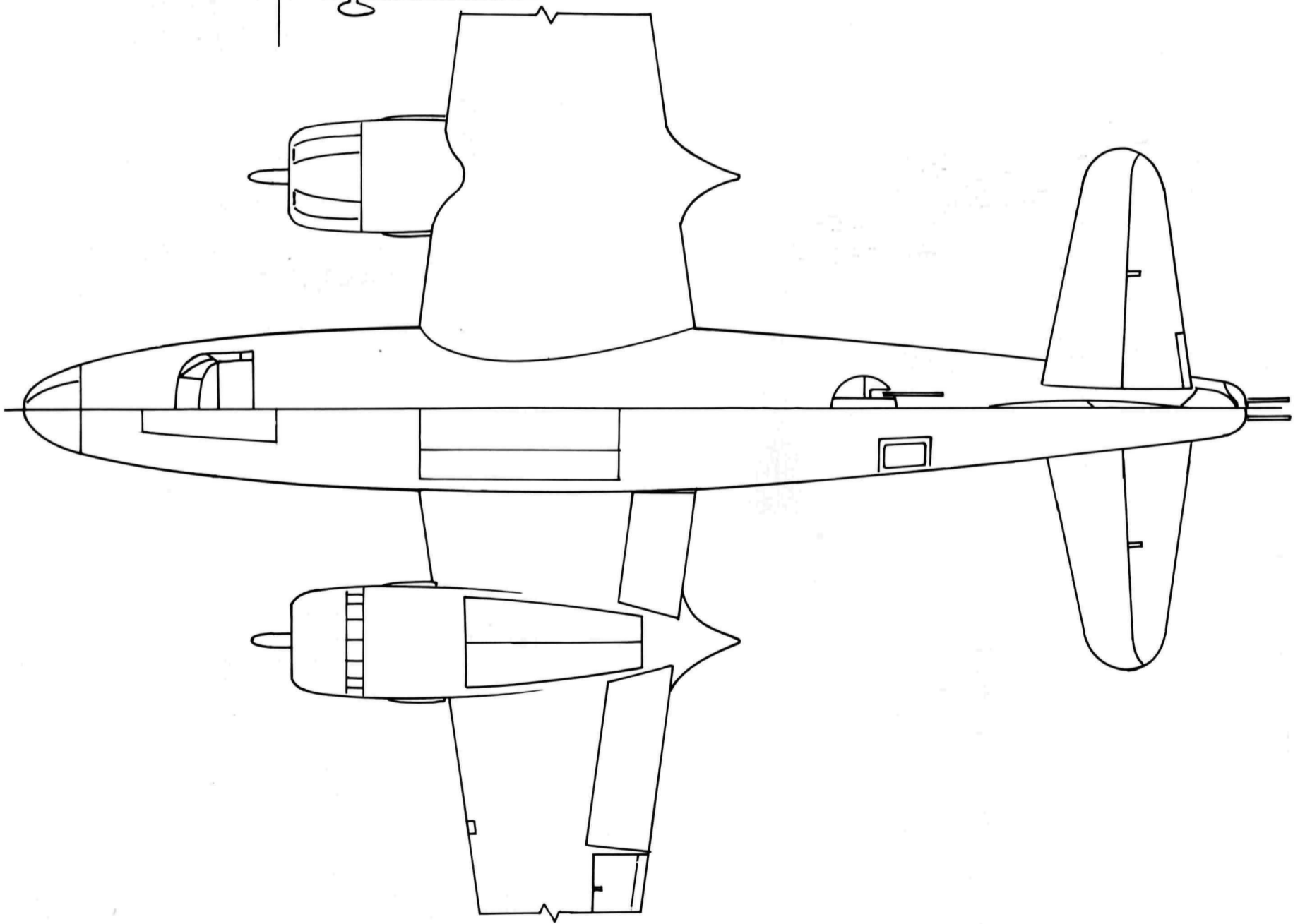
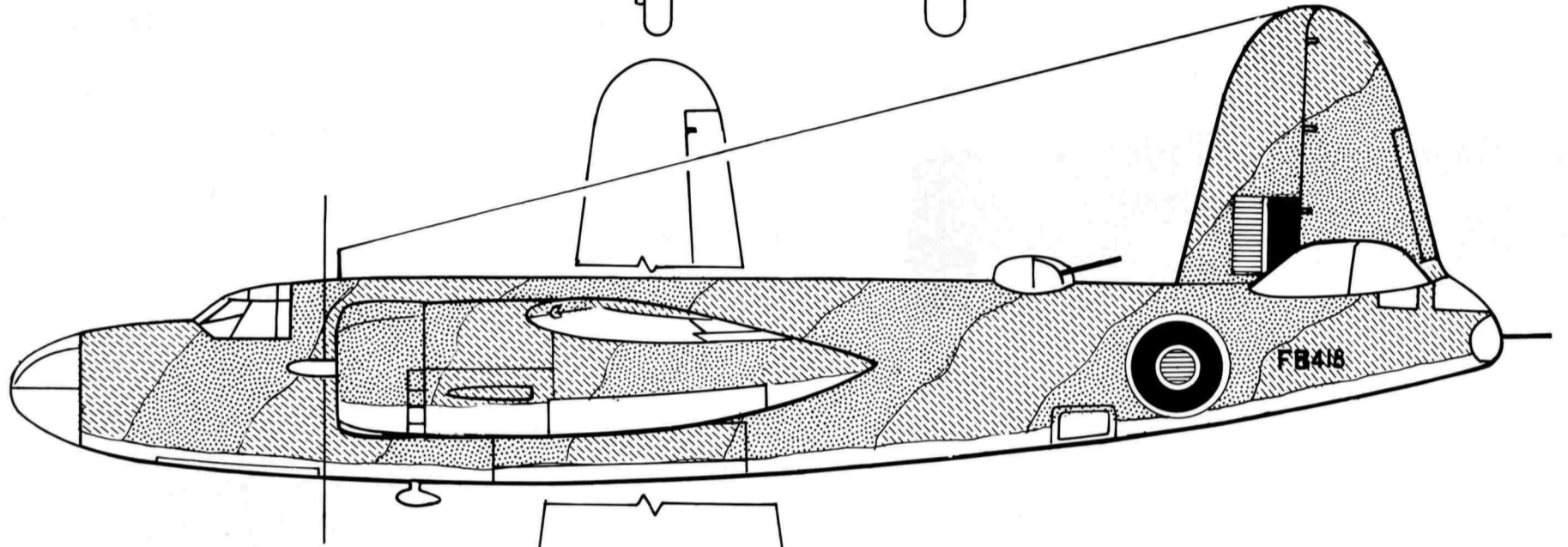
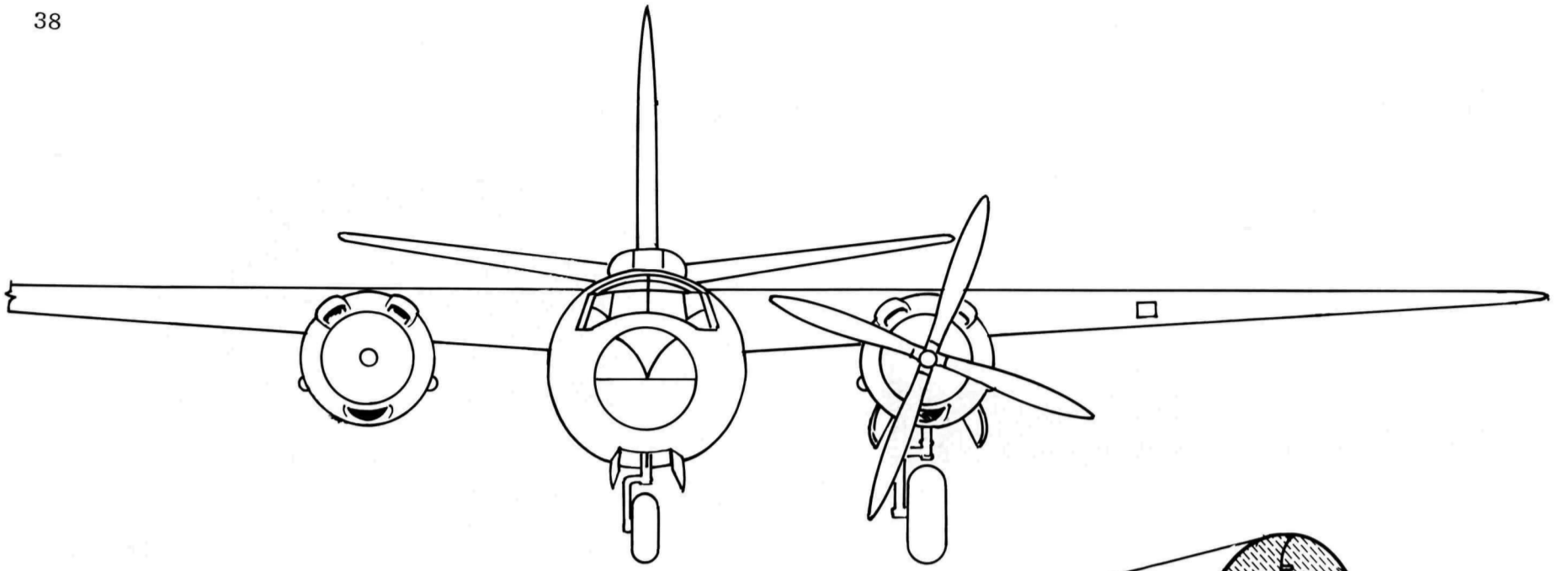


Comparative walkaround views show the differences between the Marauder I above and the Marauder III on left. The prominent air intakes on the Pratt & Whitney R-2800-43 are absent from the R-2800-5 of the Mk. I. The shorter span of the Mk. I can also be discerned on FK111. HD402 has its fixed forward-firing guns installed and the twin tail guns have a new mounting.

MARAUDER LOCATIONS

HD715	SOC 14.3.46
HD716	SOC 20.7.45
HD717	SOC 14.3.46
HD718	SOC 27.6.46
HD719	SOC 26.9.46
HD720	SOC 14.3.46
HD721	SOC 14.3.46
HD722	SOC 14.3.46
HD723	SOC 28.3.46
HD724	SOC 14.3.46
HD725	SOC 14.3.46
HD726	SOC 14.3.46
HD727	SOC 14.3.46
HD728	SOC 14.3.46
HD729	SOC 14.3.46
HD730	SOC 14.3.46
HD731	SOC 14.3.46
HD732	SOC 11.4.46
HD733	SOC 14.3.46
HD734	SOC 14.3.46

HD735	SOC 14.3.46
HD736	SOC 14.3.46
HD737	SOC 14.3.46
HD738	SOC 14.3.46
HD739	24 SAAF Overshot landing and undercarriage collapsed, Treviso, 23.5.45
HD740	SOC 14.3.46
HD741	SOC 14.3.46
HD742	SOC 11.4.46
HD743	SOC 14.3.46
HD744	SOC 11.4.46
HD745	SOC 14.3.46
HD746	SOC 28.3.46
HD747	SOC 14.3.46
HD748	SOC 11.4.46
HD749	SOC 14.3.46
HD750	SOC 14.3.45
HD751	SOC 14.3.46



HMS SPEAKER



H.M.S. Speaker at anchor in Nagasaki Harbour, September 1945

H.M.S. Speaker was an escort carrier of the same class as H.M.S. Smiter, whose career was recounted in AM 2/82. Like Smiter, she was built at the Seattle-Tacoma shipyard and moved to Vancouver for completion where she was taken over by the Royal Navy on 5 February 1944. Originally intended as the U.S.S. Delgada, she was a converted mercantile hull with a full-length hangar capable of housing twenty-four aircraft and was intended primarily for convoy escort duties.

After trials, Speaker set sail for Panama and the east coast of the United States, arriving at Norfolk, Virginia, on 17 March. After storing and refuelling, she sailed north to New York where aircraft and cargo were loaded at Staten Island for conveyance to the U.K. On arrival at Liverpool on 8 April, the freight was unloaded and she returned to Norfolk for another load. The ship's log does not specify the types of aircraft carried but they were probably P-47s or P-51s for the USAAF.

On completion of this voyage, Speaker sailed for Dundee where she was taken in hand for a refit. Although the ships were new, the Royal Navy was unhappy about their construction and equipment which were considered to make them

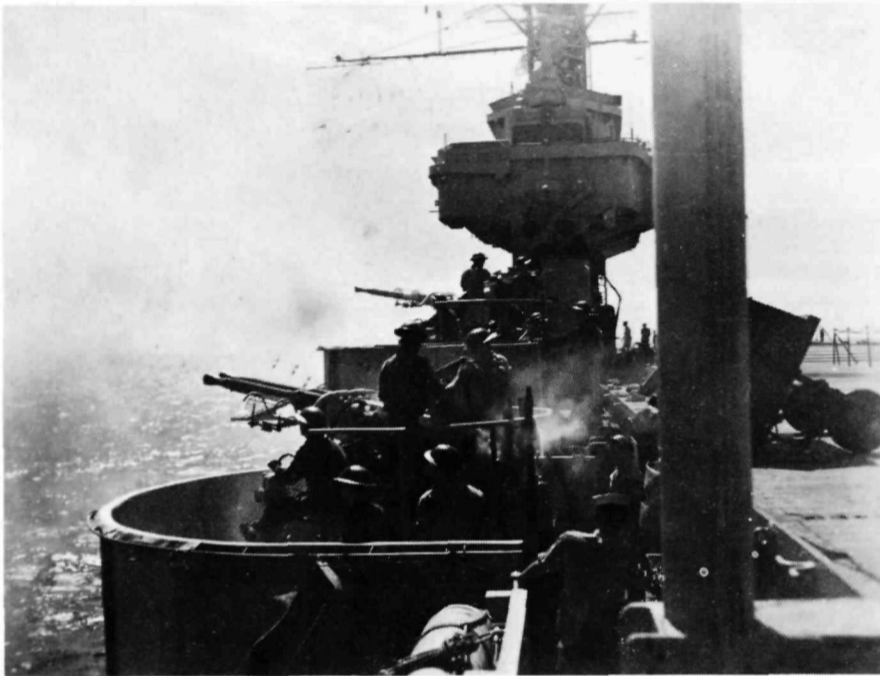
unsuitable for the type of operations which the Royal Navy intended to undertake with escort carriers. One had already blown up through a chance ignition of petrol fumes with heavy loss of life. They were also unstable and apart from redesigning the fuel system, additional ballast was added and the flightdeck lengthened. There were also many more minor modifications to fit escort carrier for carrying fighters to cover amphibious landings.

After nearly four months, Speaker emerged from the dockyard at Dundee and sailed round to the Forth for deck landing training. At 12.47 on 12 October 1944, the first aircraft landed on Speaker's deck and was catapulted off. Four days later, a Swordfish crashed on deck with a second similar incident next day. Night flying began on 18 October and on the 29th, the deck log recorded deck landings by Helldivers. It is possible that the bridge meant Hellcats!

On 31 October, an aircraft crashed overside on landing and this may have been the Barracuda illustrated as no other Barracuda is recorded as having gone overboard although several did crash on deck, notably on 26 November when five crashlanded and a sixth went into the barrier. One had also crashed the previous day and on the following day a Barracuda hit the barrier, a

A Fulmar during deck-landing practice aboard Speaker





Top: Barracuda E4W from No. 769 Squadron at East Haven goes overside on landing, probably on 31 October 1944. The crew was picked up safely.

Centre: The twin, power-operated, 40 mm Bofors guns, of which Speaker had eight pairs, in addition to twenty-seven 20 mm Oerlikon guns, at practice.

Bottom: A Swordfish is catapulted off during DLT

* * * * *

midshipman being blown overboard and drowned by its slipstream. Avengers and Wildcats also used Speaker's deck for DLT while, in turn, aircraft flew on to train deck landing control officers in their trade. A party from No. 768 Squadron were aboard during DLT and disembarked on 28 November to make way for No. 1840 Squadron. On 14 December, Speaker sailed for Belfast Lough

where Hellcats began to fly on. By the end of the month, 16 Hellcats were aboard, four having crashed on deck during training.

Speaker sailed from the Clyde on 11 January 1945 accompanied by sister ships Khedive and Slinger, destination the Far East. On 19 January, Hellcat JX760 crashed on deck and was damaged beyond repair. After being picked clean, it was jettisoned next day. On 15 January, a Hellcat crashed in the sea and the pilot killed. On arrival at Colombo, two damaged aircraft were disembarked and six aircraft landed on before she sailed for Australia. On 14 February, Hellcat JX750 crashed on deck and, like JX760, was jettisoned next day. On the 16th, another Hellcat went over the side on landing but the pilot was rescued.

Sydney came into sight on 23 February and all aircraft were catapulted off to Nowra. On 9 March, Speaker sailed for Manus, the British Pacific Fleet's advanced base in the Admiralty Islands north of New Guinea. On 19 March, she left Leyte with the Fleet Train to rendezvous with the fleet carriers off Formosa and to transfer aircraft picked up at Manus. The Hellcats of 1840 Squadron had been disembarked and the squadron was split up to reinforce other Hellcat squadrons, leaving Speaker with no squadron aboard.

While Ruler's Hellcats provided fighter cover for the Fleet Train during refuelling and replenishment operations, Speaker was reduced to a ferry carrier. In June, she returned to Sydney to pick up more aircraft, returning to Manus in July.

Speaker sailed from Manus on 18 July to rendezvous with the Pacific Fleet, carrying a batch of replacement aircraft. On 26 July, these were flown off to replace losses aboard the fleet carriers during their attacks on Japan. Seven Corsairs, eight Seafires, seven Avengers, one Hellcat and one Firefly were supplied before she returned to Manus.

A further batch of aircraft was embarked and on 14 August she sailed north again. But this time the situation had changed dramatically. After atomic bombs had been dropped on Hiroshima and Nagasaki, the Pacific war was virtually at an end and instead of returning to Manus after flying off replacement for the fleet carriers, Speaker next dropped anchor in Tokyo Bay on 30 August accompanied by the rest of the fleet.

Next day, former prisoners of war began to come aboard and on 3 September Speaker sailed for Manila. On 16 September, she entered Nagasaki harbour where sightseeing parties went ashore to view the devastation. After a couple of shuttle trips to Okinawa with American prisoners, she picked up a batch of Australians and sailed for Hong Kong and Manila to pick up more for the voyage back to Sydney.

For the next six months, Speaker ran a shuttle service from Sydney to Hong Kong with cargo and personnel. No aircraft were operated and it appears that the last aircraft off the deck was on 20 August.

On 20 April, Speaker sailed from Hong Kong for home, carrying as cargo a Japanese human torpedo for exhibition. On 24 May, she reached the Clyde where she remained until 6 July, when the last trip as a Royal Navy ship began. After calling at Bermuda to disembark passengers, Speaker arrived at Norfolk Navy Yard on 20 July. After unloading a single aircraft, the crew left the ship on 27 July 1946, leaving her tied up beside a row of other escort carriers whose work as warships was over. Shorn of her flight deck, Speaker was rebuilt as a merchant ship and from 1948 sailed the seas as the SS Lancero.



Hellcats of No.1840 Squadron ranged on deck in the Far East

MOVEMENTS

<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>	<i>Place</i>	<i>Arrived</i>	<i>Sailed</i>
Taken over, Vancouver, B.C.	5.2.44	23.2.44	Okinawa, Ryukyu Islands	19.9.45	20.9.45
Esquimalt, Canada	23.2.44	24.2.44	Nagasaki, Japan	21.9.45	23.9.45
Panama	7.3.44	10.3.44	Okinawa, Ryukyu Islands	24.9.45	25.9.45
Norfolk, Va. U.S.A.	17.3.44	24.3.44	Hong Kong	28.9.45	30.9.45
New York, U.S.A.	25.3.44	28.3.44	Manila, Philippines	2.10.45	4.10.45
Liverpool	8.4.44	10.4.44	Sydney, Australia	15.10.45	26.12.45
Greenock	10.4.44	13.4.44	Brisbane, Australia	28.12.45	29.12.45
Norfolk, Va., U.S.A.	24.4.44	27.4.44	Manila, Philippines	7.1.46	8.1.46
New York, U.S.A.	28.4.44	3.5.44	Hong Kong	10.1.46	17.1.46
Liverpool	14.5.44	16.5.44	Sydney, Australia	30.1.46	12.2.46
Gareloch	17.5.44	26.5.44	Hong Kong	24.2.46	4.3.46
Dundee	28.5.44	11.9.44	Sydney, Australia	15.3.46	26.3.46
Rosyth	11.9.44	14.12.44	Hong Kong	9.4.46	20.4.46
Belfast Lough	16.12.44	19.12.44	Colombo, Ceylon	30.4.46	1.5.46
Clyde	19.12.44	24.12.44	Glasgow	24.5.46	31.5.46
Greenock	24.12.44	31.12.44	Faslane	31.5.46	4.7.46
Rothesay	31.12.44	2.1.45	Glasgow	4.7.46	6.7.46
Lamlash	2.1.45	4.1.45	Bermuda	17.7.46	18.7.46
Greenock	4.1.45	11.1.45	Norfolk, Va., U.S.A.	20.7.46	
Alexandria, Egypt	22.1.45	22.1.45	Handed over to U.S.N.	27.7.46	
Colombo, Ceylon	4.2.45	6.2.45			
Sydney, Australia	23.2.45	9.3.45			
Manus, Admiralty Islands	15.3.45	19.3.45			
Leyte, Philippines	13.5.45	19.5.45			
Manus, Admiralty Islands	29.5.45	30.5.45			
Sydney, Australia	5.6.45	3.7.45			
Manus, Admiralty Islands	9.7.45	18.7.45			
Manus, Admiralty Islands	7.8.45	14.8.45			
Tokyo Bay, Japan	30.8.45	3.9.45			
Manila, Philippines	9.9.45	12.9.45			
Nagasaki, Japan	16.9.45	18.9.45			

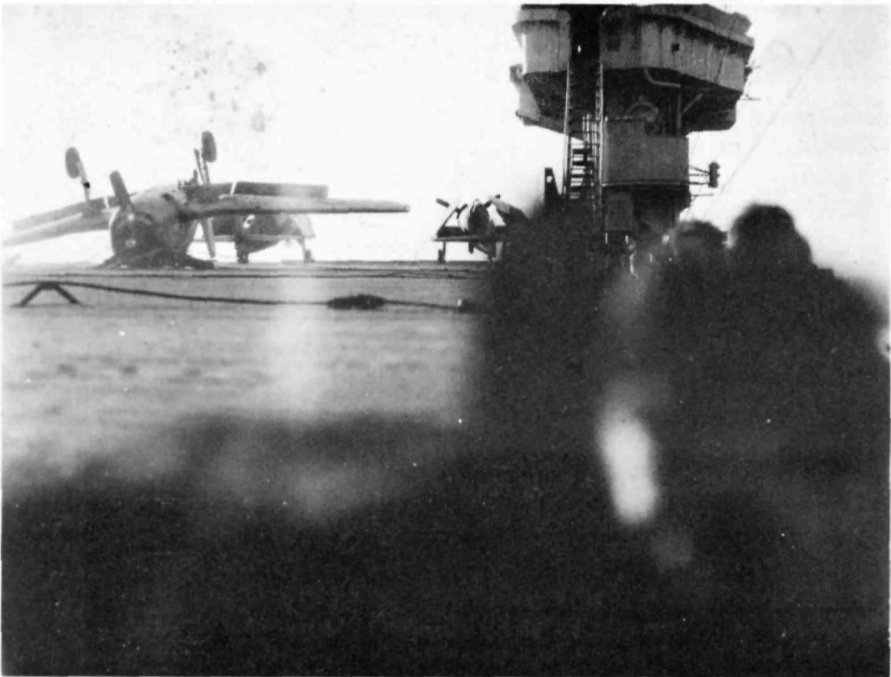
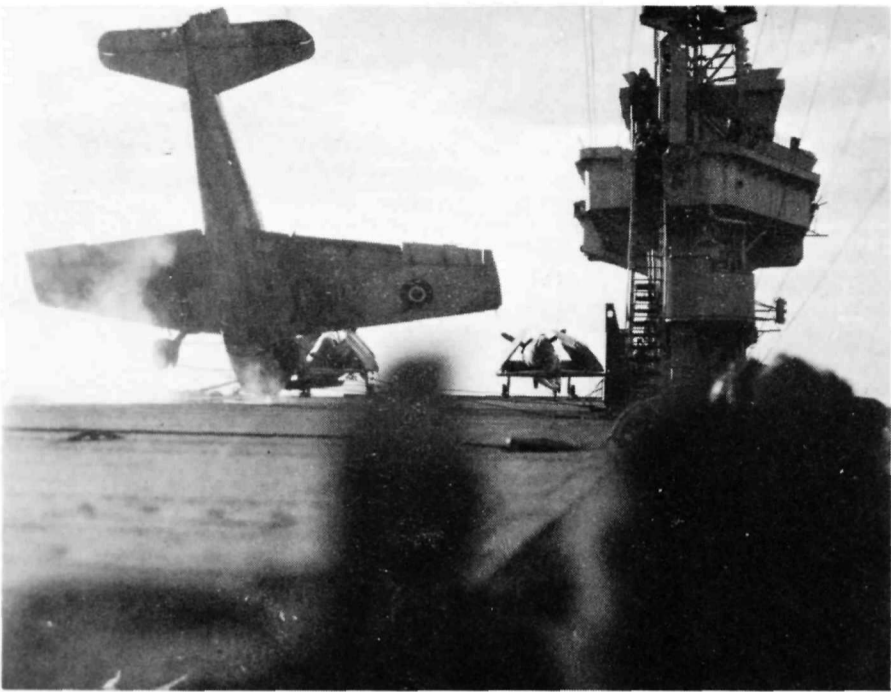
SPECIFICATION

Displacement: 11,420 tons later increased to 14,470 tons gross

Dimensions: 492 ft overall; beam 69½ ft

Machinery: 9,350 shp geared turbine; speed 17 knots

Armament: Two 4"; four twin 40mm Bofors
Eight twin 20 mm Oerlikon
Six single 20 mm Oerlikon



Above, top to bottom:

Hellcat JX750 of No.1840 Squadron overturns on landing aboard 'Speaker' on 14 February 1945 on passage from Colombo to Sydney, approximately 15 degrees south, 100 degrees east.

Above, top to bottom:

Hellcat JX750, stripped of all useful items, is jettisoned in the Indian Ocean on 15 February 1945

Centre: A Hellcat comes in to land during replenishment operations in the Pacific

Bottom: Sightseeing parties from 'Speaker' tour the devastation of Nagasaki in September 1945.

DUNLOP'S TEST FLIGHT



Line-up at Elmdon consists of a Lancaster I, Bristol Buckingham, Albemarle IV, Wellington III, the company's own Proctor V executive transport and, at the end of the line, a Lincoln I (Photo: Dunlop Archives)

Such was the progress in aircraft design and development during the final years of World War Two that several British aircraft component manufacturers operated aircraft on loan from the Ministry of Aircraft Production for flight-testing their new products. One such company was the Dunlop Rubber Company whose Aviation Division at Coventry maintained its own mini-squadron of aircraft, known as the Dunlop Test Flight.

In July 1944, the first of these aircraft, a Vickers Wellington III BK187 arrived at Baginton aerodrome near Coventry for flight testing Dunlop's new 'Compacta' aero tyre. Development of this tyre had commenced before the end of the war with the object of providing a tyre with dimensions which would allow it to be retracted into the small engine nacelles of post-war aircraft.

This aero tyre was unique in its manufacture in that a new 'flat' characteristic shape was produced by constraining the crown with a series of cords wound circumferentially. These tensioned the crown when the tyre was inflated preventing it extending to its normal toroidal shape. Such manufacturing techniques enabled aero tyres to be produced with the same pressures and capacity as normal tyres, but of a much smaller diameter.

Initial take-off and landing tests were made from Baginton's grass runway but it was soon realised that a concrete runway was not only desirable but essential for full braking trials.

Arrangements were therefore made to move to Honiley, near Kenilworth, again quite close to Dunlop's Factory. With a concrete runway over 2,000 yards long at the company's disposal, testing continued, the Wellington continuing its work flown by a test pilot from the nearby works of Armstrong Whitworth at Baginton. This aircraft was damaged during taxiing over

boggy ground when a wheel sank up to its axle. It was returned to the Ministry of Aircraft Production as unserviceable, eventually ending its days by being sold for scrap in June 1948 to J.Dale & Co.

A replacement Wellington III, BK563, arrived and test flying continued. Soon over 400 landings and take-offs had been achieved without further incident. The Wellingtons had flown many thousands of hours and Dunlop engineers had to do all their own maintenance work as well as flying them.

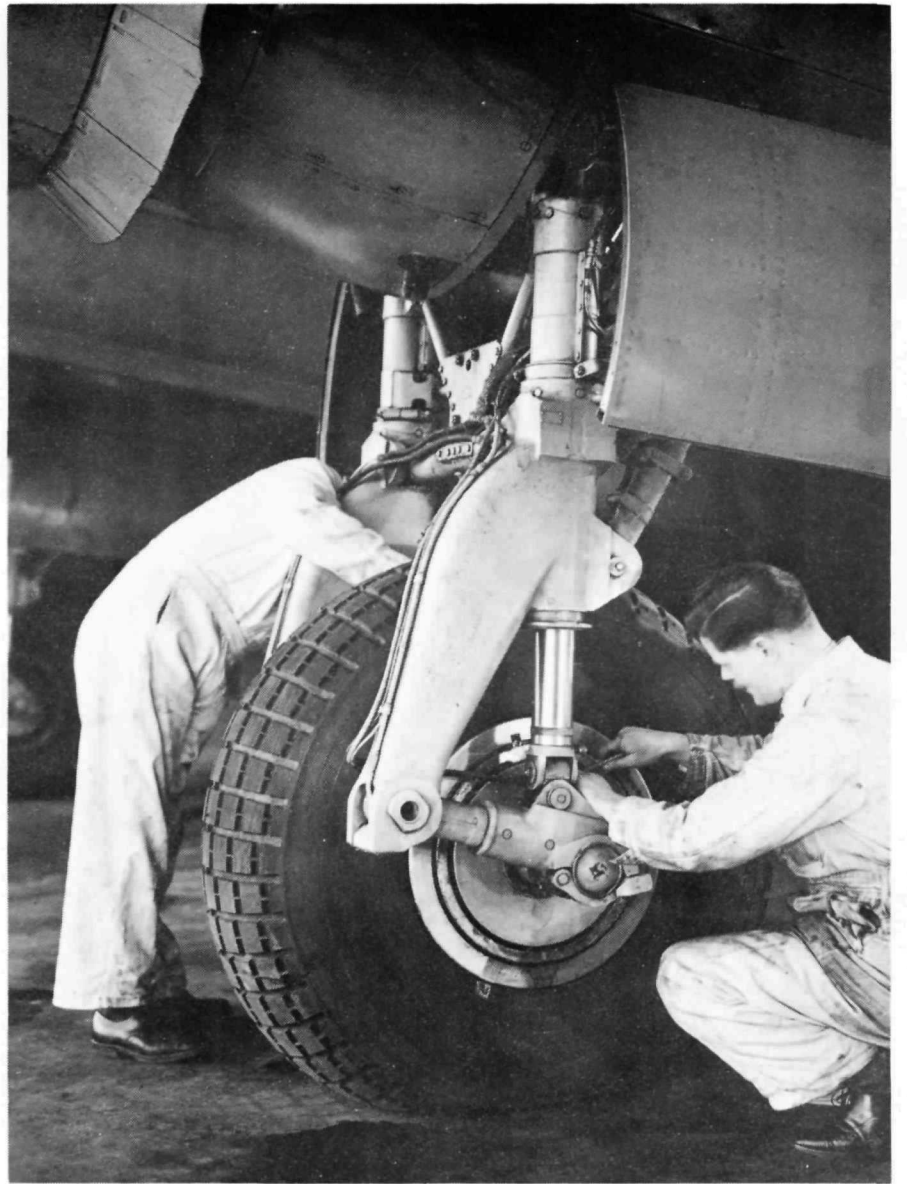
The next aircraft to arrive in March 1945 was an Armstrong Whitworth Albemarle IV, V2046, from nearby Baginton. This aircraft had just been repaired by Marshalls after suffering Cat. B damage on 13 February 1945 when it bellylanded at Keevil after the undercarriage failed to lower. Being ideal for heavy braking, it was used for flight development work on Dunlop's new aircraft plate brake and for testing during landing new types of brake linings and brake drums. Eventually, over 500 landings on Dunlop's new brake plate had been achieved, enabling the company to develop this new and improved braking system for the ever-increasing requirements of the post-war aviation industry.

Dunlop had now established accommodation and testing facilities at Honiley and were joined by W.H.Sutcliffe as chief test pilot. Considerable interest in the work that these two aircraft were doing was shown and in early 1946 Air Marshal Sir Alec Coryton, Controller of Research and Development, visited Honiley.

The summer of 1946 was to see the arrival of another type, a Bristol Buckingham I, KV479, already based at Honiley. This aircraft was used in conjunction with the Research Division of Dunlop's Fort Dunlop tyre factory at Birmingham, to investigate vibration problems associated with high pressure tyres, the aim being to improve riding comfort during taxiing, thus



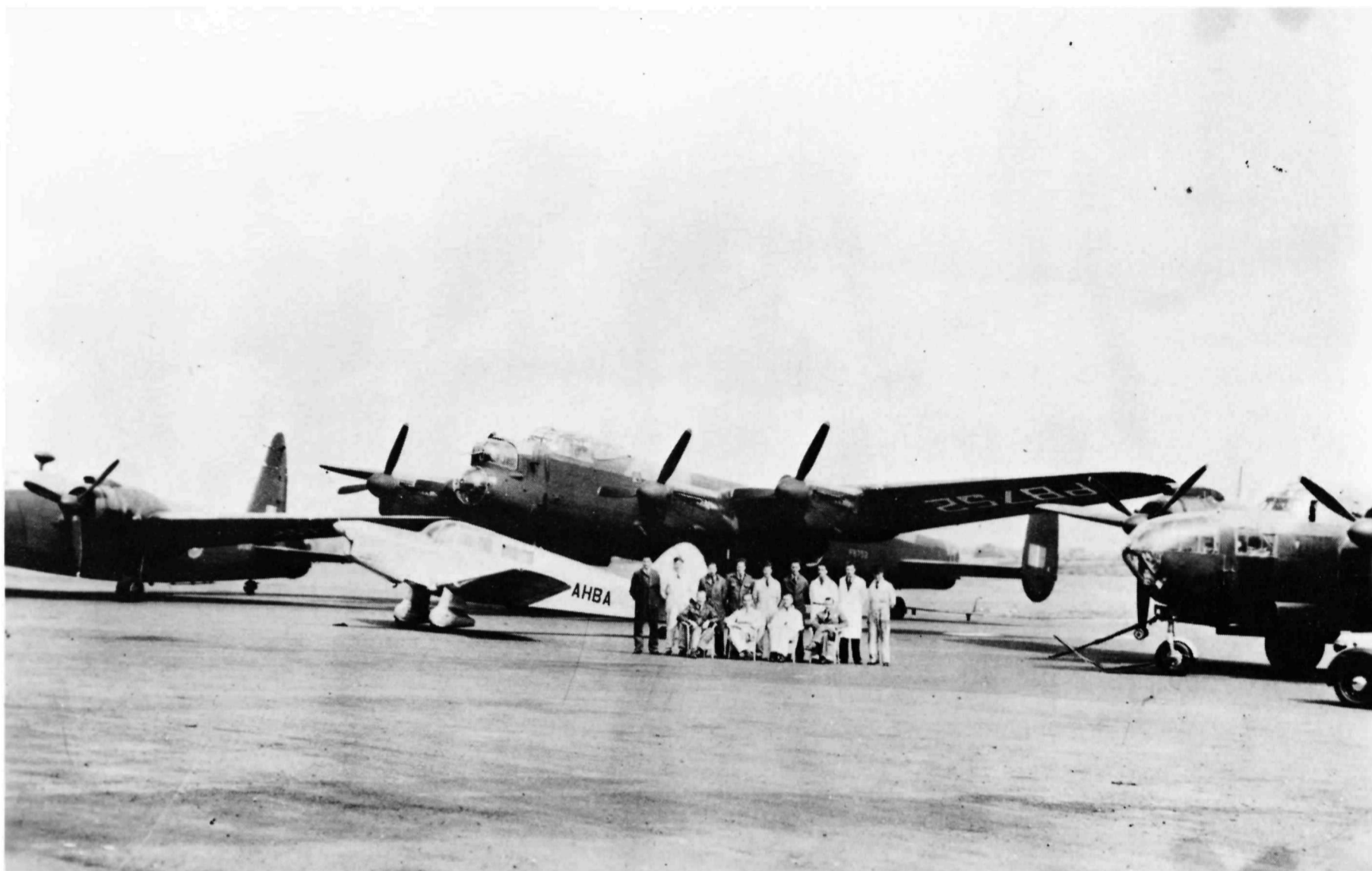
Above: The difference between a normal aero tyre and the new 'Compacta' tyre, both made by Dunlop, is clearly shown when the latter is fitted to the undercarriage of the Wellington



Dunlop test engineers fitting test equipment to Buckingham KV479 at Elmdon, 1946

*Below: The experimental 'Compacta' aero tyre fitted to a Lancaster I, PB752, at Elmdon in 1946.
(All photos; Dunlop Archives)*





The Dunlop Test Flight in 1946 with test pilot and engineers posing beside Proctor G-AHBA (Photo: Dunlop Archives)

making civil flying more pleasant for the passenger.

The fleet of three aircraft was moved to Elmdon, Birmingham Airport, in 1946 where hangar facilities were available. All previous work had been carried out in the open at Honiley and workshop facilities were poor. By now, the Dunlop Test Flight had grown to employing twenty highly-skilled engineers and two fully-qualified and experienced test pilots.

With the arrival of Lancaster I PB752 in July 1946, work now commenced on flight testing a much larger 'Compactor' aero tyre for the one-

hundred-and-twenty ton new airliner, the Bristol Brabazon. Development work was continued on a larger test aircraft, Lincoln RE253, which arrived in August 1946 to bring the Dunlop Test Flight up to a full complement of five ex-military aircraft.

Apart from the repeated circuits and landings, consistent very hard braking and rough taxiing during this type of flying, chief test pilot W.H.Sutcliffe stated that the results obtained always provided something of interest to discuss with the engineers at Dunlop's Coventry factory and with the Research, Product Design

Wellington BK563 and Lancaster PB752 show off their Compacta tyres. Note the guns still fitted (Dunlop Archives)





Buckingham I KV479 photographed at Elmdon in 1946

(Photo: Dunlop Archives)

and Product Performance Divisions at Fort Dunlop. Since these tests were deliberately arduous and intended to wear the wheels and brakes out, there was always something to examine or change. They were also fully convinced of the usefulness of the Test Flight because a component that, for example, originally gave trouble after fifty landings would now do over two hundred without further incident. This, he felt, reflected the amount of work that had to be put in as a result of the tests,

In 1949, it was judged that the usefulness of the Dunlop Test Flight was now at an end and all aircraft were returned to the Ministry of Supply.

The post-war years were to see many examples of new and faster jet-powered aircraft, in particular the Canberra jet bomber. In 1949, Dunlop's new plate brake was fitted to the Canberra prototype and a new era of stopping fast-moving and heavy aircraft on the ground commenced. Although this was the first military aircraft to be fitted with high speed braking, a civil Airspeed Ambassador had earned the distinction of being the first production post-war aircraft in the UK to be so fitted a few months earlier.

Without the services of the Test Flight, Dunlop would never have been able to achieve its impressive position in the world of brakes and tyres in the years following World War Two.

Top right: Albemarle IV at Honiley in 1945 running-up. The turret and guns are still fitted in the dorsal position



Bottom right: Heir to much of the intensive testing carried out by the Dunlop Test Flight was the Canberra. VX165, the prototype B.2, was the first.



WILDCAT SUPPLY DROPS



Wildcat V JV330 used on container-dropping trials by AFEE

The supplying of ground forces from the air in Europe involved large aircraft, usually operating in force but among the possibilities in the Far East which were envisaged by the Airborne Forces Experimental Establishment at Beaulieu in the New Forest in Hampshire was the situation of small raiding parties operating among the islands of the Dutch East Indies, Malaya and Burma. A requirement might arise for these to be supplied not, as was normal in Europe, by transport aircraft but by carrier-borne aircraft.

As part of this investigation, trials with a Mk.III container weighing about 300 lb were carried out using a Wildcat V as the carrier aircraft. As special racks were undesirable on the basis of fitment time and availability, the containers were intended to be carried on existing bomb racks. A slightly larger H-type container was also tested at 350 lbs. The racks were two Mk.III Universal bomb carriers and with loaded containers aboard, the Wildcat weighed in at 7,964 lb.

Initial trials concentrated on the fitment angle and the materials used for the ripcords. Flight trials showed that the containers did not move around in the slipstream and the static lines remained in place. Turns, climbs and dives had no effect on the containers.

The next stage was dropping tests with parachutes in place of ballast. Two Mk.III's were fitted with different chutes to compare the results. One had a 28 ft canopy C-type and the other a 28 ft R-type. They were released at a speed of 170 kts from 500 ft at the same time. There was no fouling of the containers by the canopies or lines and everything arrived safely on the ground.

JV330 on the ground at Beaulieu with Mk.III containers



Further tests were carried out with the H-type containers at 100 kts and both canopies developed satisfactorily well clear of the tail. Further testing came to a halt when the Wildcat was damaged on landing and became unavailable.

With the containers in place, ground handling was normal for a Wildcat. Stability was not affected and climbs were made to 15,000 ft to check for any overheating. Dives at 300 kts showed little difference from an aircraft without containers. Similarly, recovery from a stall at 73 kts was viceless. With the bulky containers, the maximum speed in level flight dropped to 190 kts. Under 100 kts, the effect of dropping the containers was noticeable. They should not be dropped under 500 ft to allow for recovery from any dive if the dropping speed was low.

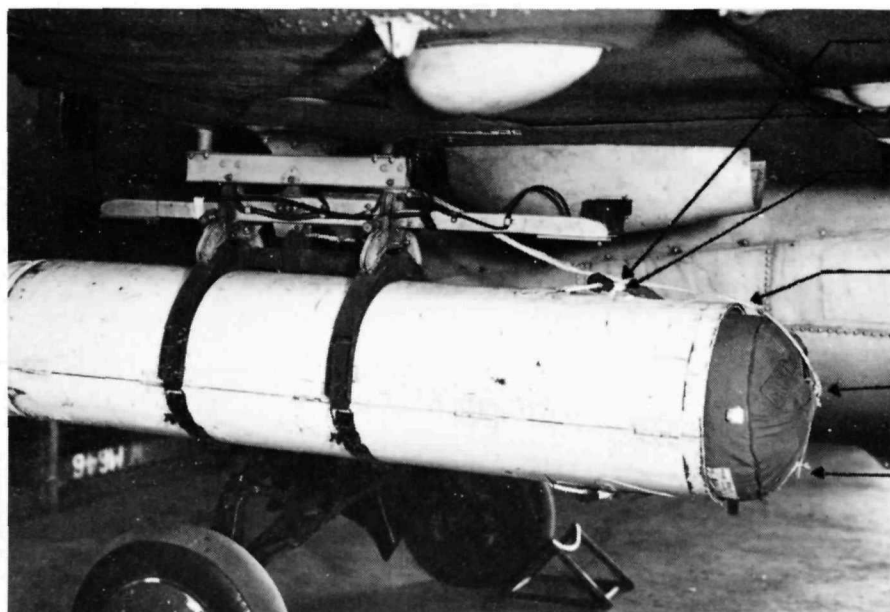
The photographs overleaf show the type H containers being dropped with different canopies on each. The drop zone was in the New Forest not far from the airfield.

