AEROMILITARIA

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By the time this issue arrives through the letter box, the Sales Department will have copies of "The Hampden File" in stock, barring a last-minute accident. This is a hard-cover volume of 208 pages, A.4 size. It contains 215 photographs, a sectional drawing and side-views showing colour schemes.

Unlike other "Files", where general works on the development and operations of the type have been published, the Hampden is covered in much greater operational detail, with many personal accounts of the adventures of Hampden aircrew from a variety of countries. Apart from the RAF, the Hampden was flown by Australian, Canadian, New Zealand and Russian units. The table of aircraft has been expanded to include details of the crews flying aircraft that were lost on operations or in accidents. A diary of Bomber Command operations and losses as well as data on German fighter claims. Even the Russian Navy has provided operational details of its use of the Hampden as a torpedo-bomber.

The price is £11.00 post free to members and £16.50 to non-members. Please note the new address of the Sales Department and send orders to David Roberts at 5 Bradley Road, Upper Norwood, London SE19 3NT.

BACK ISSUES

Air-Britain holds a small stock of past issues of Aeromilitaria (and Archive and Digest) for the benefit of new members or those who may have missed subscribing because they thought Aeromilitaria was written in Italian. This has now changed location and details can be obtained from Frank Pooley at 22 Burlington Road, Burnham, Bucks., SL1 7BG.

Also in stock are the remaining copies of a combined print of Aeromilitaria for 1975, 1976 and 1977. These were reprinted as complete volumes and cost £3.00 each. They were produced in the pre-photo days but have many drawings and tables.

HELP WANTED

In connection with the above back issues facility, we need help with storage space. The ready-for-use stock takes up a considerable amount of space so has to be restricted since each year's issues keep being added!

To avoid having to reduce the future ability of Back Issues to provide copies requested by members, we would like to be able to deposit about 50 copies of each magazine somewhere else. These would be drawn on to replace the main stock as and when required.

For logistic reasons, it would be preferable for them to be delivered somewhere within easy reach of either the Slough/Maidenhead, Southend or Gloucestershire area. Simple storage in a dry location is what is required and anyone who can help is asked to contact Frank Pooley at the address given above.

IN THIS ISSUE

The peregrinations of the search-and-rescue flights in the United Kingdom has proved rather complex to trace so we welcome Eric Myall's account of the establishment and development of the SAR coverage of the United Kingdom.

Steve Bond has provided a detailed account of the career of a dedicated naval pilot taken from his log-books. Log-books have an important role in filling in the gaps that so frequently appear in official documents, particularly of naval aircraft where much of the background information on the Fleet Air Arm was sent for destruction by the Admiralty "weeders" after the end of the war. One cannot but feel that many of them did not like to have noisy and smelly things like aircraft intrude on pure naval activities. Hence the ships' logs were retained but the flying logs dumped. Aircraft carriers can be plotted every (nautical) mile of their progress but the activities of their aircraft only intrude because they had to point the ship into wind. Besides, aircraft made the deck dirty.

The annual review of write-offs thirty years ago appears without the Army Air Corps. There seems to have been six aircraft involved but the records were temporarily unavailable when the time came to compile this item. They will appear in a future issue. Ray Sturtivant has compiled the Fleet Air Arm section from available information. Not all the crashes may had been complete write-offs but they have not surfaced after the date of the accident - unless you know differently.

Ray is also catching up with the write-offs of RAF aircraft and has covered 1948 within the same limits as above.

COVER PICS

The front cover shows D.H.60M Moth K1213 of the Central Flying School over Salisbury Plain. On the back cover is the first production Anson.

PUZZLE PIC

The airfield below is shown in a smaller format than usual as it is not as clear as we would like. We are getting short of suitable airfield photographs after all this time!

R.A.F. SEARCH & RESCUE

Sycamore HR.14 of No.275 Squadron

ORIGINS

The present search and rescue organisation of the Royal Air Force is now almost entirely centred on the use of the helicopter. In pre-war days, it was based on the use of high speed launches and during World War Two it was expanded to include specialist fixed-wing air-sea rescue (ASR) squadrons working in conjunction with those vessels. Ten ASR squadrons were formed - Nos.275 to 284 inclusive - but all of these had been disbanded by 1946.

In the early post-war years, the use of high-speed rescue launches continued but the longer range rescue functions passed to Coastal Command, with airborne lifeboats being dropped from Lancaster ASR.3s.

The very earliest experiments in helicopter rescue operations were undertaken by the Helicopter Unit, based at Hanworth with the first Sikorsky Hoverfly Is delivered to this country, under the "umbrella" of General Aircraft Ltd. This company had been appointed the "daughter" organisation in the UK to Sikorsky in the USA. This unit was formed in February 1944 and in addition to the early air-sea rescue trials, it also undertook training and general experimental tests. With the arrival of production Hoverflies later in 1945, a Helicopter Training Flight was established at Andover as part of No.43 OTU. Experimental trials were commenced at the Airborne Forces Experimental Establishment at Beaulieu and the air-sea rescue experiments were passed on to the Air-Sea Warfare Development Unit at Thorney Island.

This unit had been formed on 1 January 1945 by re-naming the Coastal Command Development Unit, then based at Angle in Pembrokeshire, with an almost immediate move to Thorney Island following on 14 January. Fleet Air Arm participation in the unit consisted of No.703 Squadron, reformed at Thorney Island on 19 April 1945 and becoming known as "NASWDU". It was not until January 1946 however that the first Hoverfly I (KL104) was attached to the unit. The first "real" rescue followed in May 1946, when two small boys were rescued from a drifting dinghy in one of the areas of open water close to Thorney Island.

The unit also involved its helicopters in other trials which continued at Thorney Island until May 1948. During the three-and-a-half years up to that time, it used the following Hoverflies:

Hoverfly I	FT834; KK975; KK992 (on loan from FAA); KL102; KL104
Hoverfly II	KN855; KN879

On 27 May 1947, the unit moved to Ballykelly and by this time all the helicopters had been passed on to other units. Around the same time, 703 Squadron was transferred to Lee-on-Solent but for some time Naval Hoverflies had been detached to Thorney Island from Gosport, where the Fleet Air Arm had formed its first dedicated helicopter squadron - No.705 - in 1947. This innovatory move presaged the formation of the Navy's own helicopter search and rescue organisation (which will form the basis for a future article). It was not until 1952 that helicopters were again to feature on the strength of ASWDU.

On 10 May 1951, ASWDU moved from Ballykelly to St.Mawgan and on 19 February 1952 it received its first Bristol Sycamore HR.12 (WV781). The second, WV782, joined it in April but crashed in September. The last two HR.12s were initially tested at the Aeroplane and Armament Experimental Establishment at Boscombe Down and WV783 and WV784 joined ASWDU in May and August 1953 respectively. It should be remembered that ASWDU had its origins in Coastal Command and it is appropriate at this stage to emphasise that the operational Commands of the Royal Air Force were fairly autonomous at this time. Fighter Command had the more pressing need to establish its own search and rescue squadron and No.275 Squadron was reformed initially at North Weald with two Sycamore HR.13s on 1 March 1953, not long after the resumption of helicopter experiments in this role at St.Mawgan. Coastal Command, however, did not form its own SAR Squadron (No.22) until 15 February 1955 - not with Sycamores as might have been expected but with Whirlwind HAR.2s.

The ASWDU trials with the three remaining Sycamore HR.12s continued past this date although 22 Squadron had been formed partly with ASWDU personnel. The last Sycamore left St.Mawgan on 31 August 1956. Codes used by ASWDU on their four helicopters were F-W, F-X, F-Y and F-Z (in reverse serial number order!)

It is interesting to consider what the Royal Air Force had in mind for its SAR helicopter

structure during the period in which these early experiments were taking place. The background to this period - the early 1950s - is coloured by the lengthy development period which the British aircraft industry took to produce reliable helicopters in the UK and the resultant shortage of machines to fulfil competing roles. From 1950 onwards, the top military priority was felt to be the supply of helicopters to be used in the anti-Communist guerrilla war in Malaya which involved all the services.

In 1950, ASWDU was seen as eventually developing into an ASR unit with sixteen helicopters, either Sycamores or Whirlwinds. By May 1952, the Air Council approved in principle SAR flights for Fighter and Coastal Commands with four Dragonflies and four Whirlwinds respectively. In 1954, it was foreseen that the twin-engined, twin-rotor Bristol 173 would be adapted for SAR duties and as a general Whirlwind replacement. This latter development turned into a long-running saga (with at times farcical undertones) and in 1955 it was anticipated that four Bristol 191s would be ordered for ASWDU - but that they would not be delivered until late 1957. The piston-engined Bristol 191 was finally discarded for the turbine-engined Bristol 192, later to become the Belvedere, and an order for eleven of this type was considered for Coastal Command in 1955. By the Spring of the following year, this had been reduced to eight for 22 Squadron and the allocation of four Bristol 191s for ASWDU was cancelled, no doubt leading to the disbandment of the Sycamore element of ASWDU later that year.

In the event, no Bristol 192s were ever operated in the SAR role and by 1958 it had been decided to standardise on the Westland Whirlwind HAR.2 for both UK squadrons and that these should be converted to turbine power at the earliest opportunity. The decision to standardise on the Whirlwind had come about with the prior successful conclusion of the Malayan campaign and the relegation of the Sycamore to support roles, principally training.

No.22 Squadron

As indicated above, 22 Squadron was formed on 1 February 1955 at Thorney Island and unlike the comparable Fighter Command squadron has retained its "Number Plate" ever since. A transfer of the squadron HQ from Thorney Island to St.Mawgan followed on 4 June 1956, where it was to remain for the following eighteen years. A similar expansion programme to that of No.275 Squadron commenced before the movement of headquarters when B Flight formed at Martlesham Heath on 25 June 1955 and C Flight formed at Valley on 27 September 1955. C Flight is still there some twenty-four years later! On the transfer of headquarters to St.Mawgan, an additional flight was formed at Thorney Island, becoming D Flight, A Flight having also moved to St.Mawgan.

Some rationalisation of the location of flights was soon underway between the two squadrons and the first example occurred on 4 November 1958 when E Flight of 275 Squadron, based at Chivenor, became A Flight of 22 Squadron with the former A Flight at St.Mawgan being disbanded, leaving the squadron HQ as the sole helicopter unit there.

It is appropriate at this stage to point out that the emphasis on helicopter coverage for SAR duties gradually moved from the separate Command requirements towards an approach based on locations which would cover as much of the UK coastline as possible. One should also not overlook the SAR/Station Flights of the Fleet Air Arm (which will also be detailed in a separate article). Eventually this meant that 275, 228 and 202 Squadrons were located in the north and 22 Squadron had the south of England as its "patch".

In April 1974, 22 Squadron HQ returned to Thorney Island but this move, unlike the last, was of much shorter duration as in January 1976, a further move was made to Finningley. This was the initial move in the formation of a Search and Rescue Wing within No.18 Group of Strike Command. No.202 joined 22 Squadron at Finningley on 1 September 1976 to complete the process. At the same time, a SAR Engineering

Whirlwind XJ723 of No.202 Squadron flying in emergency supplies to a snow-bound farm.

Whirlwind HAR.10 XP352 of No.202 Squadron

Wing was established to provide overhaul and modification facilities for the two squadrons previously mainly carried out at the Squadron HQs.

Since 1976, there have been few developments in the SAR squadrons. In May 1976, 22 Squadron received its first Wessex HAR.2, the first really new type to join the squadron although the first turbine-powered Whirlwind HAR.10 had been received in March 1962 and by the end of that year no piston-engined Whirlwinds remained with the squadron. However, the shortage of Wessexes meant that it was not until November 1981 that the last Whirlwind left the squadron. From that time, No.22 has been equipped solely with Wessex HAR.2s, with No.202 standardising on the Sea King HAR.3 from August 1978 onwards.

Former FAA bases at Brawdy and Lossiemouth were transferred to the RAF in the 1970s and have operated as SAR bases since then. Some disruption of the national coverage was necessary when the Falklands dispute arose in 1982 and RAF Sea Kings were needed to undertake similar duties in the South Atlantic.

Perhaps the only other significant development since 1976 has been the potential "privatisation" of the helicopter SAR service. This received serious discussion in the 1980s when a shortage of helicopters and personnel led to the disbandment of D Flight of 22 Squadron, then based at Manston. The logic of the closure, at a location which was closest to the Strait of Dover, one of the busiest sea lanes in the world, was not apparent to all and a strong public campaign to have helicopter SAR coverage resumed from Manston ensued. This led to the establishment of a helicopter flight operated by Bristow Helicopters Ltd on 1 June 1971 which continued until 30 September 1974. At this point the Ministry of Defence decided to respond to criticism that the services should provide total UK coverage and resumed operations from Manston. No SAR Wessex variants having yet become available, a separate flight of No.72 Squadron (based at Odiham) was established and designated D Flight, presumably to fit in with the other Flights of 22 Squadron, and was equipped with the squadron's Wessex HC.2s suitably modified.

TRAINING

Specialist training for SAR duties was very much on an ad hoc basis in the 1950s. It was not until 1954 that the RAF undertook training of its own helicopter pilots with the formation of a Central Flying School sub-unit, the CFS Helicopter (Development) Flight. This advanced to Squadron status in 1956 and on 10 August 1961, to Wing status at Ternhill. Up to that point the whole emphasis was on the training of instructors and pilots but the importance of the crewman came to be recognised as time passed. When the first operational helicopter unit had been formed in the RAF - the Casualty Evacuation Flight (later No.194 Squadron) in Malaya - the crewman's role was taken on by groundcrew volunteers. This was a direct link with much earlier times when air gunnery and flight engineering roles in the RAF were similarly filled. In due course, "redundant" flight engineers and signallers from Bomber

Command squadrons (which had converted to V-bombers) became available and took over the crewman's role.

From 1961 onwards, detachments of the CFS formed at Valley for specialist training of SAR aircrew but this quickly evolved into the CFS SAR Training Squadron, formed on 23 April 1962, which in the following year became No.3 Squadron, Central Flying School.

The ramifications of the changes in the RAF's Command status in the late 1960s, also had their effect on training units in due course. In February 1974, parts of the CFS at Ternhill and Valley were absorbed into what was initially known as No.23 Group Advanced Flying Training School. On 31 March 1976, this was re-designated No.2 (Advanced) Flying Training School which then moved from Ternhill to Shawbury on 29 September 1976. A permanent detachment for SAR flying training was however maintained at Valley until December 1979, when the responsibility for SAR flying training passed from CFS to the central SAR organisation established at Finningley in 1976, as previously recorded.

Initially this training was undertaken within flight status but quickly became the Search and Rescue Training Unit (SARTU), the title it still holds today. It operated Wessex HAR.2s alongside the resident 22 Squadron's C Flight and since 22 Squadron is the Wessex element of the SAR organisation, it also parents SARTU.

When the Westland Sea King HAR.3 was introduced into RAF service in 1978, the Sea King was already well established in the Fleet Air Arm and a RAF Sea King Training Unit was established at RNAS Culdrose alongside No.706 Squadron, which was the Navy's Sea King basic training squadron. The official formation date was 17 February 1978 and the unit has continued to perform its conversion and training role at Culdrose up to the present time.

LOCATION OF FLIGHTS

NO.22 SQUADRON

	Location	From	To
A Flight	Thorney Island	15.2.55	4.6.56
	St.Mawgan	4.6.56	4.11.58
	Chivenor	4.11.58	date
	(Ex E Flight 275 Squadron)		
B Flight	Martlesham Heath	25.6.55	16.5.56
	Felixstowe	16.5.56	1.6.61
	Tangmere	1.6.61	5.5.64
	Thorney Island	5.5.64	19.2.73
	Coltishall	2.5.73	6.4.76
	(Transferred to C Flight 202 Squadron)		
	Leuchars	8.4.76	date
	(Ex C Flight 202 Squadron)		
C Flight	Valley	27.9.55	date
D Flight	Thorney Island	4.6.56	31.12.59
	Manston	1.7.61	31.3.69
	Brawdy	1.2.74	1.7.79
	(Transferred to B Flt 202 Squadron)		
	Leconfield	1.7.79	1.7.88
	(Transferred to E Flight 202 Squadron)		
E Flight	Manston	6.76	28.8.88
	Coltishall	28.8.88	date
	(Ex C Flight 202 Squadron)		
F Flight	Coltishall	7.82	2.9.85

Nos.275,228,202 Squadrons

A Flight	Thornaby	18.11.54	2.10.57
	(Ex B Flight)		
	Acklington	2.10.57	2.10.75
	Boulmer	2.10.75	date

Wessex HC.2 of 72 Squadron in SAR colours

Wessex HAR.2 of No.22 Squadron

B Flight	Linton-on-Ouse	13.4.53	18.11.54
*	North Coates	21.2.55	9.10.57
	Leconfield	9.10.57	1.7.79
	Brawdy	1.7.79	date
	(ex D Flight, 22 Squadron)		
C Flight	Leuchars	30.6.55	8.4.76
	(transferred to B Flt, 22 Squadron)		
	Coltishall	6.4.76	7.82
	(Ex B Flight, 22 Squadron)		
	Falklands	7.82	
		(became 1564 Flt)	
	Coltishall	2.9.88	8.88
	Manston	8.88	date
	(Ex E Flight, 22 Squadron)		
D Flight	Horsham St.Faith	16.9.55	25.4.63
	Coltishall	25.4.63	2.5.73
	Lossiemouth	2.5.73	date
	(Ex E Flight)		
E Flight	Chivenor	19.6.57	11.9.58
	(Transferred to A Flight, 22 Squadron)		
	Lossiemouth	19.2.73	2.5.73
	(Transferred to D Flight)		
	Leconfield	1.7.88	date
F Flight	Aldergrove	15.7.57	6.58
	(Transferred to B Flt?; see below)		

* B Flight is also reported to have been established at Leconfield from June 1958 to 3 April 1959, on transfer from Aldergrove. Since Aldergrove was also the base for 275 Squadron at that time, it is possible that B Flight and Squadron HQ Flight operated separately. It is known that 275 Squadron also had its own training element at Leconfield around this time which was referred to as "Training Flight" but the exact squadron organisation is not entirely clear.

THE HELICOPTERS

It was not until the Ministry of Defence ordered the HAR.3 version of the Westland Sea King that the Service obtained a "dedicated" SAR helicopter, i.e. a machine that was ordered specially for that purposes and was to be used in no other role.

The Bristol Sycamore, Westland Whirlwind and Wessex were all ordered for general purpose usage, particularly transport. It should be remembered that the helicopter's natural flying abilities make it useful for rescue work, regardless of the fact that it may or may not be specifically equipped for that role. There are many instances of rescue operations being conducted by non-SAR squadrons, for example. While rescues at sea or off-shore are probably the most dramatic, rescues over land are equally frequent, particularly from cliffs and mountains, and are often carried out in conjunction with the RAF's own Mountain Rescue Service.

The SAR helicopters principal "extra" is the rescue winch or hoist and they also carry first-aid equipment and medical supplies. Other than this - and the distinctive all-yellow colour scheme - there are few differences between the SAR helicopters and their transport equivalents.

Bristol Sycamore

As already mentioned, there were two marks of Sycamore which were used in early SAR experiments and initial squadron work-up:

Sycamore HR.12	WV781 - WV784
Sycamore HR.13	XD196, XD197

The Sycamore HR.14 was the principal mark to

see service with the RAF in a number of roles. The following aircraft are known to have served in the SAR role, both in the UK and overseas:

XE306, XE309, XE317, XE320, XF265, XG501, XG504, XG505, XG506, XG508, XG509, XG512, XG513, XG514, XG518, XG521, XG544, XG545, XG547, XJ361, XJ363, XJ364, XJ380, XJ384, XJ897, XJ898, XJ915, XJ916, XJ917, XJ918, XJ919, XJ821, XL823, XL824, XJ826, XL827, XL828, XL829

Westland Whirlwind

Whirlwinds were used, like the Sycamore, in a number of roles by the Royal Air Force. The piston-engined HAR.2 was the initial equipment of 22 Squadron only but was also intended to replace the Sycamore with 275/228 Squadron, although it had not done so by the time that the turbine-engined Whirlwind HAR.10 appeared on the scene and re-equipped both squadrons.

The following Whirlwind HAR.2s were used in the SAR role and some of the higher-powered HAR.4s were also used, mainly overseas:

XD163*, XD165*, XD183, XD184*, XJ407, XJ409*, XJ412, XJ414*, XJ429*, XJ430*, XJ432, XJ433, XJ434, XJ435, XJ436, XJ437*, XJ724*, XJ725, XJ726*, XJ727, XJ728, XJ729*, XJ730, XJ756, XJ757*, XJ758, XJ760, XJ761, XJ763, XJ766, XK970*, XK986, XK987, XK989, XL110, XL111*, XL112*, XL113

All Whirlwinds marked * also served in the SAR role after conversion to Whirlwind HAR.10s with the D.H./R.R.Gnome turbine engine in the 1960s. Whirlwind HAR.10s were also the subject of a new-build order with the first (XP299) making its first flight on 28 March 1961. The following were used in the SAR role both at home and overseas:

XP299, XP344, XP345, XP346, XP347, XP348, XP349, XP350, XP351, XP352, XP353, XP354, XP357, XP358, XP361, XP395, XP398, XP399, XP403, XP404, XR457, XR483

In addition, converted HAR.10s not previously used for SAR duties as HAR.2/4s did undertake these duties after conversion:

XD164, XD182, XD186, XJ410, XJ411, XJ426, XJ428, XJ723, XJ764, XK969, XK990, XK991

Westland Wessex

The first use of the Wessex HC.2 in the SAR role was in the Persian Gulf. A detachment of 78 Squadron was formed for SAR duties following the move of the squadron from Khormaksar in Aden to Sharjah on 17 October 1967. The flight operated not only from Sharjah but also from Bahrain.

No.22 Squadron did not receive its first SAR Wessex until May 1976 and was not fully equipped with Wessexes until November 1981 when the re-equipment of 18 Squadron with the Chinook made aircraft available.

The designation of the Wessex was changed to HAR.2 for its SAR role and during the mid-1980s it was envisaged that with further modification, a new designation of HAR.6 would be applied to 22 Squadron's aircraft. It is believed that this designation has never become official. Wessexes known to have been converted to the SAR role are as follows:

XR588 (production prototype HC.2)
XR497, XR501, XR504, XR507, XR508, XR518, XR520, XR524, XS675, XT601, XT602, XT603, XT604, XT606, XT670, XT674, XT680, XV720, XV724, XV729, XV730

XT674 crashed and was written off on 1 Feb 1987

Westland Sea King

First introduced into service with the Fleet Air Arm in the early 1970s, the Sea King was not adopted by the RAF until 1978 and a total of fifteen was initially ordered, with two separate orders of one and three respectively following in 1980 and 1985. To date, only one aircraft has been badly damaged - XZ585 which crashed in Scotland on 28 January 1989 and which has since been transferred to Wroughton for possible repair.

Serials: XZ585 - XZ599; ZA105; ZE368 - ZE370

Finally, mention should be made of the two Royal Navy Hiller HTE.2s which were borrowed by 275 Squadron in 1954 for training purposes as it was so short of Sycamores that none could be diverted to training. Initially this training was carried out at RNAS Gosport using machines borrowed from 705 Squadron but XB514 was actually allocated to 275 Squadron from March 1954 to April 1955 and it is believed that a second Hiller joined it there in 1954; this was almost certainly XB478.

PRESENT AND FUTURE

Some rationalisation may soon be expected with the nine current SAR flights maintained by the two SAR squadrons covering the UK as follows:

22 Squadron (Wessex)		202 Squadron (Sea King)	
A Flight	Chivenor	A Flight	Boulmer
B Flight	Leuchars	B Flight	Brawdy
C Flight	Valley	C Flight	Manston
D Flight	-	D Flight	Lossiemouth
E Flight	Coltishall	E Flight	Leconfield

The Wessex HAR.2 has been restricted to virtually daytime operations only, with the more comprehensively-equipped Sea Kings (of both the RAF and the FAA) taking over the night call-outs. To improve the speed of response of night operations, there may be some future changes in flight locations in order that a better geographical placement of the RAF's Sea Kings may be achieved.

Rumours persist that the RAF would like to receive a further six to eight Sea Kings so that the Wessex may be finally retired. As its operational life must soon be approaching its end, this would bring about a good economic benefit with only one type to service and maintain and would permit Sea Kings deployed at Culdrose to be released to the SARTU at Valley. The withdrawal of RAF Sea Kings from the Falklands must also be on the agenda in the near future, perhaps to be replaced there by a basically civil operation.

Whether privatisation of UK helicopter SAR operations is a possible future development is open to conjecture. Neither the RAF or the Navy is keen to see this happen but Bristow Helicopters are already conducting satisfactory SAR flights at Lee-on-Solent in England and Stornoway and Sumburgh in Scotland, so a precedent has been set.

THE LOG OF PETER CARMICHAEL

Lt.Peter Carmichael climbs down from Sea Fury WJ233 after shooting down a MiG-15 on 9 August 1952

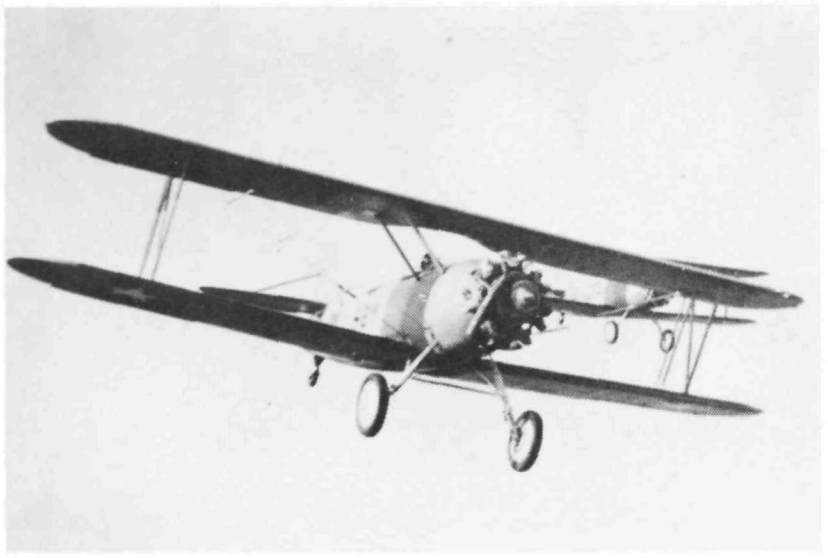
On 9 August 1952, the then Lieutenant Peter Carmichael, a pilot with No.802 Squadron aboard HMS Ocean in Korean waters, made a place for himself in history by shooting down a North Korean MiG-15, a deed made all the more remarkable by the fact that he was flying a Sea Fury at the time. Over a three month period, Carmichael flew a great many combat sorties, mostly comprising air patrols, with a goodly number of bombing missions thrown in against such targets as bridges and enemy gun positions. Although this period must stand out as a highlight, it actually represents only a tiny fraction of the flying career of this remarkable man which stretched from 1942 to 1961.

Peter Carmichael joined the Royal Navy on 12 January 1942, having been attracted to flying by the appeal of the Fairey Fulmar - a type that was ultimately to disappoint him greatly. His flying training began on 1 May, when he was sent to the US Navy Reserve Aviation Base at Grosse Ile, near Detroit, for basic training on the Naval Aircraft Factory N3N-3. Between then and early August, examples flown include 2581, 2628-2630, 2706-2708, 2721-2723, 2726, 2801, 2802 and 2832. A move was then made to Pensacola, Florida, for advanced training where aircraft used were SNV-1 Valiants and OS2U Kingfishers (no serials recorded), plus various marks of Texan including SNJ-1 0915, 0929, 0933 and 0945, SNJ-3 6983 and 7024 and SNJ-4 05544.

The next step was Miami, again mainly Texans, but also on Brewster F2A-2 and F2A-3 Buffaloes, plus a single N3N-3 2904. Texans flown at this time were: SNJ-3 6765, 6819, 6826, 6827, 6829, 6830, 6832, 6859, 6870, 6887, 6888, 6913, 6919, 6920, 6922, 6924, 6947, 6951, 6952, 6956, 6058, 6960, 6962, 6965, 6867, 6969, 6971, 6973-6977, 6994-6996, 6998, 01784, 01789, 01790, 01799, 01917, 01937, 01939, 01971, 01972, 01974, 05481, 05482, 05485, 05489, 05495, 05496, 05500, 05520, 05524 and 05526: SNJ-4 10233, 10236, 10288, 10289 and 10291: Buffaloes were F2A-2 1386, 1397, 1409 and 1434; F2A-3 01556, 01598 01610 (which he wrote off on 9 December 1942 in "a dirty big prang - bags of twitch") 01613, 01615 and 01618. The crash in 01610 was due to Carmichael, by his own admission, making a mess of the aircraft's complicated fuel transfer system, which resulted in the engine stopping dead and landing him in hospital; for several months.

Further operational training took place at RNAS Wingfield, Cape Town, with 789 Squadron, flying a variety of types such as Fulmar II DR640/AA and DR708; unidentified Albacores and Walruses and an Anson listed as 794 in which he "nearly went for a Burton!" By late September 1943, a further move found him on 726 Squadron, which operated both from Wingfield and Durban Racecourse, and here he flew DR708 again, plus Walrus I X9484, Walrus II Z1767, Kingfishers FN707, FN719, FN744, Swordfish V4326, V4704 and V4707. Next stop was RNAS Coimbatore in India where he was employed chiefly flying air tests on the following: Walrus II Z1820, HD807; Tiger Moth LR236, NL750; Seagull A2-18; Swordfish I K8397, V4321; Swordfish II LS345, LS347; Albacore N4161, T9254, X9144, X9154, X9156, BF721, BF725; Fulmar DR701; Avenger II JZ332, JZ350; Defiant II AA500; Wildcat V JV430, JV432, JV444, JV456, JV457, JV460, JV461, JV464, JV467, JV483,JV502, JV507, JV508, JV517, JV560, JV563, JV626; Seafire IIC LR667, LR669, LR755, LR757, LR758; Corsair II JT205, JT265, JT267, JT270, JT275, JT282, JT286, JT297, JT300; Hellcat I FN444, FN445; Hudson III AE569; Harvard IIB FE596, FE599, FE602, FE667; Hurricane II BN355, BN365, BN727, HV727, KX174; Dakota I FD780.

Then at long last, a front-line tour came Carmichael's way, with a posting to 889 Squadron, a Seafire unit based at Coimbatore which also included periods aboard the carriers Atheling and Unicorn. This tour was to last from April to July 1944, during which time he flew Seafire IIC and III aircraft as follows: LR667, LR699, LR755, LR768 (in which he nosed over on 21 April 1944), LR794, LR795, LR801, LR802, LR808, LR810, MB143, MB179, MB251 and MB253. There were also a few trips in Swordfish, with LS363 and LS369 getting into the book, a flight from Colombo to China Bay in



N3N-3 from Grosse Ile, mid-1942

742 Squadron's Stinson Reliant FL117 and another passenger trip in a Dakota which he only identifies as "470"; could this be KG470?

After 889 Squadron, Peter Carmichael began a long association with the Corsair, starting with 757 Squadron at HMS Rajaliya, Puttalam, Ceylon, between July and October 1944. Corsairs flown were JT222, JT225, JT234, JT242, JT246, JT250, JT260, JT267-JT269, JT270, JT279 and JT434, with further flying over this period being carried out in Reliants FB596 and FL114, Fulmar DR709, Seafires LR757 and LR808, Wildcat JV559, Hellcat JV100 and Harvard EX620. On completion of his type conversion, he went to 1834 Squadron, also at Puttalam, but shortly to re-embark in HMS Victorious for a lengthy cruise in the Pacific which lasted from October 1944 to 28 April 1945 and which was to give Carmichael his first taste of combat.

Corsairs listed in his log for this cruise are: JS539, JS556, JT332, JT339, JT342, JT348, JT356, JT361 (which he wrote off on 1 January 1945, breaking its back during a deck landing), JT362, JT368, JT383, JT394, JT413, JT423, JT424, JT426, JT430, JT434, JT435, JT451, JT486, JT523, JT528, JT532, JT533, JT540, JT565, JT567, JT573, JT579, JT583, JT622, JT626, JT628, JT635, JT648 JT697, (in which he chased some Japanese aircraft during a combat air patrol), JT701 and KD171. The only other recorded meeting with the enemy came just seven days into the ship's cruise, when four Oscars were encountered and shot at without success, while flying the unlucky JT361. Once again, occasional trips in other types came about and included Reliant FB597 of 757 Squadron, which also provided rides in Harvards EX620, EX629, EX671 and EX677 and a single Avenger of 832 Squadron, JZ369. It is also recorded that the vast majority of Corsair missions were to carry out dive bombing attacks.

Peter Carmichael in the front seat of SNV-1

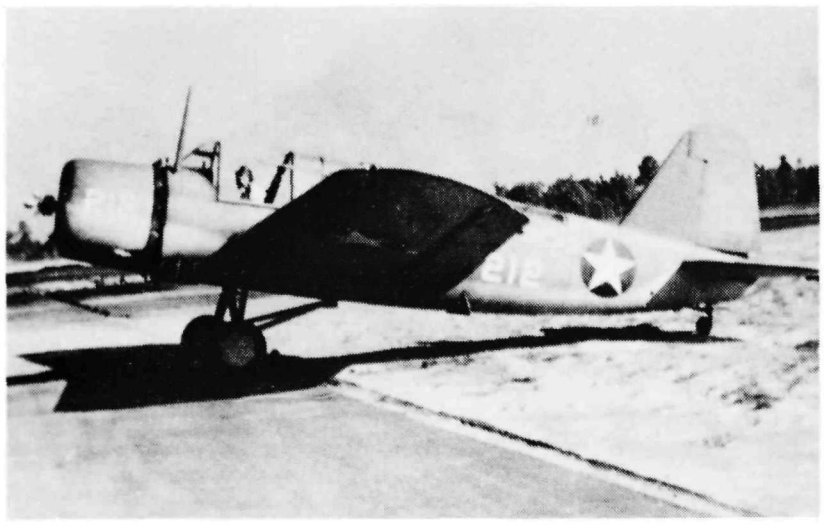
Vultee SNV-1 Valiant, Pensacola, 1942

With the war all but over, Lt.Carmichael found himself back in England at last and went to HMS Vulture, St.Merryn in Cornwall, where he joined 715 Squadron at the School of Naval Air Warfare. He continued his association with the Corsair until just before Christmas 1945, flying JT559, JT615, KB168, KD356, KD557, KD735, KD759, KD800-KD802, KD806, KD809, KD812, KD821 (which he displayed at Lee-on-Solent on 5 November), KD824, KD829, KD852 and KD853. The only other trip was in Harvard 281, possibly EZ821. Next came a ground tour at the Air Ministry between February 1946 and January 1947 although some flying still came his way, usually with 701 Squadron at Heston from where he managed to get aloft in Harvards EZ424/LOE, EZ428, Oxford DA709 (sic), PH175, PH308, Dakota FD267, a Dominie quoted as RN175, presumably a call-sign and an unidentified Meteor, listed as 265; this could have been F.4 VT265.

There now came a fresh flying tour with 4 Ferry Flight at HMS Jackdaw, Crail, which moved in March 1947 to HMS Condor, Arbroath. Among a wide variety of types encountered were Sea Otters JM741, JM797, JM884, JM887 and JN182 at Crail plus RD917 and RD920 at Arbroath; Oxfords DF420, MP292, MP293, NM360, NM480, NM524, PH298, PH324, PH370 at Crail, NM579, NM600, NM780, PG928 and RR361 at Arbroath; Harvards KF495, KF507 at Crail, EX683, EZ279 and KF554 at Arbroath plus the following, all at Arbroath: Seafire III NN524, Anson I NK952, Anson XII PH664, Expediter "673", Firefly I Z2112, MB436, Martinet RG890, RG893 and Firebrands EK729, EK746, EK748, EK797, EK798, EK827, EK832, EK835, EK836 and EK842.

This ferry flying took him all over the country, with deliveries or collections being made at such places as Donibristle, Evanton, Valley, South Marston, Watchfield, Gosport, Brough, Waddington, Culham, Yeovilton,

Pensacola's hack amphibian, a Sikorsky JRS-1



Vought OS2U-3 Kingfisher, Pensacola, 1942

A Fulmar and Albacore of 789 Squadron, Cape Town, 1943

Lossiemouth, Lee-on-Solent, Anthorn and an early look at what was to be his next unit, Ford. Here Carmichael joined 778 Squadron, the Intensive Flying Development Unit and got to know his most famous mount, the Sea Fury, flying TF905-TF908 mainly on engine endurance trials, one of which resulted in a forced landing in TF908. He also had trips in Oxford PH185/FD-002, Barracuda III RJ936 and Auster I LB384.

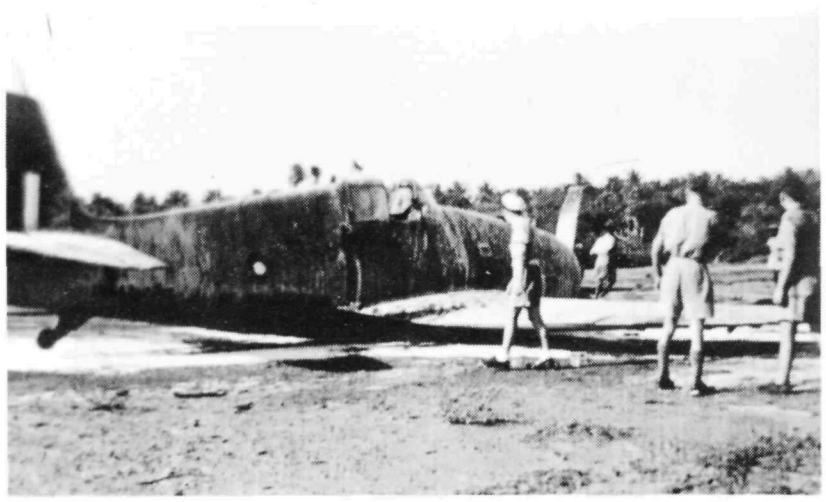
After just a month at Ford, he moved over to 813 Squadron in July 1947 and renewed his acquaintance with the Firebrand TF.5, staying with the unit until June 1948, during which time he also went to sea with it aboard HMS Implacable, before moving to Culdrose, then on to Arbroath and finally Anthorn. Aircraft logged were Firebrands EK737, EK765, EK766, EK768 - which he flew at one time as an escort for the First Sea Lord and later wrote off when it crashed and burned during a landing on Implacable on 2 December 1947 - EK780, EK782, EK786, EK790, EK793, EK829, EK832, EK838, EK842, EK843, EK845 (which made a rocket assisted take-off from Culdrose on 11 March 1948), EK847 (used to give displays at Gosport on 10 June 1948 and at Bramcote two days later), EK849 and EK850. During this period, Carmichael also flew Sea Furies TF941, TF965, TF985, TF989, TF991, TF992, TF994, TF995 and TF997 at Culdrose, plus TF968 at Arbroath. Only two other types appear at this time, namely Avenger "851" at Ford and Sea Mosquito "CW-410" of 790 Squadron at Culdrose.

The unit Carmichael joined next was 807 Squadron, a Sea Fury operator at Donibristle, in June 1948. He stayed here until the following March, which included four months aboard HMS Theseus, and flew: Sea Fury F.10 TF953, TF954/125, FB.11 TF961, TF964, TF966, TF967, TF971, TF973, TF989, VR911, VR936-VR938, VR952, VW228, VW234, VW241, VW243, VW546, T.20 VZ356 plus a single trip in a 810 Squadron Firefly VG964. Strangely, there then came what seemed a retrograde step, with a five-month tour on 737 Squadron, the operational flying school at Eglinton, where acquaintance was renewed with the Seafire, albeit in its somewhat more potent F.17 form, including: SP351, SX113, SX136, SX152, SX176, SX184, SX189, SX192, SX236, SX283, SX305, SX356, SX369 and SX386, together with Firefly Trainers DK420 and DT933.

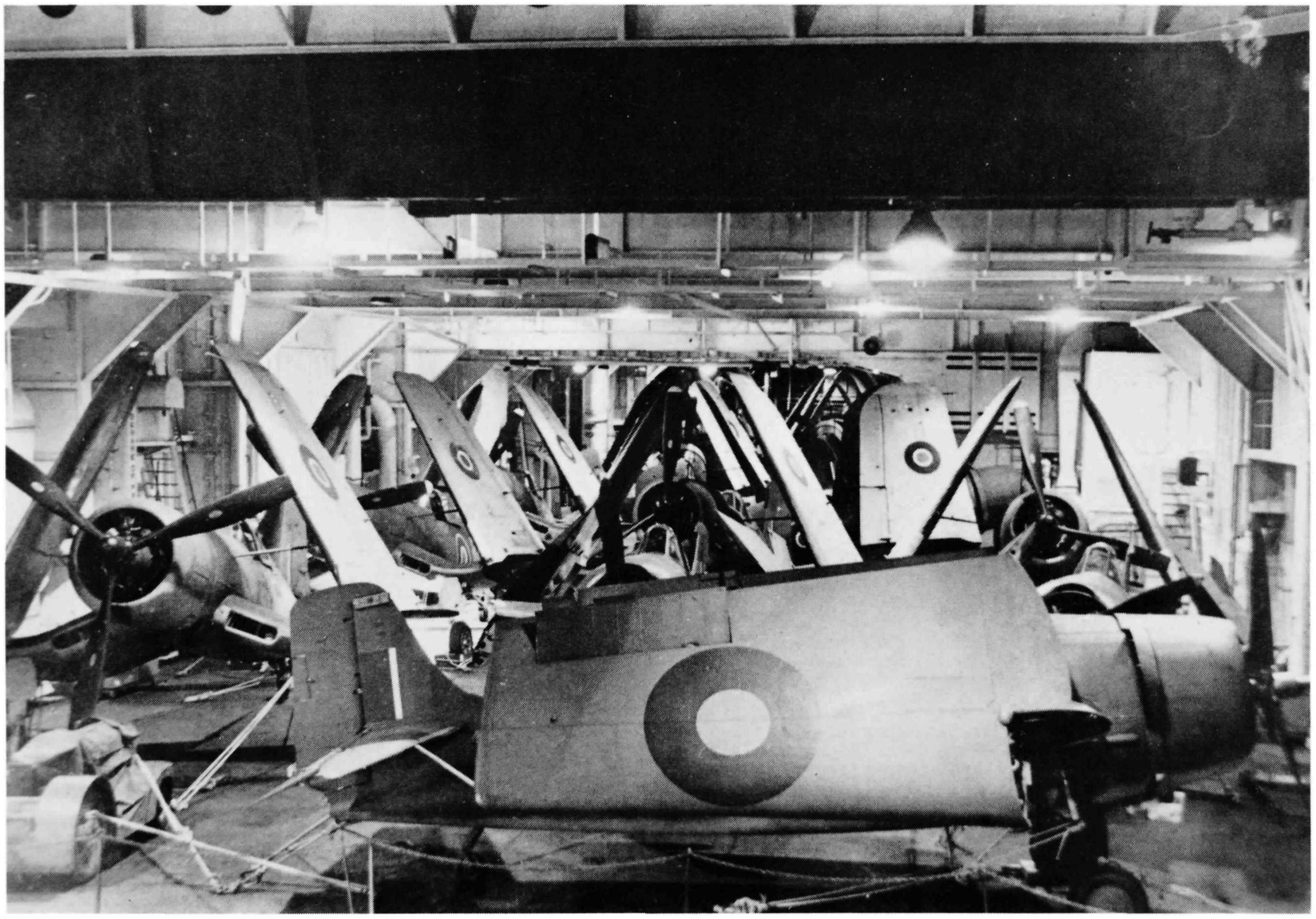
In September 1949, Lt.Carmichael joined the Central Flying School for No.113 Course at Brize Norton and three-and-a-half months on Harvards. Regrettably, the log only gives the two-letter codes as aircraft identities and not even The Harvard File can throw any light on their true tie-ups; however, for completeness they are listed: IC, IG, IJ, IL, IP, IX, JI, JJ, JX, KC, KE, KH, KP, KR and finally NK, which could have been FS819 whose full CFS code at that time was FDNK. From here it was back to Seafires, this time with 771 Squadron, a Fleet Requirements Unit at Lee-on-Solent, which flew a mixture of Seafire F.45s such as LA436, LA441, LA481/LP-563 and LA486/LP-584, plus Martinet TT.1s PX106/LP-573 and RH115.

In January 1950, another change to 773 Squadron, still at Lee, with Seafire F.15s PR368/LP-510, PR370, PR376 and SR463, plus F.45 LA441, LA455, LA482, LA486, LA488 and LA489. From late January until the end of March, the squadron was detached to Gibraltar to exercise with the Mediterranean Fleet and in addition to several of the same Seafires, flying was carried out in Martinets NR472 and NR473, before going for a one-month spell with 796 Squadron at St.Merryn. This was the Aircrewmans

An unidentified Hellcat after a mishap at Coimbatore



An unidentified Seafire III, coded "P", flying off



Corsairs and Wildcats on the hangar deck of HMS Atheling

School and here Carmichael got aloft in Barracuda TR.3 aircraft carrying the unit codes MF-300, 301, 305, 307, 309, 311, 312, 313 and 314 plus Fireflies, again only identified by codes as 202, 204, 205 and 282. Next came the Naval Instrument and Refresher Flying School at Rochester for three weeks in Oxfords, the only identified one being NM537, before returning to St.Merryn for two months on the Station Flight, with types logged as follows: Martinets PW974 and RG974, Sea Otter JM952, 796 Squadron Barracudas 304 and 314, Fireflies coded 212, 228, 280 and 285 and a single Meteor T.7 listed as 187.

At last a new front-line tour beckoned so in August 1950 a move was made to Culdrose to brush up on the Sea Fury with 736 Squadron. Most are listed by code only but some were recorded more fully, such as TF907, TF911/CW-118, TF916/CW-109 and VW635/CW-103, T.20 VX285/CW-292 plus an interloper in the shape of Firefly PP566. On 25 September 1950, Lt Carmichael went back to sea with 802 Squadron aboard HMS Vengeance and from then until the end of August 1952, he was with the squadron the whole time, with varying periods aboard that carrier plus Indomitable, Illustrious, Theseus and Ocean, with spells ashore at Culdrose, Wattisham (for a month in 1951) and Hal Far. Identified Sea Furies over this period are: TF963, TF967, TF972, TF973, TF986, VR922, VR925, VR928, VR946, VW553, VW564, VW585, VW636, VW640, VW641, VW656, VW657, VW694, VW699, VW711 (which he displayed at Culdrose on 17 July 1951) VZ351, WE679, WE683, WE717/T-108 (another display at Culdrose on 20 July 1951),

A Wildcat, coded "H", after overturning on Victorious

A Corsair, coded "K" and flown by Bud Jutton, hits the island aboard Victorious

Corsairs of Nos.1834 and 1836 Squadrons ready for a strike from Victorious; Avengers ranged astern

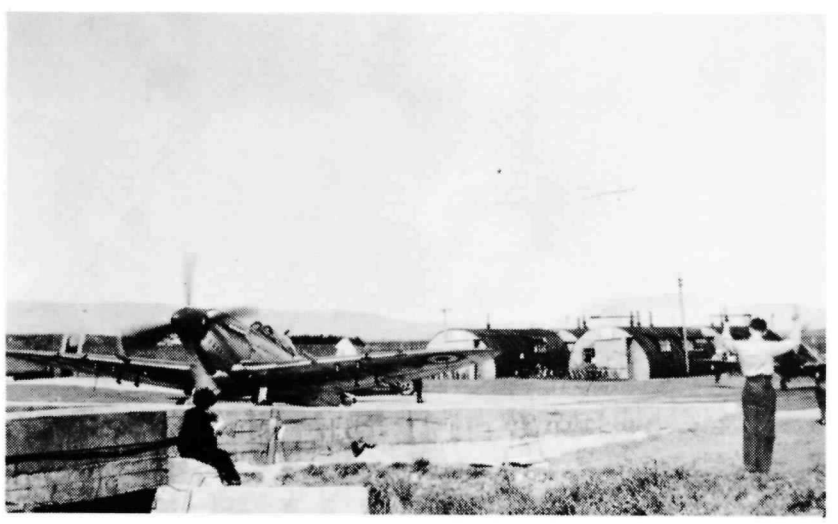
WE726/O-115, WE789, WE792, WE806, WE825 (displayed at Rochester on 5 May, Culdrose 14 May, Liverpool 26 July and Stretton 28 July 1951), WG564, WG594/O-145, WJ221, WJ223, WJ227, WJ228, WJ230, WJ231, WJ232/O-114 (the aircraft in which the MiG victory was claimed), WJ237/O-113, WJ238 (flown in a strike against Malayan bandits on 23 August 1952), WJ239, WJ264, WJ284, WJ291, WJ294 and WJ297. In all, Lt.Carmichael flew 93 combat missions over Korea and still found time to get aloft in other types, such as Firefly VT415 which appears in the log several times and a Sunderland coded "OC".

On 25 August 1952,he left Iwakuni aboard a Valetta C.1 bound for Singapore, where he transferred to a Hastings for the long haul back to Lyneham and a ten-month tour of duty away from flying. The log then picks up again in July 1953 when he arrived on 766 Squadron at Lossiemouth flying Fireflies, which he mainly lists by their codes but including: DK437/LM-254, MB698/LM-207 and MB699/LM-204. The unit moved to Culdrose in October and the pattern continued, with Fireflies MB408/CU-211 and MB585/CU-250 being listed amongst such other machines as Sea Furies and the occasional Dragonfly. In March 1954 came a jet conversion course at St.David's on Meteor T.7s, again only listed by code, before going on to 738 Squadron at Lossiemouth a month later where the flying consisted mainly of Sea Furies such as VX301/LM-201 and WE826/LM-200, Meteor T.7 WS105 and WS107/LM-405, Sea Vampire T.22, XA104, XA106/LM-211, XA107/LM-210 and Sea Hawk WF165/LM-123 and WF220/LM-120.

Our man next joined HMS Bulwark in January 1955 for six month's flying with the Ship's Flight, mainly in Avengers such as XB389/902 and XB374/B-981, after which he began a lengthy association with the Sea Hawk at HMS Goldcrest, Brawdy, between August 1956 and January 1958; among those listed are WF205, WF218/906 of the Station Flight. WN116, WV837 and WV910, plus

A Firebrand TF.5 of 813 Squadron landing on Illustrious

Seafire F.17 SX113 of 737 Squadron taxying at Eglinton



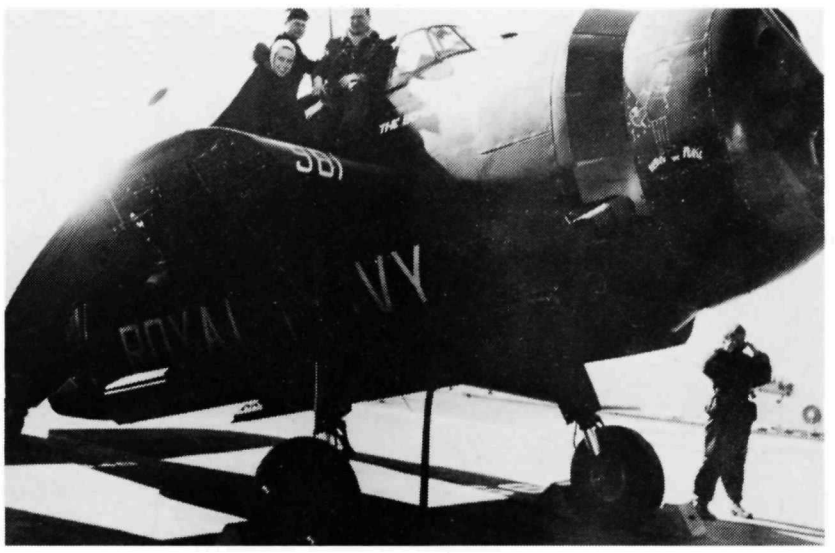
The victorious patrol on 9 August in front of VW223. From left to right: Lts Brian Ellis, Toby Davis, Peter Carmichael and Karl Haines

Sea Vampires XA110/VL-944. XA117/945, XA130, XA164/BY-561, XG748/BY-560, Sea Prince T.1 WM740/BY-567 of 727 Squadron, Meteor T.7 WA652/BY-910. WS103/LM-907, WS116/BY-906, Dominies 907 and 909 of the Station Flight and Sea Balliol T.21 BY-561 of 727 Squadron. Then up to Lossie again, this time to 764 Squadron and many more Sea Hawks: WF230, WF245, WF280, WF295, WM905, WM981, WM982, WV799, WV802, WV804, WV861, WV862/LM-692, WV870, WV910, WV918 and XE327 before shuffling back to Brawdy to join his operational squadron, No.802, which he was to stay with until the end of September 1959.