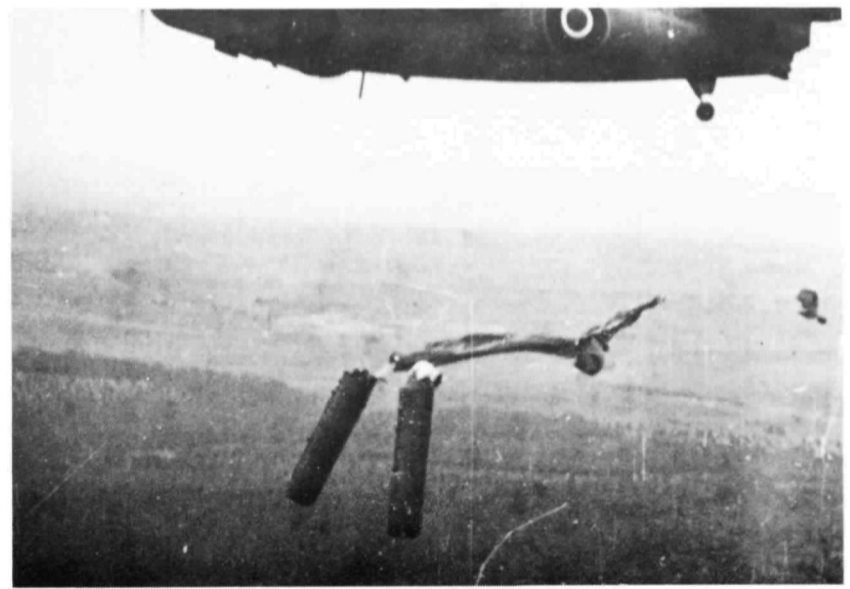
Other types of aircraft were also tested in the role of supply-droppers including the Firefly and the Seafire.

It is believed that no occasion arose for the operational use of these containers during the Second World War but as the tests were being carried out in July 1945 there was little time left to get the system operational in the Far East.

Many small groups had been landed on the eastern shores of the Bay of Bengal and were supplied by Liberators operating at maximum range from Ceylon. Once the East Indies Fleet had begun operations in the Dutch East Indies, the system might have been more economical.

The Mk.III container showing the static line attachments





HAWKER HENLEY



The Hawker Henley light bomber appeared in response to Specification P.4/34 for a replacement for the Fairey Battle capable of dive-bombing and ground-attack, a task which the Battle was eminently unsuited. In the two years since P.27/32 had appeared, the state of the art had advanced considerably and both contenders were major improvements on the unwieldy Battle.

Fairey's own replacement was a slimmed-down Battle which eventually developed into the Fulmar. Hawker provided a chunky monoplane

which looked well-fitted for the task in view. It could carry 550 lbs of bombs internally plus eight 25-pounders under the wings. Although only one 0.303-in. gun was fitted firing forwards, the wing design could have coped with more. The observer had a single 0.303-in. to defend the tail. K5115, the first prototype, took to the air on 10 March 1937 at Brooklands. Five months later, the original fabric-covered wings had been replaced by the now-standard stressed skin wings.

A second prototype flew on 26 May 1938 and the



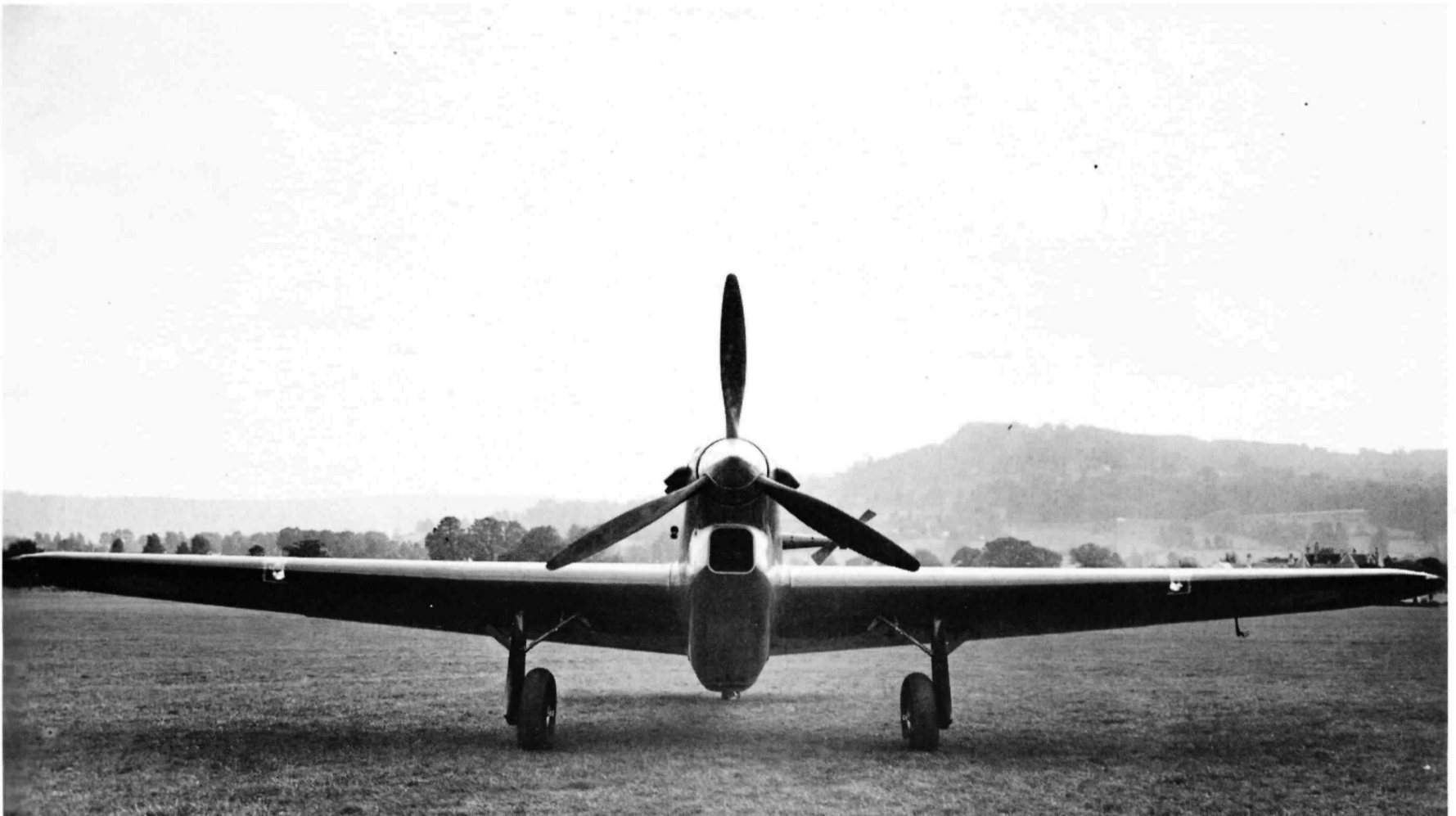


first production aircraft left the line at the Gloster factory at Hucclecote in November.

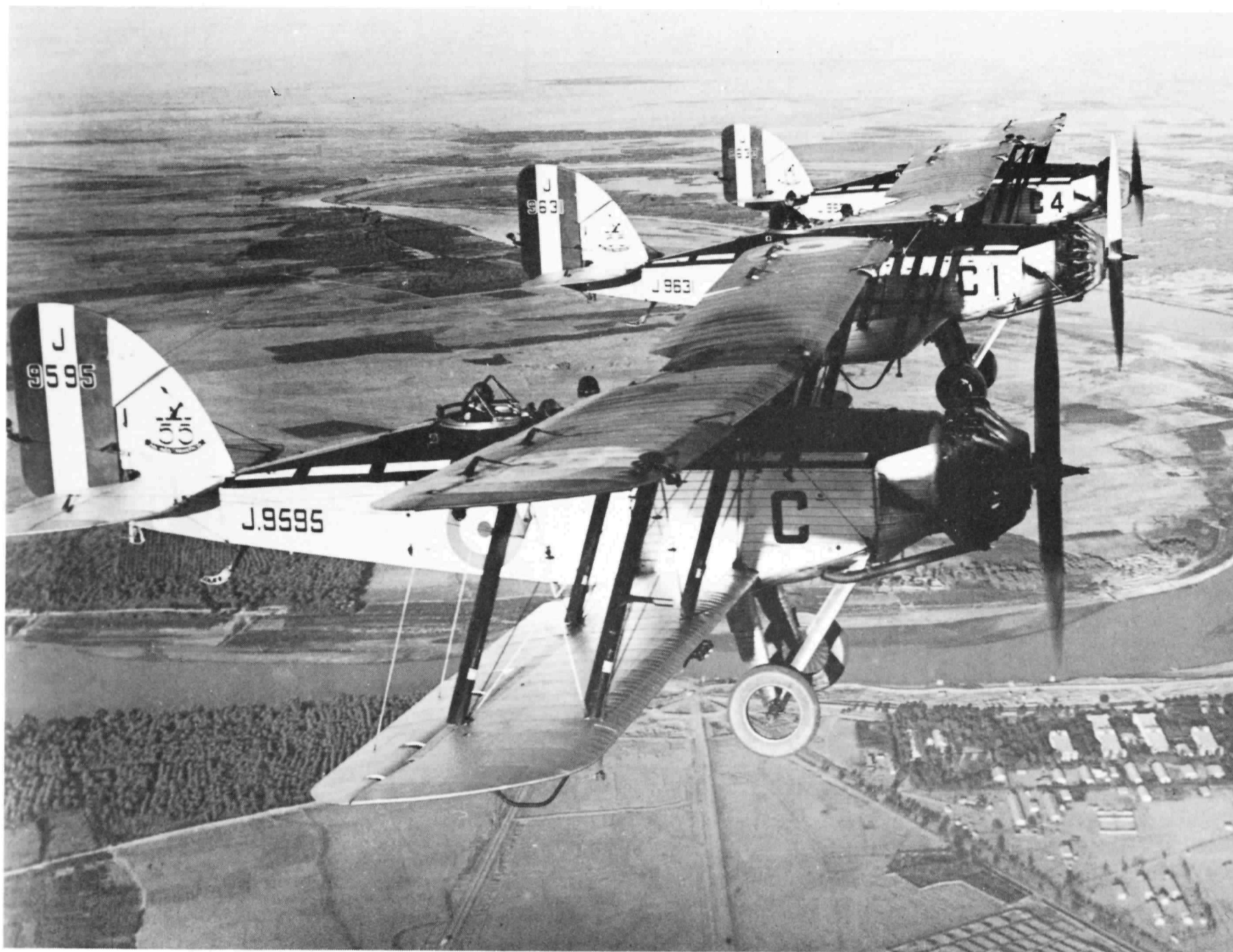
In the interim period, policy had changed and L3243 sported a target-towing windmill. With considerable foresight, the concept of the light single-engined bomber had been discarded as being too vulnerable to the heavily-armed fighters coming into service. The production line would be much more usefully employed in delivering Hurricanes and nobody can now argue with that although at the time the relegation of the Henley to second-line duties was treated as a national scandal by the aeronautical press. The Battles would be replaced by Blenheims but not

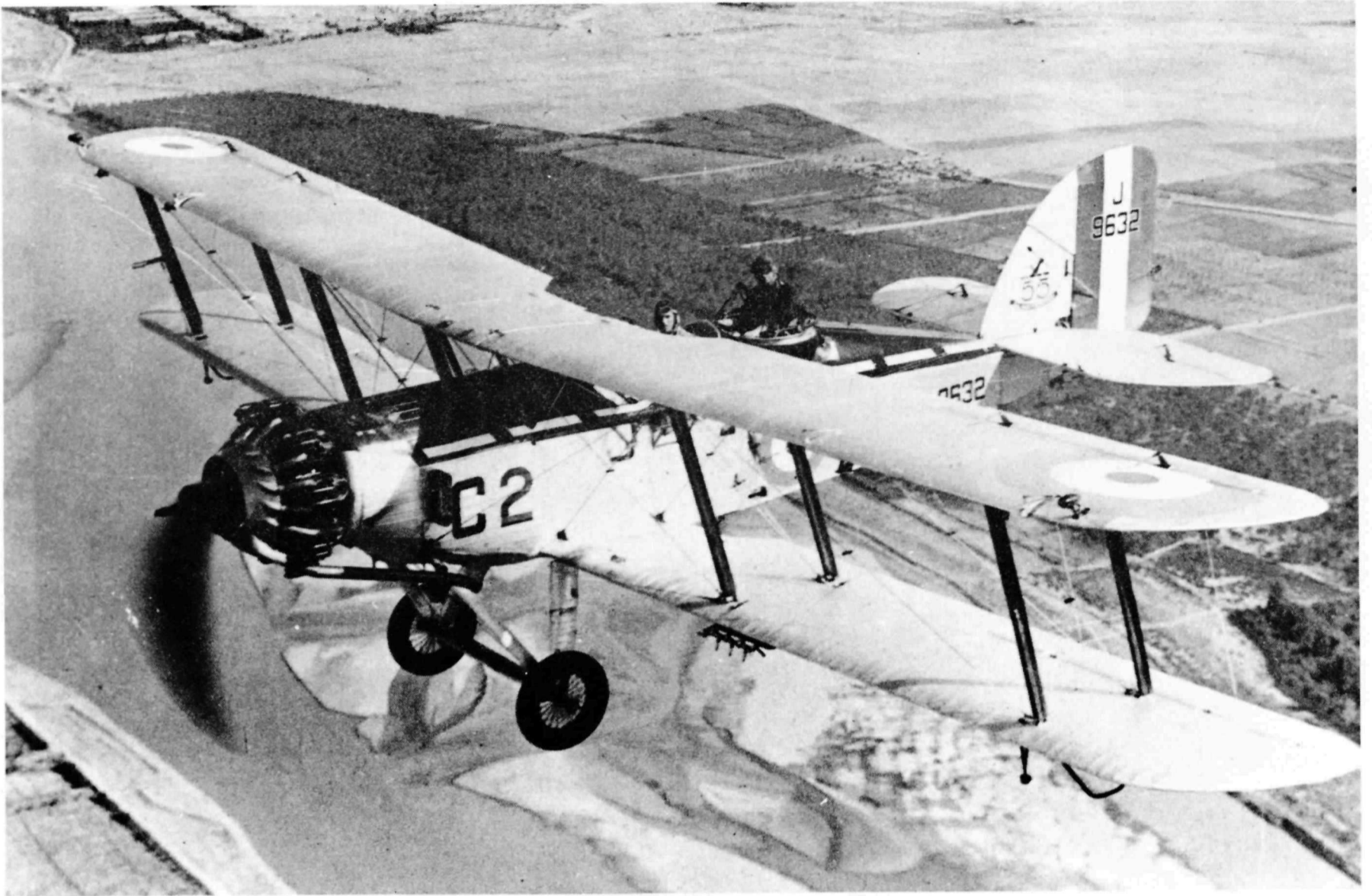
in time to save many crews who had to use their clumsy bombers in a role more suited to future fighter-bombers of twice the speed.

The first production Henley is shown in these photos taken at Hucclecote. The aircraft is yellow, the type of film used rendering this as a dark colour. For its time, the winch layout is neat and guard-wires protect the horn of the rudder from possible damage by the target cable. The load-carrying capacity of the Henley allowed targets to be carried without much loss of performance but unfortunately the engine was not up to the strain of towing drag-producing targets for long periods. Two hundred were built.

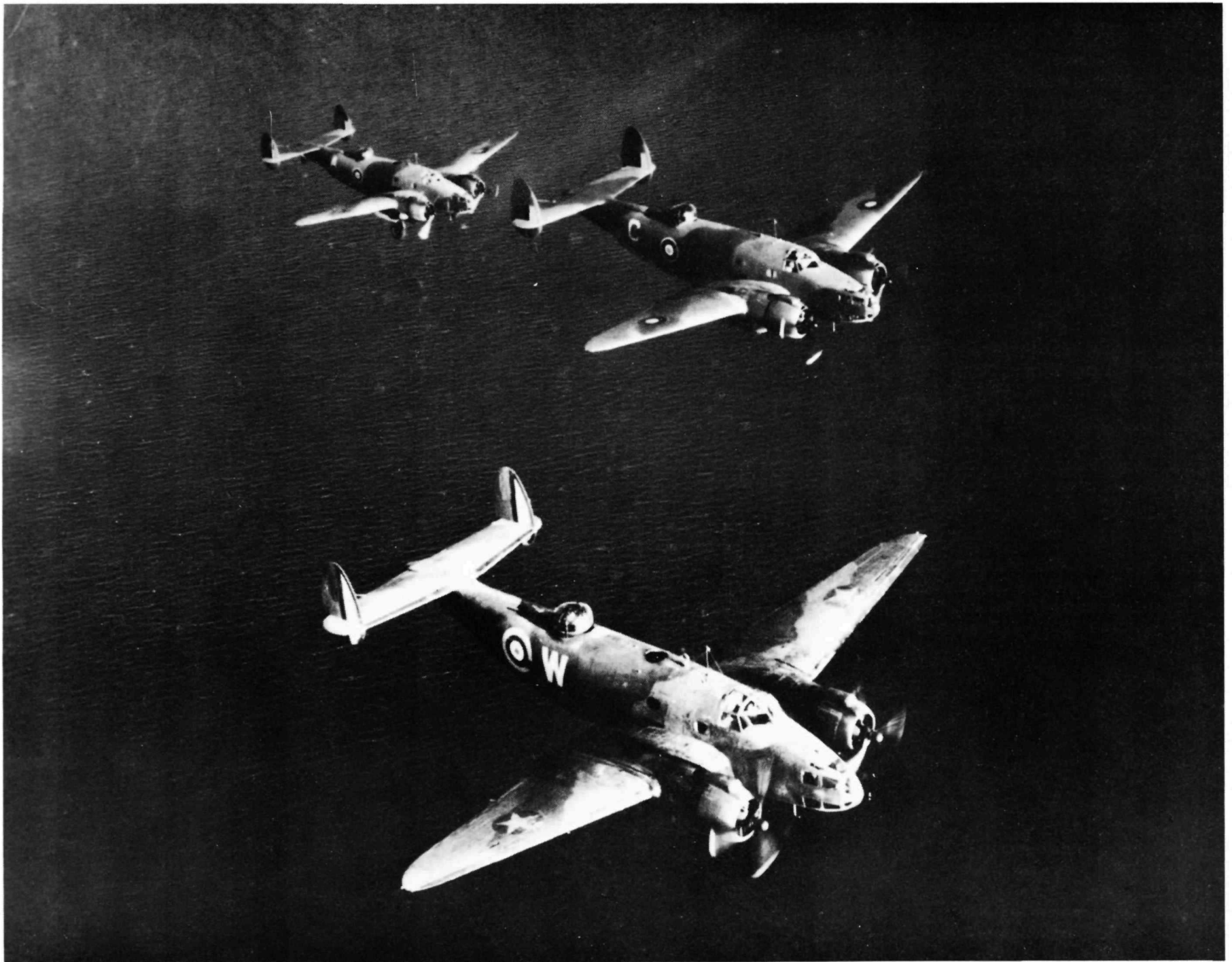


WAPITIS OF 55

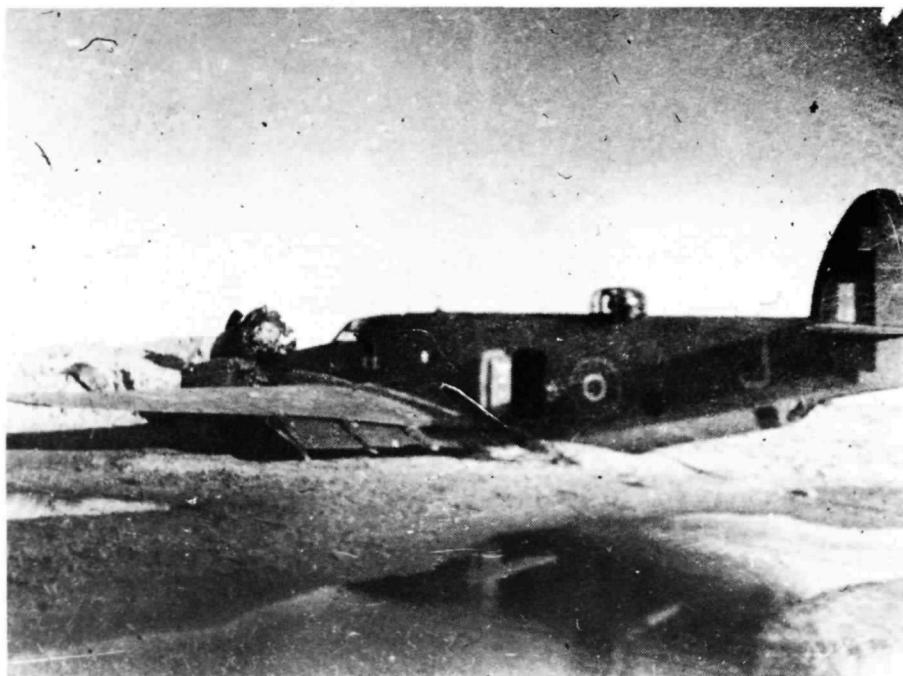




FEEDBACK



Above: Venturas of No.25 Squadron, South African Air Force returning from a raid on railway marshalling yards in Yugoslavia 'C-Charlie' belongs to the leading vic but has dropped back through loss of power. 'A-Able' has put its wheels down to avoid overrunning. Note the US star markings on 'W' showing through the paint on the top wing. Under the Geneva Convention, the crew could have been shot for flying an aircraft claiming to be of two different nationalities. Doubtless, nobody was ever convicted under this particular chapter!



Left: SAAF 6008 'J' of No.25 Squadron SAAF was hit by flak over Yugoslavia, hit another's slipstream on landing and was wrecked on landing, Termoli, 8 November 1944

In AM.4/82 we reviewed the career of the Royal Air Force Venturas and the photographs on this page come from John Lake who flew this type with No.25 Squadron, SAAF. We listed a large number of Venturas delivered direct to the SAAF and for which no records exist in the Ministry of Defence records in the UK. Some obviously retained their original RAF serials as among the aircraft of No. 25 Squadron were those in John's logbook. These were A - AJ443; B - 6009; C - 6052 and 6022; D - AJ483; F - 6106; G - 6122; J - 6004; N - AJ501; O - AJ493; R - 6067; S - 6057; Z - 6122.

Originally, No.25 Squadron was a coastal reconnaissance unit flying anti-submarine patrols from Port Elizabeth but was transferred to the Mediterranean Coastal Air Force in April 1944 and based at Pomigliano, near Naples. Because of lack of U-boats in the Mediterranean by this time, No.25 was transferred to a day bomber role. At the same time, No.608 Squadron was disbanded and a number of Hudson crews were transferred to No.25, giving the SAAF unit a British element. July and August 1944 was spent practicing 'formation air drill' and in bombing and gunnery exercises. Late in August, the squadron moved to a strip with a PSP runway and tented accommodation at Termoli on the Adriatic coast north of Foggia. With other squadrons of the Balkan Air Force, it began bombing operations over Yugoslavia, Greece and Albania with a mixture of South African, British, New Zealand and Australian crews. John flew his first operation on 2 September. It was normal practice to either take off in the dark and bomb at dawn or set out in late afternoon, bomb at dusk

and land back at base in the dark, goose-neck flares marking out the PSP runway. He recalls that he was always wringing wet with perspiration at the end of a trip as a result of keeping his Ventura in close formation with the remainder of the force.

For the record, the British crews transferred were those of F/O Eric Dodson (currently an actor in the long-running soap opera 'Coronation Street'), F/O Charlie Millen, F/O Pete Southgate, F/O Smith (RAAF), F/Lt Cook, W/O Ernie Camell, Sgt Peter Marvin and John himself. Also among the crews was Doddy Hay, later to become leader of the British Parachute Team. As a test parachutist for Martin-Baker, he was the first man to be ejected live at ground level by a rocket-propelled ejector seat. Details in 'The Man in the Hot Seat'.

No.25 Squadron re-equipped with in November 1944, the final Ventura mission having been flown during that month.

John has written an account of his last operation in SAAF 6004 which gives a good idea of what riding a Ventura was like.

Mission No.22

At 15.30 hours we were airborne for Kunjic, this being our fourth briefing for this particular target. Three aircraft took part, Lt.Sidelsky leading with F/O Eric Dodson flying at No.3 and myself as No.2. Vorster (Tearless) was sick so Sgt Bill Shepherd was in the rear turret.

We formed up in our circuit of base and set course across the Adriatic, climbing to 12,000 feet. The weather was fine and apart from the usual corkscrew motion of a loaded Ventura, the crossing was quite smooth. Twenty miles from the coast, heavy cumulus built up underneath us and by the time we had crossed the coast there was 10/10ths up to 13,000 feet and we were flying through and around the billows. Mostar just to starboard opened up with heavy flak and the black puffs above the clouds gave us a useful pinpoint just when it was most needed. Shortly afterwards more flak came up to starboard and Sidelsky turned across towards it, Eric and I closing in very tightly in order to keep up with his evasive action. The flak was pretty heavy by now, black puffs bursting all around us. A hole appeared in the centre of my windscreen but the shrapnel did not penetrate. It was a little disconcerting as I lost a few yards and had to open the throttles wide to keep up tight. A gap appeared and through it we spooted for an instant the Bridge. Sid opened the bomb doors, steadied for a few moments and then dropped the load, breaking away hard to port and driving off the target. At this moment the starboard engine started popping and dropping revs but I switched on the booster pump and she picked up. The ride home was without incident apart from the port engine running a little rough. As we left the target Johnny Foote was giving a running commentary, punctuated by exclamations, ooh!, aah!, just as if someone was pricking him with a pin. 'They're still shooting. Don't stop, Skipper!'

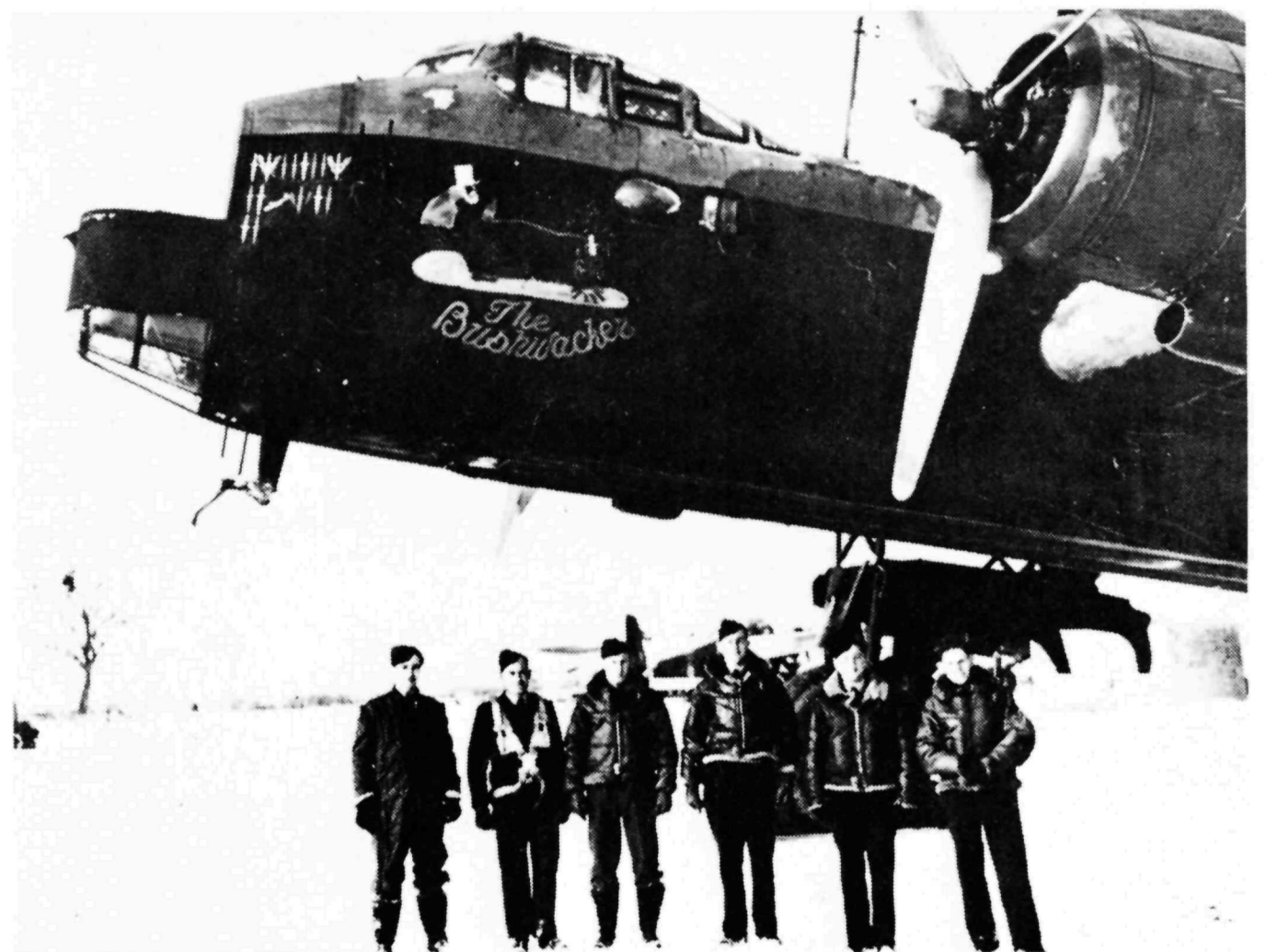
On arrival at base, Sid decided to beat up the drome so Eric and I closed in tight and we belted down to deck level and across the tented site. Then circuiting, we went into echelon and peeled off for landing. Sid seemed to be miles too high on his final turn in so I dropped down low with bags of flap and undercarriage down and crawled in at about 150 feet for the last 700 yards. Sid touched down about halfway along and I thought we'd do nicely when without any warning the starboard wing dropped. We were banked over at about 70° and slipping like blazes. I shoved open the starboard engine, pulled the stick hard round to port and kicked on full left rudder. Slowly the wings came up and just as they came level we hit the deck. We bounced about 15 feet and the second time we struck she shoved her nose down and after shooting along the ground came to rest against a sandbank just short of the runway. Then I saw that the starboard engine which had been ripped out and was lying just off the nose was starting to burn. I had switched off everything before we stopped sliding so, swearing like troopers, we shot out and started to scoop sand over the burning engine with our bare hands. An erk arrived with a small

extinguisher which seemed to be ridiculously small and the fire went out.

Then the ambulance arrived with 'Doc' beaming all over his face as if to say 'Wacko, business at last!' came over to us. Poor old Bill had just started to get out of his turret when we hit and had been rattled around the cabin like a pea in a pod and had just come round under the ministrations of Lt.Grimbeck.

I climbed back in to get my gear and had a chance to take stock. Fortunately Grimbeck, who had been sitting beside me in the second pilot's seat, was strapped in. I shudder to think what would have happened if he had not been. As it was, the ¼-inch thick by 6 inch wide webbing had broken and he had been thrown across the throttle quadrant, bending all the pitch, throttle and mixture levers down flat. The wheels came out when we first struck, one of them rolling into the sea 200 yards behind. Bits of cowlings and the oleo legs were strewn along the grooves we had cut in the sand. The starboard prop had carried on alone and was a twisted mess away ahead of the aircraft. Then they shoved us all in an ambulance and we drove up to the camp site. Meanwhile, old Eric was left stooging around upstairs. He'd had kittens when he saw the huge cloud of smoke and dust arise short of the runway and was worrying himself sick. However, they called him in and he managed to land over the top of us.

I shall never forget the tremendous reception we got from all the chaps when we got up to the camp. They had heard the bang and seen the smoke and were fully convinced that we had bought it. From the way everyone, first Ernie Cammell and then the Flight Commander and all the chaps from both messes shook my hand, anyone would have thought I had just earned a gong instead of breaking one of His Majesty's pet aircraft. Then the Doc rescued us and hauled us off to the sick bay. Bill was already in bed, his bruises having been dressed. Johnny had a few bruises on his arms and legs. Grim was still pretty shaky and had a few bangs on the head. Doc stripped off our clothes and checked us over, made us sit down for five minutes or so and plied us with hot drinks. It was the third prang Bill Shepherd had been in that week. 'Groupy' Stapleton was very decent about it. He'd seen it happen and had told the EO 'That fellow's going to prang' - which is why we probably did....



MORE ON THE BUSHWACKER

David Vincent has provided the above photograph showing the 'nose art' on Stirling LJ995. It originates from Frank Priest, a former RAAF navigator and a member of No.295 Squadron (second from the right in the picture). It is NOT Santa Claus with a top hat but an old aborigine with a top hat! Most of the crew were Australians which accounts for the Australian theme. He is sitting on a rock (not a sleigh!) with a bottle in one hand and cooking a lizard on a stick over an open fire with the other. The mission symbols comprise a Horsa silhouette for a glider towed to Arnhem on 17 December 1944 and winged daggers for SAS operations while large white daggers appear to denote SOE operations and small daggers other tasks. The whole aircraft appeared in AM.4/82.

LOST WITHOUT TRACE?

The winning of the Schneider Trophy by the Royal Air Force High Speed Flight in 1931 is one of the best-recorded bits of aeronautical history, but there seems to be a singular lack of information available on the subsequent disposal of the Flight's aeroplanes. The problem has been posed by the Leisure Department of Leeds City Council. Setting out to write a history of the City's Golden Acre Park, they turned up a pre-war coloured postcard which showed a single-engined floatplane moored in the middle of the boating lake! The photograph is too indistinct to positively identify the machine but it certainly looks like one of the Schneider Trophy monoplanes. The problem is - which one?

For the 1927 contest, three Supermarine S.5s were built: N219, N220 and N221. N221 crashed on 12 March 1928, the others were used by the High Speed Flight in training for both the 1929 and 1931 events and were certainly at Calshot between May and September 1931.

For the 1929 contest, Supermarine produced two S.6s, N247 and N248 and Gloster built two Gloster VIs, N249 and N250. The S.6s were modified as S.6As for 1931. N248 returned to the manufacturers who presented it to Southampton City Council in 1935 and after many tribulations it now forms the centrepiece of the R.J.Mitchell Museum in Southampton. N247 crashed on 18 August 1931 during practice at Calshot.

Both Gloster VIs were apparently sent to Calshot in May 1931 when the High Speed Flight moved from Felixstowe, though it seems from Wing Commander Orlebar's book that only one was assembled and flown.

Of the two Supermarine S.6Bs built for the 1931 contest, S1596 crashed on 16 September during a test flight. The winning aircraft S1595 was sent on a tour of Canada before arriving at the Science Museum on October 1932, where it remains.

Assuming that the machine floating on the lake in Leeds was a genuine aircraft rather than a forerunner of Leisure Sport's replica, it seems that it could have been one of the S.5s, N219 or N220, or one of the Gloster VIs - or perhaps the 1929 winner, S.6 N247, which was exhibited in several places before the decision was taken to take part in the 1931 contest and to refurbish the S.6s.

Can anyone shed light on this? John Bagley at the Science Museum would like to know and so would we.

WHOSE BANGSEAT?

Mr. M.J.Abraham (5 Cecil Road, Boscombe, Bournemouth, Dorset BH5 1DU) is trying to trace the origins of a Martin-Baker Mk.2 ejector seat. Its serial number is NS/153 and it is, precisely, a Mk.2CA SLE dated 3.7.63 and came from Javelin FAW.9 XH722, scrapped in July 1967 after service with No.60 Squadron.

Does anybody know who last used it and when it was extracted from XH722? Answers to Mr.Abrahams.

MORE ON VENTURAS

Denis Voaden was around No.107 MU at Kasfareet while with the army in Egypt in August 1947. One the dump there were a number of Venturas with codes and these are listed below:

JT832	167	JT804	58	JS907	166
6403	K	JT809	170	6416	J
JT815	174	FN994	7	FP595	168
6463	D	FP670	171	JS962	61
JS957	171	FP565	162	FP637	167
JS978	G	JT803	57	6410	L
FP547	172	JS912	P	FP578	S
FP669	A (red)	JT823	177	JS972	160
FP676	163	FP582	160	JS943	173
6437	Z	JT832	162	FN997	S
JS961	F	JS963	167	6450	Q
6418	P	FN957	S	JS926	T
JS943	173	JS948	168	FN993	179
JS929	167	JT815	174	JS936	51
FP631	Z	JS974	X	JS910	60

FP556	0	JT835	173	JS950	175
JT877	59	FP602	R		

At Fanara near Kabrit were FP603 '177' and FP538 and Marauder 4175M

The three-digit codes were in use by No.75 OTU and two-digit codes by No.1330 Conversion Unit. As these training units make no mention of serials except in the case of write-offs (and thus shown in the tables in AM.4/82), it would seem logical that all aircraft shown with numbers were with these two units. In some cases they had previous service with squadrons. This would explain why so many Venturas were received in the Middle East but never found their way to squadrons and had to be shown as 'Med' only.

Other aircraft at Kasfareet dump were Lodestars VR995, EW992, EW993, HK975 and HK981. VR955 was ex-G-AGCM given a RAF serial in October 1946 so it lasted less than a year. VR995 is a blank so at the moment we cannot confirm which is right.

There were also some Baltimore target tugs: FA210 '15' in black; FW442 'C' in white, FA257 'A' and FA636. Three ex-13 (Hellenic) Squadron aircraft were FW788 'F', FW429 'E' and FW844. The last-mentioned had 'B' in yellow and the USAAF marking A-30A-35-MA 43-9001 on the type stencil.

At Fanara were He 111 fuselage 5J+CR superimposed over it ?-HS. This was a captured He 111 'liberated' by 260 Squadron. Baltimore TT FA283 '16' and AG857 '5'; Thunderbolt (ex-P-47D-22-RE) carried 4720M, presumably ex173 OTU; Spitfires 4719M and 4178M and Kittyhawks AK634, AK972 and EV388.

There were also heaps of unidentifiable Spitfires, Thunderbolts, Dakotas, Beafighters, Marylands, Bostons and Wellingtons.

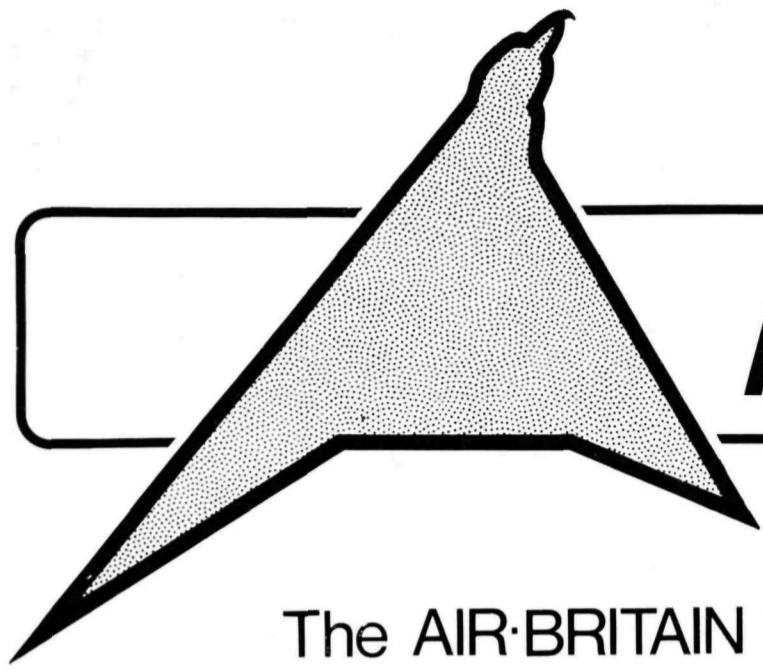


Still on Venturas, Mr. J.H.Simmonds has sent in the above photograph of JS980 after a crashlanding at Ramat David on 30 April 1944. However, since No.75 OTU reported that this aircraft had been crashed on 25 August 1944 by them. A possible answer is that the photo is not of JS980 'R' as the Operations Record Book of No.459 Squadron shows JT980 as 'U'. So the wreckage, which looks very like a write-off may have been another serial but there does not seem to be an accident record which ties up with the 30th April date. A tyre burst on landing and an attempt to go round again was cancelled by a barrel just off the runway which smashed the port wing.

BACK COVER

An attractive line-up of No.202 Squadron's Fairey IIIF on the ramp at Kalafrana, Malta. At the end of the line is a Flycatcher floatplane, undoubtedly from a Mediterranean Fleet carrier in Grand Harbour which has put seaboots on some of her aircraft to relieve the congestion at Hal Far. Where to put carrier-borne aircraft while mother was in dock was a perennial problem and much correspondence passed between the Admiralty who wanted more space, the Air Ministry who had to provide it and the Treasury who, in an unchanging world of their own, refused to pay up for the land and buildings.





AEROMILITARIA

The AIR·BRITAIN Military Aviation Historical Quarterly



No 3
1983



Edited by James J. Halley and Peter M. Corbell

Editorial address: 5 Walnut Tree Road,
Shepperton, Middlesex TW17 ORW

After prophesying in AM 2/83 that the Washington File would be ready in June, we find that it has slipped into July by a few days so should have reached all those who ordered a copy by the time this appears.

Should anyone not have read the editorial in the last issue, this is available from the Sales Dept at Stone Cottage, Great Sampford, Saffron Walden, Essex CB10 2RS at £2.00 post free (or £3.00 to non-members).

Coming along behind is another RAF register. Unable to withstand the appeals of some of our younger members who would like to see a register of their generation of aircraft (the strutless ones) before they are too old to enjoy it, we have taken a leap forward from W9999 to WA100.

So the next register will be entitled "Royal Air Force Aircraft WA100 to WZ999" and will be in the same format as the earlier registers, showing unit allocations and fates. Unfortunately, at the time this issue has to go to the printer the final price is not known as the make-up is being completed and the actual number of pages is as yet unsettled - but probably around 150-160 unless our calculator has seized up.

Sometime later this year 'The Lancaster File' will appear and there are also 'Hampden File' and 'Whitley File' in the pipeline. In respect of these, we could use some help in the photographic field, if only to avoid some of the more well-known pictures being trotted out. Any loans of photographs of these types would be gratefully accepted.

This may be a good place to mention some requirements for next issue. We have an article on RAF Station Kemble but apart from a good shot of the airfield we are bereft of photographs to illustrate it. If anyone has any pics of Kemble or its aircraft that have not appeared in AM, we would welcome them for publication.

On a wider front, Air-Britain is also looking for photographs of aircraft of the following Royal Navy squadrons, either for lending when required or, if available from a photo library, the reference number of the photograph. These are: Nos. 833, 838, 840, 841, 842, 850, 877, 878, 879, 883, 884, 885, 886, 889, 895, 897, 1700, 1703, 1790, 1834, 1837, 1838, 1842, 1845, 1847, 1852 and 1853.

Something else that we have an interest in is Operation 'Outward'. If any reader was engaged in, or has photographs of, this Naval operation, we would like to hear from him or her. As the Wrens played a major part in it, try your nearest ex-Wren.

For AM 1/84 we need a 1953 crash photo as we have so far failed to find a heading for the traditional write-off column scheduled, as in the past, for the first issue of the year.

Now we sit back and wait for the postman.

COVER PHOTOGRAPHS

Our front cover photograph is of Jet Provost T.4 XP547 before delivery to the Aeroplane and Armament Experimental Establishment. It subsequently went on to serve with the Royal Air Force College, Cranwell, the Central Air Traffic Control School and the School of Refresher Flying before passing on to No.1 Tactical Weapons Unit where it now resides.

On the back cover is a view of HMS Albion by courtesy of HMS Albion. Having a resident photographic section and a variety of aircraft to take snapshots from is very convenient. On the deck are three Sea Hawks and a Skyraider AEW.1. 'Albion' having the initial 'A', it follows that the letter 'Z' was allotted as an ident letter for the bows. Note the first Sea Hawk ready for catapulting from the port catapult.

* * * * *

IN THIS ISSUE

The Sabre was the first Royal Air Force swept-wing fighter, albeit a stopgap with only a short service life. It introduced a whole new range of problems, including some rather off-beat examples.

One heart-stopping occasion was when a pilot glanced in his rear-view mirror and found his tailplane missing! A gradual decrease in speed was begun to get down to a viable ejection speed and a final glance in the mirror to see what else had fallen off revealed the tailplane back in place.

Apparently airflow disturbance over a wrongly-adjusted hood had caused high-speed vibration on the tailplane which had rendered it invisible when seen in the mirror.