No.802 went to sea aboard HMS Eagle from May to December 1958, then came ashore at Lossie for a month before going back to the same carrier for another four-month cruise, followed by the summer of 1959 back to Brawdy. Sea Hawks flown by the now Cdr Carmichael over this period include: WV810/E-179, XE330/E-176, XE362/E-181 and XE439/E-178. Other flying fitted in was in Sea Vampire T.22 XA111, XA164, XA165, XG743 and XG745, Skyraider AEW.1 WT954/E-417 of 849 Squadron, Meteor T.7 VW447/LM-935 and WS116/BY-906 and even a US Navy Constellation, identified only as 712, on a trip from Wheelus Field in Libya to Hal Far. In addition to his normal duties, Cdr Carmichael still put in several appearances on the display circuit, flying Sea Hawk 177 for the Queen's Birthday flypast on 13 June 1959 and the Air Day at Merryfield on the same day, 177 again at both Culdrose and Yeovilton on 25 July, 182 at Roborough on 20 June and 178 at Valley's Battle of Britain Day display on 19 September, just ten days before he left the squadron.

He now went to his final Fleet Air Arm squadron, 764 at Lossie, this time flying

No.802 Squadron Sea Hawks aboard Eagle, 1958/59



Eagle's Ship's Flight Avenger AS.4 XB372 "The Bomber". Beryl the Peril cartoon on cowling

A Whirlwind HAR.3 of 701 Squadron aboard Eagle

Sea Hawk FGA.6 XE362/E-181, of 802 Squadron, on Eagle

Hunter T.8s WV363/707, XE664/LM-708 and XF995/698 for just a few weeks before being seconded to the Central Fighter Establishment at West Raynham, mainly flying Meteors: VW423, WH204, WH223, WH224, WH226, WH256, WH305, WK654, WL106, WL341 and WL470 of both T.7 and F.8 varieties, Chipmunk T.10 WZ856 of 11 Group Comm Flight and a pair of Vampires listed simply as KA and KE. Weekend trips home to Lossie also meant rides in Sea Vampires XA115, XA156, XG742, XG746 and Hunter T.8 XE717/BY-654 of 738 Squadron.

After this, Cdr Carmichael finished flying and spent a further fifteen years in the Navy before finally retiring to his home in Anglesey in November 1976.

PERSONAL CODES

Tornado ZE764 "DH" of Wg Cdr David Hamilton, CO of No.11 Squadron on 1 November 1988, the day the squadron became operational (Paul Jackson)

Around 1941 it was decided to permit Wing Leaders to use their personal initials on their own aircraft instead of the normal type of squadron code, so as to enable them to be readily identified in the air whilst leading large fighter wings. This type of marking was not altogether new, since at least one example of a personal code is known from the first World War, though its use then was almost certainly unofficial.

Such codes were usually painted either side of the fuselage roundels in the manner of a normal code, but many different ways of painting them developed, such as on the fin or under the nose. Not every Wing Leader used them, some regarding them as ostentatious and others believing that their use would make them a target for enemy aircraft. Nevertheless it is likely that the number of aircraft carrying such markings over the last half century runs well into three figures, though by their very nature many are either poorly identified or have never come to light.

In practice personal codes were much more widely used than originally envisaged, and they turned up on aircraft flown by all ranks from Flight Lieutenant upwards. They generally appeared on fighter aircraft, but they were also to be seen on a number of communications aircraft and even, in one instance, on a Stirling. In a few cases they were used by Fleet Air Arm officers and also on occasion by United States Army Air Force officers.

The following lists all known examples, with such identification as has been traced and photographs where available. Additional examples, or further information on those listed, would be very welcome, as would photographs.

AA Mustang IV KM557 on Barrackpore dump, India around 1946/47. Possibly used by Squadron Leader A.J.R.Adam of AHQ Burma around 11.45.

AAC Mosquito FB.VI HR343 with Fighter Command Communications Squadron, Northolt 7.45. Probably Squadron Leader A.A.Case, OBE

AAY Spitfire Vb AA915, believed while with Radio Warfare Establishment in 1945. Owner unidentified.

ACB Unidentified Spitfire flown to A.C.Bartley. Aircraft formerly flown by a Polish Squadron. Exact code uncertain, may have been "AB".

ACS Spitfire IX MK614 with 132 Squadron, 125 Wing Detling 3.44. Possibly flown by Wing Commander A.C.Smith.

ADS Hurricane IIa Z2515, 55 OTU Aston Down 1944.45. Flown by Group Captain A.D.Selway, DFC who was Station Commander 1.6.44 to 27.2.45

AFO Sabre F.4 XD753, 66 Squadron Linton-on-Ouse 1955. Flown by Squadron Leader A.F. 'Sammy' Osborne, DFC who was the squadron commander 11.54 to 7.57.

AG Unidentified Spitfire IX at the Fighter Leader School Milfield around 10.44 - 11.44

AGM At least two different but unidentified Spitfire Vbs flown at Biggin Hill by Wing Commander A.G. 'Sailor' Malan, DSO & Bar, DFC & Bar. The first while he was Wing Leader there from 3.41, the second as Wing Leader from 1.43 to 1.44

AGP Unidentified Spitfire FB.IX with 125 Wing 9.44. Flown by Wing Commander A.G.Page, DFC, the Wing Commander Flying from 7.7.44.

AHD Whirlwind I at Colerne 3.42, recorded as P7001 but more likely P7007 of 263 Squadron. Flown by Wing Commander A.H.Donaldson, the Wing Commander Flying.

AI16 Typhoon Ib JP436 of 124 Airfield Headquarters 9.43. Flown by Wing Commander Ingle, DFC, AFC, the Wing Commander Flying from 26.8.43 until he went missing 12.9.43. The '16' indicated that the unit was part of 16 Wing, a surprising breach of security.

AKG Meteor F.8 WK672 of Station Flight Odiham around 1955/56. Flown by Group Captain A.K.Gatward, DSO, DFC, the Station Commander from 7.55.

ALW Vampire FB.5 WA430 of RAuxAF Turnhouse around 1951/52. Flown by A.L.Winskill, DFC, the Scottish Wing Leader (this aircraft was also coded 'GM' and 'J' at different times). He also flew Vampire FB.5 with this code from 4.56 (this aircraft was coded 'DS' at one time)

APS This code on Mosquito FB.6 VA890 identified the unit rather than an individual, being with the Armament Practice Station at Lubeck in 1947/49.

AVH Spitfire F.21 LA299 of 41 Squadron Wittering in 1946. This aircraft was on squadron strength 30.5.46 to 7.8.47, but owner of code unidentified.

AVRJ Spitfire Vb BL450 at Fairwood Common. Flown by Group Captain A.V.R. 'Sandy' Johnstone, DFC, the Station Commander from 13.11.43 to 29.5.44.

AW Anson T.20 VS494 of No.12 Group Communications Flight 9.52. Owner unidentified.

AW Hunter F.5 WP186 at Waterbeach 1958 with 56 and 63 Squadron colours on wingtips. Flown by Wing Commander A.R.Wright, DFC, AFC, OC Flying Wing Waterbeach from 1.58 (also carried codes 'DGS', 'JC' and 'PT').

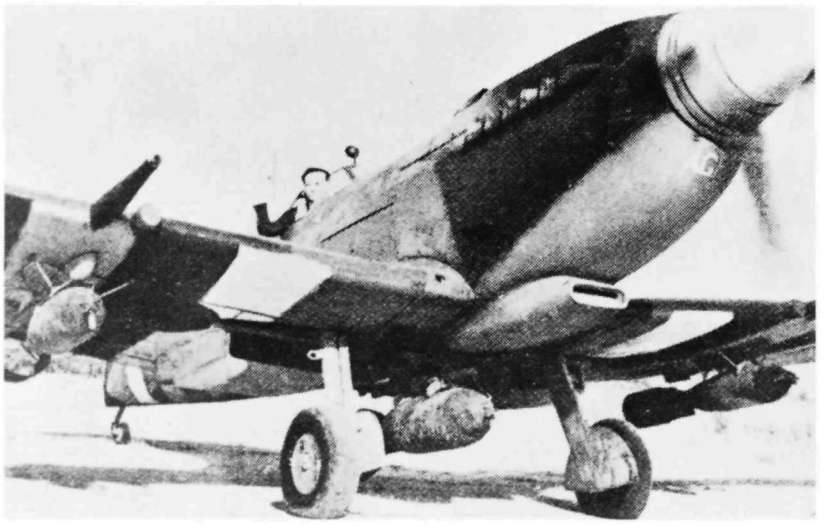
B This single letter code was used on Tempests by Wing Commander R.E.P.Booker, DFC when in command of 122 Wing from 2.1.45. The first aircraft he used with this code is unidentified, but he later replaced it with NV641 in which he was killed on 16.4.45.

BA Spitfire Vc LZ949 in Italy 1945. Owner unidentified.

BAE Mustang III FB260 of 239 Wing 9.44, also KH745 early 1945. Both flown by Group Captain B.A.Eaton, DSO, DFC, Wing CO by 9.44 to 20.9.45.

BD Meteor F.8 WA921 by 7.51, replaced by WH401 around 7.52, both with all red tails. Flown by Wing Commander B. 'Billy' Drake, DSO, DFC, the Wing Commander Flying.

BF Spitfire Vb BM308 at Hornchurch 1942. Flown Wing Commander B.E. 'Paddy' Finucane, DSO, DFC, the Wing Commander Flying from 27.6.42 until killed 15.7.42.



Spitfire IX with "AGP" on nose, 135 Wing

BFR Typhoon Ib MN753. Owner unidentified, but aircraft flown by 174 Squadron, until taken over by 121 Wing HQ 13.7.44, being shot down by flak 10.9.44 when piloted by Wing Commander W.Pitt-Brown.

BH Spitfire IX (LR), possibly MJ684, of 324 Wing in southern France 1944. Flown by Wing Commander B.Heath, who commanded 'A' detachment from 21.7.44.

BK Spitfire LF.IX TB539 of 43 Squadron of 324 Wing in 1946. Flown by Wing Commander C.B.F.Kingscombe, DSO, DFC, officer commanding the wing.

BOG Unidentified Typhoon Ib flown by Wing Commander Erik Haabjoern, DFC. He was Wing Commander Flying of 124 Wing between 19.1.44 and 25.8.44, and is known to have flown MN358, MN406 and MN542, though none of these have been positively identified with this code. The exact significance of the code unknown. One possibility is that it related to his real name, as "Erik Haabjoern" was only his adopted name. Another is that it should really be 'BGC', in which case it would actually relate to the the Wing CO at that time, Wing Commander B.G.Carroll.

BWR Unidentified Spitfire Vb at Fighter Leaders School, Charmy Down 9.43.

CAG Unidentified Spitfire FB.IX flown by Mjr C.A.Golding, DFC, who commanded 3 Squadron, SAAF from 12.44 until the end of the war.

CEM Unidentified Spitfire I of HQ 10 Group, Colerne, possibly flown by Wing Commander C.E.Malfroy.

CEO Spitfire LF.Vc at Northolt 7.45. Recorded as EE746, but more likely EE745 of 2nd TAF Comm Squadron. Owner unidentified.

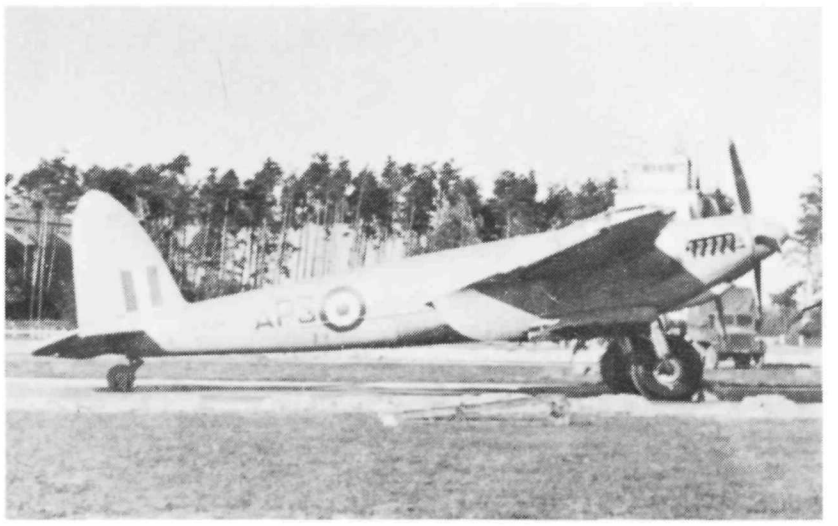
CFA Unidentified Sabre F.4 of Wing Commander C.F.Ambrose, the Wing Commander Flying of Wildenrath from 11.54.

CFB Unidentified Spitfire LF.XVI named 'Joan Too' flown by Wing Commander C.F.Bradley, DSO, DFC, Wing Commander Flying of 132 Wing in 5.45.

CFC A Spitfire Vb, possibly R7262, flown by Wing Commander Christopher 'Bunny' Currant, CO of 122 AFHQ Mobile at Kingsnorth and Zeals 8.43 - 7.44.

CFG Unidentified Spitfire flown by Wing Commander C.F.Gray, DSO, DFC & 2 Bars, a Wing Leader in Malta and Sicily 1943/45.

Spitfire F.21 LA299 "AV-H", at Wittering (J.B.Wilson)



Mosquito FB.VI VA890 "APS" at Wunstorf, 1947

CG Two unidentified Typhoons flown prior to D-Day by Wing Commander Charles 'Paddy' L.Green, DSO as Wing Commander Flying of 121 Wing. These were very probably MN666 around 6.44 - 7.44, replaced in 7.44 by MN855. An identified machine is MP156 which he flew from 9.44 as Group Captain C.L.Green, DSO & Bar, DFC, in command of 124 Wing until he went missing on 26 December 1956.

CG Unidentified Spitfire flown by Wing Commander Colin F.Gray, DSO, DFC & Bar as Wing Commander Flying, 322 Wing around 8.43. Also Spitfire XIV RM787 flown whilst Wing Commander Flying at Lympne in late 1944.

CGL Meteor F.8 WK787 flown from Turnhouse by Air Commodore C.G.Lott, CBE, DSC, DFC, commanding Caledonian Sector from 21.5.52 until 1956 when he was succeeded by Air Commodore Robinson and the aircraft became re-coded 'MWSR'.

CI Spitfire LF.IX, possibly MJ847, in tropical colours.

CM Meteor F.8 WH444 flown by Wing Commander D.Crowley-Milling, the Wing Commander Flying at Odiham around 7.53.

CMM A USAAF example, not strictly within the scope of this article. North American P-51B, possibly 42-206511, named 'Betty Jane' and flown by Col Charles M.McCorkle, OC 31st Fighter Group, 15th Air Force around 4.44 - 7.44

CR Unidentified Spitfire XIV at Changi around 5.46 - 7.46.

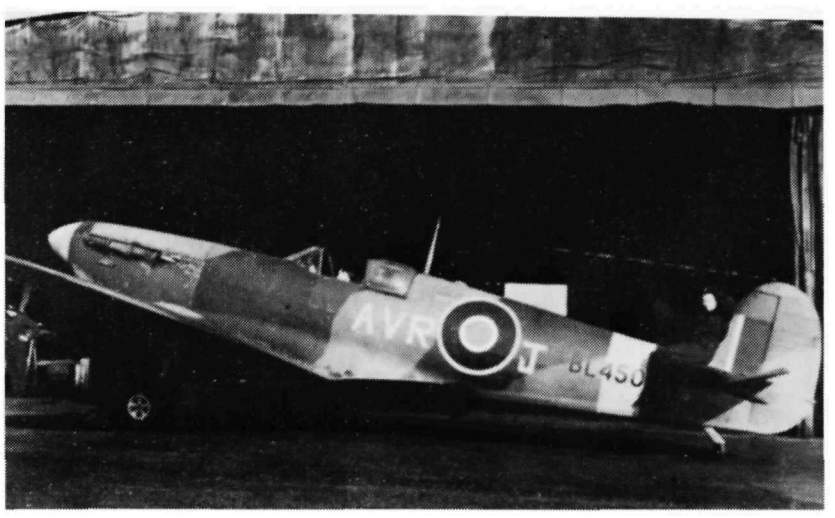
CRC Wing Commander C.R.Caldwell, DSO, DFC & Bar used this marking on a series of Spitfires whilst Wing Leader, and later Commander, of No.1 Fighter Wing, RAAF. He shot down an A6M and a B5N in Spitfire Vc BS234, later changing to BR295, then to LF.IX JL394. As Commander of 80 Wing from 1944 he flew successive LF.VIIIs A58-433, A58-484, A58-464 and A58-528.

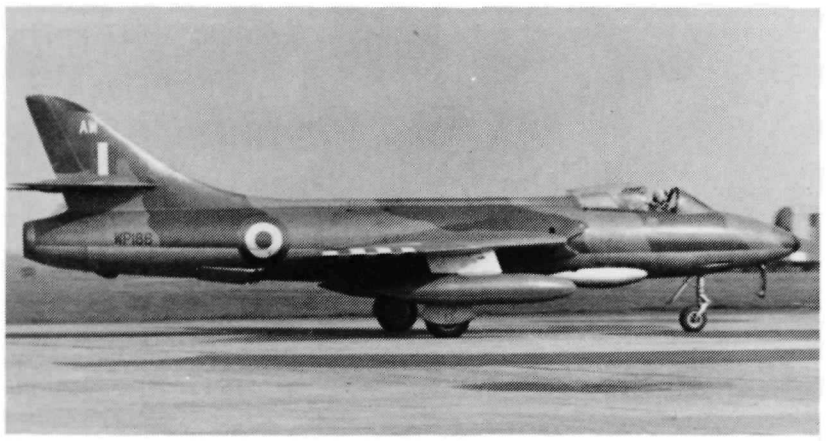
CSV Harvard T.IIb KF691 flown by Squadron Leader C.Scott-Vos, DFC, CO of 247 Squadron 4.46 - 10.46.

CWL A Spitfire VIII identified as "RSU101" presented to the Maharajah of Tripura and mounted outside his palace in 1945. It bore the initials of Squadron Leader C.W.Lockhart, CO of 101 Repair & Servicing Unit, Agartala, from which it was supplied.

CWL Marking carried carried by Vampire T.11 WZ570 at Cranwell 2.60. Possibly Wing Commander C.W.Lovatt, or simply stood for Cranwell.

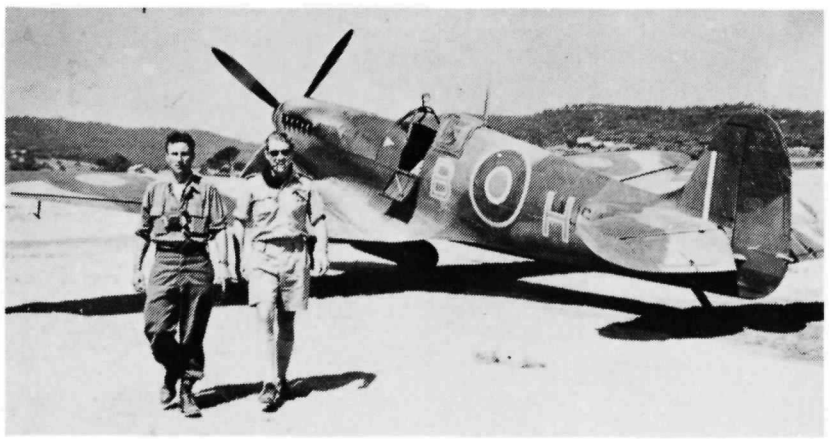
Spitfire VB BL450 "AVRJ" (via Andy Thomas)





Hunter F.5 WP186 "AW", Church Fenton (via R.Lindsay)

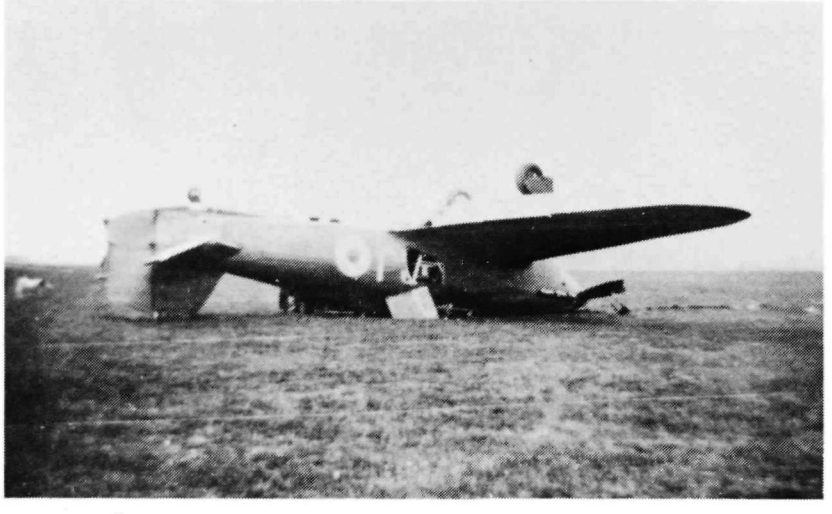
DAB Mosquito FB.VI PZ193 at Northolt in 8.45 was flown by AVM Dermot Alexander Boyle, CBE, AFC, who was AOC 11 Group from 10.7.45.
DAM Anson NK727 seen at Blackbushe in 1946. This aircraft last served with 84 Group Communications Squadron.
DB Wing Commander Douglas Bader, DSO, DFC flew Spitfire IIa P7966 as Wing Leader at Tangmere from 19.3.41, changing in early 8.41 to Spitfire Va W3185 (named 'Lord Lloyd I'), in which he collided with a Bf 109F on 7.8.41, being then taken prisoner. On his release in 5.45 he became a Group Captain and flew Spitfire HF.IX RK917 at CFE Tangmere to 8.45. He then took over another unidentified Spitfire IX, and this is probably the 'DB'-coded machine he took with him on becoming CO of the Essex Sector, North Weald on 1.10.45, flying it until 3.46.
DB Meteor F.8 WK979 flown by Air Commander Sir Dermot Alexander Boyle, CBE, AFC, then AOC-in-C Fighter Command, around 1953.
DBH Unidentified Kittyhawk flown around 1942/43 by Mjr D.B.Hauptfleisch, temporary CO of 2 Squadron, SAAF. It was in effect an adaptation of the normal code for this squadron.
DC Used on a Hurricane of 286 Squadron at Weston-super-Mare around 7.42 by 'Digger' Coburn (Station CO?)
DEK Vampire FB.5 VZ841 flown by Squadron Leader D.E.Kingaby, DSO, DFM & 2 Bars, CO of 72 Squadron North Weald around 1951/52. (also coded 'LBP' and 'PWB')
DFS Used by Wing Commander D.F.Sheen, DFC, the Wing Commander Flying at Leuchars 1955/56, initially on Hunter F.1 WW641, then later on F.4 XF993 (the latter was also coded 'GAM')
DFS Code also used by Group Captain Dennis F.Spottiswode, CBE, DSO, DFC, the Station Commander Linton-on-Ouse 6.54 to 9.56 on Sabre F.4 XD736.
DGM Used around 1944/45 on both Auster V RT514 and possibly Spitfire LF.IX PL463 by Group Captain D.G.Morris, DSO, DFC, who then commanded 132 Wing.
DGS Used by Wing Commander D.G.Smallwood, DSO, MBE, DFC on a number of aircraft, including an unidentified Spitfire when he was CO of 286 Squadron at Weston-super-Mare in 10.42. With the Predannack Wing he had Spitfire IX MH333 in 4.44. As Station Commander at Biggin Hill 1953 to 1955 he flew successively Meteor F.8s WH480 and WL169, then from 9.55 Hunter F.5 (previously 'PT').



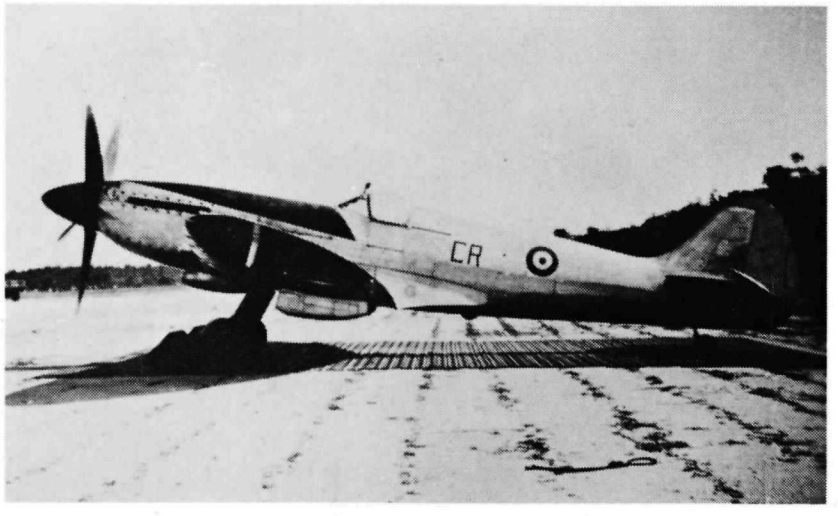
Spitfire IX MJ684(?) "B-H"

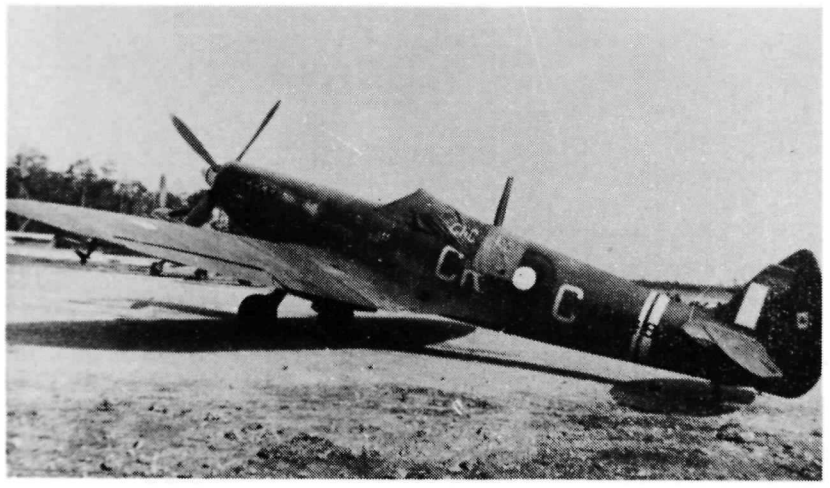
DH Used by Wing Commander D.L.Hughes, DFC, AFC, CO of 33 Squadron at Middleton St.George from 4.60 to 11.62, initially on Javelin FAW.7 XH835, then from late 1960 on FAW.9 XH773.
DH The most recent known use of a personal code, by Wing Commander David Hamilton, CO of 11 Squadron at Leeming, on Tornado F.3 ZE765 in 11.88.
DHL An unidentified Kittyhawk flown by Col Doug H.Loftus, DSO, DFC, who was Wing Leader of 7 SAAF Wing from 2.43 to 4.44
DJF Used by Squadron Leader D.J.Fowler, CO of 19 Squadron at Church Fenton, from 10.56 on Hunter F.6 XG159, changing to XG167 in 6.57.
DJS As Wing Leader and later CO of 123 Wing, Group Captain D.J.Scott, DSO, OBE, DFC used this code successively on Typhoons R8843, MM986 and MN941, and also by 2.45 on an Auster III. He became CO of 84 Group Servicing Unit in 2.45, when he transferred the code to Typhoon PD605.
DJW Used by an unidentified officer at RAF Cranwell in 1968 on Jet Provost T.4 XR643, which had a blue fin and also carried code '76'.
DMA Used on a Spitfire flown at Culmhead in 1.44, flown by Wing Commander D.G.Smallwood (possibly as CO of 286 Squadron), but belonging to another officer, not yet identified.
DPA This code was used on at least two aircraft of the Fighter Command Communications Squadron, these being Proctor III LZ683 at Northolt in 1945/46 and Mosquito PR.34 at Bovingdon in 1946/8. The initials probably indicate that they were reserved for use by officers of the Directorate of Policy (Air Staff)
DRS Used Group Captain D.Ross Shore, DFC, DFC on Mustang IV KM182 when he was CO of 239 Squadron in 1945.
DS This code was used at least twice by Wing Commander W.G.G.Duncan Smith, DSO, DFC & Bar, DSC & 2 Bars. First as CO of 324 Wing in 8.44 on a BS-serialled Spitfire IX (probably either BS884 or BS894). Then in 1953/4 as station commander at RAuxAF Turnhouse 1953/4 on Vampire FB.5 WG833.
DT Squadron Leader Don M. 'Butch' Taylor, CO of 195 Squadron used code 'JE-DT' on Typhoon EK273, which was lost on a shipping strike while being flown by Wing Commander F.Coltishall on 6.7.43. It was promptly replaced by JP438 coded 'DT'.

Hurricane I "CJ", owner unidentified (via P.H.T.Green)

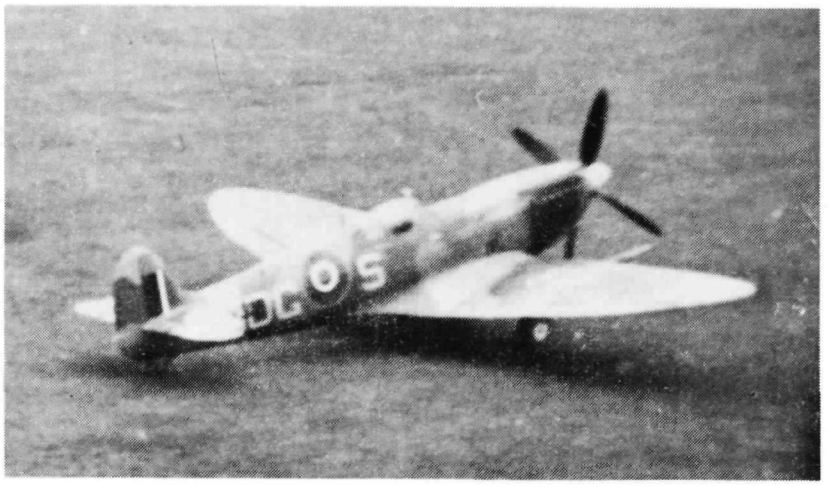


Spitfire XVIII "CR", Changi, 1947 (via Peter Arnold)





Spitfire VIII A58-484 "CR-C"



Spitfire IX MH333 "DGS"

DW Code seen in 1944 on an unidentified Spitfire IX. One possibility is that the code related to Wing Commander R.M.B.Duke-Woolley.

DW This code was used again, by 1417 Flt at Khormaksar in 3.67 on Hunter FR.10 XE599 flown by an unidentified Flight Lieutenant.

EC Meteor NF.14 WS745 carried code 'EC' on the fuselage and the individual letter 'J' on the fin with the Central Flying School in 1955/58, but the owner remains unidentified.

ED During 1942/43 this code was used by the (unidentified) CO of 72 OTU at Wadi Gazouza on Tomahawk IIB EK431.

EDM From 5.45 this code was used by Wing Commander E.D.Mackie, DSO, DFC & Bar on a Tempest V identified incorrectly as SN679, and later on SN228.

EH Used on 124 Wing Typhoons by Wing Commander Erik Haabjoern, DFC, who was the Wing Commander Flying from 19.1.44 until 25.8.44. Definitely used on MN358, and believed previously on MN406 and MN542, both of which were ditched in the English Channel, on 9.5.44 and 22.5.44 respectively.

EHT Wing Commander E.H.Thomas, DFC, while Wing Commander Flying Biggin Hill from 7.42, used Spitfire IXs BR369 and BS240. The latter was taken over by Wing Commander R.M.Milne, DFC, who was shot down in it on 14.3.43, becoming a PoW.

EJ Used on Mosquito FB.VI RF645, probably while with 138 Wing 10.45 to 3.46

EJC Used on Spitfire PT396 by Wing Commander E.F. 'Jack' Charles, date unknown. He was Wing Leader at Middle Wallop, Portreath and Wittering at various times.

EL Seen on Auster III MZ223 with Austers at Rearsby 6.44. The aircraft had previously served with 660 Squadron, which suggests the code was that of the squadron commander, Mjr F.N.Lane, though 'FL' would seem more likely if that is the case.

ELM Used on Hunter F.4 XE714 at Bruggen in 1957. The aircraft was allocated to the Wing Leader Bruggen 2.56 to 3.57, but the code was possibly that of Group Captain E.G.L.Millington, CBE, DFC

EM Used by Group Captain E.M.Donaldson, DSO, DFC on Vampire FB.5 WA396 when he was Wing Leader Fassberg in 1952.

ENW Used on an unidentified Spitfire V or IX with a serial number ending in '311' by Wing Commander E.N.Woods, DFC & Bar, who commanded 249 Squadron in Malta from 7.43 until being killed 16.12.43.

EP Used on an unidentified Spitfire IX at the Fighter Leaders School, Milfield between 12.44 and 4.45

EPW Reported used on an unidentified Spitfire IX by Wing Commander E.P.Wells, DSO, DFC & Bar, the Wing Commander Detling around 5.44.

ERB Used from 3.44 on Typhoon MN291 by Wing Commander E.R.Baker, who was CO of 146 Wing from 1.2.44. This was replaced in 4.44 by MN485, and the code is also presumed to have been carried on MN754 in which he was killed on 16.6.44.

ES This code was used on a succession of aircraft by Group Captain (later Air Commodore) F.S.S.Stapleton, DSO, DFC, the station commander at Linton-on-Ouse from 10.49, becoming Sector Commander, Northern Sector 12.1.56. The aircraft were officially allocated to the Wing Leader Yorkshire Sector at Linton-on-Ouse, this unit becoming the Northern Sector on 1.12.50, later moving to Church Fenton. First known use was on Meteor F.4 VT266 at Linton in 3.50, this being replaced by VT308 in 6.50. The code was also used briefly on Auster AOP.6 TW575 around 4.50 - 5.50. There was no known use for a time from 1.51, but by 6.56 the code was carried on Meteor F.8 WK991 (also coded 'VSB' and 'HH' at various times). Finally the code was borne on Hunter F.6 XE618 around 9.57 - 4.58, this machine also carrying an Air Commodore's pennant.

ET Code carried on Meteor F.8 WK942 of the Central Fighter Establishment at West Raynham around 7.54, owner unidentified.

EW Used by Group Captain E.W.Whitley, DSO, DFC, the Commandant of the Fighter Leaders School at Milfield around 8.44 on Spitfire Vb EP770, being carried as 'EW-?'.

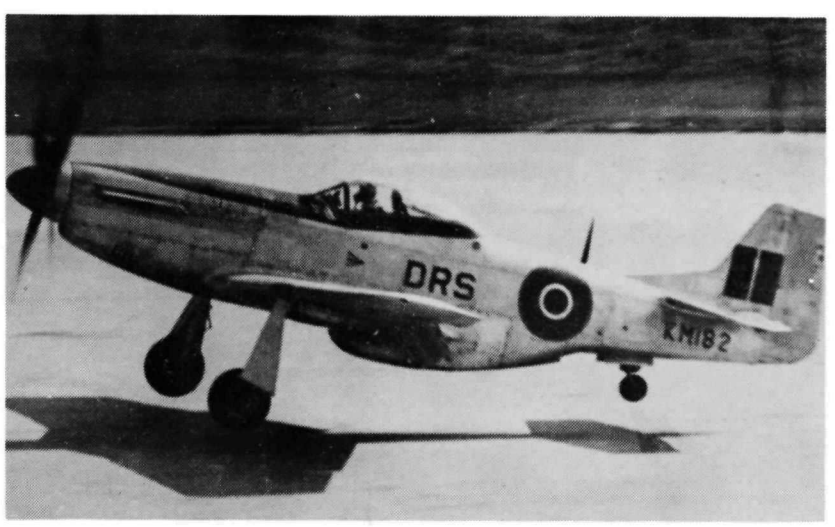
EWW Sabre F.4 XD763 carried this code at Linton-on-Ouse around 7.55 when flown by Wing Commander Eric W.'Ricky' Wright, DFC, DFM, the Wing Commander Flying.

FA Used on Spitfire Vb ER934 of 73 OTU Fayid at one time.

FA Code also used on Anson X NK589, which only served with 1322 Air Delivery Letter Service Flight.

Typhoon IB MN941 "DJS"

Mustang IV KM182 "DRS", 239 Wing, 1946



WRITE-OFFS 1959

XE648 of No.54 Squadron on nose at Nicosia, 9.9.59

ROYAL AIR FORCE

Date	*Type*	*Serial*	*Unit*	*Location*	*Cause*
14.1.59	Valetta C.1	VW817	84 Sqn	Firq, Oman	Tyre burst on landing; swung and tipped up
16.1.59	Canberra PR.7	WJ818	13 Sqn	Akrotiri, Cyprus	Lost hydraulic fluid; undercarriage jammed up; bellylanded
20.1.59	Meteor T.7	WH206	SF Khormaksar	Mogadishu, Somaliland	Ran out of fuel; abandoned (1)
20.1.59	Meteor FR.9	WX978	SF Khormaksar	Sharjah	Tyre burst on take-off; swung and hit obstruction and undercarriage collapsed
26.1.59	Dakota C.4	KJ810	209 Sqn	Kuala Lumpur, Malaysia	Took off with elevators locked; stalled and crashed
2.2.59	Provost T.1	WV676	2 FTS	Shawbury	Ran out of fuel on approach and tipped up in forced landing
17.2.59	Hunter F.6	XE619	1 Sqn	Honington	Hit tree on approach to Stradishall; crashlanded at Honington
18.2.59	Javelin FAW.1	XA569	87 Sqn	Near Bruggen, West Germany	Ejection seat fired in flight (1)
19.2.59	Meteor T.7	WL478	RAFFC	Theddlethorpe All Saints., Lincs	Stalled and dived into ground during asymmetric flying practice (1)
21.2.59	Sycamore HR.14	XE319	194 Sqn	6m S of Kuala Lumpur, Malaysia	Lost rotor blade and spun into ground; DBF (2)
28.2.59	Swift FR.5	XD967	2 Sqn	Jever, W.Germany	Undercarriage jammed; bellylanded
4.3.59	Canberra B(I).8	XH207	59 Sqn	3m S of Sorpe Dam, West Germany	Flew into ground in bad visibility (2)
9.3.59	Javelin FAW.2	XA802	46 Sqn	Sylt, W.Germany	Engine exploded on start up; caught fire
18.3.59	Canberra B.6	WJ761	9 Sqn	Luqa, Malta	Missed runway landing at night; overshot but touched down and undercarriage raised to stop; swung and nosewheel collapsed; hit WH973
20.3.59	Hunter F.4	WV410	229 OCU	Chivenor	Undershot landing and hit sea wall; caught fire
24.3.59	Hunter F.6	XG208	26 Sqn	3m W of Gutersloh, West Germany	Engine lost power and radio failed; abandoned
8.4.59	Twin Pioneer CC.1	XM287	78 Sqn	30m W of Khormaksar, Aden	Both engines cut; forcelanded and overturned
8.4.59	Twin Pioneer CC.1	XM288	78 Sqn	½m W of Khormaksar, Aden	Both engines lost power; ditched
9.4.59	Swift FR.5	XD928	2 Sqn	Rantum, Sylt, West Germany	Engine cut; abandoned
10.4.59	Vampire T.11	XH264	28 Sqn	Tat Hong Channel, Hong Kong	Engine failed; abandoned
24.4.59	Anson C.19	VM308	RAFTC	Roborough	Overshot landing into cutting
27.4.59	Sycamore HR.14	XF267	194 Sqn	3½m N of Kuala Lumpur, Malaysia	Lost rotor blade; spun into ground
4.5.59	Provost T.1	XF882	RAFC	½m E of London-thorpe, Lincs.	Abandoned in spin
5.5.59	Anson C.19	TX189	SF Colerne	Colerne	Swung on landing and undercarriage collapsed
6.5.59	Hunter F.4	XF996	229 OCU	Chivenor	Ailerons jammed on approach; abandoned
11.5.59	Meteor T.7	WN318	BCCS	Benson	Undercarriage jammed; bellylanded
20.5.59	Anson T.21	VV955	CCCF	7m WSW of Llandudno, Denbigh	Flew into mountain in cloud (3)
25.5.59	Chipmunk T.10	WP828	Glasgow UAS	In Tay 2m W of Newburgh, Fife	Hit water in turn and cartwheeled

Date	*Type*	*Serial*	*Unit*	*Location*	*Cause*
29.5.59	Hastings C.1	TG522	36 Sqn	1m S of Khartoum, Sudan	Engine cut; stalled on approach and crashlanded (5)
2.6.59	Canberra B.6	WT304	139 Sqn	Nr.El Adem, Libya	Flew into ground on night target marking exercise (3)
3.6.59	Meteor T.7	WL481	RAFFC	6½m SE of Driffield	Abandoned after elevator control failure
7.6.59	Chipmunk T.10	WZ880	Bristol UAS	2½m ENE of Filton	Abandoned in spin (1)
8.6.59	Balliol T.2	WG217	S of FC	Hurn	Undercarriage collapsed on landing
12.6.59	Vampire FB.5	VV640	Ferry Wing	Off St.Athan, Glam	Crashed in sea on let-down to Llandow (1)
16.6.59	Meteor F.8	WH256	Malta C&TTS	Takali, Malta	Abandoned take-off; overshot runway and hit walls
18.6.59	Vampire FB.5	VZ357	5 FTS	Oakington	Brakes failed on landing; hit WE846 and XD463
18.6.59	Vampire FB.5	WE846	5 FTS	Oakington	Hit by VZ357 while parked
18.6.59	Vampire T.11	XD463	5 FTS	Oakington	Hit by VZ357 while parked
20.6.59	Javelin FAW.4	XA750	3 Sqn	2m NW of Norvenich, West Germany	Rolled after take-off and spun into ground (2)
22.6.59	Venom FB.4	WR475	Ferry Wing	Khormaksar, Aden	Ammunition loading panel opened on take-off; stalled on approach and hit ground (1)
3.7.59	Hastings C.1	TG580	48 Sqn	Gan, Maldives	Swung on landing and undercarriage collapsed
3.7.59	Meteor T.7	WA681	81 Sqn	Tengah, Singapore	Bellylanded at night
5.7.59	Canberra B(I).8	WT331	88 Sqn	Sharjah Creek	Crashlanded on attempted overshoot in bad weather; hit water
5.7.59	Meteor T.7	WL480	12 Gp CF	Leconfield	Yawed on overshoot and rolled into ground (1)
7.7.59	Javelin FAW.4	XA722	72 Sqn	Leconfield	Engine cut after take-off; returned but SOC
8.7.59	Canberra B.2	WJ649	231 OCU	½m NE of Bassingbourn	Engine cut; rolled on single-engined approach and dived into ground (3)
9.7.59	Javelin FAW.7	XH750	33 Sqn	5m W of Horsham St.Faith	Hit by lightning; caught fire and abandoned
9.7.59	Pembroke C.1	WV745	SF El Adem	Akrotiri, Cyprus	Brakes failed; swing into ditch while taxying
13.7.59	Swift FR.5	XD955	79 Sqn	Gutersloh, W.Germany	Landed after hydraulic fire in rear fuselage; SOC
17.7.59	Swift FR.5	XD961	79 Sqn	2m E of Gutersloh, West Germany	Engine cut; abandoned
20.7.59	Vampire T.11	XD627	RAFC	Off Lincolnshire	Hit sea recovering from dummy RP dive; returned to base but SOC
30.7.59	Javelin FAW.7	XH789	64 Sqn	Akrotiri, Cyprus	Overshot emergency landing after hydraulic failure
31.7.59	Whirlwind HAR.2	XJ766	22 Sqn	Off Constantine Bay, Cornwall	Engine cut during SAR search; ditched and sank
4.8.59	Meteor F.8	WL142	APS Sylt	Off Sylt, W.Germany	Collided with WK864 and lost tail; abandoned
5.8.59	Anson T.22	VM306	A&AEE	Boscombe Down	Undershot landing
7.8.59	Hunter F.4	XF986	229 OCU	Sutton, N.Devon	Pilot ejected in spin during aerobatics
20.8.59	Victor B.2	XH668	A&AEE	Off Milford Haven, Pembrokeshire	Lost pitot head; dived into sea (5)
24.8.59	Chipmunk T.10	WP982	1 FTS	Linton-on-Ouse	Hit extinguisher trolley while taxying
25.8.59	Hunter F.6	XF502	74 Sqn	Cantley, Norfolk	Collided with XF425; caught fire and dived into ground (1)
25.8.59	Hunter F.6	XF425	74 Sqn	Cantley, Norfolk	Collided with XF502 and abandoned
26.8.59	Canberra PR.7	WT540	13 Sqn	Akrotiri, Cyprus	Engine shut down; yawed on approach and bellylanded off runway
27.8.59	Swift FR.5	WN124	2 Sqn	5m W of Rinteln, West Germany	Engine cut; abandoned
1.9.59	Javelin FAW.7	XH775	23 Sqn	Brundall, Norfolk	Collided with XH781 during night interception and abandoned
1.9.59	Javelin FAW.7	XH781	23 Sqn	Brundall, Norfolk	Collided with XH775 during night interception (2)
7.9.59	Venom FB.4	WR400	208 Sqn	Eastleigh, Kenya	Brakes failed taxying; ran into ditch
8.9.59	Canberra B(I).8	WT335	88 Sqn	Hochneukirch, West Germany	Rolled at low altitude and dived into ground (2)
9.9.59	Hunter F.6	XE648	56 Sqn	Nicosia, Cyprus	Overshot landing and hit fence
11.9.59	Valiant B.1	XD869	214 Sqn	2¾m NE of Marham	Flew into ground after night take-off (6)
14.9.59	Canberra B.6	WH982	9 Sqn	1¼m SSW of Idris, Libya	Both engines cut; forcelanded and caught fire
17.9.59	Sycamore HC.14	XE307	103 Sqn	Tymbou, Cyprus	Engine cut in hover; rotors hit ground; rolled over
23.9.59	Anson T.21	WJ514	SF Binbrook	Leeming	Swung on landing and tailwheel collapsed
24.9.59	Provost T.1	XF884	RAFC	Barkston Heath	Swung on landing and undercarriage collapsed
26.9.59	Anson C.19	VM322	SF N.Coates	Jurby	Tyre burst on take-off; swung and broke back
29.9.59	Javelin FAW.5	XA662	228 OCU	30m W of Leeming	Engine cut; failed to relight; abandoned
2.10.59	Meteor T.7	WF835	5 FTS	1m ENE of Oakington	Abandoned in spin (1)
4.10.59	Venom FB.4	WR421	60 Sqn	Tengah, Singapore	Undercarriage jammed; bellylanded
6.10.59	Provost T.1	WV566	1 FTS		Collided with WV578 and crashed
6.10.59	Provost T.1	WV578	1 FTS		Collided with WV566 and crashed
14.10.59	Javelin FAW.7	XH720	33 Sqn	Nicosia, Cyprus	Swung on landing and undercarriage collapsed
15.10.59	Vampire T.11	XE897	5 FTS	4¾m W of Oakington	Collided with WZ495 during formation aerobatics; returned but SOC
15.10.59	Vampire T.11	WZ495	5 FTS	5m W of Oakington	Collided with XE897 during formation aerobatics and dived into ground
24.10.59	Pioneer CC.1	XG561	209 Sqn	Ipoh, Malaysia	Hit radio mast on take-off in bad weather and lost wing (2)
26.10.59	Swift FR.5	WK304	2 Sqn	4m ESE of Jever, W.Germany	Lost power on ground controlled approach; abandoned

Date	*Type*	*Serial*	*Unit*	*Location*	*Cause*
29.10.59	Venom FB.1	WE377	28 Sqn	Off Kai Tak, Hong Kong	Overshot flapless landing after brake failure into sea
1.11.59	Chipmunk T.10	WZ870	SF Duxford	Duxford	Swung on take-off and hit runway light; forcelanded and tipped up
10.11.59	Hunter F.4	XF953	RAFFC	-	Damaged by bird strike; SOC
11.11.59	Hunter F.6	XJ641	93 Sqn	Off Frisian Is	Missing; presumed crashed in sea (1)
17.11.59	Vampire FB.5	WA413	3/4 CAACU		Damaged in ground accident; SOC
18.11.59	Meteor T.7	WL424	APS Sylt	2m SE of Grinsted, Denmark	Radio failed; passenger baled out (1); bellylanded out of fuel
28.11.59	Canberra B.2	WH699	RAFFC	2m WSW of Strubby	Control lost after take-off; abandoned (1)
18.12.59	Sycamore HR.14	XL828	SAR Flt, Khormaksar	23m NNE of Ahwar, Aden	Encountered resonance on landing; rotor blades shattered
30.12.59	Vampire T.11	XE830	1 FTS	1½m SW of Linton-on-Ouse	Flew into ground after night take-off (1)
				FLEET AIR ARM	
13.1.59	Sea Hawk FB.5	WM926	802 Sqdn	from Brawdy	Mid-air collision with WM939, crashed in sea
13.1.59	Sea Hawk FB.5	WM939	802 Sqdn	from Brawdy	Crash landed after mid-air collision with WM926
21.1.59	Sea Venom FAW.21	WW150	Airwork FRU	10m W of Strumble Head, South Wales	Collided with XG678 during an exercise and crashed
21.1.59	Sea Venom FAW.21	XG678	Airwork FRU	10m W of Strumble Head, South Wales	Collided with WW150 during an exercise and crashed
28.1.59	Sea Hawk FGA.6	WV830	803 Sqdn	HMS Albion in FE	Crashed on landing
2.2.59	Sea Venom FAW.21	WW288	738 Sqdn	Lossiemouth	Flew into ground shortly after take-off
5.2.59	Sea Hawk FGA.6	WV838	738 Sqdn	Lossiemouth	Crashed on take-off
26.2.59	Sea Venom FAW.21	WW295	809 Sqdn	HMS Albion	Crashed in sea after catapult launch
3.3.59	Sea Hawk FGA.6	WV917	801 Sqdn	HMS Centaur	Ditched when ejector seat drogue streamed during catapult take-off
12.3.59	Sea Hawk FGA.6	XE455	801 Sqdn	HMS Centaur off Africa	Crashed in sea after catapult take-off
14.4.59	Whirlwind HAS.7	XM663	824 Sqdn	Culdrose	Clutch failure while hovering just above ground, fell on to port side breaking off rotors and tail section
21.4.59	Whirlwind HAR.3	XG579	815 Sqdn	off Portland	Ditched after engine and rotor revolutions dropped in hover at ten feet
29.4.59	Hiller HTE-2	XB521	705 Sqdn	Predannack	Overturned after gust of wind caused main rotor to hit gound
29.4.59	Whirlwind HAR.3	XJ397	815 Sqdn	off Portland	Ditched
5.5.59	Sea Hawk FB.3	WM986	736 Sqdn	Riverlean Burn, 13m from Nairn	Struck ground in hilly country in near vertical position and disintegrated
26.5.59	Sea Venom FAW.22	WW289	891 Sqdn	HMS Centaur	Brakes failed while landing, hit another aircraft and went over starboard side
26.5.59	Sea Hawk FGA.6	XE453	804 Sqdn	HMS Albion	Partial arrest on landing, went over port bow
25.6.59	Sea Venom FAW.22	XG696	891 Sqdn	HMS Centaur	Bolted on heavy landing, struck two parked Sea Hawks, climbed slowly away, crew ejected
20.7.59	Whirlwind HAR.3	XG584	815 Sqdn	Portland harbour	Ditched after engine failure at 300 ft
12.8.59	Dragonfly HR.5	VX600	Ships Flt	HMS Centaur in FE	Ditched after engine explosion at 100 ft
28.8.59	Sea Venom FAW.21	WW266	Airwork	Brawdy	Power loss after take-of, forcelanded but crashed short of runway
15.9.59	Sea Venom FAW.21	WW194	738 Sqdn	Lossiemouth	Crashed on take-off and caught fire
16.9.59	Sea Venom ECM.21	XG608	831 Sqdn	Yeovilton	Catapult bridle fouled starboard undercarriage and flaps on take-off, diverted to Yeovilton and crash landed on runway
17.9.59	Gannet AS.4	XA424	814 Sqdn	Winkleigh	Crashed at end of runway during rehearsal for display
19.9.59	Sea Venom FAW.21	WW297	766 Sqdn	nr Fremlingham South Wales	Collided with XG617 during Chivenor Battle of Britain display
9.9.59	Sea Venom FAW.21	XG617	766 Sqdn	nr Fremlingham	Collided with WW297 during Chivenor Battle of Britain display
22.9.59	Skyraider AEW.1	WT953	849 Sqdn	off Lofoten Islands	Went into sea while flying from HMS Victorious
24.9.59	Sea Hawk FGA.6	XE385	RNARY Fleetlands	Nr Isle of Wight	Test flight from Lee-on-Solent after repair and modernisation, went out of control over Ford, pilot ejected
28.9.59	Whirlwind HAR.3	XG575	737 Sqdn	nr Portland	Ditched after bang followed by complete engine failure
7.10.59	Sea Venom FAW.22	WW213	891 Sqdn	HMS Centaur	Broke out of catapult while on full power, went over port side
15.10.59	Sea Vampire T.22	XA117	Stn Flt	Yeovilton	Crashed on landing
16.10.59	Sea Hawk FGA.6	XE445	800 Sqdn	nr Lossiemouth	Mid-air collison with another Sea Hawk, pilot ejected
10.11.59	Scimitar F.1	XD281	807 Sqdn	nr Aberfoyle, Perthshire	Abandoned after controls locked on tactical reconnaissance exercise
19.11.59	Sea Venom FAW.21	XG667	738 Sqdn	Lossiemouth	Crashed on landing
19.11.59	Scimitar F.1	XD266	803 Sqdn	HMS Victorious	No.1 arrester wire parted on landing, crashed into sea
20.11.59	Skyraider AEW.1	WV179	849B Flt	Caglian Bay	Ditched while en route HMS Victorious
9.12.59	Dragonfly HR.5	WP501	Ships Flt	HMS Vidal	Lost power on take-off and sank
29.12.59	Sea Hawk FGA.6	XE443	800 Sqdn	HMS Centaur in Far East	Caught fire after fuel spillage during catapult launch, ditched ahead of ship

FEED BACK

THE FRENCH BARRACUDA

Mr.N.A.Webber advises that a photograph of a French Barracuda appears on page 240 of "Histoire de l'Aviation Militaire l'Armée de l'Air" (Christienne et Lissavrague) as used by the Escadrille de Liaison Aérienne "Vaucluse" during the period 1947-56. According to "Histoire du Transport Aerien Militaire Français, ELA 56 served the French counter-intelligence service - the SDECA. This would make the Barracuda an Air Force, as well as a Navy, type.

However, SDECA is not likely to be dressed as commandos. But there is always the horse, nobody having yet identified him (or her)....

SUNDRIDGE AIRFIELD

From Mike Rice comes some details of Sundridge which seems to be missing from the roll of World War Two military airfields.

This airfield lies in the corner formed by the M.25 and A.25 at Combe Bank. It appears to have opened before World War One when the owner of Combe Bank House, Robert Mond, sponsored the de Bolotoff aircraft factory, set up by Prince Serge de Bolotoff. He had designed a triplane at Brooklands in 1913.

Hangars were erected which still exist as farm storage. Just what the de Bolotoff Aeroplane Works built during World War One seems shrouded in mystery but one aircraft from Sundridge, possibly the only one, crashed in 1915 at Bessels Green, and was reputed to be a de Bolotoff design.

The relatively well-known SDEB 14, powered by a 200 hp Curtiss engine, survived the war and was registered as G-EAKC in August 1919 but does not appear to have carried its registration. What happened to it is not recorded and it may be that this was the sole aircraft produced by the company which was worked on for years. In appearance, it looked more like a 1914 than 1918 design!

It is recorded in an article by Len Pilkington in a local history magazine that the company had a team of pilots headed by test pilot Lietenant Olechnovitch. What did they all find to do?

After the company closed, the sheds were used by West Kent Motor Services for their buses and some amateur aircraft construction took place. One was registered G-EAWS and an illustration shows it to be a parasol-winged monoplane powered by a 10 hp Singer engine from a car. It took (or rather bounced) off the ground on its first flight, ran on and turned over on hitting a ditch, with terminal damage. We leave the fact that G-EAWS was a Boulton and Paul P.9 to Archive to sort out.....

The Cobham Circus visited Sundridge in the 1930s and after the outbreak of war No.86 MU used the airfield as a salvage dump, mainly for German aircraft. However, Spitfires were serviced in the old hangars and at Combe Bank House.

The standard works fail to mention any de Bolotoff types apart from the SDEB 14 so what were the Types 2 to 13 , presuming the Brooklands triplane was Type 1? The Illustrated Encyclopedia of Aircraft fails to mention DB at all.

There seems to be a lot of unanswered questions revolving around Sandridge so we hope our readers will go digging in the archives.

TEMPEST II

First apologies for the bizarre appearance of the titling (and also the Chesapeake). It was the result of the editor trying to ensure that the person who sets the titles did not produce "Tempest Eleven" but used a Roman two. It failed miserably to do so.

A heartening amount of updating has come in on the allocations of the Indian-based Tempests from Norman Roberson, Joe Warne, Ray Sturtivant and Mr.G.C.Bailey. Much digging in log books and the foresight to be walking around the machines at the time they were in service have resulted in additional units and for convenience, the following table shows the changes in column 2 under serial number order.

PR529	20/5	PR656	5
PR532	5/3 RIAF	PR660	20/30/10 RIAF
PR535	5	PR668	30/10/RIAF
PR536	20/152/5	PR688	20
PR544	20/152/30/10 RIAF	PR714	5/3 RIAF
PR545	152/30/10 RIAF	PR715	5
PR546	5/152	PR718	5/9 RIAF
PR551	20/30/10 RIAF	PR721	30/10 RIAF
PR552	20	PR723	5
PR553	20	PR725	20
PR559	5	PR728	10 RIAF
PR564	152/5	PR729	30/10 RIAF
PR566	30/10 RIAF	PR731	20
PR567	30/20/10 RIAF	PR737	20
PR593	5	PR740	30/20
PR602	30/20	PR747	152
PR605	20/30/10 RIAF	PR751	30/10 RIAF
PR607	5/3 RIAF	PR787	30/10 RIAF
PR617	20/30/10 RIAF	PR801	20/30/10 RIAF
PR621	20	PR804	20/30/10 RIAF
PR623	5	PR814	20/152
PR648	30/20	PR815	5
PR651	30/10 RIAF	PR837	30
PR652	30/20	PR840	20/30
PR655	20	PR842	20/30/10 RIAF

THE AIRCREW ASSOCIATION

We have been asked to remind any serving or retired members of aircrew in any of the three Services of the above association. Membership is approaching 14,000 but there are many eligible who have not joined or may even be ignorant of the existence of the Aircrew Association.

Details from Fred McMillan, 16 Marescroft Road, Slough, Berks., SL2 2LW enclosing an SAE.

THE BURMESE VOLUNTEER AIR FORCE

John Havers ("Lilstock", Brighton Road, Lower Kingswood, Surrey, KT20 6SX) is gathering information on the aircraft of the above air arm. These had a "Z" prefix but some RAF aircraft were also used which were not given new serials during the Japanese invasion of Burma. Any help would be appreciated.

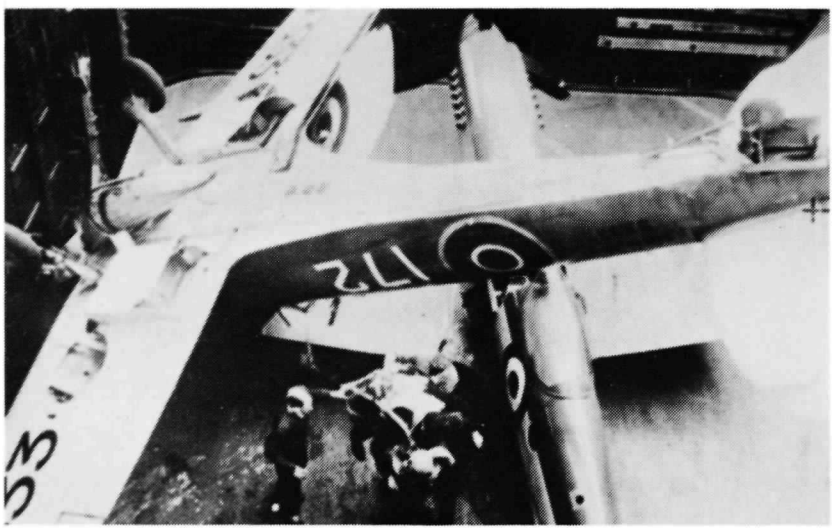
ROYAL EGYPTIAN AIR FORCE

Dr.David Nicolle, 8 Hill Rise, Woodhouse Eaves, Leicester LE12 8QI would like to hear from anyone with information on the REAF in its pre-jet years for a book he is preparing for the Smithsonian. Do not send him a photostat of the article in Aeromilitaria on the pre-war and wartime REAF as we have already done so!

PUZZLE PIC

Last issue's airfield was Ford.

PICTURE PAGES



Since the FAA crashes filled the allotted pages, the two photographs above were squeezed out. Top left is Seafire F.17 SX333 of 800 Squadron which taxied into the lift when it was taking down an 804 Squadron Seafire 47. Sea Mosquito TR.33 RV293 of 762 Squadron overshot Ford on 16 April 1948.

Reprinted from Royal Air Force Aircraft HA100-HZ999 is this photograph of Martinet HP413 with a very non-standard fairing. So far we have received no comment while the reference books do not appear to mention this and it is assumed it was for aerodynamic testing of a raised intructor's cockpit for the Martinet Trainer. Ideas are welcome.

Lined up at Issy-les-Moulineaux, Paris, are Goelands and Simouns for Armée de l'Air training schools, some in camouflage. Presumably in 1939 but more precise details would be welcome. Post-war, Issy became the main Paris heliport. Not having seen it since around 1963, presumably it is now even more hemmed in by buildings.

Three Hurricane photographs have come from Andy Thomas. Those at the top of the page show two Hurricane IIBs of the Russian Air Force crashed in Finland during 1942. That on the left is Z3577 and on the right is BM959.

Standing on its nose on the left is another Hurricane whose swastika appears to have weathered considerably while no serial is visible. The emblem looks like a stylised gibbet and is repeated on the tail. Or it could be in Chinese!

Below is an Oxford of the Portuguese Air Force. Again, no serial is visible. A number of Oxfords were supplied during World War Two but were replaced as twin-engined trainers by Ansons in the post-war years as the latter were easier to maintain than the wooden Oxfords.

FLEET AIR ARM AIRCRAFT ACCIDENTS AND LOSSES 1948

Date	*Type*	*Serial*	*Unit*	*Location*	*Cause*
19.1.48	Sea Fury F.X	TF901	WEE	Edmonton, Canada	Struck ground at full power after completing manoeuvre
22.1.48	Firefly FR.I	PP595	816 Sqdn	HMS Ocean off Malta	Banked steeply on TO and crashed in sea
28.1.48	Sea Fury F.X	TF919	803 Sqdn	Eglinton	Crashed (no details)
4.2.48	Sea Fury F.X	VB857	RAE	Farnborough	Stalled landing, tyre burst, port undercarriage collapsed, swung on to grass
5.2.48	Firefly FR.I	PP563	816 Sqdn	HMS Ocean in Mediterranean	Floated over wires hitting island and first barrier stanchion
25.2.48	Seafire F.XVII	SX343	800 Sqdn	HMS Triumph in Mediterranean	Ditched downwind after engine failure in formation at low altitude and sank immediately
26.2.48	Firebrand TF.IV	EK685	RNARY	Donibristle	Starboard wing broke off on test during normal circuit and aircraft dived into ground
27.2.48	Sea Fury F.X	TF949	807 Sqdn	Ashbrook, Drumahoe, Londonderry, NI	Crashed in flames after striking tree top
2.3.48	Seafire F.XVII	SX200	767 Sqdn	Milltown	Stalled on final approach and overturned
15.3.48	Seafire F.XVII	SX237	736 Sqdn	Codda Farm, Bolventor, Bodmin, Cornwall	Struck high ground in low cloud and bad visibility
15.3.48	Sea Fury F.X	TF944	803 Sqdn	Eglinton	Destroyed in fire on ground
17.3.48	Firefly FR.I	?	728 or 827 Sqdn	N of Ustica Islands, Mediterranean	Engine failure, baled out
31.3.48	Firefly FR.I	PP540	827 Sqdn	HMS Triumph in Mediterranean	Engine caught fire on starting up
14.4.48	Sea Otter ASR.I	RD885	Stn Flt Hal Far	Malta	Porpoised on landing and sank
15.4.48	Firefly FR.I	MB637	766 Sqdn	Lossiemouth	Swung to port after landing, starboard undercarriage collapsed followed by port undercarriage
15.4.48	Barracuda TR.V	RK556	783 Sqdn	Lee-on-Solent	Crashed in emergency landing after engine failure
16.4.48	Sea Mosquito TR.33	TW293	762 Sqdn	Felpham, nr Ford	Port engine failed while practising small field procedure
20.4.48	Seafire F.XVII	SX342	800 Sqdn	HMS Triumph in Mediterranean	Hook and tail struck rounddown landing
26.4.48	Sea Otter ASR.I	RD882	Stn Flt Eglinton	Eglinton	Starboard wheel failed to lower on landing
29.4.48	Sea Fury F.X	TF921	807 Sqdn	HMS Implacable	Crashed (no details)
1.5.48	Firefly FR.IV	TW754	810 Sqdn	HMS Implacable	Crashed (no details)
7.5.48	Seafire F.XV	SR446	766 Sqdn	Lossiemouth	Engine failure after TO, forcelanded wheels up on airfield
7.5.48	Firefly FR.IV	TW745	810 Sqdn	HMS Implacable	Violent climbing turn on TO, stalled in sea
12.5.48	Seafire F.XV	PR416	766 Sqdn	Lossiemouth Golf Course	Stalled turning into finals, hit ground in steep spin and broke back
15.5.48	Firefly FR.I	PP532	816 Sqdn	Fayid	Crashed on landing from HMS Ocean
18.5.48	Seafire F.XV	PR431	766 Sqdn	20m ENE of Fraserburgh	Propeller hit water during low flying in company with two other Seafires, ditched in sea fog
18.5.48	Firefly FR.1	PP621	827 Sqdn	Hal Far	Port oleo collapsed while landing
31.5.48	Dominie C.1	NR753	Yeovilton	RN Unit RAF Old Sarum	Collided in circuit with Anson
3.6.48	Mosquito TR.33	TW277	771 Sqdn det Tangmere	39m S of Nab Tower	Mainplane broke off in half roll at 6,000 ft during interception exercise on another Sea Mosquito, caught fire and crashed in sea
4.6.48	Harvard T.2b	KF501	799 Sqdn	1½m S of Long Sutton	Crashed during forced landing during IF practice
4.6.48	Seafire F.17	SX363	800 Sqdn	HMS Triumph in Mediterranean	Fuselage broke in half after struck rounddown landing heavily
8.6.48	Seafire F.15	PR477	Ferry Flt Arbroath		Fuel shortage in bad weather, emergency wheels down landing
11.6.48	Sea Hornet F.20	VR845	806 Sqdn	200 yds S of McNab's Light, Nova Scotia	Broke cloud diving steeply into sea
21.6.48	Firefly FR.1	PP524	827 Sqdn	HMS Triumph in Mediterranean	Crashed (no details)
21.6.48	Firefly FR.4	TW732	814 Sqdn	From Eglinton	Pilot based out after suspected fuel failure
22.6.48	Attacker proto	TS413	AAEE	Between Bulford and Durrington, Wilts	Dived into ground during measured TO and handling trials
25.6.48	Harvard T.3	EZ423	Stn Flt Eglinton	Maydown	Spun off slow roll at 1,000 ft
26.6.48	Seafire F.17	SX356	800 Sqdn	HMS Triumph in Mediterranean	Damaged in heavy landing
1.7.48	Sea Fury FB.11	VR942	802 Sqdn	Eglinton	Pilot baled out into River Foyle after mid-air collision during Eglinton Air Day
2.7.48	Sea Fury FB.11	TF987	807 Sqdn Donibristle	Newton Farm, East Wemyss	Engine cut and caught fire, attempted forcedlanding, broke in two on hitting ground

Date	*Type*	*Serial*	*Unit*	*Location*	*Cause*
2.7.48	Firefly FR.1	PP622	827 Sqdn	HMS Triumph in Mediterranean	Landed with port drift, port wheel trickled into GM Sponson
4.7.48	Seafire F.15	SW826?	767 Sqdn?	nr Brockentore, Kellas, nr Elgin	Collided with SW904 and burst into flames
4.7.48	Seafire F.15	SW904?	767 Sqdn?	nr Brockentore, Kellas, nr Elgin	Collided with SW904 and burst into flames
(One crashed in barley field at Thomshill, Birnie, other crashed 3 miles away. Not known which was which)					
5.7.48	Seafire F.47	VP434	804 Sqdn	Eglinton	Caught fire after landing accident
15.7.48	Sea Mosquito TR.33	TW288	790 Sqdn	Culdrose	Crashed after pilot baled out when starboard engine caught fire in flight
18.7.48	Firefly FR.1	PP643	827 Sqdn	HMS Triumph in Mediterranean	Ditched after engine failure
23.7.48	Seafire F.17	SX179	1831 Sqdn	Stretton	Starboard undercarriage leg collapsed landing
26.7.48	Mosquito T.3	VT596	762 Sqdn	Nanslow Farm	Practising feathered landing, crashed on approach to Culdrose
27.7.48	Hoverfly R.1	KK983	705 Sqdn	Old Mill Creek Woods, Dartmouth, Devon	Hit high tension cables
13.8.48	Firefly FR.1	MB583	736 Sqdn	from St.Merryn	Engine failure, ditched during shadowing exercise with HMS Roebuck
20.8.48	Firefly FR.4	VG991	810 Sqdn	HMS Theseus	Landing accident with VG999
20.8.48	Firefly FR.4	VG999	810 Sqdn	HMS Theseus	Landing accident with VG991
24.8.48	Seafire F.15	SR541	767 Sqdn	10m E of Lossiemouth Light	Crashed in sea after colliding with SX228 during formation exercise
24.8.48	Seafire F.17	SX228	767 Sqdn	3½m SSW of Covesea Light	Crashed in sea after colliding with SR541 during formation exercise
27.8.48	Mosquito T.3	VT623	Mtce Test Flight Culdrose	Lemin Reawla Farm, 2m SSW of Gwinear Road Station	Crashed in field on test flight
31.8.48	Seafire F.17	SX348	800 Sqdn	Hal Far	Fuselage damaged after drop tank became detached while taxying for TO
31.8.48	Firefly FR.4	VG978	814 Sqdn	HMS Vengeance	Bounced over all wires into No.1 barrier
15.9.48	Firefly FR.4	TW728	810 Sqdn	HMS Theseus	Hit on deck by VG958
20.9.48	Barracuda TR.5	RK555	No.3 Ferry Flight Anthorn	Bank of Solway Firth 2m from Anthorn	Dived into ground after TO, exploding and catching fire after impact
22.9.48	Firefly FR.1	PP430	827 Sqdn	HMS Triumph in Mediterranean	Crashed (no details)
28.9.48	Firefly AS.5	VT435	812 Sqdn	HMS Ocean off Malta	Crashed in sea
29.9.48	Sea Otter ASR.2	RD899	Ships Flt HMS Vengeance	HMS Vengeance	Landed with drift, caught No.5 wire, crashed over side, suspended by hook until ditched after catching fire
30.9.48	Sea Fury FB.11	VR925	802 Sqdn	HMS Vengeance	Crashed (no details)
30.9.48	Firefly FR.4	VG994	814 Sqdn	HMS Vengeance	Caught No.5 wire, propeller pecked deck
5.10.48	Firefly FR.1	PP556	827 Sqdn	Hal Far	Crashed (no details)
15.10.48	Firefly FR.1	PP428	827 Sqdn	Castel Benito	Crashed (no details)
15.10.48	Firefly FR.4	VG971	825 Sqdn	HMCS Magnificent	Stalled into sea on TO, hitting Bofors gun and whip aerial
25.10.48	Harvard T.3	EZ406	Stn Flt Hal Far	2m W of Ta Kali airfield	Collided with RAF Vampire VT808 and crashed out of control
3.11.48	Avenger 3	KE441	703 Sqdn	4m W of Belfast	Crashed into top of hill approaching Aldergrove
3.11.48	Firefly FR.1	DK546	767 Sqdn	HMS Illustrious	Floated over wires and barrier and ran over bows
12.11.48	Firebrand TF.5	EK833	813 Sqdn	nr Lands End	Crashed in field
17.11.48	Seafire F.47	VP444	804 Sqdn	HMS Ocean in Mediterranean	Crashed on deck
19.11.48	Seafire	?	767 Sqdn	Milltown approach	Stalled half mile from runway on final
27.11.48	Firefly FR.1	PP545	827 Sqdn	Hal Far	Crashed (no details)
30.11.48	Firefly FR.1	VG983	810 Sqdn	HMS Theseus	Throttle linkage broken, unable to throttle back, ordered to ditch
1.12.48	Firefly FR.4	VH121	810 Sqdn	HMS Theseus	Ditched (no details)
7.12.48	Sea Fury F.10	TF926	805 Sqdn	Eglinton	Forcelanded after engine failure
9.12.48	Mosquito PR.16	MM346	RDU	1m from end of Stretton runway	Port engine failed going round again on test flight, crash landed
13.2.48	Firefly FR.1	PP600	827 Sqdn	Hal Far	Emergency landing after engine failure while flying through severe rain squall
20.12.48	Seafire F.17	SX316	800 Sqdn	HMS Triumph in Mediterranean	Failed to catch wire, engaged No.1 barrier
23.12.48	Firefly AS.5	VT462	812 Sqdn	Hal Far	Crashed (no details)
30.12.48	Seafire F.17	SX333	800 Sqdn	HMS Triumph	Taxied into lift when it was down, landed on 804 Sqdn Seafire F.47

BOOKSHELF

GRUMMAN AIRCRAFT SINCE 1929 by René Francillon
Putnam - £30.00

A most welcome additional to the Putnam shelf covers the products of a company which provided the US Navy with the bulk of its aircraft from the mid-thirties to the present day. During World War Two, Grumman designs provided 12,275 Hellcats, 9,839 Avengers and 7,905 Wildcats for the US Navy and Fleet Air Arm. If it was the Wildcat that held back the tide of Japanese aggression in the first year of the Pacific War, it was the Hellcat that cleared the skies of Japanese aircraft as one by one the islands of the Japanese empire were invaded and occupied until the final invasion of Okinawa brought fighters within range of the Japanese home islands.

The Hellcat was probably the decisive ship-borne weapon on the closing stages of the war but Grumman's nautical tradition went back to those endearing little biplanes with their wind-up wheels, first the two-seat FF-1s which were the only ones to carry British roundels on the Canadian-built examples, followed by the dumpy F2Fs and F3Fs which typified the pre-war US Navy carrier aircraft.

Grumman also went in for utility seaplanes and produced the J2F Duck amphibian (645 built for a variety of users) and the Goose, Widgeon and Albatross/Mallard amphibious flying boats. Although the first two were designed as civil aircraft, they saw much military service while the sturdy Albatross was the backbone of the air-sea rescue service post-war until the helicopter reached a stage of development to match its range and capacity.

This is one of the best Putnams produced to date and its price reflects the ten-fold increase over the first Putnam - as does every other commodity we can think of. Coming along is a volume on General Dynamics (better known by its pre-agglomeration names of Consolidated, Vultee, North American, etc. We can't wait to see the one promised on Parnall Aircraft!

THE BRITISH AIRSHIP 1914-1918 by Patrick Abbott
Terence Dalton - £12.95

In recent years, there has been a resurgence of interest in airships, possibly spurred on by the sight of Airship Industries' modern blimps plying the skies around major sporting events around the world. Most of the books concentrate on rigid airships as these are by far the most glamorous of the breed, as well as having some spectacular accidents. The smaller and floppier non-rigids did a lot more effective work during World War One than the British rigids and over 200 were put into service for anti-submarine patrols.

This book is a readable account of the design and operations of the World War One airships from Britain. There is virtually nothing on the use of airships in the Mediterranean and the list of PRO records quoted implies that only the UK records were consulted.

A useful precis in 142 pages for those who want a starting point for the study of UK airship operations during The Great War with a good selection of interesting photographs to back up the chapters on various aspects of lighter-then-air flying.

DIE FLUGZEUGE DER K.U.K.LUFTFARTRUPPE UND SEEFLIEGER 1914 - 1918 by Erwin Hauke, Walter Schroeder and Bernhard Totschinger
H Weishaupt Verlag, Graz - £37.95

The price is high for only 224 pages but this guide to the aircraft flown by the Austro-Hungarian Empire during World War One can claim to widen our horizons and is a welcome antidote to a surfeit of Spitfire/Mustang/Bf 109 books.

The average citizen would be hard pushed to say who the Empire was fighting in 1914-18; the answer seems to be almost every major power but the Germans and Turks. Yes, even the Japanese got involved, albeit in a floating capacity.

To equip its air arm, the KuK (Kaiserlich und Koniglich) Luftfahrtruppe, the Austrian aircraft industry produced a wide variety of types, many being designs of German origin. Native products ranged from the PKZ-2 helicopter to the Lloyd 40.08. The former was a lethal-looking apparatus in which a lower framework contained three rotary engines driving contra-rotating rotors while perched above this was a dustbin containing the pilot-cum-observer. Something similar was recently developed but the crow's nest was a radar dome and not a man with binoculars. The latter was a massive three-engined triplane as high as it was long! In between were such oddities as the Aviatik 30.18 with two engines driving four propellers in tandem pairs - all of them tractors...

There were also some designs that built up the gunner's cockpit into towers to give all-round defence; we can only think of Sage as a similar British design but that was much neater than the Austrian battlements.

Each manufacturer was allotted a prefix to indicate origin followed by an individual aircraft number, e.g.17.11, a Lohner B.VII and 85.07, a W.K.F. D.1 built by the nostalgically-titled Wiener Karosserie-Fabrik. Serial allocations are listed as are the identification colours of the Fliks (the Fliegerkompanien, equivalent to the RAF squadrons). There are many interesting photographs of seaplanes and flying boats for the Seeflieger and 95% of the space is occupied by photographs and colour drawings.

Not cheap but an escape from the ordinary and much-recycled aviation literature that denudes the forests for its paper.

THE CHARTERHALL STORY by J.B.Thompson
Air Research Publications - £9.95

Charterhall was one of the many airfields that never became well-known except to the local populace who probably did not know what was going on beyond the perimeter fence and who complained about the noise. The inhabitants of Berwickshire had more cause to complain than most as Charterhall was the home of No.54 Operational Training Unit - a night fighter OTU. Between 1942 and 1945, the OTU turned out night fighter crews before moving to East Moor after the end of the war, being replaced for a short time by No.3 Armament Practice Station. Winfield was a satellite airfield and survives as an active airfield to this day, but with the more sedate aerodynes of the local flying club. Charterhall still has civil flying and in 1976 was occupied by the military for trials of the Rapier anti-aircraft missile.

The 198 pages give a good account of the every-day activities of the station and appendices include a listing of aircraft crashes resulting from a fairly high-risk type of training - especially since much of it was done in the dark over hilly countryside. Worth putting on the bookshelf for any RAF historian.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AEROMILITARIA

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The AIR·BRITAIN Military Aviation Historical Quarterly

Edited by James J Halley and Ray Sturtivant.

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Shepperton, Middlesex, TW17 ORW

Soon after this issue is distributed, the next episode of "Royal Air Force Aircraft" should be with our Sales Department. This one covers the series JA-JZ and consists of a lot of Spitfires! Most were Mk.Vs and Mk.VIIIs which were shipped overseas and thus came to a dead end in the movement records. Fortunately, a lot of research elsewhere has enabled their subsequent history to be traced and published for the first time.

Other types include Wellingtons, Lancasters, Halifaxes, Sea Otters, Beaufighters and Martinets from home production, Hurricanes from Canada and the beginning of a new allocation of Lend-Lease aircraft that includes Venturas, Catalinas, Coronados, Mariners and Liberator IXs. Cost to members is £6.00 (£9.00 to non-members) from the Sales Dept at 5 Bradley Road, Upper Norwood, London, SE19 3NT.

Coming along later this year is "The Beaufort File" and, trailing behind, "The Wellington File" but there were a lot of Wimpeys and it takes time to sort them all out so patience is requested.

If you are interested in winged things that fly from ships, there is something on the way for you too.

PUZZLE PIC

Last month's airfield was Wellesbourne Mountford. Our lament that we were running out of airfields was answered by Peter Green who provided a number including the one below. So now you can blame him....

IN THIS ISSUE

Although we have produced fairly comprehensive background details on such bombers as the Lancaster, Halifax, Hampden, Stirling and Whitley, there is one which is too small for such treatment. Hence the article on the Manchester with details similar to those found in later "Files". Our thanks to Cliff Minney whose drawings have graced the pages of AM since its inception (not to mention numerous "Files").

Ray Sturtivant has provided follow-ons to the earlier series on FAA crashes and personal codes carried on aircraft while Dave Vincent has sent in a piece of research on the Hudsons that were dispatched to to reinforce Singapore in the early days of 1942. Official records of these are confused since communications tended to break down after they passed India and many just tailed off in the movement records as being "presumed struck off charge".

Apologies to Eric Myall for unwittingly excising a section of his article on RAF SAR in the last issue. The missing bit is reproduced in Feedback.

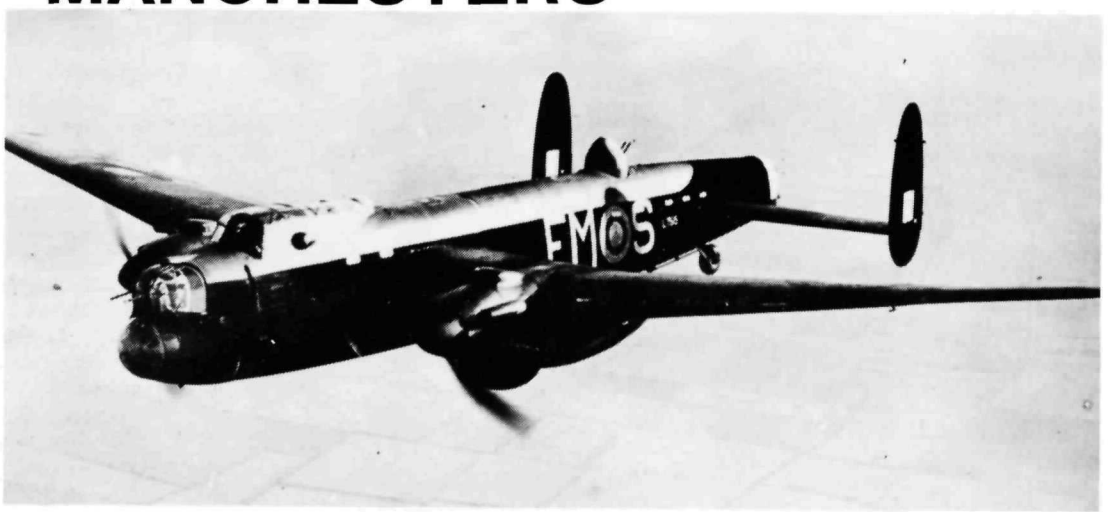
PANDORA HAVOCS

Mr.I.G.Payne (who sent in the Martinet photo in this issue) has been trying to find a genuine photograph of a Havoc equipped to carry aerial mines with 93 Squadron. Readers will recall (?) that these were originally laid by Harrows across the path of approaching enemy bombers and later some Havocs were modified for this use, doing considerable damage to the rooftops of Norwich in the process. The code name for these was "Pandora" and the mines were "Mutton" so such references pin-point one. If anyone can provide a photograph, please let us use it.

COVER PICS

The front cover shows a Hawker Fury of the Spanish Air Force (serial 4-3) fitted with Dowty cantilever undercarriage legs similar to those used on the Gladiator. On the back cover is a Y1B-17 with the original nose turret eliminated in production aircraft. No serial is visible. In the background is a Consolidated PB-2A two-seat fighter (PB for Pursuit Biplace)

MANCHESTERS



Manchester I L7515 of No.207 Squadron

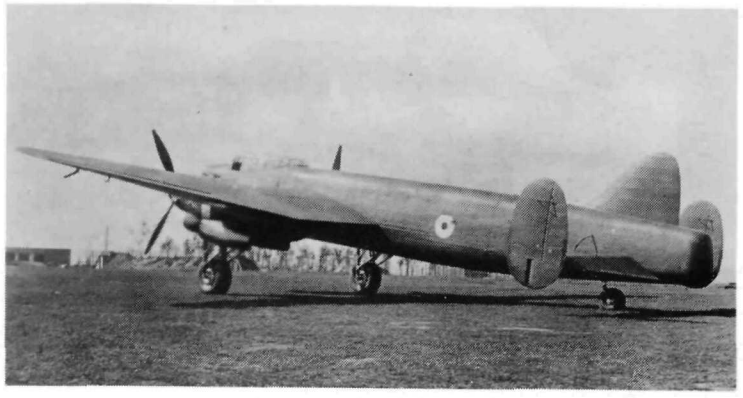
The issue of Air Ministry Specification P.13/36 for a large twin-engined bomber was paralleled by Specification B.12/36 for a four-engined heavy bomber and both reflected the views of the Air Staff at that time. The latter appeared as the Stirling while the former produced tenders from Avro with the Type 679 and Handley Page with its H.P.56. Both were intended to carry up to 12,000 lbs of bombs (including the ability to house an 8,000-pounder) and to have defensive armament in three power-operated turrets, nose, ventral and tail. The carriage of torpedoes was also specified.

The Handley Page project soon fell by the wayside to re-emerge as the Halifax but Avro pressed on with the development of their large twin-engined design which depended on the success of the new Rolls-Royce Vulture engine. These were fitted into Henley flying test-beds and soon showed signs of problems that were, in the event, never to be solved.

The prototype Manchester, L7246, made its first flight on 25 July 1939 at Ringway and handling problems were immediately evident. The Vultures failed to produce the rated horse-power and the high wing loading resulted in an extended wing being designed, giving it a 90-foot wingspan, just nine feet less than the four-engined Stirling.

Despite being flown from a civil airport, no mention of the new bomber reached the press and after eight test flights it was transferred on 28 November to the Aeroplane and Armament Experimental Establishment at its new home at Boscombe Down. Lack of directional stability resulted in a third fin being added, this being discarded on later production aircraft after improvements to the original twin fins and rudders and the fitment of a wider tailplane. The designation of Manchester IA was applied when this was done.

Prototype L7246 with central fin



The second prototype, L7247, first flew on 26 May 1940 and had its armament fitted, unlike the first prototype where the gun positions were faired over. It also had the extended wing and various other modifications.

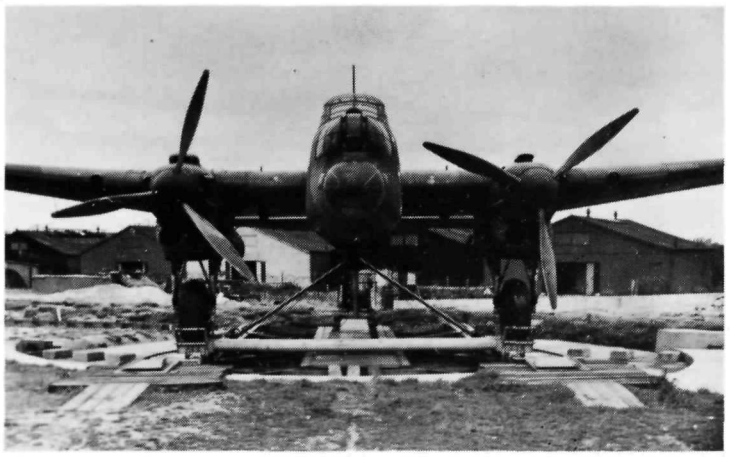
L7246 was now subjected to an idea that had been incorporated into the original specification. Frictionless take-off was intended to reduce the need for long runways and a hydro-pneumatic catapult developed at the RAE launched the aircraft, tail-up, into the air. After tests with a Heyford, the 37,000 lbs of Manchester was successfully launched. The idea was not pursued and concrete mixers proliferated.

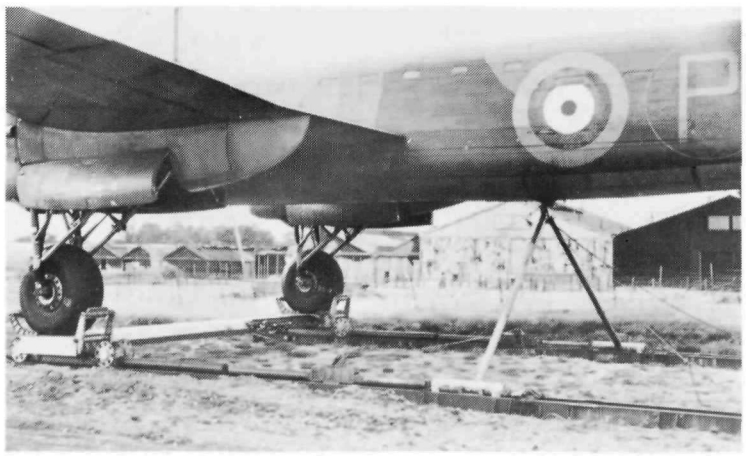
The first production Manchester, L7276, left for Boscombe Down on 5 August 1940, to be followed by the second on 25 October after many modifications had been incorporated. During the following month, Manchesters began to trickle through to No.207 Squadron at Waddington, L7279 having arrived on the first of the month. Before beginning operations, modifications were required, including the fitment of auto-pilots and balloon cable cutters. L7280 was used for turret trials.

In the meantime, Vultures were showing signs of being temperamental. Loss of power and complete failure resulted in forced landings, the power-to-weight ratio making it difficult to maintain height on one engine. Outbreaks of fire occurred and after the particularly bad crash of L7278 from this cause, all Manchesters were grounded on 13 April 1941 after 67 sorties, with four operational losses.

Raids were resumed on 2 May, when two aircraft carried 4,000-lb bombs to Cologne. The engine problems still occurred and on 17 May the Manchesters were again placed non-operational, returning to operational status on 21 June, only to be grounded again on the 30th.

Second prototype L7247





L7246 on accelerator at Farnborough (via P.Middlebrook)

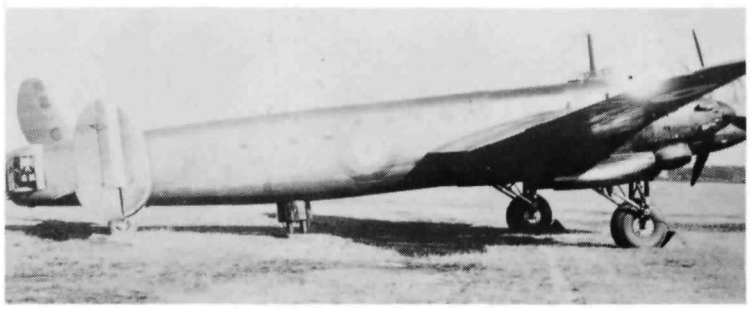
By the time this had been rescinded on 12 August, the Manchester had returned to its twin-fin state which was carried forward to the Lancaster. Many of the squadrons flying or scheduled to fly Manchesters received Hampdens to keep them operational.

By the end of 1941, the highest number of Manchesters dispatched on a single night was only 18 and thirty had been lost on operations. It was becoming obvious that Manchesters were not going to blacken the skies over Germany. How many of those reported missing had been the victims of engine failure rather than enemy action has not been ascertained but in view of the losses to this cause over the UK, some must have succumbed to the Vulture's shortcomings.

The last few weeks of operations saw a flurry of activity. On the last night of May 1942, no less than 46 were dispatched on the first "thousand-bomber raid" on Cologne, four being lost. Next night, 33 went to Essen for the loss of one and on a final operation against Bremen on 25/26 June, 20 were sent, losing L7289 as the last Manchester to be reported missing.

One VC was won on Manchesters, awarded to FO L.T.Manser of No.50 Squadron for bringing back L7301 from Cologne on 1 June 1942 and allowing his crew to bale out before the aircraft dived into the ground.

Once into service, modification to the defensive armament had resulted in the ventral guns being replaced by a dorsal turret and this was continued into the Lancaster. Dispensing with the ventral guns on all RAF heavy bombers was to cost Bomber Command dearly. The practice of German night fighters formating under bombers and using their obliquely-mounted cannon to fire upwards into the belly resulted in many losses, the tail turret guns not being capable of being depressed sufficiently to reach such attackers. Whether a ventral gunner could have picked up the shape of a night fighter in time with his limited view is a moot point but they would have been better than a total lack of defence from this sector. Surviving Manchesters went to Heavy Conversion Units where they served to accustom crews to Lancasters. Not being burdened by full loads of



L7247 with original central fin

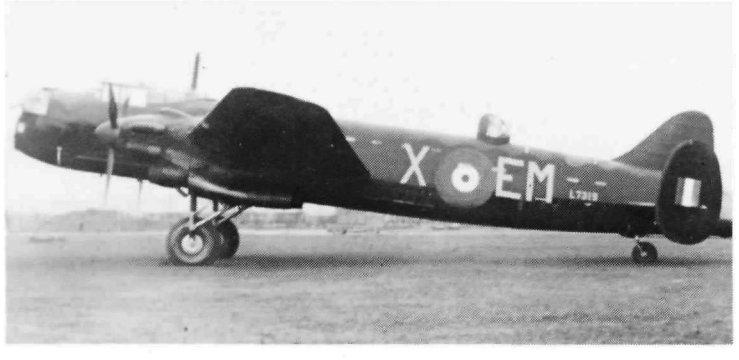
fuel and bombs, they also had a better chance of surviving engine failures.

Production of Manchesters was also undertaken by Metropolitan-Vickers Ltd at Trafford Park in Manchester but was delayed when R5768 to R5780 were destroyed on the production line in an air raid on 23 December 1940, new aircraft being given the same serials to complete the order. As there was no airfield at Trafford Park the aircraft were assembled at Ringway and Woodford.

After 200 production Manchesters had been built, forty-four of them at Metrovick, production was cancelled and the remaining parts of the contracts amended to cover Lancasters. The first Lancaster, BT308, was a Manchester airframe modified for four Merlins. It was originally designated Manchester III but by then the name had acquired unfortunate connotations! Other proposals to replace Vultures had been for Napier Sabres (as the Manchester II) and Bristol Centaurus radials but neither flew. The one justification for all the trials and tribulations of Manchester units was that out of the disasters came forth the Lancaster.

In the course of 1,126 sorties, the 193 Manchesters that served in RAF units lost 78, an operational loss percentage of 6.9%. Forty-five were destroyed in accidents not connected with operations. Of the latter, thirty involved engine failure. In addition, seven more major accidents were due to the same cause although the aircraft were repaired.

Manchester I L7319 of 207 Squadron (RAFM P6299)



Manchester I L7380 of 207 Squadron (RAFM P4023)

Two Manchester Prototypes

L7246	Mkrs & AAEE/RAE	To 2422M 20.11.42
L7247	AAEE	To 2738M 8.10.41

* * * * * *

157 Manchester Is delivered between August 1940 and November 1941 by Avro, Chadderton

L7276	AAEE/61/ 25 OTU/TDU	SOC 31.10.43
L7277	AAEE/1654 CU/408/ 1654 CU/1485 Flt/ 83 CF/1654 CU	Engine cut; hit tree in forced landing near North Scarle, Notts., 2.3.43
L7278	Mkrs/207	Engine caught fire; hit tree in forced landing 1½m E of Wymondham, Norfolk, on return from Lorient, 21.3.41; DBF
L7279	207/61/RAE	SOC 11.10.43
L7280	Mkrs/207/44 CF/ 83 CF/1654 CU/ 1660 CU	SOC 18.10.43
L7281	AAEE/1654 CU/ 49/49 CF/49/ 1661 CU	SOC 14.9.43
L7282	207/97	To GI airframe at 12 STT 4.6.43; no M-serial
L7283	207/25 OTU/97 CF/ 1660 CU	To 3743M at 10 AGS 23.6.43
L7284	207/61	SOC 18.6.43
L7285	83/RAE	SOC 15.6.43
L7286	207/61 CF/83/ 1660 CU	Engine cut; bellylanded at Waddington, 14.2.43; SOC 7.3.43 as DBR
L7287	Mkrs/83/49	Missing (Emden) 7.6.42
L7288	207/97/61/ 1654 CU	SOC 12.5.43
L7289	83/50	Missing (Bremen) 26.6.42
L7290	207/97/1654 CU/ 49	Missing (Cologne) 31.5.42
L7291	207/97/106/50/ 420 CF/1654 CU	Crashed and DBF 4.4.43; NFD
L7292	207/97/61/TDU	SOC 10.11.43
L7293	R-R/83/49/61/ 207/1660 CU	To 3773M 6.43
L7294	207/97/61/ 1654 CU	Stalled on approach after engine caught fire, Wigsley, 15.4.43; DBF
L7295	Mkrs & R-R	Crashed on approach, Ternhill, 26.5.41
L7296	49/49 CF/1661 CU	SOC 18.10.43
L7297	R-R/83/207 CFU/ 1660 CU/1661 CU	Engine cut; undercarriage raised to avoid overshoot, Winthorpe, 19.5.43
L7298	207/97/1654 CU	Engine cut; bellylanded on approach 1m E of Wigsley, 1.9.42
L7299	207/97	SOC 4.11.43
L7300	207	Engine cut; yawed on approach, hit ground and skidded into pond 8m E of Lincoln, 23.11.41
L7301	106/50	Missing (Cologne) 31.5.42
L7302	207	Missing (Kiel) 9.4.41
L7303	207	Missing (Dusseldorf) 28.3.41
L7304	207/61	Missing (Kiel) 27.6.41
L7305	Mkrs/25 OTU/106/ 106 CF/1660 CU	To 4279M 22.9.43
L7306	97	Engine caught fire on take-off; skidded and under-carriage collapsed, Coningsby, 13.9.41; DBF
L7307	97/61/207/97/ 25 OTU/1654 CU/ 1660 CU/1668 CU	To 4118M at 5 LFS 10.43
L7308	97/49/1656 CU	SOC 26.5.43
L7309	207/97/207	Missing (Hamburg) 15.1.42
L7310	207	Engine cut after take-off for Boulogne; crashlanded and hit bank, Waddington, 21.6.41
L7311	207	Missing (Ostend) 17.8.41
L7312	207	Missing (Cologne) 14.10.41
L7313	207	Shot down by intruder after take-off for Hamburg, Whisby, Lincs., 13.3.41
L7314	207	Shot down in error by Beaufighter en route to Boulogne, Wollaston, Northants., 22.6.41
L7315	97/61	Engine caught fire; abandoned near Bishops Bridge, Grantham, Lincs., 29.6.41
L7316	207	Missing (Cologne) 1.9.41
L7317	207/106	Ran out of fuel and crashed in forced landing 1m NW of Lee-on-Solent, 14.4.42, on return from Dortmund
L7318	207	Dived into ground in circuit, Waddington, 15.9.41; cause obscure
L7319	207/106/50/ 50 CF/1654 CU	SOC 1.4.43
L7320	AAEE & Mkrs	Engine lost power on test; lost height and crashlanded, Elstead, Surrey, 12.12.41
L7321	207	Missing (Huls) 13.10.41
L7322	207	Missing (Brest) 9.1.42
L7323	97	Missing (Berlin) 11.5.41
L7324	97	Missing (Berlin) 16.5.41; believed suffered engine failure
L7325	97/25 OTU/49/ 9/57/1656 CU	To 3751M 4.6.43
L7373	AAEE/207	Missing (Cologne) 14.10.41
L7374	97	Missing (Kiel) 27.6.41
L7375	97	Lost power during feathering practice; crashlanded 1m E of Sibsey, Lincs., 28.9.41
L7376	25 OTU/106/ 1654 CU	Brakes failed; taxied into gun pit, Swinderby, 18.10.42; to 3747M at 3 AGS 11.5.43
L7377	207	Missing (Berlin) 13.8.41
L7378	207/106/50 CF/ 1654 CU	To 3752M 17.6.43
L7379	207	Missing (Hamburg) 3.5.41
L7380	207	Missing (Berlin) 8.9.41
L7381	207	Missing (Berlin) 13.8.41
L7382	97/83/44/49 CF/ 83/83 CF	To 3753M at 6 AGS 6.43
L7383	61/97	Ran out of fuel in bad weather returning from Brest and crashed in forced landing 2m S of North Walsham on approach to Coltishall, 14.9.41
L7384	97	Missing (Dusseldorf) 17.8.41
L7385	83/44 CF/207 CF/ 207	Collided with Lancaster R5550 while landing, Bottesford, 6.8.42; DBF
L7386	25 OTU/49/420/ 1654 CU/9/57	Engine caught fire; undershot and undercarriage collapsed, Scampton, 5.10.42
L7387	61/207/97/83/49	Missing (Emden) 21.6.42; ditched off Friesians *
L7388	61	Missing (Berlin) 3.9.41
L7389	61/207/83/49/ 97/106 CF/ 1660 CU	To 3763M 30.5.43
L7390	106	Missing (Essen) 26.3.42
L7391	207/106/1485 Flt	Engine cut; lost height and crashlanded, Fishtoft Drove near Boston, Lincs., 11.2.43
L7392	AFEE	SOC 26.10.43
L7393	207	Engine caught fire; overshot landing at Perranporth and hit truck, 18.5.41; to 2600M
L7394	83/106	Missing (minelaying) 30.3.42
L7395	61	Engine feathered after over-heating: abandoned and crashed 1½m S of Wittering on return from Cologne, 14.3.42
L7396	61	Crashed in sea 2m off Start Point, Devon, returning from Brest, 31.1.42

L7397	Mkrs/83/49/ 207 CF/1660 CU	To 3762M
L7398	97/106/49/97/ 1661 CU/1660 CU	SOC 30.4.43
L7399	106	Missing (minelaying) 3.5.42
L7400	RAE/420 CF/408/ 1654 CU	Practice bomb exploded in bomb bay during bombing practice, 25.2.43; SOC
L7401	408/1654 CU/ 1485 Flt/1654 CU/1661 CU	SOC 15.10.43
L7402	420 CF/1661 CU	SOC 31.3.43
L7415	408/1654 CU/ 1485 Flt/1660 CU/ 1661 CU	SOC 1.10.43
L7416	1654 CU/420/ 1654 CU	Swung on landing into trees due to brake failure, Wigsley, 30.8.42
L7417	106/106 CF/ 1660 CU	SOC 9.11.42
L7418	83/106	Missing on navex off Pembroke coast, 19.5.42
L7419	207/50/408/ 1654 CU	To 3748M at 4 AGS
L7420	25 OTU/44 CF/ 207/1660 CU/1661 CU/1660 CU	SOC 19.11.43
L7421	25 OTU/49/106/97/ 97 CF/1660 CU	SOC 16.11.43
L7422	207	Engine cut; lost height and bellylanded during feathering test 1m S of Market Raisen, Lincs., 26.10.41
L7423	97/83	Missing (Cologne) 14.3.42
L7424	97	Missing (Berlin) 13.8.41
L7425	97/207/50/408/ 1654 CU/9/97 CF/ 1661 CU	To 3741M at 8 AGS
L7426	61/83	Ditched off Dutch coast returning from Essen, 9.3.42
L7427	97/83	Missing (Hamburg) 9.4.42
L7428	25 OTU	Engine cut; lost height and crashlanded at Scaftworth, Notts., 18.11.41; DBF
L7429	25 OTU/97/ 25 OTU/49/49 CF	Missing (Cologne) 31.5.42
L7430	25 OTU/44 CF/ 1661 CU/1654 CU/ 1661 CU	SOC 30.9.43
L7431	25 OTU/1654 CU	Undercarriage leg collapsed in heavy landing, Coningsby, 10.8.42; to 3772M
L7432	207/50	Missing (Bremen) 4.6.42
L7433	61	Missing (minelaying) 17.2.42
L7434	25 OTU/106/ 1656 CU	To 4221M
L7453	207/97/83/49/44/ 44/44 CF/1661 CU	Engine caught fire on take-off; bellylanded, Swinderby, 24.3.43
L7454	207/61	Missing (minelaying) 30.3.42
L7455	207/50/9/9 CF/ 1661 CU	To 3742M at 8 AGS 21.5.43
L7456	25 OTU/106	Missing (Cologne) 31.5.42
L7457	207/97/97 CF/ 106/83 CF/1654 CU	Engine caught fire; lost height and crashlanded, Saxilby, Lincs., 24.1.43
L7458	83/61/61 CF/ 1660 CU	To 4280M 22.9.43
L7459	97	Practice bomb exploded on take-off; crashlanded at Coningsby, 8.1.42
L7460	83/97/83/50/57/ 1656 CU	SOC 26.7.43
L7461	97/106/1661 CU/ 1654 CU/1660 CU	To 4278M 2.9.43
L7462	97	Missing (Bremen) 21.10.41
L7463	97/106	Missing (Rostock) 24.4.42
L7464	97/61/50/57/ 460 CF/1656 CU	To 3624M at 1 AAS 26.3.43
L7465	83	Missing (Essen) 26.3.42
L7466	97	Missing from ASR search over North Sea, 8.11.41
L7467	25 OTU/97 CF/ 1660 CU/1661 CU/ 1660 CU	SOC 25.9.43
L7468	207/50/9/1660 CU	Engine cut on approach and caught fire; crashlanded, Swinderby, 1.5.43; to 3732M
L7469	25 OTU/49	Missing (Emden) 7.6.42
L7470	61	Missing (Essen) 7.4.42
L7471	61/50	Missing (Emden) 7.6.42
L7472	61	Missing (Brest) 1.2.42
L7473	97/61/50/1485 Flt	Engine cut after take-off; crashlanded, Dunholme Lodge, 6.10.42
L7474	97/106	Bounced on landing; overshot and undercarriage leg jammed up; abandoned ½mN of Winceby, Lincs., 12.3.42
L7475	97/61/50/50 CF	Engine caught fire on take-off from Talbenny; crash-landed at Marloes, Pembs., 16.8.42
L7476	97/207/50/50 CF/ 1654 CU	SOC 26.4.43
L7477	61/61 CF/1661 CU/ 1485 Flt/1654 CU	SOC 12.5.43
L7478	25 OTU	Engine cut; swung on approach and hit ground 1½m N of Bawtry, 10.2.42
L7479	25 OTU/49/49 CF/ 1656 CU	SOC 15.7.43
L7480	207/61/50/44 CF/ 1661 CU	SOC 30.4.43
L7481	25 OTU/49/44 CF/ 1661 CU	SOC 14.9.43
L7482	25 OTU/97 CF/ 1660 CU	Abandoned in severe icing conditions near Metheringham, Lincs., 2.1.43
L7483	207	To 3749M at 10 AGS 17.6.43
L7484	207/83/49/408/ 1654 CU/9/ 1485 Flt/1654 CU	To 3776M at 1 AGS 17.6.43
L7485	207/106	Missing (minelaying) 17.4.42
L7486	207/50	Bounced on landing and stalled, Skellingthorpe, 25.3.42; DBF
L7487	207	Ran out of fuel and ditched 10m N of Great Yarmouth returning from minelaying off Sassnitz, 21.10.41
L7488	97/207/106/50 CF/ 1654 CU	To 3750M 23.6.43
L7489	97/50	Abandoned over North Sea on return from Hamburg, 9.4.42
L7490	25 OTU/97	Damaged by fighters off Brittany and stalled on overshoot, Coningsby, 18.12.41; DBF
L7491	25 OTU/97/207/ 50/1654 CU	Swung on take-off and undercarriage collapsed, Wigsley, 17.5.43
L7492	25 OTU/97/61/ 50/1485 Flt/ 1654 CU	To 3985M at 4 AOS 20.7.43
L7493	25 OTU/49/49 CF/ 1661 CU	SOC 18.10.43
L7494	61	Missing (Boulogne) 8.12.41
L7495	61	Ran out of fuel in low cloud and abandoned near Grimoldby, Lincs., on return from Hamburg, 16.1.42
L7496	61/50/420/ 1654 CU	Engine failed on overshoot; crashlanded and DBF, Wigsley, 5.7.42
L7497	61	Missing (Essen) 26.3.42
L7515	207/106/49/ 1656 CU	SOC 6.11.43
L7516	61/50	Missing (minelaying) 30.4.42
L7517	-	Not delivered
L7518	61	Ditched off Dutch coast on return from Essen, 26.3.42
L7519	61/50	Dived into ground near Thurlby, Lincs., 13.5.42; cause obscure

L7520	61	Engine cut; lost height and crashlanded, Roxton, Beds., 2.11.41
L7521	61/50/50 CF	Engine cut; stalled avoiding Oxford on approach, Waddington, 5.9.42; DBF
L7522	61/97/83	Missing (Stavanger/Sola airfield) 22.2.42
L7523	207	Crashed at Hopton near Withernsea, Yorks., on return from Hamburg, 14.1.42; DBF; cause unknown
L7524	25 OTU/49/1485 Flt/1661 CU	SOC 16.10.43
L7525	97/106/83/50/ 1485 Flt/1661 CU	SOC 24.8.43
L7526	25 OTU/49/207/ 207 CF/1656 CU	SOC 15.7.43

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Cancelled Fairey-built Manchesters:

R5273-R5320; R5339-R5380; R5397-R5426; R5448-R5477

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43 Manchester Is delivered between March 1941 and March 1942 by Metropolitan-Vickers, Manchester

R5768	Mkrs/83/1656 CU/ 1660 CU	SOC 19.11.43
R5769	25 OTU/106/50/9/ 9 CF/1661 CU	SOC 2.9.43
R5770	25 OTU/106/ 1660 CU	Engine cut on take-off; swung and undercarriage raised to stop, Swinderby, 4.7.43
R5771	25 OTU/83/49/420/ 57/50 CF/1654 CU	To 3746M at 2 AGS 27.5.43
R5772	25 OTU/49/83 CF/ 1654 CU	Engine cut after take-off and caught fire; crashlanded 1m NE of Wigsley, 26.1.43
R5773	RAE/TDU	To 3892M at Jurby 6.43
R5774	TDU	To 3890M 30.6.43
R5775	49/83 CF/1654 CU/ 1660 CU	To 4281M 22.9.43
R5776	1654 CU/408/ 1654 CU	To 3745M at 1 AGS 14.5.43
R5777	1654 CU	SOC 4.11.43
R5778	207/50	Hit by flak, Warnemunde, 9.5.42; SOC on return
R5779	83	Missing (Essen) 9.3.42
R5780	83/106/49/57/ 1656 CU	Hit tree low flying 2m ENE of Lichfield and dived into ground, 19.10.42; DBF
R5781	83	Missing (Lubeck) 29.3.42
R5782	207/50	Missing (Hamburg) 18.4.42
R5783	97	Ran out of fuel returning from Brest and crashed in forced landing, Friskney, Lincs., 21.10.41
R5784	61/50/9/57/ 1485 Flt/1660 CU	To 3984M at 9 OAFU 20.7.43
R5785	61	Missing (Le Havre) 11.4.42; presumed ditched
R5786	61/50/50 CF/ 1654 CU	SOC 1.4.43
R5787	61	Missing (Brest) 1.2.42
R5788	207/83/49/ 1660 CU	To 3983M at 1 OAFU 30.7.43
R5789	61	Engine cut; lost height and hit trees in forced landing, Wiltshire Cross, Tidworth, Hants., on return from Cherbourg, 9.1.42
R5790	207/83/49/ 44 CF/1661 CU	To 3774M 5.43
R5791	207/1485 Flt/ 1654 CU	To 4001M 26.7.43
R5792	97	Collided with Hurricane and crashed near Sutton Bridge, 24.11.41
R5793	25 OTU/49/83/ 1656 CU	SOC 26.5.43
R5794	25 OTU/49	Missing (Essen) 2.6.42
R5795	97	Shot down by Bf 109s, Brest, 18.12.41
R5796	61/207/106/ 57/50 CF/ 1654 CU/1660 CU	SOC 19.11.43
R5797	Mkrs	To 3778M 5.6.43
R5829	25 OTU/1654 CU	SOC 15.7.43
R5830	AAEE/83/1656 CU	SOC 16.11.43
R5831	83	Missing (Essen) 26.3.42
R5832	61/61 CF/1660 CU/ 1661 CU	3744M NTU; SOC 30.4.43
R5833	207/83/50	Missing (minelaying) 6.6.42
R5834	61	Engine failed over Bremen; ran out of fuel, bellylanded and hit ditch, Loddon, Norfolk, 11.2.42
R5835	207/83/49/408/ 1654 CU/1661 CU	SOC 6.10.43
R5836	83/49/49 CF/ 1661 CU	Stalled on landing and undercarriage collapsed, Scampton, 1.12.42
R5837	83	Ditched off Manston returning leaflet drop over Calais, 9.4.42
R5838	83/9/9 CF/ 1661 CU	Engine cut; undercarriage collapsed landing at Wickenby, 12.3.42
R5839	106/49/1458 CU/ 1661 CU	SOC 18.10.43
R5840	106	Missing (minelaying) 3.5.42
R5841	106/1660 CU	Engine caught fire; crashed in forced landing, Swinderby, 11.4.43; DBF

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Cancelled Armstrong-Whitworth-built Manchesters:

W1280-W1299; W1319-W1350; W1374-W1410; W1426-W1475; W1488-W1498

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* This loss appears in the squadron ORB, Bomber Command "missing" cards and on an accident card, all quoting Emden as target. But nothing is mentioned on the Bomber Command Raid sheet for that night.