Histories of naval airfields are notoriously difficult to compile. There may be ship's logs for tiny craft but HMS Sparrowhawk, and all the other stone frigates, had none. So we have made the item on Hatston a photographic one.

Having visited Drem quite frequently and on occasions flown from its grass field, the name "Drem Lighting" always brought back memories of the old airfield. In time, however, we began to suspect that the Drem part of the title was actually D.R.E.M. (Down the Runway by Electric Markers?) but now Bill Hughes has produced an account which proves it was really Drem all the time. One minor mystery is why a fighter station commander should report to No.18 Group in Coastal Command but this has been rechecked and is not a typographical error. So another of the obscurer facets of wartime aviation has been put in perspective.

The Sarafand was such a big boat that we felt that two pages would not do it justice.

* * * * *

NO. 804's GLADIATORS

Since No.804 Squadron appears prominently in the Hatston article, a few notes on its Sea Gladiators might be of interest.

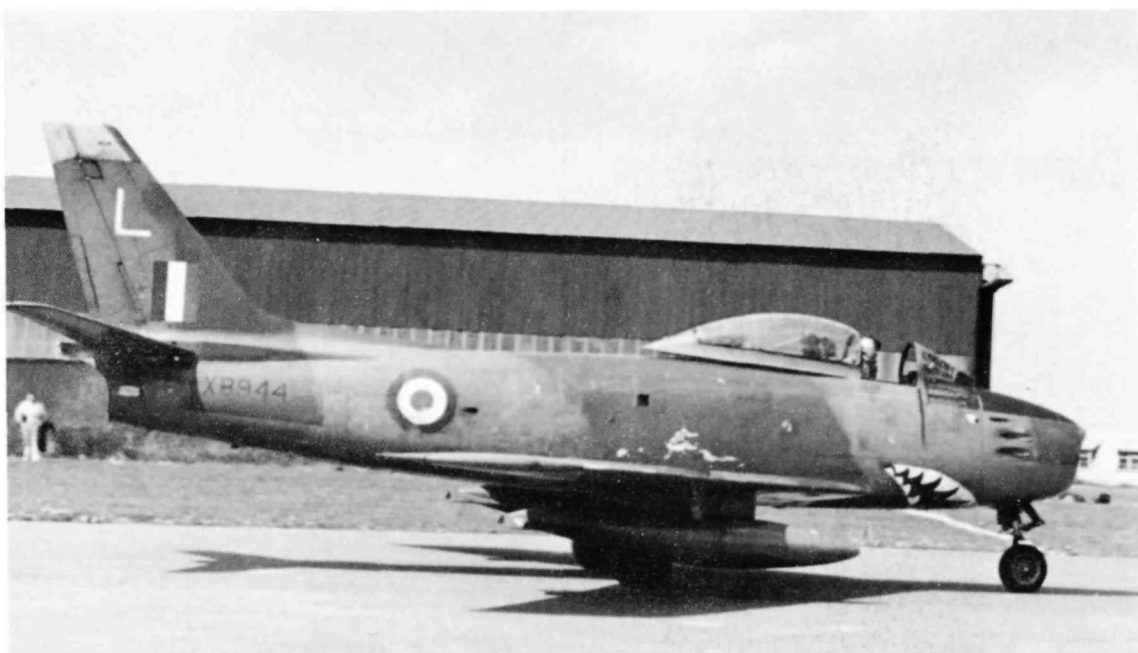
When No.769 Squadron's four Sea Gladiators moved north from Donibristle to provide some measure of air defence for Scapa Flow on 25 November 1939, they were allotted to X Flight which began to form on 2 December. Y Flight was formed at Wick on 5 December and took over six Gladiators. The aircraft available were:

X Flight: N5506, N5507, N5509, N5510, N5538 and N5545

Y Flight: N2268, N2272, N2273, N2274, N2276 and N2277.

On 28 December, N5504 was damaged in a collision and abandoned. On 9 January, N5506 was awaiting take-off clearance when hit by a Swordfish.

RAF SABRES



Sabre XB944, sporting the Sharksmouth of No.112 Squadron (Peter M. Corbell)

The capture of tons of research documents by the Allies at the end of World War Two had demonstrated the amount of research carried out in Germany on high-speed aircraft. While some projects were pure fantasy, others showed promise; among the latter were the designs for swept wings to delay the onset of compressibility and these were seized upon by the victors as part of major development programmes.

In Britain, research into swept wings had been proceeding but was far behind that into jet engines, although a contract had been placed with Miles Aircraft for a supersonic research aircraft, the M-52. The choice of a constructor whose experience was almost entirely in wooden trainers would probably have doomed the programme to extinction in due course but was pre-empted by the cancellation of the contract on the grounds that supersonic flight was too dangerous to be carried out by human beings. The perils of travelling at more than 20 mph in a train, or going through a mile-long tunnel, were still clearly in the mind of the politicians. So mere humans were excluded from such perilous research and a programme of model trials was substituted. Dropped from Mosquitos, the models showed how wise the decision had been by refusing to follow any perceptible form of controlled flight.

The next stage was to adapt straight-winged prototypes to take a swept wing, the two main contenders being the Hawker P.1040 (later to become the Sea Hawk) and the Supermarine Attacker. These became the P.1052 and the Type 510 respectively, the forerunners of the Hunter and Swift, first flying in November and December 1948.

In the meantime, the British Government had made a shrewd business deal by selling fifty modern jet engines to Russia. The Socialist government of the time was still trying to talk itself into believing that Russia was some kind of social democratic republic which suffered from a bad press; the Conservatives saw money coming to private companies and drooled over all the licence fees should Russia's Managing Director, a friendly old buffer called Stalin, decide to build thousands of them.

A year before the British swept-wing prototypes took to the air, a swept-wing fighter powered by a Rolls-Royce Nene made its first flight in Russia. In mid-1948, Berlin was blockaded and Russian peaceful democracy began to be doubted. MiG-15s entered operational service by the end of 1948 but powered by RD-45 jet engines which, apart from being identical, had no connection with Nenes. No production licence fees were forthcoming.

Fortunately, in November 1947, North American had flown its XP-86 which was dived at supersonic speed in April 1948. Dubbed the 'Sabre', the type was ordered before the first flew and deliveries began in February 1949.

The outbreak of the Korean War soon brought jet fighters into action and numbers of MiG-15s flown by Chinese pilots began to appear, out-flying the F-80s and F-84s with their straight wings. Sabres were moved to Korea to combat this new menace and established superiority over the MiGs, mainly due to superior training than to the flying characteristics of the aircraft.

Meanwhile, back in the UK, an expansion programme was authorised and Vampires and Meteors flowed off the production line. Reports of the performance of the MiG-15 trickled back, mainly from RAF exchange officers with the USAF who could see how outclassed Vampires and Meteors were if involved in air-to-air combat with MiGs at altitude. The RAAF had received Meteors due to an excess of Commonwealth goodwill by the Australian Prime Minister, the RAAF en masse wanting Sabres. The best that the British aircraft industry could do was provide Venoms, basically Vampires with a slightly-swept wing.

In the meantime, prototypes continued to appear and 'super-priority' plans were made to re-equip the RAF. The plans kept to schedule, only the aircraft failed to appear for years.

Two years after the start of the Korean war, the RAF still had no swept-wing fighters but the Hawker P.1067 prototype Hunter had flown in July 1951 but another two years would pass before production aircraft reached squadrons. Next month, the first Swift flew.

To fill the gap, the British Government decided to acquire a stop-gap fighter until Hunters and Swifts flowed out of the factories in large numbers. Since it was unlikely that the ever-neutral Swedes would provide SAAB J-29s - and since nobody asked the Russians - the choice was narrow. It was either Sabres or no Sabres.

Another bit of Commonwealth goodwill resulted in the aircraft being Canadair-built Sabres. These were Sabre 2s with General Electric J-47 engines and were initially being designated F.1s, but later F.2s and F.4s were the accepted forms to line up with the RCAF's mark number system. Both marks corresponded with the USAF F-86E.

No.1 Long Range Ferry Unit was given the task of ferrying the RAF's Sabres from Canada and pilots were given familiarisation flying by USAF squadrons in Europe.

Operation 'Becher's Brook', named after a jump on the Grand National racecourse, began on 8 December 1952 and ended on 19 December 1953. Prior to that, the first three had been flown over during October for use by the Ferry Training Unit.

The 3,100 mile route from the Canadair factory passed through Goose Bay, Labrador, Bluie West One, Greenland, Keflavik, Iceland and terminated at Prestwick or Kinloss. Stornoway was available should an early landing be required through fuel shortage or weather problems.

At a ceremony at Abingdon in January 1953, the first batch of Sabres was handed over to the RAF, all destined for Germany. Delivered in natural metal finish, the Sabres were camouflaged after arrival.

No.1 LRFU became No.147 Squadron on 1 February 1953 but the first operational unit to fly Sabres was No.3 Squadron at Wildenrath in May 1953, the first of ten Sabre squadrons in Second TAF. Apart from No.130, which reformed, all were converted from Vampires.

In the UK, two Fighter Command squadrons, Nos.66 and 92, converted from Meteors at Linton-on-Ouse.

The Sabre Conversion Flight at Wildenrath supplemented No.229 OCU's output of pilots in providing familiarisation for Vampire pilots. There was not a drastic change from previous types, as Sabre pilots found. Engines still stopped, aircraft went out of control, electrics packed up and clouds still turned out to be stuffed with bits of Europe. One unfortunate pilot discovered a new hazard. After opening his hood, he watched his brand-new Sabre fly off into the distance from the bird's-eye view of his ejector seat.

Perhaps one of the striking features of the Pilot's Notes was the rectification action to be taken in the event of equipment failure. A surprising number of items carried the single

word 'eject'.

Squadrons flying the Sabre were as follows:

No.3 Squadron (Wildenrath and Geilenkirchen);
May 1953 to January 1956
No.4 Squadron (Jever)
October 1953 to July 1955
No.20 Squadron (Oldenburg)
October 1953 to November 1955
No.26 Squadron (Oldenburg)
November 1953 to June 1955
No.66 Squadron (Linton-on-Ouse)
December 1953 to March 1956
No.67 Squadron (Wildenrath and Bruggen)
May 1953 to March 1956
No.71 Squadron (Wildenrath)
October 1953 to May 1956
No.92 Squadron (Linton-on-Ouse)
February 1954 to April 1956
No.93 Squadron (Oldenburg and Jever)
April 1954 to January 1956
No.112 Squadron (Bruggen)
January 1954 to April 1956
No.130 Squadron (Bruggen)
August 1953 to April 1956
No.234 Squadron (Oldenburg and Geilenkirchen)
November 1953 to May 1956

Some Sabres went to No.229 Operational Conversion Unit at Chivenor to supplement its Vampires, Meteors and Venoms. A few were sent to the Central Gunnery School, the Fighter Weapons School and the Air Fighting Development Squadron for trials.

Although Sabres were in service for a relatively short time, No.234 Squadron formed a four-plane aerobatic team which appeared at various Continental air displays.

In June 1955, the first Hunter F.4s arrived in Germany to begin replacing Sabres and by May 1956 the process was complete. The survivors of the 430 Sabres delivered were returned to the USAF, having been supplied under the Mutual Defence Aid Programme by the United States.

Although on the charge of Station Flight, Linton-on-Ouse, XD763 carried the insignia of Wing Leader, Linton (PMC)



PRODUCTION

<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>	<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>
XB530	19378	1 OFU/FTU	To RCAF 30.7.54	XB620	19523	RAE	To USAF 27.11.56
XB531	19384	1 OFU/FTU/ 229 OCU	SOC 26.12.57	XB621	19524	3	To USAF 16.4.57
XB532	19404	1 OFU/FTU/ 229 OCU/CFE	To USAF 19.9.56	XB622	19525	AFDS	To USAF 24.4.56
XB533	19464	-	To USAF 25.9.56	XB623	19526	26	Yawed on take-off and hit snowbank, Oldenburg, 24.2.55
XB534	19465	1 OFU	Crashed on delivery flight 3m SE of Prestwick, 19.12.52	XB624	19527	67/71	To USAF 16.7.57
XB535	19466	FTU/26	To USAF 14.1.57	XB625	19528	67	To USAF 19.2.57
XB536	19467	3/234	To USAF 21.8.56	XB626	19529	67	SOC 18.12.58
XB537	19468	1 OFU/FTU	To USAF 6.7.56	XB627	19530	67	Ran out of fuel and crashed 3m S of Peer, Belgium, 7.9.54
XB538	19469	1 OFU/FTU/67	SOC 19.12.58	XB628	19531	71	Collided with XB729 and abandoned 10m NW of Krefeld, 26.10.54
XB539	19470	-	To USAF 14.9.56	XB629	19532	112/93/3	SOC 18.12.58
XB540	19471	CGS/FWS	To USAF 9.2.56	XB630	19533	71	SOC 18.12.58
XB541	19472	3	SOC 18.12.56	XB631	19534	71	To USAF 5.6.56
XB542	19473	SCF/66	To USAF 7.6.57	XB632	19535	67/71	To USAF 23.10.57
XB543	19474	1 OFU/FTU/26	To USAF 7.7.56	XB633	19536	3	Sank back on take-off and overshot, Eindhoven, 16.6.55
XB544	19475	1 OFU/FTU	To USAF 5.6.57	XB634	19537	67	Collided with Anson TX238 on approach, Wildenrath, 5.4.55
XB545	19476	1 OFU/FTU	To USAF 11.12.56	XB635	19538	71/SCF	To USAF 27.3.57
XB546	19477	FTU/CGS/FWS	To USAF 11.7.56	XB636	19539	26	To USAF 31.5.57
XB547	19478	FTU/3	SOC 18.12.58	XB637	19540	71	SOC 18.12.58
XB548	19479	1 OFU/FTU/93	Flew into ground recover- ing from dive, Meppen ranges, W.Germany 3.8.55	XB638	19541	20	Hit tree on approach and dived into ground, Oldenburg, 5.8.54
XB549	19480	147	Undercarriage collapsed on landing, Stornoway, 10.3.53	XB639	19542	67	To USAF 20.4.56
XB550	19481	3/71/67/71	To USAF 30.6.56	XB640	19543	3	To USAF 13.3.57
XB551	19663	Hawkers	To USAF 17.5.56	XB641	19544	147/229 OCU	To USAF 12.1.56
XB575	19482	20/234	SOC 28.12.58	XB642	19545	234	SOC 18.12.58
XB576	19483	112/93	To USAF 6.2.57	XB643	19546	3	Flew into ground during GCA training, Henri- Chapelle, Belgium, 24.2.54
XB577	19484	26	To USAF 10.4.56	XB644	19547	3/229 OCU	To USAF 25.6.56
XB578	19485	234	To USAF 12.9.57	XB645	19548	20	To USAF 1.3.57
XB579	19486	-	SOC 19.12.58	XB646	19549	20/3	SOC 18.12.58
XB580	19487	26	To USAF 28.9.56	XB647	19854	4	Stalled on overshoot and dived into ground 3m SSW of Jever, 8.7.54
XB581	19488	3	To USAF 21.2.57	XB648	19855	130	Swung on take-off and nose- wheel retracted, Bruggen, 3.6.54; DBR
XB582	19489	3/234	To USAF 8.11.57	XB649	19856	112	To USAF 27.7.57
XB583	19490	FTU/93	To USAF 9.10.56	XB650	19857	112	To USAF 16.7.57
XB584	19491	-	To USAF 9.11.56	XB664	19550	67	To USAF 5.12.56
XB585	19492	FTU/3	SOC 18.12.58	XB665	19551	SCF/71/67	To USAF 14.11.56
XB586	19493	67	To USAF 18.3.57	XB666	19552	AFDS/229 OCU	To USAF 26.2.57
XB587	19494	SCF	To USAF 28.6.57	XB667	19553	3	Flew into ground during GCA training, Henri- Chapelle, Belgium, 24.2.54
XB588	19495	26/20	SOC 18.12.58	XB668	19554	67	To USAF 7.9.56
XB589	19496	FTU/20/234/3	SOC 18.12.58	XB669	19555	71	To USAF 30.6.56
XB590	19497	3	SOC 18.12.58	XB670	19556	3	To USAF 23.5.57
XB591	19498	SCF	To USAF 5.12.56	XB671	19557	67	SOC 18.12.58
XB592	19499	SCF	To USAF 6.11.56	XB672	19558	3	To USAF 6.5.57
XB593	19500	SCF/26	To USAF 13.6.56	XB673	19559	SCF/3	SOC 18.12.58
XB594	19501	20	To USAF 15.3.57	XB674	19560	67	To USAF 4.3.57
XB595	19502	26	To USAF 10.4.56	XB675	19561	SCF/Hawkers	To USAF 23.5.56
XB596	19503	67	To USAF 5.10.56	XB676	19562	SCF	DBR on ground, 17.6.53
XB597	19504	20	To USAF 9.3.56	XB677	19563	AFDS/92	Failed to become airborne and overshoot, Linton-on- Ouse, 24.6.55: DBF
XB598	19505	67	To USAF 18.3.57	XB678	19564	67	To USAF 28.2.57
XB599	19506	71	To USAF 30.5.56	XB679	19565	67	To USAF 15.2.57
XB600	19507	67	Bellylanded after electrics failed, Wildenrath, 22.3.54	XB680	19566	234	To USAF 14.5.57
XB601	19508	FTU/147/CGS/FWS	To USAF 12.10.56	XB681	19567	3	Overshot landing and un- dercarriage raised to stop, Geilenkirchen, 10.2.54
XB602	19509	SCF	To USAF 15.2.57	XB682	19568	SCF/67	To USAF 3.6.57
XB603	19510	SCF	Lost power on overshoot; crashlanded, Wildenrath, 15.6.53	XB683	19569	67	Abandoned in spin 6m S of Liege, Belgium, 17.9.53
XB608	19511	71	To USAF 6.11.56	XB684	19570	3	To USAF 27.1.56
XB609	19512	3/26	To USAF 27.6.56	XB685	19571	FTU/147/3	To USAF 30.11.56
XB610	19513	147	Dived into ground after instrument failure 7m NE of Grantown-on-Spey, Moray, 5.4.53	XB686	19572	SCF/71	To USAF 4.2.57
XB611	19514	SCF/71	To USAF 17.12.57				
XB612	19515	3	SOC 9.57				
XB613	19516	26	To USAF 12.11.56				
XB614	19517	3/234	SOC 18.12.58				
XB615	19518	234/WL Geil- enkirchen	Engine cut; forcedlanded 1m E of 1m E of Pfaffen- dorf, W.Germany, 3.5.55				
XB616	19519	SCF/229 OCU	To USAF 5.12.56				
XB617	19520	3	To USAF 12.7.57				
XB618	19521	SCF	To USAF 12.9.56				
XB619	19522	WL Wildenrath/ 3	SOC 18.12.58				

<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>	<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>
XB687	19573	71	To USAF 21.9.56	XB761	19459	-	To USAF 22.6.56
XB688	19574	SCF	To USAF 19.1.57	XB762	19636	229 OCU	To USAF 6.11.56
XB689	19575	-	To USAF 13.8.57	XB763	19629	229 OCU	To USAF 21.3.57
XB690	19576	67	Collided with XB730 in formation and abandoned near M-Gladbach, West Germany, 6.11.53	XB764	19638	26	To USAF 29.5.56
XB691	19577	71	To USAF 14.1.57	XB765	19639	229 OCU	To USAF 10.1.57
XB692	19578	67	To USAF 9.10.57	XB766	19640	234	SOC 18.12.58
XB693	19579	67	To USAF 12.1.57	XB767	19641	26	To USAF 31.10.56
XB694	19580	SCF/92	To USAF 3.6.57	XB768	19642	93	SOC 18.12.58
XB695	19581	67	To USAF 22.3.57	XB769	19460	-	To USAF 12.9.56
XB696	19582	229 OCU	To USAF 11.7.56	XB770	19858	4	To USAF 16.5.56
XB697	19583	93	To USAF 13.6.57	XB771	19859	112	To USAF 4.4.57
XB698	19584	229 OCU	To USAF 20.3.56	XB772	19860	112	To USAF 6.5.57
XB699	19585	3	Dived into ground near Lontzen, Netherlands, 16.5.55	XB773	19861	4	To USAF 6.5.57
XB700	19586	SCF/71/26	Collided with Sea Hawk WM964 3m E of Yeovilton, 17.8.55	XB774	19862	112	To USAF 5.10.57
XB701	19587	67/93	To USAF 22.5.57	XB775	19863	4	To USAF 19.1.57
XB702	19588	WL Wildenrath/ WL Bruggen/67	To USAF 4.3.57	XB776	19644	130/20/3	To USAF 20.11.56
XB703	19589	3	To USAF 9.5.56	XB791	19645	20	To USAF 29.8.56
XB704	19590	3	SOC 18.12.58	XB792	19646	234/3	To USAF 20.6.57
XB705	19591	67	To USAF 15.2.57	XB793	19647	229 OCU	To USAF 4.3.57
XB706	19592	67	To USAF 24.6.57	XB794	19648	234	To USAF 29.4.57
XB707	19593	26/20/3	To USAF 29.5.57	XB795	19649	229 OCU/66	To USAF 8.3.57
XB708	19594	26	To USAF 14.9.56	XB796	19650	71	To USAF 18.9.56
XB709	19595	20	To USAF 31.5.56	XB797	19651	130/20	To USAF 6.5.57
XB710	19596	71	To USAF 21.4.56	XB798	19852	-	To USAF 23.7.56
XB711	19597	229 OCU	Missing presumed crashed in sea, 23.10.54	XB799	19653	229 OCU	To USAF 31.5.57
XB712	19598	93	To USAF 13.3.57	XB800	19654	130/26	To USAF 6.2.57
XB713	19599	229 OCU	To USAF 1.3.57	XB801	19655	229 OCU	To USAF 21.3.57
XB726	19600	SCF/93	To USAF 20.3.57	XB802	19656	112/93	SOC 18.12.58
XB727	10601	234	To USAF 6.11.56	XB803	19657	20/93/234	SOC 18.12.58
XB728	19602	SCF/71	To USAF 27.7.57	XB804	19658	112/93	To USAF 4.4.57
XB729	19603	71	Collided with XB628 and abandoned 10m NW of Krefeld, 26.10.54	XB805	19659	-	To USAF 30.6.56
XB730	19604	67	Collided with XB690 near M-Gladbach, W.Germany, and blew up, 6.11.53	XB806	19461	-	To USAF 6.5.57
XB731	19605	20/3	SOC 18.12.58	XB807	19661	234	To USAF 14.3.56
XB732	19606	130	To USAF 21.8.57	XB808	19662	112/20	Flew into ground recovering from dive, Meppen ranges, W.Germany, 16.8.55
XB733	19607	AAEE	To USAF 25.8.56	XB809	19453	-	To USAF 25.10.56
XB734	19608	26	Undercarriage jammed up; crashlanded at Oldenburg, 2.9.54	XB810	19664	CGS/FWS	To USAF 27.3.56
XB735	19609	234	Engine cut on approach; hit pylon and broke up, Brindisi, Italy, 2.9.55	XB811	19665	229 OCU	To USAF 6.5.57
XB736	19610	3	To USAF 3.10.57	XB812	19666	112/93	To USAF 26.7.56
XB737	19611	67	To USAF 13.3.57	XB813	19667	229 OCU	To USAF 9.10.57
XB738	19612	SCF/3	To USAF 30.6.56	XB814	19668	-	To USAF 29.9.56
XB739	19613	71	To USAF 16.5.57	XB815	19669	20	To USAF 30.8.57
XB740	19614	3	To USAF 25.7.57	XB816	19454	93	To USAF 26.2.57
XB741	19615	229 OCU	To USAF 6.5.57	XB817	19671	234	SOC 18.12.58
XB742	19616	93	To USAF 10.8.56	XB818	19672	112/26	To USAF 29.8.56
XB743	19617	-	To USAF 28.3.57	XB819	19673	234	Engine cut; crashed 4m ESE of Julich, West Germany, 29.6.54
XB744	19618	3	To USAF 29.3.57	XB820	19674	67	To USAF 20.9.57
XB745	19635	130/3	To USAF 17.6.57	XB821	19675	229 OCU	To USAF 15.3.57
XB746	19620	112/93	To USAF 5.10.56	XB822	19676	112/93	Engine cut; undershot landing 1½m E of Jever, 1.10.55
XB747	19621	3	To USAF 5.9.57	XB823	19677	229 OCU	To USAF 19.9.57
XB748	19622	234	To USAF 29.5.57	XB824	19678	130/93	To USAF 21.6.57
XB749	19623	20/3	To USAF 20.6.57	XB825	19575	229 OCU	To USAF 9.10.56
XB750	19624	234	SOC 18.12.58	XB826	19680	-	To USAF 14.1.57
XB751	19625	26	To USAF 4.3.57	XB827	19681	WL Geilenkirchen/ 234	To USAF 25.5.57
XB752	19626	20/234	SOC 18.12.58	XB828	19682	-	To USAF 29.3.57
XB753	19627	-	To USAF 24.9.56	XB829	19683	147/112/93	To USAF 11.7.56
XB754	19628	67	To USAF 22.3.57	XB830	19684	-	To USAF 15.6.56
XB755	19458	93/20	To USAF 14.1.57	XB831	19685	-	To USAF 17.5.56
XB756	19630	FTU/147/ 229 OCU	To USAF 4.5.56	XB832	19686	26	To USAF 21.9.56
XB757	19631	92	To USAF 24.6.57	XB833	19687	130/93	To USAF 18.9.56
XV758	19632	FTU	To USAF 14.12.56	XB834	19688	130/26	To USAF 13.5.57
XB759	19633	26	To USAF 28.2.56	XB835	19455	229 OCU	To USAF 18.7.56
XB760	19634	71	Control lost in cloud; dived into ground 2m W of Julich, W.Germany, 4.2.55	XB836	19690	130/234	To USAF 27.7.57
				XB837	19691	92	To USAF 27.6.57
				XB838	19692	130/234	To USAF 27.1.58
				XB839	19693	130/26	Dived into ground 8m SSW of Oldenburg, 10.2.55
				XB851	19864	130	To USAF 8.5.56
				XB852	19865	130	SOC 15.11.56
				XB853	19866	-	To USAF 14.6.58
				XB854	19867	20/4	To USAF 6.5.57
				XB855	19868	112/66	To USAF 10.4.57
				XB856	19694	93	To USAF 14.9.56
				XB857	19695	-	To USAF 12.6.56
				XB858	19696	130/3	To USAF 11.5.56

<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>	<i>Serial</i>	<i>RCAF</i>	<i>Units</i>	<i>Fate</i>
XB859	19697	130/3	To USAF 23.11.57	XB929	19816	130	To USAF 22.5.57
XB860	19698	234	Broke up in air, Wintraal, Netherlands, 29.10.54	XB930	19817	130	To USAF 8.11.56
XB861	19699	130/20/234	SOC 18.12.58	XB931	19818	26/4	SOC 5.9.55
XB862	19700	130/26/20	To USAF 5.11.57	XB932	19819	130	Undershot landing at Bruggen, 12.7.55
XB863	19701	147	Lost radio aids in cloud; crashed 6m NE of St. Felix de Valois, Canada, 5.6.53	XB933	19820	130	To USAF 29.3.57
XB864	19702	-	To USAF 3.10.57	XB934	19821	112	To USAF 17.7.57
XB865	19703	112/26	Overstressed, caught fire and abandoned 4m WSW of Hede, W.Germany, 23.7.54	XB935	19822	SCF/4	To USAF 24.5.56
XB866	19704	26	Missing after radar contact lost in cloud, 24.2.54	XB936	19823	Hdlg Sqn/67	Failed to become airborne and crashed, Wildenrath, 4.3.54
XB867	19705	234	SOC 18.12.58	XB937	19824	4	Dived into sea 9m SE of Sylt, 8.10.54
XB868	19706	26	To USAF 13.6.57	XB938	19825	4/3	To USAF 7.11.57
XB869	19732	67/71	SOC 18.12.58	XB939	19826	67/112	To USAF 29.8.57
XB870	19733	71	To USAF 12.4.57	XB940	19827	4	Forcelanded short of fuel on autobahn 8m E of Hamburg, 22.6.54
XB871	19734	130/93/3	SOC 18.12.58	XB941	19828	4/66	To USAF 27.6.57
XB872	19735	234	To USAF 30.9.57	XB942	19829	130	To USAF 12.6.56
XB873	19736	234	To USAF 1.5.57	XB943	19830	71/130	To USAF 6.7.56
XB874	19737	SCF/93	To USAF 4.2.57	XB944	19831	112	SOC 18.12.58
XB875	19738	71	To USAF 5.11.57	XB945	19832	WL Bruggen/130	To USAF 21.6.56
XB876	19739	71	To USAF 10.1.57	XB946	19833	112	To USAF 17.7.57
XB877	19740	26	To USAF 27.5.56	XB947	19834	112	SOC 18.12.58
XB878	19741	71	To USAF 28.8.57	XB948	19835	WL Jever/ WL Geilenkirchen	To USAF 30.10.56
XB879	19742	71	To USAF 31.5.57	XB949	19836	3/234/130	To USAF 12.6.57
XB880	19743	71	Lost height on approach; hit ground and blew up, Bruggen, 15.7.55	XB950	19837	112	Engine caught fire; dived into ground 1m E of Heerlen, Netherlands, 5.7.55
XB881	19744	-	To USAF 7.11.56	XB951	19838	130	To USAF 22.6.56
XB882	19745	147	Ejector seat fired when hood opened 4½m N of Broughty Ferry, Angus, 18.7.53	XB952	19839	71/SCF/130	To USAF 15.10.56
XB883	19746	26	To USAF 5.12.56	XB953	19840	3/130	To USAF 26.9.57
XB884	19747	112	Abandoned after controls failed on approach, Bruggen, 16.6.54	XB954	19841	130	To USAF 7.9.56
XB885	19748	234	To USAF 5.10.56	XB955	19842	4	To USAF 28.9.56
XB886	19774	20/93	To USAF 3.7.57	XB956	19843	112	To USAF 15.11.57
XB887	19775	-	To USAF 3.9.56	XB957	19844	3/112	To USAF 13.6.57
XB888	19776	20	To USAF 4.6.57	XB958	19845	112	To USAF 28.2.57
XB889	19777	20	SOC 18.12.58	XB959	19846	130	To USAF 19.9.57
XB890	19778	234	To USAF 29.6.56	XB960	19847	112	To USAF 24.5.57
XB891	19779	130/93/234	SOC 18.12.58	XB961	19848	26/4/130	To USAF 28.2.57
XB892	19780	20	To USAF 23.10.56	XB973	19849	4/3	To USAF 19.8.57
XB893	19781	112/WL Bruggen/ 93	To USAF 21.5.57	XB974	19850	4/71	To USAF 24.6.57
XB894	19782	130	To USAF 12.12.56	XB975	19851	234/130	To USAF 16.5.57
XB895	19783	20	To USAF 3.7.57	XB976	19852	112	To USAF 2.12.57
XB896	19784	71	To USAF 12.12.56	XB977	19853	20/4	To USAF 24.8.56
XB897	19785	234	To USAF 22.11.57	XB978	19869	112	To USAF 29.5.57
XB898	19786	234	SOC 18.12.58	XB979	19870	112	To USAF 26.11.57
XB899	19787	20	Bellylanded at Schleswigland, 22.9.54	XB980	19871	4	To USAF 9.10.56
XB900	19788	20	To Bristol Engines 28.4.59	XB981	19872	4/130/71	SOC 18.12.58
XB912	19789	112	Lost power on overshoot and forcelanded, Bruggen, 3.3.54	XB982	19873	92	To USAF 6.3.57
XB913	19790	112/93/3	SOC 18.12.58	XB983	19874	4	To USAF 30.10.56
XB914	19791	112/20	To USAF 12.9.57	XB984	19875	3	To USAF 8.11.57
XB915	19742	112/20	To USAF 15.10.56	XB985	19876	130	To USAF 5.9.57
XB916	19803	130	To USAF 25.9.56	XB986	19877	130	To USAF 6.12.56
XB917	19804	112	To USAF 12.7.56	XB987	19878	130/WL Bruggen/ 71	To USAF 27.5.57
XB918	19805	130	SOC 18.12.58	XB988	19879	130	Caught fire on night navex and crashed 7m NE of Kassel, W.Germany, 19.10.54
XB919	19806	112	To USAF 7.9.57	XB989	19880	147/4/71	SOC 18.12.58
XB920	19807	112	To USAF 14.6.57	XB990	19881	4	To USAF 6.12.56
XB921	19808	4/130/71	To USAF 30.9.57	XB991	19882	130	To USAF 10.2.56
XB922	19809	130	To USAF 22.10.57	XB992	19883	AAEE	SOC 18.12.58
XB923	19810	4	To USAF 20.11.56	XB993	19884	4	To USAF 25.4.56
XB924	19811	130	To USAF 31.5.56	XB994	19885	4	To USAF 9.5.56
XB925	19812	147	Crashed on ferry flight, Kinloss, 28.9.53	XB995	19886	4/71/112	SOC 18.12.58
XB926	19813	SCF/112	To USAF 7.1.58	XB996	19887	4	To USAF 14.11.56
XB927	19814	130	Engine cut; forcelanded on approach, Bruggen, 29.10.54	XB997	19888	Hawkers	To USAF 27.6.56
XB928	19815	130	To USAF 25.7.57	XB998	19889	92	To USAF 4.1.57
				XB999	19890	71	To USAF 20.8.57
				XD706	19707	66	SOC 18.12.58
				XD707	19708	66	Flew into high ground in cloud, Kinder Scout, Derby, 22.7.54
				XD708	19709	66	To USAF 6.11.56
				XD709	19710	92	To USAF 26.8.57
				XD710	19711	66/92	Abandoned take-off and swung in to grass, Acklington, 5.4.55

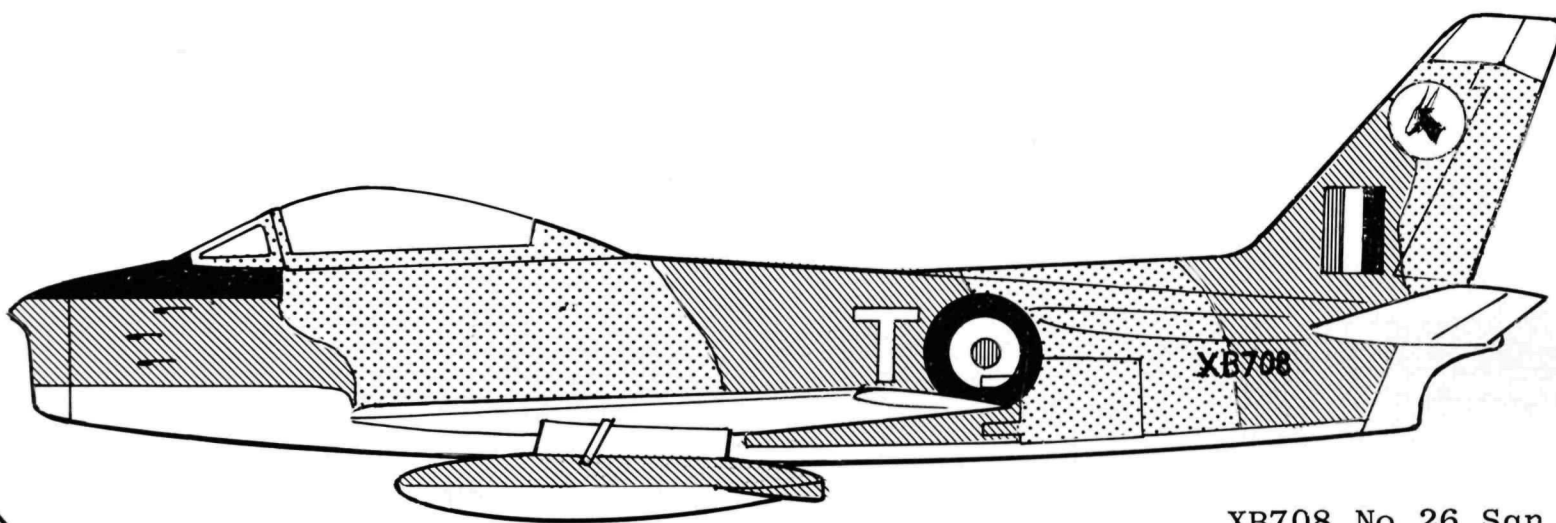
Serial	RCAF	Units	Fate	Serial	RCAF	Units	Fate	
XD711	19712	66	Collided with XD715 and abandoned 4m WNW of Hornsea, Yorks, 16.6.54	XD759	19761	92	SOC 18.12.58	
XD712	19713	66	Broke up recovering from dive and spun into sea 9m E of Scunthorpe, Lincs., 16.6.55	XD760	19762	92	To USAF 28.6.57	
XD713	19714	92	Tyre burst on take-off; undercarriage raised to stop, Linton-on-Ouse, 29.1.55	XD761	19763	66	To USAF 13.9.57	
XD714	19715	92	To USAF 29.12.56	XD762	19764	66	SOC 18.12.58	
XD715	19716	66	To USAF 27.7.57	XD763	19765	66/SF Linton	SOC 18.12.58	
XD716	19717	66	Collided with XD711 and abandoned 4m WNW of Hornsea, Yorks, 16.6.54	XD764	19766	92	To USAF 19.9.56	
XD717	19718	92	To USAF 3.7.57	XD765	19767	66	To USAF 22.8.57	
XD718	19719	66	SOC 12.7.56	XD766	19768	92	SOC 18.12.58	
XD719	19720	66/92	To USAF 10.1.57	XD767	19769	92	To USAF 28.5.57	
XD720	19721	66	To USAF 23.5.57	XD768	19770	66	Engine lost power; swung on forced landing at Full Sutton airfield and nose wheel collapsed, 10.8.54	
XD721	19722	66	To USAF 10.8.56	XD769	19771	92	SOC 18.12.58	
XD722	19723	66	Engine cut; undershot landing at Langham, 6.5.54	XD770	19772	66	SOC 18.12.58	
XD723	19724	92	To USAF 8.11.56	XD771	19773	92	Engine cut on approach; bellylanded 2m ENE of Linton-on-Ouse, 29.9.54	
XD724	19725	66/92	To USAF 19.12.57	XD772	19793	66	Abandoned after engine cut ½m E of Kelstern, Lincs., 29.11.54	
XD725	19726	66	To USAF 3.7.57	XD773	19794	66	Engine lost power; undershot landing at Linton-on-Ouse, 13.5.54	
XD726	19727	92	To USAF 9.10.57	XD774	19795	66	To USAF 8.1.58	
XD727	19728	92	SOC 18.12.58	XD775	19796	147	Crashed on delivery flight, 18.8.53	
XD728	19729	92	To USAF 22.6.56	XD776	19797	66	Caught fire and abandoned 12m SW of North Luffenham, 27.8.54	
XD729	19730	66	Lost power on overshoot; bellylanded at Linton-on-Ouse, 25.1.56	XD777	19798	66	To USAF 7.1.57	
XD730	19731	66	Flew into high ground in cloud, Kinder Scout, Derbyshire, 22.7.54	XD778	19799	66	To USAF 28.3.57	
XD731	19749	66	To USAF 13.9.56	XD779	19800	92	To USAF 4.11.57	
XD732	19750	92	SOC 18.12.58	XD780	19801	AFDS/229 OCU/92	Stalled on to runway and undercarriage collapsed, Linton-on-Ouse, 14.5.55	
XD733	19751	92	Flew into high ground at night, Easingwold, Yorks., 21.9.54	XD781	19802	AFDS	To USAF 23.10.56	
XD734	19752	92	To USAF 3.1.57	Notes:				
XD735	19753	66	To USAF 20.3.57	The first three aircraft were designated F.2, the remainder were F.4s.				
XD736	19754	92	To USAF 19.2.57	After the original batches were numbered, a certain amount of renumbering took place to separate the Canadian and American-funded aircraft. As a result, XB901-XB905 became XB912-XB916; XB941-XB990 became XB917-XB961 and XB973-XB977; XD117-XD129 became XB978-XB990.				
XD753	19755	66	To USAF 21.8.57	The above listing shows the aircraft in the serials by which they were actually delivered and placed in service.				
XD754	19756	92	To USAF 31.5.57	The aircraft were ferried to the UK between December 1952 and December 1953				
XD755	19757	66	Stalled on approach and dived into ground 2m SW of Driffield, 16.3.55					
XD756	19758	92	To USAF 21.8.57					
XD757	19759	66	To USAF 19.8.57					
XD758	19760	66	Abandoned after fire warning 2½m NE of Helmsley, Yorks., 22.7.54					

* * * * *

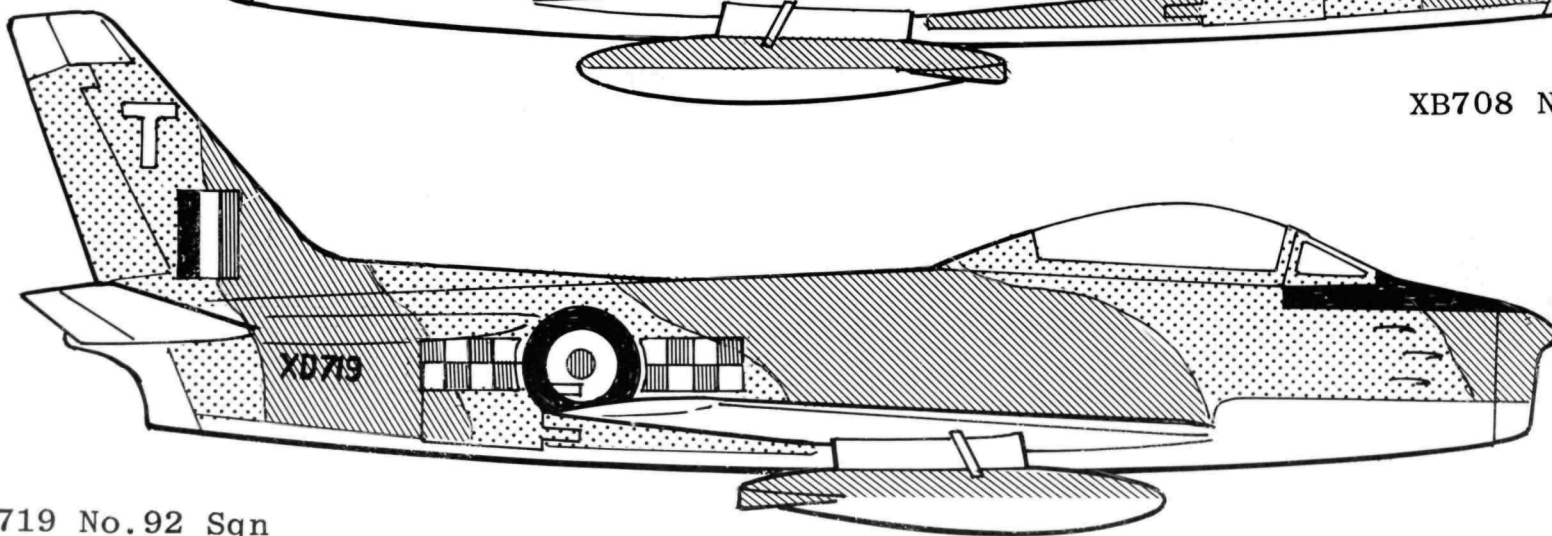
Sabre F.4 XD770 was 'M' of No.66 Squadron

(Peter M. Corbell)

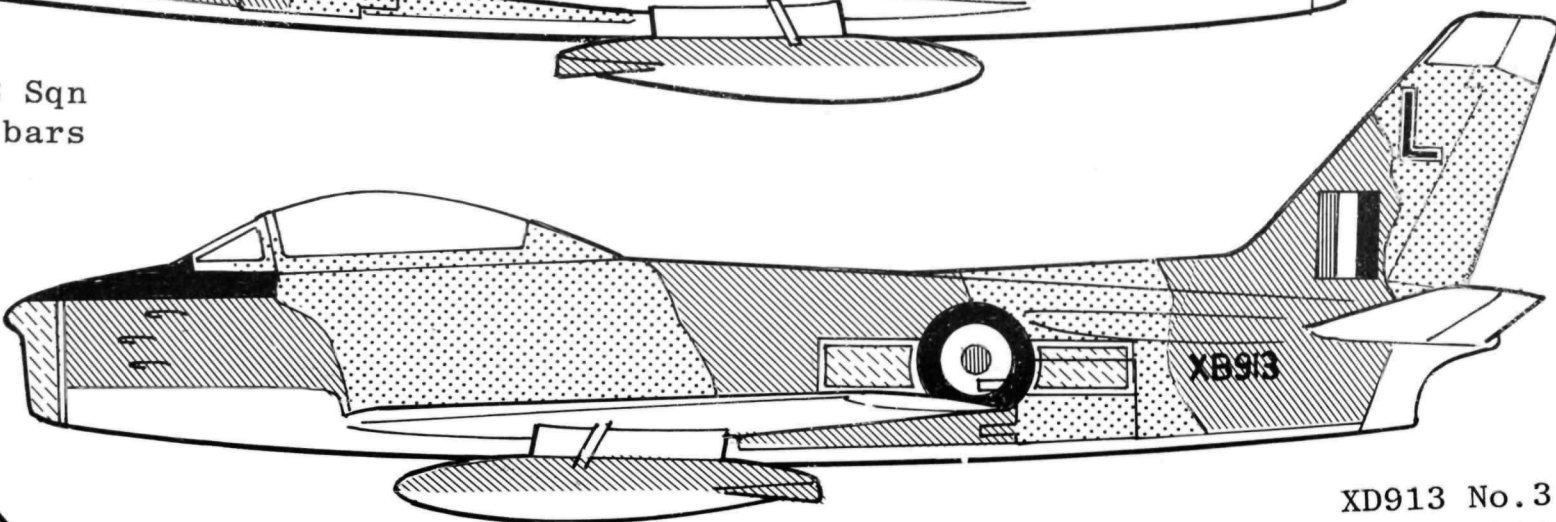




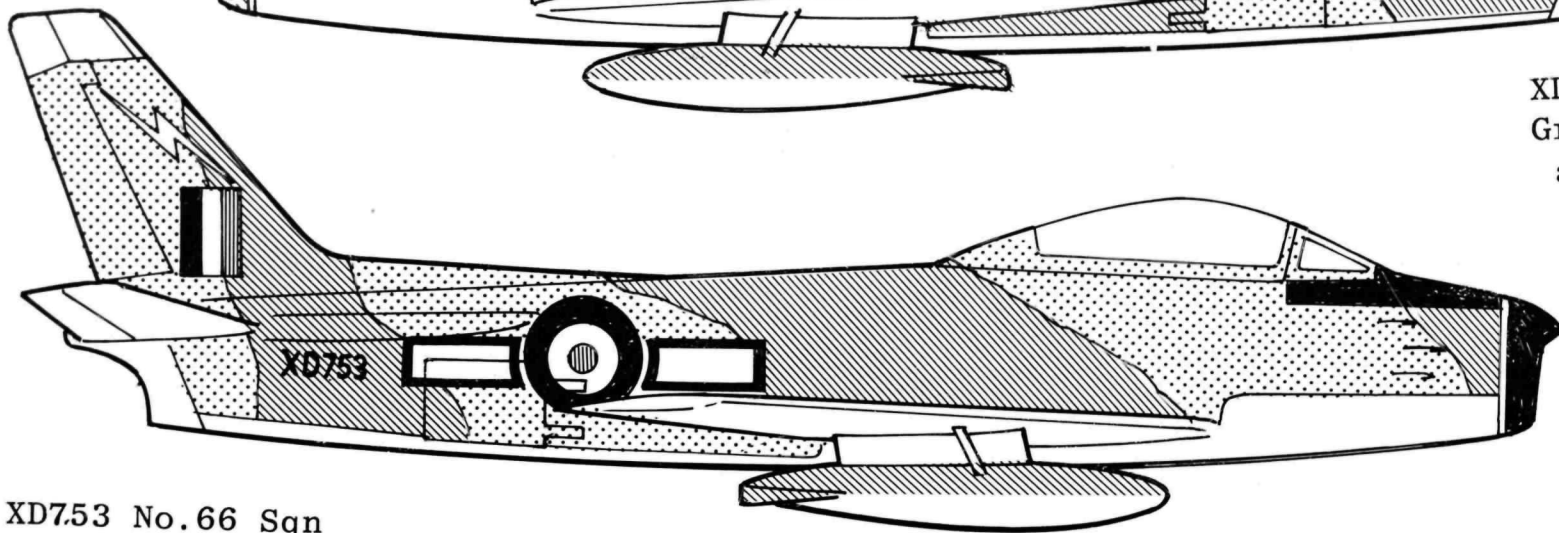
XB708 No.26 Sqn



XD719 No.92 Sqn
Red/yellow bars

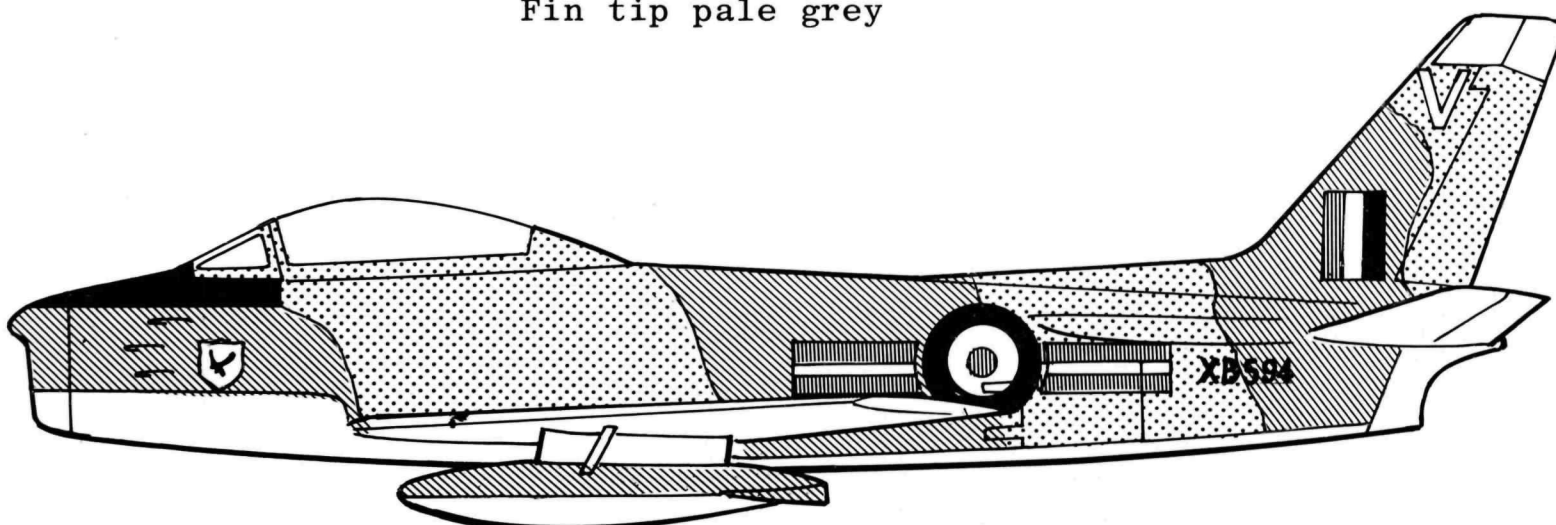


XD913 No.3 Sqn
Green/white nose
and bars

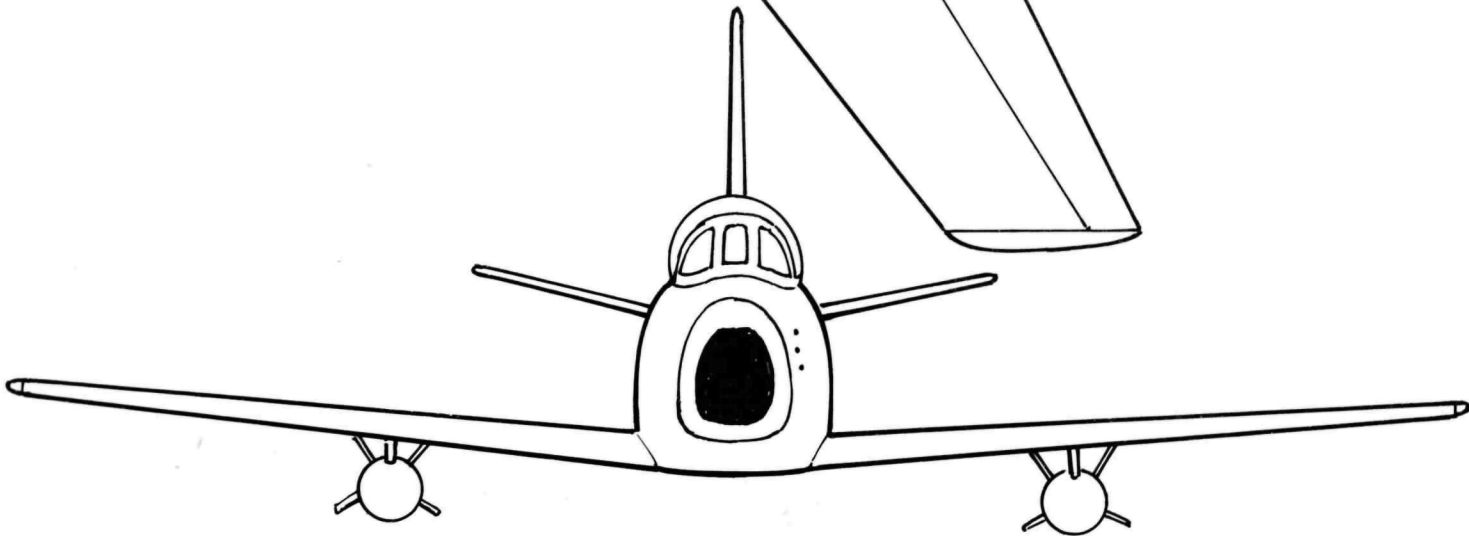
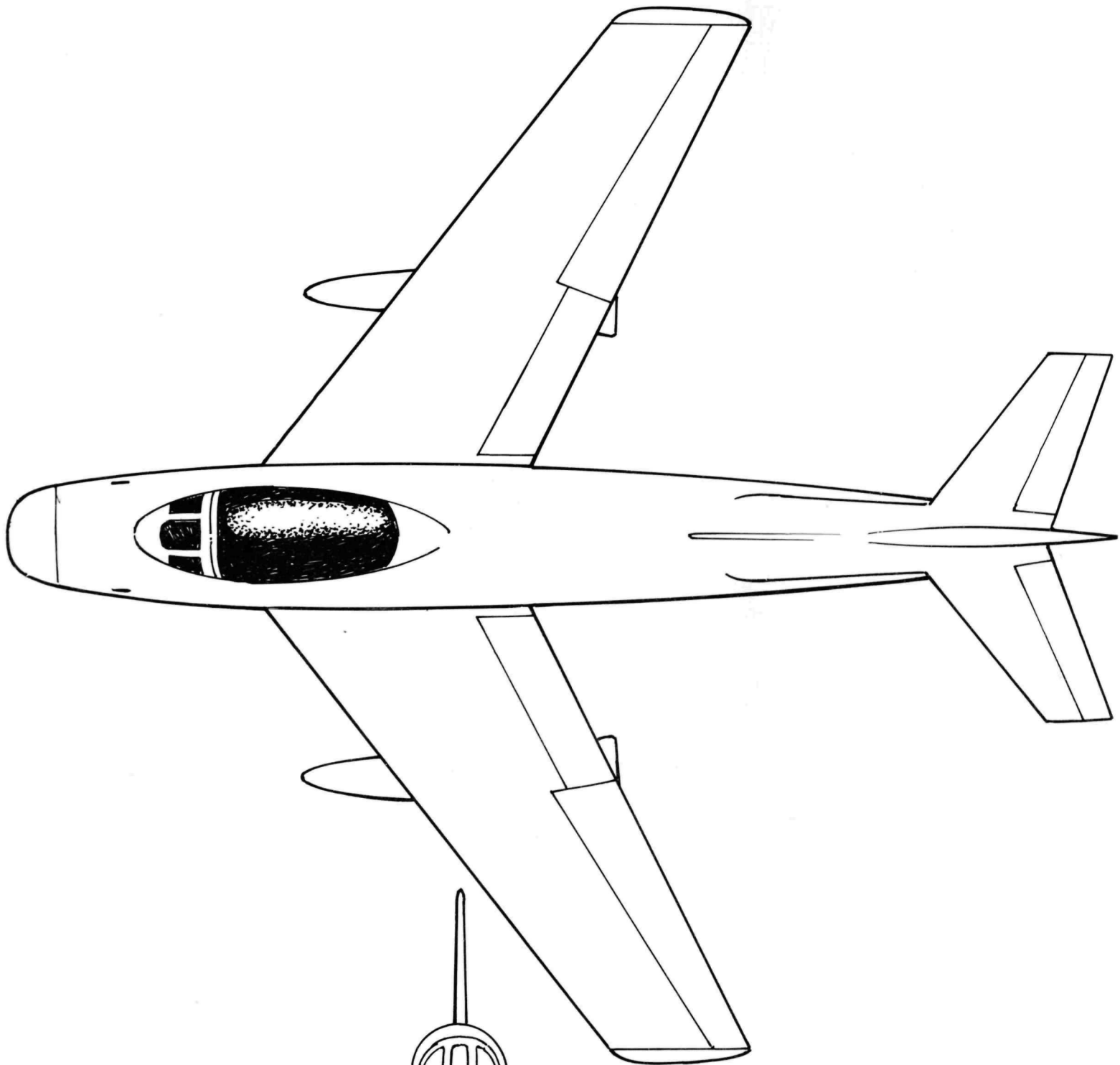
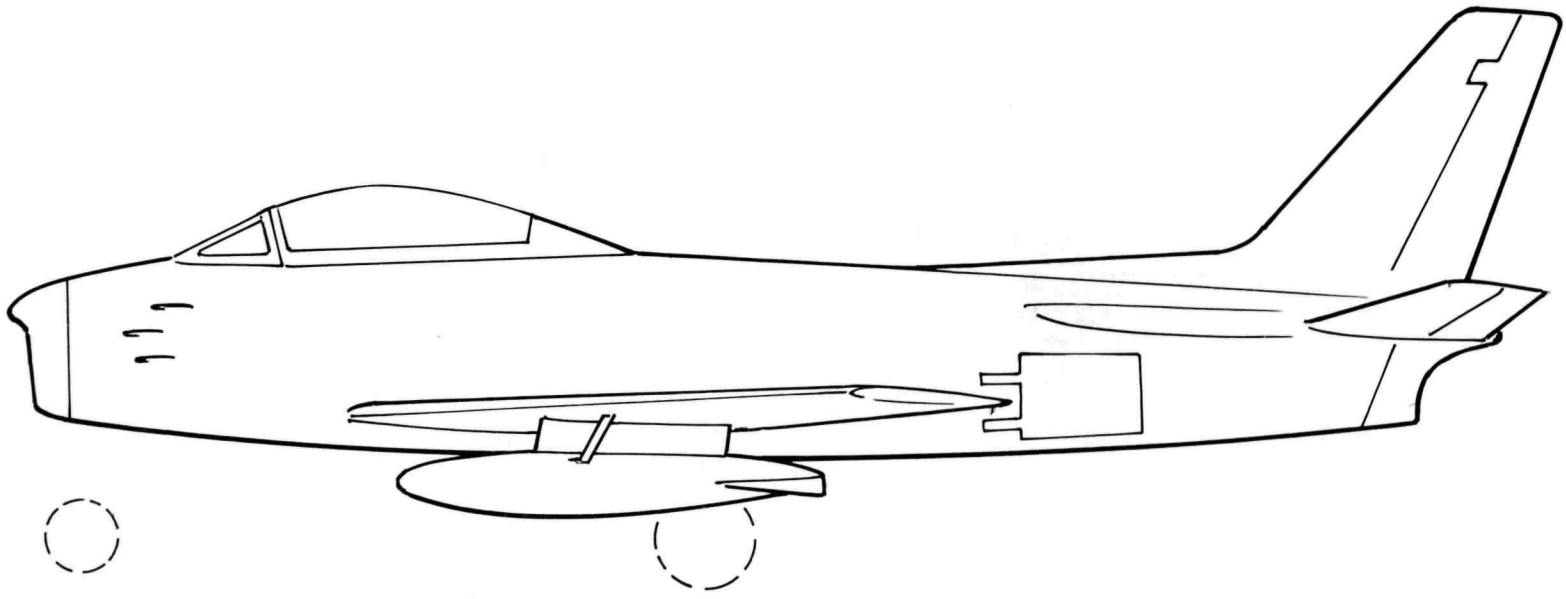


XD753 No.66 Sqn
White/blue nose,
bars and flash

All aircraft in standard dark green/dark grey camouflage with PR blue undersides. Fin tip pale grey



XB594 No.20 Sqn
Red/white/green
bars



HMS SPARROW HAWK



Royal Naval Air Station, Hatston, looking east towards Kirkwall. Apart from the line of sixteen Swordfish, visible on the left is a Henley and two Skuas of No.771 Squadron, the Fleet Requirements Unit at Hatston (IWM A9012)

Commissioned on 2 October 1939, a month after the outbreak of World War Two, HMS Sparrowhawk occupied the old civil airport at Kirkwall once used by the Dragons and Rapides of Highland Airways which maintained a link with the mainland airfields at Wick and Inverness. Hatston's position close to the capital of the Orkneys was almost as handy for the fleet anchorage at Scapa Flow, a few miles south. It was thus inevitable that the presence of the Home Fleet brought the Fleet Air Arm to Hatston.

For the first half of the war, No.771 Squadron was the main permanent inhabitant of the airfield, its aircraft having started to arrive on 30 September 1939. It was soon joined four Sea Gladiators from No.769 Squadron at Donibristle to provide an impenetrable shield for the Fleet, Hatston and the flying boat base at Sullom Voe. To make assurance double sure, two more Sea Gladiators joined when the detachment became No.804 Squadron on 31 November. The occasional air raid did bring the fighters into sight of He 111s, invariably just as THEY saw the Gladiators clambering up after them and opened their throttles to disappear towards Germany. However, the squadron's size doubled in December when another flight was formed.

Hatston itself was attacked by the occasional He 111, one memorable exploit being when a 111 threaded its bombload through Hatston without doing any damage, leaving the puzzled inhabitants working out how it had been possible to

hit only open patches of ground.

During the Norwegian campaign, No.804 provided detachments aboard HMS Furious and again in September 1940 before moving to the new airfield at Skeabrae, twelve miles to the north-west. Hatston continued to be the shore base for numerous TBR squadrons from the Home Fleet carriers while they were anchored at Scapa between operations.

Sparrowhawk decommissioned on 14 July 1945, only two weeks before the nearby HMS Robin at Grimsetter which had commissioned on 6 July 1943. It was Grimsetter that became Kirkwall's civil airport after the war, Hatston being too close to the centre of the town to make it safe for civilian operations.

A third naval air station had opened at Twatt, being commissioned as HMS Tern on 1 April 1941. The other airfield at Skeabrae was an RAF station only two miles to the south. All were on the most populated island, confusingly called Mainland.

Hatston had four runways and lay on the shore of Kirkwall Bay at Crow Ness. The longest runway was 1,000 yards and there were eventually fourteen hangars, four of them 105 ft by 185 ft, three 95 ft by 175 ft and seven smaller storage hangars 60 ft by 70 ft.

Although some civil use was made of Hatston, it later became an industrial estate.



Top to bottom:

One of No.804 Squadron's Sea Gladiators, N2272, at Hatston with members of the squadron. Top is S/Lt J.Sleigh, below him S/Lt Balmer, to his right S/Lt B.Paterson and on the right S/Lt N.H.Patterson. The landing hook can be clearly seen but the personal marking of a fist smashing something with a swastika on it is not so obvious.

Martlet AX829 soon after arriving at Hatston as the first replacement aircraft for the Sea Gladiators, one of which can be seen on the left of Hatston's watch office. In the background can be seen Swordfish and a Henley of the Fleet Requirement Unit at Hatston. On the right is the airfield's Chance light mounted on a chassis.

Hatston's runways suffered from an additional hazard in certain directions by having ships anchoring on the approach, in this case an ocean boarding vessel used to maintain the blockade of Germany in the opening months of the war when there were still many neutral ships plying the waters around the Orkneys and Shetlands.



Taken on 11 April 1942, the bottom photograph shows a Fulmar being pushed towards one of the hangars at Hatston. It carries no visible identity but contrasts with the stubby F4F Wildcat from VF-7 on the right. The other aircraft are Douglas TBD-1 Devastators from VT-7 which, being in the Atlantic Fleet, escaped the massacre of their sister squadrons at the Battle of Midway a few weeks later, 36 out of 41 being lost.

Note the telescopic sight on the torpedo-bombers which contrasted with the sighting bars used on FAA torpedo-bombers. This device was disliked by pilots as it cut out all vision while using it apart from the small area it covered.





A certain divergance in design philosophy is evident in these two photographs of the eastern hangar area at Hatston. Above are the SB2U Vindicators from USS Wasp's Air Group disembarked while the carrier took Spitfires to Malta in May 1942. Below are the Fleet Air Arm's primary strike aircraft demonstrating that they could exceed walking pace. (IWM A9444 and IWM A 9017)





Above: Folding the wings of an anonymous Swordfish at Hatston. This photograph shows good details of some of the appendages which were hung on Swordfish.

On the centre-section struts is a torpedo sighting bar which permitted aiming-off according to the estimated speed of the target.

Under the wings are racks for varying sizes of bombs which could also take other stores, e.g. flares. The locks which held the wings in position during flight appear quite insignificant but there were few cases of these becoming unlocked in flight.

On the upper wing are the slats which gave the Swordfish its slow approach speed and enabled it to operate from small carriers in weather which grounded (or decked?) its more advanced contemporaries.

In the background is a Gipsy engine which appears to be attached to a Puss Moth. Behind it can be seen parts of what appears to be a Dauntless.

Left: Martlet S7-B belonged to No.804 Squadron at Hatston before the unit moved to Skeabrae in September 1940 although it still flew from Hatston from time to time. On 17 November 1940, S/Lt D.Hutchinson overshot the runway at Skeabrae and tipped up on its nose.

No.804 received its first Martlets on 8 September 1940 when AX829 and BJ568 arrived to replace the squadron's Gladiators. Not surprisingly, they were received with rapture by pilots frustrated in their attempts to catch German bombers in obsolete biplanes and were christened 'Gorgeous' and 'Gerty'. The latter swung on take-off and stalled while avoiding B Flight's hangar on 30 October 1940 and was written off. 17 November was not a good day for 804's Martlets, a second flying into the ground near Skeabrae.



THE DREM SYSTEM

Royal Air Force night flying procedures prior to World War Two had not changed a great deal over many years and on occasions the techniques employed to complete a flying detail could be hair-raising for the aircrews involved and, to a much lesser degree, a dangerous procedure for those on the ground who were standing by to maintain the flare-path in a serviceable state. A few paraffin flares, their layout not always in keeping with the plan outlined in the appropriate RAF manual, the necessity for such replenishment of the flares if the flying was held up or extended for any reason and, of course, local weather conditions with varying wind speeds and direction, any of these could affect the flying programme.

An enforced change in the take-off and landing procedure could make it difficult for those pilots with very few night flying hours in their logbooks. A sudden deterioration of local visibility or a definite change in wind direction would entail a time-consuming change of normal procedure on the ground. The writer recalls that on one occasion aircraft were 'held upstairs' by Aldis lamp and Very light operation because the flare-path had to be switched around to accommodate a definite change of wind direction. The change of lay-out occupied perhaps twenty to twenty-five minutes and this entailed extinguishing, laying out, refuelling and relighting of the flares.

'Money' type flares were in use in the early 1930s, followed by a type known as the 'goose-neck', the first-mentioned being a decidedly messy thing to handle in the darkness of the aerodrome.

A night flying ground detail consisted of a duty pilot, together with a senior NCO and sometimes a corporal, plus a few 'erks'. There were a couple of drivers, one for the Crossley tender with spare flares and a paraffin supply and the other for a small van or car attached to the watch hut, an erk for duty in the last-mentioned and, of course, the usual crash tender and its attendant 'blood wagon', both of these vehicles with their normal crews.

The Duty Pilot made the Watch Hut (no Control Towers at many airfields) his centre of operations. He had an 'Airman of the Watch' under his direct control, a vehicle with a driver, sometimes another erk to act as runner, and his tools of the trade. These consisted of an Aldis signalling lamp, Very cartridge pistols and a good supply of white, green and red signal cartridges with full details of the flying programme.

The Duty Pilot invariably supervised the flare-path layout but if the senior NCO on duty with him was fully conversant with the requirements, he and the erks made the physical distribution of the flares in a pattern decided upon by the Duty Pilot. A measuring device (a hundred-yard rope knotted in the centre comes to mind) determined the distance between the flares.

High performance, heavy armament, sophisticated navigation aids, high standards of flying training, all the ingredients of a highly-competent air force counted for nothing if the aircraft could not be landed safely at night and in bad visibility. Airfield lighting saved thousands of aircraft during World War Two and this survey of the Drem System by W.H.Hughes provides an insight into a neglected aspect of military aviation.

* * * * *

FLARE-PATH EQUIPMENT AND LAYOUT PATTERN

The 'Money' type flare consisted of a block of wick-like substance, probably asbestos/lamp-wick based, standing in a small metal tray which acted as a paraffin reservoir; if necessary, the tray could be replenished to about half of its capacity.

A 'Gooseneck' flare unit, considered an advance on the 'Money' type and decidedly cleaner to handle, was essentially a watering can type of container with a wick protruding from the cranked spout or neck, again fuelled with paraffin. Sometimes a small metal tray was used as a base for the flare but the body of the flare canister acted as the fuel reservoir.

The flare-path in the form of a 'T' was laid out in plan and in the direction ordered by the Duty Pilot, the short cross-arm of the 'tee' being upwind. Sometimes one arm of the tee was omitted and then the path layout became an inverted 'L' shape in plan. A pilot could land either side of the long leg of the flare-path, although it was normal procedure to land on the righthand side, with the left-hand side being used for emergencies.

A flare-path pattern recorded by the writer in 1937 indicates that five flares were used for the long leg, spaced at hundred-yard intervals, with an additional flare at the downwind end of the path, spaced at only fifty yards from, and in line with, the remainder of the flares. The crossbar of the tee comprised one flare 100 yards on either side of the last upwind flare. On occasions, the crossbar consisted of two flares each side. The writer never noticed, or himself positioned, any flares or lights indicating the boundary of the aerodrome, upwind or downwind of the flare-path. Occasionally, if the wind veered slightly, it was noted that one arm of the crossbar was deleted, with the remaining arm of the bar pointed into the wind. Not having served on any camps equipped with runways prior to 1940 (there were only five or six RAF airfields equipped with runways before September 1939), the writer is not aware of what modern systems obtained at these few bases. The first airfield with tarmac runways, served on in late 1940, used 'Gooseneck' flares, with a mobile Chance light on a Brocklehurst trailer providing flood illumination when required. Within a few weeks the paraffin flares had been replaced by electric 'glim' lamps.

A further hazard to the night-flying pilot in pre-war times of fabric-covered wings was the 'Holt' landing flare, a magnesium device attached to a fitting on the underside of the lower wing just inboard of the wingtip. It was considered good practice, when using 'Holt' flares, to continue taxiing following completion of the landing run to keep the conflagration away from the fabric surface. A static aircraft or a touch of a wing-tip on the ground with the flare still burning was almost a certainty for fabric fire and then all concerned on the ground had to nip smartly into appropriate action to prevent a wing burn-up.

With the outbreak of hostilities in 1939, Commanding Officers of Stations and Squadron Commanders were immediately aware that night operations were vital and that on the majority of airfields not then equipped with runways, improved night flying aids would be urgently required.

One Commanding Officer on a fighter station quickly realised the necessity for urgent improvements to the night flying procedure then in force. Wing Commander Richard Acherley took over as Station Commander at Drem in June 1940. This old World War One airfield (originally known as Gullane or Fenton Barns) had no runways but did have three grass 'stripways' which gave a better-than-average surface on what was, in the winter months, a very muddy aerodrome.

The first major decision Acherley made was to completely disperse all aircraft of the three fighter squadrons then based on the station and then to build blast pens of timber and stone to protect them, one of the lessons he had learned the hard way during the short Norwegian campaign. The Stationmaster, however, was most concerned with the safety of his aircraft and the station as a whole during night operations. He was well aware of the time factor involved in extinguishing a laid flare-path whenever an enemy aircraft was reported to be in the area. There was always the chance that an enemy intruder would sneak in and attack aircraft on the approach or attempt to bomb the camp.

Acherley was restricted by wartime regulations governing the supply of materials he needed to build up his new airfield lighting system and he knew how difficult it would be to obtain particular equipment so necessary to his plan. He therefore decided to obtain permission and some of the materials by subterfuge, applying for authority to install a direct telephone line to a hill position some six miles from Drem. The particular site was manned by a small party of airmen then living under canvas. His request was granted and so the issue of miles of cable and other relevant items was authorised. Acherley placed the manufacture of certain static ground lighting items on to his station workshop facilities, local resources and scrap produce being utilised where possible. The cable in particular was used for landing and approach lights, together with a distant light pattern capable of being viewed only by a pilot flying at a certain altitude on a laid-down approach pattern.

Reference to an appendix to No.18 Group's Operations in September 1940 gives a description of Acherley's system and also the reasons he gave in his report to Group for the adoption and further development of the new system.

'With the standard system a flare party is required to lay out the flare pattern and to be ready to put them out if necessary when enemy aircraft are in the vicinity. To extinguish the flares and to relight them takes up to 40 minutes. Cases have occurred, especially in Bomber Command, where our aircraft have been kept up due to the presence of enemy aircraft, until their fuel is exhausted and the crews have had to jump.

In addition, a Duty Pilot carried out the laying of the flare-path and the pilot of a landing aircraft has some misgivings as to the obstructions over which he may have to approach. A standard flare-path does not make the approach for an inexperienced pilot an easy matter'

So reads part of Acherley's report to No.18 Group Headquarters. With his system, flarepath indicators were permanently laid out and the path could even be used with enemy aircraft overhead as the lighting was invisibly from over 500 feet above the aerodrome. Approach/landing lights of controlled brilliancy were used and they could be dimmed until they were visible from only 100 yards away. The system was originally applied to one Drem grass stripway of 1,400 yards in length with a width of 100 yards chosen for its bearing into the prevailing wind. The airfield's grass-covered surface had three stripways, the portion of the surface between the stripways and the perimeter being used for the dispersal of aircraft.

STRIPWAY FLAREPATH LIGHTING

A 'totem' pole ten feet high was sited at each corner of the stripway, each pole displaying a narrow section of light, the centreline of which was parallel to that of the strip. The pole lights were shielded from above and showed white lights to the centre of the stripway and red lights away from the airfield. Some twenty-five yards to the port side of the stripway centre were the flare lights numbered 1, 4 and 7 and an angle of glide indicator, also known as a sector light, positioned 100 yards to leeward of No.1 flare. No.4 flare was a double version, with its lights placed six feet apart. The flares were shielded from all directions except that on the approach side. The one row of runway markers was installed at ground level at a spacing of 100 yards along each stripway edge so that the left-hand side of the runway could be delineated for a pilot landing in either direction. A special light fitting was placed at a distance of 400 yards from the stripway indicated end and this was fitted with two amber glass screens to act as a runway distance marker.

On the back of the sector light (glide path indicator) was a screened blue light pointing to the centre of the aerodrome where a blue marshalling point light was set in a small concrete blisted in the ground, similar to those of the flares, but with six equally-spaced sectors; this took the place of the 'taxying post'. All aircraft before take-off and after landing taxied to this point from which other blue lights at intervals acted as taxi paths.

FUNNEL APPROACH AND LANDING LIGHTS

A group of funnel lights was placed on poles fifteen feet high, 1,000 yards from the stripway extremities. These white lights, six comprising each unit, were unscreened, the inner lights being 300 yards apart with the lines diverging at an angle of 45° with the three lights in each line spaced at 100-yard intervals. Each group of funnel lights was positioned on the path of the outer circle lighting described in the next paragraph.

OUTER CIRCLE LIGHTS

This outer ring of twenty-three light units, identical to those of the funnel lights and each fitted with a 60 watt white bulb, was equally spaced on a circle of 2,000 yards radius with the centre of the circle at the geometrical centre of the aerodrome.

FLOOD LIGHTING

A 5 Kw mobile floodlight was sited on the left-hand side of the stripway in use at a point ten yards from the stripway edge and some 20 yards from the position of the glide path indicator. The floodlight was independently controlled from the stripway and taxi circuits, all lighting being off the mains supply and

operated from a dual switchboard under the control of the Duty Pilot. The airman of the watch operated the switchgear only on orders from the Duty Pilot, both he and the airman being positioned in a 'pillbox' sited off the stripway edge and in line with the glide path indicator.

TAKE-OFFS AND LANDINGS

A pilot wishing to take off taxied out until he saw a blue light from the centre of the aerodrome and then proceeded via the holding point and the line of blue lights to the take-off point, opposite the GPI. A pilot wishing to land obtained permission to do so and flew around the outer circle of lights and aimed to enter the line of approach above a set of funnel lights, flying at an altitude of 500 feet. The following lights would be visible to him when he lined up on the approach:

1. Two white vertical strips of light from the totem poles at the rear end of the stripway
2. Two red vertical strips of light on the outer edges of the same location as in 1 but at the approach end of the stripway.
3. Three flares (one double) and one distance marker (two amber) on the left-hand side of the stripway.
4. The funnel approach light group
5. The glide path indicator light, green if the approach angle was correct

On touchdown and landing run, if the tail-wheel was not on the ground by the time No.4 (double) flare was reached then the pilot had to go round again.

WING COMMANDER ACHERLEY'S SUMMING-UP AND GROUP HQ ACTION

A summing-up at the end of Acherley's report to Group indicated that pilots were unanimous in agreeing that the system simplified night flying considerably. If a failure of the mains electrical supply occurred, the floodlight generator could be connected into the system. Emergency flares and lamps could be used as necessary.

Group HQ sent observers to Drem to report on tests using the new system, these being conducted during periods of heavy rain. The observers gained the impression that 'the system is well-nigh foolproof, the only point at which an error of judgement might arise being in the actual touchdown. The great advantage of the system was that it assisted the landing approach, normally the most tricky part of night flying. It was ideal in bad weather.'

An officer at Group HQ who prepared the report on the results of the tests stated that the cost of preparing one stripway for two-way landing use was £500. Two stripways could therefore be completed for the price of one Tiger Moth or a Miles Magister. This compared very favourably with the price of £4,000 for the Air Ministry system which had obvious disadvantages in wartime.

In December 1940, Wg Cdr Acherley was posted to No.54 OTU at Church Fenton. His job as OC (Flying) involved turning out night fighter pilots. The night he took over at Church Fenton a first-night solo pupil was attacked by a Luftwaffe intruder and his aircraft caught fire. Happily the trainee pilot managed to get his aircraft down without sustaining injury to himself. The flarepath system at Church Fenton was of the normal type then in use although the building of the runways had only been completed a few months previous to the incident mentioned.

Acherley's biographer, John Pudney, in his excellent book 'A Pride of Unicorns' (published by Oldbourne, London) states that he did a lot of work at Church Fenton on his prototype Drem system 'which had been messed up when the Ministry of Supply took over production of the new approach and landing system; the improved layout became the pattern for all other service airfields' to quote Acherley's own words to his biographer. In this phase of his development work, Acherley received close cooperation from Wing Commander A.McDonald who had designed an ingenious approach indicator for assisting pilots' judgement with night landings.

THE DREM SYSTEM: INSTALLATIONS AND MODIFICATIONS

We can now take a look at the progress of the introduction of the new system at various airfields.

No.19 OTU, Kinloss: On 11 February 1941, two engineers of No.15 Works Area visited the station to discuss the installation of the modified Drem system on to the existing runway pattern. Kinloss had runways incorporated during the construction period which was completed early in 1939. Following this visit, a further entry in the ORB of 19 OTU in June 1941 states that the flarepath lighting based on the Drem layout was installed, using angle of glide indicators, sector lights and many additional lights for the taxiways and the existing runways. Three months later, in September, another ORB entry makes further reference to the new system, stating that outer circle and funnel lighting of modified Drem pattern was brought into use for night flying.

The new airfield approach and lighting system became known and discussed throughout UK stations and we find a good description of the layout when it was being installed at 16 OTU

No.16 OTU, Upper Heyford: The ORB entry quotes: 'With the introduction of Drem lighting into the RAF it was found necessary to give all pilots thorough instruction on this new system of aerodrome lighting for night flying'. Then follows a complete description of the system and also a write-up of how Upper Heyford taught the subject to the flying staff.

A model of the airfield, boundaries and surrounding countryside was made, using a standard service Bell tent wooden base of 12 feet in diameter, all to a scale of 1/1000. The new lighting system was built into the model and was illuminated by a couple of accumulators, the whole controlled by two separate switchboards. Following remarks about tuition of pupil pilots, the entry notes that 'all pilots understood the system after about 15 minutes instruction, followed by time for general discussion.'

As No. 16 OTU appears to have recorded all details in connection with their Drem system once it was installed, we will quote from the relevant entries as they occur. The person(s) responsible for entering up the ORB must have been very conscientious and a devotee of detail in whatever he entered.

18 October 1941: under the heading 'Guide to Drem system action on receipt of an air raid warning' the following instructions appear:
 Purple Warning: all outer circle and funnel lights will be extinguished and floodlight will NOT be used
 Red Warning: all aircraft lights will be extinguished; aircraft to wait in the vicinity of distant beacon
 EA in vicinity: all lights, airfield and distant, will be extinguished
 White Warning: revert to normal lighting

Included in the same book entry is a directive dealing with bad visibility procedure.

Very bad visibility (mist or fog) procedure: ALL lights are to be switched on to full rheostat settings and Gooseneck paraffin flares are to be used to augment the landing lane lighting.

27 November 1941: a further entry reads 'at the beginning of the month, experiments were commenced using two types of Day/Night glide path indicators'

26 August 1942: The Mark II system lighting of runways was completed. This entry is the first indication that a Mark II system had been introduced for the runway part of the layout.

Progressing through the ORB brings us to the Summary for July 1943: 'Outer light circuit and funnel lights (Mark I version) stepped up to full Mark II standard. Twelve-volt battery operated Glide Path Indicators replaced by power-operated versions, positioned 100 yards back on the landing path.

Again, on 15 March 1944, we find an entry which indicates that modification of the Mark II system was in progress. The entry reads: 'pending installation of fully-metalled runways the airfield was placed unserviceable, except for certain classified flying states'. Reference this particular entry, No.92 Group sent a team of specialists to Upper Heyford to inspect the watch office lighting control panels. This was in view of the proposed standardisation of RAF watch offices for all 92 Gp stations, based on the Upper Heyford layout.

December 1944: It is recorded that the airfield opened for Day/Night flying, all airfield lighting being complete with the exception of the new sodium funnel lights, still being modified. All ORB entries at Upper Heyford after 1942 refer to the Mark I, Mark IA (interim version) and Mark II systems.

No.16 OTU eventually moved to Cottesmore and one assumes that the Drem system was installed in part, or completely, at that base.

From what we have seen up to this stage of our story, it is obvious that once the new system was installed, it was constantly being modified. A further illustration of this continued development is provided by an extract from the ORB of Woolfox Lodge which recorded that in January 1944 'the airfield had signalled an unserviceability state in view of the incompleteness of the Drem lighting system'. No.16 OTU had just moved from Woolfox at around this time and contractor's work had commenced on sodium lighting for the funnel of two of the three runways and the installation of special electrical plugs for the portable sodium flarepath. A further entry indicates that these improvements had been completed. Barely fifteen months later, in August 1945, the station was placed on a care and maintenance basis, following which Woolfox Lodge was occupied by No.259 MU until the closure of the airfield to flying in 1954.

It is well at this stage to reflect that Wing Commander Acherley's introduction of his Drem Airfield Lighting System must have saved many lives as a result of his determination to introduce a scheme to meet the requirements dictated by active service conditions. Within a year of the system passing its tests at Drem in 1940, installation work on improved layouts was proceeding at several RAF stations and we are aware that an improved Mark II system was already being installed in 1942.

Following the end of hostilities, a reactivation of airfield lighting system information took place at a stage when the Drem layout was already accepted as part of the RAF's history. The occasion was the presentation of a paper by A. Watson and E.C.Hyde in the Institution of Civil Engineers symposium 'The Civil Engineer at War' (1948). This paper does not mention the Drem system by that name but makes reference to 'Many attempts locally at airfields to provide amateur equipment and installations' and then describes the Mark I and Mark II Airfield Lighting Systems.

The writer does not doubt the technical ability of the authors of this paper but queries the probability of the system being developed as rapidly it was if it was not for the prototype installation at Drem so early in the war years. A perusal of Watson and Hyde's paper gives the following details:

'The first large-scale provision of airfield lighting suitable for operation under clear visibility at night, under conditions of enemy air activity over this country, was what has subsequently been designated 'Airfield Lighting Mark I'. This system, while retained wholly, or in part, at one or two airfields, is now obsolete and has for the most part been superseded by 'Airfield Lighting Mark II'. However, it is of interest to describe the system briefly as it was the forerunner of the scheme finally adopted'.

Then follows a description under the separate headings:

Runway lighting
Approach lighting
Outer Circle lighting
Control panels

The paper proceeds to give a full description of the later Mark II system. Comparing part of the paper's contents with Wing Commander Acherley's report of September 1940 to No.13 Group shows a remarkable similarity in terminology and installation descriptions, more so when one appreciates that the paper was produced almost eight years after the original description was issued in the report to Group HQ.

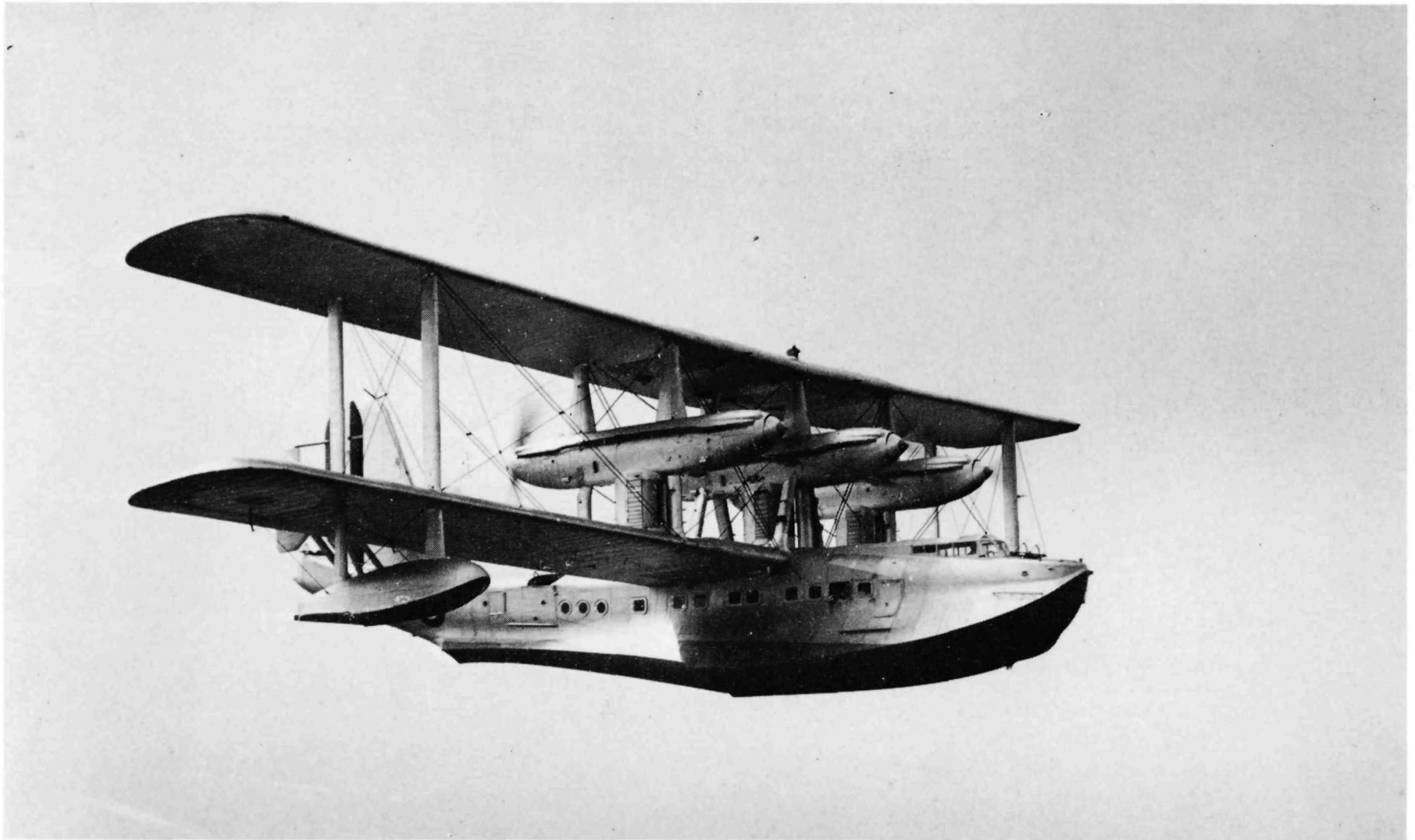
Whatever the title acquired by the 1940 system of airfield lighting, it must be accepted that 'The Drem System' deserves a high place in RAF wartime history. In recent years the writer was showing an ex-RAF friend of pre-war days around Heathrow Airport; he had also served at Drem for a period. At dusk, standing on the East Perimeter Road, this friend remarked, apropos runway and approach lighting 'A bit different from the old Drem system, you will agree?'