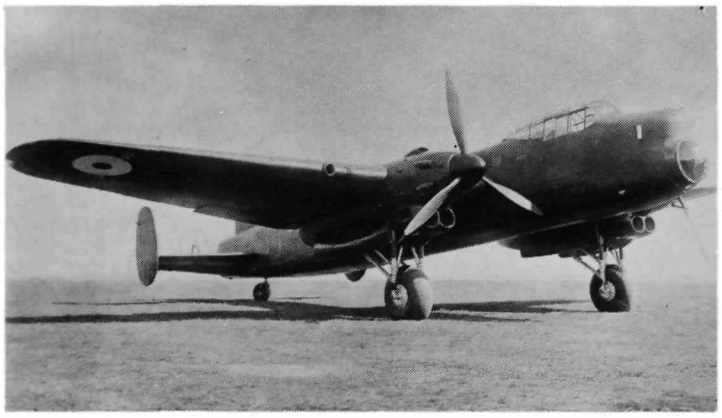
L7246 with short-span wings (via Peter Corbell)

BT308 modified to Lancaster prototype (via Peter Corbell)

1941				
February				
24/25	Brest	6		
26/27	Cologne	5		
March				
3/4	Brest	2		
12/13	Hamburg	4	1	L7313/207 CO
13/14	Hamburg	5		
18/19	Kiel	2		
20/21	Lorient	3	1	L7278/207
27/28	Dusseldorf	4	1	L7303/207
30/31	Brest	4		
April				
4/5	Brest	4		
6/7	Brest	4		
8/9	Kiel	12	1	L7302/207
9/10	Vegesack	1		
10/11	Brest	5		
12/13	Brest	6		
May				
2/3	Hamburg	3	1	L7379/207
3/4	Cologne	2		
	Brest	1		
5/6	Mannheim	4		
6/7	Hamburg	4		
8/9	Hamburg	9		
9/10	Berlin	3		
10/11	Hamburg	1		
	Berlin	5	1	L7323/97
11/12	Bremen	2		
12/13	Mannheim	2		
15/16	Berlin	8	1	L7324/97
June				
21/22	Boulogne	18	2	L7310/207; L7314/207
23/24	Dusseldorf	11		
24/25	Dusseldorf	8		
26/27	Kiel	18	2	L7304/61; L7374/97
29/30	Hamburg	6		
August				
12/13	Berlin	9	3	L7377/207; L7381/207; L7424/97
14/15	Magdeburg	7		
16/17	Dusseldorf	6	1	L7384/97
	Ostend	2	1	L7311/207
25/26	Mannheim	7		
28/29	Duisburg	6		
29/30	Frankfurt	3		
31/1	Cologne	6	1	L7316/207
September				
2/3	Berlin	4	1	L7388/61
3/4	Brest	2		
7/8	Berlin	4	1	L7380/207
11/12	Rostock	5		
13/14	Brest	4	1	L7383/97
15/16	Hamburg	5		
19/20	Stettin	3		
29/30	Hamburg	4		
October				
10/11	Essen	10		
12/13	Huls	11	1	L7321/207
13/14	Cologne	9	2	L7373/207; L7312/207
20/21	Bremen	8	2	L7462/97; R5783/97
	Minelaying	4	1	L7487/207
21/22	Bremen	2		
23/24	Kiel	6		
24/25	Frankfurt	6		
26/27	Hamburg	5		
29/30	Schiphol	5		
31/1	Hamburg	5		
	Minelaying	1		
November				
1/2	Minelaying	2		
4/5	Minelaying	4		
5/6	Cherbourg	2		
7/8	Cologne	14		
	Boulogne	4		
8	ASR	2	1	L7466/97
8/9	Dunkerque	5		
9/10	Hamburg	6		
	Ostend	1		
15/16	Emden	6		
23/24	Lorient	2		
27/28	Dusseldorf	6		
30/1	Hamburg	4		
	Emden	2		
	Minelaying	4		
December				
7/8	Aachen	12		
	Boulogne	4	1	L7494/61
18	Brest	11	2	L7490/97; R5795/97
27/28	Dusseldorf	7		
1942				
January				
2/3	St.Nazaire	12		
5/6	Brest	12		
8/9	Brest	10	1	L7322/207
	Cherbourg	6	1	R5789/61
9/10	Brest	6		
	Leaflets	1		
10/11	Wilhelmshaven	9		
	Emden	1		
	Leaflet	1		
14/15	Hamburg	11	2	L7309/207; L7523/207
15/16	Hamburg	10	1	L7495/61
	Emden	1		
17/18	Bremen	6		
	Emden	1		
21/22	Emden	3		
	Leaflets	3		
22/23	Munster	5		
25/26	Brest	15		
26/27	Emden	2		
27/28	Brest	3		
28/29	Boulogne	7		
	Leaflets	1		
31/1	St.Nazaire	7		
	Brest	11	3	L7396/61; L7472/61; R5787/61
	Leaflets	1		
February				
4/5	Minelaying	3		
10/11	Bremen	10	1	R5834/61
11/12	Mannheim	6		
	Minelaying	1		
12	German fleet	15		
12/13	Minelaying	9		
14/15	Mannheim	8		
	Leaflets	1		
16/17	Minelaying	12	1	L7433/61
	Leaflets	2		
19/20	Leaflets	1		
21/22	Airfields	5	1	L7522/83
	Minelaying	6		
22/23	Emden	3		
	Minelaying	2		
24/25	Minelaying	9		
	Leaflets	4		
25/26	Kiel	12		
	Minelaying	1		
27/28	Kiel	17		
	Minelaying	4		
March				
3/4	Paris/Renault	26		
8/9	Essen	22	2	R5779/83; L7426/83
	Minelaying	3		
9/10	Essen	10		
10/11	Essen	13		
12/13	Minelaying	1		
13/14	Cologne	16	2	L7395/61; L7423/83
20	Minelaying	13		
23/24	Minelaying	2		
24/25	Minelaying	3		
25/26	Essen	20	5	L7390/106; L7465/83; L7497/61; L7518/61; R5831/83
	Minelaying	1		
26/27	Minelaying	12		
	Leaflets	1		
28/29	Lubeck	21	1	R5781/83
29/30	Minelaying	8	2	L7394/106; L7454/61
April				
1/2	Le Havre	1		
	Minelaying	11		
2/3	Le Havre	3		

Manchester IA L7486 on test (via D.M.Hannah)

5/6	Cologne	11		
6/7	Essen	10	1	L7470/61
8/9	Hamburg	13	2	L7427/83; L7489/50
	Leaflets	5	1	R5837/83
10/11	Essen	10		
	Le Havre	4	1	R5785/61
	Leaflets	1		
12/13	Essen	9		
	Minelaying	2		
	Leaflets	4		
13/14	Minelaying	7		
14/15	Dortmund	4	1	L7317/106
15/16	Dortmund	7		
	Minelaying	2		
16/17	Minelaying	2	1	L7485/106
	Leaflets	2		
17/18	Hamburg	5	1	R5782/50
	Minelaying	2		
19/20	Minelaying	9		
22/23	Minelaying	12		
23/24	Rostock	6	1	L7463/106
24/25	Rostock	8		
	Leaflets	2		
25/26	Rostock	5		
26/27	Rostock	9		
29/30	Minelaying	5	1	L7516/50
May				
2/3	Minelaying	8	2	L7399/106; R5840/106
	Leaflets	9		
3/4	Leaflets	1		
4/5	Minelaying	5		
	Leaflets	3		
5/6	Leaflets	4		
6/7	Nantes	2		
	Leaflets	5		
7/8	Minelaying	8		
8/9	Warnemunde	9	1	R5778/50
	Minelaying	2		
9/10	Minelaying	2		
16/17	Minelaying	7		
19/20	Mannheim	4		
	St.Nazaire	2		
	Leaflets	2		
29/30	Leaflets	3		
30/31	Cologne	46	4	L7456/106; L7290/49; L7429/49; L7301/50
June				
1/2	Essen	33	1	R5794/49
3/4	Bremen	6	1	L7432/50
	Leaflets	4		
4/5	Leaflets	1		
5/6	Minelaying	3	1	R5833/50
	Leaflets	1		
6/7	Emden	7	3	L7471/50; L7287/49; L7469/49
20/21	Emden	?	1	L7387/49
25/26	Bremen	20	1	L7289/50



L7246 with extended wings

L7247 at Boscombe Down

MANCHESTER CODES

Only three squadrons completed their Forms 541 with code letters and then not for the complete period. The following are known code letters assigned to the serials in alphabetical order. Some units changed letters during the aircraft's period of service.

No.49 Squadron - EA

T	L7453	Y	L7296 (Conversion Flight)

No.50 Squadron - VN

Z	L7476

No.61 Squadron - QR

E	L7458	V	L7471
J	L7389		

No.83 Squadron - OL

A	L7387	K	L7453
C	L7385	L	R5830
D	R5780	N	L7522; R5833
F	R5790	O	L7525
G	R5779	Q	L7289; L7427
H	L7465	R	R5837
I	R5831	S	R5838
J	L4247	T	R5836

No.97 Squadron - OF

A	L7492	P	L7463
B	L7375; L7475	R	L7461
C	L7491	S	L7423
D	L7382; L7525	T	7489
F	L7383; L7488	U	L7490
H	L7473	V	L7522; R5783
J	L7460	W	R5795
K	L7476	X	L7453
L	R5792	Y	L7457
N	L7459; L7466	Z	L7462; L7474

No.106 Squadron -ZN

V	L7417

No.207 Squadron - EM

A	L7278; L7378	P	L7303; L7484;
B	L7279 L7322; L7486		L7486; L7488
C	L7313; L7317	Q	L7322
D	L7279; L7321; L7485	R	L7302; L7309;
F	L7300; L7311; L7484		L7381; R5782
G	L7377; L7455; L7484	S	L7300; L7432; L7475;
H	L7310; L7419; L7483		L7496; L7515
J	L7309; L7432	T	L7373; L7379
K	L7318; L7419; L7476	U	L7316
L	L7312; L7375;	V	L7393; L7422; R5791
	L7480; L7496	W	L7380; R5796
M	L7378; L7454; L7523	X	L7319; L7419
N	L7487	Y	L7314; L7391
O	L7309; L7385; L7432;	Z	L7432; L7486
	L7483; L7485; L7491		

No.9 Conversion Flight

Bar B	R5769	Bar G	L7455
Bar C	L7455	Bar P	L7425
D	L7464		

No.1654 Conversion Unit - UG

A	R5730	H	L7431
B	L7419	J	L7280; L7288
C	L7416	K	L7400; L7492
E	L7419	M	R5791
F	L7430; L7431; R5776	N	L7376
G	L7299; L7461	R	L7307

No.1656 Conversion Unit - BL

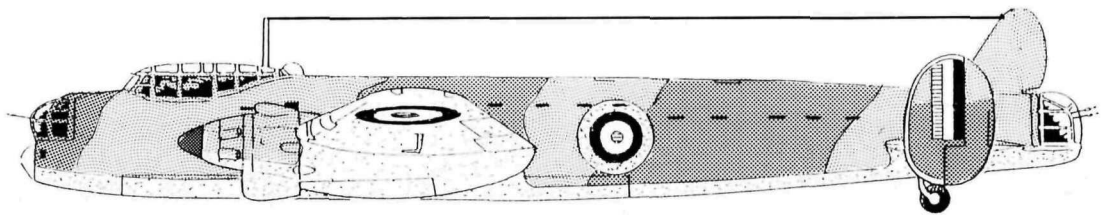
Y	L7434

No.1660 Conversion Unit - TY

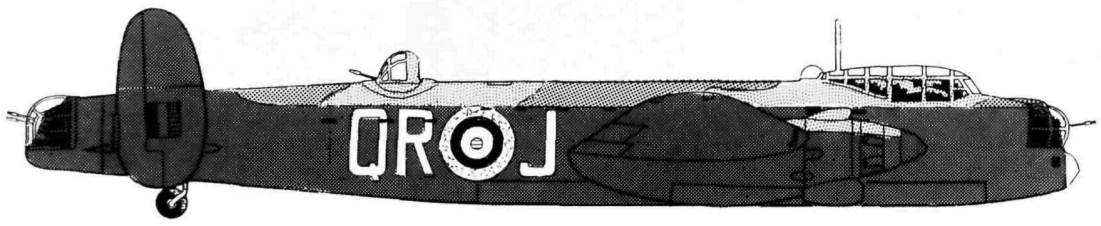
A	R5768	R	R5775
D	L7420		

No.1661 Conversion Unit - GP

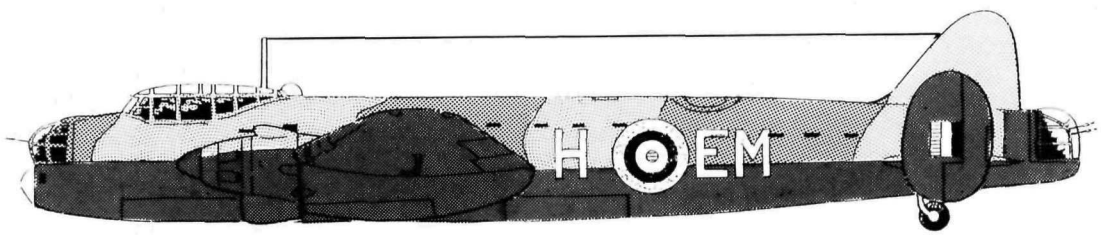
F	L7461	T	L7493
G	R5839	W	L7415
K	L7281	X	L7467
M	L7401	Y	L7296
N	L7524		



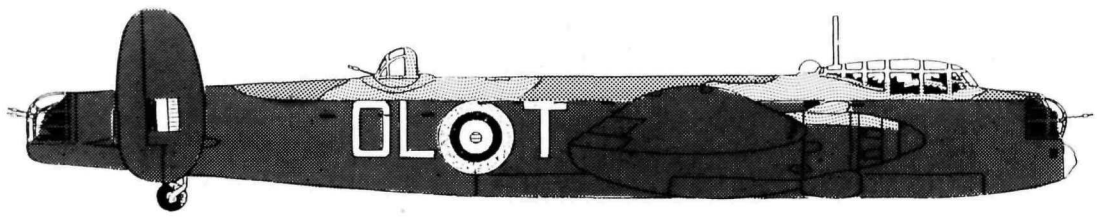
Prototype L7247 with first design for central fin



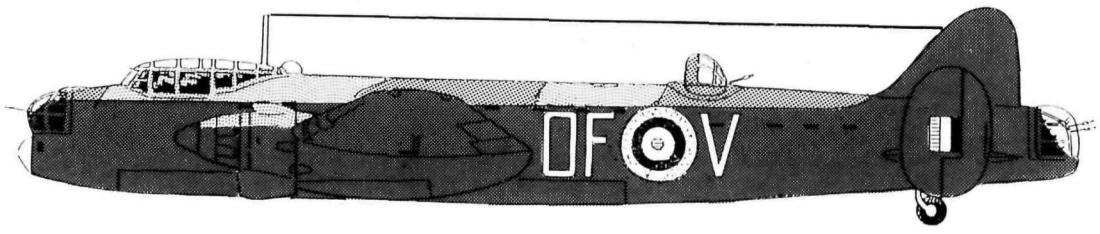
L7389 of No.61 Squadron



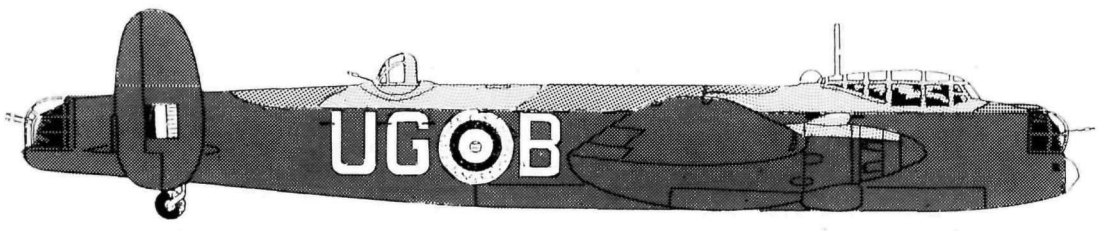
L7288 of No.207 Squadron



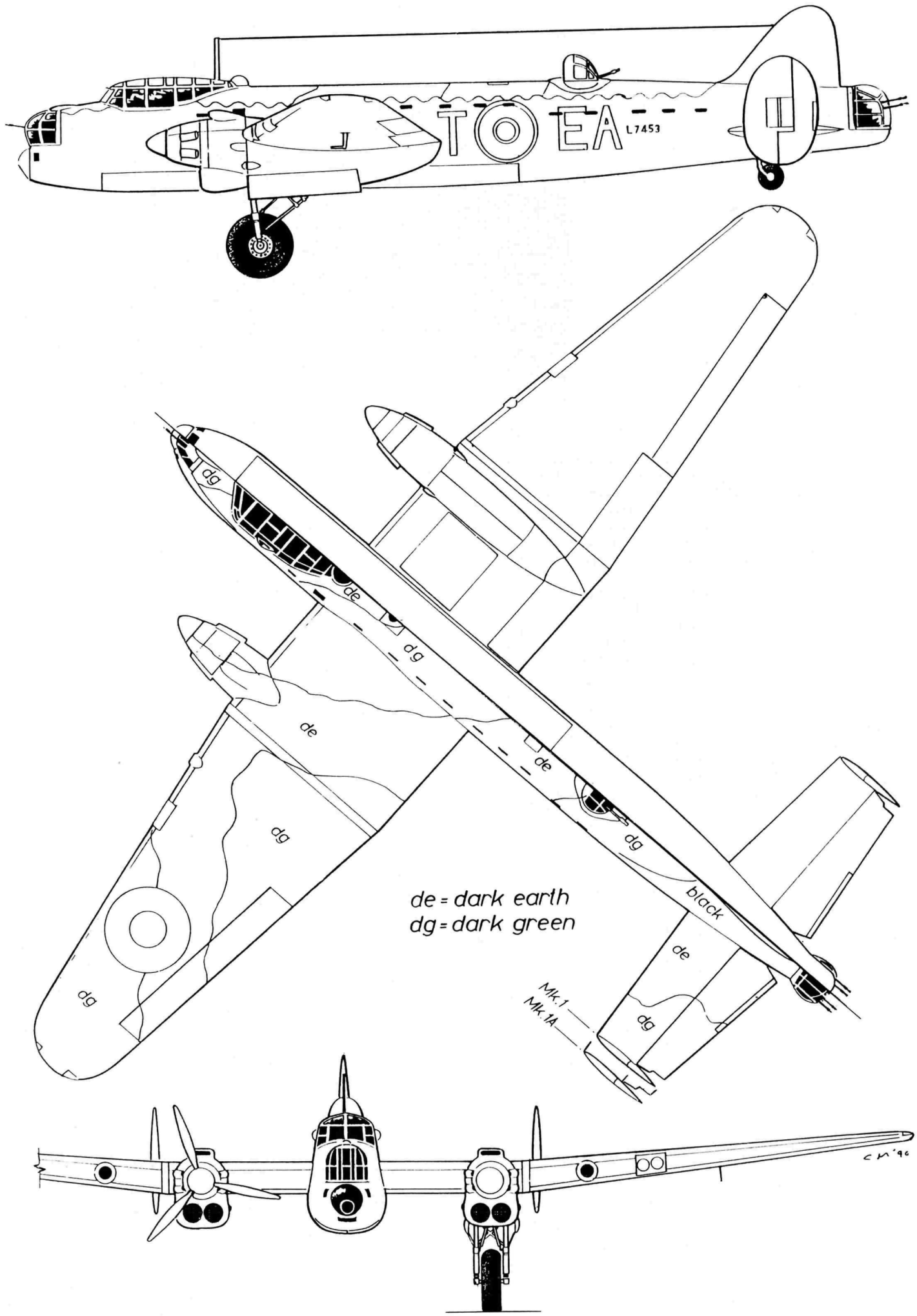
R5830 of No.83 Squadron



R5783 of No.97 Squadron



L7419 of No.1654 Conversion Unit


TO EA
L7453
dg
de
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dg
black
de
dg
Mk.1
Mk.1A
de = dark earth
dg = dark green
CM '90

PERSONAL CODES PART 2

Spitfire XIV TZ198 at Lubeck in 1947 (via Peter Arnold)

All photographs via Ray Sturtivant except as noted

FB Used on Spitfire LF.VIII MD371 by Group Captain F.Boyd when Station Commander Baigachi in 1944.

FC Seen on Spitfire HF.IX RK901, which served with 11 Arm. Practice Camp at Fairwood Common to 7.45. Possibly represented the initials of the name of the station.

FCCS Not strictly a personal code, aircraft of the Fighter Command Communications Squadron carried the initial letters of the unit identity either side of the fuselage roundels on a number of Meteors. These included T.7 WL436 (1959), F.8s WK672 (1957/58) and F.8 WK986 (1958/61) and NF.14 WS848 (1961).

FCT Used on Hurricane IIa.Z2487 of Station Flight Northolt around 1941/2, owner unidentified.

FDH Appeared on Meteor NF.11 WD648 of the Central Fighter Establishment at West Raynham around 2.52.

FG Used around 8.65 by an unidentified Flight Lieutenant of 1417 Flt Khormaksar on Hunter FR.10 XF441.

FGB A rare example of a naval use of a personal code. First used on Spitfire I P9397 by Major F.D.G.Bird, RM when CO of of 759 Squadron and CFI of No.1 Naval Air Fighter School at Yeovilton 12.43 to 6.44. From then until 8.45 he flew the code on Seafire L.III NF500 as Commander Flying and Officer Commanding RNAS Lee-on-Solent. The aircraft was regarded as the station flagship, and was probably later coded 'WTC'.

FGG This code was used on Typhoon RB205 around 12.45 by Wing Commander F.G.Grant, DSO, DFC, who was Wing Commander Flying of 143 Wing from 14.10.44 to 7.9.45. It was very likely also used previously on MN475, and later on SW451 and SW452.

FH Used briefly around 6.44 - 7.44 on Auster V MT367 by Wing Commander F.W.Hillock, who then commanded 143 Wing.

FHP Another example of a naval personal code, used on an unidentified Wildcat at Yeovilton, possibly of 748B Squadron. The first letter of the code is somewhat uncertain, being partially obscured by the wing in the only known photograph.

FMD An American use of personal codes on a British aircraft. An unidentified Spitfire V was flown by (Lt Col?) Fred Murray Dean, CO of the 31st Fighter Group.

FMT Vampire FB.5 WA245 was used by Wing Commander F.M.Thomas, Filton station commander around 9.56.

FN Used on Spitfire LF.IX MH374 of the Fighter Command Communications Squadron at Northolt around 8.45, possibly by Squadron Leader C.N.Foxley-Norris, DSO, OBE.

FOG Seen on Spitfire LF.XVI TE396 in store at 33 MU Lyneham in 1947. This aircraft last served with 19 Squadron at Molesworth, but the initials do not relate to the squadron CO at that time.

FRC Used on Tempest II PR674 around 1947 by Wing Commander F.R.Carey of 135 Wing.

FS A captured Fiat CR.42 was flown in the Western Desert with code 'OK-FS'. It is assumed to have been a combination of the 450 Squadron code and a personal code.

FSC Mosquito PR.34 RG190 used this code at one time. The aircraft was used successively by 544 Squadron, the Photographic Reconnaissance Development Unit and 540 Squadron.

GAM Used at Leuchars on Hunter F.4 XF993 by Wing Commander G.A.Mason, DFC, AFC, who was Wing Commander Flying from 9.57.

GBJ Used on Vampire FB.5 VZ847 by Wing Commander G.B.Johns, who was Wing Commander Flying at Bruggen between 7.53 and 1.54.

GC Used in 1942 on Spitfire Vb AB328 in Egypt. This aircraft served at one time with 601 Squadron in 244 Wing, but its full history is unknown.

GC Code also used later by Flt Lt G.T.Coles on Hunter FR.10 XE614 of 1417 Flt Khormaksar around 1965 (it was also flown with code 'RJ').

GCK This code was used by Wing Commander G.C.Keefer, DSO, DFC & 2 Bars on various Spitfires and with different Wings of which he was Wing Commander Flying during 1944 and 1945. With 126 Wing he flew Spitfire IX MK826 around 7.44. By early 1945 he was flying Spitfire XIV RM809 with 125 Wing, and by 4.45 had Spitfire XIV MV263 with 127 Wing.

GD Used on a Mustang IV, probably KH734. Owner uncertain but possibly Group Captain G.Denholm.

GDE Reported used on a Spitfire Vc, serial reported incorrectly as ES941.

GFA Used on Tempest V EJ811 around 3.45 - 5.45 and seen at Hawkers Langley around 11.45. Served with 56 OTU 1.45 to 6.45, and could relate to Wing Commander G.F.Anderson.

GHB Between 5.66 and 12.66 used on Javelin FAW.9 XH898 by Squadron Leader George H.Beaton, CO of 228 Operational Conversion Unit at Leuchars.

GJ Could possibly be 'CJ', on a photograph of a crashed Hurricane I.

GJ Used around 1.45 on Typhoon RB375 of 121 Wing at Volkel by the CO, Group Captain E.Gordon Jones.

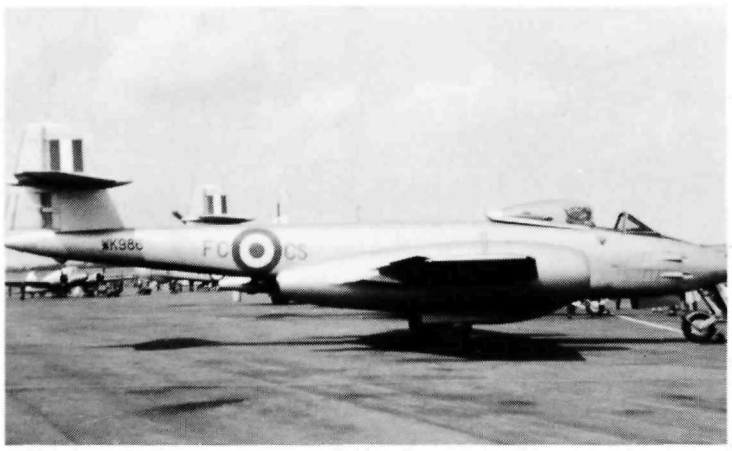
GL During the summer of 1964 code carried on Hunter FGA.9 XE530 flown by Squadron Leader G.N.Lewis, AFC the CO of 208 Squadron at Khormaksar and Muharraq. The aircraft also carried the individual code letter 'A'.

GM Carried successively at RAuxAF Turnhouse during 1952 - 1955 on Vampire FB.5s WA430 and WG833 flown by Wing Commander E.G.L.Millington, CBE, DFC, the Scottish Wing Leader.

GMS Used on Meteor F.8 WK932 around 1956 - 1957 by Squadron Leader G.M.Smith, the CO of 245 Squadron at Stradishall.

GP Recorded in the flying log book of a Typhoon pilot of 181 Squadron at Snailwell in 2.43.

GR Used on Spitfire IX EN455 of 81 Squadron in Tunisia 1943. The aircraft was taken on Mediterranean strength in 3.43, and the code probably relates to 322 Wing, the parent formation.



Meteor F.8 WK986 of FCCS

Meteor NF.14 WS848 of FCCS

GRC Seen on Hunter FR.5 WP141, reportedly in 1 Squadron markings at Tangmere in 7.55, though in fact the aircraft was officially on charge to 41 Squadron at Tangmere at that time. The initials may relate to Wing Commander G.R.Cook.

GT Another example of a personal code used by 1417 Flt at Khormaksar, in this case used on Hunter FR.10 XF460 flown by Flt Lt G.W.Timms (also coded 'RB')

GW Used on Hunter FR.6 XG168 at Nicosia around 7.58 - 2.59, the code relates to the CO, Squadron Leader J.H.Granville-White.

HB Air Vice Marshal Sir Harry Broadhurst, KBE, CB, DSO & Bar, DFC & Bar, AFC used this code on Spitfire F.VIII JF330 at Taranto around 9.43. He also used it on Fieseler Storch VX154 of the BAFO Communications Squadron in 1945. A Spitfire at Tangmere with this code in 4.44 may also have belonged to him.

HBW Used on several aircraft by Wing Commander H.A.C.Bird-Wilson, DSO, DFC & Bar, AFC as Wing Commander Flying. Initially on Mustang III KH447 at Perranporth in 7.44, then by 9.44 possibly on Spitfire LF.IX MK782 of Bradwell Bay and by late 1944 at Bentwaters on Mustang III KH500 (which was also coded 'MLD'). From 14.8.45 until 1.46 he flew Meteor III EE357 with this code at 226 OCU Molesworth (this later coded 'HFON'). It was replaced in 1.46 by EE418 with the same code.

HCG Used on at least two Spitfire IXs by Wing Commander H.C.Godefroy, DSO, DFC & Bar, the first being an unidentified machine when Wing Commander Flying with 127 Airfield Headquarters in 1943. Later with 83 Group Headquarters in 1944 he flew an LF.IX, believed to be PL201.

HD The code of Wing Commander Hugh S.L. 'Cocky' Dundas, DSO, DFC as Wing Commander Flying of 244 Wing in 1944/45. First used on a Spitfire VIII to 5.45, then transferred to a Spitfire IX, neither machine having been identified.

HEW Hunter F.5 WP123 seen at Tangmere in 1958. The aircraft was then with 56 Squadron at Waterbeach, and had earlier been coded 'RIKE'.

HFB This code is believed to have been used by Wing Commander H.F. 'Billy' Burton, DFC & Bar, the Wing Commander Flying of 239 Wing on Kittyhawks FR347 and FR430 until he was killed in action 7.43.

HFO'N Possibly used by Wing Commander H.F.O'Neill, DFC & Bar on Spitfire LF.XVI TE457 at Horsham St.Faith until it was written off on 9.9.46. The code was certainly used by him as Wing Commander Flying there in 1947 on Meteor III EE357 (previously coded 'HB'), and later in a similar post at Middleton St.George in 1957 on Hunter F.6 XG165.

HGG Used by Group Captain H.G.Goddard, DSO, DFC, AFC in Burma around 11.44 to 2.45 as CO of 170 Wing, which became restyled 906 Wing in 12.44. He may possibly have also used the code on Hurricane IIc LE294.

HH Used by Air Commodore Harry A.V.Hogan, CB, DFC, Sector Commander, Northern Sector at Linton-on-Ouse around 1952/53 on Meteor F.8s WK724 and WK991 and also on Oxford NJ310. WK991 also used codes 'ES' and 'VSB'.

HJW Meteor I EE221 was used by Group Captain H.J.Wilson with this code, when with the High Speed Flight at Tangmere from 9.46.

HK Typhoon EK991 was seen with this code under repair by Austers at Rearsby in 1944. It had served with 268 Squadron in 35R Wing from 9.44 to 12.44.

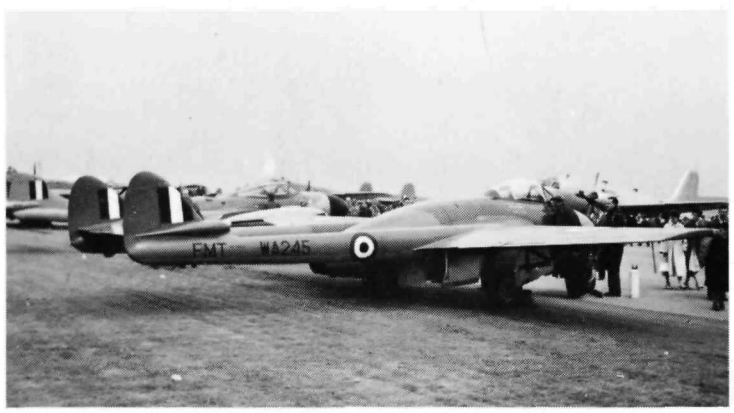
HK The code was also used around 9.45 by Wing Commander H.C.Kenward, DFC, the CO of 74 Squadron at Colerne, on Meteor III EE401. This aircraft has also been reported with code 'MK', though one cannot rule out the possibility of a spotting error.

HM Used on an unidentified Spitfire IX of SHQ North Weald around 7.43 - 8.43. The station at that time housed 331 and 332 (Norwegian) Squadrons, and the code could therefore well have related to Major H.Moehre, DFC, who commanded 331 Squadron there earlier that year and who subsequently became a wing commander.

HMS Spitfire XIV TZ198 carried this code when allocated to the Station Commander, Air Practice Station Lubeck in 1947.

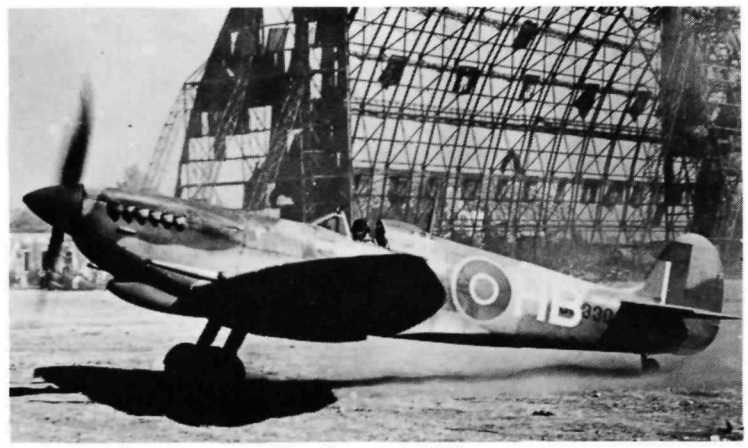
HMT Used by Squadron Leader H.M.H.Tudor, DFC, AFC on Meteor NF.11 WM186 when CO of 264 Squadron at Linton-on-Ouse around 1953/54. Replaced in 10.54 by Meteor NF.14 WS841, the squadron being renumbered as No.33 9.57. By 12.57 he had been promoted to Wing Commander and was using the code on NF.14 WS847 at 238 Operational Conversion Unit, North Luffenham.

Vampire FB.5 WA245 at Colerne, September 1956



Javelin FAW.9 XH898 of No.228 OCU

Spitfire IX EN455 with 81 Squadron in Tunisia, 1943



Spitfire VIII JF330 in 1943 (RAFM P13513)

HNT Meteor F.8 WL141 carried this code in 1953, it relating to Major H.N.Tanner, USAF, who was then in command of 257 Squadron at Wattisham on an exchange posting.

HPB Believed used by Wing Commander H.P.Blatchford on Spitfire Vb AD292 at Digby around 3.42 - 4.42 when he was Wing Commander Flying of the Digby Wing. Later used by him on Spitfire Vb EP126 as station commander at Coltishall by 5.43 until 16.8.43 when he had to abandon the aircraft over Falaise.

HR Used on Meteor III EE404 of 263 Squadron at Church Fenton around 4.46.

HWA Unidentified officer flew Spitfire II P7287. This aircraft was used successively by 65 Squadron, 122 Squadron and the USAAF. Possibly therefore a USAAF personal code.

HWB Painted as 'CV-HWB' on an unidentified Kittyhawk of 239 Wing by Wing Commander H.F.Burton, DFC & Bar, the Wing Commander Flying from 12.42, who also used 'HFB'.

IRG Used on a succession of Spitfire Vs by Wing Commander I.R.Gleed, DSO, DFC. These included Vb AA742 around 1941, then at Northolt Vb AB934 in 1941/42, an unidentified Vc around 9.42 - 10.42 and Vb AB380 around 1942/43. From 18.2.43 he commanded 244 Wing in the Western Desert, flying Vbs ER170 and AB502 until he was shot down on 16.4.43.

JAK Used on Spitfire Vb AB790 by Wing Commander John A.Kent, DFC, AFC when Wing Commander Flying at Northolt in 6.41. Also used by him from 9.53 as Group Captain when Station Commander Tangmere, probably until 10.55 on Meteor F.8 WK731.

JAM Mosquito PR.XVI NS877 used this code at Northolt in 1945 when used by Wing Commander J.A.Mackie, MBE of Fighter Command Headquarters.

JAS Carried on a variety of aircraft by Squadron Leader (later Wing Commander) J.E.Storrar, DFC & Bar. As Co of 65 Squadron at Kingsnorth from 1.43 to 11.43 he had Spitfire IX MH358 painted as 'YT-JAS'. When Chief Flying Instructor at 55 OTU Annan from 12.43 to 4.44 he probably flew an unidentified Spitfire I painted as 'JAS', though this might alternatively have been the mount of Wing Commander J.E.Scoular, DFC, who was then Wing Commander Training. Mustang IV KM232 was flown by Storrar as Wing Leader, at Hunsdon then Digby and finally Molesworth between 4.45 and 8.45. By 2.46 to 12.46 he was Wing Commander Flying of 239 Wing in Italy, using Mustang IV KM264 and also an ex-Bulgarian YAK-9 No.72/7087, both with his initials. Reverting to Squadron Leader in the RAuxAF, he commanded 610 Squadron at Hooton Park between 5.52 and 3.57, flying Meteor F.8 WH506 to mid-1953 then exchanging it for WK988.

JB Used on a succession of Typhoons by Wing Commander J.R.Baldwin, DSO, DFC. With 146 Wing as Wing Commander Flying he might possibly have used this code on MN935 around 7.44 - 8.44. The code was carried later that year, on an unidentified Typhoon, perhaps the same aircraft, which was one of two destroyed by a V2 rocket at Antwerp/Deurne on 25.10.44. Replaced by PD521 which was painted as 'JBII'. Reverted to 'JB' on promotion to Group Captain in command of 123 Wing from 22.2.45, first on SW470 then on SW496.

JBW Wing Commander J.B.Wray, DFC used this code on Tempest V EJ750 whilst Wing Commander Flying 122 Wing from 12.10.44. On moving to 56 OTU Milfield as Wing Commander Training in 12.44 he took over to NV729, changing this for EJ520 in 4.45, which he used until 7.45 when he became OC Training Wing at Milfield

JC Used by Squadron Leader J.Castagnola, DSO, DFC, the commanding officer of 41 Squadron at Biggin Hill in 1957 on Hunter F.5 WP186, a Station Flight aircraft which carried his code on the starboard side of the fin, code 'PT' on the port side of the fin and 41 Squadron colours on the nose.

JCB Wing Commander John Charles Button, DSO DFC used this code early in 1945 in Typhoon RN431 when Wing Commander Flying 123 Wing, the name 'ZIPP XI' being painted on the nose. In a similar post at Wunstorf in 1946 he used the code on Tempest V NV708 until it crashed on 7.1.47, the aircraft being recoded 'PPH' after repair. Around 9.54 Meteor F.8 WH480 (formerly coded 'DGS') carried this code with Station Flight Biggin Hill, presumably being flown by the same officer.

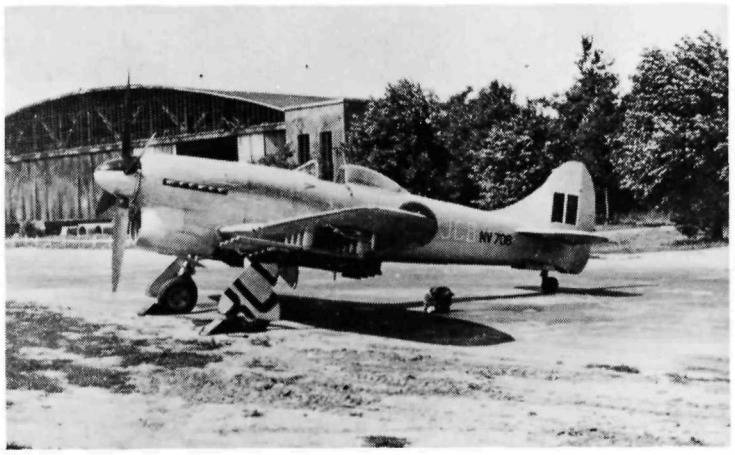
JCF This code was carried on an unidentified Spitfire Vc of 249 Squadron around 4.44 - 5.44 in Italy.

JCF This code was used again around 1956/57 by Wing Commander J.C.Forbes, DFM, CO of 264 Squadron at Linton-on-Ouse on Meteor NF.14s WS841 and WS844.

Hunter F.6 XG165 at Church Fenton (R.Rayner)

Meteor NF.14 WS841 of 264 Squadron at Blackbushe

Meteor F.8 WK731 at Tangmere, 1953



Tempest V NV708 at Wunstorf, 1946 (P.H.Dobbs)

JCW An unidentified Typhoon of 146 Wing carried this code around 1944/45 when flown by the Wing Commander Flying, then Wing Commander J.C.Wells, DFC & Bar from 17.11.44, until being promoted to Group Captain and given command of the Wing on 28.2.45.

JD Kittyhawk III FR868 was flown from around 9.43 by Group Captain J ('Jackie') Darwen, DSO, DFC & Bar, the CO of 239 Wing until he was shot down and killed by flak near Palato on 7.10.43, in this aircraft.

JE Air Commander J.Embling, Sector Commander Eastern Sector at Horsham St.Faith used this code on Meteor F.8 WK795 'JE' around 9.57. It also bore codes 'JW' and 'SCW' at different times.

JEFF Spitfire XIV MV263 carried this code when in storage at 33 MU Lyneham in 1947. Its last unit was 443 Squadron, which was in 127 Wing, and the code is therefore probably that of its Wing Commander Flying from 6.4.45 to 7.7.45, Wing Commander J.F.Edwards, DFC & Bar, DFM. It is probably the same aircraft as that coded 'JEFF' which damaged a tailwheel on landing when piloted by Wing Commander G.W.Northcott of 126 Wing on 4.7.45.

JEJ Wing Commander J.E.Johnson, DSO & 2 Bars, DFC & Bar used this code as Wing Commander Flying on several Spitfire IXs. The only one identified is EN398 of the Kenley Wing between 4.43 and 7.43. This was followed by three unidentified machines, one with 127 Wing 7.43 to 9.43, another with 144 Wing 3.44 to 7.44 and the last with 127 Wing again from 7.44 onwards. In 1945, as a Group Captain, he flew Spitfire PR.XI PM147 with this code, presumably with 34R Wing, since this aircraft was officially on charge to 16 Squadron within that wing. Also in 1945 he made a belly landing in an unidentified Spitfire XIV, though this may possibly have been coded 'JJ'. Around 1953, by which time he had reverted to the substantive rank of Wing Commander, he was flying Vampire FB.5 WG834 as Wing Leader Wildenrath, this having a red tail, a rank pennant on the nose and 'JEJ' on the tail boom (and also, curiously, it carried a Fassberg flash). Finally, as Station Commander at Wildenrath in 1.54, now a Group Captain again, he flew an unidentified Sabre F.4 with a red fin and rudder until being posted to the Home Establishment on 26.5.54.

JF Javelin FAW.9 XH846 carried this code at Tengah around 1964/65 when flown by the CO of 60 Squadron, Wing Commander J.Fraser. It had previously been coded 'J', to which it reverted when he departed in 11.65.

JFE A captured Fw 190 carried this code around 6.45 when flown by Wing Commander J.F.Edwards, DFC & Bar, DFM, the Wing Commander Flying of 127 Wing.

JG Group Captain J.Grandy, DSO used this code on Typhoon R7684 as Station Commander at Duxford around 5.42 - 6.42. He also used it when Wing Commander Flying, Northern Sector at Linton-on-Ouse around 7.51 - 5.52 on Meteor F.8 WA909.

JGH Seen on Spitfire Vb BL415 with 17 SFTS at Harlaxton in 1945.

JGH Also used on Oxford V3571 of the Fighter Command Communications Squadron around 6.45, this being the code of Wing Commander J.G.Hudson of Headquarters Fighter Command.

JGT Used by Group Captain J.G.Topham, DSO, OBE, DFC & Bar, Station Commander at Waterbeach, around 5.59 - 9.59 on Meteor F.8 WH404. The aircraft was nominally on the strength of 153 Squadron, which was renumbered 25 Squadron on 1 July 1958, and had previously been coded 'RGD'.

JH Reported used on an unidentified Tempest V, and might possibly have related to Wing Commander J.W.E.Holmes, DFC, AFC, who was with 84 Group Headquarters around 3.45.

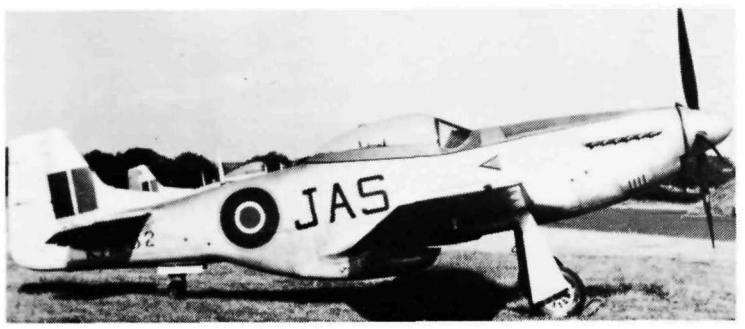
JH This code was also used at Duxford in 1956/57 by Wing Commander J.A.Hemingway, DFC, then OC Flying, on Meteor F.8 WK887, which at one time was coded 'PH'.