Indeed it is, the product of a continually improving system, a system which commenced with a few miles of electric cable, several RAF tradesmen's endeavours and a serving officer's ingenuity at an old Service airfield over forty years ago.

* * * * *

Editor's Note: A sideline on Drem, not unconnected with the fact that the article refused to end at the bottom of the page, was that when we were at Drem in 1945 the system of landing was undergoing a radical change. As the mist hung over the still-grass airfield soon after dawn, Double-Wasps were running up. Driving slowly round the perimeter track in very low visibility, a red light held up progress. Out of the mist came a Hellcat NF.II to thump down on the dummy carrier deck marked on the grass strip. More followed and it seemed that someone, somewhere, was trying to make the windscreens obsolete. With radar, who needed lights?

SHORT SARAFAND



The Short Sarafand was designed as an enlarged Singapore II four-engined flying boat to be powered by six Rolls-Royce Buzzard engines mounted in tandem pairs. Apart from the three pairs of engines, the design was of similar configuration but about 30% larger overall.

Its role was intended to be long-range patrol and was designed for a range of around 1,500 miles, enabling it to remain airborne for long periods and to be capable of transit flights between Britain and the Far East without the need to refuel at foreign bases.

Specification R.6/28 was issued to cover the production of a prototype. Construction began in the summer of 1931 and the aircraft, S1589, was launched on 30 June 1932 after it had been removed from the assembly shop at Rochester down river to have the upper wings fitted due to the limited headroom in the factory.

On the same evening, S1589 was flown for the first time by Short's test pilot, John Lankester Parker. The large boat was found to have excellent handling qualities and needed little adjustment before delivery to Felixstowe for trials.

The hull was of Alclad with a stainless steel planing bottom, as were the floats. The metal wing was fabric-covered and the upper wings contained four fuel tanks containing 2,110 gallons while the lower inboard sections of the wings carried another 1,272 gallons.

To make the Sarafand independent of base facilities, the central nacelle contained an auxiliary power unit and a gas-starter.

Accommodation was provided for a normal crew of ten. Two pilots sat in tandem in an enclosed cockpit; the nose compartment was fitted with a gunring for a 0.303 in. Lewis gun but was also capable of taking a 37 mm anti-submarine cannon. In the hull were positions for the navigator,

flight engineer and radio operator. There were two dorsal gun positions aft of the wings and a fourth gun position was fitted in the extreme stern of the hull. Cabin fittings included ten bunks, a galley, a wardroom and a workshop. A hatch over the work area allowed a spare engine to be embarked and two spare propellers could be carried among the spares stowage which included maintenance ladders and an engine-changing hoist.

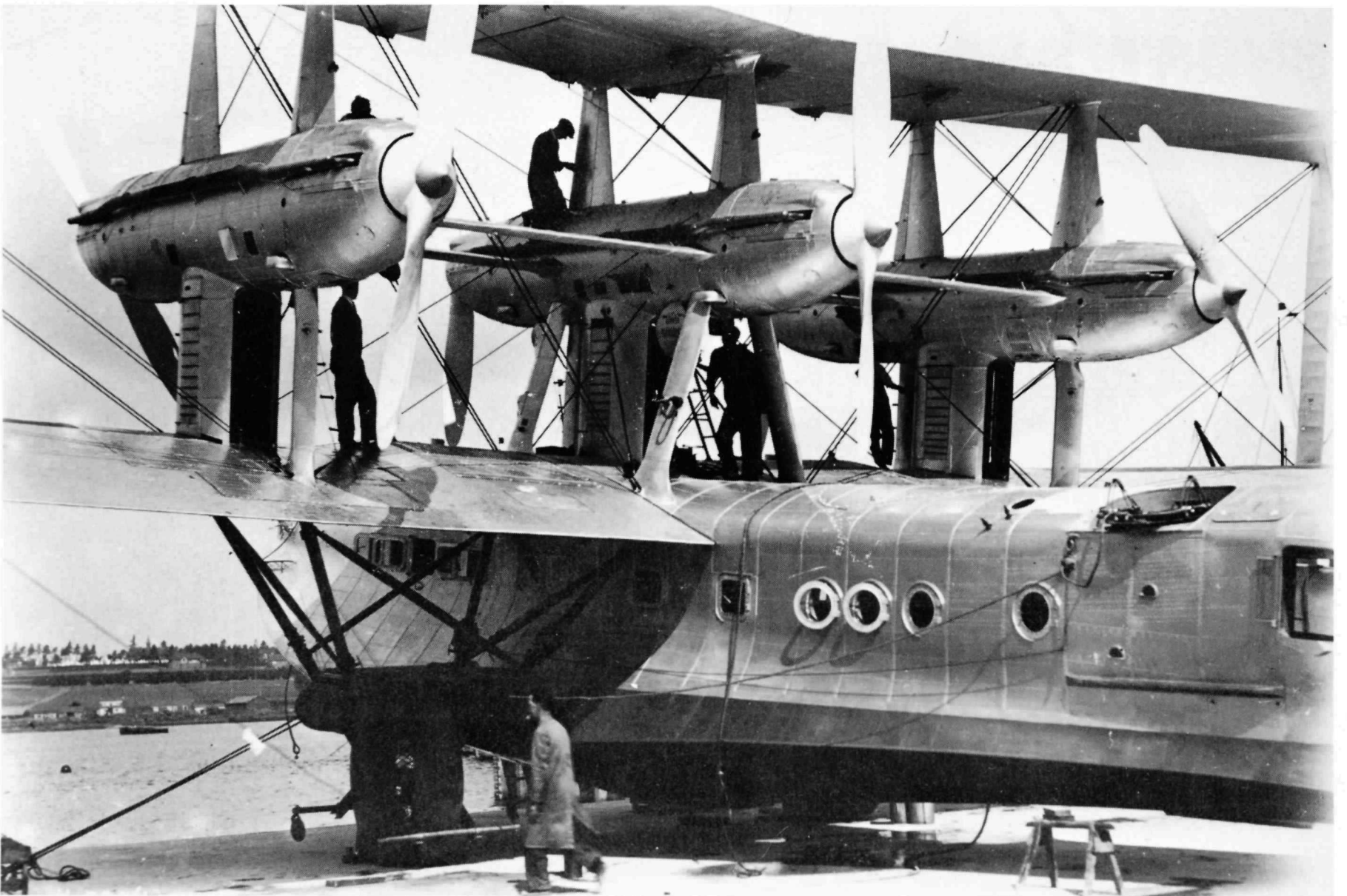
In August 1932, the Sarafand was delivered to the Marine Aircraft Experimental Establishment at Felixstowe where it was flown on various trials until June 1933 when it was returned to Rochester for modifications.

The first set of trials was carried out at a flying weight of 63,020 lbs. Control on the water was found to be easy but if the wind was over 25 mph, it was virtually impossible to turn the aircraft at low speeds while taxiing. In the air, controllability was good.

The floats failed, both being forced inwards at some time, possibly while moored. There was vibration in the hull and inadequate cooling for the rear engines, all engines taking a long time to warm up. The auxiliary power unit was hard to start but the engines themselves started easily by hand. There was a tendency to porpoise but after being moored out for 90 days, some of the time in gales of up to 50 mph, seaworthiness was judged to be satisfactory.

There was no intercom and the position of the radio operator was unsatisfactory.

At the end of these trials, the Sarafand was returned to Rochester to have the planing bottom and wing-tip floats replaced by Alclad. Larger radiators and oil coolers were fitted to help the over-heating problem. The after portholes for the navigator were filled in but nothing could be done to cure the draughty side windows of the cockpit without rebuilding.



The massive central section of the Sarafand showing the original cooling system and freight access hatch (Short H 520b)

SPECIFICATION

Power Plant: Six 825 h.p. Rolls-Royce Buzzard IIIMS driving two-blade wooden propellers

Dimensions: Span 120 ft (36.6m) Length: 89 ft 6 in (27.3 m) Wing area 44,750 sq ft (20,300 m²)

Weights:	On delivery	First tests	Final tests	Fuel capacity:	
Empty	46,084 lb	46,821 lb	47,380 lb	Petrol	3,386 gall
Mil load	2,073 lb	2,090 lb	2,268 lb	Oil	96 gall
Service ld	3,261 lb	3,341 lb	3,456 lb		
Fuel/oil	13,090 lb	13,576 lb	13,472 lb		
Flg wt	63,020 lb	63,739 lb	64,308		

Rate of climb: 510 ft/min at 5,200 ft
750 ft/min at sea level

Max speed: 124 kts at 5,200 ft
130 kts at sea level

Take-off: 31 seconds and 730 yds at
63,000 lb AUV (no wind)

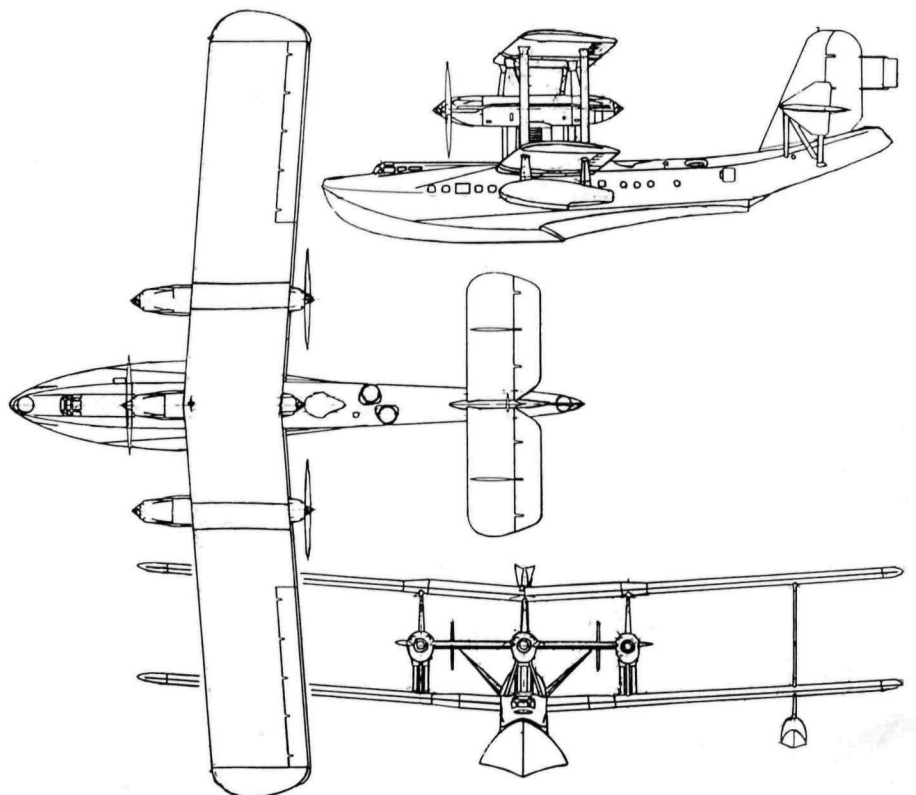
Landing: 21 seconds and 530 yards at
63,000 lb AUV

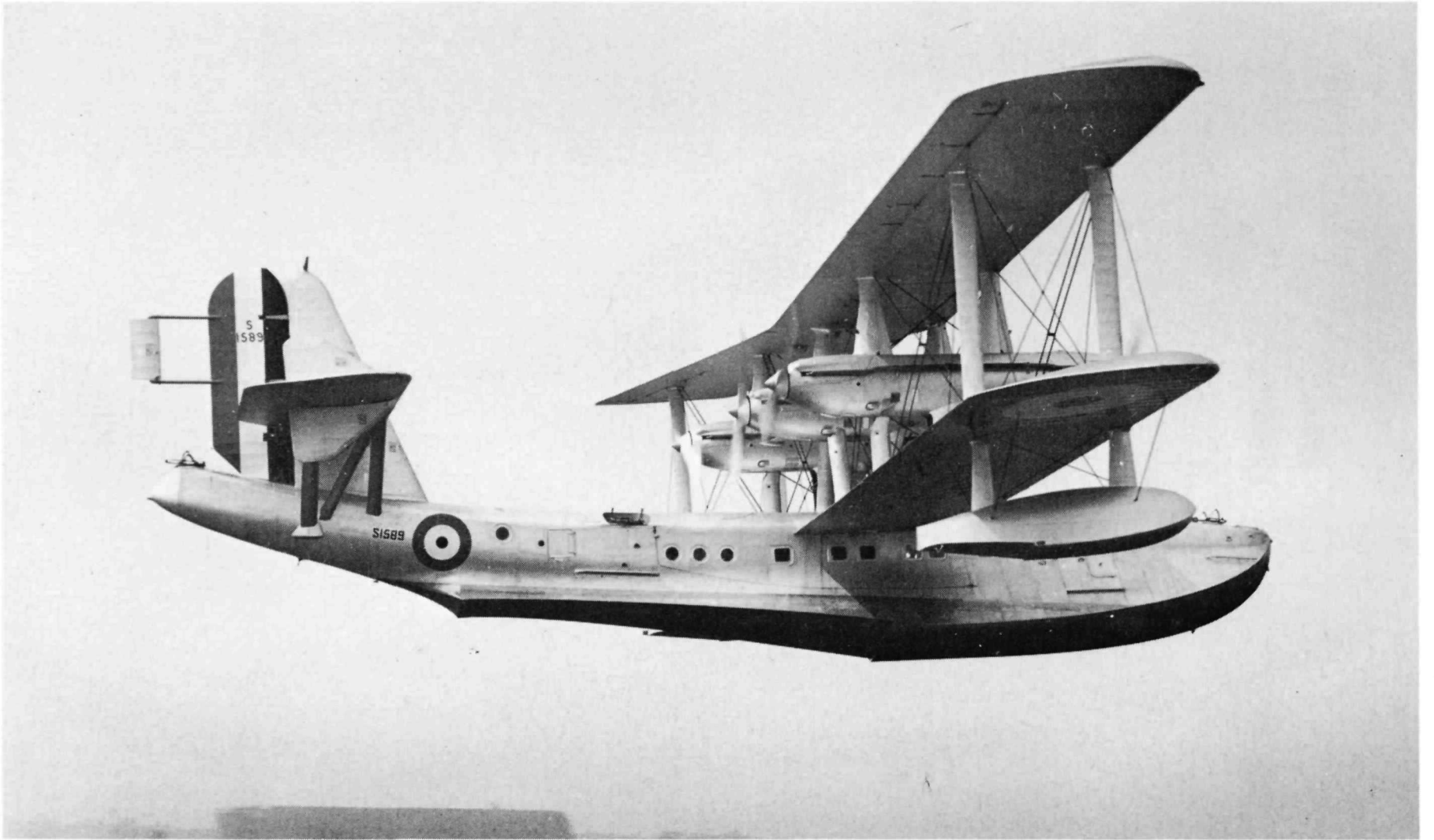
Service ceiling: 12,000 ft (3,660 m)

Range: 1,450 mls (2,337 km)

Armament: Four 0.303 in machine guns in
four gun positions.
Nose gun replaceable by 37 mm
COW cannon

Figures taken from MAEE report F/106 dated
February 1933.

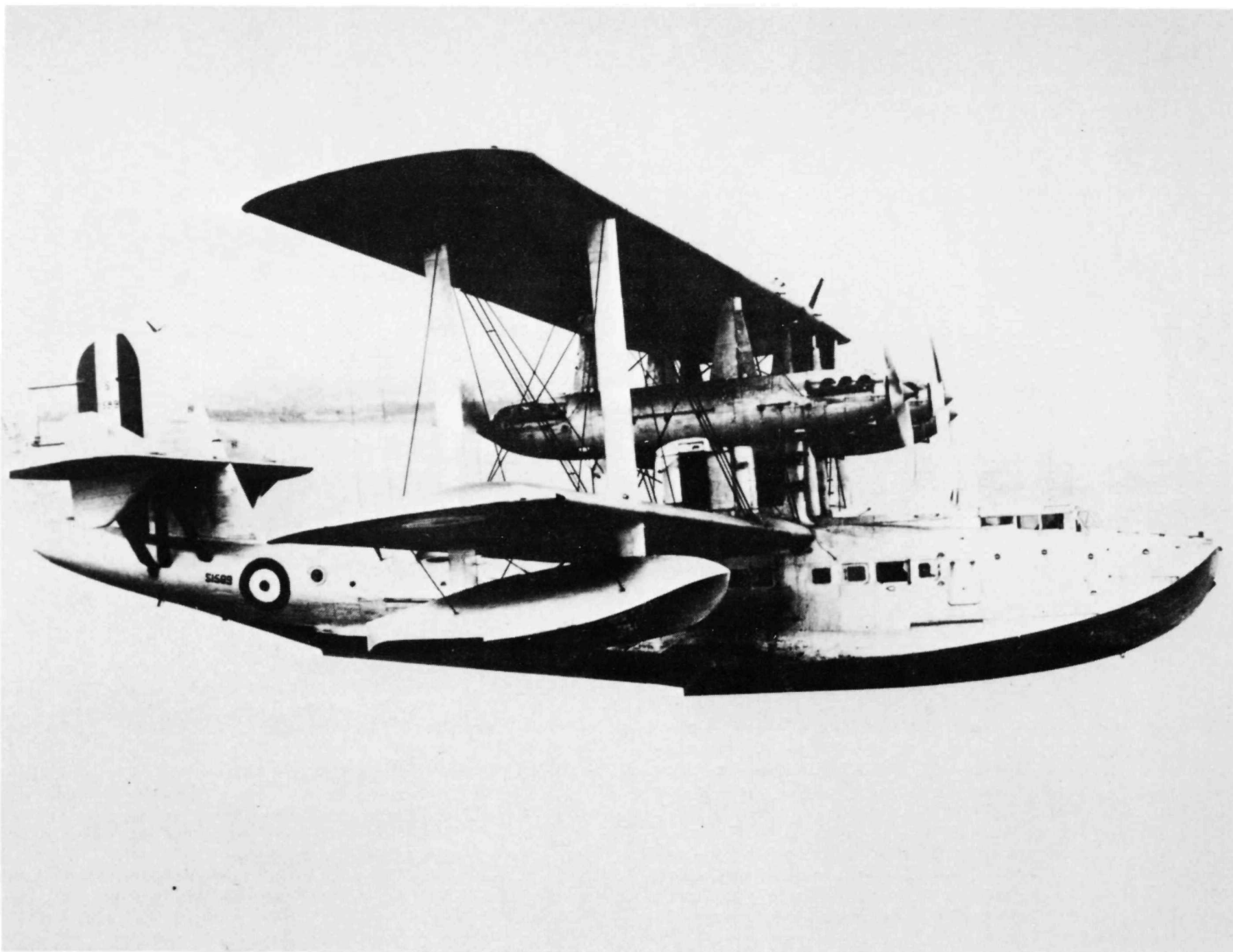




Above: The Sarafand in her original state soon after launching (Short Brothers & Harland photo H524d)

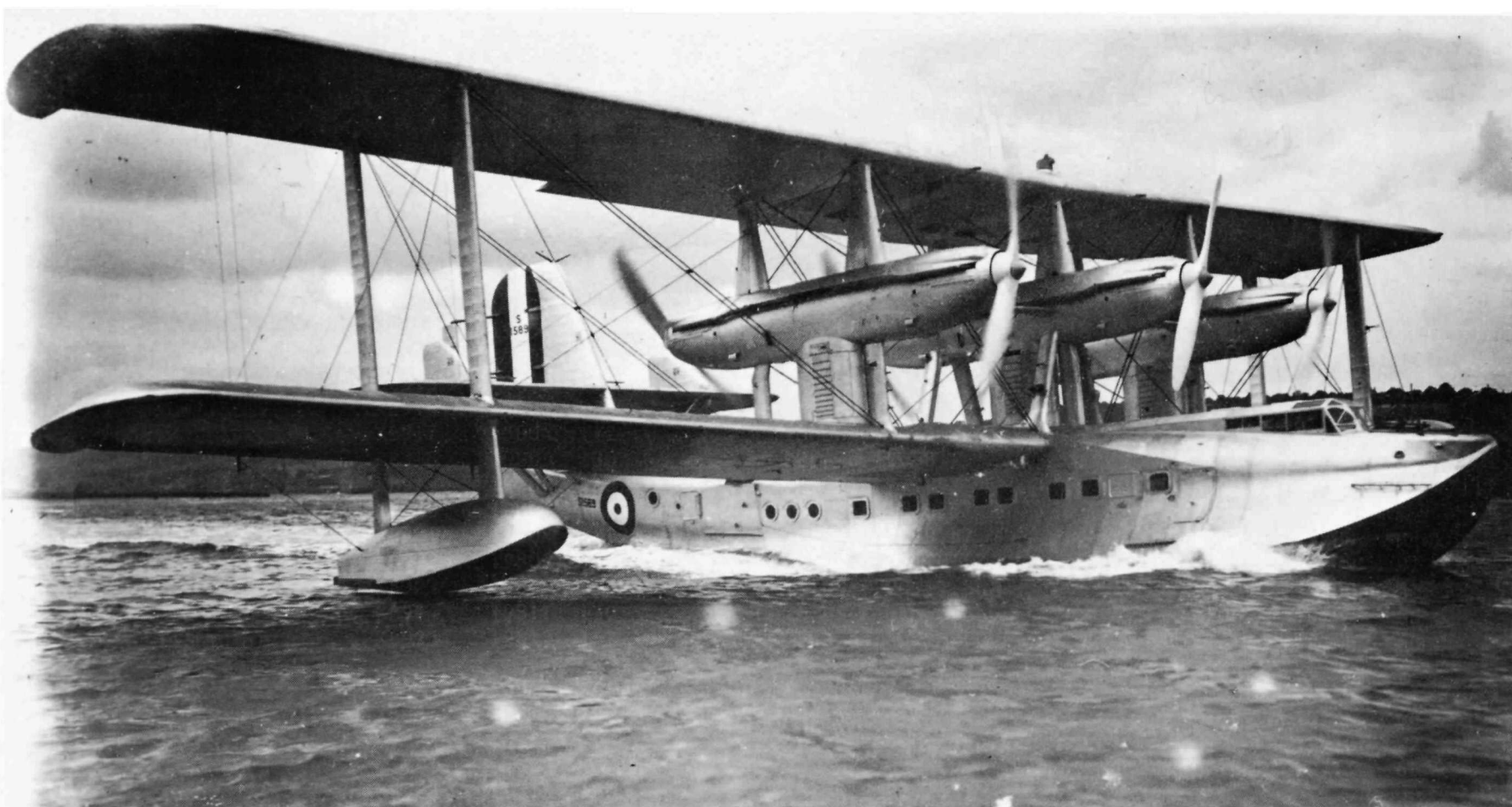
Below: The tail section showing the tail gun position and the servo-rudder (Short photo H 520D)





*Above: S1589 in full flight after modifications. Some additional footholds have appeared below the cockpit
(Photo: Michael L. Gibson)*

Below: The Sarafand taxiing on the River Medway at Rochester (Short Brother & Harland photograph H522(b))



HAWKER HENLEY



In AM 4/77 we covered the career of the Miles Master I in some detail and these two pages serve to illustrate the type as it entered service with the Royal Air Force.

N7410 was the third production aircraft and was delivered to the Aeroplane & Armament Experimental Establishment at Martlesham Heath in August 1939, following N7409 which was intended for general handling trials.

N7410 was equipped with bomb racks for use

as a bombing trainer, having racks for small practice bombs mounted on the rear centre-section just outboard of the fuselage.

Much of the preliminary testing had been done with the Miles M.9 Kestrel and the A & AEE's requirement was to check out the aircraft in its production form as many modifications had been made to the prototype Kestrel to turn the type into an acceptable advanced trainer. This resulted in the first production Master not flying until 31 March 1939 with a lower-powered





Kestrel 30 which gave it a top speed of 226 mph at 14,400 ft.

The bombing training requirement was never implemented as plenty Battles were available for such training and were more typical of the standard RAF light bomber of the time - the Battle. N7410 was retained by the A & AEE after its move to Boscombe Down and was eventually struck off charge in March 1941, becoming a ground instructional airframe as 2551M.

The bombing equipment did come out of the darker recesses of A & AEE and Miles during the Battle of Britain when invasion threatened and Magisters and Tiger Moths were being fitted with similar racks for attacking landing craft. Although Masters were faster and, presumably, be able to carry out low attack less perilously,

it does not appear that any were actually fitted with racks, unlike the Magisters which could be seen carrying out elementary training with racks in place.

Instead the Master acquired an armament of six 0.303 inch Browning machine guns and was intended as a last-ditch fighter. With its slow speed and a tendency towards structural failure, the Master would have been easy meat for any Bf 109 but it might have been fairly effective for ground attack if it could have sneaked in under the fighter screen. N7412 was the prototype conversion and N7780, 7781 and 7782 are shown in Air Ministry records as six-gun fighters. The Putnam book on Miles states N7801 to N7822 as being converted to this configuration. There seems to be a discrepancy here which needs elucidation.



FEEDBACK



ON GOLDEN POND

In AM 2/83 we asked for information on the Schneider Trophy racer which appeared on a post-card of Golden Acre Park's pond in the 1930s. Above is the object in question.

Our thanks to Keith Palmer who found a reference to this aircraft in Vintage Aircraft for 1977 and to Philip Jarrett who had supplied it - but had not got round to reading the bit in AM by the time his phone rang.

The seaplane was Supermarine S-5 N219 which took part in the 1927 and 1929 races. It was acquired by a Mr. Thompson who owned Golden Acre Park in Leeds and was displayed apparently without an engine and with a propeller and engine cowlings which do not seem to be those originally fitted. There are three tubes projecting downwards just forward of the wing and these may have been inserted for drainage.

After Mr. Thompson's son had been drowned in a boating accident on the lake, he had it drained and for the next eighteen months the seaplane was displayed on a plinth at the junction of Wetherby Road and Hare Hills Lane, Leeds, before disappearing without trace. Any trace of the whereabouts of N219 after this would be welcome.

The photo originally came via Cliff Walker and shows N219 in its enclosure on the lake.

* * * * *

SITS VAC: Is there anyone in the Staines area who can help the editors with black/white film printing and copying - or either? Salary nil.

DID YOU KNOW?

From time to time, odd facts surface during research into some quite different subject so we are revealing some hitherto-unknown information in these columns for the benefit of the 98% of the readership who will write in to say that it is common knowledge.

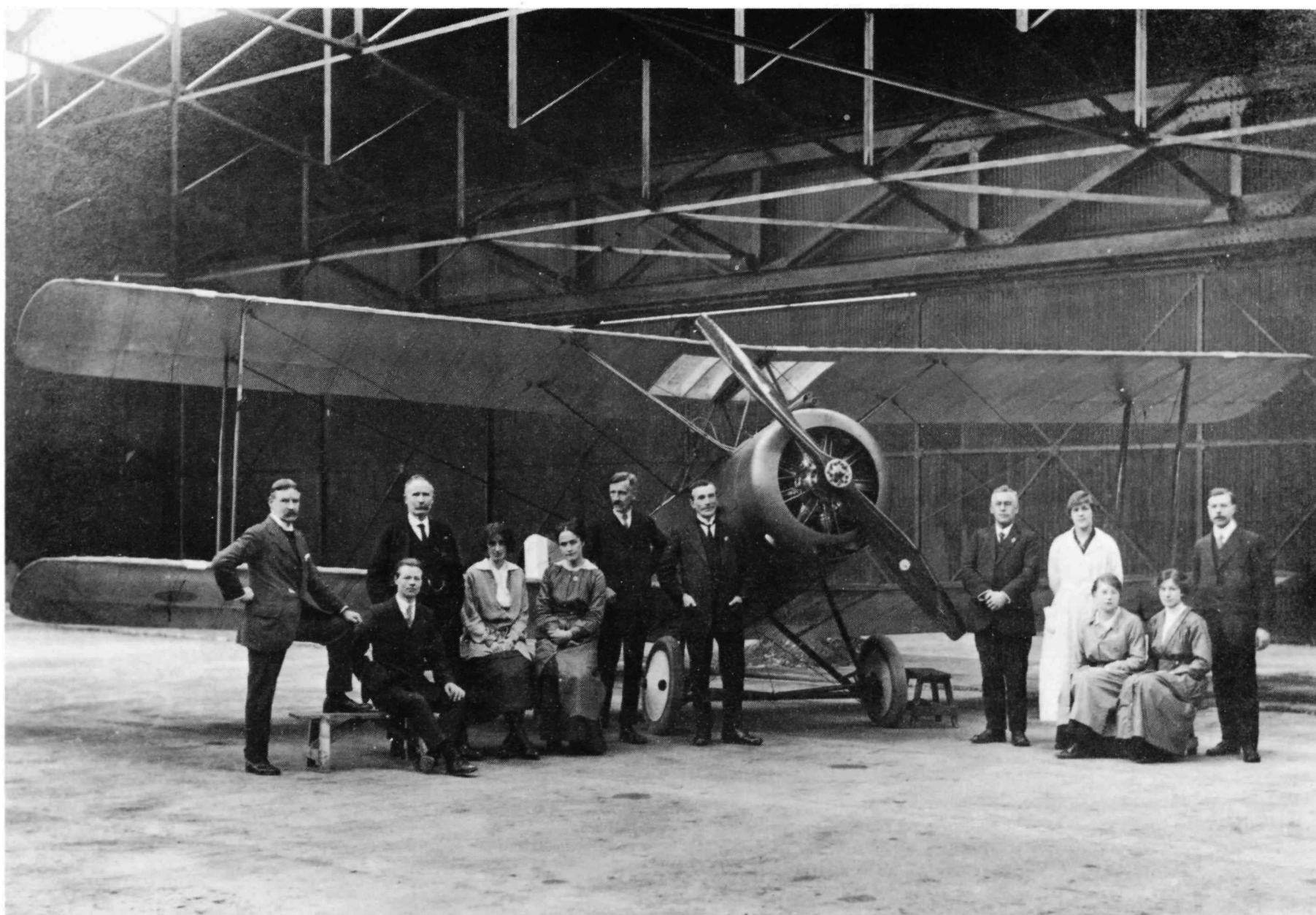
The Empire Central Flying School reported in 1944 on the possibilities of a 'triple-trainer' which would have two pupils side-by-side at dual controls while the instructor sat in the back with his over-riding controls. The aircraft used was the Miles M.28 Mk.III PW937.

The experiments were not a rousing success. The idea that the layout would provide economies in flying time was rather illusory. Although it increased the time available for flying on a pupil hours basis, there were certain snags.

One was that the passive pupil had to put up with his fellow-pupil's attempts to land with a stoicism above and beyond the call of duty. Errors by one pupil brought forth criticism from the other and the instructor became a referee. It was also judged bad for morale to have a pupil's shortcomings brought out in the presence of another pupil.

The ECFS's Research Flight reported on the pros and cons and the idea of a triple trainer was dropped. The M.28, which was about the only possibility on hand which could have become such a trainer was only produced as prototypes but contributed to the M.38 Messenger design.

But why did the Prentice have three seats?



Mr. A.W.Evans has provided us with the above photograph for which no details are known.

The aircraft is a Sopwith 1½ Strutter and, apart from the surrounding populace, there are few clues as to its identity. On the rudder there appears to be a number of some sort. Did any of the sub-contractors have the habit of putting on serial numbers in this fashion?

No gun-mounting is visible in the rear cockpit - or was it a single-seater bomber version of the Strutter? There appears to be a Bowden cable affixed to the forward centre section strut which does not appear clearly in the photographs of 1½ Strutters which come to hand. The central rib of the transparent centre section seems also to be deeper than on Sopwith-built aircraft.

Probably the best clue is the people posing in front of the aircraft, possibly their first completed machine. The central character has a wing collar, obviously part of the management if not actually the owner of the factory. The smock-clad ladies are presumably impressed sempstresses, transferred from silk dresses to best Irish Linen for the aircraft's covering. Slightly-varied dress on the lady on the left may designate her as the firm's Lady Typewriter. And the others? Works Manager, Foreman, Accountant? They seem to outnumber the work force.

Does anyone recognise the hangar itself? Does it belong to Hooper, Mann Egerton, Ruston Proctor, Wells or Morgan, all sub-contractors who might have been more impelled to pose in front of their first aeroplane than the more established manufacturers of Strutters such as Fairey, Vickers and Westland, not to mention Sopwith?

Answers please.

* * * * *

In 1976, Aeromilitaria had an article on Penrhos airfield but this was in pre-photo days. Those on the right were taken in August 1940 at No.9 Bombing & Gunnery School and show the unit's Battles and Henley and Wallace target tugs. K6073 actually has a code letter 'H'.





Hitch-hiking is not a very difficult or unusual way of moving around but it shows a certain flair to hitch-hike on a truck with a Folland Gnat for company.

Stefan Barnickel has sent in the above photographs taken by Manfred Gebel in July 1958 while travelling towards London from the north. The cargo carries Yugoslav markings and is one of two delivered for evaluation to Yugoslavia.

The question that arises is what it was doing on the back of a lorry in July 1958 and what the fate of the two Yugoslav Gnats was. It is probably all covered in some book or magazine which doesn't appear on the editorial bookshelf. Perhaps someone would like to offer a history of Folland aircraft for AM to fill this gap...

* * * * *

MORE ON THE VENTURA

Ray Sturtivant has provided some additions to the Ventura listings which appeared in AM 4/82.

FP553 was D of 13 Sqn until missing on 27 November 1943

FN997 was S of 459 Sqn

JS898 was with Stn Flt Gianacelis when damaged in March 1945

JS901 was with Iraq Comm Flt in 1946

JS926 was T of 459 Sqn

JS961 was F of 459 Sqn

JT830 was delivered to Aden Comm Flt from Asmara on 13 August 1945 and was with Iraq Comm Flt by March 1946

JT831 was with Iraq CF in 1945

JT834 was with Aden CF in August 1945

JT872 served with 17 SAAF Sqn

JT894 is believed to have been W of 521 Squadron so its trip to the Med may have ended in 16 FU transferring it to 521. 16 Ferry Unit was based at Dunkeswell and 521 flew Venturas at Langham.

J.L.Gossling reports that SAAF 6463 in 1946 at Kasfareet carried code 'J', having previously been D of 22 Sqn SAAF and 6450 ex Q/22 Sqn SAAF was carrying the

code letter 'G'. From Denis Voaden's list in August 1947 these were in their 22 Squadron codes, possibly the 1946 having weathered off.

Mike Bowyer has sent in what he believes are the constructor's number/serial tie-ups. These were:

c/n 4001-4300 AE658-AE845 (Mk I) and AE846-AE957 (Mk II)

c/n 4676-4875 FD568-FD767 USA 41-38020-38219.

The FD batch was under Lend-Lease so were allocated USAAC serials. Previous batches were direct purchase.

All outstanding British contract aircraft deliveries had been stopped during the panic that followed the Japanese attack on Pearl Harbor on 7 December 1941 but by January 1942, all Venturas (in common with Mustangs and Baltimores) had been cleared for delivery.

Ragnar Ragnarsson in Reykjavik reports that several aircraft passed through Reykjavik according to the records of the RAF station there which are not recorded as taken into service by the RAF. On 2 June 1942, AE771 landed from Goose Bay and while taxiing the undercarriage collapsed. On 27 June 1942, AJ184 forced landed north-west of Bjorness (although we cannot locate this place) while on a ferry trip from Goose Bay with AJ177 and AJ181. Another Ventura crashlanded at Thykkvibaer on 29 July 1942 but which one of the transit losses this was is not known.

AE927 and AE817 also passed through during June but do not appear on the RAF records as delivered.

AE771 is shown as lost en route to the SAAF 19.1.43 so was probably repaired and delivered by the southern ferry route, unless 19.1.43 is a 'paper' date. AE928 was a frequent visitor so was probably a Canadian-based communications aircraft, although 45 Group's aircraft were normally shown as being RAF-charge. Possibly this was an RCAF aircraft.

* * * * *

MILITARY AIRFIELDS IN THE BRITISH ISLES PART 3

A third section of this useful guide to British airfields is now available from D.Willis, 10 North Street, Titchmarsh, Kettering, Northants NN14 3DH price £5.25 post free.

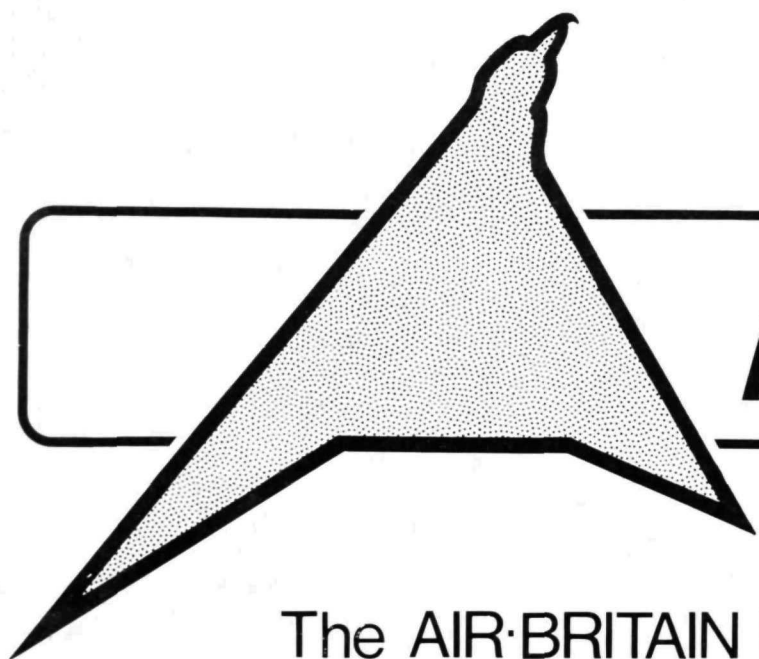
This volume covers airfields P to Z and a bonus is the useful guide to abbreviations for various sizes of hangar and types of building and runway construction.

The listing starts with Panshangar and ends with Zeals. Details are given of location (OS, AM references and Lat/Long as well as in miles from nearest town), runways or landing area with dimensions and headings, hangars available, its role, parent organisation and residents. The last-mentioned items relate to 1 December 1944, the date of the original Air Ministry document.

The small plans are useful for identifying airfield photographs apart from that depicted below which has the editors baffled and does not seem to tie up with any plan. Perhaps we are holding it upside down. Any answers out there?







AEROMILITARIA

The AIR·BRITAIN Military Aviation Historical Quarterly



No 4
1983



The AIR-BRITAIN Military Aviation Historical Quarterly

Edited by James J. Halley and Peter M. Corbell

Editorial address: 5 Walnut Tree Road,
Shepperton, Middlesex TW17 ORW

* * * * *

Readers will probably have noticed the announcements in Air-Britain Digest and Air-Britain News informing all and sundry that the WA-WZ register is now available.

As mentioned in AM.3/83, the decision to jump forward to the post-war years was at the request of many members with an interest in prop-less aircraft. Fortunately, we have received a great deal of help with the fates of these and the accidents which removed these aircraft from service are virtually complete. Some remained unrepaired for a lengthy period before being struck off charge but, as is our normal practice, we have recorded the reason for its final strike off instead of the 'paper' date.

The price is £5.00 post free from the Sales Department, Stone Cottage, Great Sampford, Saffron Walden, Essex, CB10 1RS. The editorial calculator mentioned in the last editorial has failed to meet the challenge. The estimated 150 pages became 113, thus demonstrating the fallacy of using the number of pages in the first half of the register as a guide to the final half. As crashes take up the most lines, more aircraft were squeezed into the final pages since they did not crash as frequently as the Vampires and Meteors which filled the first half of the volume!

IN THIS ISSUE

As a change from wartime aircraft, we have opted for a pair of types which went out of service only thirteen years ago. The Pioneer and Twin Pioneer were operating in such similar conditions and had so much in common that we have combined the story of both in one item. Our thanks to Cliff Minney for the drawings.

HMS Emperor was one of the escort carriers which was primarily a fighter carrier for supporting amphibious landings and for providing fighter cover for naval forces. Her Hellcats were thus engaged in operations very different from the usual convoy escort duties that the escort carrier was intended to fulfil. Our choice of escort carriers for coverage tends to be based not on their fame but on the fact that we have been provided with photographs to illustrate her activities.

Kemble was never one of the RAF stations which became well-known to the populace but it has had a fairly long history for an airfield built just as war was about to break out and a number of interesting happenings took place from time to time.

Having reached WZ999 in the most recent register, a follow-on from XA100 was logical but for the fact that many of the XA-XZ series are still in service and likely to remain so for many years, if not decades. However, the early aircraft in this range have, with few exceptions, left active service so we have decided to carry on from the WA-WZ register as feature in AM. By the time we reach the Phantoms, perhaps they will be out of service too. It also saves your editors trying to invent contents for four pages!

We will try to head each major batch with a photograph of an aircraft in that batch. To fit in with the requirement that some readers have for AM to become a loose-leaf system, we have titled the first page accordingly. There also arises the problem of what to do with the tables of Sabres which appeared in AM.3/83. For completeness, we will reprint these in their proper sequence, incorporating some amendments sent in recently.

Our thanks for the stoicism of our entire readership who refrained from writing in to say that pages 79 and 80 were not full of Henleys, but Master Is. The caption got hung over from the previous issue by a piece of mental aberration...

* * * * *

COVER PHOTOGRAPHS

Our cover photograph in this issue is a pictorial shot of Walrus NZ151 from the seaplane training unit at Hobsonville, seen below the aircraft.

On the back cover is a formation from No.110 Squadron as it converted from Sycamores to Whirlwinds. In celebration, they toured the waterfront of Singapore in 1964

* * * * *

AN ORPHEUS-SABRE?

Following on from the Sabre item in AM.3/83, we have received a query on XB983 which is shown as having been returned to the USAF in 1956. This is stated to have been used as a testbed for the Bristol-Siddeley Orpheus but there is no mention of its being allotted to BSE during its period of RAF service. Any ideas?

* * * * *

RAF B-45s

In AM 4/82 we asked for information on B-45 Tornados seen with RAF markings. The consensus seems to be that they were used for electronic reconnaissance along the Iron Curtain and Flt Lt N.D. Welch has provided a small photograph which will not reproduce in any detail in AM. This shows a roundelled RB-45C with a tall fin flash. Comparing the colour hues, it appears to be a French flash. Since a number of NATO aircraft had forcelanded over the frontier in the Russian zones of occupation, it is thought that the new paint scheme was intended to involve crews from several NATO countries so that any incident would be seen as being a combined operation and not from any individual member state.

Apparently some flights were operated from Wyton as well as Sculthorpe by these Tornados.

* * * * *

ANONYMOUS AIRFIELD

The photograph of an unidentified airfield on page 83 of AM.3/83 may be of Fairford before it was developed for USAF use. The runways seem to point the same way and the perimeter track has the right kinks, once one has sorted out which way up is north.

* * * * *

COLOUR SLIDE CATALOGUES

Readers are reminded that catalogues of colour slides available from the Air-Britain Colour Slide Library can be obtained from the editorial office.

There are three sections which cost 60p each. One contains civil slides, one military and one is a supplement to both. The total listed comes to around 6,000 slides from a wide variety of sources which are on sale to members at a price of 8p each unmounted.

PINS AND TWIN-PINS



The first Twin Pioneer, XL966, outside the Scottish Aviation factory at Prestwick

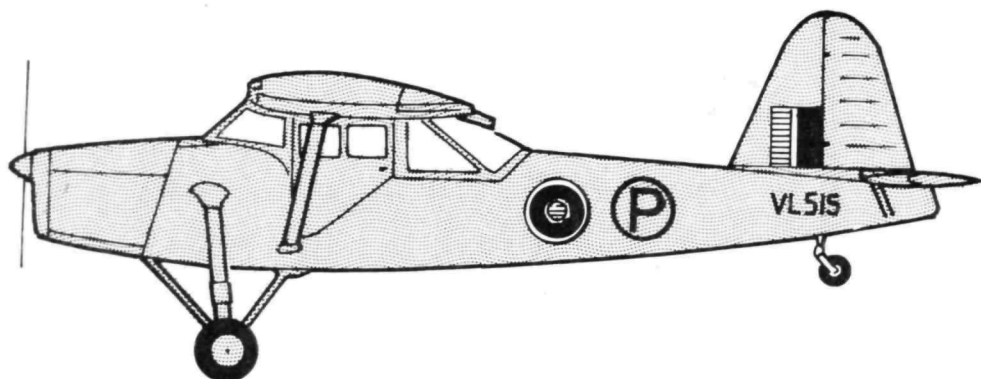
(Photo: Donald M Hannah)

During World War Two, Scottish Aviation Ltd had grown from a small overhaul facility and flying training school at Monkton Aerodrome, Ayr, to a large complex of hangars and workshops at the same airfield, now expanded enormously to become the main UK terminal for the trans-Atlantic air routes, Prestwick. The original factory had been the Engineering Pavilion of the 1938 Empire Exhibition at Glasgow but soon outgrew its bounds as large numbers of American-built aircraft began to arrive for service in the Royal Air Force.

By the end of the war, Scottish Aviation's expertise in large aircraft was considerable and it was engaged in overhauling and modifying Liberators, Dakotas and other types. Despite this, it was a small transport aircraft that became the first of the company's own design to fly.

Liaison aircraft in service with the RAF were mainly Austers with the useful ability to operate from small, unprepared, fields. With the war in the Far East still in full swing, there was a need for a larger liaison aircraft which could still operate out of primitive airstrips. Specification A.4/45 was issued and Scottish Aviation was one of the tenderers. While Heston Aircraft's submission was a twin-boom layout,

First of the line, the prototype Prestwick Pioneer



Scottish Aviation's proposal was for a conventional high wing monoplane with a 240 hp D.H. Gipsy Queen engine.

Initial testing showed that the aircraft was underpowered and its rate of climb from take-off made it impracticable to use jungle strips. Air Ministry interest in the specification had lapsed after Japan surrendered so the project was continued as a private venture.

After casting around for suitable engines of greater power, the new Alvis Leonides was selected, at 520 hp more than twice the power of the original Gipsy Queen. Accommodation was also increased to five and the prototype Pioneer II flew in June 1950.

It soon became clear that there was considerable potential in the revised aircraft and its slow-flying and STOL capabilities were almost unique for its time. At the SBAC displays at Farnborough, the Pioneer was a frequent demonstrator and impressed the spectators by taking off across the runway instead of along it. This could have unexpected effects as when on one occasion, the elevator caught on a runway light and was wrenched off its outboard hinges. The aircraft continued its demonstration with one elevator at right-angles to its normal position. It was heavy on the controls but was otherwise a comfortable aircraft to take into and out of primitive airstrips and unprepared surfaces.

Although the RAF requirement for a jungle-hopper had lapsed after the end of the Burma campaign, a new emergency had developed in Malaya where Chinese guerillas were attacking Malayan villages and farms. The Pioneer was an ideal type for operating from the small airstrips set up beside camps and settlements and the type was ordered as the Pioneer CC.1. Forty saw service with RAF units, beginning with No.267 Squadron in February 1954. This unit was engaged in liaison work with isolated strongpoints in the jungle and lost five of its Pioneers in this



Pioneer XL665 of No.209 Squadron at Seletar (Cliff Minney)
type of operation.

In the UK, No.215 Squadron was formed at Dishforth to provide aircraft for army training but was disbanded after a short period of service between April 1956 and September 1958.

A similar type of guerilla war was taking place in the Aden Protectorate where raiding parties from the Yemen were crossing over the ill-defined frontier in the Radfan. No.78 Squadron was reformed at Khormaksar on 24 June 1956 to support the local defence forces which, as in Malaya, operated from a series of isolated forts. Abrasive sand replaced jungle humidity as the Pioneers' main enemy and accidents on dusty and rutted airstrips put paid to three of the squadron's Pioneers. Fortunately, the aircraft's robust structure kept injuries in such accidents low.

On disbandment, No.215's Pioneers were handed over to No.230 Squadron, a recently-disbanded flying boat squadron. In the UK, they were based at Dishforth, Upavon and Odiham before being replaced by Whirlwinds. A year's detachment to Mamfe in Cameroon was caused by an unusual task, the provision of a security force during a change in status of the territory. The last Pioneer left the squadron in December 1962.

On 1 November 1958, No.267 had been renumbered No.209 Squadron, a long-resident Sunderland squadron at Singapore which had been disbanded. This unit continued to support the Commonwealth forces in Malaya until disbanded in December 1968. A few Pioneers were passed over the No. 20 Squadron, equipped with Hunters, to act as Forward Air Control aircraft for a further year. In all, twelve Pioneers were lost in accidents in Malaya and Borneo, the latter in support of local forces during the confrontation with Indonesia which claimed the whole of

Pioneer XL705 of No.78 Squadron in the Aden Protectorate (Photo via Cliff Minney)



the island from the new state of Malaysia.

Eight Pioneers were sold to the Royal Malaysian Air Force and two to Ceylon (CC603 and CC604) which were joined by XL668 diverted from an RAF contract.

Of the five civil aircraft that did not go to military use, one (G-ANRG) was used for trials in the autumn of 1954 at Boscombe Down. Two others were sold to Iran but there was no great civil interest in the type which was expensive and more complicated than a civilian operator would wish. Its unequalled STOL performance was of little use to companies operating from established airfields.

Fortunately, XL703 has been preserved for the RAF Museum as a monument to the sterling work carried out by this handful of aircraft.

As a follow-up to the Pioneer, Scottish Aviation designed a twin-engine light transport in the same mould. It was intended to be a rugged STOL aircraft which could carry heavier loads into the same rough airstrips.

The prototype (G-ANTP) made its first flight on 25 June 1955 and soon proved to be fully up to specification. An order for twenty was placed by the Air Ministry as the Twin Pioneer CC.1 which was later increased to a total of 39, the final seven being CC.2s with some structural modifications. Two Leonides 514 engines of 550 hp were fitted and later 640 hp Leonides 531s were provided for late-production aircraft and retrofitted to surviving earlier models.

The first CC.1 flew on 29 August 1957 and trials at the Aeroplane and Armament Experimental Establishment at Boscombe Down and in tropical conditions led to the introduction of the type to squadron service in October 1958. No.78 Squadron at Khormaksar received some Twin Pioneers to supplement its Single-Pins and completely re-equipped with Twin-Pins in August 1959. Like its smaller sister, they were busily engaged in moving troops and supplies around the wilderness and at times lending support, alongside Pioneers, to the Sultan of Oman who had a similar problems with incursions into Oman and Muscat.

A series of double engine failures caused problems, No.78 losing two aircraft on the same day to this cause. The soft patches on airstrips caught out a number of pilots and a few aircraft had to be written off after hitting soft sand and tipping up, although No.78 only wrecked one aircraft when it caught a rut and swung off the strip into trees at Manawa.

No.152 Squadron based at Muharraq, Bahrain, received some Twin Pioneers to supplement its

FM1015 of the Royal Malaysian Air Force awaiting delivery at Benson, September 1957. (A-B Colour Slide No.9433)





XK370 of No.20 Squadron FAC Flight comes into land over Mirages of No.75 Squadron, RAAF, at Butterworth in 1966.

Pembrokes for nearly nine years.

No.21 Squadron had been reformed at Benson in May 1959 and was sent to Kenya in September for internal security and supply-dropping duties, the Kenyan air component at that time consisting only of some civilian-type light aircraft. The squadron suffered only one major accident when XL966, the first aircraft built, flew into a valley from which it became impossible to climb out. One person was killed.

In June 1965, No.21 was transferred to Aden and took over No.78 Squadron's Twin Pioneers, the latter squadron converting to Wessex helicopters. It continued to fly supply missions around the Protectorate until disbanded in September 1967.

No.152 tended to operate around the Persian Gulf and suffered the most serious accident to befall a Twin Pioneer when XL994 suddenly dived into the ground while circling the airstrip at Bu Hafafa, in Oman, with the loss of all eight aboard.

In March 1959, No.209 Squadron at Seletar began to receive Twin Pioneers to supplement Single-Pins. The squadron's aircraft were active in Borneo, losing seven aircraft in accidents in Borneo and Malaya, one of the fatal. This was when XN318 flew into a wooded cliff while following a river in Borneo and fell into the water, five occupants being killed.

Last of the Twin Pioneer operators was No.230 in the UK where some camouflaged Twin Pins were flown beside single-engined Pioneers for two years. The short-range conversion unit at Odiham flew three Twin Pioneers for training crews destined for service in Twin-Pin squad-

rons.

The type left squadron service in December 1968 and three were sold to civilian operators. XL993 was preserved for the RAF museum after representing the Twin Pioneer force at the Royal Review at Abingdon in 1968.

Fourteen Twin Pioneers were supplied to the Royal Malaysian Air Force, the first of which was one of the seventeen civil aircraft built by Scottish Aviation.

Despite the nature of their service with the Royal Air Force, only four fatal accidents occurred, three to Twin Pioneers as mentioned above and one to a Pioneer which hit a radio mast on take-off and crashed, killing the crew of two.

SERVICE USE

Pioneer CC.1:

No.20 Squadron, Tengah	January 1969 to January, 1970
No.78 Squadron, Khormaksar	June 1956 to August 1959
No.209 Squadron, Seletar	November 1958 to December 1968
No.215 Squadron, Dishforth	April 1956 to September 1958
No.230 Squadron, Dishforth, Upavon and Odiham	September 1958 to December 1962
No.267 Squadron, Kuala Lumpur	February 1954 to November 1958

Twin Pioneer CC.1/CC.2

No.21 Squadron, Eastleigh and Khormaksar	May 1959 to September 1967
--	----------------------------

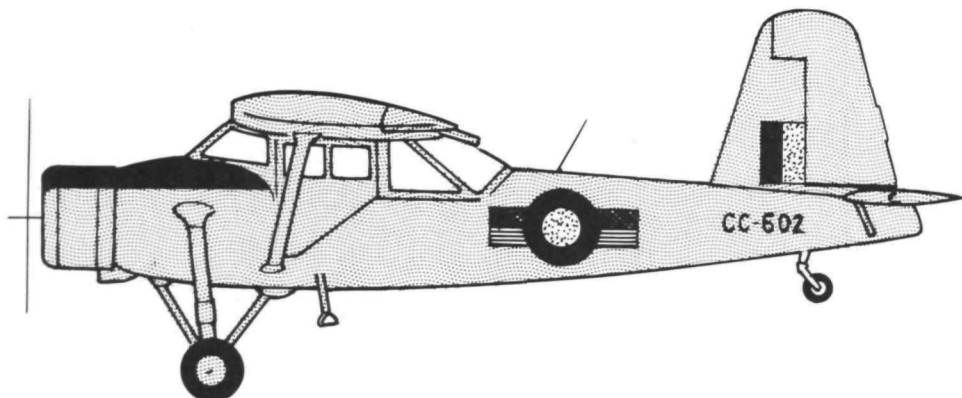
PRODUCTION

PIONEER		TWIN PIONEER	
XE512	1311 Flt/267/ 209	Ex G-AKBF. Ground-looped into ditch after heavy landing, Kuala Lumpur, 4.11.58	XL966 AAEE/78/21 Flew into rising ground on supply drop, Mount Meru, Tanganyika, 2.3.61
XE513	1311 Flt/267	Wingtip hit ground on landing; rolled over on runway, Kuala Lumpur, 8.4.58	XL967 209 Both engines cut; crash-landed on approach, Kota Tinggi, Malaya, 19.4.62
XE514	Hdlg Sqn/267	Ex G-ANAZ. Hit downdraught on approach and undershot, Fort Shean, Malaya, 8.8.54	XL968 AAEE/21/78/21 SOC 18.12.67
XE515	267/209	SOC 26.8.66	XL969 209 SOC 12.10.67
XG558	267/209	SOC 7.6.63	XL970 SF Katunayake/209 SOC 20.12.68
XG559	267	Hit downdraught and undercarriage collapsed, Bidor, Malaya, 28.1.57	XL991 FSS/78/209 Both engines cut; ditched 3m E of Tioman airstrip, Malaya, 29.9.67
XG560	267/209	Engine lost power; hit tree in forced landing, Rengah, Malaya, 26.8.60	XL992 78/21/152 SOC 30.10.68
XG561	267/SF Seletar/ 267/209	Hit radio mast on take-off; lost wing and crashed, Ipoh, Malaya, 23.10.59	XL993 78/21 To 8388M 6.2.69; preserved for RAF Museum
XG562	267	SOC 7.2.58	XL994 78/152 Dived into ground in circuit 1m W of Bu Hafafa, Oman, 18.4.63
XG563	267	Undercarriage collapsed on landing, Fort Shean, Malaya, 15.4.57	XL995 209 SOC 20.12.68
XH469	AAEE	G-ANRG used for trials in September and October 1954	XL996 230/SF Odiham/152 SOC 30.10.68
XJ450	267/209	Hit by squall on landing and tipped up, Fort Kemar, Malaya, 4.10.60	XL997 209 SOC 1.10.68
XJ451	267	Swung on take-off and hit trees, Fort Langkap, Malaya, 10.4.58	XM284 FSS/78/21/152 SOC 27.11.67
XJ465	267/209/20	SOC 1.1.70	XM285 230/SF Odiham/ 225/SRCU Sold 29.11.69;
XJ466	267/209	SOC 26.11.64	XM286 78/152/21/152 SOC 30.10.68
XK367	215/209	SOC 11.8.67	XM287 78 Both engines cut; force-landed and overturned 30m W of Khormaksar, 8.4.59
XK368	267/209	SOC 27.9.62	XM288 78 Both engines cut on approach; ditched ½m W of Khormaksar, 8.4.59
XK369	215	Hit fence on take-off and crashed into ditch, Barnard Castle, Co.Durham, 23.7.56	XM289 152/78/21/152 SOC 30.10.68
XK370	Benson/215/230/ SOAF/209/20	SOC 1.1.70	XM290 152/21 Tipped up after landing, Kalimikui, Kenya, 13.3.63
XL517	78/230/209	Ex G-AOGK. Hit trees in turn and crashed, Long Pa Sia, Borneo, 15.7.66	XM291 152/78/152/21/152 SOC 30.10.68
XL518	78/SOAF	SOC 30.10.62	XM939 152/78/21/209 SOC 9.10.68
XL519	78	SOC 10.7.57	XM940 Sc Avn/230/SF Odiham/ SRCU/78/21/152 SOC 30.10.68
XL520	78	Failed to become airborne and hit ridge, Beihan, 13.9.57	XM941 224 Gp Support Flt/ 209 Both engines cut; force-landed in clearing 4m W of Paloh, Malaya, 9.3.60
XL553	78	Blown over by gust on landing and hit runway, Wadi Ain, Aden, 19.9.57	XM942 209 Hit soft patch on landing and undercarriage broke off, Long Akah, Borneo, 29.5.64
XL554	78	To SOAF 5.8.59	XM943 78 Swung off strip and hit trees, Manawa, Aden, 16.9.64
XL555	230	Stalled on take-off and dived into ground, Upavon, 29.4.60	XM957 78/21/AAEE/209 SOC 20.7.67
XL556	215/Hdlg Sqn/ 215/230	Undercarriage collapsed on landing, Middle Wallop, 22.9.58	XM958 21/152 SOC 30.10.68
XL557	215/230	Wing hit ground on approach due to gust; undercarriage collapsed, Watchfield, 9.8.60	XM959 21/152 Ran into ruts on runway on landing and tipped up, Tayibah, Oman, 14.9.67
XL558	215/230/209	Damaged beyond repair in storm, Vientiane, Laos, 18.4.68	XM960 21/78/21 SS 3.9.68
XL664	Sc Avn/230/ Sc Avn/AAEE	Engine cut; undershot forced landing 6m WNW of Kidderminster, Worcs., 16.6.61	XM961 21/230/SF Odiham/ SRCU To 7978M 28.7.67;
XL665	78/Hdlg Sqn/ 230/209	SOC 26.10.67	XM962 MoS & Alvis/209 SOC 9.10.68
XL666	Sc Avn/230/209/20	SOC 1.1.70	XM963 21/78/21/209 SOC 14.8.68
XL667	230	Wingtip hit ground on approach, slewed in to strip ½m S of Kingussie, Fife, 12.5.62	XN318 230/209 Flew into trees and hit cliff; fell into river 6m N of Long Semodo, Sarawak, 14.2.63
XL668	-	Direct to Ceylon AF	XN319 209 SOC 9.10.68
XL699	209	Sank back after take-off; overshot and overturned, Bareo, Borneo, 24.7.60	XN320 209 SOC 20.12.68
			XN321 209 Engine cut on take-off; undercarriage collapsed in forced landing, Butterworth, Malaya, 28.4.67
			XP293 Hdlg Sqn/209 SOC 20.12.68
			XP294 SF Odiham/AAEE/209 Skidded landing on wet strip into ditch; undercarriage collapsed, Bareo, Borneo, 11.9.64
			XP295 230/SF Odiham/ 1310 Flt/MoA/ SF Odiham Sold 26.8.70;
			XP296 - became G-AZHJ
			Cancelled

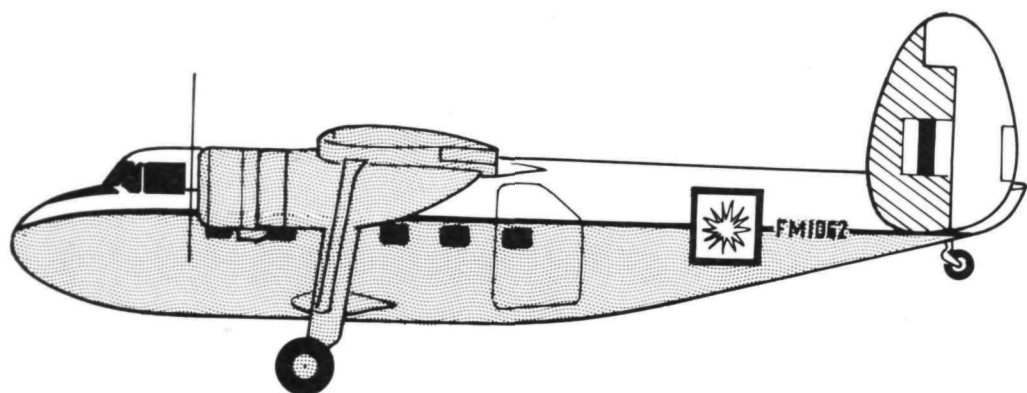
Pioneers (continued)

XL700	MoS/209	Failed to gain height on take-off and hit trees, Patik, Labuan, 10.2.63	XL702	230/MoA/209/20	SOC 1.1.70
XL701	78	Collided with Landrover after landing, Awabi, Muscat, 1.7.58	XL703	230/209	To 8034M 1.10.68; preserved for RAF Museum
			XL704	209	SOC 18.4.67
			XL705	78/209	SOC 11.8.67
			XM706	78/SOAF/209	SOC 25.7.68

* * * * *



Pioneer CC-602 served with No.2 Squadron of the Ceylon Air Force. It was silver overall apart from the black anti-glare strip forward of the windscreen. The national markings consisted of red and yellow roundel, yellow innermost, and orange and green bars, the orange uppermost.



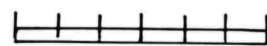
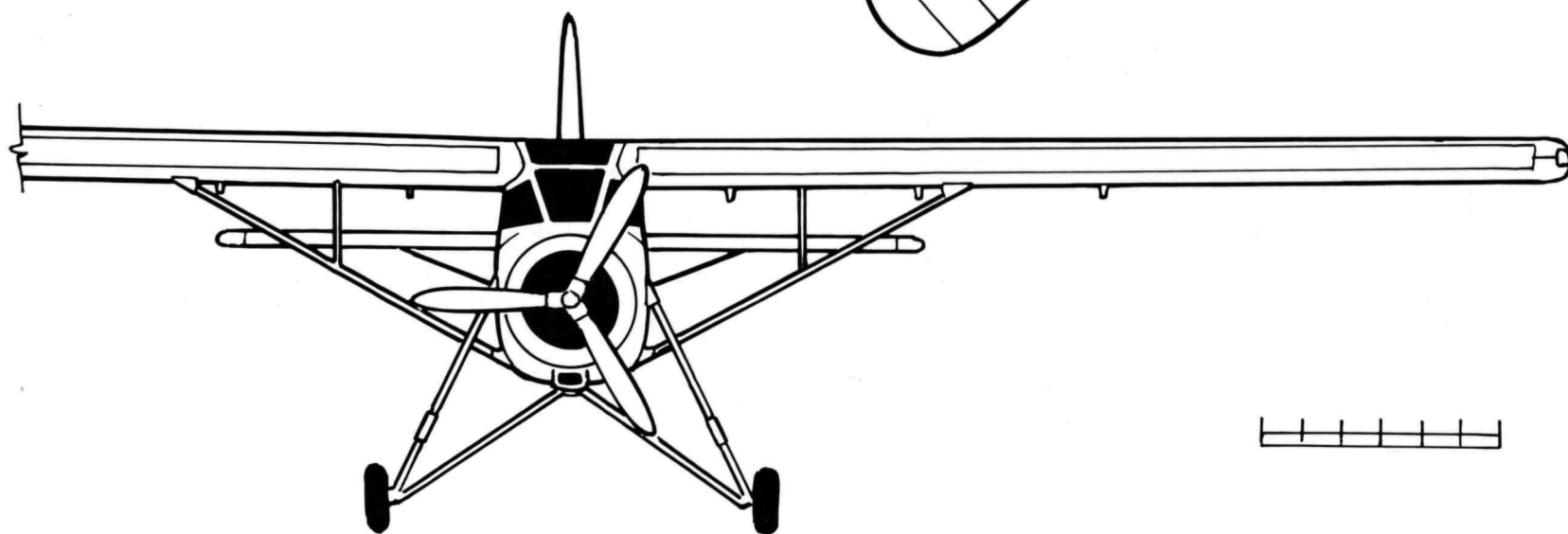
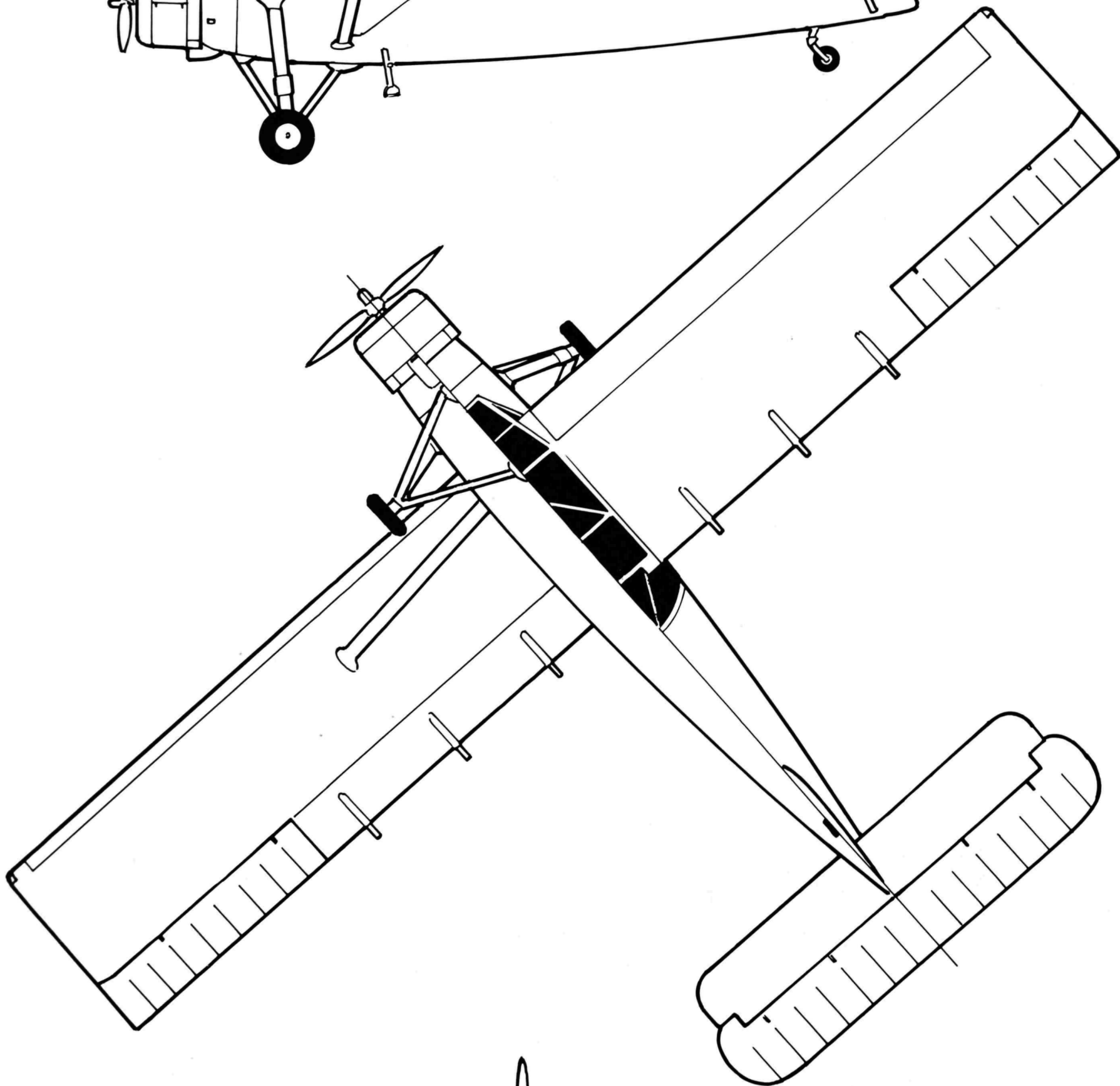
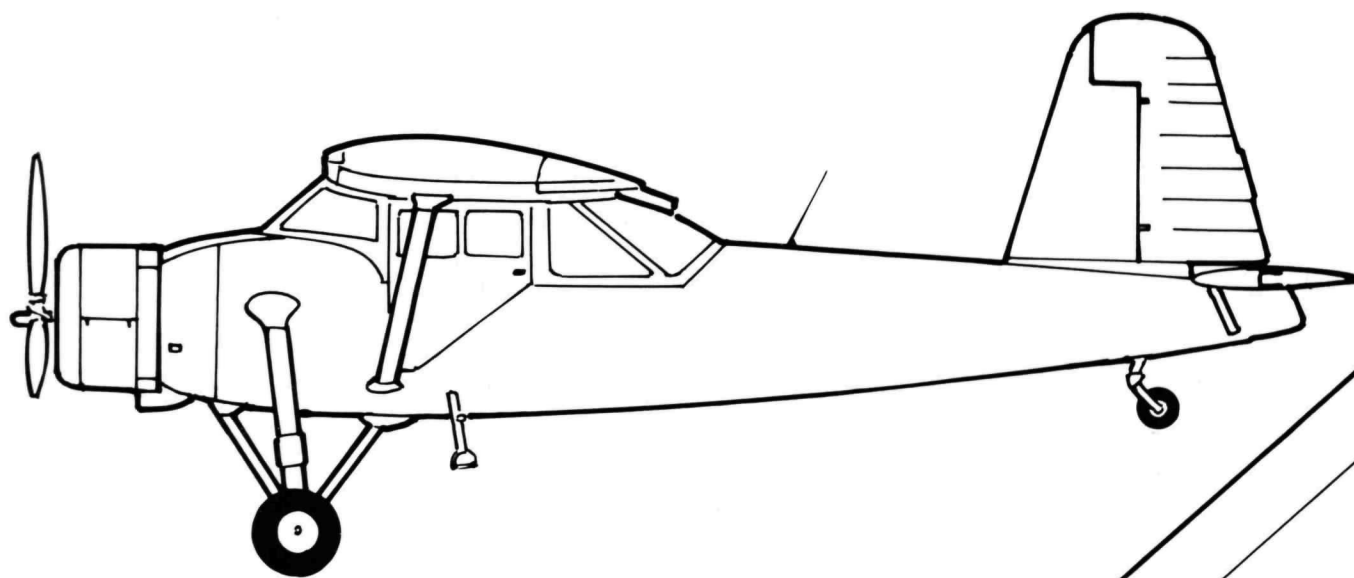
Twin Pioneer FM1062 of the Royal Malaysian Air Force was silver with a white top and dark blue trim. The fin was painted in dayglo to assist location in the event of a forced alnding in the jungle.

Twin Pioneer XL966 at the 1958 SBAC Display at Farnborough

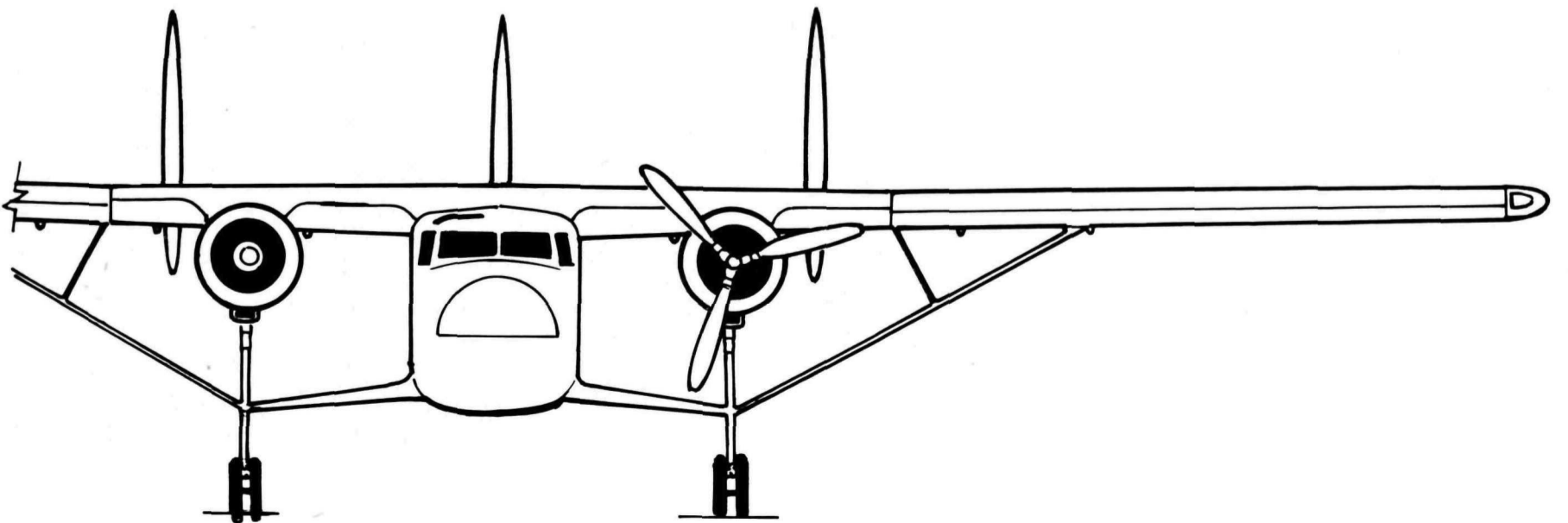
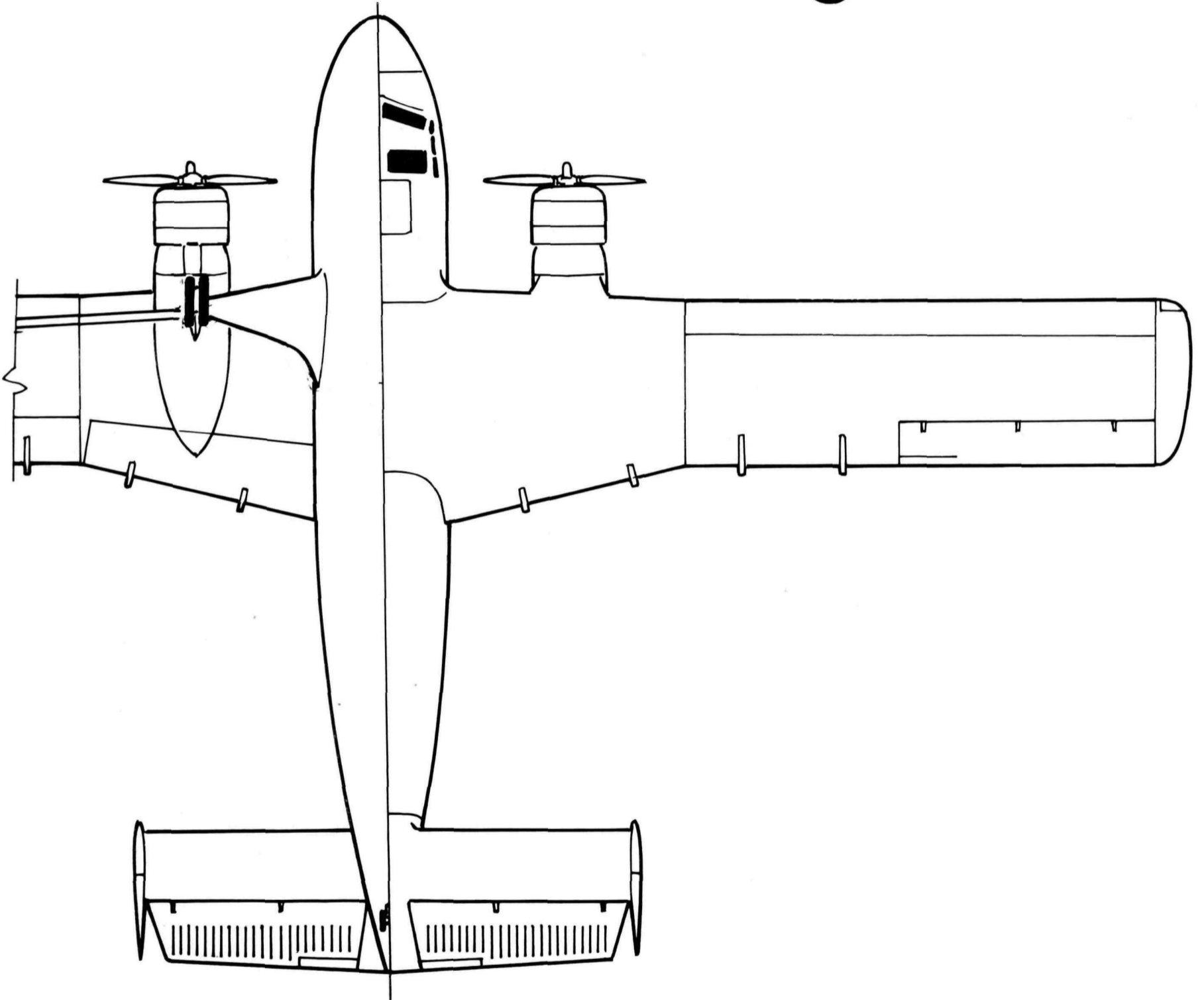
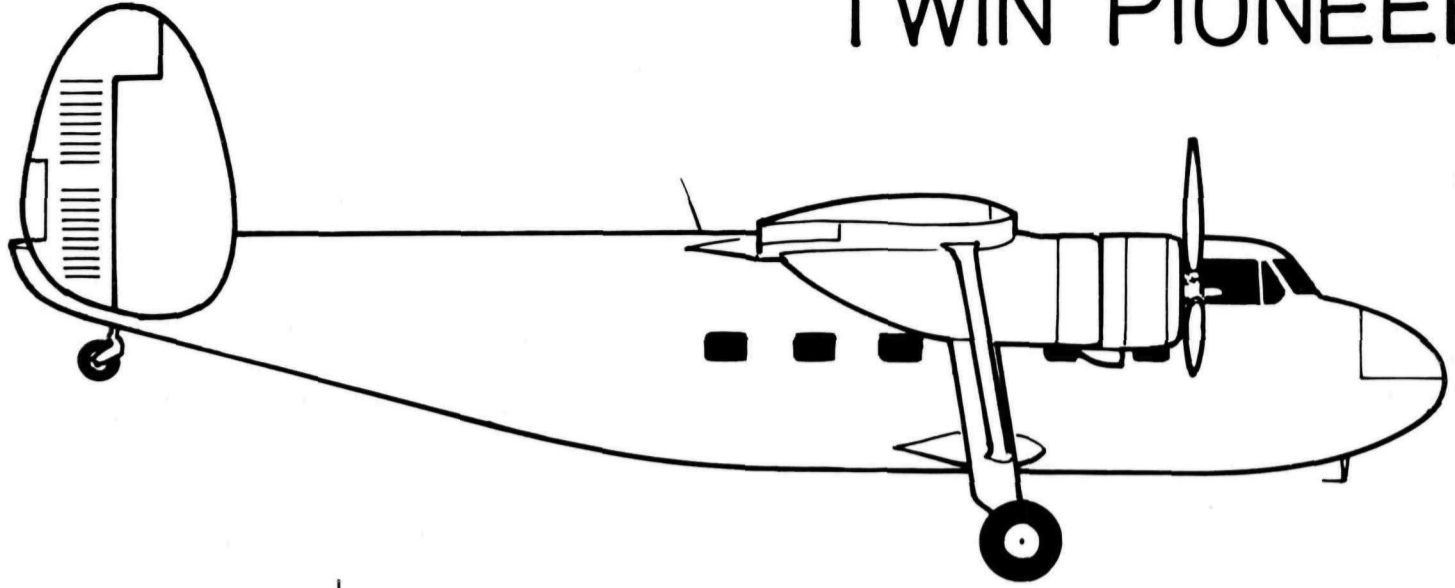
(D.M.Hannah)



PIONEER



TWIN PIONEER



HMS EMPEROR



One of the 'Ruler' class escort carriers. HMS 'Emperor' was built by the Seattle-Tacoma Shipyards as USS 'Pybus' but was allotted to the Royal Navy before completion. She was launched on 7 October 1942 and delivered for service a year later. On a displacement of 11,420 tons she could carry nominally 24 aircraft and had a defensive armament of two 5-inch, sixteen 40 mm and twenty-seven 20 mm guns. The 5-inch guns are shown as being carried by the ship's log but 4-inch guns were normally standard in this class.

After trials on Belfast Lough, 'Emperor' sailed for the Clyde and began deck-landing trials and take-offs on 1 December 1943, returning to Belfast to fly on Nos. 800 and 804 Squadrons on 5 December for working up.

On 11 January 1944, 'Emperor' joined a west-bound convoy, flying off her two squadrons to Norfolk NAS on the 25th before entering dry-dock for hull repairs. On 5 February, she re-embarked her aircraft to return to the Clyde for deck-landing training before joining the Home Fleet at Scapa Flow on 18 March. She sailed on 30 March with 'Searcher', 'Pursuer' and 'Fencer' to join 'Victorious' and 'Furious' for strikes on shipping off the Norwegian coast.

Early in the morning of 3 April, 'Emperor' flew off seven, and catapulted three, Hellcats on their first strike, followed an hour later by another ten. On return, one Hellcat's hook jammed up and the pilot ditched, being rescued by a destroyer. From the fleet carriers, Barracudas added heavier armament while Seafires from 'Furious' flew CAP. On return to Scapa on the 6th, the squadrons were flown off to Hatston, to return on the 11th in preparation for another strike.

On 21 April, the same four escort carriers left Scapa, running into heavy seas on the 23rd which distorted beams and dislodged plates from the hull. On the 26th, twelve Hellcats were flown off to attack shipping off Norway. Eleven landed on, one of which crashed on deck, injuring the pilot fatally. A second (FN366'H') ditched. On the way back to Scapa, an aircraft broke away in the hangar in heavy seas and damaged three others. On return, twelve Hellcats were flown off to Hatston while repairs were made to the damaged flight deck to permit the aircraft to fly on again on 6 May. During this operation, JV147 lost its hook and struck the bridge, injuring one of the deck crew and damaging two tractors.

On 8 May, 'Emperor' catapulted two Hellcats for CAP before flying-off two strikes of eight aircraft each for more attacks on shipping. One Hellcat (JV107) failed to return and another (JV140) was abandoned over the task force but the pilot was not picked up.

Another strike on 14 May saw another Hellcat being abandoned over the force (JV135) and again the pilot was lost. Six enemy aircraft were sighted approaching and three Hellcats were flown off to intercept but the enemy got away before the fighters could reach them.

A quieter period followed as 'Emperor' did some convoy escort work from Loch Foyle. A Hellcat hit the island on 8 June and fell into the Irish Sea and on 6 July, JV148 went into the barrier. The ship's Walrus was busy flying errands. On 9 July, the squadrons flew on and on the 15th, 'Emperor' sailed from the Clyde with 'Searcher', 'Pursuer' and 'Khedive' for Malta, arriving on 25 July to fly off aircraft to Hal Far.

Left: A Hellcat of No. 800 Squadron takes the barrier aboard 'Emperor' off Norway and dents its cowling. Code is 'J'
Right: Hellcats of No. 800 Squadron ranged for take-off prior to a strike on shipping off the Norwegian coast in 1944





Emperor's Walrus was in frequent use for various tasks. Not being equipped with a seaplane crane, she had to rig a sheerlegs to hoist in the Shagbat

Although the enemy was by now well up the Italian peninsula, there were still German aircraft in Greece and the occasional air raid warning was sounded before Grand Harbour disappeared under a smoke screen.

August 15 found 'Emperor', in company with other British and American escort carriers, about twenty miles off the French coast near St. Tropez, supporting the Allied landings on the French Riviera. Regular fighter patrols were flown over the beaches until the 23rd. JV150 crashed on landing on the 16th and another ditched on the 17th. On the 18th, the Walrus hit the rounddown on landing and was damaged and on the 22nd JV153 was posted missing while two more ditched, both pilots being saved. On the 23rd, another Hellcat crashed in the sea with the loss of its pilot before the carrier put in at the Italian naval base of Maddalena in Sardinia.

After a spell at Alexandria, 'Emperor' went to the Aegean on 14 September on the first of a number of sorties to that region as part of the mopping up of German forces in Greece. There was little air activity as 800 Squadron flew CAP over the task force but on 2 October a pair of Ju 88s was sighted and 'Hunter' scrambled two fighters. On 11 October, the destroyer 'Terpsichore' broke down and a pair of Hellcats was flown off to provide cover, one of them, JV149, failing to return, having apparently been shot down by flak from a German-held island.