JH Another use of this code was by Wing Commander J.E.S.Hill, DSO, the Wing Commander Flying at Horsham St.Faith from 1.56, on Meteor F.8 WL173. By early 1957 he was using the code on Hunter F.4 WV314. Then in 5.57 it was reported on Meteor F.8 WK973, though this serial was evidently mis-spotted as WK973 actually went to the RAAF as A77-885.

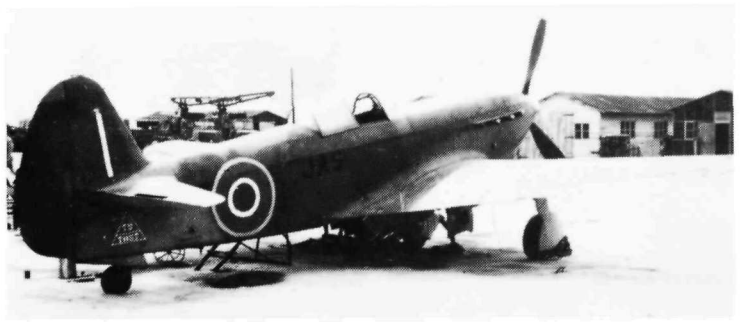
JHD Around 4.45 this code was used by Wing Commander J.H.Deall, DSO, DFC, the Wing Commander Flying of 146 Wing on a Typhoon, believed to be SW449.

JHW Wing Commander J.H.Walton, AFC, CO of 25 Squadron at Waterbeach, used this code in 1960/62 on Javelin FAW.9s XH880 and XH883. It is not known whether he had any connection with the code being used from 1967 on Meteor NF.14 WS788, gate guardian at RAF Patrington, where it had ground instructional number 7967M, the "code" being later removed on going to Leeming.

Mustang IV KM232 at Digby in 1945 (RAFM P5122)



Yak-9 72-7087 of 239 Wing, 1946 (RAFM P5133)

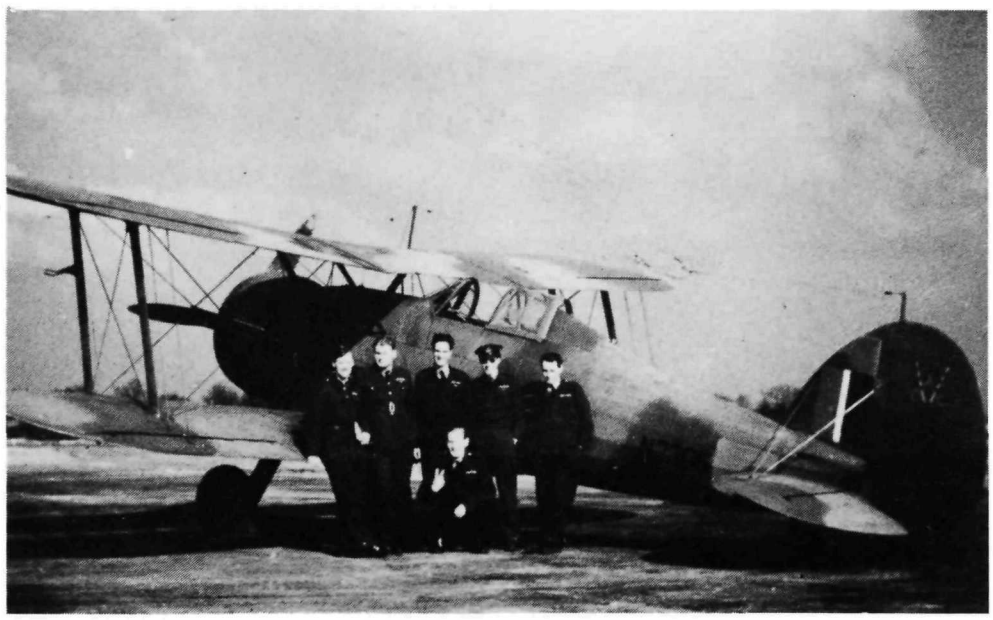


FLEET AIR ARM ACCIDENTS AND LOSSES 1949

Date	Type	Serial	Unit	Location	Cause
10.1.49	Mosquito TR.33	TW281	790 Sqdn	St.Merryn	Landing in poor visibility, overshot runway and ran into disused shelter
16.1.49	Mosquito TR.33	TW295	771 Sqdn	6m ENE Eddystone Light	Crashed in sea during radio trials with HMAS Sydney
22.1.49	Firefly FR.1	PP558	827 Sqdn	HMS Ocean	Crashed (no details)
23.1.49	Firefly FR.1	MB722	1830 Sqdn	Abbotsinch	During ADDLs, stalled, starboard wing touched ground, swung to starboard, undercarriage collapsed
1.2.49	Firefly AS.5	VT371	814 Sqdn	HMS Triumph	Insufficient power, ditched
4.2.49	Firebrand TF.5	EK786	813 Sqdn	Moray Firth	Failed to recover from spin from about 5,000 ft, went in sea and sank immediately
8.2.49	Firefly FR.4	VG998	816 Sqdn	HMAS Sydney	Slow approach, arrester hook removed on rounddown; skidded into barrier on belly
10.2.49	Firefly FR.4	VG987	810 Sqdn	HMS Theseus	no details
10.2.49	Barracuda TR.3	?	815 Sqdn?	Off west coast of Scotland	Crashed on training flight from Eglinton
14.2.49	Sea Fury FB.11	TF964	807 Sqdn	St.Pauls Bay	Ditched flying from Hal Far
15.2.49	Sea Otter ASR.2	JN256	Stn Flt Culdrose	Mawnan, near Falmouth	Crashed into trees
15.2.49	Firefly AS.5	VT366	812 Sqdn	Krendi	Engine trouble, forced landed on obstructed runway, caught fire on landing
18.2.49	Sea Otter ASR.2	JN244	RN Arctic Force	HMS Vengeance after trial flight near Jan Mayen Island	Bounced landing, slewed across deck, caught No.8 wire, crashed into sea over starboard side, the hook disengaging from the wire
28.2.49	Dominie C.1	X7400	782 Sqdn	Dun Rig, Peebles	Port engine failed at 6500ft above cloud, unable to maintain height on one engine, crash landed on mountain side in cloud
9.3.49	Martinet TT.1	RH114	728 Sqdn	Hal Far	Severe engine vibration after one hour of towed target exercise, emergency landing
12.3.49	Firefly FR.1	PP426	826 Sqdn	HMCS Magnificent	Torque stall from full throttle when taking voluntary wave-off, went into sea
12.3.49	Sea Fury FB.11	TF992	803 Sqdn	Dartmouth	Ditched
22.3.49	Sea Fury FB.11	TG116	883 Sqdn	HMCS Magnificent	Ditched after lost power on take-off
23.3.49	Sea Fury FB.11	VW580	802 Sqdn	Culdrose	Ditched during oxygen climb practice
24.3.49	Firebrand TF.5	EK793	813 Sqdn	off Plymouth Hoe	Ditched after lost power during mock attack on Devonport Dockyard by carrier-borne aircraft from HMS Implacable
24.3.49	Sea Fury FB.11	VW241	807 Sqdn	from HMS Theseus	Pilot forced to bale out during mock attack on Devonport Dockyard by carrier-borne aircraft from HMS Theseus
26.3.49	Mosquito PR.16	NS531	728 Sqdn	About ½ mile off Delimara Point, Malta	Returning from mail run to Bone, starboard engine gave trouble soon after take-off, struck water nearing Malta; Lt Marshall, OK
26.3.49	Sea Otter ASR.2	RD880	Ships Flt	HMS Triumph	Stalled and landed heavily on port float
26.3.49	Sea Otter ASR.2	JM880	728 Sqdn	off Malta	Landed in rough sea in attempt to rescue crew of ditched Mosquito NS531, engine stopped, aircraft damaged then driven on to rocky shore and broken up
28.4.49	Firebrand TF.5	EK772	813 Sqdn	English Channel, SE of Isle of Wight	Crashed in sea after lost formation in cloud while operating from Lee-on-Solent
10.5.49	Sea Fury FB.11	VW578	802 Sqdn	2½ m S of Pendennis Castle	Undercarriage failure, lost in sea after pilot unsuccessfully attempt to abandon aircraft
16.5.49	Firefly FR.1	Z2108	766 Sqdn	Lochnager, Grampians	Overshot Lossiemouth on local instrument flying training in poor weather conditions
19.5.49	Mosquito T.3	VT615	762 Sqdn	Culdrose	Undershot on feathered approach and crashed attempting to go round again
19.5.49	Seafire F.15	SW781	766 Sqdn	3½ m ESE Covesea Light	After take-off from Lossiemouth, climbed to about 1,000 ft then made a shallow dive turning slowly to port and hit ground with engine on
19.5.49	Sea Otter ASR.2	JN183	Ships Flt	HMS Ocean off Malta	Missed wires, starboard wing struck island and mobile crane on taking off again; crashed in sea
25.5.49	Barracuda TR.3	RJ942	719 Sqdn	Eglinton	Ditched, crew picked up by launch
25.5.49	Sea Fury FB.11	VR941	703 Sqdn	HMS Illustrious	Missed wires, caught first barrier, engine broke off, overturned into second barrier, caught fire
26.5.49	Firefly FR.4	TW743	RNAMY	Abbotsinch	Engine cut on test flight, crashed in emergency landing on airfield
30.5.49	Seafire F.47	VP436	804 Sqdn	HMS Ocean	Went over side of ship in Mediterranean
31.5.49	Seafire	?	766 Sqdn?	Nr Lossiemouth	Collided with another Seafire and crashed in sea (Canadian pilot killed), other aircraft landed safely
1.6.49	Firefly FR.4	VH136	825 Sqdn	HMCS Magnificent	Lost power on take-off; ditched on starboard bow
9.6.49	Sea Fury FB.11	VX618	Hawkers	North Park, Iver	Crashed after engine failure on production test flight from Langley
19.6.49	Firefly FR.1	PP533	736 Sqdn	3m N of Cornwood, nr Ivybridge	Flew into hill in poor visibility, burnt out
23.6.49	Firebrand TF.5	EK834	813 Sqdn	HMS Implacable	Hook hit top of rounddown and fractured
27.6.49	Oxford T.1	PH375	762 Sqdn	Near Mawnan Smith, Cornwall	Stalled and crashed in field
29.6.49	Seafire F.17	SX136	737 Sqdn	HMS Illustrious	Crashed (no details)

30.6.49	Sea Fury FB.11	VW240	703 Sqdn	Lee-on-Solent	Suspected fire shortly after take-off; switched off on final approach, stalled at 50ft executing steep turn
4.7.49	Seafire F.47	VR965	800 Sqdn	HMS Triumph	While taxiing on deck, port wing struck leading edge of stationery Seafire
5.7.49	Firefly AS.5	VT418	810 Sqdn	HMS Theseus	Hit in deck park by Firefly Kl169 of 4 Sqn RNN
5.7.49	Seafire F.47	VP486	800 Sqdn	HMS Triumph	Over all wires, through No.1 barrier into No.2 barrier
8.7.49	Harvard T.3	EZ288	Stn Flt	Hal Far	Overturned after violent braking during landing from instrument flying practice
12.7.49	Seafire F.47	VP491	800 Sqdn	HMS Triumph in Mediterranean	Hit rounddown landing, broke in two; pilot's half fell in sea and sank immediately
15.7.49	Seafire F.15	SW797	1832 Sqdn	HMS Implacable	Hit rounddown, undercarriage collapsed
15.7.49	Sea Hornet NF.21	VW948	809 Sqdn	Near Gweek	Crashed during night exercise from Culdrose
16.7.49	Seafire F.17	SP325	1831 Sqdn	Wildboar Clough, Peak District	Section of two aircraft carrying out controlled descent into cloud, hit top of hill
16.7.49	Seafire F.17	SX314	1831 Sqdn	As above	
16.7.49	Sea Otter ASR.2	RD879	781 Sqdn	Lee-on-Solent	Engine cut shortly after take-off, no time to retract undercarriage, landed in sea, nosed over, ultimately sank
18.7.49	Seafire F.17	SX112	1831 Sqdn	Stretton	Crashed after wingtip touched sand during low flying
18.7.49	Seafire F.47	PS949	Test Flt	Eglinton	On test flight, pilot called up for immediate landing, engine cut on final approach, tail struck four-foot bank near perimeter and became detached, aircraft nosed over and burst into flames
19.7.49	Firefly AS.5	VT498	812 Sqdn	off Cape Bon, ½ m from HMS Ocean	Crashed in sea during low turn
23.7.49	Firebrand TF.5	EK747	813 Sqdn	Poole Harbour	Forced landed in water after engine failure
26.7.49	Seafire F.17	SX224	728 Sqdn	Hal Far	Crashed (no details)
29.7.49	Firefly AS.5	VT367	812 Sqdn	Castel Benito?	Lost power on take-off; ditched
9.8.49	Firefly FR.1	MB556	766 Sqdn	½ m off NW shore of Kerrera island near Oban	Crashed in sea
16.8.49	Firefly AS.5	VT496	719 Sqdn	2m N of Ballymena Town	Lost control in aerobatics; Lt R.P.Dunn klled
24.8.49	Barracuda TR.3	RJ931	815 Sqdn	Eglinton	Stalled and dropped wing during stream landing
1.9.49	Sea Fury FB.11	VW544	802 Sqdn	Culdrose	Stream landing, hit slipstream of aircraft ahead, stalled and hit ground
5.9.49	Sea Fury FB.11	VW238	802 Sqdn	Yeovilton	Struck by following aircraft (TF965) while awaiting take-off
5.9.49	Sea Fury FB.11	TF965	802 Sqdn	Yeovilton	Hit VW238 on take-off; aircraft went into barrier
16.9.49	Sea Hornet F.20	TT211	801 Sqdn	HMS Implacable	Ditched after turning to starboard on take-off then unable to maintain height or keep straight
19.9.49	Seafire F.17	SX176	737 Sqdn	Eglinton	ADDLs, wheels-up landing on grass after damaged undercarriage on take-off
20.9.49	Firefly FR.1	PP561	792 Sqdn	Culdrose	Crashed (no details)
22.9.49	Seafire F.15	SR606	1831 Sqdn	HMS Illustrious	Tail hit rounddown; nosed over
26.9.49	Seafire F.15	SW789	1833 Sqdn	HMS Illustrious	Hit rounddown, bounced over wires and 1st barrier, into 2nd barrier and caught fire
26.9.49	Seafire F.15	SW820	1833 Sqdn	HMS Illustrious	Tail hit rounddown, nosed over
26.9.49	Sea Fury FB.11	VW651	807 Sqdn	3½ m from Landguard Point, Devon	Forced landed after engine failure while flying from Biggin Hill
28.9.49	Seafire F.17	SX226	728 Sqdn	Hal Far	Crashed (no details)
19.10.49	Mosquito T.3	VT630	762 Sqdn	1m S of Culdrose	Crash landed in field after starboard engine failed
20.10.49	Martinet TT.1	RG971	771 Sqdn	Lee-on-Solent	Engine vibration, stalled during emergency landing, undercarriage collapsed
20.10.49	Sea Fury FB.11	VW695	804 Sqdn	Entrance to Grand Harbour, Malta	Ditched after engine trouble while flying from Hal Far, dived into sea
24.10.49	Sea Fury FB.11	VR945	50 TRAG	Yeovilton	Landing accident
4.11.49	Sea Hornet F.20	VR892	801 Sqdn	HMS Implacable	Ditched after power lost on take-off
10.11.49	Sea Hornet F.20	VR857	801 Sqdn	off Kilda	Crashed in sea when port wing folded after take-off from HMS Implacable
14.11.49	Harvard T.3	EZ391	Arbroath	Arbroath	Starboard oleo collapsed on landing, aircraft swung to starboard on wingtip
15.11.49	Firefly AS.5	WB289	812 Sqdn	HMS Ocean off Malta	Fast touchdown, missed wires, went over starboard side of ship
16.11.49	Firefly FR.1	DV133	766 Sqdn	1½ m E of Milltown	Spun into ground inverted on dual flying check, believed after looping twice
17.11.49	Firefly FR.1	PP651	827 Sqdn	HMS Triumph	Floated, bounced and crashed into barrier
18.11.49	Seafire F.45	LA456	771 Sqdn	On public road at end of Runway 24, Lee-on-Solent	Approached too high and too fast, overshot into Stubbington Lane, Stubbington and overturned
24.11.49	Seafire F.17	SX241	728 Sqdn	Hal Far	Engine cut on take-off; landed ahead and overran despite retracting undercarriage
30.11.49	Seafire F.15	SR600	767 Sqdn	HMS Illustrious off Portland	Hook engaged No.2 wire and fractured, pilot braked, aircraft nosed under barrier which removed windscreen and struck pilot
4.12.49	Seafire F.17	SX282	1833 Sqdn	Cloudsley Bush, Wolvey, 4m E of Bramcote	Spun in during authorised aerobatics
8.12.49	Sea Fury FB.11	VW709	804 Sqdn	Hal Far	Crashed (no details)
16.12.49	Sea Fury FB.11	VX650	767 Sqdn	HMS Illustrious	Crashed and broke in two

PICTURE PAGES



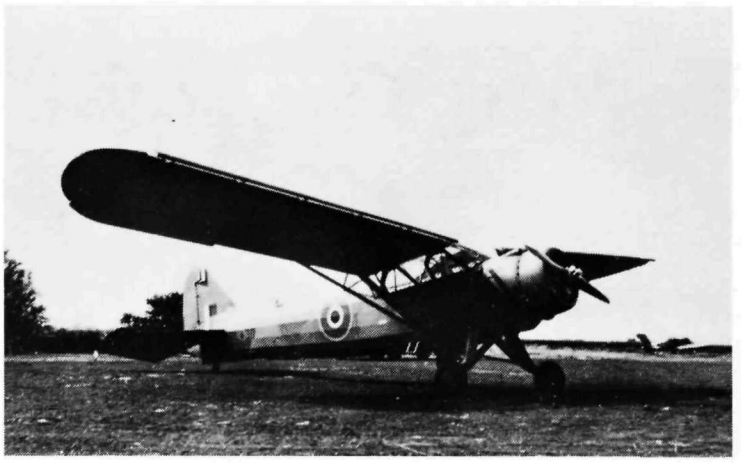
Top: Gladiator II N2306 presents some problems of identity. The official movement record is deficient in that it shows it was delivered on 7 February 1939 and went to 605 Squadron in April, being passed on to 615 Squadron in October. The last of its Gladiators departed in May 1940 but there is no detail on the record until 27 March 1942 when it is shown as being repaired on site. There are no write-off details. However it is known to have carried code UG-R in May 1940 with No.16 Squadron (N2304 was UG-D) supplementing its Lysanders and in September 1940 was with 239 Squadron until January 1942.

The photo from Andy Thomas shows N2306 at Hartfordbridge (later Blackbushe) in late 1942. It has an interesting tail marking consisting of a "V" with "A" in the top segment and two "C"s on either side of the base. Is this a personal code or could the fact that 239 was an army co-operation unit mean that the aircraft was later held as a hack in **Army Co-operation Command**?

Below: The mock-up on Martinet HP413 shown in AM.1/90 is confirmed by Peter Green as being for the Martinet Trainer and a photo of JN668 has been sent in by P.F.Edmonds to illustrate this.

Above: The Armée de l'Air's basic training types included a production run of the Romano R-82 from the Cannes-based aircraft builder, nationalised in 1938 to be part of SNCASE. (Photo via Charles W Cain)

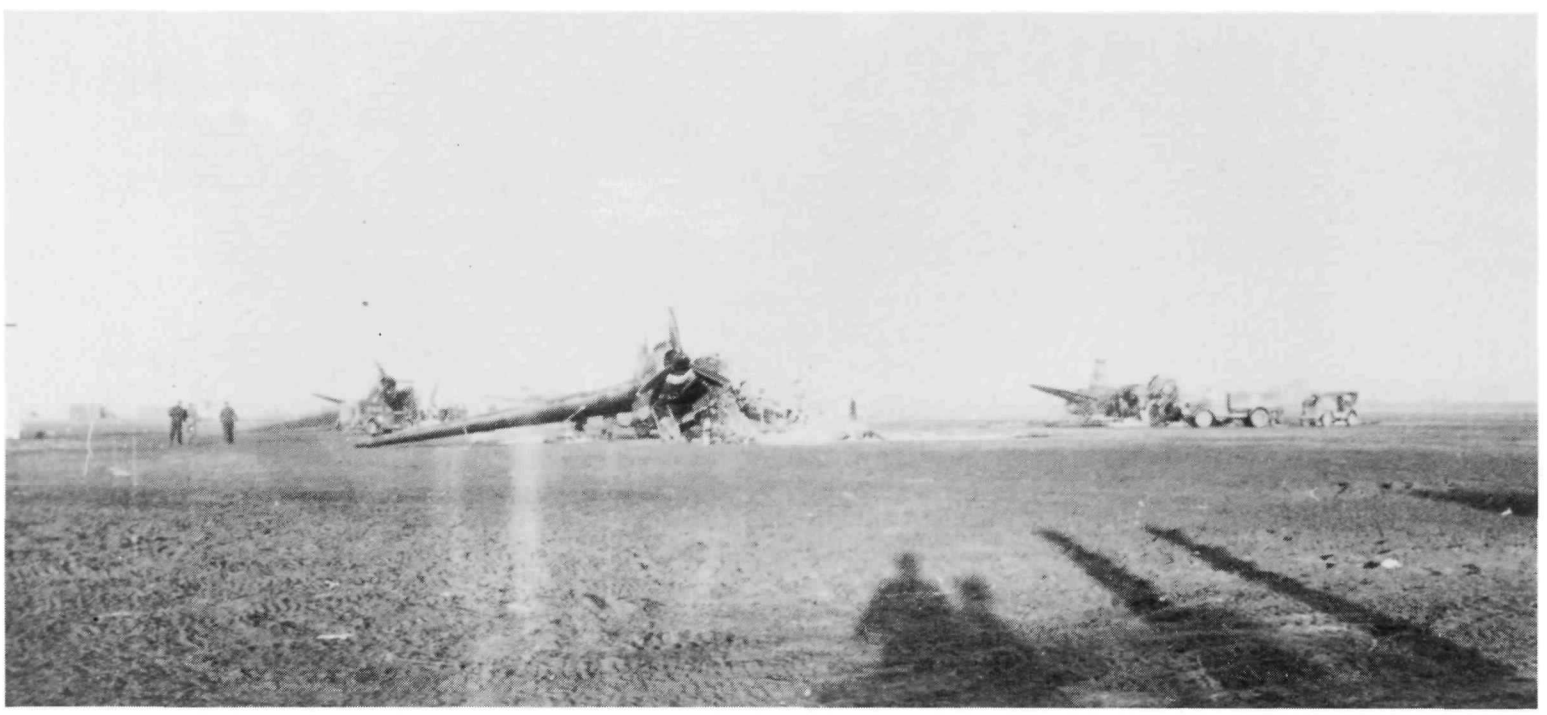
Vigilant I HL430 of No.83 Group Communications Flight at New Romney in 1943 (via Andy Thomas)



Auster AOP.9 XK412 landing on HMS Albion in 1960, probably hoping the tailwheel would not catch a wire!

A total of 233 Ansons is reported as being transferred to France after the end of the war as part of a large re-equipment programme. NK617 is here seen at BE.706 Cazaux. (via CWC)

The wreckage of Wellington XIIIs of No.69 Squadron at Melsbroek on the afternoon of 1 Janbuary 1945. (via Peter Green)



FEED BACK

RAF SEARCH AND RESCUE

In AM.1/90, we carried an article on RAF SAR operations in the UK. While this was being keyed in, there occurred a classic example of Murphy's Law. Being interrupted after typing the first three words of one paragraph, we resumed shortly afterwards. By sheer coincidence, the same three words occurred at the beginning of a later paragraph, resulting in a section being left out. Our apologies to Eric Myall whose missing words were as follows, starting immediately before "No.22 Squadron" in the second column of page 4:

THE SQUADRONS

As indicated above, the origins of the two ASR squadrons covering the United Kingdom are found in the former Fighter and Coastal Commands. On 30 April 1968, Strike Command was formed by the Royal Air Force, combining Fighter and Bomber Commands. Coastal Command joined Strike Command on 28 November 1969 so that from then on there was no real distinction between the respective SAR squadrons which were brought within No.18 Maritime Group of Strike Command. Nevertheless, separate geographical squadron headquarters were maintained until 1976, when the Royal Air Force's SAR organisation was centralised at Finningley.

No.275 Squadron

The first dedicated RAF helicopter squadron in the SAR role was formed as mentioned above, transferring to Linton-on-Ouse on 13 April 1953 equipped with two Sycamore HR.13s (XD196 and XD197), an interim version of the HR.14 which was becoming the standard production model. This was a modest enough beginning and expansion took some time to achieve. It was not until July 1954 that the first additional Sycamore HR.14 (XE306) joined the squadron, by which time XD196 had already been written off! A move to Thornaby took place on 18 November 1954 and this was soon followed by the formation of the first Flight within the Squadron at North Coates on 21 February 1955. This was initially known as B Flight, with the flight at Thornaby being re-designated as A Flight, having been known up to that point merely as HQ Flight. This was, however, quickly changed and the flight at North Coates became A Flight and Thornaby's, B Flight. C Flight at Leuchars followed on 20 June 1955, D Flight at Horsham St.Faith on 16 September 1955, E Flight at Chivenor on 20 June 1957 and F Flight at Aldergrove on 15 July 1957. The Squadron HQ and B Flight transferred to Leconfield on 9 October 1957.

No.228 Squadron

With a continuing reduction in the overall size of the Royal Air Force in the 1950s, Squadron "Number Plates" were progressively passed to the older squadrons so that on 1 September 1959, No.275 Squadron was re-numbered 228 Squadron and remained so identified for six years. Within that time-scale, the squadron was progressively re-equipped with, initially, Whirlwind HAR.2s and then with HAR.10s, the last Sycamore leaving in June 1960. Movements of the individual flights are given in a separate table below.

No.202 Squadron

History repeated itself in 1964 and 228 Squadron was re-numbered 202 Squadron on 1 September 1964, the headquarters remaining at Leconfield. Apart from movements of individual flights (see below), the following twelve years were fairly uneventful. But on 1 September 1976, the Squadron HQ was transferred to Finningley to complete the bringing together of the two SAR squadrons with the creation of a centrally-based SAR organisation. With the introduction of the Sea King HAR.3 in August 1978, some re-structuring of the two squadrons was undertaken with 202 Squadron concentrating on the Sea King and 22 Squadron on the Wessex HAR.2.

EXPEDITERS

Some useful comments have arrived from Steve Darke, Air-Britain's Beech 18 specialist, on the batch of Expediters in the recently-published HA-HZ Register.

Diversions to the RCAF were allotted RCAF serials as follows:

HB184	1401;	HB187	1403;	HB188	1402;
HB189	1404;	HB211	1406;	HB213	1405;
HB215	1508;	HB219	1407;	HB228	1410;
HB232	1412;	HB237	1411;	HB238	1409;
HB262	1413;	HB263	1414;	HB264	1415;
HB265	1416				

HB260 is shown as being returned to the US on 2 May 1946 but was written off while being flown by 249 Ferry Wing. Due to the poor state of the runway, both undercarriage legs collapsed in succession on landing at Strasbourg on 8 May and the aircraft was judged a write-off.

HB247 had both tyres burst on take-off and the port leg collapsed at Willingdon on 15 January 1946. It could mean that the aircraft was passed to US control in a damaged condition.

HB295: entry was incomplete and should read: Flew into hill in cloud near Ariano, 3.4.45

THE FRENCH BARRACUDA

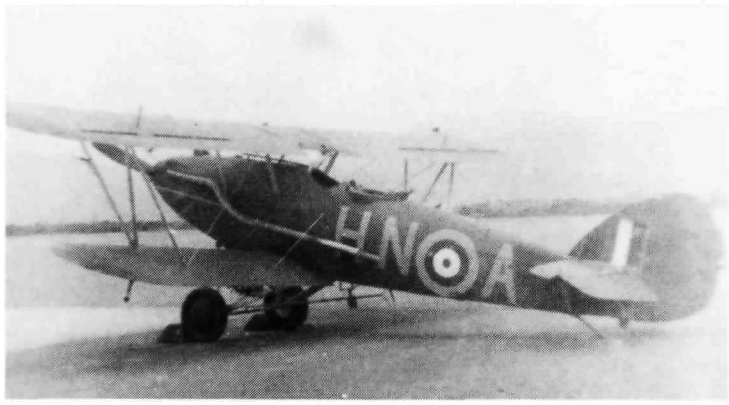
A further note on the above (AM.4/89) comes from Serge Blandin who records that Barracudas RK360, RK367, RK368, RK400, RK420, RK463, RK476, RK477, RK479 and RK480 were delivered and used by ELA 56 based at Persan-Beaumont for special duties.

The photograph we used was taken by a local photographer and was part of the René Brunot collection. The aircraft is in a field near Camp de Montlouis about 10 km E of Font-Romeu in Pyrénées-Orientales. At the time, experimental flights were being made in co-operation with French paratroops and commandos.

Serge saw one of the Barracudas at Persan-Beaumont in 1948, lying in the middle of the airfield after suffering a broken port undercarriage leg, apparently still in British markings. It was under guard and could not be examined more closely.

LANCASTER PD336

"The Lancaster File" shows this aircraft as having crashed after collision with HK610 over Bury St.Edmunds on 2 February 1945. John Sigourney, who was there, has pointed out that this is not exactly true. The collision took place but while HK610 crashed, PP336 managed to land back at Tuddenham with heavy damage to the tail. This resulted in the aircraft being struck off charge as being damaged beyond repair.



Joe Warne has kindly contributed the following notes on markings carried by squadrons in India

SQUADRON AIRCRAFT CODE LETTERS USED IN INDIA, 1939-1942

No Orders have been traced in available records so the codes used by squadrons of the RAF in India and precise dates of effect for the changes which took place within the AFI are uncertain. The codes allocated to the RAFI squadrons by the Air Ministry in 1938 were:

No.5 QN; No.11 OY; No.20 PM; No.27 MY:
No.28 US*; No.31 ZA*; No.39 SF; No.60 AD*

Notes: 1 * = known use by AFI squadrons in subsequent short term
2 Squadrons were allowed to retain badges until on war operations

The codes actually used in India around the outbreak of World War Two were:

No.5 OQ (retained - see Note 3)
No.11 YH (for re-inforcement of Singapore)
No.20 HN (retained - see Note 3)
No.27 NB (passed on within India Command)
No.28 US (passed on within India Command)
No.31 ZA (vanished from India/FE scene)
No.39 XZ (for re-inforcement of Singapore)
No.60 AD (passed to 113 Sqn in Middle East)
No.1 IAF possibly "MR"

In practice, the Frontier squadrons did not use codes until detailed to deploy to their War Stations (No.2 Wing) or after deployment to CDF duties (60 Sqn). It may be assumed that the other "mobile" squadron (No.28) and the transport support squadron (No.31) used codes for similar deployments in accord with the overall plan for strategic re-inforcement. The following changes took place within the AFI but particularly in the case of the IAF, lack of precisely dated/located photos leads to conjecture as to the facts:

No.27 PT by February 1940 and retained until disbandment in FEC, February 1942
No.28 BF by 1940 (Audax and Lysander) see 3
No.31 EE by 1940 (Valentia)
No.60 MU by February 1940 and retained until November 1946 (see Note 3)
1 IAF NB conceivably before November 1941 but certainly by May 1942 (Lysander)
2 IAF US? by 1941 (Audax and Lysander)
3 IAF MR? by 1942 (Audax (see Note 3 for all IAF squadrons)

Notes:
1 About June 1940, camouflage was applied to Audaxes but Harts, Wapitis, etc on CDF and training duties retained "aluminium" finish
2 Detached aircraft bore original codes for some months after the changes had been ordained
3 During 1943-44, the Hurricane squadrons did not use codes.

SUMMARY OF MARKINGS USED BY RAF SQUADRONS IN INDIA, 1920-39

Inevitably some distinctive markings were painted on aircraft by the early squadrons in India but by RAF (India) Order 25 of 20 July 1920, these were abolished and the new standard decreed that Flight colours should be applied to wheel discs (repeated elsewhere on the aircraft in practice) as Red = A Flight, White = B Flight and Blue = C Flight. Individual aircraft were to be identified by letters A to Z, omitting "I", irrespective of Flight allocation within each squadron. These were in white (or black in the obvious underwing cases) forward of the fuselage roundels, together with one over the top wing centre section and another below one lower plane. Wartime finish was overpainted with V 84 aluminium dope from 1923 onwards and black letters became the vogue.

Practical Aspects

No precise evidence has been found as to when this lettering scheme was abandoned but 60 Squadron used numerals when it converted to the D.H.9A in 1923. Conceivably, 27 Squadron may have used numerals on their D.H.9As at this time. In May 1925, letters replaced these numbers as 27 and 60 (Bomber) Squadrons were co-located at Kohat and split the alphabet between them. Subsequently, and exceptionally, 39 Squadron used numbers on their aircraft from 1929 until 1938 as a component of No.2 (Indian) Wing, co-located with 11 Squadron at Risalpur. The letters were split between the three flights (Four each in alphabetical sequence, but "I" and "U" were normally used for Wing aircraft maintained by component squadrons.

By 1 January 1925, squadrons began to paint their individual "badges" on their aircraft fins, albeit these were not yet official approved by the Chester Herald, along with their selected colours used in several minor aspects.

Late in 1926, the squadrons had their number painted on the aircraft fins in black instead of the badge but this was another short-lived scheme, again undefined by dates.

By 1930, interim, simple but distinctive fuselage stripes had been introduced by the squadrons but these were standardised by RAFI Instruction on 23 April 1931. Lack of space precludes detailed description of obscure variations on this theme, along with the colours involved (mainly black or red) but photographs illustrate some aspects.

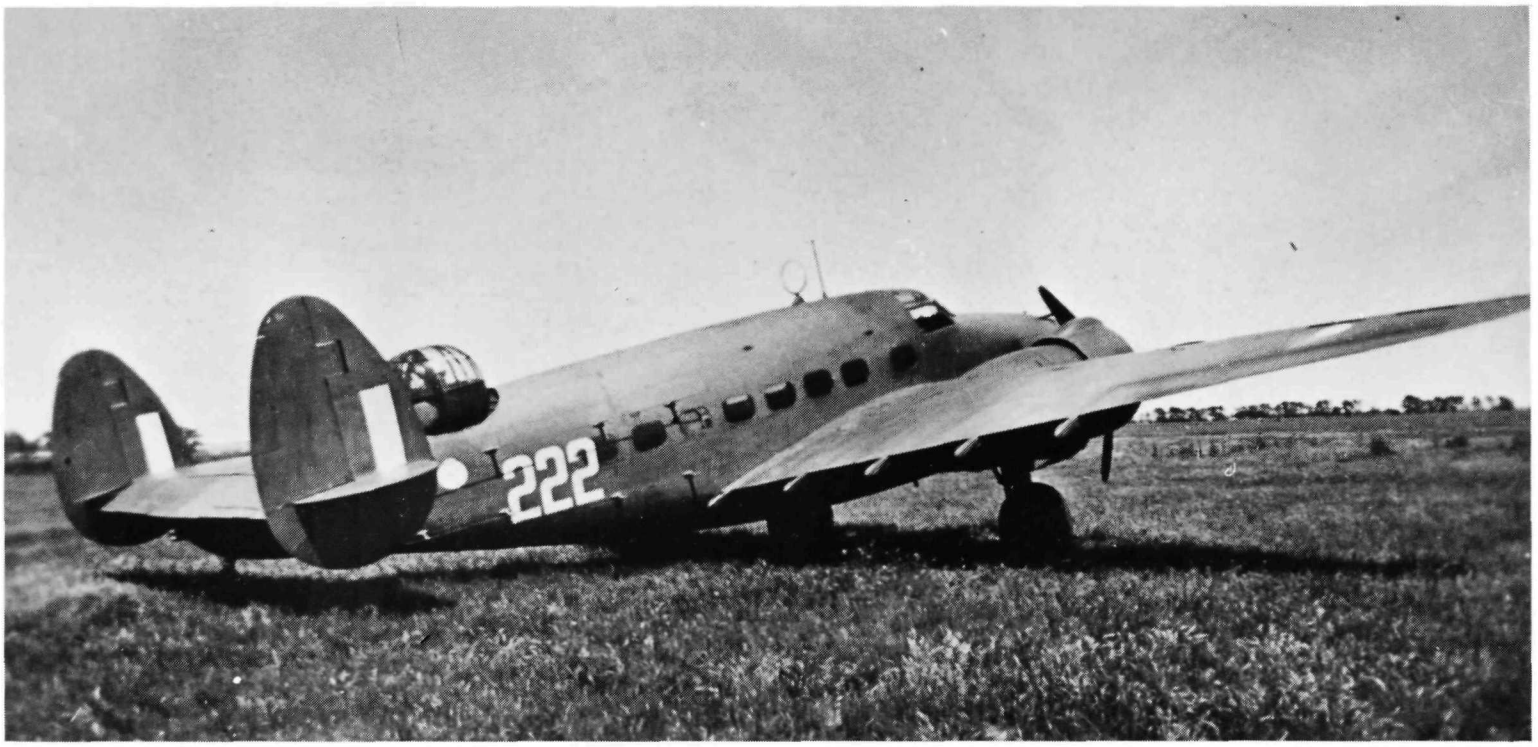
RAFI Order 48 of 5 May 1936 authorised the use of approved squadron badges within the white role patch - "grenade" for bombers, six-point star of St.David for army co-operation - to be applied to the aircraft fin. However, photographs of, for example, XI and 28 Squadron markings in the late 1930s, show a shield as background to the badge, which included the squadron number, on aircraft nose or fin, presumably prior to role patch standardisation.

Squadron numbers and role were soon deleted from such badges and AFI Order 108 of 2 August 1937 regularised the letters, colours and sizes to be used on their aircraft by its squadrons. These were:

5 Sqn:	A-M in black;	11 Sqn:	A-M in red
20 Sqn:	A-M in red;	27 Sqn:	A-M in black
28 Sqn:	A-M in green;	31 Sqn:	A-M in red
39 Sqn:	N-Z in red;	60 Sqn:	N-Z in black
1 Sqn IAF:	N-Z in yellow:	BT Flt:	A-M in black
HQCF:	A-H in blue		

Letter sizes:
Wapiti: 3-inch strokes, 23 in x 21 in
Hart/Audax: 2½-inch strokes; 20 in x 14 in

HUDSON REINFORCEMENTS FOR SINGAPORE



A16-222 (ex-AE488) at No.1 OTU, East Sale, in 1945 (Lindsay Denham via David Vincent)

A week before Japan's devastating attacks against British and American targets on 7/8 December 1941, Prime Minister Churchill responded to Duff Cooper, Britain's Minister resident in Singapore, in answer to his urgent request for bomber reinforcements, that arrangements were being made "to transfer four to six bomber squadrons to your theatre at the earliest possible moment hereafter". (PM's Personal Telegram T996, 14.12.41: Churchill Papers 20/46, quoted on page 7 of " Road to Victory: Winston S.Churchill 1941-1945" by Martin Gilbert)

This request was hardly news to Churchill. On 8 December, his Chiefs of Staff had received a telegram from the Commander-in-Chief, Far East, and Commander-in-Chief, Eastern Fleet, "stating that the outcome of the battle in northern Malaya might well turn on the number of aircraft available and emphasising the need for the maximum air reinforcement as early as possible" (page 253 "The War Against Japan Vol.1" by S Woodburn Kirby, hereafter quoted as "Kirby").

By the end of December, according to Kirby, the first of 36 Hudson IIIs had left for Singapore. A further sixteen were earmarked as "special reinforcements" (Kirby p.254) but it is doubtful that they were ever sent. The pilot who led the first flight was Terence O'Brien, an Australian in the RAF, who recollected that the composition of these reinforcements was basically only half of No.53 Squadron and half of No.59 Squadron, adding "We in 53 went first and 59 followed, all in dribs and drabs". By 6 January 1942, Kirby comments that 23 Hudsons were en route from the UK, the original route being defined as Gibraltar - Malta - Egypt - Habbaniya - Basrah - Sharjah - Karachi - Allahabad - Calcutta - Mingaladon - Victoria Point - Singapore. It is generally conceded, however, that only 16 Hudson reinforcements from the UK were ever received in Singapore (see, for example, P.188 of Lt.Gen Percival's report), RAAF official historian Douglas Gillison blaming the cutting of the ferry route from India for the low number (see footnote p.342 of "Royal Australian Air Force 1939-42"), although this seems outwardly unlikely as Kirby (p.254) indicates that Sabang in Sumatra was substituted for Victoria Point when the latter airfield was taken by the Japanese on 15 December (i.e. a fortnight before the first Hudsons left England). Terence O'Brien has confirmed that most of the Hudsons from 58 Squadron "never got past Rangoon". They may have been held back when it was decided in late January 1942 to transfer the remaining Singapore-based bombers to Sumatra.

From here the information becomes even sketchier until all remaining Hudsons - both of the RAF and RAAF - were taken over by No.1 Squadron RAAF on 20 February 1942. At the start of the month, an Order of Battle used by Kirby substantiates the figure of sixteen Hudson IIIs available and indicates six were on the strength of No.8 Squadron RAAF (which had left its remaining Mk.Is with No.1 on Sembawang in late January) whilst the other ten, along with five Blenheim Is, were on the strength of No.62 Squadron. These squadrons were then based at a secret airfield near Palembang, along with elements of Nos.27, 34, 84 and 211 Squadrons. The airfield was known as P.2. It is presumed that most, if not all, of the Hudson IIIs were fairly inactive at the beginning of the month because all would have been in need of major overhauls following their flight from the UK. Known losses since the arrival of the Hudsons were two at this time; two 62 Squadron aircraft crashed on the evening of 26 January 1942 following their successful return from a six-aircraft attack against a significant Japanese convoy landing troops at Endau. Which two aircraft these were is not known. There were no survivors and in the scramble to Java which followed in February, very few records - if any - of No.62 Squadron survived. The story of No.8 Squadron RAAF is much the same. The records of No.1 Squadron RAAF were, however, more fortunate in surviving Singapore, Sumatra and Java. Before going into captivity with his men on Java, the Commanding Officer of No.1 Squadron, Wg Cdr R.H.S.Davis, had his orderly room sergeant transcribe the details which had been maintained right up to the end on the customary A50 pages (equivalent of the RAF Forms 540/541) on to thin grey paper he had obtained from the Dutch and these sheets were then concealed, both in the false bottom of a small case that Davis had made in Java from scrounged materials to carry his essentials into captivity, and in his RAAF cape.

"We had some interesting moments during POW life hanging on to the record" he later told me, but fortunately at least one version of Wg Cdr Davis's report has survived and today is held by the Australian War Memorial. The entry for 20 February confirms the existence of eight Hudson IIIs at that date and provides an interesting commentary on their condition:

"On the 20th, the following aircraft were taken over from Nos.8 and 62 Squadrons: Nos.506, 529, 553, 583, 488, 7, 937 and 9121. Of those actually located at Semplak at the time of handover, only two were serviceable, the others were either badly damaged or grounded at other aerodromes in various states of disrepair. The task of collecting all these aircraft and commencement of repair fell heavily on the men of the Squadron, particularly as some of the new equipment aircraft of No.8 Squadron had not been operationally serviceable since that Squadron first received its six Mk.IIIs on arrival at Palembang at the end of January. However, the Squadron personnel fell to with a will using that ingenuity for quick patching, etc. which had already earned for them considerable recognition."

One by one these aircraft were destroyed or abandoned over the next sixteen days until Allied forces on Java surrendered but it seems likely that there were at least two survivors which were both collected from Andir. One, AE488, was evacuated by a RAAF crew to Australia where it was renumbered A16-222 and saw further operational flying, participating in training duties until disposed of post-war. Its air force days were not yet over though: after a brief appearance on the Australian Civil Register as VH-BLB, it made its way to the fledgeling Israeli Air Force in 1949. Unfortunately, its ultimate fate is unknown.

The other Andir example appears in the background of a published photo of a captured Curtiss-Wright CW-22 (see p.140 Air International, September 1977) and could well have been the example that the South West Pacific Area Intelligence Summary No.16 (based on information to 10 July 1942) referred to when it reported that a captured Hudson plus a Martin 166 and Hawker Hurricane had been flown over Tokyo for the first time on 7 July. For these Hudsons sent to the Far East as reinforcements from the UK, it seemed anything was possible.

In compiling the following list, I have extracted all Hudsons listed by Jim Halley in the Royal Air Force Aircraft serial number volumes for which an eventual fate of "Lost at Singapore" or "Lost in Malaya" or similar is recorded and added information from "Seek and Strike" by Andrew Hendrie and Australian sources, all of which are noted. This provides brief details on 21 aircraft, five in excess of what the figure should be if the number received at Singapore is agreed to be sixteen, though this discrepancy is easily accounted for, given the lack of detail on each aircraft. Apparently some attempt at a census of these aircraft occurred during the evacuation of Singapore, but even then the true picture was relatively unknown. Although the positive identities for these 16 Hudsons is presently unknown, safe assumption of 75% of their number would be as follows: V9121, AE488, AE506, AE511, AE521, AE529, AE553, AE583, AE607, AM937, AM945 and AM952. Confirmation of the identities of the remaining four aircraft would be most welcome.

V9120 No details; fate recorded as "Lost at Singapore 18.1.42" (1)

V9121 Transferred to 1 Sqn at Semplak, Java 20.2.42 (2) and damaged beyond repair there during air raid 22.2.42 (2)

V9153 No details; "Lost at Singapore 1.42"

V9180 No details; fate as for V9153 (1)

V9233 No details; fate as for V9153 (1)

AE485 No details; fate as for V9153 (3)

AE488 Participated in strike near Palembang, Sumatra, 15.2.42 (4) (No.62 Squadron), subsequently transferred to No.1 Sqn at Semplak, Java, 20.2.42 (2) but as it was unserviceable remained at Batavia, Java, until 26.2.42 when it was flown to Kalidjati, Java (2); flown to Australia 6.3.42 (2) and subsequently added to RAAF strength as A16-222.

AE506 Participated in strike near Palembang, Sumatra, 15.2.42 (5) with No.8 Sqn, subsequently transferred to No.1 Squadron at Semplak 20.2.42 (2); undertook lone attack on shipping on Musi River, Sumatra, 22.2.42 (2); convoy search over Banka Strait, 23.3.42 (2); convoy attack in company with AE553 28.2.42 (2) and further convoy search 1.3.42 (2) (6); presumably evacuated to Andir, Java, 1.3.42 but no further details.

AE511 Evacuated from P.1 to P.2, Sumatra 14.2.42 (4) but no further details.

AE521 Participated in strike from P.1 13.2.42 with No.62 Squadron (7) but no further details.

AE529 Arrived P.1 27.1.42 (7); carried out reconnaissance 1.2.42 (7); participated in Kluang attack 4.2.42(7); carried out reconnaissance from P.1 10.2.42 (4) - all operations with No.62 squadron; destroyed at P.1 during air raid, 22.2.42 (2)

AE530 No details; fate recorded as "Lost in Malaya 1.42 (1)

AE551 No details; as for AE530 (3)

AE553 Possibly flown by No.8 Squadron crew on reconnaissance 11.2.42 (8); transferred to No.1 Squadron at Semplak 20.2.42 (2); to Kalidjati, Java, 28.2.42 (2); participated in convoy attack with AE506 28.2.42 (2); no further details.

AE583 Possibly flown by No.8 Squadron crew on bombing attack on Kluang, Malaya 12.2.42 (8); transferred to No.1 Sqn at Semplak 20.2.42 (2); damaged beyond repair, Semplak, 22.2.42 (2)

AE592 No details; as for AE530 (3)

AE604 No details; as for AE530 (3)

AE607 Fate recorded as "Lost in Malaya 1.42" (3); possibly aircraft identified simply as "7" which was transferred to No.1 Sqn at Semplak 20.2.42 (2) but no further details.

AM937 Possibly flown by 8 Sqn crew on reconnaissance 13.2.42 (8); transferred to No.1 Sqn 20.2.42 (2) and destroyed there during air raid on 22.2.42 (2)

AM945 Flown to Singapore 3.2.42 (9) (No.62 Squadron) with RAAF personnel to recover RAAF Hudson A16-60 but no further details.

AM952 Abandoned as unserviceable at P.1 14.2.42 (4); believed subsequently ground-looped in an evacuation attempt.

Sources:

1 Royal Air Force Aircraft V1000-W9999 Air-Britain 1983

2 No.1 Sqn RAAF Operational Records 19.1.42 to 8.3.42; AWM PR82/58(1)

3 Royal Air Force Aircraft AA100-AZ999 Air-Britain 1985

4 Log Book Owen Whitford (8 Sqn RAAF)

5 Log Book Ross Page (8 Sqn RAAF)

6 Log Book Tony Jay (1 Sqn RAAF)

7 Seek and Strike, Andrew Hendrie 1983

8 Correspondence Herb Plenty (8 Sqn RAAF)

9 Log Book Doug Scott (8 Sqn RAAF)

LYSANDER II

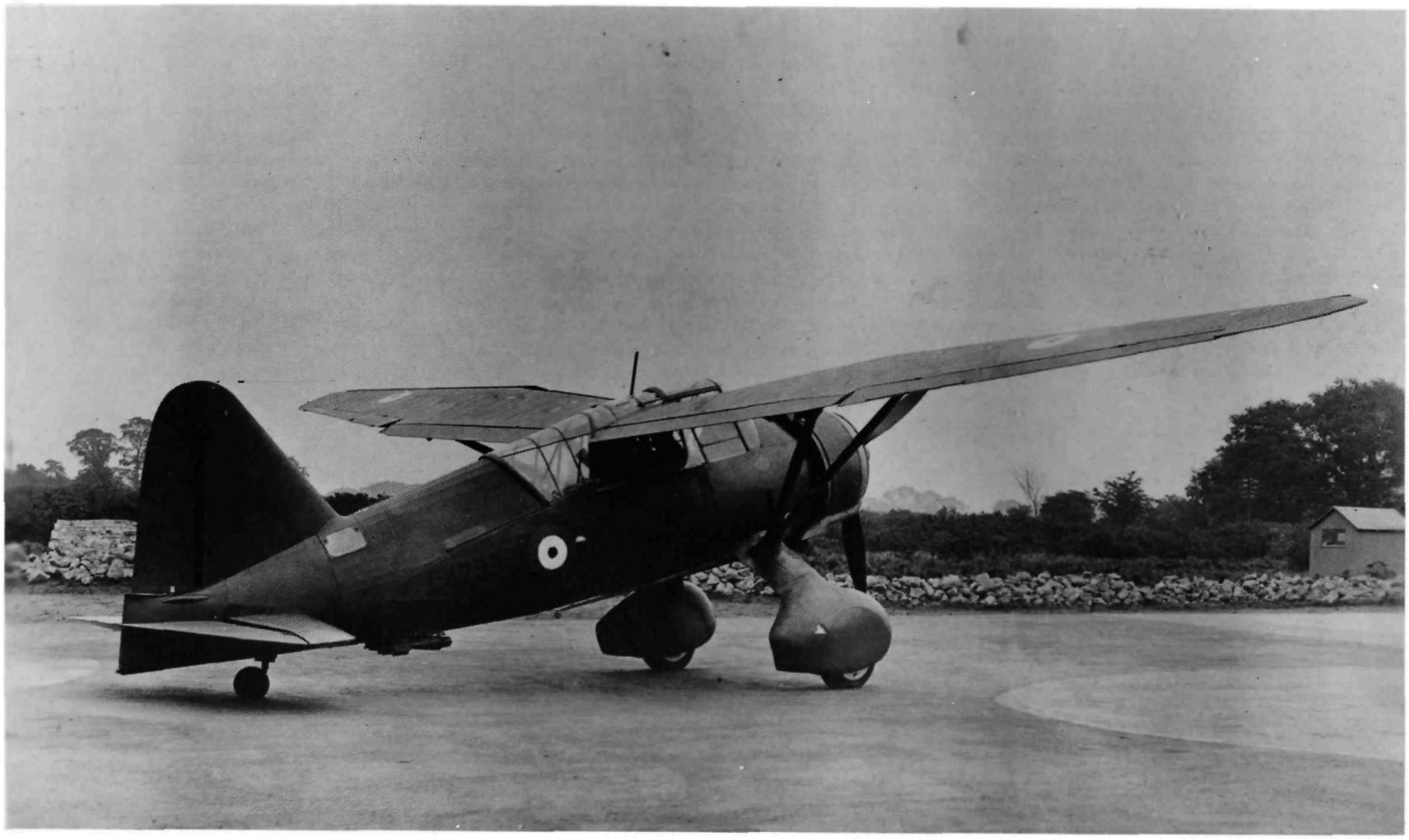
The Westland Lysander was a logical development of the long line of army co-operation aircraft that stretched back to the first military types to see service. Before any other role had been envisaged for the military use of aircraft, that of reconnaissance for the army had become a reality on manoeuvres prior to the outbreak of World War One.

The static nature of the Western Front resulted in the RFC being given army co-operation tasks like artillery spotting, tactical reconnaissance and liaison with ground troops. At first titled "corps reconnaissance", the army co-operation squadrons became the maids of all work, adding light bombing, supply dropping and survey to their tasks. The post-war RAF was to continue this role with Bristol Fighters, Atlases, Audaxes and Hectors whose performance was not wildly different from opposing fighters. As a replacement for the Audax, Specification A.39/34 was issued and Westland tendered the Lysander.

While development continued, the more conventional Hector was built to provide some updating of the Audax squadrons.

The Lysander prototype (K6127) first flew on 15 June 1936 at Boscombe Down, powered by a Bristol Mercury engine. This was fitted to the Mk.Is and Mk.IIIs but the Mk.II had a 905 hp Bristol Perseus XII. L4739 was the first production Mk.II and was tested at Martlesham Heath in June 1939. 442 were built and saw service with numerous units. The National Steel Car Corporation at Malton, Ontario, built 75 Mk.IIs.

L4739 carries a light bomb carrier under the rear fuselage but stub wing carriers fitted to the spats were the standard method of carrying bombs, containers, etc. After completion of trials, L4739 was shipped out to Egypt where it served with No.208 Squadron. Despite its vulnerability to modern fighters, the Lysander remained in operational service until the end of World War Two.



BOOKSHELF

PARNALL AIRCRAFT SINCE 1914 by Kenneth Wixey
Putnam - £24.00

This latest addition to the Putnam range of company histories must have been a difficult one to compile. A Heinkel He 111 did a good job in removing much of the Parnall archives when it dropped its load on Yate on 27 February 1941. But some devoted digging has produced an off-beat volume covering the aircraft designed and built by Parnall and has also sorted out the interlocking activities of the different Parnall companies. The first part of the book deals with the general history of the firm with interesting illustrations. One of the airfield shows that when we cycled over to Yate shortly after the war to see the Parnall factory, we were looking at the wrong one!

The Panther was the only Parnall product that saw service in numbers and most of these were built by Bristols at Filton but a variety of types appeared that showed a variety of ideas. The Peto submarine-borne seaplane is well-known but others included the Possum with its central engine-room, the monoplane/biplane Pixie, the Parasol research aircraft and the very odd Perch flying boat with its ridiculously-small propeller. Apart from its own Elf light aircraft, Parnall also built the Hendy Heck.

The author has done a good job in drawing together all the strands of Parnall's history and another gap on the shelf has been filled. Putnam's publishing programme has other intriguing subjects to come; more power to their elbow(s).

LINCOLN, CANBERRA AND F-111 IN AUSTRALIAN SERVICE by Stewart Wilson
(Aerospace Publications $A19.95)

Third in the series of booklets on RAAF and RAN aircraft, this volume covers three post-war bomber types. There are a lot of good photographs, including colour, and each type has a background history before a section devoted to a more detailed account of service in the RAAF. Tables of individual aircraft are provided but for some reason dates are restricted to month and year only. It would be useful to have the exact dates for crashes, for instance. At £10.00 the book is worthwhile but one wonders how much this will be inflated by the time it appears on UK lists.

HISTORY OF THE BELGIAN AIR FORCE by John Pacco
(JP Publications)

Published privately in Belgium, this 128-page booklet, in laminated covers, covers the aircraft and units of the BAF. Text is in French and English but the latter should have been looked at by someone whose first language is English as the syntax and spelling are rather odd. Only the first dozen pages deal with the BAF up to the end of World War Two and the remainder is taken up with post-war activities. A few colour shots are mixed in with a good selection of photographs and drawings of badges. Individual aircraft types have a description of their use and the BAF serials allotted to the batches are quoted. There is a table of types flown and numbers acquired.

In addition to BAF activities, there are sections on the army, navy and gendarmerie aircraft and details of the Belgian national aerobatic team. Price appears to vary.

SUN ON MY WINGS by Dundas Bednall
Available from Paterchurch Publications, 6 Laws Street, Pembroke Dock, Dyfed at £11.95 (hardback) and £9.95 (laminated cover)

Wing Commander Bednall joined the Royal Air Force in 1937 and left ten years later after spending his operational career entirely overseas after elementary training at Hanworth on Blackburn B.2s. This was followed by advanced training at 4 FTS Abu Sueir on Harts and Audaxes before going to No.45 at nearby Helwan where ultra-modern one-wing Wellesleys lived. These were replaced by Blenheims before the author went on to No.230 Squadron's Sunderlands, flying these until the end of 1944.

There is much of interest to the reader in the background details of an interesting career spent mainly in flying boats.

UP AND UNDER by Gwyn Martin.
Available from author at 13 South Marine Terrace, Aberystwyth, Dyfed - £15.00 post free

The author was an observer who joined the RAF in September 1939 and was trained at Evanton before going to No.75 (New Zealand) Squadron and later to No.150, both equipped with Wellingtons.

The first part of the book is a vivid account of life in a night bomber unit during the early days of the strategic bomber offensive. But a trip to Haugesund to drop a pair of mines ended up with the aircraft being shot down by flak and the author went into the bag.

The second half of the book details his experiences as a Kriegie which rounds off an interesting account of one man's war.

AIR FORCE BASES Vol.1 Produced by the Office of Air Force History, Washington, DC. £40.00 app.

After similar books on USAF Groups and Squadrons comes one on USAF bases, or at least 89 of them. There is no narrative to speak of, the contents being a tabulation of previous names, base operating units, base commanders, "off-base installations" (what the RAF would call satellites, a summary of major changes in construction, commands to which assigned, changes in status and a complete listing of units stationed at each base with dates. The latter include many non-flying units (like the 3310 Field Printing Unit!) and a few of the bases are not airfields. All are in the United States.

There are numerous photographs of the bases but few have recognisable aircraft. Comparison of pre-war, wartime and current construction is an interesting exercise. It is often difficult to locate the original airfield, even when there were runways as a guide. Where three or more runways were once standard, the whole area is now overlaid by one long runway, or two parallel runways. Some study often reveals the old pattern once the viewer has absorbed the fact that the new runways are so long that the originals cover only a small area of the existing base.

Washington's Bolling Field (and nearby Anacostia Naval Air Station), where so many pre-war photographs were taken, are now completely built up. This was an inevitable fate for large open spaces close to the centre of Washington but there is a nice picture of the airfield in 1931 with a line of Curtiss B-2s showing up among the smaller aircraft.

The book is 633 pages of highly-specialised material but there is inevitably a growth of interest in the more exotic aspects of aviation. This is doubtless a result of more rewriting of past aviation literature, urged on by the current passion for re-cycling....

AEROMILITARIA

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Edited by James J Halley and Ray Sturtivant

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As we go to press, there are no firm dates for the next batch of monographs but the computer and glue pot are being deployed in the usual Air-Britain version of DTP, DRTP (dining room table publishing). The JA-JZ part of the RAF Registers is selling well so if you have not ordered your copy, please do it soon.

For the benefit of our newer members, we should issue a reminder that some colour slide sets remain in stock, including the 1988 Bicentenary Air Show at Richmond, NSW, not to be missed by collectors of Papua-New Guinea Defence Force Aravas. A SAE to the editors plus a 15p stamp will bring a list.

The two parts of the military slides catalogue are also available at 90p per section. These list over 3,000 slides and are restricted to members only.

PUZZLE PIC

Last month's airfield was Llandow. See page 80.

COVER PICS

The front cover shows an early Gannet AS.1 over the Needles at the western tip of the Isle of Wight (Fairey photo) and on the back cover the Mosquito FB.6s of No.75 Squadron RNZAF are on review at Ohakea in 1949. (Photo courtesy RNZAF)

IN THIS ISSUE

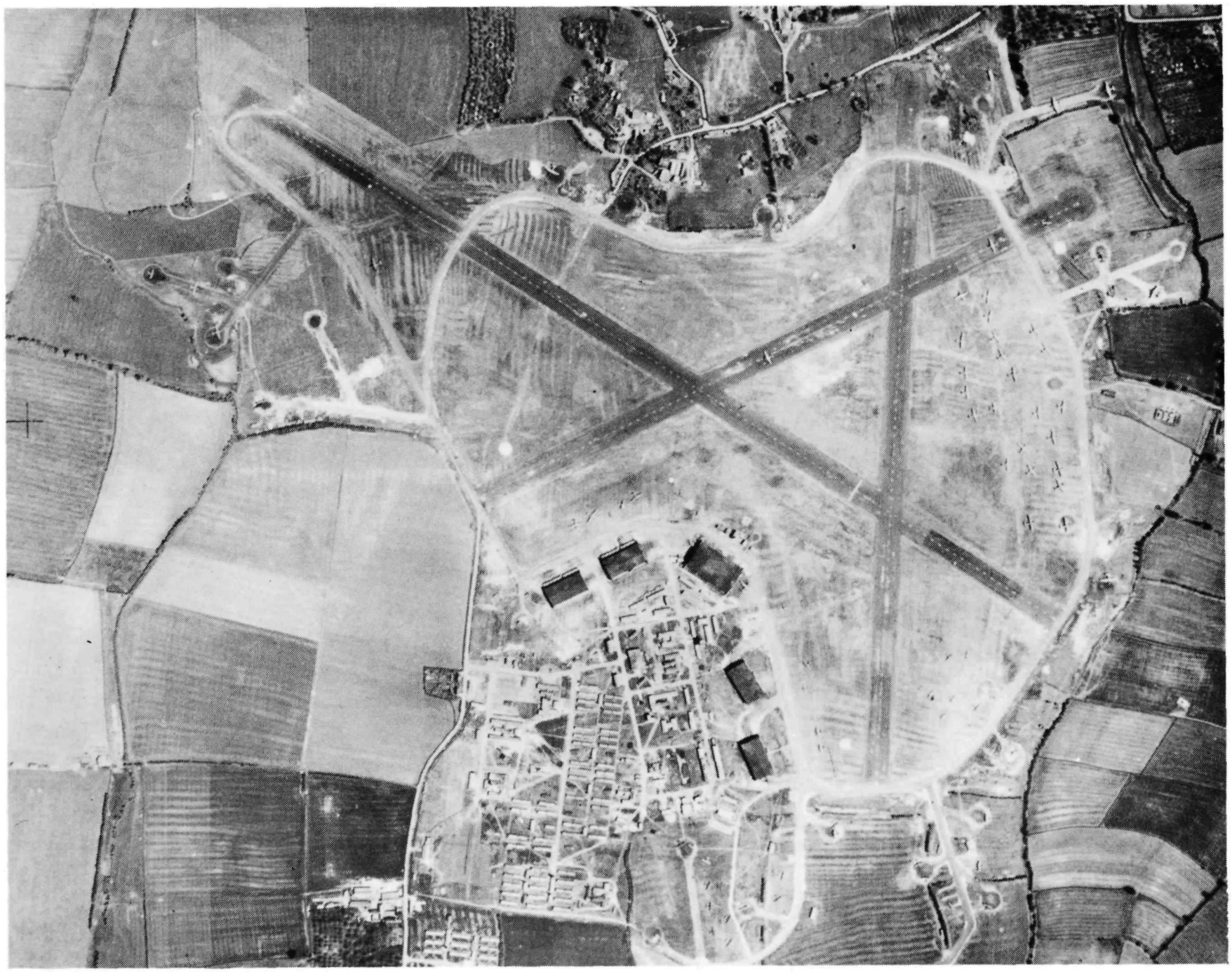
George Kernahan has produced an article on another pre-war US Navy type, this time the oft-forgotten Vought SBU and Cliff Minney has again provided the drawings. The quality of the US Navy aircraft has often been held up as an example by comparison with the Fleet Air Arm. However, in September 1939, the Grumman F2F and F3F were the standard fighters and bracketed the performance of the Sea Gladiator. The SBU was of indifferent performance and only the TBD torpedo-bombers and SB2U scout-bombers were monoplanes and they proved as durable as Skuas when confronted by modern single-seat fighters.

Eric Myall has kindly continued his series on SAR in the Royal Air Force, covering overseas activities in this field in a second article,

Ray Sturtivant's listing of personal codes continues; our thanks for additions sent in which will be included in a final update when the last set of codes has been reached.

ABSENTEEISM

JJH is due to be in Australia until mid-November going walkabout.



VOUGHT SBU

SBU-1 9820 of VS-41 with VS-1B's duck badge. A large "Neutrality" star has been painted on the cowling. (National Archives 80-G-5636)

When the US Navy went to war against Japan at the end of 1941 there could be no doubting the distinctiveness of the roles assigned to the various types of aircraft serving aboard its carrier fleet. Fighters were for fighting, scout-bombers for scouting and bombing. As the war progressed, however, these rigid assignments began to break down so that by 1945 the fighters in particular had to earn their keep as multi-purpose machines. A good example of this evolution is provided by Vought's F4U Corsair which, designed in the late thirties as a "pure" fighter, went on to emerge at VJ-Day as the best all-round fighter-bomber of World War Two. Twenty years previously the concept of the multi-purpose fighter had likewise held considerable sway among planners in the Navy's Bureau of Aeronautics. Stemming from a desire to provide rearwards protection in the form of a flexibly-mounted machine gun installed in the rear cockpit, two-seat fighters were becoming established in fleet squadrons and it then proved an easy matter to equip them for dropping bombs of up tc 500 lb in weight. The effectiveness of such fighter-bomber-observation multi-purpose types was a matter that could be gauged only in the light of experience but they clearly involved a compromise between the speed and manoeuvrability of the single-seat fighter and the lifting power and range of the dedicated bomber. Typical of the breed was the Curtiss XF8C-1 of 1927. Although derived from an Army observation design, initial procurement was as a two-seat fighter carrying the designation F8C-1. Not long after entering service, however, this changed to OC-1 ("O" for observation), reflecting its general purpose employment by the Marines. Later models such as the F8C-3 and F8C-5 became the OC-2 and O2C-1 respectively, while the F8C-4 served as a carrier fighter and retained its F-for-fighter class letter.

In 1932, searching for a replacement for the F8C series, the Bureau circulated its design proposal 114 to manufacturers. Once again a two-seat multi-purpose fighter was specified and from seven companies that responded, three were awarded contracts for the construction of prototypes. Both Douglas XFD-1 and Vought XF3U-1, which arrived at Anacostia for testing in the summer of 1933, were orthodox fixed-undercarriage biplanes powered by the new Pratt & Whitney R-1535 Wasp radial engine of 700 hp. In contrast, the Curtiss XF12C-1 was a parasol-winged monoplane, featuring a retractable undercarriage and Wright R-1510 radial of 625 hp, but by the month it became available for testing, October 1933, events had occurred that would ensure it never entered production. Comparative testing of the XFD and XF3U not only confirmed the superiority of the latter as a fighter but also brought out its potential as a scout. This second quality proved rather fortuitous for Voughts as it emerged at a time when the whole concept of the two-seat multi-purpose fighter had begun to fall from favour and in fact neither of the three Design 113 prototypes obtained a production contract. Noting how ideas within the Bureau were changing, Vought flew its XF3U-1 back to the factory, where it was extensively re-worked and offered to the Navy again in early 1934, this time as a scout-bomber bearing the designation XSBU-1. Of these evaluations, one of the engineers is quoted in Herard P.Moran's history of Vought as commenting:

"A two-place fighter's what we want,
the best that can be got.
Of course, you should be quite prepared,
like any good go-getter,
to change it quickly to a scout,
if we decide that's better."

Curtiss also modified its XF12C-1 to scout configuration and put it forward in competition with the Vought entry as the XS4C-1, soon changed to XSBC-1. However, the Navy preferred the XSBU-1 and in January 1934 awarded a contract for 84 Vought SBU-1s. Down, but not out, the subsequent history of the Curtiss XSBC design can be found in AM.2/87 (Curtiss SBC Helldiver).

Compared with the prototype, production SBU-1s featured a larger tail assembly and revised engine cowl with adjustable cooling gills around the trailing edge. The Pratt & Whitney R-1535-82 of 850 hp gave a maximum speed of 205 mph, while 145 gallons of fuel allowed a range of 540 miles carrying a single 500 lb bomb. Defensive armament comprised a single 0-30 in. fixed machine gun firing through the starboard side of the upper engine cowl and another on a flexible mount for the rearseatman. A bomb displacement fork bestowed true dive-bombing capability, although the propeller's dive brake mode could never be made to function properly.

The first production SBU-1 was accepted by the Navy in September 1935 and flew to Anacostia for testing. Just two months later, deliveries got underway to fleet units, VS-3B (VS-2 effective from 1 July 1937) from the carrier Lexington being the first to receive the type and by the spring of 1936 scouting squadrons assigned to Saratoga and Ranger, VS-2B (VS-3) and VS-1B (VS-41), had also been fully equipped. As was customary at that time, single aircraft were supplied to fleet fighter squadrons - VF-1B, VF-2B (VF-2), VF-3B, VF-5B (VF-4) and VF-6B (VF-3) - for utility duties, while yet another operated for a time with Lexington's bomber squadron, VB-5B (VB-2). Through 1937 and 1938, the pattern of use remained much the same, although VS-3 re-equipped with the Curtiss SBC-3 towards the end

of 1937 and a second Ranger scouting squadron, VS-42, began flying SBU-1s from the middle of that year. Two further changes in 1939 saw Lexington's VS-2 also re-equipping with the SBC-3, freeing its SBUs for use by VS-71 of the newly-commissioned Wasp Air Group. Ranger and Wasp squadrons continued to fly the Vought biplane until replaced in early 1941 by SB2U monoplanes (see AM 2/86).

From late-1939 onwards, as they were released from service with fleet units, surviving SBU-1s went to training command at Pensacola, supplementing the later SBU-2s that had begun arriving in mid-1937. Once SBU-1 production was complete, Voughts supplied a further fifteen examples of an export version (Model V.142-A) to Argentina before embarking on construction of forty SBU-2s, ordered by the Navy in late 1936. Distinguished from the -1 in minor detail only, the SBU-2 served from May 1937 with four Naval Reserve Aviation Bases, at Opa-Locka (Miami), Squantum, Philadelphia and Brooklyn, and as a trainer at Pensacola.

By mid-1941, the SBUs were employed in a training role only, though in small numbers, at Miami and Corpus Christi, in addition to Pensacola. This mundane, but valuable, duty continued for another two years before more modern aircraft became available in sufficient numbers to allow the old biplanes to be retired. Even then it was not quite the end for the SBU, as from early 1943 many of both -1 and -2 versions (including several converted to drones at the Naval Aircraft Factory, Philadelphia) flew with utility squadrons at Cape May (VJ-5), Long Beach (VJ-8) and Pearl Harbor (VJ-3); a handful from the latter even managed to survive into the spring of 1944.

Although in neither performance nor service career did it merit any special distinction, the SBU was noteworthy as the last fixed-undercarriage biplane to operate with the Navy's carrier combat squadrons. To insure against the failure of its XSB2U-1 monoplane entry for the 1934 VSB competition, Voughts did construct an SBU with a retractable undercarriage but, as the XSB3U-1, it failed to secure a production contract. At the time the SBU-1 entered service, such features as the enclosed cockpit, controllable pitch propeller and close-fitting engine cowling were the essence of modernity, yet so great was the rate of progress in aero-engineering as World War Two approached that by 1939 the design was clearly obsolete.

Serial numbers:	XF3U-1	9222 and 9746*
	XSBU-1	9222
	SBU-1	9750 - 9833
	SBU-2	0802 - 0841

*The original XF3U-1 bore the serial 9222. When parts were taken from its airframe to construct a new scout-bomber prototype, the serial number went as well. Two years later, the surviving pieces of XF3U-1 were reconstructed for use by Pratt & Whitney and a new serial allotted by the Bureau.

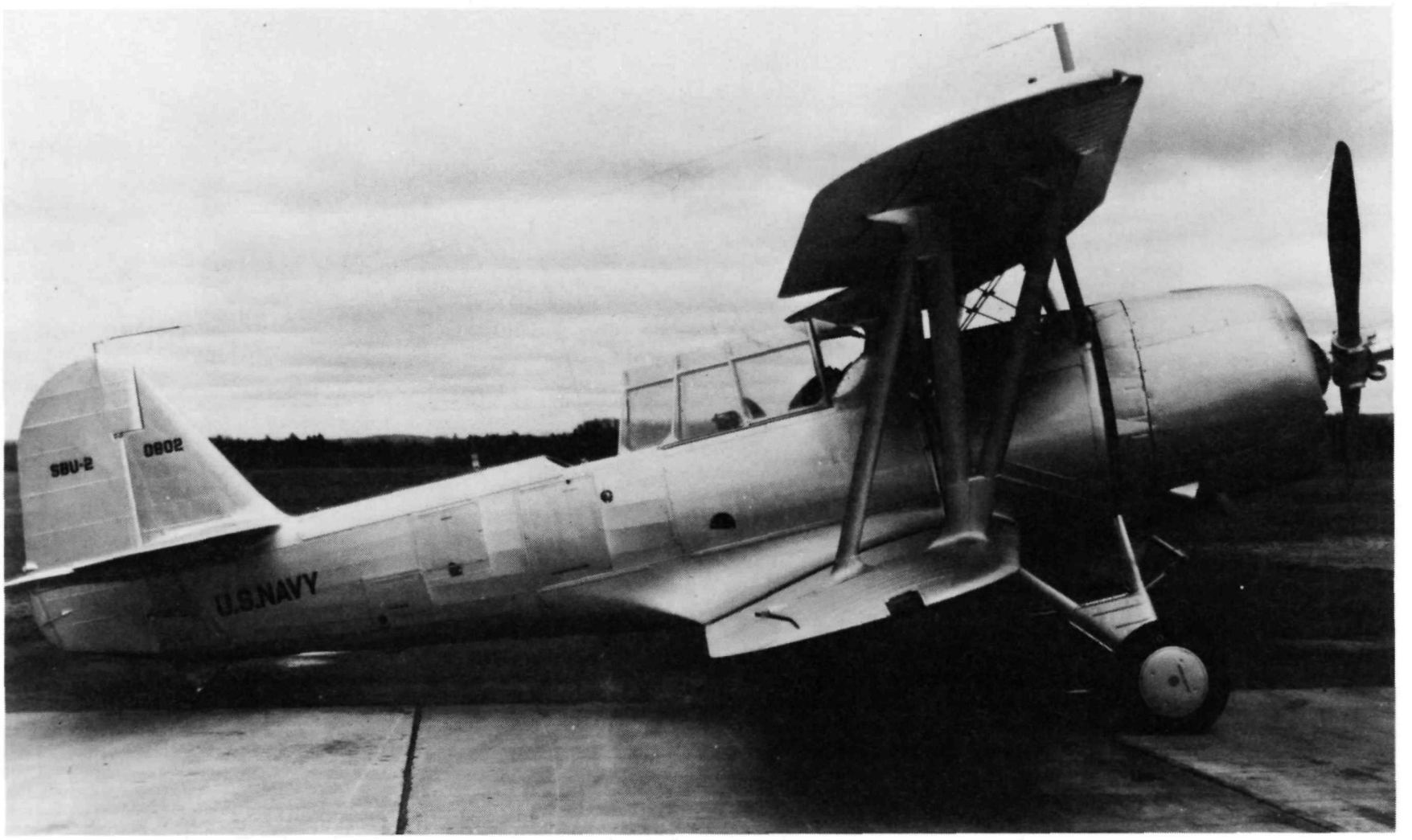
CARRIER ASSIGNMENTS

Lexington	VF-1B
	VF-2B/VF-2
	VB-5B/VB-2
	VS-3B/VS-2
Saratoga	VF-6B/VF-3
	VS-2B/VS-3
Ranger	VF-3B
	VF-5B/VF-4
	VS-1B/VS-41
	VS-42
Wasp	VB-7
	VS-71

Abbreviations

NAF	Naval Aircraft Factory, Philadelphia
NRAB	Naval Reserve Aviation Base
TC	Training Command
TT	Technical Training

The first SBU-2, 0802, outside the Vought factory. (AAHS Collection No.3548)



The third SBU-1 in the markings of Lexington's VS-3B. The badge motif is an Indian head. (National Archives 80-G-5628)

PRODUCTION

SBU-1

9750	10.35 - 4.38	Test aircraft at Norfolk/Anacostia/NAF/P & W; 4.38 - 8.38 VS-42; crashed 25.8.38
9751	11.35 - 1.37	VS-3B; 4.37 - 12.38 VS-3B/VS-2; 6.39 - 9.40 VS-42; 3.41 - 8.42 TC; 5.43 - 8.43 VJ-8; 10.43 VJ-3; stricken 14.10.43
9752	11.35 - 6.37	VS-3B; 8.37 - 5.38 VS-42; 8.38 - 7.40 VS-41; 11.40 - 12.40 VS-71; 12.40 - 5.42 VS-42; 5.41 - 1.43 TC; stricken 31.1.43
9753	11.35 - 2.37	VS-3B; 6.37 - 10.38 VS-3B/VS-2; 12.38 - 10.40 VS-42; 5.41 - 4.42 TC; to P & W East Hartford; stricken 30.6.42
9754	11.35 - 12.36	VS-3B; 3.37 - 9.38 VS-3B/VS-2; 11.38 - 12.40 VS-41; 4.41 - 4.42 TC; stricken 30.5.42
9755	11.35 - 1.37	VS-3B; 3.37 - 9.38 VS-3B/VS-2; 11.38 - 12.38 VS-42; 3.39 - 6.39 VS-2; 7.39 - 1.41 VS-71; 2.41 - 3.43 TC; 7.43 VJ-3; stricken 23.7.43
9756	11.35 - 1.37	VS-3B; 4.37 - 10.38 VS-3B/VS-2; 6.39 - 1.41 VS-42; 1.41 - 7.42 TC; to NAF and stricken 31.12.42
9757	11.35 - 12.36	VS-3B; 3.37 - 9.38 VS-3B/VS-2; 11.38 - 9.40 VS-42; 1.41 - 7.42 TC; 7.42 - 11.42 NAF; converted to drone; 3.43 - 5.43 VJ-5; operational loss 15.5.43
9758	12.35 - 3.37	VS-3B; 7.37 - 12.38 VS-42; 6.39 - 1.41 VS-42; 1.41 - 7.42 TC; 7.42 - 11.42 NAF; 3.43 - 12.43 VJ-5; stricken 15.1.44
9759	12.35 - 1.37	VS-3B; 3.37 - 8.37 VS-3B/VS-2; 8.37 - 10.37 VS-42; 12.37 - 8.38 VS-41; 10.38 - 12.38 VS-2; 2.39 - 4.39 VS-2; 7.39 - 1.41 VS-42; 1.41 - 2.41 VS-41; 2.41 - 12.41 TC; crashed 20.12.41
9760	11.35 - 3.37	VS-3B; 6.37 - 11.38 VS-1B/VS-41; 4.39 - 6.39 VS-2; 7.39 - 1.41 VS-71; 7.42 - 11.42 NAF; 4.43 - 8.43 VJ-8; stricken 15.8.43
9761	12.35 - 11.36	VS-3B; 2.37 - 8.38 VS-3B/VS-2; 10.38 - 6.39 VS-2; 7.39 - 9.40 VS-71; 3.41 - 7.42 TC; 7.42 - 11.42 NAF; 3.43 - 10.43 VJ-5; stricken 30.11.43
9762	12.35 - 1.36	VS-3B; 3.36 - 4.37 VS-3B; lost at sea 6.4.37
9763	12.35 - 6.37	VS-3B; 9.37 - 2.39 VS-42; 2.40 - 2.41 VS-41; 2.41 - 10.41 TC; crashed 17.10.41
9764	12.35 - 3.37	VS-3B; 7.37 - 5.38 VS-42; 7.38 - 6.39 VS-2; 7.39 - 5.40 VS-71; 8.40 - 1.41 VS-41; 1.41 - 2.41 VS-42; 2.41 - 3.43 TC; 5.43 - 8.43 VJ-5; stricken 25.8.43
9765	12.35 - 4.37	VS-3B; 6.37 - 8.37 VS-2B/VS-3; crashed 26.8.37
9766	12.35 - 12.36	VS-3B; 3.37 - 9.38 VS-1B/VS-41; 12.38 - 12.40 VS-42; 5.41 - 3.42 TC; to TT Jacksonville 3.42
9767	12.35 - 2.37	VS-3B; 6.37 - 3.38 VS-5B/VB-2; 3.38 - 10.38 VS-2; 12.38 - 12.40 VS-42; 5.41 - 7.42 TC; 7.42 - 11.42 NAF; 3.43 - 6.43 VJ-5; stricken 22.6.43
9768	12.35 - 12.36	VS-3B; 3.37 - 9.38 VS-3B/VS-2; 11.38 - 7.39 VS-2; 7.39 - 9.40 VS-42; 1.41 - 7.42 TC; 7.42 - 11.42 NAF; 6.43 VJ-3; stricken 14.6.43
9769	11.35 - 12.35	NAF; 2.36 - 12.36 VS-1B; crashed 8.12.36
9770	11.35 - 12.35	NAF; 2.36 - 3.37 VS-1B; 7.37 - 12.38 VS-42; 4.39 - 6.39 VS-2; 7.39 - 2.41 VS-71; 2.41 - 3.43 TC; 5.43 VJ-5; stricken 7.6.43
9771	12.35	NAF; 2.36 - 12.36 VS-1B; 3.37 - 12.37 VS-1B/VS-41; 3.38 - 4.38 VS-41; 4.38 - 2.40 VS-42; 7.40 - 3.41 VS-41; 3.41 - 7.42 TC; 7.42 - 11.42 NAF; 3.43 - 5.43 VJ-5; stricken 25.6.43

9772	12.35 - 11.37	VS-2B/VS-3; 1.38 - 2.38 VS-41; 5.38 - 12.39 VS-41; 4.40 - 12.40 VS-42; 6.41 - 8.42 TC; 8.42 - 11.42 NAF; 3.43 - 9.43 VJ-5; stricken 13.9.43
9773	12.35 - 9.37	VF-6B/VF-3; 12.37 - 12.39 VS-41; 5.40 - 1.41 VS-42; 1.41 - 3.43 TC; 6.43 - 8.43 VJ-8; 10.43 VJ-3; stricken 28.10.43
9774	12.35 - 6.37	VF-6B; 6.37 - 7.39 VS-42; 12.39 - 3.41 VS-41; 2.41 - 3.43 TC; 6.43 - 8.43 VJ-8; 9.43 VJ-3; stricken 12.10.43
9775	12.35 - 6.37	VS-2B; 8.37 - 5.39 VS-42; 10.39 - 2.40 VS-41; crashed 13.2.40
9776	1.36 - 10.36	VF-3B; 1.37 - 9.37 VS-3B/VS-2; 11.37 - 12.39 VS-41; 5.40 - 2.41 VS-71; 2.41 - 7.42 TC; 7.42 - 1.43 NAF; 8.43 - 12.43 VJ-5; stricken 30.12.43
9777	1.36 - 6.37	VB-5B; 8.37 - 10.37 VS-42; 12.37 - 1.40 VS-41; 5.40 - 2.41 VS-71; 6.41 - 3.43 TC; 7.43 VJ-3; stricken 23.7.43
9778	2.36 - 8.37	VS-2B/VS-3; 9.37 - 8.39 VS-42; 1.40 - 3.41 VS-41; 3.41 - 3.42 TC; 8.42 - 11.42 NAF; 4.43 - 8.43 VJ-8; 10.43 VJ-3; stricken 30.10.43
9779	1.36 - 5.37	VS-2B; crashed 7.5.37
9780	2.36 - 7.37	VS-2B/VS-3; 9.37 - 11.38 VS-42; crashed 29.11.38
9781	2.36 - 7.37	VS-2B/VS-3; 9.37 - 5.39 VS-42; 10.39 - 3.41 VS-41; 3.41 - 5.42 TC; crashed, Corpus Christi, 6.5.42
9782	2.36 - 1.37	VS-2B; 7.37 - 7.38 VS-42; 9.38 - 8.40 VS-41; 11.40 - 2.41 VS-71; 2.41 - 3.43 TC; 5.43 VJ-5; 7.43 VJ-3; stricken 13.7.43
9783	2.36 - 6.37	VS-2B; 8.37 - 5.39 VS-42; 10.37 - 3.41 VS-41; 3.41 - 7.42 TC; 7.42 - 11.42 NAF; 5.43 VJ-3; stricken 8.7.43
9784	2.36 - 7.37	VS-2B/VS-3; 9.37 - 7.39 VS-42; 12.39 - 2.41 VS-41; 2.41 - 8.41 TC; crashed, Corpus Christi, 29.8.41
9785	2.36	VS-2B; crashed 22.2.36
9786	2.36 - 8.37	VS-2B/VS-3; 10.37 - 9.39 VS-42; 1.40 - 3.41 VS-41; 3.41 - 3.42 TC; to TT Chicago; stricken 30.6.42
9787	2.36 - 8.37	VS-2B/VS-3; 10.37 - 5.39 VS-41; 12.39 - 5.40 VS-41; crashed 21.5.40
9788	2.36 - 8.37	VS-2B/VS-3; 11.37 - 4.39 VS-41; 4.39 - 5.39 NAF; 5.39 - 12.39 VS-41; 4.40 - 2.41 VS-41; 2.41 - 4.42 TC; to TT Chicago; stricken 30.6.42
9789	2.36 - 8.37	VS-2B/VS-3; 9.37 - 8.39 VS-42; 2.40 - 1.41 VS-42; 1.41 - 5.43 TC; 2.44 VJ-3; stricken 31.3.44
9790	2.36 - 8.37	VS-2B/VS-3; 11.37 - 9.39 VS-41; 2.40 - 2.41 VS-42; 1.41 - 8.42 TC; 8.42 - 11.42 NAF; 6.43 VJ-3; stricken 23.6.43
9791	2.36 - 9.37	VS-2B/VS-3; 12.37 - 1.40 VS-41; 4.40 - 12.40 VS-41; 12.40 - 2.41 VS-71; 2.41 - 4.42 TC; to TT Chicago; stricken 30.6.42
9792	2.36 - 3.36	VS-2B; crashed 17.3.36
9793	2.36 - 9.37	VS-2B/VS-3; 9.37 - 1.38 VS-2; 5.38 - 4.40 VS-42; 7.40 - 2.41 VS-71; 2.41 - 7.42 TC; 3.43 - 9.43 VJ-5; stricken 23.9.43
9794	2.36 - 8.37	VS-3; 11.37 - 5.39 VS-41; 9.40 - 2.41 VS-71; 2.41 - 7.42 TC; 7.42 - 10.42 NAF; 3.43 - 5.43 VJ-5; stricken 21.5.43
9795	2.36 - 9.37	VS-2B/VS-3; 11.37 - 6.38 VS-41; 9.38 - 6.39 VS-2; 7.39 - 9.40 VS-71; 3.41 - 7.42 TC; 7.42 - 11.42 NAF; 3.43 - 5.43 VJ-5; stricken 23.5.43
9796	2.36 - 9.37	VS-2B/VS-3; 9.37 - 12.37 VS-2; 5.38 - 4.40 VS-41; 7.40 - 2.41 VS-41; 2.41 - 8.42 TC; 8.42 - 11.42 NAF; 2.43 - 12.43 VJ-5; stricken 15.12.43
9797	2.36 - 12.37	VS-1B/VS-41; 2.38 - 6.39 VS-2; 7.39 - 2.40 VS-41; 6.40 - 1.41 VS-71; 2.41 - 8.42 TC; 8.42 - 11.42 NAF; 3.43 - 9.43 VJ-5; stricken 22.9.43
9798	2.36 - 9.37	VS-1B/VS-41; 11.37 - 9.39 VS-41; 2.40 - 12.40 VS-42; 5.41 - 7.41 TC; crashed, Corpus Christi, 22.7.41
9799	12.36 - 6.37	VS-1B; 8.37 - 6.39 VS-42; 12.39 - 2.41 VS-41; 2.41 - 2.42 TC; 6.43 VJ-3; stricken 3.7.43
9800	2.36 - 11.37	VS-1B/VS-41; 1.38 - 2.40 VS-42; 6.40 - 2.41 VS-41; 2.41 - 4.43 TC; 4.44 VJ-3; stricken 13.5.44
9801	2.36 - 11.37	VS-1B/VS-41; 1.38 - 6.39 VS-2; 7.39 - 1.40 VS-71; 5.40 - 1.41 VS-71; 1.41 - 3.42 TC; to TT Chicago; stricken 30.6.42
9802	2.36 - 11.37	VS-1B/VS-41; 1.38 - 6.39 VS-2; 7.39 - 1.40 VS-71; 5.40 - 12.40 VS-71; 4.41 - 4.42 TC; to TT Jacksonville; stricken 30.4.42
9803	2.36 - 12.37	VS-1B/VS-41; 2.38 - 8.38 VS-41; 10.38 - 12.38 VS-2; 12.38 - 12.40 VS-42; 6.41 - 8.42 TC; 8.42 - 11.42 NAF; 3.43 - 7.43 VJ-5; stricken 23.7.43
9804	3.36 - 10.37	VS-1B/VS-41; crashed 4.10.37
9805	3.36 - 6.37	VS-1B/VS-41; 8.37 - 5.38 VS-42; 8.38 - 6.40 VS-41; 9.40 - 12.40 VS-71; 4.41 - 8.42 TC; crashed at Pensacola, 1.8.42
9806	3.36 - 12.37	VS-1B/VS-41; 5.38 - 2.39 VS-42; crashed 24.2.39
9807	3.36 - 11.37	VS-1B/VS-41; 1.38 - 2.39 VS-2; 7.39 - 1.41 VS-42; 1.41 - 8.42 TC; 8.42 - 11.42 NAF; 4.43 - 8.43 VJ-5; stricken 13.8.43
9808	3.36 - 10.37	VS-1B/VS-41; 1.38 - 10.39 VS-41; crashed 6.10.39
9809	3.36 - 11.37	VS-1B/VS-41; 1.38 - 4.39 VS-41; 12.39 - 2.41 VS-41; 2.41 - 8.42 TC; 8.42 - 11.42 NAF; 3.43 - 5.43 VJ-5; stricken 14.6.43
9810	3.36 - 10.37	VS-1B/VS-41; 12.37 - 12.39 VS-41; 12.40 - 2.41 VS-71; 1.41 - 2.43 TC; 4.43 - 8.43 VJ-5; stricken 13.8.43
9811	4.36 - 12.37	VS-1B/VS-41; 2.38 - 9.39 VS-41; crashed 5.9.39
9812	3.36 - 11.36	Anacostia on test; 4.37 - 1.38 VS-3B/VS-2; 5.38 - 8.39 VF-4; 8.39 - 4.40 VS-42; crashed 10.4.40
9813	4.36 - 9.37	VS-2B/VS-3; 12.37 - 1.38 VS-41; 3.38 - 3.40 VS-42; 7.40 - 2.41 VS-41; 2.41 - 7.42 TC; 7.42 - 11.42 NAF; 4.43 VJ-8; 9.43 VJ-3; stricken 27.9.43
9814	3.36 - 11.36	Anacostia on test; 4.37 - 12.37 VS-3B/VS-2; 2.38 - 6.39 VS-2; 7.39 - 11.39 VS-71; 7.40 - 10.40 VS-71; 10.40 - 11.40 VB-7; 11.40 - 1.41 VS-71; 1.41 - 3.43 TC; 6.43 - 9.43 VJ-5; stricken 30.10.43
9815	4.36 - 9.39	Flag aircraft, Battle Force; 12.39 - 1.41 Cdr Aircraft, Battle Force; 1.41 - 12.41 TC; crashed, Pensacola, 20.12.41
9816	4.36 - 6.36	VS-1B; 11.36 - 4.37 VS-3B; crashed 6.4.37
9817	4.36 - 6.36	VS-2B; 12.36 - 6.37 VF-1B; 6.37 - 8.38 VF-2B/VF-2; 10.38 - 6.39 VS-2; 7.39 - 1.40 VS-71; crashed 16.1.40
9818	4.36 - 6.36	VS-3B; 12.36 - 6.38 VS-3B/VS-2; 9.38 - 6.40 VS-42; 9.40 - 1.41 VS-42; 1.41 - 2.41 VS-41; 2.41 - 3.42 TC; 3.43 VJ-5; stricken 31.12.44
9819	4.36 - 5.36	VS-2B; 5.36 - 11.36 Cdr Aircraft, Battle Force; 2.37 - 8.37 VS-2B/VS-3; 8.37 - 5.38 VS-42; 8.38 - 6.39 VS-2; 7.39 - 7.40 VS-71; 9.40 - 1.41 VS-71; 1.41 - 3.43 TC; 6.43 - 8.43 VJ-5; stricken 13.8.43

SBU-1 9802 was operating with Ranger's VS-1B when photographed. The duck in the badge features pontoon floats and wheels. (National Archives 80-G-5637)

9820	4.36 - 6.36	VS-3B; 10.36 - 5.37 VF-3B; 5.37 - 5.38 VF-5B/VF-4; 8.38 - 6.39 VS-2; 7.39 - 10.39 VS-71; 10.39 - 6.40 VS-41; 10.40 - 1.41 VS-71; 1.41 - 7.42 TC; 7.42 - 11.42 NAF; 4.43 VJ-5; 6.43 - 9.43 VJ-8; stricken 3.11.43
9821	4.36 - 10.37	VS-1B/VS-41; 1.38 - 6.39 VS-2; 7.39 - 9.40 VS-71; 3.41 - 7.42 NAF; 3.43 VJ-5; stricken 8.6.43
9822	1.37 - 6.38	VS-3B/VS-2; 9.38 - 6.39 VS-2; 7.39 - 7.40 VS-71; 9.40 - 12.40 VS-71; 12.40 - 3.41 VS-41; 3.41 - 5.43 TC; stricken 4.11.43
9823	12.36 - 9.37	VS-3B/VS-2; 11.37 - 12.39 VS-41; 5.40 - 11.40 VS-71; crashed 4.11.40
9824	5.36 - 6.36	Anacostia on test; crashed 10.6.36
9825	5.36 - 3.38	Anacostia on test; 3.38 - 4.38 Vought; 4.38 - 5.38 NAF; 5.38 - 1.39 Anacostia on test; 7.39 - 3.43 TC; stricken 5.11.43
9826	5.36 - 7.38	Anacostia on test; 7.38 - 10.38 NAF; 10.38 - 10.39 Naval Attache, Mexico City; 10.39 - 7.42 TC; 7.42 - 11.42 NAF; 2.43 - 8.43 VJ-5; stricken 10.8.43
9827	12.36 - 8.38	VS-3B/VS-2; 10.38 - 6.39 VS-2; 7.39 - 9.40 VS-71; 3.41 - 7.42 TC; 7.42 - 11.42 NAF; 6.43 VJ-3; stricken 30.6.43
9828	12.36 - 9.38	VS-3B/VS-2; 11.38 - 9.40 VS-41; 3.41 - 5.43 TC; 4.43 VJ-3; stricken 7.6.43
9829	1.37 - 9.38	VS-3B/VS-2; 10.38 - 4.39 VS-2; crashed 10.4.39
9830	11.36 - 12.37	Commander Aircraft, Battle Force; 12.37 - 6.39 VS-2; 7.39 - 9.40 VS-71; 2.41 - 3.43 TC; 8.43 VJ-3; stricken 30.8.43
9831	9.36 - 11.36	VF-1B; crashed 30.11.36
9832	12.36 - 6.38	VS-1B/VS-41; 9.38 - 6.39 VS-2; 7.39 - 9.40 VS-71; crashed 5.9.40
9833	1.37 - 12.38	VS-3B/VS-2; 6.39 - 1.41 VS-42; 1.41 - 3.43 TC; stricken 12.7.43

SBU-2

0802	7.37 - 1.38	Test aircraft at Norfolk/Anacostia/NAF; 1.38 - 10.40 NRAB Opa-Locka; 10.40 - 3.43 TC; 6.43 - 8.43 VJ-5; stricken 10.8.43
0803	5.37 - 10.40	NRAB Opa-Locka; 10.40 - 5.43 TC; stricken 16.11.43
0804	5.37 - 12.40	NRAB Opa-Locka; 12.40 - 4.42 TC; crashed, Pensacola, 10.4.42
0805	5.37 - 1.38	NRAB Opa-Locka; crashed 30.1.38
0806	5.37 - 12.40	NRAB Opa-Locka; 12.40 - 4.42 TC; 4.42 - 7.42 NAF; 7.42 - 2.43 Lakehurst; crashed 23.2.43
0807	5.37 - 12.40	NRAB Opa-Locka; 12.40 - 7.41 TC; crashed, Pensacola, 30.7.41
0808	5.37 - 3.43	TC; 5.43 - 7.43 VJ-5; stricken 23.7.43
0809	5.37 - 6.40	TC; crashed, Pensacola, 10.6.40
0810	5.37 - 7.41	TC; crashed, Pensacola, 30.7.41

0811 5.37 - 4.42 TC; 4.42 - 6.42 NAF; crashed, San Diego, 8.3.43
0812 5.37 - 5.38 TC; crashed, Pensacola, 25.5.38
0813 5.37 - 10.40 NRAB Squantum; 10.40 - 3.43 TC; 11.43 VJ-3; stricken 17.12.43
0814 5.37 - 3.40 NRAB Squantum; 3.40 - 12.40 NRAB Opa-Locka; 12.40 - 10.41 TC; crashed, Pensacola, 10.10.41
0815 5.37 - 3.40 NRAB Squantum; 3.40 - 12.40 NRAB Opa-Locka; 12.40 - 2.43 TC; crashed, Quonset Point, 11.3.43
0816 6.37 - 4.39 NRAB Squantum; collided with 0817 4.4.39
0817 6.37 - 4.39 NRAB Squantum; collided with 0816 4.4.39
0818 6.37 - 3.40 NRAB Squantum; 3.40 - 12.40 NRAB Opa-Locka; 12.40 - 3.43 TC; 12.43 VJ-3; stricken 30.12.43
0819 6.37 - 7.42 TC; to TT Jacksonville; stricken 30.11.42
0820 6.37 - 3.43 TC; 5.43 - 7.43 VJ-5; 7.43 VJ-3; stricken 6.8.43
0821 6.37 - 3.43 TC; 5.43 - 8.43 VJ-5; stricken 13.9.43
0822 6.37 - 4.42 TC; 4.42 - 7.42 NAF; 7.42 - 11.44 Jacksonville; stricken 28.2.45
0823 7.37 - 2.43 TC; 4.43 - 9.43 VJ-5; stricken 20.10.43
0824 6.37 - 8.40 NRAB Philadelphia; crashed, Cape May, 12.8.40
0825 6.37 - 11.40 NRAB Philadelphia; 12.40 - 7.42 TC; to TT Jacksonville; stricken 30.11.42
0826 6.37 - 11.40 NRAB Philadelphia; 11.40 - 3.43 Anacostia; 11.43 VJ-3; stricken 20.11.43
0827 7.37 - 1.40 TC; crashed, Pensacola, 25.1.40
0828 7.37 - 7.42 TC; to TT Jacksonville; stricken 30.11.42
0829 7.37 - 1.43 TC; crashed, Pensacola, 7.1.43
0830 7.37 - 5.41 TC; crashed, Pensacola, 5.5.41
0831 7.37 - 3.43 TC; 6.43 - 9.43 VJ-5; stricken 9.10.43
0832 7.37 - 3.40 NRAB Brooklyn; 3.40 - 10.40 NRAB Opa-Locka; 10.40 - 4.43 TC; 12.43 VJ-3; stricken 31.1.44
0833 8.37 - 3.40 NRAB Brooklyn; 3.40 - 10.40 NRAB Opa-Locka; 10.40 - 5.42 TC; crashed, Pensacola, 2.5.42
0834 7.37 - 1.41 NRAB Brooklyn; 1.41 - 3.43 TC; 5.43 - 8.43 VJ-5; stricken 25.8.43
0835 7.37 - 10.40 NRAB Brooklyn; 10.40 - 11.41 TC; 11.41 - 11.42 NAF; 11.42 - 7.43 Lakehurst; 8.43 - 5.44 Philadelphia on test; stricken 25.5.44
0836 7.37 - 9.37 NRAB Brooklyn; crashed, Floyd Bennett, 5.9.37
0837 8.37 - 10.40 NRAB Brooklyn; 10.40 - 9.41 TC; crashed, Pensacola, 5.9.41
0838 8.37 - 1.41 NRAB Opa-Locka; 1.41 - 4.42 TC
4.42 - 7.42 NAF; 8.42 - 8.43 VJ-3; stricken 14.8.43
0839 8.37 - 4.40 NRAB Brooklyn; 4.40 - 11.40 NRAB Philadelphia; 12.40 - 11.41 TC; 11.41 - 11.43 Pratt & Whitney; to TT Chicago; stricken 22.12.43
0840 8.37 - 11.40 NRAB Squantum; 10.40 - 5.41 TC; crashed, Pensacola, 5.5.41
0841 8.37 - 4.41 NRAB Philadelphia; 4.41 - 5.43 TC; 2.44 VJ-3; stricken 14.3.44

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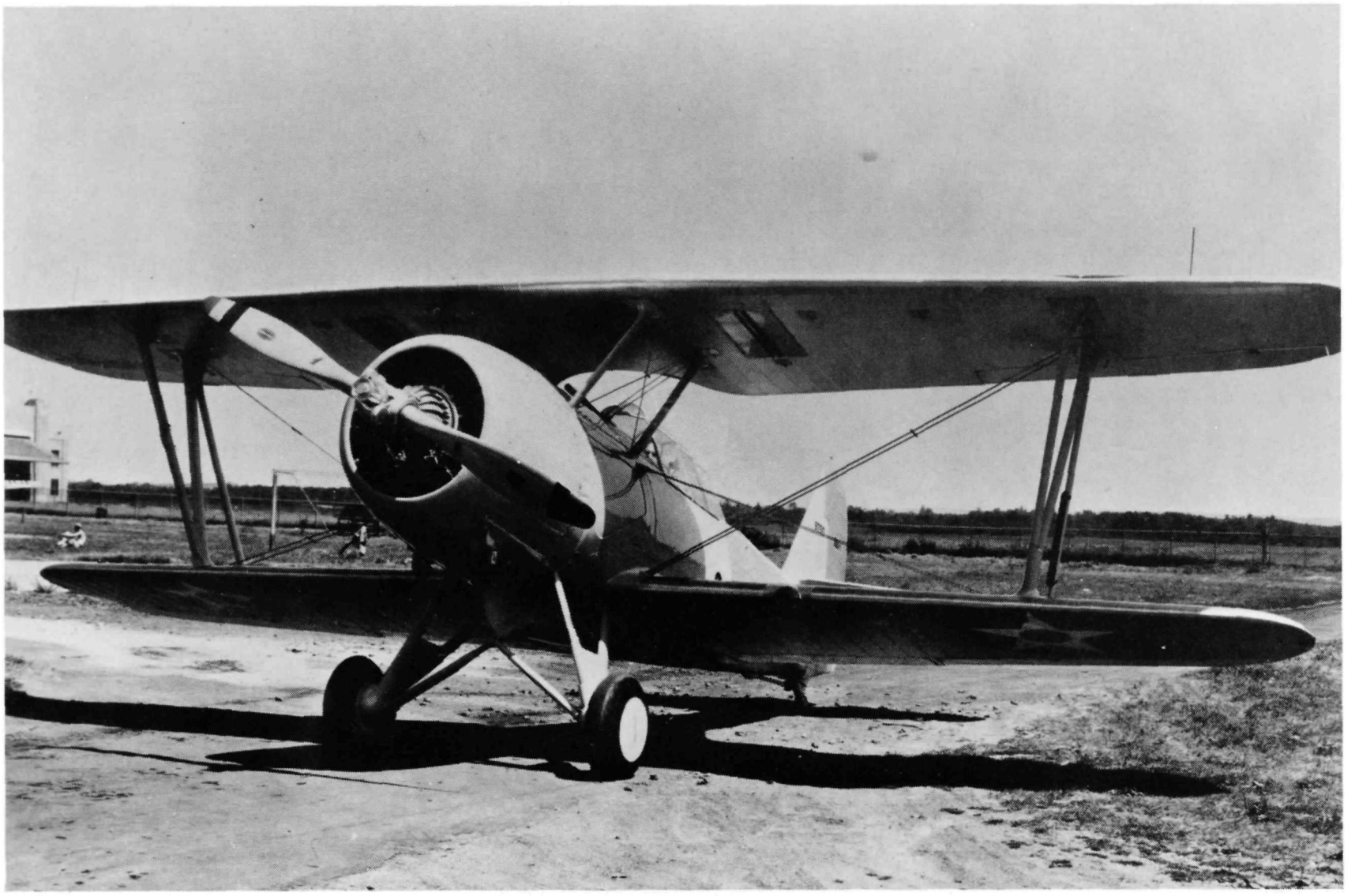
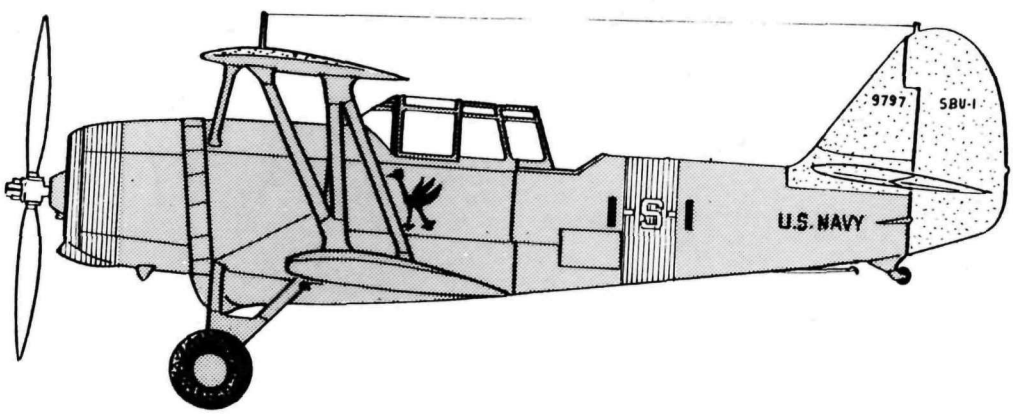
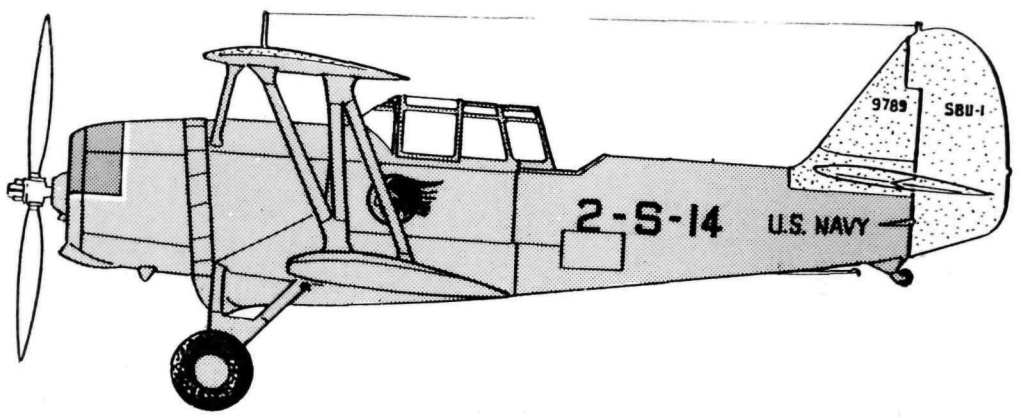
The first production SBU-1, 9750, just before being handed over to the Navy.
(AAHS Collection No.7842)