On 27 October, JV227 ditched but the Walrus retrieved the pilot. Occasionally, the crew sighted other ships bombarding islands to per-

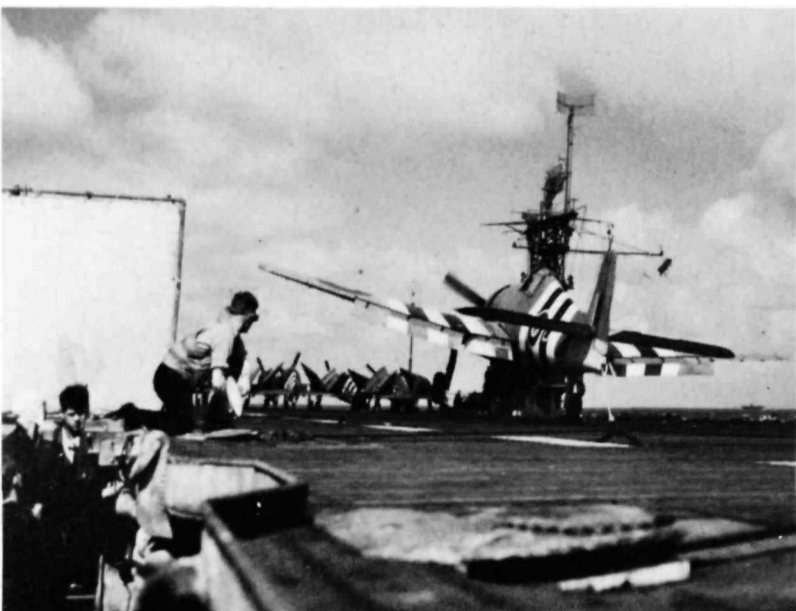
suade the garrisons to give up, including the battleship 'King George V' off Melos on 14 November. A Swordfish came aboard that day so was possibly a spotter.

On 20 November, the carrier sailed for home and flew off 24 aircraft, plus a Walrus and a Seafire, from a point near the Longships lightvessel before putting into Newport for a refit. It was 18 February 1945 before another aircraft hit the deck and a few days later No.800 Squadron was back on board from its stay at Long Kesh.

'Emperor' sailed on 1 March as part of the 21st Carrier Squadron for the Far East, reaching Ceylon on the 25th. On 8 April, nine Avengers of No.845 Squadron came aboard, accompanied by a detachment of Hellcats from No.888 Squadron. No.800 stayed ashore at Colombo when the carrier squadron sailed to carry out photo-reconnaissance over Thailand and northern Malaya in preparation for future landings there. On the 14th, an Avenger crashed on deck and was jettisoned. Next day, two bombs landed in the sea 400 yards off the starboard bow from a high-flying aircraft, only one exploding. On return to Ceylon, the short-stay visitors left and No.800 came back on board for the next operation.

As the 14th Army converged on Rangoon, a landing from the sea took the Japanese from the rear. To provide air support, escort carriers of the Eastern Fleet was based on Akyab and cruised off the mouth of the Irrawaddy. On the 29th, an Auster landed aboard on a liaison mission. One Hellcat ditched on 10 May after the carrier sailed from Trincomalee for

No.800 Squadrons Hellcats acquired 'Invasion Stripes' for Operation 'Dragoon', the landings in Southern France in 1944





Left: 'Emperor' off the coast of Sardinia in August 1944. Right. A Hellcat without stripes during Operation 'Dragoon'

a strike on coastal targets in the Tenasserim area of Burma, Part of No.800 Squadron was embarked in 'Shah' for this operation, making room for No.851's Avengers. One aircraft went over the side on take-off, presumably a Hellcat as the ship's log noted that the pilot was rescued and makes no reference to the crew as would have been the case with an Avenger. Two damaged Avengers were dumped overboard on the 17th and 851 Squadron and eight Hellcats were flown off on the 21st as the carrier approached Colombo.

'Emperor' sailed up the Indian coast to permit Spitfire pilots some experience of flying off carrier decks before setting out on 2 July to provide fighter cover for a strike on the Nicobar Islands. This time a detachment of four Walruses went along for ASR duties. Two aircraft ditched on the 5th and the carrier returned to Trincomalee on 13 July. On the 19th, fifteen Hellcats were catapulted off to a shore base while 'Emperor' was at anchor.

No.800 returned on board on 7 August and the Eastern Fleet prepared for the invasion of Malaya. Operation 'Zipper', allegedly so-called because nothing was buttoned up, was thrown into confusion by the atomic bomb attacks on Japan. Deckloads of fighters and bombers to soften up the defences and Spitfire squadrons ready to fly off escort carriers to occupy airstrips in the beachhead were now in a state of suspended animation. If the Japanese were about to surrender, there was no point in all this military display. But would the Japanese forces in South East Asia surrender meekly on the orders of far-away Tokyo? In the event, no fighting took place in Malaya and the vast

armadas of ships and aircraft found themselves occupied in very different roles.

With a large force of battleships and cruisers of the Eastern Fleet, 'Emperor' found herself sailing into Singapore harbour as part of an occupation force, a location that had, only weeks before, been the ultimate objective of a major campaign.

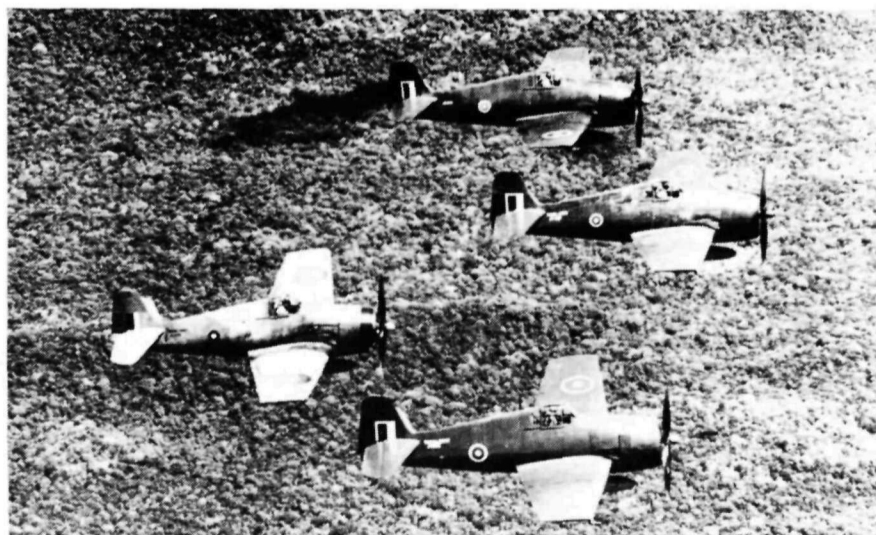
'Emperor' returned to Trincomalee on 18 September, flying off 23 Hellcats on arrival. The 24th was catapulted off 15 October, the last flying from her deck. No.800 took its aircraft to Coimbatore and left them there.

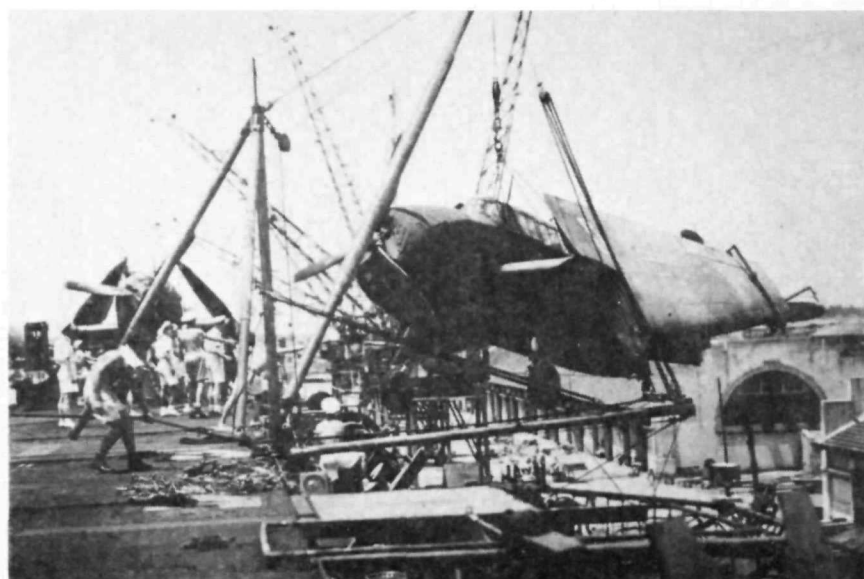
After another trip to Singapore with stores and personnel at the end of October, 'Emperor' left Colombo on 6 November for home. Aboard were the personnel of 800 Squadron, now reduced to being passengers and bereft of aircraft.

At Alexandria, some aircraft were hoisted aboard for conveyance to Malta and on 4 December she was back at Greenock in mid-winter, a far cry from the tropical heat of Ceylon. Next day, No.800 Squadron disembarked and dispersed to a variety of destinations, effectively disbanding the squadron. It would be nearly a year before the famous number '800' reappeared at Eglinton with Seafire 17s for service in the light fleet carrier 'Triumph'.

After embarking aircraft at Glasgow, the carrier received aboard 37 officers, 434 men of the US Army, 3 officers and seven seamen of the US Navy and 22 civilians, all destined for their homes in the USA. She sailed from Southampton on 16 January 1946, arriving at Norfolk for hand-over to the US Navy on the 28th for scrapping.

Hellcat IIs of No.888 Squadron were engaged in photographic reconnaissance missions from 'Emperor' in April 1945





Left: Hellcats of No.800 Squadron lined up and the crew man ship for entering Colombo
 Right: An Avenger is off-loaded at Cochin. Despite the many cranes at this port, a sheerlegs has been rigged.

Place	Arrived	Sailed
Belfast	26.11.43	29.11.43
Gareloch	29.11.43	2.12.43
Greenock	2.12.43	3.12.43
Belfast	3.12.43	5.12.43
Greenock	5.12.43	7.12.43
Belfast	7.12.43	11.12.43
Greenock	11.12.43	11.1.44
Norfolk, USA	24.1.44	6.2.44
Argentia, Newfoundland	10.2.44	10.2.44
Liverpool	17.2.44	20.2.44
Greenock	20.2.44	29.2.44
Bangor, NI	29.2.44	1.3.44
Rothesay	1.3.44	3.3.44
Greenock	3.3.44	6.3.44
Belfast	6.3.44	9.3.44
Greenock	9.3.44	17.3.44
Scapa Flow	18.3.44	30.3.44
Scapa Flow	6.4.44	21.4.44
Scapa Flow	28.4.44	7.5.44
Scapa Flow	9.5.44	12.5.44
Scapa Flow	16.5.44	20.5.44
Greenock	21.5.44	23.5.44
Lough Foyle	23.5.44	27.5.44
Lough Foyle	2.6.44	3.6.44
Moelfre Bay	3.6.44	4.6.44
Belfast	5.6.44	7.6.44
Greenock	11.6.44	28.6.44
Belfast	28.6.44	11.7.44
Greenock	12.7.44	15.7.44
Algiers, Algeria	23.7.44	23.7.44
Malta	25.7.44	12.8.44
Maddalena, Sardinia	24.8.44	29.8.44
Alexandria, Egypt	2.9.44	14.9.44
Alexandria, Egypt	21.9.44	30.9.44
Alexandria, Egypt	13.10.44	13.10.44
Alexandria, Egypt	20.10.44	24.10.44
Alexandria, Egypt	6.11.44	13.11.44
Alexandria, Egypt	15.11.44	20.11.44
Gibraltar	25.11.44	25.11.44
Barry	29.11.44	1.12.44
Newport, Mon.	1.12.44	31.1.45
Plymouth	1.2.45	14.2.45
Belfast	15.2.45	18.2.45
Greenock	18.2.45	24.2.45
Belfast	24.2.45	25.2.45
Greenock	25.2.45	1.3.45
Alexandria, Egypt	13.3.45	14.3.45
Cochin, India	23.3.45	24.3.45
Colombo, Ceylon	25.3.45	4.4.45
Trincomalee, Ceylon	5.3.44	8.4.44
Colombo, Ceylon	20.4.45	21.4.45
Trincomalee, Ceylon	23.4.45	23.4.45
Akyab, Burma	26.4.45	29.4.45
Kyaukpyu, Burma	29.4.45	30.4.45
Trincomalee, Ceylon	9.5.45	10.5.45
Colombo, Ceylon	21.5.45	22.5.45

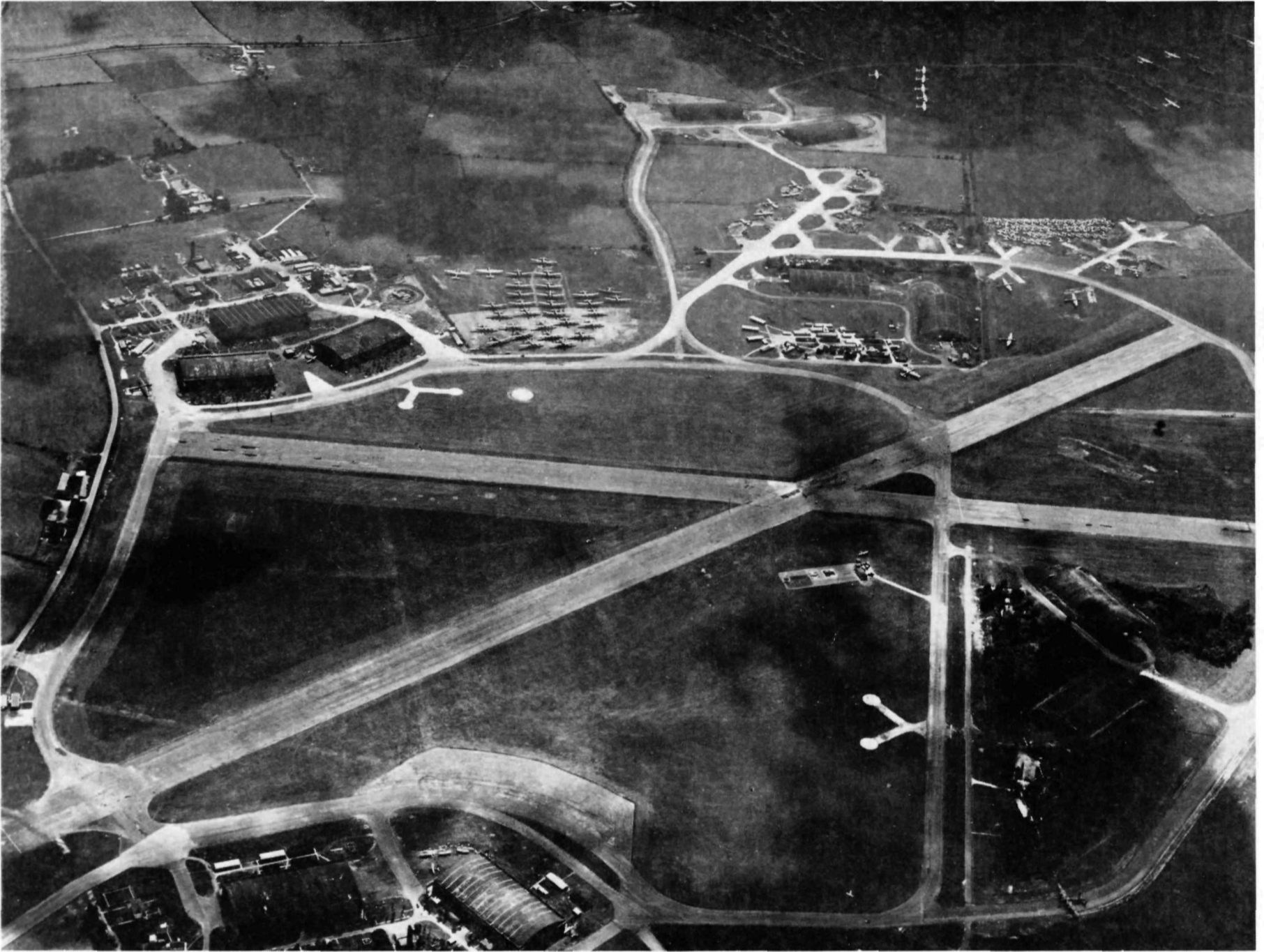
Place	Arrived	Sailed
Cochin, India	23.5.45	9.6.45
Colombo, Ceylon	10.6.45	14.6.45
Trincomalee, Ceylon	15.6.45	20.6.45
Vizagapatam, India	22.6.45	24.6.45
Coconada Bay, India	24.6.45	26.6.45
Trincomalee, Ceylon	28.6.45	2.7.45
Trincomalee, Ceylon	13.7.45	10.8.45
Trincomalee, Ceylon	15.8.45	22.8.45
Trincomalee, Ceylon	24.8.45	4.9.45
Singapore	10.9.45	13.9.45
Trincomalee, Ceylon	18.9.45	19.10.45
Colombo, Ceylon	20.10.45	21.10.45
Singapore	26.10.45	30.10.45
Colombo, Ceylon	4.11.45	6.11.45
Bombay, India	8.11.45	12.11.45
Alexandria, Egypt	21.11.45	23.11.45
Malta	25.11.45	26.11.45
Gibraltar	29.11.45	30.11.45
Greenock	4.12.45	28.12.45
Glasgow	28.12.45	30.12.45
Greenock	30.12.45	3.1.46
Glasgow	3.1.46	11.1.46
Greenock	11.1.46	12.1.46
Southampton	14.1.46	16.1.46
New York, USA	26.1.46	27.1.46
Norfolk, USA	28.1.46	3.2.46
* * * * *		

Note: Placenames are as recorded in the ship's log. All places without a country name are in the United Kingdom. Stops where the ship only hove to for a few hours have not been shown except during a lengthy passage to show progress.

Hellcat JV145 'E-L' of No.800 Squadron aboard Emperor



KEMBLE



Kemble airfield in the early 1950s with Lancasters and Lincolns present in numbers. Taken from the north, this view shows a Type C and two Type D hangars at top left and another pair of Type Ds at the bottom. Spread around the right half of the photograph are six Type Ls. The control tower, with Auster alongside, is isolated on the airfield.

The Royal Air Force station at Kemble has been the home of No.5 Maintenance Unit since 1938, making it unique in the length of time it has housed any RAF unit without break.

No.5 MU was formed on 22 June 1938, Kemble being allocated in place of Alvescot, Oxon, its original intended base which later became Brize Norton. No.1 Aircraft Storage Unit at Waddington hived off the nucleus of No.5 MU as 'H' MU pending the formation of a self-administering unit.

By 26 February 1939, the transfer of equipment and personnel from Waddington was complete and Kemble became a hive of activity as Blenheims and Hurricanes were received from the factories and prepared for issue to squadrons. Training types were also checked out for training units and Kemble was a major source of replacements for these.

Work on the airfield continued during all these activities, neighbouring fields being requisitioned to park the increasing numbers of aircraft awaiting modification and issue. On the outbreak of war, the Fosse Way, a Roman road that ran across the airfield was barred and on 6 September fourteen Wellingtons of 37 Squadron arrived as part of the 'Scatter Plan' that dispersed bombers from their peacetime -

and well-known - stations to avoid possible air attacks. These left after two days and Kemble settled into its routine task of supplying combat-ready aircraft to operational squadrons and stored trainers to replace the inevitable wear and tear on these much-abused aircraft.

During September 1939, No.5 MU received 93 aircraft and issued 89. Air tests totalled 126 and the stock at the end of the month was 376. By the end of the year, the stock had risen to 488. This was a large number of aircraft to be packed into a single airfield and rose to nearly 500 by mid-1940 when enemy bombing was a distinct possibility. The site had been selected in 1938 as being protected from air attack from Germany by the distance from the East coast but now the German bombers could come from the south and could also swung out over the Irish Sea and sneak in over the Welsh mountains.

To clear aircraft from the airfield after all work on them was complete, No.4 Ferry Pool was formed at Cardiff and on 1 June 1940, its advanced party moved in to Kemble, the remainder arriving in batches until the 12th.

Among the standard service types handled by 5 MU were the oddities. On 19 February 1940, twelve Rocs were being prepared for delivery to Finland and five were despatched on 6 March and

a further five on the 8th. None reached Finland before the armistice. Canadian-built Hurricanes began to appear in March.

Stock peaked at 629 aircraft in April and the surrounding fields filled up. These had become more permanent establishments since hard tracks had been laid down to permit the movement of aircraft in what had often been a bog after heavy rain.

The range of aircraft handled in June comprised Blenheims, Whitleys, Hurricanes, Battles, Beauforts, Lysanders, Herefords, Wellingtons, Hectors and the odd Gladiator, Gauntlet, Tiger Moth, Magister, Hind and Fury. During the month, No.4 FP had ferried 1,310 aircraft.

The shooting war reached Kemble on 25 July when a Ju 88 that wandered towards the MU was shot down by Pilot Officer A.C. Bird of No.4 FPP in Hurricane P3271 at Coates, near Cirencester before he spun into the ground near Aston Down for reasons unknown and was killed.

July saw six Buffalos arrive as the first of the flow of wartime orders from the USA, in this case from a frustrated Belgian order. To the list of types handled were added Audaxes, Harts, Dominies, Harrows, Queen Bees, Hampdens, Tutors and examples of the Demon and Osprey.

The Luftwaffe arrived for the first time on 14 August when two enemy aircraft bombed the airfield. Eighteen bombs caused no casualties or damage to the station but nine Whitleys were damaged on B Site, a dispersal field.

To administer Kemble, a station headquarters was formed on 1 October 1940. By then, the MU and Ferry Pilots Pool had been joined by the Overseas Aircraft Delivery Flight, formed on 9 September with a primary function to fly out Wellingtons to the Middle East and Malta. Stoke Orchard was impressed as an overflow site but soon became waterlogged and was replaced by Watchfield.

In January 1941, the first satellite landing ground for Kemble was being built at Calmsden, 3½m north of Cirencester and probably on the site of the old World War One airfield at Rendcomb (usually spelt with a final 'e' by the RFC). Among the MU's stock were 65 Masters held by Miles at Woodley but in practice stored in various garages around the Reading area. A sub-unit at Northolt held twelve Spitfires.

During November 1940, No.4 Ferry Pilots Pool had been redesignated Headquarters Service Ferry Pools, No.7 SFP being responsible for most of Kemble's deliveries.

On 22 September 1941, Bush Barn in Oxfordshire was opened as a SLG (No.44) but did not have a good surface. No.33 SLG at Berrow, Worcs., was loaned by No.20 MU on 29 November while Marlow (later known as Booker) became a small holding unit for Spitfires although Northolt continued to hold No.5 MU stock.

During July 1941, Kemble changed its role from simple ferrying to training crews for overseas ferry flights, a large proportion of aircraft being ferried to the Middle East having come to grief through inadequate training in the hazards of long-range flying near enemy territory. OADF became the Overseas Air Deliveries Unit on 15 August to combine ferrying with training. The same month saw a couple of Bombays being ferried out to the Middle East and Beaufighters were in stock. On 5 November 1941, OADU disbanded to form the Ferry Training Unit, the Overseas Aircraft Delivery Unit and the Overseas Aircraft Preparation Flt, later Unit. Hudsons and Marylands were among the aircraft handled in addition to the regular flow of Wellingtons, Beauforts and Beaufighters.

By the beginning of 1942, the overseas support units were fully occupied in reinforcing the Middle East and India. The OAPU at Kemble had two flights; No.1 handled Wellingtons and No.2 mainly Hudsons but also any other type. Nos.3 and 4 Flights were based at Filton to handle Beauforts and Beaufighters.

New types continued to appear, Hotspur gliders in February, Albemarles in March and Typhoons and Horsas in May. A variety of impressed civil types also began to pass through 5 MU.

In April, Kemble acquired its first concrete runway and next month another SLG, No.12 at Beechwood, Beds. This was supplemented in September by No.22 at Barnsley Park, Glos. which was transferred from No.6 MU.

Kemble became an assembly centre for gliders in September and November saw the first Hamilcar arrived. By the end of the year, the FTU and OADU had handled 661 Wellingtons, 269 Hudsons, 17 Halifaxes, four Beaufighters, two Marylands and a Beaufort, a total of 954 aircraft.

On 27 July 1942, Kemble had been raided by three Do 217s which machine-gunned the massed dispersal parks. Nothing was hit!

Lancasters began to arrive in February 1943 and in August, Warwicks but Hurricanes and Beauforts continued to be the main receipts. The rows of gliders lengthened. On 28 September, work began on the new NW-SE runway which caused No.1 OAPU to pass over its commitments to other OAPUs in 44 Group for a period.

Typhoons flooded in during 1944 and, in May, the first Tempests. Some Buckingham appeared before the end of summer while Lancasters and Albemarles still came in for modification and issue. By November, only Barnsley Park SLG remained in use, housing fifteen Dominies and a Harrow.

The imminent invasion of Europe was foreshadowed on 27 May 1944 when 24 C-47s collected Horsas for the US airborne divisions. The next visit by this type in quantity was on 6 September. Between 0630 and 0816, no less than 165 of them descended on Kemble. The breakout from Normandy had outrun conventional supply lines and stores were being flown to captured airfields. The 439th, 440th and 441st Troop Carrier Groups were all involved and all aircraft were loaded and despatched by 1230 en route to Douai/Vitry-en-Artois airfield. There was no chance to relax at Kemble as 90 of them were back in the afternoon for more loads while in the evening a further 75 landed. During the day there had been 580 movements.

The C-47s kept coming until the 14th on a less frantic scale but over 200 movements a day was normal. Between the 22nd and 30th, another series of waves of C-47s arrived from the 50th, 52nd and 53rd Troop Carrier Wings to uplift fuel and ammunition. During the month, there had been 2,769 C-47s flights from Kemble and some statistically-minded person totted up the cargo as 13,737,835 lbs - over 6 million kilos for the metricated.

October was even more hectic with 5,437 C-47 movements between Kemble and Belgian airfields while, despite the opening up of roads, railways and ports, November had 668 and December 645 C-47 movements.

Amid all this activity, 5 MU continued to churn out aircraft, among them Welkins destined for storage. No.1 OAPU had become No.1 APU on 29 July 1944 and early in 1945 completed its move to Pershore where it had begun to merge with No.1 Ferry Unit in October. The Transport Aircraft Modification Section had been working on Dakotas since November and this type became one of Kemble's major customers.



Hawks of the 'Red Arrows' over Kemble. Taken from another Hawk, this photograph by Richard Cooke is one of the range of colour photographs in the Charles Skilton series available from the Air-Britain Sales Stand

Kemble had been transferred to No.47 Group on 1 January 1945 and for a period was fully involved in maintaining transport aircraft. On 1 August, TAMS became No.2 Transport Aircraft Modification Unit and, in addition to the ubiquitous Dakotas, handled Yorks, Stirrings and Lancastrians.

After the end of the war, No.5 MU was inundated with surplus aircraft and at the end of November 1945 had 927 aircraft and 85 gliders in stock, most of them Typhoons awaiting breakdown. With Tempests in full production, there was no requirement for Typhoons. To reduce the numbers slightly, Kemble held its famous sale of impressed civil aircraft which included Moth Minors, Monarchs, Cygnets, Puss Moths, Taylorcrafts, Cubs, Vega Gulls and single examples of the Envoy, Falcon, Monospar, Gipsy Moth, Percival Q-6, Reliant and Topsy. Later sales featured no less than 12 Cierva C-30s and a dozen Hornet Moths.

Aircraft were sold for breaking up on site to a variety of scrap merchants who chopped up large numbers of Typhoons, Hurricanes, Lylanders, Albemarle, Beauforts and Lancasters. This reduced the stock at the end of 1946 to a mere 656 aircraft.

On 1 May 1946, Kemble was returned from Transport Command to Maintenance Command. In addition to its work for the RAF, No.5 MU was, in common with several other MUs, engaged in preparing various aircraft for transfer to other air forces, including many Spitfires for Norway and Turkey. The first jet fighter to be handled was a Vampire which arrived during November 1947. In 1951, Kemble became the reception point for the flow of Sabres from Canada and, after mod-

ification, issued them to Second TAF in Germany.

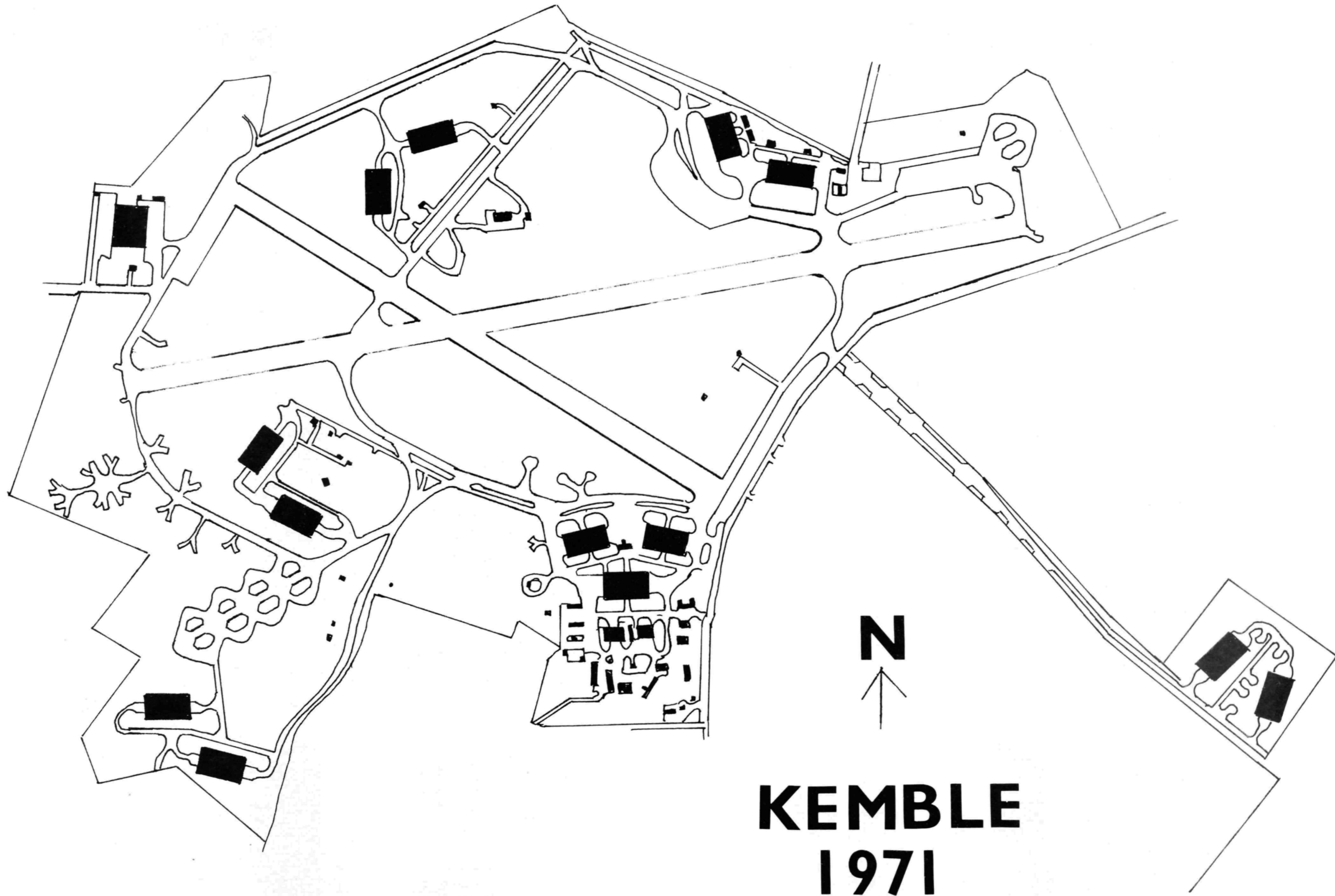
During the 1950s, Kemble handled almost every fixed-wing type in service with the RAF. The most obvious type in the latter half of the decade was the Hunter, the MU's stock reaching almost 200 at times.

The varied assortment of types handled continued during the sixties and seventies and fighters, transports and trainers were all to be seen passing through for refurbishing and repainting.

The skies around Little Rissington having become overcrowded with fast jet trainers, it was decided in 1966 that No.4 Squadron of the CFS and the aerobatic team should move to Kemble where the Red Arrows could practice their routines without wrecking the CFS training schedule. The Gnats arrived in September 1966, the Arrows taking over G Site.

The CFS detachment left for Valley in April 1976 but the Red Arrows stayed on to convert to Hawks before finally leaving in March 1983 to be based at Scampton in the future.

In 1982, defence cuts spelled the end of No.5 MU and of Kemble as a RAF station but fortunately in March 1983, it was announced that the station would be reprieved. Although work on RAF aircraft was decreasing, the skilled staff available at Kemble was to undertake refurbishing work on USAF A-10 Thunderbolts. This extra commitment enabled the craftsmen of Kemble to continue to work on aircraft into the 1980s with combat aircraft a far cry from the Blenheims and Hurricanes that had first flown from Kemble's grass almost a half-century before as World War Two loomed ahead.



**KEMBLE
1971**

DISCS, MASTS AND VIMYS

The recent *Aeromilitaria Special* on 'Kent's Listening Ears' has provoked unexpected interest in the subject of pre-war aircraft detection. William Smith has contributed this follow-up story.

* * * * *

The real heroes in the story of location of aircraft by sound were probably those few men who risked life and limb in holes on the Western Front during World War One listening-in on primitive equipment to the enemy. They set in train the later experiments in acoustic detection.

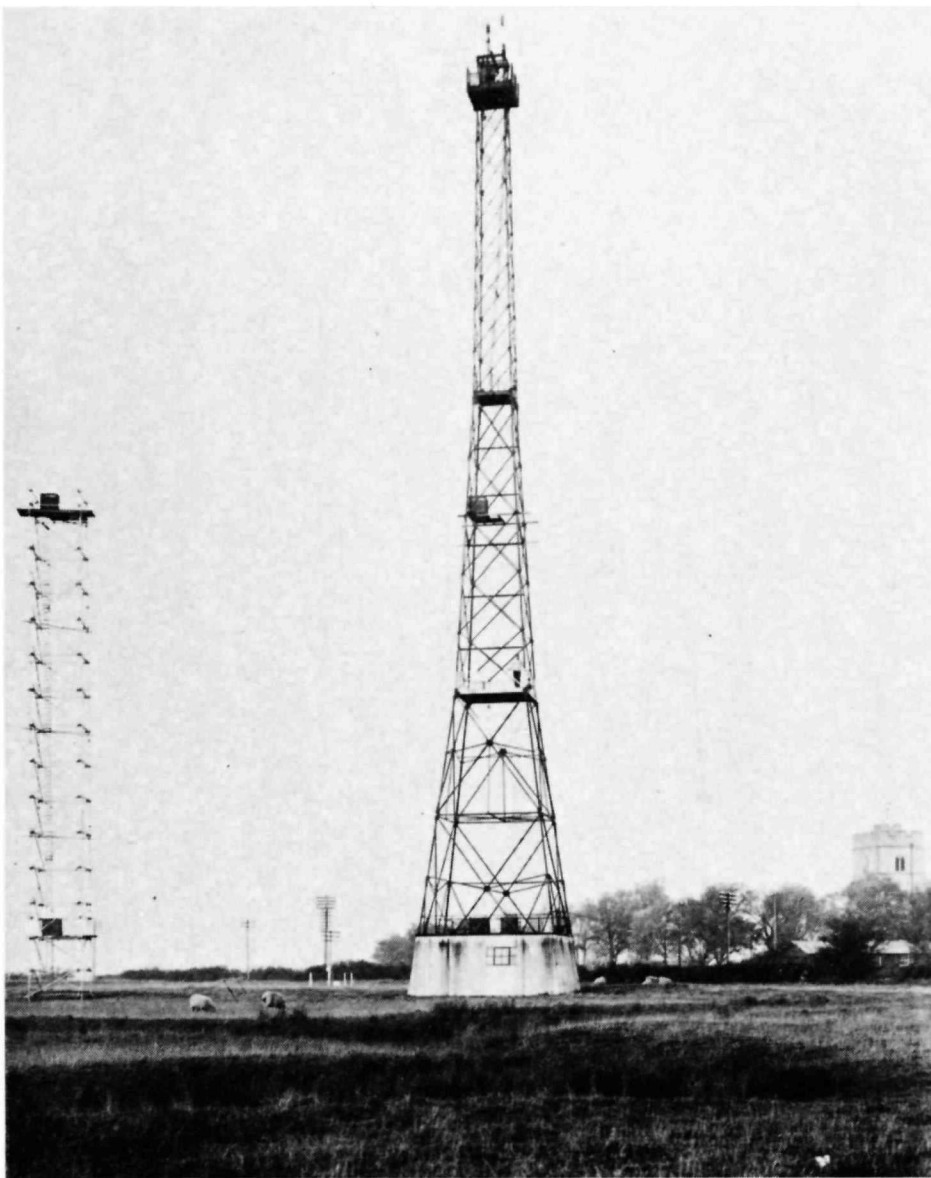
However, for sheer determination against seemingly impossible odds over a long period, one W.S.Tucker merits an award for persistence in his experiments on this side of the Channel. Tucker's wartime career prior to June 1918 is not known but he may have been involved in sound location for the Army.

The first mention of Mr.Tucker's connection with acoustic discs goes back to June 1918 when he was testing some small wooden discs at Imber Court in Surrey. In January 1920 he was working at Woolwich Common with one concrete disc and possibly he did some work at Hendon. It was at Woolwich that it was discovered that unless they were properly shielded, discs would pick up noises from road traffic as well as from aircraft. These early experiments showed that almost any substantial material would suffice for the construction of discs; apart from wood and concrete, it seems that boiler plate was also considered and may have been tested.

High hopes were obviously entertained for the discs as in one of the early tests there was a comment that they might be of assistance to the Police or Customs; perhaps another Crippen-style arrest was envisaged.

Some useful data must have been obtained as Tucker was permitted to continue them at intervals despite the rundown of the services and the scrapping of vast quantities of material after the end of the war on which many projects foundered.

Mr.Tucker (who was possibly a demobilised Major) was to become the Superintendent of



Lofty and Tich

the Hythe Acoustical Section, built around 1923 on a tract of land above Hythe commonly called 'The Roughs' and presumably became Britain's first disc jockey. The station was an outpost of the Air Defence Research Establishment at Biggin Hill and although it was called 'The Hythe Headquarters' or, sometimes, 'The Lympne Headquarters', it remained subordinate to the parent HQ at Biggin Hill. Further complications in nomenclature arose later when it was found necessary to move some of the equipment from Lympne to a hut at Newchurch which became known as the 'Headquarters Hut'.

The Romney Marsh area was chosen for many of the acoustical experiments because not only did it lie on a direct path between France and London but the terrain was ideally suited to the disc system as these had to be constructed on very level ground.

In 1924, the military authorities, for once acceding to Tucker's pleas, resolved to construct a number of discs on the Marsh. As many as 32 discs were needed and they were to be in two straight parallel lines, 16 to a line. The lines would be three miles apart and there would be a half-mile separation between discs. Each disc was twenty feet in diameter and made of two-inch concrete, divided into sections for ease of portability.

Someone was needed who had an intimate knowledge of Romney Marsh and its farming fraternity to act as liaison between the Royal Engineers and the farmers on whose land the discs were to be constructed. Such a man - Mr.Richard Body - was found and he obviously did his job well, all for the cost of a lunch at the George Hotel at Rye. Doubtless, in the financial climate of the time, even that small expenditure had to be scrutinised by the Treasury.

Unfortunately, despite a lot of research, no accurate plan of the sites has been found but

there are two conflicting sketches showing the Seaward Line and some of the Landward Line. Despite the confusion caused by these, two approximate lines of discs can be located, due mainly to Mr. Body's excellent memory. The locations were:

The Seaward Line (approximately $7\frac{1}{2}$ miles long) from Donkey Street (Burmash) where there was definitely a disc adjoining the seaward side of Donkey Street via Orgarswick Farm, Dymchurch, Haffenden Farm, St. Mary's, Yoakes Court, Ivychurch and perhaps reaching or passing through Millbank to Old Romney.

The Landward Line ($7\frac{1}{2}$ miles long and three miles from the Seaward Line and parallel to it) through, or near, Wey Street Farm, Ruckinge, Poplar House and Court-at-Wick Farms, Snave, Hope Farm, Snargate and thence to Cherry House Farm, Fairfields and perhaps beyond.

One disappointment is that no photographs or official drawings of a disc, either fully assembled or in sections, has been found but the drawing by Mr. Paul Grundy will be of assistance. These have been compiled from what information was provided and may not be completely accurate.

The parapet wall around a disc was to prevent 'extraneous noises' such as the traffic noise found at Woolwich being picked up, the intention being to pick up the noise of aircraft flying directly over it within a narrow field. The assumption is that the microphone (or more than one) was fitted 'ear downwards' in the iron ring in the centre of the disc, picking up sounds which passed through the gap between the outer edge of the disc and the parapet wall and under the disc which stood one foot off the ground, supported by pillars. There were possibly two microphones as Mr. Tucker in his early tests discovered that two assembled very close to each other worked considerably better than a single one.

The hot-wire microphones at the disc sites were heated preparatory to use by electric current passing from batteries at Lympe and/or Newchurch through cables which served a dual purpose for they also carried back to the plotters the impulses from the microphones. The cables had to be specially installed by the GPO and some remnants of their poles, etc. may still be found.

As well as the discs having to be constructed as near to horizontal as possible, the prescribed spacing of half a mile between discs had to be strictly observed. It was no good a farmer trying to slip the construction team a 'back-hander' to built it in a corner of his field instead of in its proper place in the middle. However, in those days there was much less arable land on the Marsh so possibly the discs were not such a nuisance as they might appear.

Getting the discs installed and connected after long delays was a feather in Mr. Tucker's hat. The whole system was put to the test by RAF aircraft detailed to fly over it while also trying out the other acoustical equipment in the area, the readings being collated at Lympe. The scientists there would phone their findings to the Prediction Computing Centre at, or near, Biggin Hill where the personnel were in communication with four local searchlight teams. These were directed to switch on at the predicted angle and time so that the aircraft would be illuminated. This was all very well in theory but some problems arose, as shown by reports for August and September 1924.

For the purposes of the tests, Vimy bombers from the Night Flying Flight attached to No. 56 Squadron under Flt Lt R. Halley DFC and two bars, AFC, were temporarily based at Lympe airfield. Two were to fly each night, weather permitting, in the direction of the French coast until out of range of the acoustical equipment and then turn back into range.

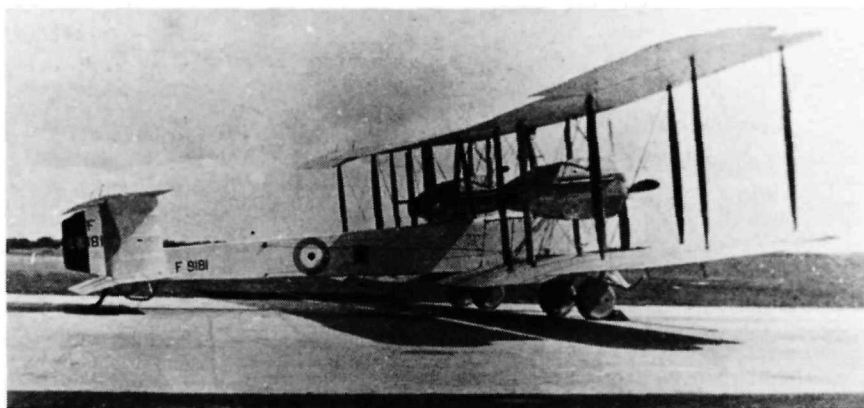
On 8 August 1924, Flg Offrs G.W. Higgs and D.H. Humphreys, in Vimys F9176 and F8642 respectively, took off from Lympe, probably around 2200 hrs but due to a misunderstanding the second aircraft took off too soon after the first. Having crossed the Channel and turned back, both aircraft should have come within range of the discs. The first line picked up some sounds at 2237 while the second did likewise three minutes later. The 'boffins' at Lympe calculated the course of the 'sound source' as 320 degrees with a ground speed of 57 mph and a height of 5,500 ft. But what was the sound source whose predicted moves had been forwarded to Biggin Hill? Nobody could tell whether the sounds were from one Vimy (or which one) or whether each line had recorded a different aircraft. Neither Vimy saw the other until shortly before landing back at Lympe so they may not have been too close to each other.