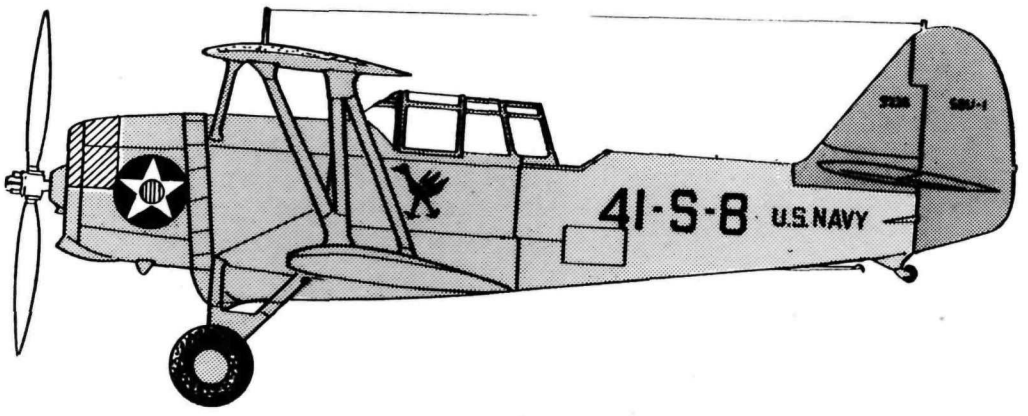
9797 of VS-1B from USS Ranger.
Tail colour: yellow
Section colour: red
S in white

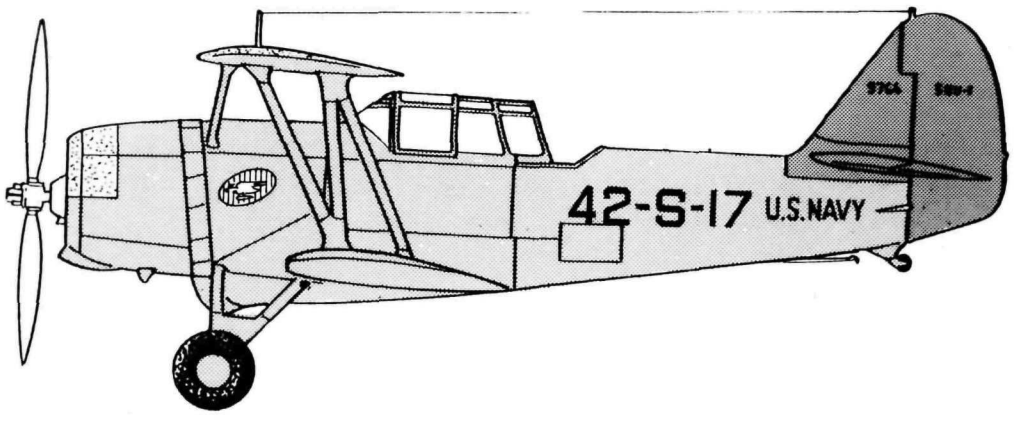




9789 of VS-2B from USS Lexington.
Tail colour: yellow
Section colour: green

9828 of VS-41 from USS Ranger
Tail colour; green
Section colour: blue

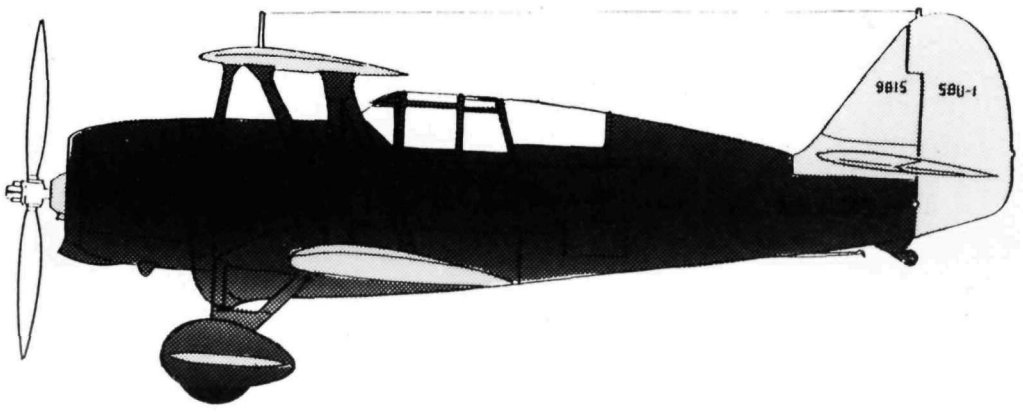


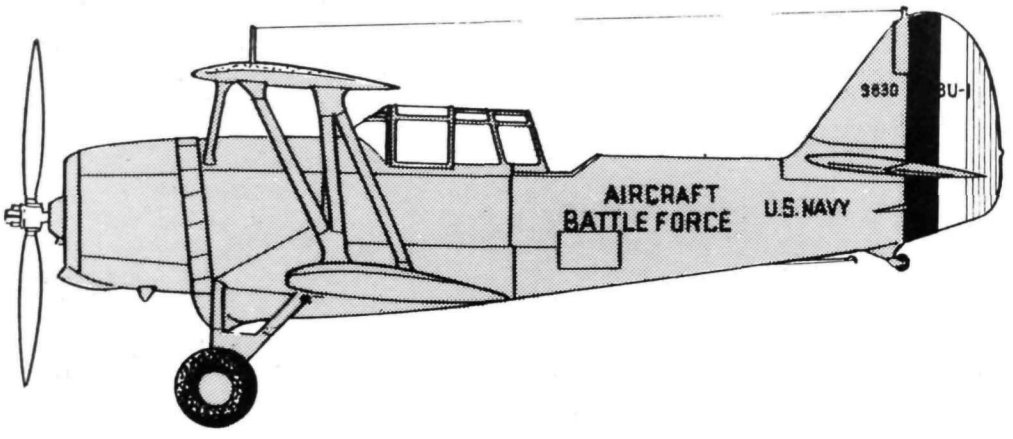


9764 of VS-42 from USS Ranger
Tail colour: green
Section colour: yellow

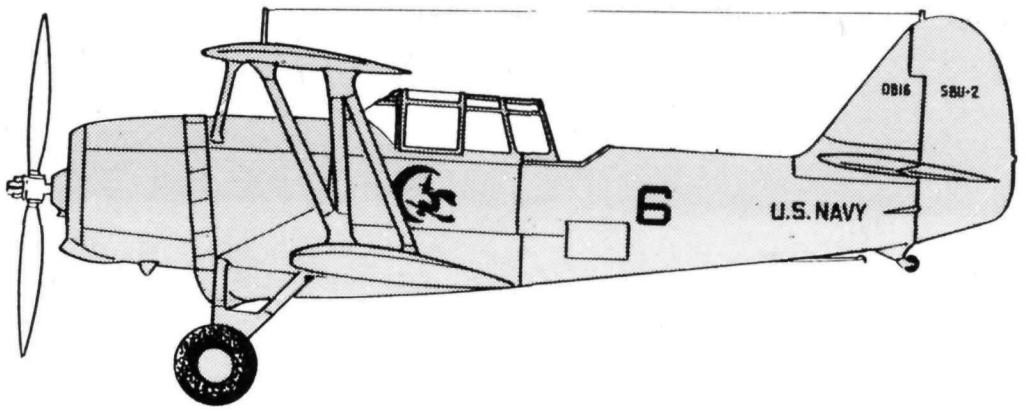
Service finish of both the SBU-1 and SBU-2 was aluminium overall, except for upper surface of top wing which was chrome yellow. Squadron colours comprised tail coloured according to parent ship and section colours applied to nose/fuselage as detailed in AM.2/86. Chevron on upper wing applied in section colours.

9815 of Commander Aircraft, Battle Force
Dark blue fuselage; aluminium wings and tail





9830 of Commander Aircraft, Battle Force
aboard USS Saratoga

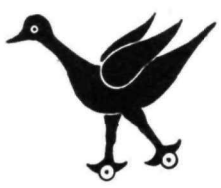


0816 of Naval Reserve Air Base, Squantum

Emblems of:

VS-3B/VS-2
Black and red head
on yellow disc

VS-1B/VS-41
Black duck on skates



VS-42
White bird, yellow beak
and bomb, black cigar and
legs, red background

R.A.F. SEARCH & RESCUE (OVERSEAS)

Wessex HC.2 XT601 of Gulf SAR Flight

While the Second World War officially terminated in 1945, the aftermath lingered on for several years. In the immediate post-war euphoria it was once again hoped that war was a thing of the past. Such hopes were quickly dashed. The confrontation between Communism and Capitalism (East versus West) and the beginning of the Post-Colonial Era soon saw to it that there were plenty of tasks to keep the wartime services fully occupied in what was at best a very fragile peace.

So the late 1940s and the 1950s saw the role of the Royal Air Force quickly resuming the pre-war mantle of keeping the peace in what was once "The Empire" and was now the Commonwealth.

Post-war occupation forces were maintained in Europe and some of the territories in the Near and Far East that had been occupied by the Axis Powers during the war, under treaty obligations.

Insofar as search and rescue activities were concerned. the dedicated wartime squadrons (Nos.275-284) had been disbanded by mid-1946. In the previous article, we have seen that helicopter search and rescue activities commenced, on an initially experimental basis, during the latter part of the war and came to fruition in the early/mid 1950s with the establishment of two helicopter SAR squadrons in the United Kingdom.

These were formed specifically for search and rescue purposes. Overseas, it was a different matter. The units abroad had to turn their hands to a number of different tasks as the need arose and it was rare to have units with just one specific task allotted to it. When helicopter units began to be formed abroad in the 1950s, it was almost invariably with a view to their performing primarily transport and liaison roles. But the unique ability of the helicopter to hover when necessary and fly very slowly when appropriate enabled it to perform search and rescue functions whenever it was called upon to do so. This second article therefore will be much different in scope from the first as will readily become apparent.

The very first overseas helicopter unit to be formed was the Casualty Evacuation Flight formed in Singapore in 1950. As its title described, the unit assisted in the anti-communist guerrilla campaign in Malaya by bringing Army casualties of the conflict out of the jungle quickly and back to hospitals in Kuala Lumpur and Singapore. Thus "search and rescue" would not strictly apply to the Flight's activities although rescue was what they did. Frequently it had to search for suitable clearings in the jungle from which to perform its vital task. With radio communications being comparatively unreliable at that time and place, the "search" element of the task was frequently difficult. A return to the Far East sphere of operations will be made later in this article but a geographical location closer to home is the logical sequence of moving away from the United Kingdom, the subject of the previous article.

EUROPE

There was only one SAR unit formed in Europe and that was the Second Tactical Air Force Helicopter ASR Flight based at Sylt, an island off the Danish coast, at the Armament Practice Station. This unit was formed on 4th February 1955 with the arrival of the first of two Bristol Sycamore HR.14s (XE320). A second aircraft (XG513) joined it in November 1955. In addition to the normal range duties of ensuring that people/vehicles/boats, etc were kept well away from the targets at which aircraft were shooting, the helicopters were also responsible for SAR duties off the coast of North-West Germany and Denmark. The unit was also referred to as the "Sylt SAR Flight" and the "APS Sylt SAR Flight" during its time at Sylt which endec in September 1961. It is presumed that the closure of the Flight's operations was brought about by the ability of the recently-formed German air and naval units to begin undertaking those tasks. It is rumoured that a posting to the Flight was much sought after; the proximity of various nudist camps and beaches to Sylt probably had nothing to do with this.

NEAR EAST/AFRICA

Cyprus

The first deliveries of helicopters to the Near East began in April 1955 and two Sycamore HR.14s were received by the Station Flight at Nicosia (XF268/XF269) with two more following later in the year. A requirement for SAR helicopters for this area had been initiated by the AOC No.205 Group in the Canal Zone, Egypt, as long ago as 1952 but the slow development of British helicopters and the priority given to problems in Malaya ensured that none were available until 1955. The initial locations for SAR flights were envisaged as (a) Canal Zone/Sinai; (b) Aden and (c) Jordan/Iraq. A total of three SAR helicopters were promised for the Near East area but nothing happened until 1955.

Back in Cyprus, Nicosia Station Flight was absorbed into the Levant Communications Squadron in January 1956 and this unit retained

Whirlwind HAR.10 of No.103 Squadron

two Sycamores until January 1960. It is believed that the unit remained based in Cyprus and that the duties included both SAR and communications.

Meanwhile, political developments in Cyprus were on the move with first indication of the "Enosis" campaign for unification with Greece and consequent hostilities between the Greek and Turkish Cypriots. An Internal Security Flight was formed at Nicosia in March 1956. This unit achieved squadron status on 15th October 1956 when it was re-designated 284 Squadron. The use of the former war-time ASR "number plate" is probably significant but the squadron's main role was to support the Army in the containment of the guerrilla campaign which commenced in support of Enosis.

On 1st August 1959, the squadron was re-numbered 103 Squadron and continued to be based in Cyprus until 31st July 1963. No.103 then disbanded and was re-formed in the Far East almost immediately (see below).

Its place in Cyprus was taken by 1563 Flight with a separate Flight - No.1564 - being formed at El Adem in Libya.

Up to this point in time, virtually all helicopters in Cyprus had been Sycamore HR.14s but in February 1964 the first turbine-engined Whirlwind HAR.10s arrived to re-equip No.1563 Flight and remained with this unit until the formation of 84 Squadron at Akrotiri on 18th January 1972, absorbing 1563 Flight and a detachment of 230 Squadron.

From the early 1960s through to the present day, the duties of the RAF (and the Army Air Corps) in Cyprus had been a mixture of support for the British Sovereign Bases in Cyprus, particularly on SAR duties, and the support of the United Nations Forces in Cyprus (UNFICYP) following the occupation of Northern Cyprus by the Turkish forces in 1974.

Thus, 84 Squadron maintained two separate flights since those days, A Flight operating from Akrotiri with yellow "Rescue" Whirlwinds and B Flight (also known as the Nicosia Detachment) with camouflaged Whirlwinds bearing the distinctive light blue stripes of the United Nations Forces. The squadron received its first Wessex HC.2s in March 1982 and became unique in operating ex-Fleet Air Arm Wessex HU.5Cs from June 1984 onwards, becoming fully equipped with the type from June 1985. It is rumoured that the potential order for further Sea King HAR.3s to be announced later this year will include an element for replacement of 84 Squadron's rapidly-ageing Wessex HU.5Cs. These are only five in number, a reduction from eight Whirlwinds when the squadron was re-equipped in 1982. The squadron's two separate roles were combined, with the Army Air Corps providing continuing support to the United Nations Forces.

Libya

A total of four Sycamore HR.14s served with the El Adem Station Flight from August 1957 until December 1959 when they were withdrawn. It is believed that from 1959 to 1964, Sycamores were detached from Cyprus on an "as required" basis. Certainly when 103 Squadron was formed in 1959 by re-numbering 284 Squadron, it included a SAR detachment at El Adem, presumably the residual helicopter element of the Station Flight. The aircraft concerned were XG512 and XG517.

As recounted above, on the transfer of 103 Squadron from the Near East to the Far East in 1963, No.1564 Flight was formed at El Adem. This continued to operate Sycamores until May 1965 when Whirlwind HAR.10s took over. These continued at El Adem until February 1967, when helicopter operations temporarily ceased. They again resumed in March 1969 when the 22 Squadron element at Manston was withdrawn from its home SAR duties and reinstated at El Adem in the guise of 1563 Flight. This second phase lasted only a short time, until January 1970 to be precise. Early in 1970 the coup which brought Colonel Gadaffi to power took place and Libya became a fully independent state.

Jordan and Iraq

Sycamore HR.14 XG518 was allocated to the Amman Station Flight on 14th January 1956. A treaty existed between Jordan and Britain for the maintenance of a British presence in Jordan but this was rescinded by Jordan in March 1957 and the RAF's aircraft and personnel were withdrawn in May 1957.

XG518 then appears to have been transferred to the Station Flight at Habbaniya in Iraq but its presence there was short-lived. The Iraqis were equally anxious to see the end of a British presence and this came about after the July 1958 revolution in Iraq. XG518's stay in Iraq only lasted until August 1957 when it was again transferred, this time to Libya, the first Sycamore to see service there.

Aden

In Aden, the first Sycamore HR.14 was XG504 and this was allocated to the Aden Communications Squadron on 9th July 1955. In October 1955, it was joined by XE309 and by this time the unit concerned was apparently re-designated the Aden Protectorate Communications Squadron. A further re-designation then occurred when from 1st June 1957 the Sycamores were transferred to the Khormaksar Station Flight. Finally on 13th June 1958, the title of the parent unit became officially Khormaksar Search and Rescue Flight. Sycamores continued to serve with this unit until July 1964 and were then replaced by Whirlwind HAR.10s. Unrest in the area and in neighbouring Yemen increased significantly from 1962 onwards and led eventually to a complete British withdrawal towards the end of 1967. The last Whirlwind HAR.10 had left in June.

The Gulf

One of the units displaced by the events in Aden was 78 Squadron, which had reformed at Khormaksar on 24th April 1956 with Pioneer CC.1s and, from June 1958, with Twin Pioneers. In June 1965, the squadron converted to Wessex HC.2s and played a prominent part in the anti-guerrilla campaign in Aden until withdrawal.

From 17th October 1967, the squadron was based at Sharjah in the then Trucial States on the western side of the Persian Gulf.

The main Royal Air Force staging post for flights to the Far East in this area became the airfield at Muharraq on the island of Bahrain

Sycamore HC.14 of 110 Squadron winching

and 78 Squadron detached a couple of Wessex HC.2s to cover SAR duties in the Gulf. This was the first use of the Wessex in this role and it pre-dated similar use in the UK by at least two years. Three Wessex HC.2s were employed on SAR duties, XT601, XT602 and XT604.

In the late 1960s, it was decided that there would be no British presence in the Gulf after the end of 1971 and the Royal Air Force stations at Sharjah and Muharraq were closed down in December 1971. On return to the UK, the SAR Wessexes were found to be heavily corroded and required extensive refurbishment at Westland's.

Kenya

Not strictly - certainly not geographically - the Middle East, Kenya nevertheless had close connections with the British Forces in Aden, which were responsible for the RAF in Aden, the Gulf and Kenya.

In 1952, what became known as the Mau-Mau Campaign in Kenya began in earnest. It again was an anti-British, anti-colonialist movement.

Sycamore HR.14 XE309 was attached to the Eastleigh Station Flight near Nairobi from 25th October 1954, being replaced the following year by XJ361.

The use of the helicopter operating at quite high altitudes was analogous to that of the Dragonfly's with the Casualty Evacuation Flight in the jungles of Malaya, i.e. casualty evacuation. The anti-guerrilla campaign had largely been successful by mid-1955 and XJ361 followed XE309 to Aden in February 1957.

FAR EAST

It was, as already mentioned, the operational requirements of the anti-communist guerrilla campaign in the late 1940s that brought the helicopter into an operational role with the Royal Air Force from 1950 onwards.

The Casualty Evacuation Flight at Sembawang, Singapore, was re-designated 194 Squadron on 1st February 1953. Then equipped with Westland Dragonfly HC.2s, it added Sycamore HR.14s to its complement from October 1954 onwards. A second helicopter squadron, No.155, joined it in the campaign from 1st September 1954, equipped with Whirlwind HAR.4s and based at Kuala Lumpur, where 194 Squadron had moved in May 1953. In addition, No.848 Squadron of the Fleet Air Arm operated in Malaya alongside the RAF squadrons with their Sikorsky-built Whirlwind HAR.21s. The principle task of all these units were army support duties and the extraction of casualties from the jungle. There were, however, no specialised SAR helicopters in the 1950s in this theatre.

A successful conclusion of Operation "Firedog", as the campaign in Malaya was known, was assured by the late 1950s, although it was not until July 1960 that an end was formally proclaimed.

On 3rd June 1959, a merger of 194 and 155 Squadrons took place and the resultant combination became 110 Squadron, based initially at Kuala Lumpur. A move was made to Butterworth from 1st September 1959 and more peaceful operations ensued. It had been the intention to equip 110 Squadron solely with Sycamores but in 1959 technical problems grounded them and 110 was forced to retain a handful of Whirlwind HAR.2s until April 1960, when Sycamores again became available.

The period of tranquillity was not to last long and by December 1962 the dispute between Indonesia and the now-independent state of Malaysia erupted to become known as "The Confrontation" campaign and was primarily centred on the island of Borneo which was shared geographically by both Malaysia and Indonesia, together with the states of Brunei and Sarawak.

On 17th January 1964, 110 Squadron transferred from Butterworth to Seletar in

Singapore to join 103 Squadron. The latter had formed on 1st August 1943 from B Flight of 110 Squadron. The Flight had received the first turbine-powered Whirlwind HAR.10s in the Far East theatre earlier that year and had worked up on this new type at Seletar.

The intensification of confrontation meant that helicopter requirements increased rapidly and this brought two UK-based squadrons out to Malaysia, Nos.225 and 230 Squadron, both with Whirlwind HAR.10s.

When 110 Squadron moved from Butterworth in north Malaysia it left behind a detachment of Sycamores for SAR duties and this was soon taken over by 103 Squadron. As the focus of operations in the area continued to centre on the island of Borneo to the south, this detachment also moved down to Singapore. The Sycamores were transferred to liaison duties and were replaced in the SAR role by Whirlwinds. Detachments were still maintained from time to time at Butterworth which had become a base for the Royal Australian Air Force.

The situation continued until well beyond the end of confrontation in the latter half of 1966. By the end of 1970, Britain had decided to run down its Far East commitments, with 110 Squadron disbanding on 15th February 1971. This left 103 Squadron as the sole helicopter unit in Singapore. The squadron's Whirlwinds were replaced by Wessex HC.2s from November 1972 onwards but there were no dedicated SAR helicopters once the last Whirlwinds had left. No.103 disbanded in Singapore on 31st July 1975.

HONG KONG

As the position in Borneo improved in the mid-1960s, thought was given to maintaining a helicopter presence in Hong Kong. From 1967 onwards, both 103 and 110 Squadrons sent detachments to the colony and on 1st March 1968, No.28 Squadron was re-formed at Kai Tak from the 103 Squadron detachment then in place. Its initial equipment of Whirlwind HAR.10s was replaced by Wessex HC.2s from January 1972 onwards and this squadron continues to operate in the colony today, now based at Sek Kong. As with 103 Squadron in Malaysia, search and rescue operations are performed whenever the squadron is tasked to do so.

THE NUCLEAR BOMB TESTS

One aspect of the Royal Air Force's post-war operations in the Far East that has never received due publicity is the support it gave to the atomic and hydrogen bomb tests in the 1950s. A great number of personnel and aircraft were involved in maintaining bases in the necessarily remote locations where the tests were conducted.

Initial atomic bomb tests were conducted at Monte Bello Island off Australia in 1952, with static ground level explosions only. Later tests in 1956 were carried out, again at Monte Bello, and at Maralinga, South Australia, with a first air-drop of "The Bomb" on 11th October 1956.

To support these tests, No.1362 Flight was formed at Weston Zoyland in October 1955 and transported by sea to Australia with two Whirlwinds, arriving at the end of the following month. It is not certain when 1362 Flight disbanded but the last test at Maralinga took place on 9th October 1957 and the Whirlwinds were back in the UK by April 1958.

The atomic bomb tests were, in fact, overtaken by hydrogen bomb tests which began on Christmas and Malden Islands, in the Pacific some 1,500 miles south of Hawaii, in 1957.

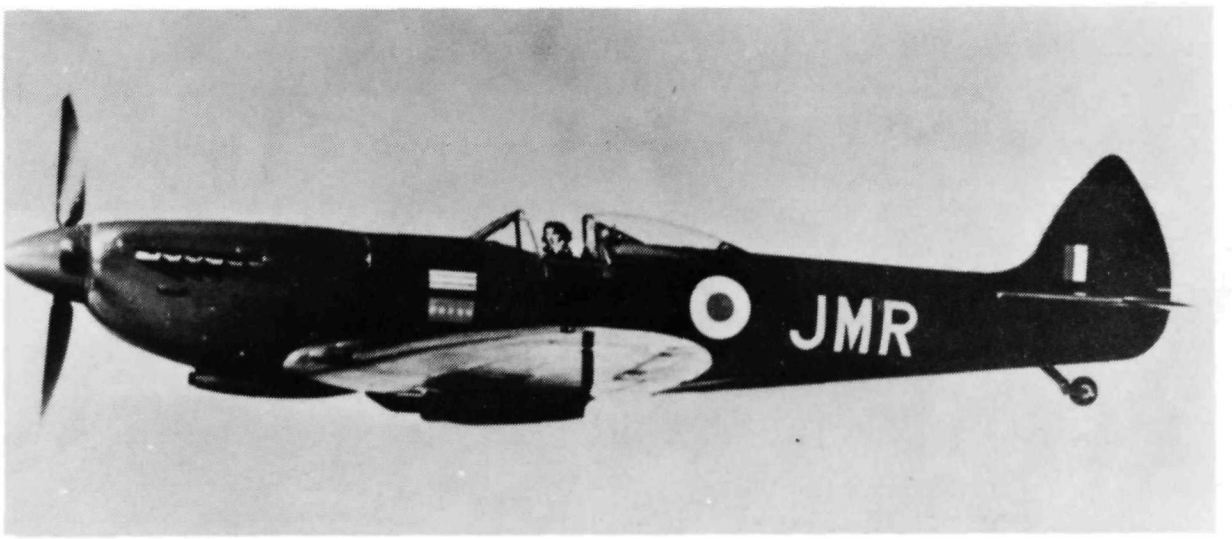
Once again a support flight of Whirlwinds was formed, this one at St.Mawgan, and designated "X" Flight of 22 Squadron, in October 1956. The first tests occurred in May/June 1957 and on 1st August 1957 the flight was re-designated 1360 Flight. As the test programme developed, the unit's complement of Whirlwinds increased to eight and on 1st February 1958 the Flight was elevated to rescue squadron status and became No.217 Squadron, remaining in this guise in support of the tests until 13th November 1959 when it disbanded.

The Flight/Squadron Whirlwinds were in the SAR all-yellow colour scheme and bore "Rescue" markings. It is not clear whether they were in HAR.2 or HAR.4 guise but probably the latter in view of the tropical conditions in which the units operated. The main difference between the two marks was the higher-rated engine in the HAR.4.

Search and rescue was an important element in the operations but general support and supply tasks were the main functions. As ever, the Royal Air Force abroad had to cover a variety of tasks.

Whirlwind HAR.10s of No.110 Squadron in Malaysia

PERSONAL CODES PART 3



Spitfire PR.19 PM659 of ACM Sir James Robb

JK An unidentified Hurricane had this code in 1943 when flown by Wing Commander 'Johnnie' Kent, the Wing Commander Training, Air Headquarters Air Defences, Eastern Mediterranean, the same aircraft having been previously coded 'MA'.

JK This code was also used on an unidentified Typhoon of 121 Wing by Wing Commander Jimmy G.Keep, DSO, DFC, who was Wing Commander Flying until 7.45, when he became the commanding officer.

JLL A rare example of a First World War use of a personal code, this one appeared Sopwith Camel H826, flown late in that war by J.L.Leith, MC of 46 Squadron.

JM Used by an unidentified Flight Lieutenant of 1417 Flt at Khormaksar on Hunter FR.10 XE589.

JMC Wing Commander J.M.Checketts used this code on Spitfire 'xB509' (possibly AB509).

JMR Used by Air Marshal Sir James Robb, KBE, CB, DSO, AFC, the AOC-in-C Fighter Command around 8.45 on Mosquito PR.XVI NS561 of the Fighter Command Communications Squadron at Northolt. The code was also used by him from about the same time on Spitfire LF.IX MJ843 (previously coded 'RH') until being crashed by another pilot who was killed when the wings pulled off in a dive on 16.9.46, the squadron having moved to Bovingdon two months earlier. It was replaced in 10.46 by Spitfire LF.XVI SL721, Robb later becoming promoted to Air Chief Marshal on becoming C-in-C Air Forces Western Europe, British Element, the aircraft being taken over by the Metropolitan Communications Squadron at Hendon on 7.2.48. SL721 left 7.48 and was replaced two months later by Spitfire PR.XIX PM659, the MCS having in the meantime become 31 Squadron at Hendon. At Bovingdon around 1947/48 Robb used Meteor F.4 EE549 of FCCS with this code.

JOC Reported seen on an unidentified Spitfire around 4.42.

JP Used at Debden in 4.42 on an unidentified Spitfire Va by the Station Commander, Wing Commander John R.A.Peel.

JR Used around 7.54 on Meteor F.8 WE927 of Station Flight Duxford, it might have belonged to either Group Captain Jamie Rankin DSO, DFC or Wing Commander J.A.Read, DFC.

JRG Carried in 1957 on Hunter F.5 WP144 of 34 Squadron at Tangmere, having been previously been coded 'PJS' of Station Flight. The code might possibly have related to Wing Commander J.R.Gibbons, AFC.

JS Lightning F.3A XR728 carried this code around 4.88 when used by the Binbrook Station Commander, Group Captain John Spencer.

JW Used on Meteor F.8 WK795 of the Eastern Sector at Horsham St.Faith in 1955 by the Sector Commander, Air Commodore J.Worrall (rank at that time not entirely certain).

JWB Spitfire F.21 LA232 used this code around 1945/46 when flown with 12 Group Communications Flight at Hucknall by the AOC 12 Group, Air Vice-Marshal John Wakeling Baker, CB, MC, DFC (later became 'TT').

KB Used by Lt Col K.Birksted, DSO, DFC, the Wing Commander Flying of 132 Norwegian Wing at North Weald towards the end of 1943 on Spitfire LF.IX MH830, then by 2.44 on Mk.IX MJ462. Also around 4.45 - 5.45 with 132 Wing, as it had by then become, on another Spitfire IX at Twente and North Weald.

KB The code was also used by 616 RAuxAF Squadron on Meteor F.8 WL166 at Finningley and Worksop around 9.56. Possibly Wing Commander K.R.Bowhill, OBE.

KBBC Group Captain K.B.B.Cross, CBE, DSO. DFC, Sector Commander, Eastern Sector at Horsham St. Faith from 26.7.49, used this code around 1951/52 on Meteor F.8 WA773, which later became coded 'SCW'.

KC Used on an unidentified Spitfire Vb in the Middle East.

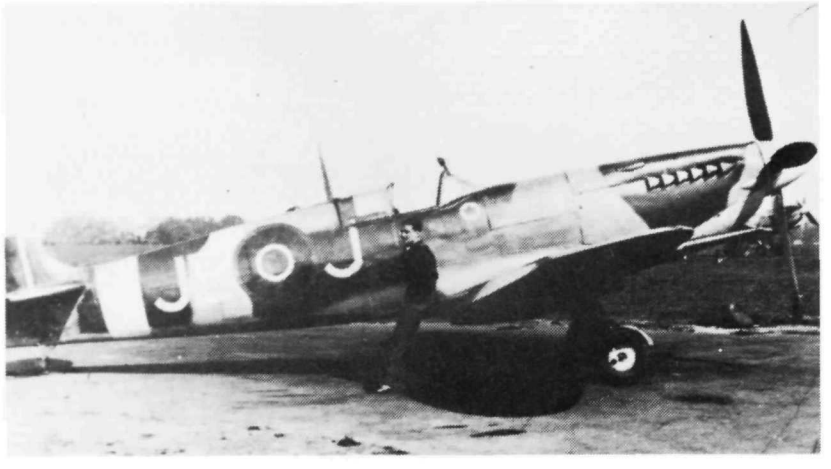
KE Used on Spitfire LF.XVI TE388, possibly when it was on the strength of the Maintenance Command Communications Squadron at Andover around 1948/49.

KK This code was used in the Middle East on a Spitfire Vb reported incorrectly as BL224, which only served in the United Kingdom.

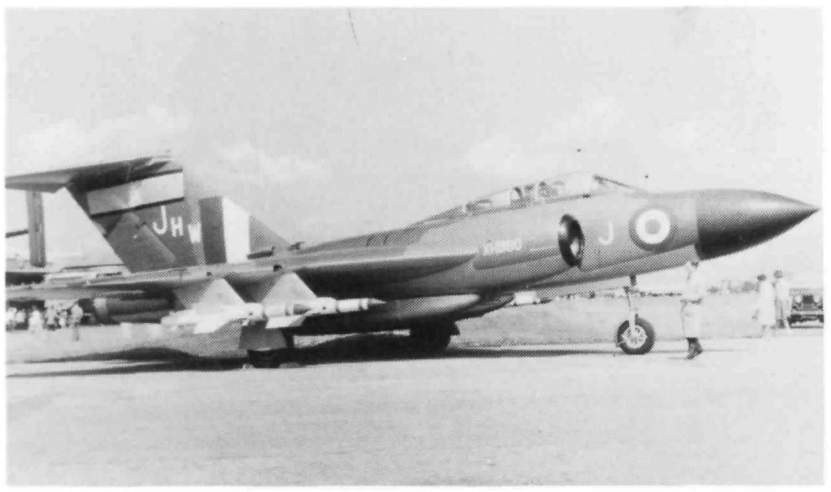
KL Used in 1944 at Milfield on an unidentified Hurricane at the Fighter Leaders School.

KNL Wing Commander C.D. 'Kit' North-Lewis, DFC used this code as Wing Commander Flying, 124 Wing on successive Typhoons, first MN922 in 7.44, followed by MP189 in 8.44, then RB208 from 12.44 to 3.45.

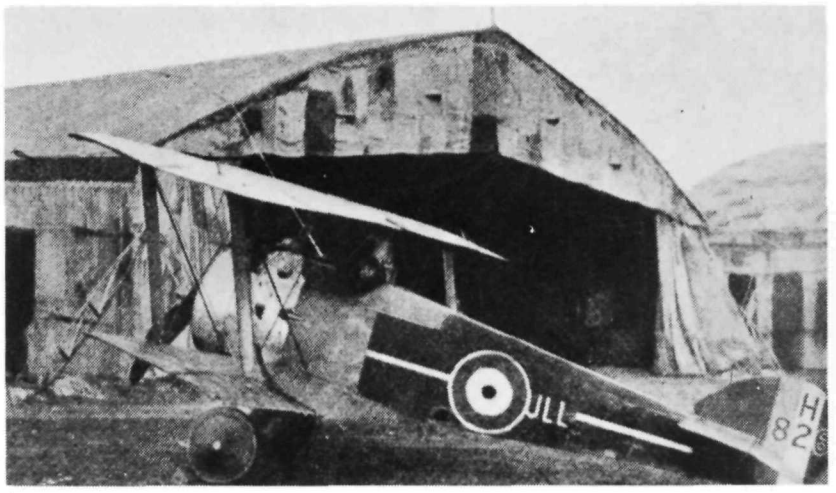
Spitfire IXC EN398 in 1943



Meteor F.8 WH404



Javelin FAW.9 XH880 of 25 Squadron in 1961



Camel H826

KR Used by Flt Lt K.R.M.Remfrey commanding the station flight, then the Northern Sector Flight, at Linton-on-Ouse around 1952/53 on Meteor T.7 WH209, which also carried 'SF', presumably signifying Station Flight.

KS Flight Lieutenant K.A.Simpson of 1417 Flt at Khormaksar used this code on Hunter FR.10 XF429.

KSY Used on an unidentified Spitfire around 1945.

KW An unidentified Spitfire IX carried this code at the Central Fighter Establishment around 4.45.

LB Air Vice-Marshal Leslie O.Brown used this code on Spitfire LF.IX MK910, which he flew between 12.5.44 and 4.10.44 as AOC 84 Group. The aircraft belonged to the Group Communications Squadron, and he carried the letters either side of the fuselage roundel, which he regarded as signifying his middle initial.

LBP Vampire FB.5 VZ841 of Station Flight North Weald was flown with this code and in 41 Squadron colours around 1951/52. At different times it was also coded 'DEK' and 'PWB'.

LG Used on Anson XII PH626 of the Fighter Command Communications Squadron at Northolt around 4.46. Owner unknown.

LG Code also believed used by an unidentified Flight Lieutenant of 1417 Flight at Khormaksar on Hunter FGA.9 XE530, though the exact code is uncertain and might possibly have been either 'GL' or 'LGA'.

LHB Wing Commander L.H.Bartlett used this code on Meteor F.8 WA764 when he was Wing Commander Flying at Wattisham around 7.53.

LJ Hunter FGA.9 XE654 carried this code around 4.63 when flown by Squadron Leader L.A.Jones, then CO of 8 Squadron at Khormaksar.

LL Carried around 9.56 at 233 Operational Conversion Unit, Pembrey by Hunter F.1 WT625, which also carried code 'J' with that unit.

LM Wing Commander Lee A.Malins, DSO, DFC used this code around 7.53 - 11.53 when Wing Commander Flying at Linton-on-Ouse on Meteor F.8 WH401, which had an all red tail and had previously been coded 'BD'. He also used from 3.54 on Sabre F.4 XD763

LOL Used on Spitfire F.IX MA507, this is assumed to have been a personal code, but the exact significance of it is not apparent as it was being flown by Wing Commander P.H.Woodruff when he was killed on 27 February 1945, having been taken on strength by 337 Wing in Greece in 11.44. Possibly it was the mount of another officer in that wing.

LV Tempest FB.II PR566 carried this code with 30 Squadron at Agra in 1946. Owner unknown.

LVC Wing Commander Lloyd Vernon Chadburn, DSO & Bar, DFC flew this code on Spitfire LF.Vb EP548 as Wing Commander Flying of the Digby Wing from 6.43 until the end of the year. He took over a similar post with 127 Wing on 16.4.44, and was flying Spitfire LF.IX MJ824 with this code when he was killed as a result of a collision with NH415 on 12.6.44.

LW Mustang III FB260 carried this code in respect of Lt Col Laurie A.Wilmot, SAAF, the CO of 239 Wing of the Desert Air Force from 10.43 to at least 4.44.

MA Wing Commander Max Aitken flew this code on Hurricane I P2623 in the Mediterranean theatre from 11.3.43 to 9.7.43. From then he used it on another unidentified Hurricane as Wing Commander Training, Air Headquarters Air Defences Eastern Mediterranean, this latter machine later becoming coded 'JK'. Then with the Banff Strike Wing he used it again on an unidentified Mosquito between 16.9.44 and 6.6.45.

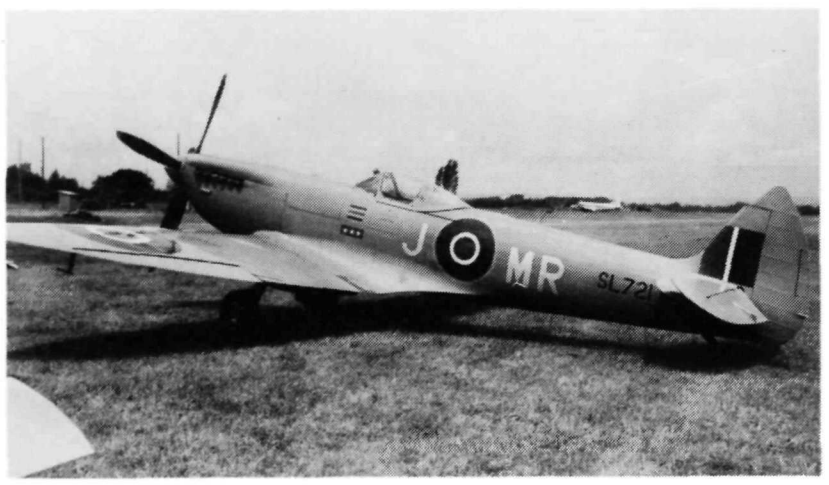
MB An unidentified Spitfire Vb was flown with this code around 1.42 by Wing Commander Minder Vaughan Blake, DSO, DFC, the Wing Leader Portreath, being replaced around 3.42 by W3561 which he flew until it was lost and he was taken prisoner during the Dieppe raid on 19.8.42.

MD Meteor III EE243 was reported as having this code with 263 Squadron at Acklington around 11.45, though it may have been a visitor as it was then officially on charge to the Central Fighter Establishment at Tangmere.

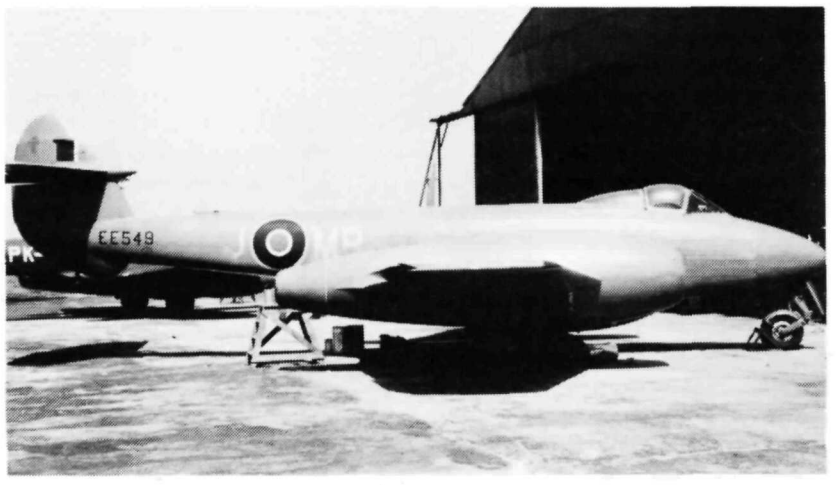
MH Squadron Leader M.E.Hobson, AFC, the CO of 92 Squadron, used this code during 1957 at Middleton St.George and later Thornaby on Hunter F.6 XG239, replacing it in 1.58 with XF521 which later became coded 'RD'.

MHD Used on Mosquito FB.6 RS639, probably with 139 Wing at Wahn around 1947/49. It probably related to Group Captain M.H.Dwyer, who had been Station Commander at Lubeck around 1946/47.

Spitfire XVIE SL721, 1948



Meteor F.4 EE549, 1948



Mosquito FB.6 RS639 at Wunstorf, 1967 (P.Dobbs)

Javelin FAW.9 XH839, 1965 (via Roger Lindsay)

MHM Wing Commander Michael H.Miller, the CO of 60 Squadron at Tengah from 11.65 to 4.68, used this code successively on Javelin FAW.9s XH839, XH721 (from 2.66) and XH872 (from 7.67).

MJ Wing Commander M.T.Judd, DFC, AFC had this code painted on Typhoon MN518 when he took over as Wing Commander Flying of 143 Wing after his predecessor, Wing Commander R.T.P.Davidson, DFC went missing on 8.5.44 in MM957 (F3-N). He is assumed to have later used the same code from 7.44 to 10.44 on MN475, the replacement aircraft.

MJL Used on Spitfire Vc JL122, which was used in the Middle East between 8.43 and 1.44.

MLB An unidentified Sabre F.4 carried this code at Wildenrath when being flown by Wing Commander Michael Le Bas, the Wing Commander Flying, from 7.54 until 11.54, when he was posted away and his successor change the code to 'CFA'.

MLD Used by Wing Commander Baron Michael G.L.Donnet, DFC, Croix de Guerre, Wing Commander Flying at Bentwaters from 2.45, on Mustang III KH500 (previously coded HBW'), then from 4.45 Mustang IV KM121 until this belly landed near Godalming after engine failure in 23.4.45. Post-war he became Commandant of the 1st Belgian Fighter Wing, and continued to used the code, on Meteor F.4 EF24 around 1949/51 and later on Meteor F.8 EG212.

MLO This code was reported used on Spitfire LF.IX NH476, which is known to have been used by 132 Squadron from 20.7.44 until it went missing on 27.9.44. This squadron was based at Hawkinge as part of 125 Wing, and it quite possible therefore that the code was correctly 'MLD' and would therefore have related to Wing Commander Donnet (see 'MLD') who was Wing Commander Flying there by 10.44.

MLR Used on an unidentified Spitfire Vb of 340 Squadron within the Tangmere Wing by Wing Commander Michael L.Robinson DSO, DFC, Croix de Guerre.

MMS Wing Commander M.M.Stephens, DSO, DFC, Wing Leader at Ta Kali in the Spring of 1942, used this code on an unidentified Spitfire V.

MP Meteor F.8 WK741 carried this code at Linton-on-Ouse when used between 7.53 and 1.54 by the Station Commander, Group Captain M.G.F. 'Mike' Pedley, who took over Sabre F.4 XD736 with the same code from 3.54.

MR Air Commodore M.W.S.Robinson, AFC, Sector Commander, Caledonian Sector, used this code at Turnhouse on Hunter F.4 XF304 until 2.57, when it became coded 'SC'. This aircraft had been previously coded 'CGL' and 'MWSR'.

MRA An unknown officer used this code on an unidentified Hurricane IIc with Headquarters No.10 Group at Colerne around 12.42.

MRIF Wing Commander M.R. ('Mike') Ingle-Finch, DFC, AFC, who was Wing Commander Flying of 124 from 19.5.45, probably until it disbanded on 30.4.46, used this code on a Typhoon, a Tempest V and a Spitfire XIV, none of which have been identified.

MS Auster VI TW535 carried this code around 1951/52 with the Metropolitan, and it assumed that the code represented the initials of the unit.

MS The code was also used in late 1957 by Wing Commander Maurice J.A.Shaw, DSO, the Wing Commander Flying at Church Fenton on Meteor F.8 WF677, being replaced in 1958 by Meteor NF.14 WS833. WF677 also flew with codes 'PFS' and 'RWO'.

MWSR Air Commodore M.W.S.Robinson, AFC used this code at Turnhouse from early 1956 on Meteor F.8 WK787 when Sector Commander, Caledonian Sector, replacing it with Hunter F.4 XF304 by mid-1957.

NLA A variation on the theme was this code applied early in 1941 to a Spitfire (possibly N3044) of 118 Squadron. Wing Commander I.Gleed gave permission for it to be carried by his No.2, Gerry Aalpoel, the 'NL' standing for Netherlands and the 'A' being the initial of the pilot's surname.

NP Meteor NF.14 WS844 used this code at Leeming when flown from late 1957 by Wing Commander Norman Poole, the CO of 33 Squadron, being replaced around 9.58 by similarly coded Javelin FAW.9 XH835.

NW This code was applied around 9.52 to Meteor F.8 WK689, and may simply have represented the initial letters of the station's name.

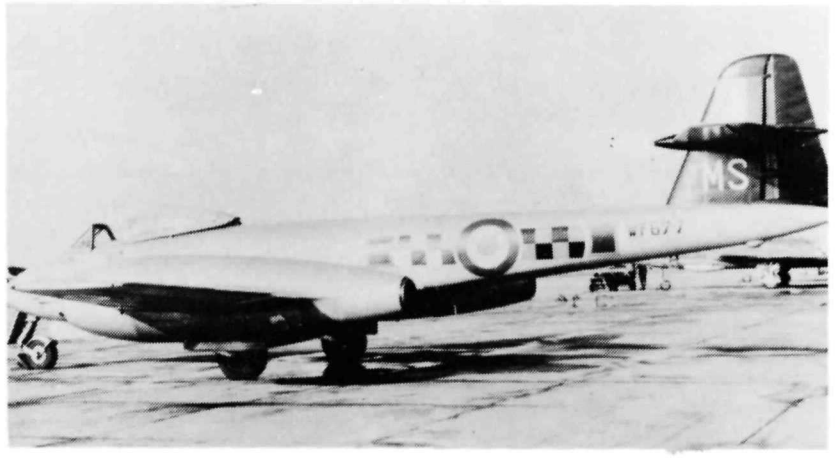
NW The code was also used around 7.56 on Anson C.19 VM313 of the Home Command Communications Squadron at White Waltham.

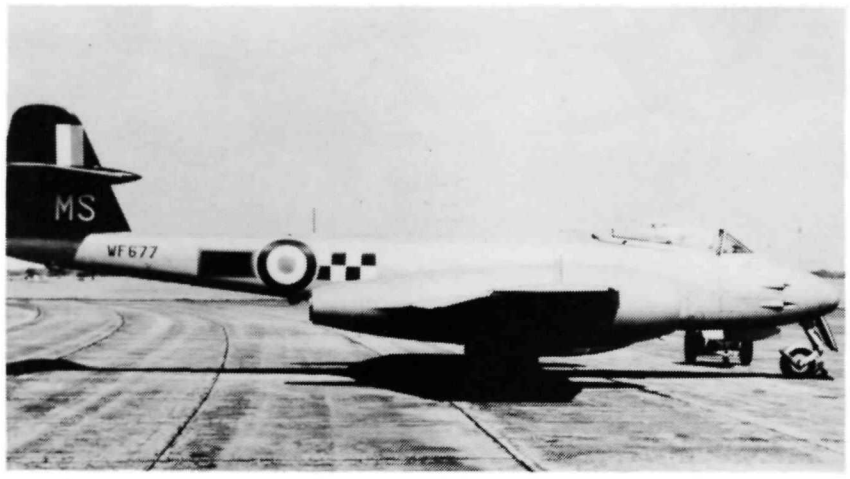
OGW Used on Anson XII of 12 Group Communications Flight at Hucknall around 1946/47.

OH This code is recorded in the log book of a 247 Squadron pilot on 3.9.44 and 5.9.44. These flights are

Meteor F.4 EF-24, 1954

Meteor F.8 WF677 at Aldergrove, October 1973. Markings are 72/19/85/72 Sqns. (R.Rayner)





Meteor F.8 WF677 at Church Fenton, July 1947 carrying 72 and 19 Squadron markings.

Javelin FAW.7 XH833 of No.33 Squadron

entered in the squadron ORB - but with two different serials, MN482 and MN408 respectively. this is puzzling as 247 Wing was then in 124 Wing, MN482 with 438 Squadron in 143 Wing and MN408 with 183 Squadron in 123 Wing. No eligible officer can be identified with any of these wings or squadrons at that time.

OK An unidentified Hurricane IIc carried this code in 1941 when flown by Air Chief Marshal Sir Keith Park, GCB, KCB, MC, DFC as AOC Malta, though if it a personal code it is not apparent why he should have used this code instead of 'KP'. 'OK' was the squadron code of 450 Squadron at that time, but there appears to have been no connection with this aircraft as they only flew Mk.Is and were never in Malta.

OO Another unexplained double letter code, used on Typhoon JP730 in late 1943 and early 1944 by Wing Commander D.R.Walter, DFC when Wing Commander Flying of 124 Airfield Headquarters at Merston.