Perhaps the sounds were all from the same Vimy as one of the reports from the pilots is remarkably lacking in detail. Possibly his aircraft did not fly according to plan. The searchlights tried to act on the predictions but confusion reigned. Nobody on the ground could tell one Vimy from the other, although both aircraft were supposed to be in contact with Lympe.

The aircraft lacked any sophisticated navigational aids and were very much at the mercy of the elements. In 1924 there were some ground aids but in most cases these required fairly good visibility for them to be of any real assistance. Flares were displayed at, or fired from, Newchurch and Dungeness Lighthouse while the 'aerial lighthouses' at Cranbrook and Tatsfield and flarepaths at the emergency landing grounds at Littlestone and Marden were of occasional use. Despite good visibility on the night of 8 August, few of these aids were seen from the Vimys. Neither were illuminated by searchlights but one got 2,000 feet below one Vimy but an estimated five miles off course!

Flg Offr Humphreys was airborne for the next few nights, sometimes in concert with Higgs and sometimes with Flg Offr T.S. Horry, a World War One pilot with ten victories to his credit. Again predictions made at Lympe were passed to the sound-trumpet listeners in the Biggin Hill area - possibly some at Squerrys Court, Westerham. The lights were again switched on to the predicted position and Humphrey's aircraft was closest to being caught. Two of the searchlights only picked him up after he had switched on his navigation lights. Horry had navigational problems and approached Newchurch from an unplanned direction. He was later held by searchlights but apparently these were switched on to let the pilot know where the searchlights and sound locaters were situated.

Vimy F9181 attached to No. 56 Squadron, Biggin Hill, 1923





Left: The Newchurch Hut near the parish church Right: The remains of the outer section of a disc at Wey Street Farm

On one night a pilot reported that he had been held by searchlights for some time so improvements in prediction were occasionally forthcoming. A Snipe of 56 Squadron, piloted by Flg Offr Bucknall, was used on 12 August but the report recorded that 'no good readings were received and no prediction was made'. On another occasions, a Snipe airborne from Biggin Hill on a flight unconnected with the tests 'jammed' the whole system.

Other difficulties were experienced at the sites of searchlights and 'trumpets'. On one occasion, a Vimy pilot reported that the searchlights did not appear to be under any form of control. The trumpets produced such poor results that doubts arose as to whether they were properly orientated but on checking they were found to be correct.

In the reports located, only four serials have been traced of the aircraft used, Vimys F8640, F8642, F9176 and F9180 and any additions to the aircraft used for acoustical tests would be welcome.

As Superintendent, Mr. Tucker had many experiments under his wing and had frequently to try to persuade his superiors, the Sound-Locators and Acoustics Sub-Committee of the Royal Engineers 'B' Committee, to allocate more money to enable more elaborate tests to take place. Although many attempts proved fruitless, he did on one notable occasion extract a promise that if one particular experiment proved successful, the team could go ahead with a more ambitious programme of tests.. The experiment on which so much depended involved the flying of an aircraft over the ranges at Hythe in such a manner that the sound of the explosion of a bullet fired from a specially-adapted BSA rifle in the aircraft would, hopefully, be picked up by microphones on a hundred-foot Inglis Tower on the ranges and the impulses recorded at Lympne. Such experiments were presumably a success as in late 1928 Mr. Tucker was given the go-ahead for further tests, though much frustration had to be endured before fruition.

One major requirement for Mr. Tucker's elaborate programme of experiments was the erection of a tall mast at Newchurch which, for simplicity, we will call 'Lofty'. For technical reasons, Lofty had to be as high as 156 feet. Such structures do not appear overnight and there was a lot of preliminary work to be done, possible sites inspected and, inevitably, much correspondence to pass to and fro.

A suitable site was found on land at Newchurch belonging to Mr. Ashley Palmar, somewhere in the region of today's council house estate. Mr. Palmar entered into the requisite wayleave under which he would receive the princely sum of two pounds per annum as rent. Tenders were invited for Lofty's construction. The mast was originally intended to be of wood, no doubt for cheapness, but was eventually built of steel. The successful tenderers were Messrs. A.J. Main of Australia House in the Strand, London but there was some sub-contracting. A figure of £675 is quoted but whether this is the final sum paid is not clear. The specification, in itself, must have taken some time to prepare and ran to ten pages.

According to a contemporary report, the construction of Lofty was 'about to begin' on 12 August 1930 with completion anticipated by the 28th. Whether the schedule was adhered to is not known but its completion was much later than Mr. Tucker had hoped. Having got the OK back in 1928, he had been frustrated again by lack of funds. What money was available for the acoustical programme was used on more urgent work at the Biggin Hill end. More monetary problems were to follow.

At some late stage, someone thought fit to tell the Air Ministry that Lofty had been built, quite rightly so in view of the numbers of aircraft using the local air space for flights at Lympne and Littlestone ELG to which a 150-foot mast must have constituted a real danger. Even so, the Notice which the Air Ministry inserted in The Times about the existence of the mast does not convey too much concern by the Ministry. The Notice, in a very few words of small print, was tucked away in the corner of a page where one would not expect to find important information that might save lives. It did not even say where on Romney Marsh it had been built. Had this been omitted merely to save having to pay for more wordage? A high structure like Lofty could hardly be concealed and had presumably been noted by foreign eyes.

The Air Ministry soon made known its requirements for Lofty. The mast should be lit at night and such a request caused immediate problems as there was no mains gas or electricity in Newchurch. A lot of fresh thinking had to be done, more advertisements requesting tenders, this time for proposals as to the type of lighting and its cost. In the meantime, Lofty remained an illegally-unlit obstruction. Eventually, after more funds were provided, the mast was

fitted with marine-type lights on the 50-foot and 100-foot platforms and on top. They were fuelled from a bank of twenty-four gas cylinders kept at the foot of the mast with connecting tubes running up the inside of two of Lofty's legs. The successful tenderer had been the Gas Accumulator Co. Ltd of Brentford.

One purpose of Lofty was to support further hot-wire microphones at exact heights above the ground in connection with acoustical tests but was also housing meteorological instruments. It seems that Arthur Mee thought Lofty a thing of note for in his Kent volume of the 'King's England' series one of his two paragraphs on Newchurch contains the following:

'And yet to this small place comes the wonder of the world, for here is a beacon, twice as high as any church tower in Kent, to guide our flying men by night'. Mr. Mee had obviously wrongly assumed Lofty's purpose but it is unlikely that any of the locals really knew the reasons for the mast being there.

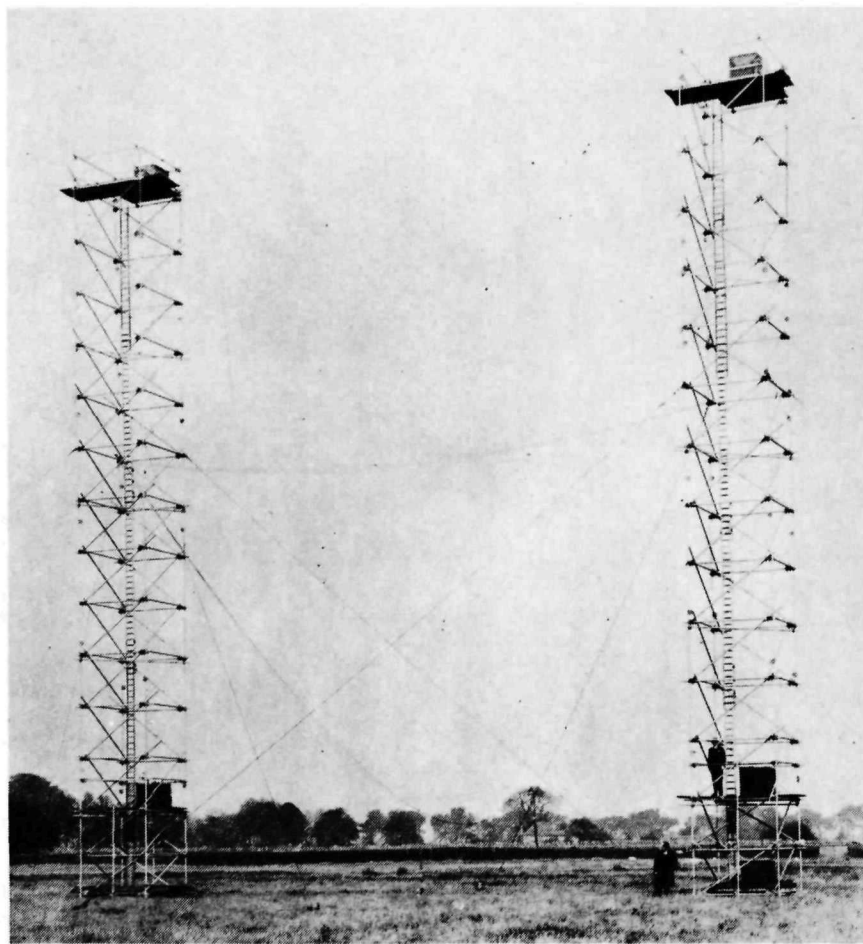
Yet further expense was incurred in connection with the acoustical tests was in the provision of the 'Newchurch Hut'. When it was erected is not known but it was probably in 1924; confirmation would be welcome. Civilian scientists did a lot of work in this hut where all their very technical and secret equipment was contained. In view of the secrecy, perhaps the hut was manned 24 hours a day or perhaps there were special guards for the hut and Lofty?

The records that exist of the readings taken at the Newchurch Hut were meticulous but unintelligible to the average reader. Whether all these records served any very useful purpose seems a matter of opinion.

A special set of experiments started as soon as Lofty was complete and all the equipment ready. For tests starting in October 1930, a 'Forward Observation Post' had to be provided somewhere in the Old Romney area; exactly where is not known. It was a fifty-foot tower and perhaps not too elegant as it was merely an up-ended section from an Inglis military bridge.

The purpose of these edifices was to support more microphones which hopefully would pick up sounds from the firing of shells by a single AA gun on Lydd ranges. It was planned that the point of explosion of the shell, the FOP, some of the Newchurch equipment and some, if not all, of the Seaward Line would all be in a straight line, and linked with each other and with Lympne. Newchurch gave the order to fire and the sounds of the gun and shell would be heard and logged in several places. Things did not always go to plan. The pick-up of sound by various microphones often went awry, sometimes the gunfire being heard and sometimes the exploding shell but seldom both. Often sounds leapfrogged over Newchurch but were recorded at Lympne. There seems to be no records of how successful the discs were.

Clearly the wind affected the results and on wind-swept Romney Marsh the sounds could be easily distorted, which must have been disappointing to the team. A total of 375 shells were fired in 1930 but Mr. Tucker persisted and got more money for additional structures for 1931. Two towers, 70 feet apart, were erected near Old Romney Church some way from the earlier FOP. They had microphones at the top and ten feet from the ground, fitted in a vertical line. Another 80-foot tower, which we will call 'Tich', joined Lofty at Eastchurch and also mounted microphones as did the FOP which had been extended by wooden staging to mount its phones at the 70-foot level. As screening from the wind, all the microphones were inserted in a wire basket embedded in straw contained in an outer basket which appeared to overcome some



The Old Romney masts in 1931. It would be nice to think that one of the figures is the elusive Mr. Tucker

of the problems discovered during the 1930 tests.

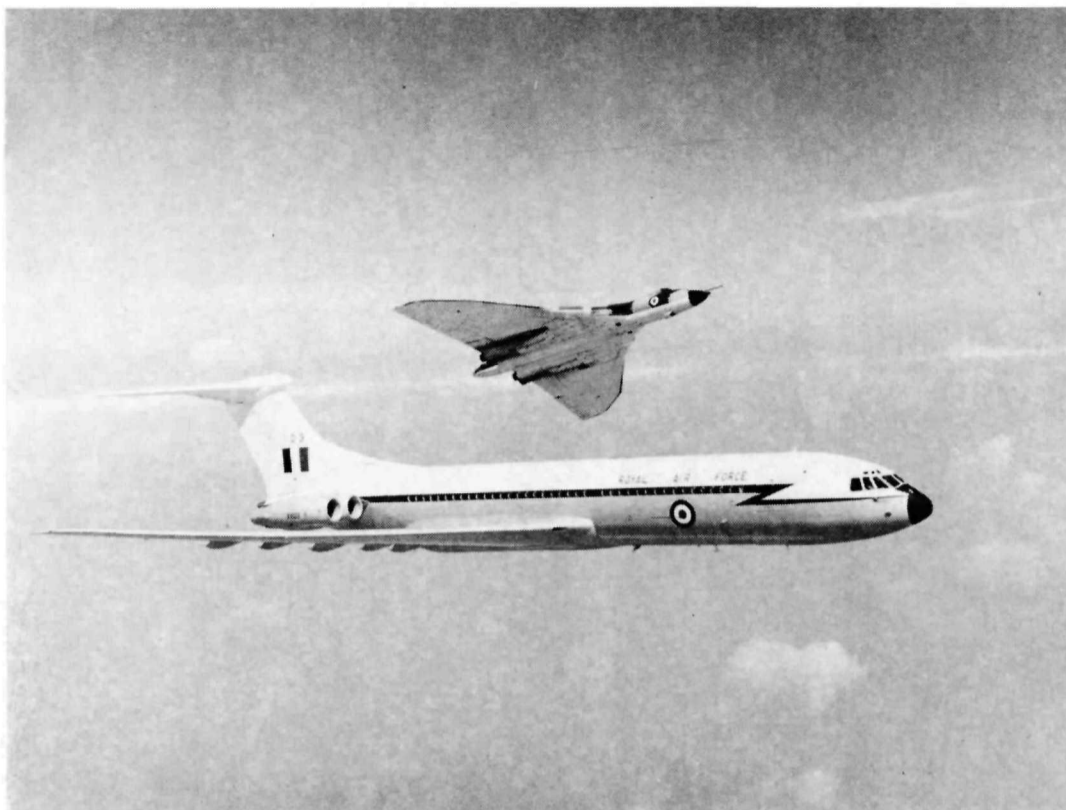
The 1931 season of experiments seems to have been the last in which the discs and masts were used. Lofty was eventually removed, to Essex it is thought but the fate of the others is unknown. One 1932 report stated that the Disc System had been dismantled but this probably only referred to the microphones and cables since it is believed that some of the discs languished on their sites for years to come. Although the original agreements with the farmers provided for their removal at Crown expense, not surprisingly the authorities did not want to spend money on this. It was therefore arranged that the discs would be abandoned, leaving the landowner to do what he wished with them. Probably most were broken up for hardcore for paths, etc. while some smaller pieces survive in rockeries! Not all were smashed and we are grateful for Mr. Deryck Body of Ruckinge who unearthed a section of disc from one of his farm buildings to permit it to be photographed, all 300+ lbs of it. The 32nd disc was intended to be re-erected at Lympne and possibly the few circular pieces of concrete seen recently are the remains of it.

The Newchurch Hut remained for some time and the local parson tried to buy it unsuccessfully. Perhaps it still stands on some farm on the Marsh.

While the disc system had been capable, in the best of conditions, of picking up sounds up to 26,000 feet or more, it could not differentiate between enemy and friendly aircraft and could only cope with one aircraft at a time. Higher speeds also shortened the warning time and led to the Romney disc system being abandoned in favour of the Observer Corps and the much larger mirror and bowl acoustical systems whose development is detailed in 'Kent's Listening Ears'.

It would have naturally been preferable to list the successes gained by the painstaking devotion of all who worked on the acoustical experiments for so many years but such results eluded them. Possibly the knowledge gained in these tests helped improve the sound locators which the Army used in some quantity in the late 1930s with some success before the first temperamental radar sets became available.

ROYAL AIR FORCE AIRCRAFT XA100 – XZ999



53 de Havilland Vampire T.22s for Royal Navy

XA100 to XA131; XA152 to XA172

* * * * *

XA177 Auster B.4 G-AMKL for evaluation by MoS

XA181 Supermarine 545 prototype not completed

XA191 and XA192 Temporary serials for Yorks G-AMGK and G-AGNM

* * * * *

Three Fairey Seamew AS.1s for Ministry of Supply

XA298, XA213 and XA216. No RAF service. XA216 was a structural test airframe

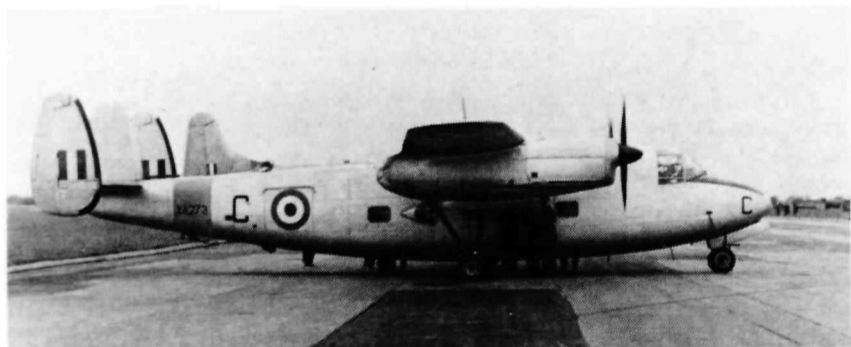
* * * * *

XA219 to XA221 Sycamore HR.50s for Royal Australian Navy

XA225 to XA244 20 Grasshopper gliders for ATC

* * * * *

28 Miles Marathon T.1s delivered between April 1952 and April 1954 by Handley Page, Reading, to Contract No. 6/ACFT/8228



XA273, 'C' of No.1 Air Navigation School, Thorney Island

XA249	G-ALUB	-	SS 15.1.59
XA250	G-ALVW	AAEE/2 ANS/ 1 ANS	Undercarriage collapsed on landing, Topcliffe, 10.12.57
XA251	G-ALVX	1 ANS	SOC 16.11.57
XA252	G-ALVY	1 ANS	Sold 31.12.58
XA253	G-ALXR	2 ANS/1 ANS	Undercarriage retracted after landing, Topcliffe, 5.5.58
XA254	G-AMAX	2 ANS	Overshot landing and hit sea wall, Thorney Island, 9.1.56; DBR
XA255	G-AMAY	2 ANS/1 ANS	To 7465M 8.8.57
XA256	G-AMDH	1 ANS/2 ANS/ 1 ANS	Undercarriage collapsed in hangar, Thorney Island; SOC 7.11.57
XA257	G-AMEK	1 ANS	SS 24.4.59

XA258	G-AMEL	2 ANS/1 ANS	SS 15.1.59
XA259	G-AMEM	1 ANS/2 ANS/ 1 ANS	SS 24.4.59
XA260	G-AMEP	AAEE	SS 24.4.59
XA261	G-AMER	1 ANS	Sold 11.5.59; to G-AMER
XA262	G-AMET	-	Sold as spares 11.5.59
XA263	G-AMEU	-	Sold 24.4.59
XA264	G-AMEV	-	Sold 24.4.59
XA265	G-AMEW	HP	Sold 28.8.57; to G-AMEW
XA266	G-AMGN	1 ANS/2 ANS/ 1 ANS	Sold 15.1.59
XA267	G-AMGO	1 ANS	Sold 8.1.59
XA268	G-AMGP	1 ANS/2 ANS/ 1 ANS	Nosewheel detached on landing, Topcliffe, 11.2.58
XA269	G-AMGR	1 ANS	Sold 26.5.59; to G-AMGR
XA270	G-AMGS	1 ANS/2 ANS/ 1 ANS	SS 15.1.59
XA271	G-AMGT	2 ANS	Dived into ground after wing failure 1½m SSE of Calne, Wilts., 30.9.54
XA272	G-AMGU	1 ANS/2 ANS/ 1 ANS	SS 24.4.59
XA273	G-AMGV	2 ANS/1 ANS	Undercarriage collapsed on landing, Thorney Island, 30.11.57
XA274	G-AMHT	Hdlg Sqn/ 1 ANS	Sold 29.12.58; to G-AMHT
XA275	G-AMHU	2 ANS/1 ANS	SS 24.4.59
XA276	G-AMHX	1 ANS	SS 24.4.59
XA277	G-AMHY	-	Not delivered; to JA-6009
XA278	G-AMHZ	-	Not delivered; to JA-6010
	*	*	* * * * *

Fairey Gannets delivered to Royal Navy

XA319 to XA364; XA387 to XA411 Gannet AS.1s

XA412 to XA436; XA454 to XA474 Gannet AS.4s

XA508 to XA530 Gannet T.4s

* * * * *

One English Electric Canberra B.2 replacement aircraft

XA536 50/15/Cv T.11/228 OCU/
MoA/228 OCU/85/Cv T.19/
85/7/100 To 8605M 30.8.78

* * * * *

One de Havilland Sea Venom FAW.21 for Ministry of Supply trials

XA539 Mkrs Not delivered to RAF

* * * * *



Javelin FAW.1 XA549 at Boscombe Down with A & A E E

40 Gloster Javelin FAW.1s delivered between October 1954 and March 1956 by Glosters, Hucclecote, to Contract No. 6/ACFT/8336

XA544	Mkrs & RAE/AAEE	To 7558M 19.12.57
XA545	Mkrs	SOC 28.7.60
XA546	Mkrs	Spun into Bristol Channel on test flight, 21.10.54
XA547	Mkrs/AAEE/ETPS/AWDS/MoA/AFDS	SS 30.7.62
XA548	Mkrs & AAEE	Retained by MoS
XA549	Mkrs/AAEE/CSE/I.Av Med/87	To 7717M 23.2.62
XA550	Mkrs	To 7484M 14.11.57
XA551	Mkrs/RAE/AAEE	To 7586M 26.11.58
XA552	-	To MoS for Gyron Junior testbed
XA553	Mkrs	To 7470M 13.8.57; preserved at RAF Stanmore
XA554	Mkrs/AAEE/Mkrs/RAE/AAEE/Mkrs/87	To 7662M 19.7.61
XA555	Mkrs/CFE/MoS/AFDS	SS 30.7.62
XA556	Mkrs/RAE/Mkrs/MoS/CFE/MoS/AFDS	SS 30.7.62
XA557	Mkrs	Sapphire 100 trials; SOC 29.12.60
XA558	Mkrs/AAEE/Mkrs/87	Abandoned after double flame-out 1½m SE of Bruggen, 5.6.58
XA559	Mkrs/AAEE/Mkrs/87	Engine caught fire starting up, Bruggen, 22.7.58
XA560	Mkrs	Sapphire 7 testbed; to 7619M 16.10.59
XA561	Mkrs/AAEE	Abandoned in spin, Ashley, Isle of Wight, 8.12.55
XA562	Mkrs	To Rolls-Royce 22.12.57
XA563	Hdlg Sqn/AAEE/RAE	To 7627M 2.2.60
XA564	Bristols	To 7464M 12.7.57
XA565	CFE/46/87	SS 19.3.62
XA566	CFE/46/87	SS 30.7.62
XA567	Mkrs & B-P	To 7551M 16.3.58
XA568	CFE/46/Coll of Aeronautics/AAEE	SOC 31.12.64
XA569	46/87	Crashed after accidental ejection of pilot near Bruggen, 18.2.59
XA570	46	Flew into ground on approach at night 1½m ESE of Odiham, 12.6.56
XA571	46/87	To 7663M 23.6.61
XA572	46/87	SS 30.7.62
XA618	46/87	SS 19.3.62
XA619	46/87	SS 30.7.62
XA620	46/87	To 7723M 18.7.61
XA621	46/87	SS 30.7.62
XA622	46/RAE	To MoS 24.8.59
XA623	AAEE/46/87/MoS/AWDS/MoA/AFDS	SS 19.3.62
XA624	46/87	SS 30.7.62
XA625	46/87	Caught fire starting up, Bruggen, 12.5.58
XA626	46/87	To 7666M 8.7.60
XA627	46/87	To 7661M 14.10.60
XA628	46/87	To 7720M 26.7.61

* * * * *

12 Gloster Javelin FAW.4s delivered between September 1955 and July 1957 by Glosters, Hucclecote, to Contract 6/ACFT/8336

XA629	Mkrs/3	SOC 13.6.63
XA630	Mkrs/Hdlg Sqn/3	SS 20.3.61
XA631	AAEE/23/72/87/11	SS 16.8.63
XA632	AWA/11	SS 11.3.65
XA633	Mkrs/3/11	SS 31.7.63
XA634	Mkrs	To 7641M 2.6.60; preserved at Leeming
XA635	Mkrs/3/11	SS 11.3.65
XA636	141/41/87	SS 20.3.63
XA637	141/41/11	SS 31.7.63
XA638	141/41/3	SS 17.10.62
XA639	141/41/3	SS 17.10.62
XA640	141/3	Nosewheel jammed up; overshot landing into wood, Geilenkirchen, 8.4.60; DBR

59 Gloster Javelin FAW.5s delivered between September 1956 and October 1957 by Glosters, Hucclecote and Armstrong Whitworth, Coventry (from XA662 onwards) to Contract 6/ACFT/8336

XA641	Mkrs & AAEE/87/5	SS 21.9.64
XA642	AWDS	Both engines cut; crashed in sea 10m E of Skegness, Lincs., 6.12.57
XA643	CFE/228 OCU/11	SS 11.3.65
XA644	Mkrs	Built as FAW.4; collided with Hunter XF980 over Nailsworth, Glos., 24.8.56
XA645	87/5	Caught fire in air and abandoned 4m NW of Wesel, West Germany, 7.6.62
XA646	72/228 OCU/AWFCS	Caught fire starting up, West Raynham, 25.7.62; DBR
XA647	151/11	SS 25.9.63
XA648	AWDS	Stalled recovering from dive and abandoned 3m WSW of Fakenham, Norfolk, 20.9.58
XA649	Hdlg Sqn/5	SS 21.9.64
XA650	151/11	SS 21.9.64
XA651	151	SS 25.9.63
XA652	151/228 OCU/AWFCS	SS 21.9.64
XA653	151/228 OCU/AWFCS	SOC 31.7.64
XA654	23/72/AWFCS	SS 25.9.63
XA655	151	SS 25.9.63
XA656	228 OCU/AWFCS	SS 21.9.64
XA657	AWDS/5	SS 25.9.63
XA658	41/5	SS 21.9.64
XA659	AWDS/5	SS 21.9.64
XA660	AWDS/228 OCU/11	SS 25.9.63
XA661	151/11	Caught fire starting up, Geilenkirchen, 29.10.62
XA662	228 OCU	Engine cut; abandoned after fire warning 30m W of Leeming, 29.9.59
XA663	228 OCU/AWFCS/11/5	SS 21.9.64
XA664	228 OCU/AWFCS/5	SS 25.9.63
XA665	AWFCS/228 OCU/11	SS 11.3.65
XA666	228 OCU/41/5	SS 11.3.65
XA667	228 OCU/41/72/	
	228 OCU/11	SS 25.9.63
XA688	AWFCS/228 OCU/151/	
	AWFCS	SOC 18.11.62
XA689	228 OCU/AWFCS/151/5	SS 11.3.65
XA690	228 OCU/11	SS 25.9.63
XA691	228 OCU/AWFCS/11	SS 25.9.63
XA692	I.Av Med	To Glosters 1.10.59
XA693	228 OCU	SS 25.9.63
XA694	228 OCU/151/11	SS 21.9.64
XA695	228 OCU/11	SS 25.9.63
XA696	AWFCS/11	SS 21.9.64
XA697	AWFCS/5	SS 25.9.63
XA698	228 OCU	SS 21.9.64
XA699	151/5	To 7809M 14.2.64
XA700	228 OCU/AWFCS	SOC 17.3.64
XA701	228 OCU/AWFCS	Caught fire starting up, West Raynham, 4.10.62; to 7765M

Javelin FAW.5

XA702	228 OCU/AWFCS	SS 21.9.64
XA703	228 OCU/41/72/ 228 OCU/AWFCS	SS 21.9.64
XA704	AWFCS/5	SS 11.3.63
XA705	AWFCS/5	SS 25.9.63
XA706	228 OCU	Electrics failed; force- landed at Leeming, 29.6.60; to 7649M
XA707	41/5	SS 25.9.63
XA708	151	SS 25.9.63
XA709	Mkrs & AAEE/5	SS 21.9.64
XA710	151	SS 25.9.63
XA711	Mkrs & AAEE	To MoA 31.12.61
XA712	151	SS 25.9.63
XA713	151	SS 25.9.63
XA714	228 OCU/151/11	SS 25.9.63
XA715	151	SS 21.9.64
XA716	228 OCU/11	SS 25.9.63
XA717	151/11	SS 25.9.63
XA718	228 OCU/AWFCS/5	SS 25.9.63
XA719	228 OCU	SS 21.9.64

*Javelin FAW.4 XA729 of No.23 Squadron, Coltishall*

37 Gloster Javelin FAW.4s delivered between March 1956 and April 1957 by Armstrong Whitworth, Coventry, to Contract 6/ACFT/8336

XA720	Mkrs & AAEE/11	SS 16.8.63
XA721	Mkrs & AAEE/3	SS 31.5.62
XA722	23/72	Engine cut after take-off; forcelanded at Leconfield, 7.7.59; DBR
XA723	CEPE Namao/11	SS 11.3.65
XA724	AWA & Glosters/11	SS 16.8.63
XA725	AWA/AAEE/3/11	SS 11.3.65
XA726	23/72	SS 20.3.63
XA727	141/23/72	SS 20.3.63
XA728	23/72	SS 20.3.63
XA729	23/72	SS 20.3.63
XA730	23/72/AWFCS	SS 16.8.63
XA731	23/72	SS 20.3.63
XA732	23	Ventral tank detached while taxying at Horsham St.Faith, 25.5.57; DBR by fire
XA733	23/72/87	SS 20.3.63
XA734	23	Engine caught fire; aban- doned near Wymondham, Norfolk, 11.2.58
XA735	AWDS/96/3	SS 20.3.63
XA736	23/72	SS 20.3.63
XA737	23/72	SS 20.3.63
XA749	AWDS/3	SS 20.3.63
XA750	141/41/96/3	Rolled after take-off and spun into ground 2m NW of Norvenich, West Germany, 20.6.59
XA751	141	Abandoned in spin 1½m NW of Wattisham, 11.7.58
XA752	23/72	Hit barrier on approach and undercarriage leg coll- apsed on landing, Leeming, 2.3.61; DBR
XA753	23/72/AWFCS	SS 16.8.63
XA754	Mkrs/23/72	Jet pipe split; airframe overheated during run-up, Leconfield, 27.10.60; DBR

Javelin FAW.4

XA755	23/72	To 7725M 16.8.61
XA756	141/41/11	SS 11.3.65
XA757	141/41/87	SS 31.5.62
XA758	141/41/11	SS 11.3.65
XA759	141/41/11	SS 16.8.63
XA760	141/41/11/AAEE	SS 10.5.62
XA761	141/41/87	SS 17.10.62
XA762	141/41/3	SS 17.10.62
XA763	AWDS/96/3	SS 17.10.62
XA764	AWDS/3/11	SS 16.8.63
XA765	Mkrs/11	SS 16.8.63
XA766	141/41/11	SS 16.8.63
XA767	141/41/11	SS 11.3.65

*Javelin FAW.2 XA778 of A & AEE, Boscombe Down*

30 Gloster Javelin FAW.2s delivered between April 1956 and November 1957 by Glosters, Hucclecote, to Contract 6/ACFT/8336

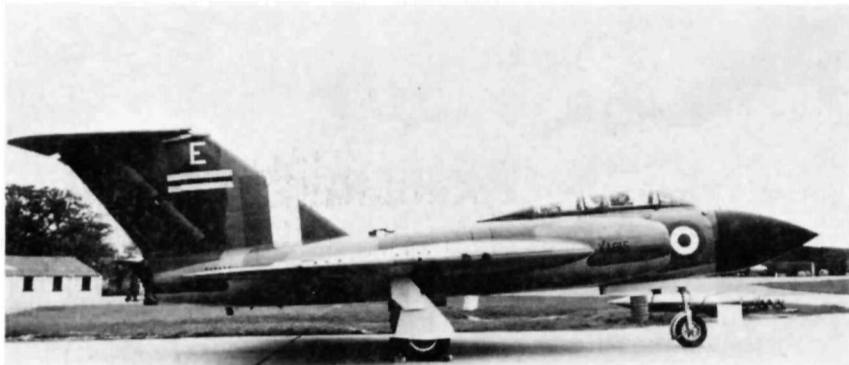
XA768	Mkrs/46	To MoA 13.3.62
XA769	Mkrs & AAEE	SS 31.5.62
XA770	Mkrs	SS 31.5.62
XA771	Mkrs & AAEE	To MoS 30.3.60
XA772	46	SS 20.3.63
XA773	46	SS 17.10.62
XA774	89/85	SS 20.3.63
XA775	89/85	SS 22.3.62
XA776	46	SS 17.10.62
XA777	46	SS 17.10.62
XA778	Mkrs & AAEE	MoS aircraft
XA779	89	Stalled turning into approach and spun into ground, Stradishall, 19.9.58 To MoA 29.1.62
XA780	46	SS 20.3.63
XA781	89/85	SS 20.3.63
XA799	89/85	SS 20.3.63
XA800	89	SS 31.5.62
XA801	46	To 7739M 26.1.62; preserved at Stafford
XA802	46	Caught fire starting up, Sylt, 9.3.59; DBR
XA803	46	SOC 2.5.61
XA804	89/85	SS 20.3.63
XA805	46	SS 17.10.62
XA806	AFDS/89/85	SS 20.3.63
XA807	46	To MoA 29.1.62
XA808	AWDS/46	SS 17.10.62
XA809	AWDS/46	SS 17.10.62
XA810	46	SS 20.3.63
XA811	46	To MoA 29.1.62
XA812	46	To MoA 29.1.62
XA813	46	Jet pipe fractured in flight; airframe damaged by heat, 12.4.61; SOC as DBR on return To MoA 13.3.62
XA814	46	To MoA 13.3.62

22 Gloster Javelin FAW.6s delivered between August 1957 and March 1958 by Glosters, Hucclecote, to Contract No. 6/ACFT/8336

XA815	89/85	SS 24.6.63
XA816	89/85	SOC 13.7.62
XA817	29	SS 17.12.62
XA818	29	SS 17.12.62
XA819	29	SS 24.6.63
XA820	89/85	To 7752M 10.5.62
XA821	Mkrs & AAEE/29	To 7749M 12.4.62

Javelin FAW.6

XA822 29 SS 17.12.62
 XA823 29 Collided with XA835 off Durham coast and abandoned, 21.5.60
 XA824 29 SS 17.12.62
 XA825 29 Flew into hill descending in cloud 4m NE of Peebles, 21.11.60

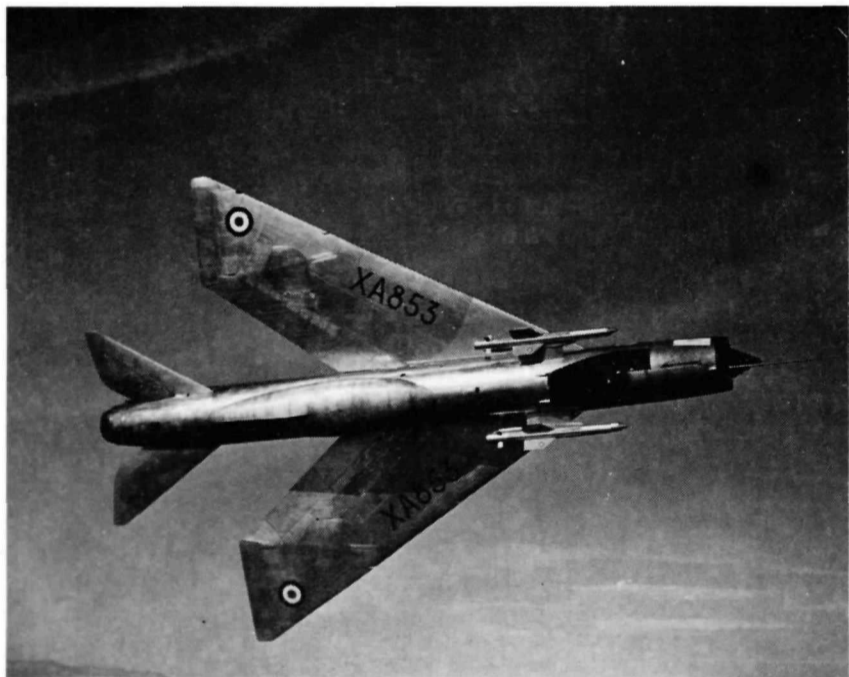


Javelin FAW.6 XA815 of No.89 Squadron, Stradishall

XA826 29 SS 24.6.63
 XA827 29 SS 24.6.63
 XA828 29 SS 24.6.63
 XA829 - SOC 30.7.62
 XA830 46/89/85 SOC 30.7.62
 XA831 FTU/I.Av Med To 7808M 21.10.63
 XA832 89/85/AFDS SS 29.3.63
 XA833 - SS 29.3.63
 XA834 Hdlg Sqn SS 29.3.63
 XA835 29 Collided with XA823 and abandoned over Durham coast, 21.5.60
 XA836 89/85/29 SS 24.6.63

* * * * *

XA842 Sikorsky S-55 G-AMHK for evaluation



English Electric P-1B prototype XA853

Three English Electric P-1B prototypes for Ministry of Supply

XA847 Mkrs & AAEE/RAE To 8371M; preserved in RAF Museum
 XA853 Mkrs Retained my makers
 XA856 Mkrs /R-R MoS aircraft

* * * * *

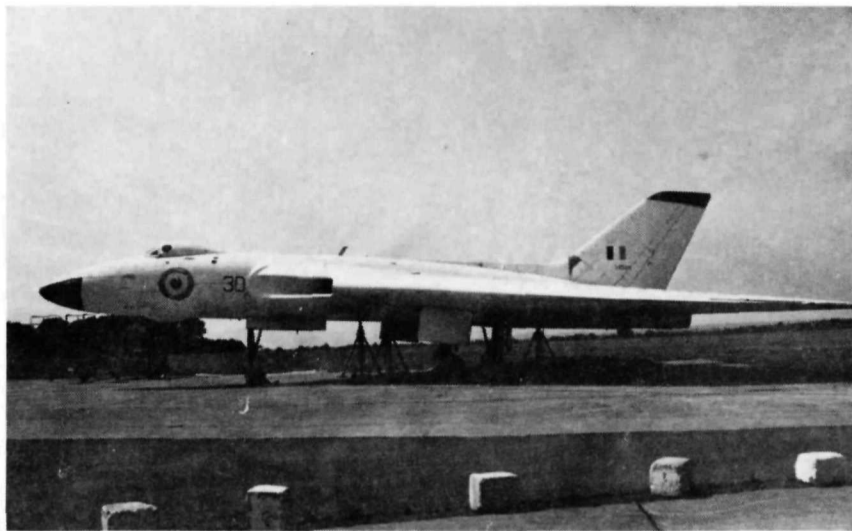
XA862 to XA871 Whirlwind HAR.1s for Royal Navy

XA876 Slingsby T.34 glider for ETPS

* * * * *

Two de Havilland Devon C.1s delivered in October 1952 and September 1953 by D.H., Hawarden, to Contract No. 6/ACFT/7383

XA879 ETPS SOC 7.68
 XA880 TRE/RRE/RAE/Cv C.2/RAE



Vulcan B.1 XA898 converted to 7856M

25 Avro Vulcan B.1s delivered between August 1956 and December 1957 by Avro, Woodford, to Contract No. 6/ACFT/8442

XA889 Mkrs & BSE/AAEE To MoA 10.6.55
 XA890 Mkrs/RAE/AAEE/BLEU To MoA 31.8.55
 XA891 Mkrs Crashed during test flight, Walkington, Yorks, 24.7.59
 XA892 Mkrs/AAEE/BSE/RAE To 7746M, 21.6.62
 XA893 Mkrs/AAEE MoA aircraft
 XA894 Mkrs/BSE To MoA 11.60; Olympus testbed; caught fire during ground running tests, Filton, and destroyed, 3.12.62
 XA895 230 OCU/Hdlg Sqn/ 230 OCU/AAEE/BCDU SS 19.9.68
 XA896 230 OCU/44/230 OCU/ BSE To MoA 25.6.64 as Olympus testbed
 XA897 230 OCU Flew into ground on approach in bad weather, Heathrow, 1.10.56
 XA898 230 OCU/101/230 OCU To 7856M 26.8.64
 XA899 Mkrs/AAEE To 7812M 26.6.63
 XA900 230 OCU/101/230 OCU/ 101/Cv B.1A/230 OCU To 7896M 24.2.66; preserved at Cosford
 XA901 230 OCU/617/230 OCU/ 44/Cv B.1A/230 OCU To 7897M 26.11.65
 XA902 230 OCU/AAEE/R-R Spey testbed; to G.I. airframe 6.63
 XA903 Mkrs/BSE MoA aircraft; Blue Steel trials aircraft and Olympus testbed
 XA904 83/Cv B.1A/83/44 Ran out of fuel on landing and undercarriage collapsed, Waddington, 1.3.61; nose to 7738M
 XA905 83/44/230 OCU/ Waddington Wg To 7857M 14.9.64
 XA906 83/44/Cv B.1A/44/ Waddington Wg SS 8.11.68
 XA907 83/44/Cv B.1A/44/ Waddington Wg/BCDU SS 20.5.68
 XA908 83 Dived into ground after electrical failure of power controls, Detroit, Michigan, 24.10.58
 XA909 50/Cv B.1A/50/ Waddington Wg/ 230 OCU/101 Abandoned after explosion in engine bay 3m E of Valley, 16.7.64
 XA910 101/Cv B.1A/50/ Waddington Wg To 7995M 10.11.67
 XA911 83/230 OCU/Cv B.1A/ Waddington Wg SOC 8.11.68
 XA912 101/Cv B.1A/101/ Waddington Wg SOC 20.5.68
 XA913 101/Cv B.1A/101/ Waddington Wg SOC 20.5.68

Note: In the late 1950s and early 1960s, it became a common practice for larger types of aircraft to be pooled between squadrons on one station. Although any aircraft could be flown by a crew from any of the squadrons based at that airfield, individual squadron emblems continued to be carried on the aircraft, often on the basis of equal division of the station's allocation of aircraft.

FEEDBACK



Our mention of the hitch-hiking Gnat in AM.3/83 has brought forth details on the Yugoslav Gnats from Peter Amos. The two Gnats supplied for evaluation were as follows:

G-39-8 c/n FL14 Became 11601

First flight was at Chilbolton on 7 June 1958 in the hands of the late Sqn Ldr E.A.(Ted) Tennant for 12 minutes. Accepted by the Yugoslav Delegation at Chilbolton on 21 June 1968. Delivered by road, sea and rail to Batajnica, dates of departure and arrival unknown. Belly-landed on 7 October 1958 as a result of an 'emergency down failure' - presumably meaning the undercarriage jammed up. It was not repaired and was probably the one on the lorry as the dates would tie up nicely.

G-39-9 c/n FL17 Became 11602

First flight 21 July 1958 at Chilbolton for 19 minutes by Ted Tennant. Accepted by Captain Pastovic on 25 July 1958. Delivered as for 11601 and had logged 81 hours 54 minutes by April 1959.

There were no follow-up orders but there is a family likeness to the Soko Orao/CNIAR IAR-93 design which appeared much later. In the meantime, the Yugoslav Air Force soldiered on with Thunderjets and Sabres.

One, presumably 11602, survives in open storage on the site of the Yugoslav Aviation Museum and will presumably appear therein after refurbishing. The above photograph is of G-39-8.

The remaining mystery is why a Gnat was on a lorry heading towards London from the North? Chilbolton was west of London.....

In the background of the photograph are two Meteor T.7s used for ejector seat trials by Folland. They were modified to eject the rear seat and also had camera noses as on the Meteor PR.10.

TAILPIECE

On reading through the item on acoustical devices, it occurred to us that perhaps the references to 'sound trumpets' or, as they were more commonly titled, sound locators, might not conjure up to our younger readers what these pieces of equipment were. Although the receivers were of different shapes, they resembled the apparatus below in general lay-out.

In the photograph, Nicholas II, Czar of all the Russias - if not all of the Russians - can be seen examining an Italian sound locator and being briefed by an Austrian corporal whose face seems familiar.

Is it just possible that it might be.....? No, of course it can't!



And a Happy Christmas to one and all plus a survivable New Year.