PB Wing Commander Peter M.Brothers, DSO, DFC & Bar used this code on a number of Spitfires, none of which have been identified. One of unknown mark was flown at Tangmere around 2.43 when he was still a Squadron Leader, then by 8.43 until 24.11.43 he flew a Mk.I or II as OC Training Wing at 61 OTU Rednal. As Wing Commander Flying he flew a Mk.XIV with this code at Predannack and Bolt Head in 5.44, and at Culmhead in 6.44. He may well have had the code applied to Mk.IX MH844 which he flew whilst with the Central Fighter Establishment at Tangmere in 4.45.

PB This code was also used on Meteor F.8 VZ559 of Station Flight Horsham St.Faith in 1951, probably by Wing Commander W.Pitt-Brown, who was Wing Commander Flying there at that time. There is a possibility that this aircraft was later coded 'RDY'.

PB Another Meteor F.8 to bear this code was WH415, which was flown by Wing Commander P.P.C.Barthrop, the Wing Commander Flying at Waterbeach, by 7.53 until it crashed on 14.5.56 when it undershot while landing at Waterbeach.

PBl The personal aircraft of HRH Prince Bernhardt of the Netherlands, Beech D.17S DR628 carried this code with a succession of units, being the Allied Flight of 24 Squadron at Hendon from 1941 until 15.10.42, when it became part of the new 510 Squadron there until 8.4.44, then becoming the Metropolitan Communications Squadron at Hendon. On 22.1.45 the aircraft was transferred to the 2nd TAF Communications Squadron, then based at Brussels/Evere. The aircraft still survives, and in recent years has been restored on the civil register and repainted in its wartime colours.

PDW Javelin FAW.9 XH834 bore these marks at Seletar in 1965/66 when flown by Wing Commander P.D.Wright, the CO of 64 Squadron.

PFS Wing Commander Peter F.Steib, the Wing Commander Flying at Church Fenton in 1954/56 used this code on Meteor F.8 WF677, which had formerly carried 'RWO' and later used 'MS'.

PH Wing Commander Peter H. 'Dutch' Hugo, SAAF used this code on an unidentified Spitfire when Wing Commander Flying at Hornchurch around 8.42. As Group Captain Hugo, DSO, DFC & 2 Bars he also used it around 2.43 - 5.43 on Spitfire IX EN240 as CO of 322 Wing in North Africa.

PHB Used at the Day Fighter Leaders School element by the Central Fighter Establishment, Tangmere around 4.45 on Tempest V NV961 by Squadron Leader P.H. 'Beaky' Beake, DFC.

PJS Wing Commander P.J.Simpson, DFC used this code on a succession of aircraft, including an unidentified Spitfire Vc whilst with Headquarters Fighter Command in 11.42, and Spitfire Vb BM273 with an unknown unit. He flew an unidentified Spitfire IX whilst Wing Commander Flying of 145 Wing at Perranporth between 9.43 and 2.44, then LF.IX ML357 in a similar post with 135 Wing in 6.44. Post-war he held the same post at Tangmere, where he flew Hunter F.5 with this code throughout 1955.

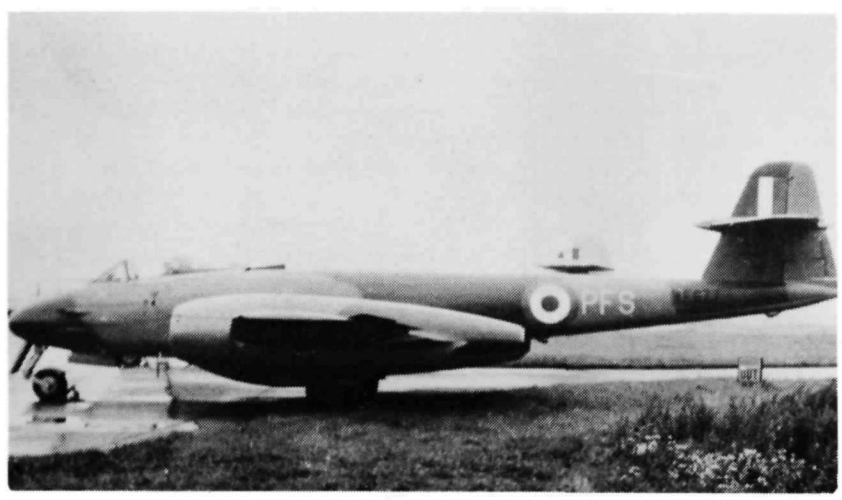
PLB Both Spitfire F.21 LA253 and Meteor III EE403 carried this code at Church Fenton around 6.46, possibly relating to Squadron Leader P.L.Bateson-Jones, DFC.

PM Used on an unidentified Meteor F.8 around 7.53, then in 1955 on Hunter F.1 WT649 by Wing Commander P.G.H.Mathews, DFC, the Wing Commander Flying at Leuchars.

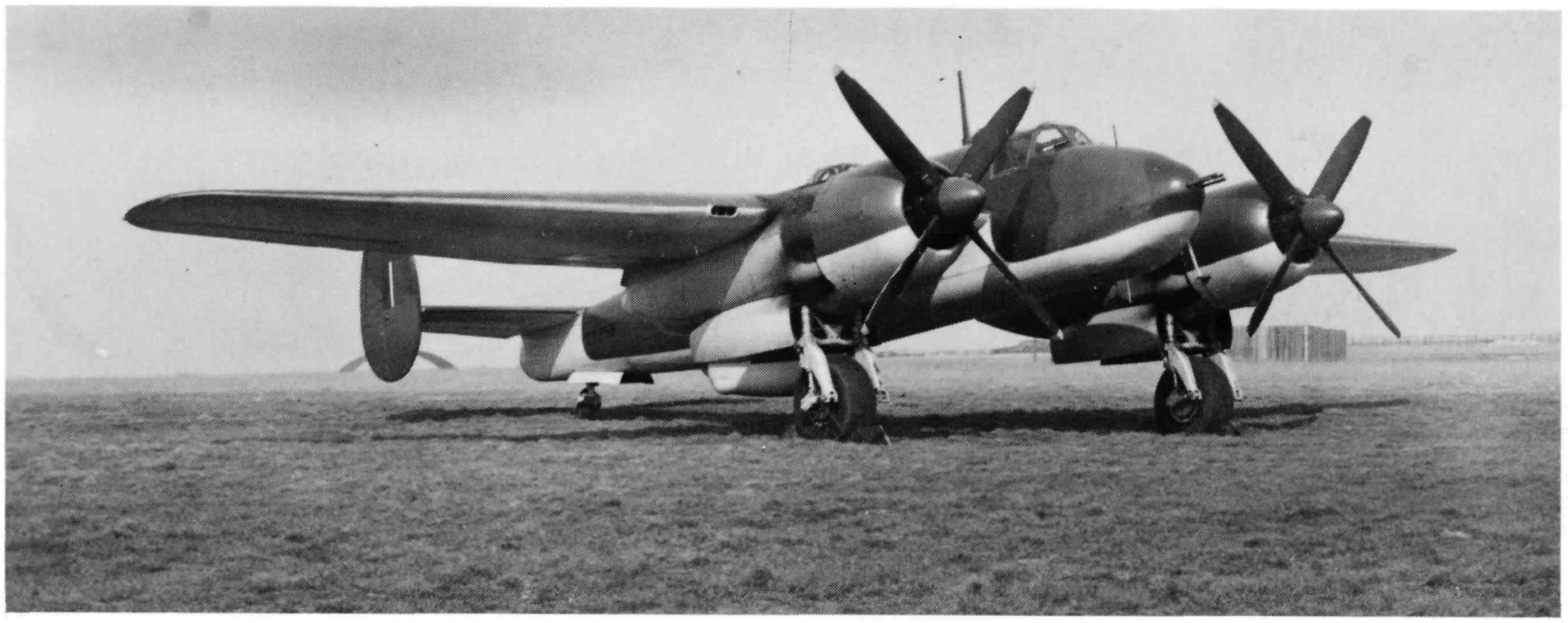
PMB Wing Commander Peter McCall Bond used this code on an unidentified Mustang around between 10.45 and 1.46, then as Wing Commander Flying with the Norfolk Sector at Horsham St.Faith on an unidentified Spitfire between 4.46 and 6.46.

Javelin FAW.9 XH834 of 64 Squadron (via Roger Lindsay)

Meteor F.8 WF677 at Church Fenton, August 1956 (via Roger Lindsay)



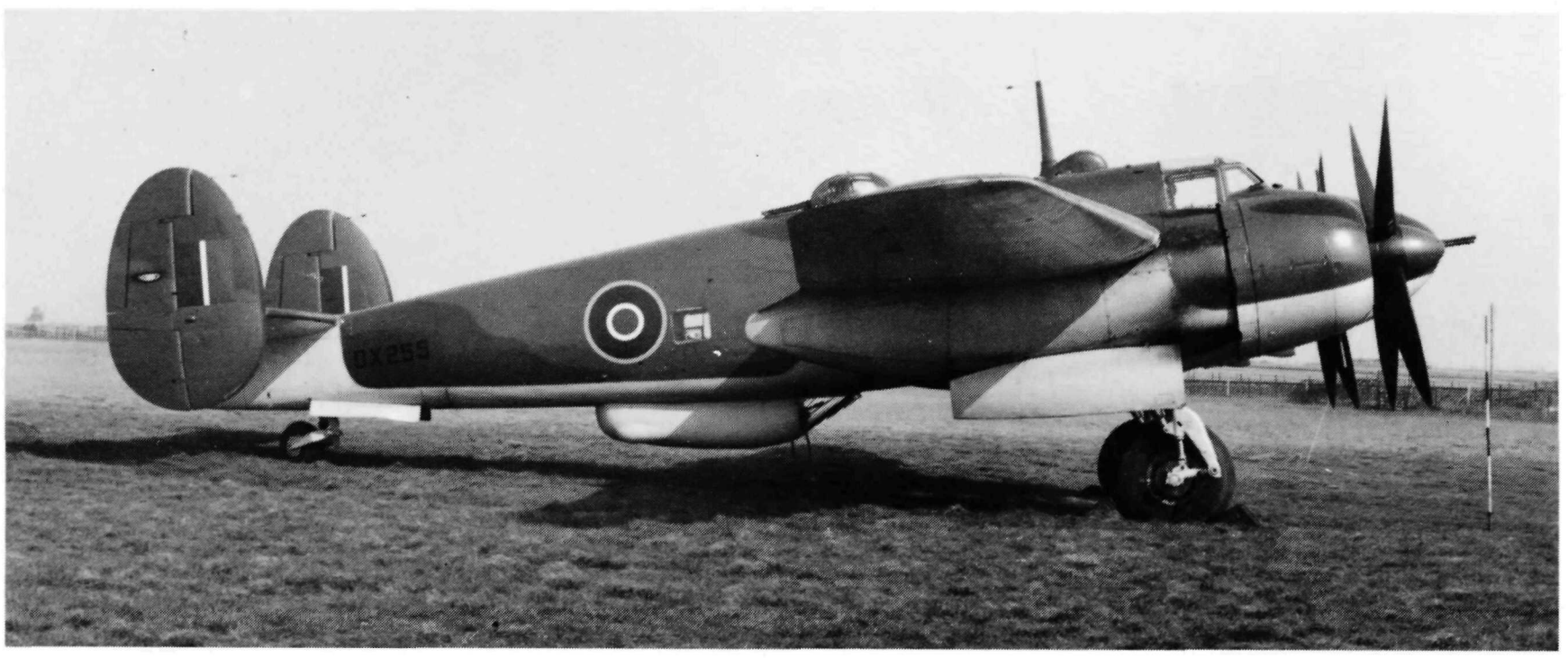
BRISTOL BUCKINGHAM

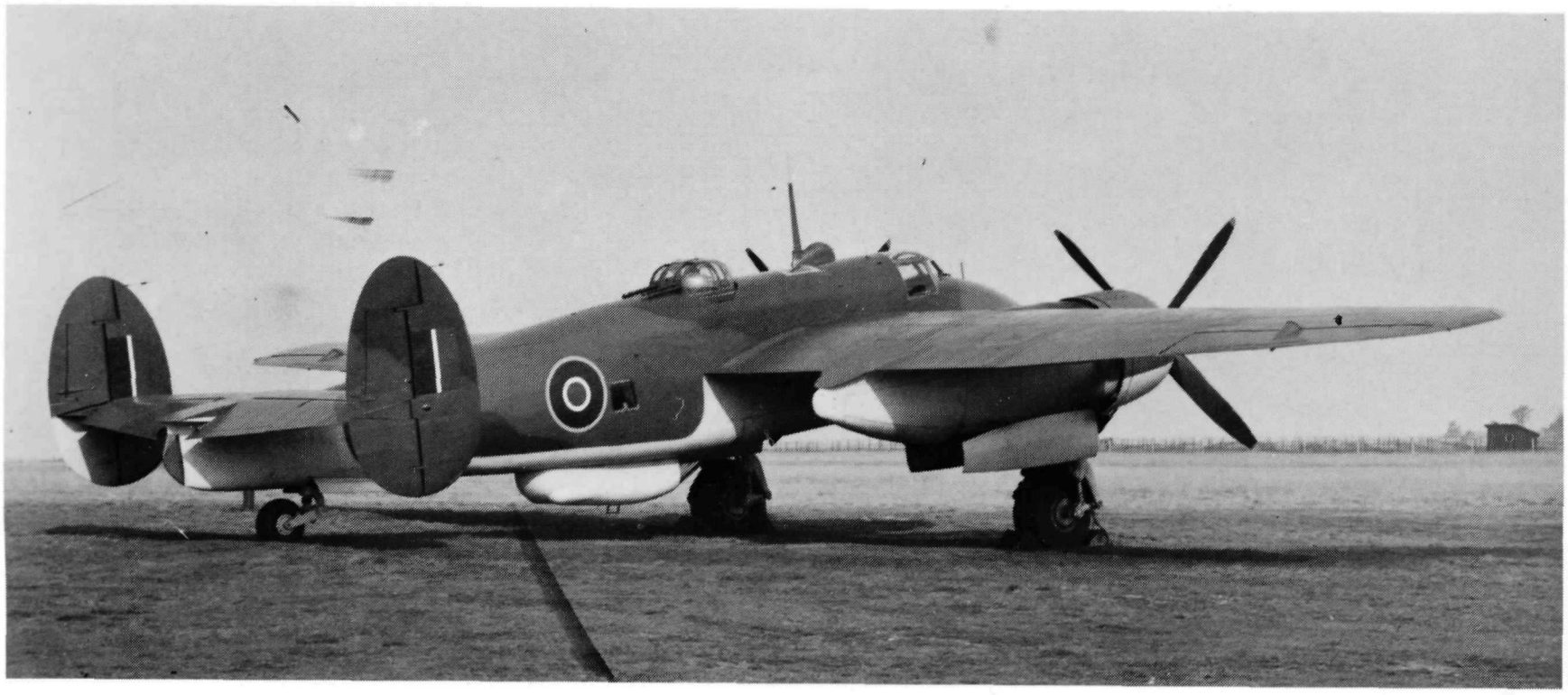


When Specification B.7/40 was issued by the Air Ministry in April 1940, the concept of a well-armed day bomber capable of fighting its way to the target and back again was still believed to be practicable. Although lightly-defended Battles and Blenheims had suffered at the hands of fighters during the relatively few occasions that formations of light and medium bombers were engaged over enemy territory, there seemed to be a place for better-armed and faster light bombers to replace these types.

Bristol's Type 161 was intended for several roles, including high level bombing, ground attack and dive-bombing. With a crew of two, it was to be fitted with a four-gun dorsal turret, supplemented by a pair of ventral guns for additional defence in level bombing mode or a pair of 20 mm cannon for ground attack. The gunner was obviously going to be a busy man. It was designed to take either Hercules or Merlin engines but later amendments to the specification included night fighting and the Type 162 was submitted as a three-seater to meet Specification B.2/41. The new requirements would have rendered the aircraft underpowered and a revised design was created as the Type 163 to take advantage of the new and powerful Centaurus engine.

Originally named Beaumont in line with the previous Beaufort and Beaufighter nomenclature, the new type was re-named Buckingham and the ground attack role was dropped. Experience in France by Blenheim squadrons and the toll taken of German day bombers during the Battle of Britain had revised estimates of what was needed to survive over occupied Europe. The new specification called for a range of 1,000 miles with a 2,000 lb bomb load at a cruising speed of 300 mph. It was hoped that a top speed of 370 mph would enable the Buckingham to extract itself from sticky situations while the Boulton Paul BPA.1 four-gun dorsal turret, two-gun ventral Fraser-Nash FN.64 mounting and twin 0.5 in. nose guns would provide an effective defence. There was room for one 4,000 lb., two 2,000 lb. or six 500 lb. bombs in the bomb bay and the whole design seemed a potent weapon by the standards of 1941. However, the crew grew





to four in number as housing the wireless operator in the dorsal turret proved impracticable. More range was called for and the increase in weight resulted in a revised specification, this time calling for a range of 1,500 miles with 2,000 lb of bombs and a top speed of 355 mph. The twin nose guns were replaced by a four-gun remotely-controlled mounting operated by the bomb-aimer. An order for 400 aircraft was placed.

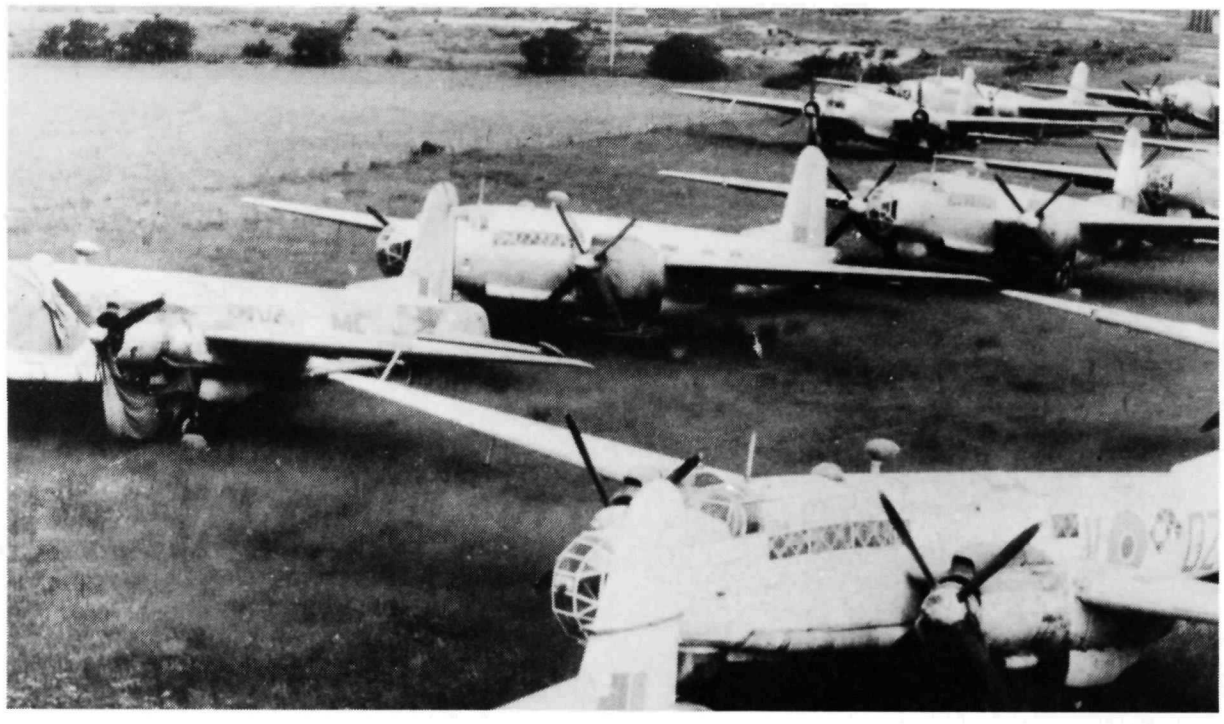
The first of four prototypes (DX249) flew on 4 February 1943 but circumstances had changed by then. The two-seat Mosquito had proved capable of doing everything the Buckingham could do with a much simpler airframe and half the crew. Day bombing was already being undertaken by the recently arrived B-17s and B-24s of the USAAF and there seemed little point in using the Buckingham for night bombing. However, there were still Blenheims to be replaced in the Far East and tropicalisation was called for - but the order was reduced to 300.

The first production Buckingham B.1 flew on 12 February 1944 but it was now too late for the type to enter service and the line closed after 119 had been delivered. Development of the basic concept continued as the Brigand with major changes to the fuselage to provide a new cabin for three crew members. A direct development of the Buckingham was the Buckmaster conversion trainer to cope with the expected re-equipment of Beaufighter strike squadrons with Brigands.

In an attempt to utilise the existing Buckinghams, the late production aircraft were stripped of operational equipment and fitted with four passenger seats as the Buckingham C.1. Later the seating was raised to seven. Although the Transport Command Development Unit used two (KV365 and KV369) for development flying and the Mediterranean and Middle East Communications Squadron had KV404 for a short time, all the other Buckinghams were used for experimental work by Bristols, A&AEE, RAE, Torpedo Development Unit, Dunlop, Rotol and the Handling Squadron. Some retained by Bristol were used by the Centaurus Flight for testing this engine which was just entering service in large numbers at the end of the war. Three aircraft were written off in accidents but flying hours for the batch were very low.

A considerable amount of work went into the development of the Buckingham but the changing requirements of the air war overtook all the applications for which the type was intended. If it had been available in 1941/42, it would have made the lot of Blenheim aircrews much happier as it had the potential of high speed and good defensive armament.

PICTURE PAGES



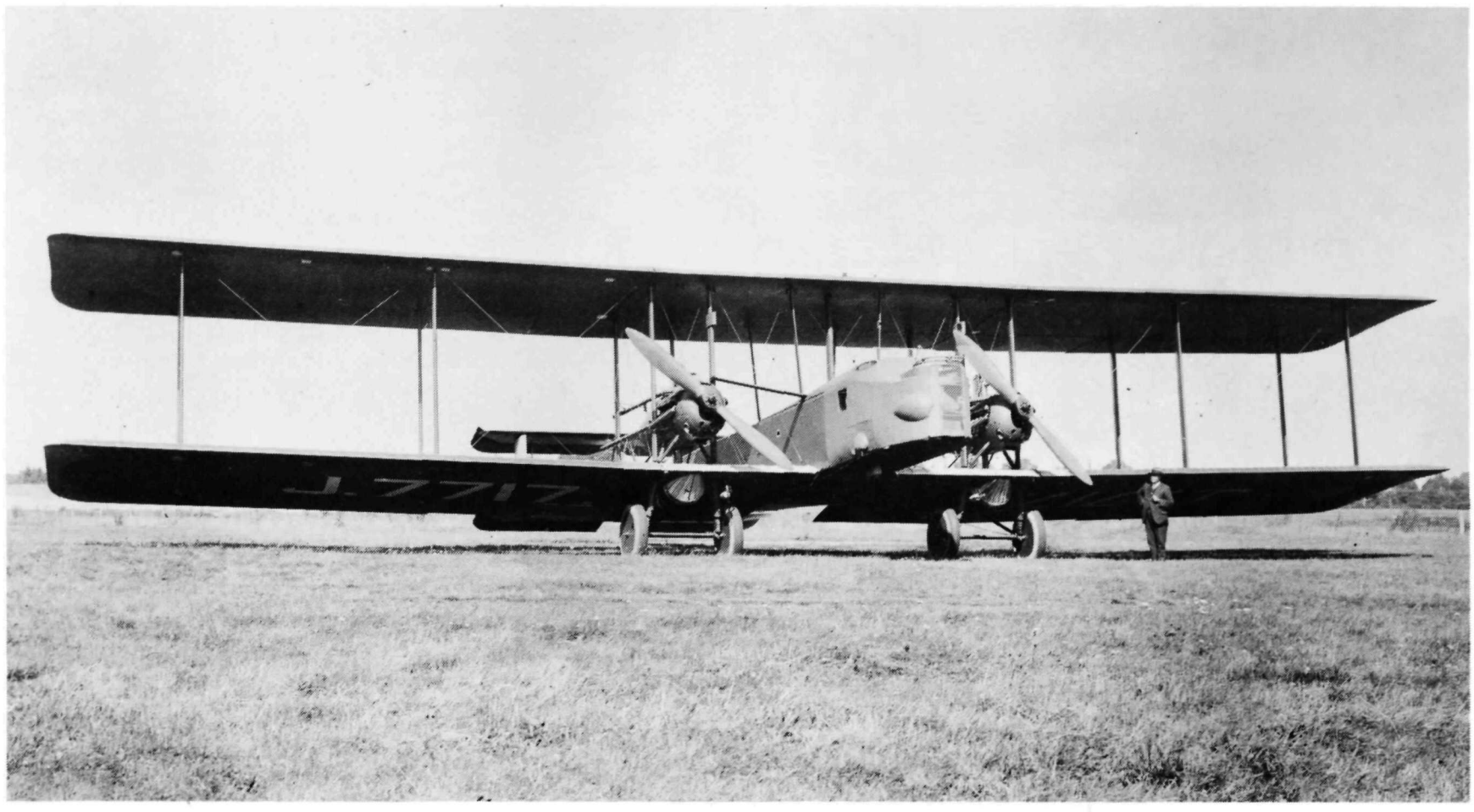
Top photograph shows Warwick GR.Vs parked at Kinloss in 1948, including OZ-V of 179 Squadron and a Warwick ASR.1 of 280 Squadron. (via Peter Green)

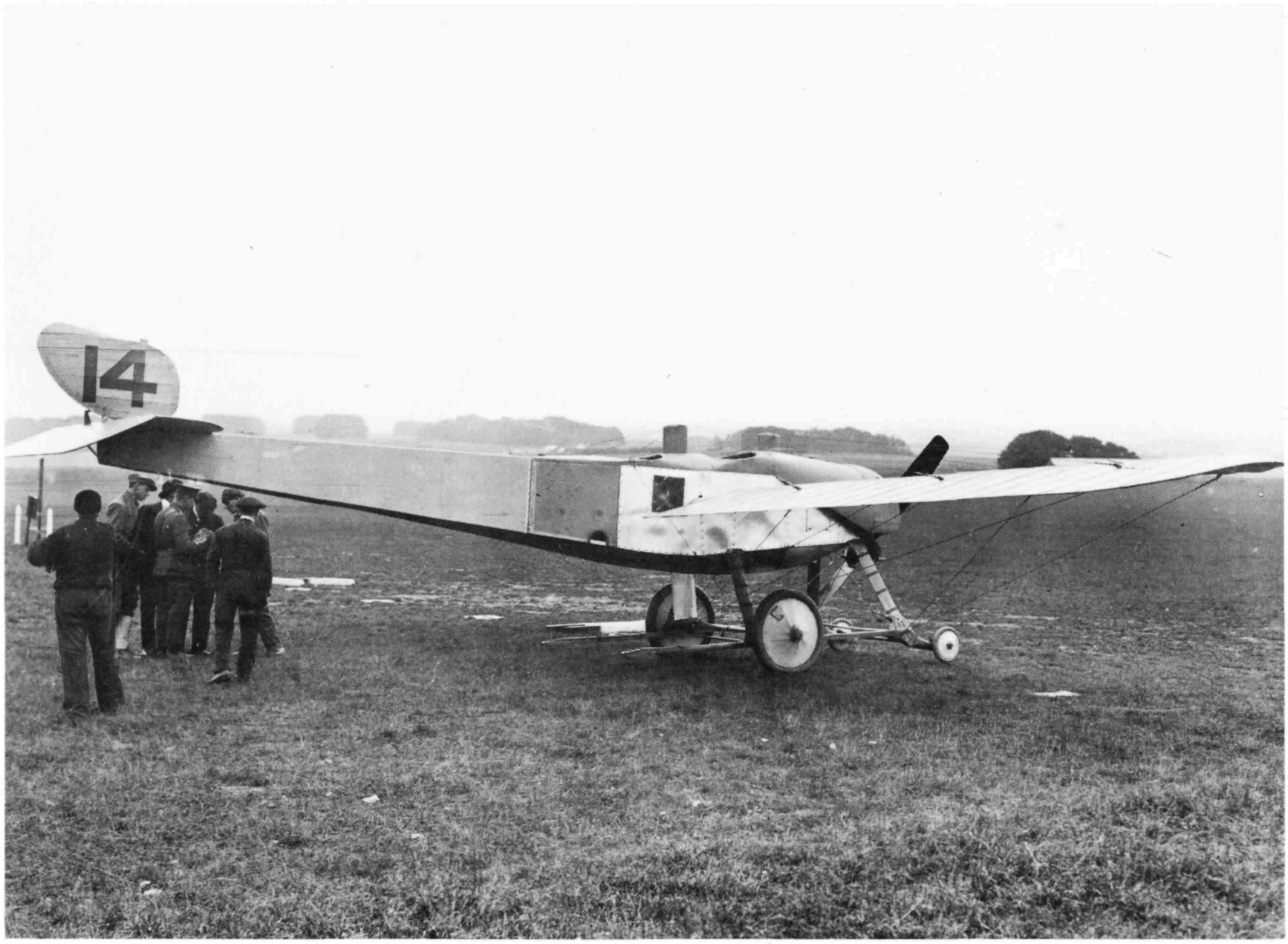
Centre is a Sikorsky S-43 amphibian taken in French West Africa as used by Aéromaritime which maintained a route along the West African coast. The Wellingtons are presumably of 344 Squadron. Although roundels and tail stripes are carried, there are signs of a civil registration above the roundel.

Valetta VX514 crashed on approach to Bromma Airport, Stockholm, on 18.2.51, while landing in a snowstorm.

Above, the Fairey Rotodyne XE521 undergoes hovering trials at White Waltham (Fairey)

Below: Virginia X J7717, presumably at Radlett in view of the civilian posed in front. Note the underwing radiators for the Napier Lion Vs



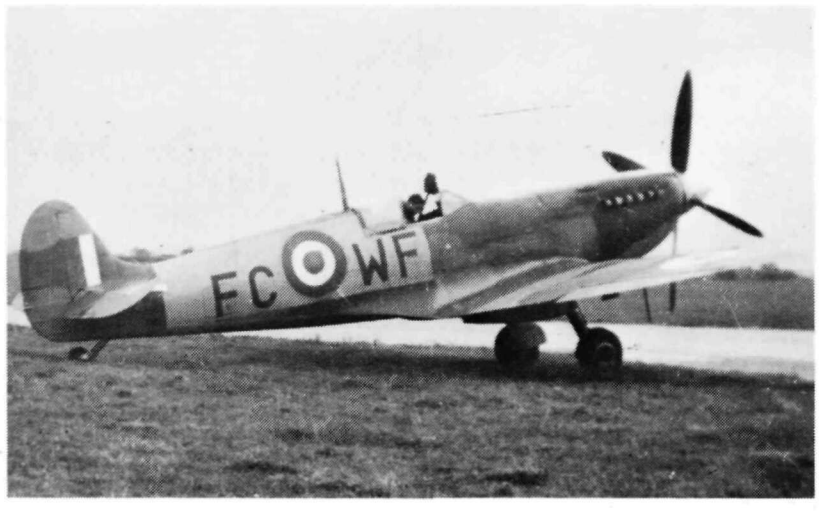


Entered in the Larkhill trials in August 1912 the Bristol-Coanda carried its competition number 14 on the rudder. Two were entered, Nos.105 and 106, and were powered by 80 hp Gnomes. The Coanda of the title was a Romanian who had designed a biplane driven by a ducted fan making it appear to be the first jet aircraft!

The type stood up well the the trials and afterwards both were acquired by the War Office as Nos.262 and 263 and allotted to No.3 Squadron. The ban on flying monoplanes imposed after the crash of No.263 and Deperdussin 258 resulted in No.262 being grounded.

Centre is a UC-78 Bobcat in French liberation markings

Bottom left is Spitfire LF.XVIE FC-WF of the Empire Flying School and on the right Brigand RH758, formerly of 238 OCU, being broken up at Colerne in September 1956. (Both Peter M Corbell)



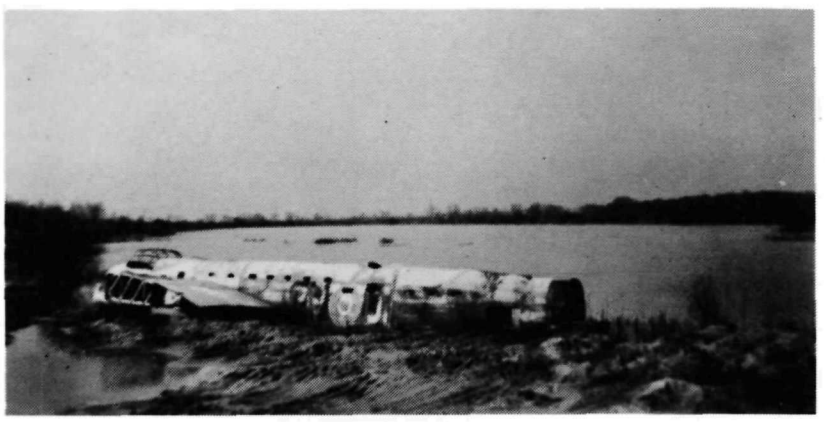
The sole He 111H in service with GB.1/31 "Aunis" in 1945. This unit also had a Bf 110 on strength. (Serge Blandin)

Another aircraft carrying French roundels is Wellington PF837 which was transferred in September 1946. Used for training and maritime reconnaissance, this Mk.XIV has lost its chin radome.

Last issue's airfield, seen obliquely, was Llandow and Peter Green has also supplied a vertical of the site which shows the layout in detail. This shows the state of the airfield in May 1944 and the maintenance unit has a number of dispersal areas for parking aircraft away from the main runways and buildings. In the early days of the war, nearby fields were used for this purpose but as aircraft grew heavier, the original expedient of knocking down a few hedges proved inadequate. Proper taxitracks were laid down and a developed site appears on the right where concrete paths join a loop on which aircraft can be parked. In the bottom right corner, another track has acquired dispersal spurs. Between the tracks, aircraft are parked, probably on PSP or mesh.

Our first sight of Llandow was from the train taking us to nearby Bridgend to be picked up for transport to St.Athan. The sight of long rows of white Lancasters and other camouflaged aircraft unidentifable in the dusk was impressive and after a few long walks around St.Athan, it became clear that a large part of Glamorgan was being used as a parking lot for aircraft - Stirlings, Buckinghams, Bothas, Albemarles and even a Catalina (non-amphibious) that had left a groove in the grass up to its parking slot!

FEED BACK



THE LAST MANCHESTER?

The above photograph comes from Barry Moores and was taken in mid-1956 on the edge of a gravel pit a few miles north of Lincoln. It is the remains of Manchester L7420 which was struck off charge on 19 November 1943 by No.1660 CU at Swinderby. Soon after he took the photo, the relic disappeared and it was rumoured that the Americans took it to Sturgate. How it got to the state it was in and what subsequently happened to it is not known and any information would be welcome. Could someone be re-building a Manchester for the Confederate Air Force?

Barry adds that the Lancaster on page 45 of The Lancaster File was photographed on 27 June 1959 at Scampton when it was taken out of storage for the occasion of the presentation of a Standard to No.617 Squadron. Scampton kept this aircraft for several years before it went to the Royal Air Force Museum. The photo on page 194 of PA474 shows it flying over Lincoln Cathedral, not York Minster. There is a need for The Observer's Book of Cathedrals.

MANCHESTER L7320

Peter Pimblett has written in to say that the photographs in AM.2/90 on page 31 (bottom right) and 38 (top right) both show L7320 and not L7247 as captioned. This aircraft was at Boscombe Down for investigations into tail structure vibration, the subject of A&AEE Report 751 Pt.12 dated November 1941. From the foliage on the trees, this photograph must have been taken earlier in the year.

MANCHESTER L7456

Kevin Whittaker has kindly sent in this account of the loss of Manchester L7456 which is shown in the Manchester tables as "Missing (Cologne) 31.5.42". As always, there is more to it than that. To quote Kevin:

On 22nd May 1942, Sergeant Pilot Jim Wilkie of No.50 Squadron was recalled from leave together with his crew to Swinderby. They were told something big was brewing and confined to camp until further notice; many other crews were also recalled. This was the build up for the 1,000-bomber raid on Cologne on the night of 30/31st May.

On the 29th, Jim was informed that there were no spare aircraft available and that his crew, and one other, were spare. However, on the morning of the 30th, he was told there were two spare Manchesters available at Coningsby, the home of 106 Squadron, so the two crews were flown there where they found the Manchesters, both of which had seen better days. They had oil leaks everywhere and the engines were coughing and groaning. Jim's Manchester, L7456 ZN-T, could not fly above 8,000 feet.

They took off just as the last of the daylight was fading. The ailing Manchester was flying very sluggishly and could not get above 7,500 feet. On crossing the border into Germany, it was caught by a master searchlight and was soon lit up by others. Jim threw the aircraft all over the sky in order to evade the searchlights and began to lose height when suddenly there was a loud bang and the port engine began to splutter and spit flames. This was cut but as height was lost all the time, the bomb load was jettisoned as the aircraft turned for home.

It was realised that the ground was close and the pilot gave orders for the crew to abandon the aircraft, remaining at the controls in order to give the rest of the crew time to bale out. Expecting the aircraft to hit the ground, he switched on his landing lights and saw the Manchester was hitting the tops of trees. In a matter of seconds, it struck the ground and Jim saw he had made a belly landing in a large field. Both the engines were aflame and fire was spreading along the wings. Jim checked that there was no one left inside the burning bomber then jumped himself and was immediately surrounded by a mass of Luftwaffe troops telling him to put his hands up. He discovered he had landed on Dusseldorf/Lohausen Airfield.

In the guardroom, he found that his front and rear gunners, together with the navigator, had baled out too low and had been killed; his second pilot and mid-upper gunner had managed to bale out before the Manchester had lost too much height and landed safely. Needless to say, the survivors became POWs and returned to England in 1945 after spending time at Stalag Luft III and Stalag Luft 6. Jim escaped from captivity in the last days of the war and found his way back to the advancing Allied troops.

Jim Wilkie was demobbed in late 1945 with the rank of Warrant Officer and now lives quietly with his wife in Altrincham, Cheshire.

HADRIANS IN INDIA

In the FA-FZ volume of the RAF Register, batches of Hadrian gliders are shown as having been shipped to the Far East. Geoff Pott was there, noting down serials in preparation for Air-Britain type activities once the world had been made safe for civilisation.

Hadrians FR581 to FR600 were all on the strength of the Glider Service Unit, a part of the Transport Support Training Unit at Chaklala near Rawalpindi. Due to congestion on this busy airfield, however, the gliders were flown from the satellite airfield at Dhamial from 19th June 1944. FR596 was wrecked at Chaklala in a gale on 25/26 June before it could be moved.

FR773 and FR774, received on 15th March 1945, differed from the others in having shorter and thicker landing skids and the underside of the rear fuselage was sloped upwards at about 45 degrees whereas in the earlier batch it was curved. They were built by a different contractor which Geoff believes was Ford (who built 4,190 CG-4As). The Form 700s showed FR581-600 as Mk.Is and FR773 and FR774 as Mk.IIs which does not agree with the Air Ministry movement cards. It is tempting to assume that what the Air Min in London thought was going to arrive in India was not what actually arrived, assuming whichever unit shipped them knew, or cared, whether they were Mk.I or Mk.II. FR773 carried the US serial 342084 which would make it built by Robertson Aircraft at St.Louis who built 170.

When the GSU was disbanded on 26th March 1945, all the surviving gliders were flown to Fatehjang. What the difference was between the Mk.I and the Mk.II eludes us at the moment.

USAAC BOSTONS

Some of the fates that befell RAF Bostons which were diverted to the USAAC immediately after Pearl Harbor have come to hand and help to fill in gaps in the Air Ministry serial blocks. The batch AL263 to AL500 began to be delivered in November 1941 from Boeing but at AL279 the diversions began and only 26 of the remaining aircraft reached the RAF although eight were also sent direct to Russia while four crashed before delivery.

Known fates were as follows:

AL279 Crashed 6m SW of Pearson, Ga, 2.4.42
AL301 Crashed in sea off Barnegat Light, NJ, 5.3.42
AL326 Crashed in forced landing 8m W of Imokalee, Fla, 22.1.43
AL328 Crashed on landing, Key Field, Miss, 18.8.42
AL333 Caught fire on ground during maintenance, Grenier Field, NH, 27.2.42
AL334 Collided with another aircraft on landing, Page Field, Myers, Fla, 25.1.43
AL339 Crashed at Leesburg, Va, 1.12.43
AL340 DBR while taxying, Dover, Del, 17.5.42
AL345 Nosewheel collapsed taxying at Morris Field, Charlotte, NC, 13.11.43; DBR
AL349 Crashed on landing, Morris Field, NC, 22.12.42
AL354 Crashed at Morris Field, NC, 30.9.42
AL356 Overshot landing into ditch, Savannah AAB, Ga, 12.4.42
AL357 Crashed at Blackshear, Ga, 25.2.42; cause unknown
AL360 Crashed on take-off, Hunter Field, Ga, 17.6.42
AL373 Overshot landing and hit obstruction, Savannah AAB, Ga, 15.4.42
AL377 Crashed at Tullahoma, Tenn, 12.5.43; cause unknown
AL382 Crashed in bad weather, Ceres, Cal, 5.12.42
AL383 Brakes failed on landing; overshot, Orlando, Fla, 29.3.43
AL386 Engine cut on take-off, Esler Field, La, 11.9.42
AL389 Overshot landing and hit obstruction, Hunter Field, Ga, 11.5.42
AL390 Crashed in forced landing, Tallahassee, Fla, 24.6.42
AL392 Undercarriage collapsed taxying at Key, Miss, 25.7.42
AL394 Crashed 10m S of Coushatta, La, 9.1.43
AL403 Crashed in forced landing 3½m N of Electra, Tex, 1.12.42
AL405 Crashed, Shelter Cove, Cal, 6.2.42; cause unknown
AL406 Spun into ground 35m NW of Orlando, Fla, 2.11.42
AL411 Crashed on landing, Orlando, Fla, .17.2.43
AL418 Brakes failed on landing; overshot, Galveston Airport, Tex, 15.4.42
AL423 Crashed in forced landing, N.Bellow, Oregon, 1.42
AL433 Hit obstruction on approach and undercarriage torn off; crashlanded, Blythe, Cal, 7.6.42
AL434 Engine caught fire; crashed, Brewton, Ala, 28.5.42
AL440 Crashed, Barksdale, La, 13.3.42; NFD
AL443 Crashed in forced landing 2m W of Ellington Field, Tex, 5.4.42
AL444 Crashed, Portland, Ark, 12.2.42
AL447 Brakes failed on landing, Will Rogers Field, Okla, 26.6.43
AL448 Crashed at Fairfax Airport, Kansas City, Kan, date obscure
AL450 Broke up in air and abandoned, Shipdham, 20.3.43
AL453 Crashed and blew up, Blythe, Cal, 24.10.42
AL467 Crashed, Bolling Field, DC, 20.2.42; CNK

Of the batch AL668 - AL907, 74 were diverted to the USAAC, starting AL722, and of these the following were written off:

AL722 Engine caught fire on take-off; crashed 4m S of Daniel Field, 14.8.42
AL808 Nosewheel collapsed taxying at Drew Field, Tampa, Fla, 10.11.43
AL821 Brakes failed on landing; ran off runway, Salinas, Cal, 25.11.42
AL833 Engine cut on approach; stalled and spun into ground, Morris Field, 25.11.42
AL834 Crashed in wood on approach, Hunter Field, Ga, 20.6.42
AL835 Undercarriage jammed up; bellylanded at Hunter Field, Ga, 15.10.42
AL838 Crashed in Neuse River, NC, 11.7.42; CNK
AL840 Damaged taxying at Northern Field, Tullahoma, Tenn, 19.11.42; DBR
AL842 Ran out of fuel and crashed, Ocracoka Inlet, NC, 19.6.42
AL843 Crashed at Camp Rucker, Ala, 15.3.43
AL844 Fuel line broke; crashed in forced landing, Woodward AAF, Okla, 3.10.43
AL847 Crashed at Harding Field, 2.12.42; DBF
AL859 DBR taxying at Will Rogers Fld, Okla, 25.1.43
AL861 Stalled and spun into water, mouth of Potomac, Va, 16.4.42
AL865 Engine caught fire; crashlanded in wood 1m NW of Wade, Miss, 15.6.42
AL867 Spun into Chesapeake Bay off Beedville, Va, 16.4.42
AL875 Crashed 5m E of Cochran Field, Macon, Ga, 3.4.42
AL885 Crashed on approach, Cherry Point, NC, 8.8.42
AL902 Crashed 15m W of Taft, Cal, 10.12.41

Many of the Bostons were converted for target-towing duties and most of the remainder were used for training purposes. The price, incidentally, was recorded as $171,551 each. AL450 was shown as being "Turbinlite".

* * * * * *

LIBERATOR NOSEWHEEL COLLAPSES

In the RAF Registers, a number of Liberators have been shown as damaged beyond repair because the nose wheel collapsed.

This might seem an inadequate cause since undercarriage legs often collapsed without doing major damage and the aircraft was soon jacked up, towed off and repaired.

The sort of damage done by a nose wheel collapse in a Liberator is shown above and can be seen to be major. A factor was the construction of the deep nose on this type which was relatively unobstructed. This allowed a wayward nose wheel to penetrate into the navigator's space, taking most of the floor with it. The stress on the remainder of the fuselage distorted the airframe and with repair facilities stretched to the limit, major rebuilding jobs were unproductive. The damaged airframes were stripped for spares to keep other Liberators in the air.

BOOKSHELF

GENERAL DYNAMICS AIRCRAFT AND THEIR PREDECESSORS by John Wegg Putnam - £30.00

Consolidated Aircraft Corporation was one of the major US aircraft producers, remembered mainly for its Catalinas and Liberators. It is therefore a welcome addition to the Putnam range to have a history of this company, although the title "General Dynamics" hides the real identities of the contents. Rather like including de Havilland and Hawkers in a book entitled "British Aerospace and its Predecessors"....

Unfortunately for keen collectors of the series, this is not a classic Putnam. For one thing, the shape is wrong, being approximately A.4 size, so does not fit in with the others on the shelf. Since we have 44 of them in a line, it would have been nice to include this one in its appropriate place but now it has to sit alongside the SAAB volume which we had hoped was a temporary aberration. Purely on the price front, £30.00 for 256 pages seems a lot, even if the pages ARE larger.

As well as Consolidated/Convair aircraft we get Thomas-Morse, Dayton-Wright, Hall (the one that made the longest tongue-twister in the US designation system, the XPTBH-2), Stinson, Vultee and Barkley-Grow, plus the General Dynamics tail-end. All this adds up to a lot of aircraft so obviously something had to go. Cessna, Canadair and Fleet have been dropped out although all under the GD wing. Only a small proportion of types have three-view drawings and the author admits to considerable editing to reduce the size. One gets the impression that the publishers wanted to cut the cost of production, if not the price, and decided on the cheaper A.4 size with less detail than one has come to expect.

This said, the contents are a useful record of all the types that came from the companies included. Oddly, the pages of lists of airliner registrations and operators have been left in despite the pruning of the text. It is nice to see photos of almost-forgotten types like the Hall Air Yacht, the Stinson A 'phib, the Convair Model 103 (forerunner to the Skycar) and even the portly Gwinn Aircar that popped up so frequently in pre-war magazines as the shape of the future.

Expensive for its size but necessary if you are hooked on company histories.

* * * * *

BRITISH NAVAL AVIATION by Ray Sturtivant Arms and Armour Press - £19.95

Where have we seen that name before? And it is all about the Fleet Air Arm, 1917-1990.....

If one has to recommend a good basic history of the FAA, this is the one. The combination of aircraft and ships is of abiding interest. But in addition to the chronology, there are very good accounts from those who served in the FAA at various times of their experiences. The Royal Navy chalked up an impressive list of "firsts" that were adopted by other navies - with the usual effect that other navies had newer and larger carriers by the time they came into their own. We were also rather slow on the catapult front.

The illustrations are excellent and give a good impression of the ups and downs of flying from carriers. There are also useful maps and a few appendices, including the location of FAA units at the outbreak of war. We never know that the floating tower block "Terror" had a Walrus aboard. Where did they put it; more important, what did they do with it before they fired the fifteen-inchers?

* * * * *

FLEET AIR ARM 1920-1939 by Ray Sturtivant
Arms & Armour Press Fotofax Series - £4.95

Yes, it's the prolific RCS again, this time with a volume in the Fotofax series devoted to mainly photographs of pre-war Fleet Air Arm aircraft. The captions are informative, Mike Keep has contributed two pages of side-views of FAA colour schemes and it all adds up to 48 pages of nostalgia. There is a lovely view of a Flycatcher seaplane over Gibraltar harbour with "Nelson" and "Rodney" below.

One thing we failed to find on the cover was a price - just a bar-code! Is this the future and are we in for heart attacks at the check-out desk?

* * * * *

HALIFAX SPECIAL by Bruce Robertson
Ian Allen - £8.95

Ian Allen "Specials" have covered a number of types in recent times; this one provides the same treatment for the Halifax in providing a brief history of the type and numerous interesting photographs.

Obviously, eighty pages are not going to house a detailed account of the activities of this workhorse of Bomber Command but chapters cover the strategic bombing offensive, airborne forces, transport and Coastal Command. The 137 photographs depict the Halifax in its various marks and roles as well as targets and equipment.

Appendices list Halifax production, Bomber Command statistics of raids and losses and a list of variants produced or planned.

The Halifax has always come off second best to its more famous stable-mate, the Lancaster, but it did an enormous amount of work when every aircraft was needed to defeat the enemy. The two types were not too far apart in performance in their final wartime forms but the Lancaster came later on the scene as a result of the Manchester's catalogue of misfortunes and did not suffer the major modifications that the Halifax required to make it a highly-effective heavy bomber.

* * * * *

BRITISH RESEARCH AND DEVELOPMENT AIRCRAFT
by Ray Sturtivant Foulis - £19.95

Arriving just in time to get into this issue is an account of British research aircraft from around 1918 to the EFA. With 238 photographs, many of them in colour, a wide range of types is covered. The Brennan and Isacco helicopters appear as does the Weir W.5 which flew two years before the much-publicised Sikorsky VS-300 and is now virtually forgotten. Drawings depict projects like the Pterodactyl VII flying boat and the Folland E.28/40 torpedo-bomber which bore a close resemblance to the Avenger.

Chapters are divided into themes, high altitude, delta wings, tailless, rotorcraft, central engine rooms, VTOL and many more. The Short SB.1, Youngman-Baynes High Lift, GAL.56, Handley Page Manx and Percival P.74 all appear. And the elusive Bevan Brothers are at last identified. This is a very useful book to have and will save a lot of searching around for information on the numerous types that never made it into production or which paved the way for more potent descendants.

AEROMILITARIA

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Edited by James J.Halley and Ray Sturtivant

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

Two new monographs have gone to the printers as we write this so should be ready by the time this issue appears.

"The Beaufort File" is the latest in the line of background histories on Royal Air Force types. Compiled by Roger Hayward, who has been looking at the subject for several decades, it covers the activities of this rather-neglected aircraft in the usual detail and in the style adopted for "The Hampden File".

The book covers the activities of both the British and Australian aircraft industries in producing the Beaufort with details of their operational use and development history. Also dealt with are the aircraft's service with the SAAF, RCAF, FAA and Turkish air forces. The usual tables give details of each aircraft, the units which flew it and final fate.

The cost is £10.00 to members (£15.00 for non-members). This hardback consists of 172 pages with 161 photographs and numerous drawings and is available from the Sales Dept.

The second publication is another episode in the RAF Register series and covers KA100 to KZ999. The majority of aircraft listed are either Lend-Lease from the USA or Canadian production, with batches of Buckinghams, Beaufighters and Hurricanes from British factories. It has 96 pages and 73 photographs and costs £6.00 (members) and £9.00 (non-members).

This leaves us with four more volumes to complete the series from J1 to WZ999. Yes, we do mean four.

IN THIS ISSUE

Due to JJH's imminent departure for the antipodes, this issue is being prepared well in advance so there is no feedback this time.

The two main articles cover widely-different types. The Defiant is not normally given much credit for its wartime activities but the arrival of a batch of "fighter" Defiants from Andy Thomas has provided an opportunity to illustrate many of the night fighter squadrons that used the type effectively, a task overshadowed by the normal publicity devoted to its unfortunate daylight operations, which were undertaken in a climate not envisaged in the Specification. However, since writing the text, the Defiant seems to have surfaced in numerous magazines during the past few weeks.

George Kernahan has provided a survey of the NA Savage which is another neglected type although it was the US Navy's first nuclear bomber (apart from some jury-rigged Neptunes). Its survival rate in combat would probably have emulated the Defiant's by day.

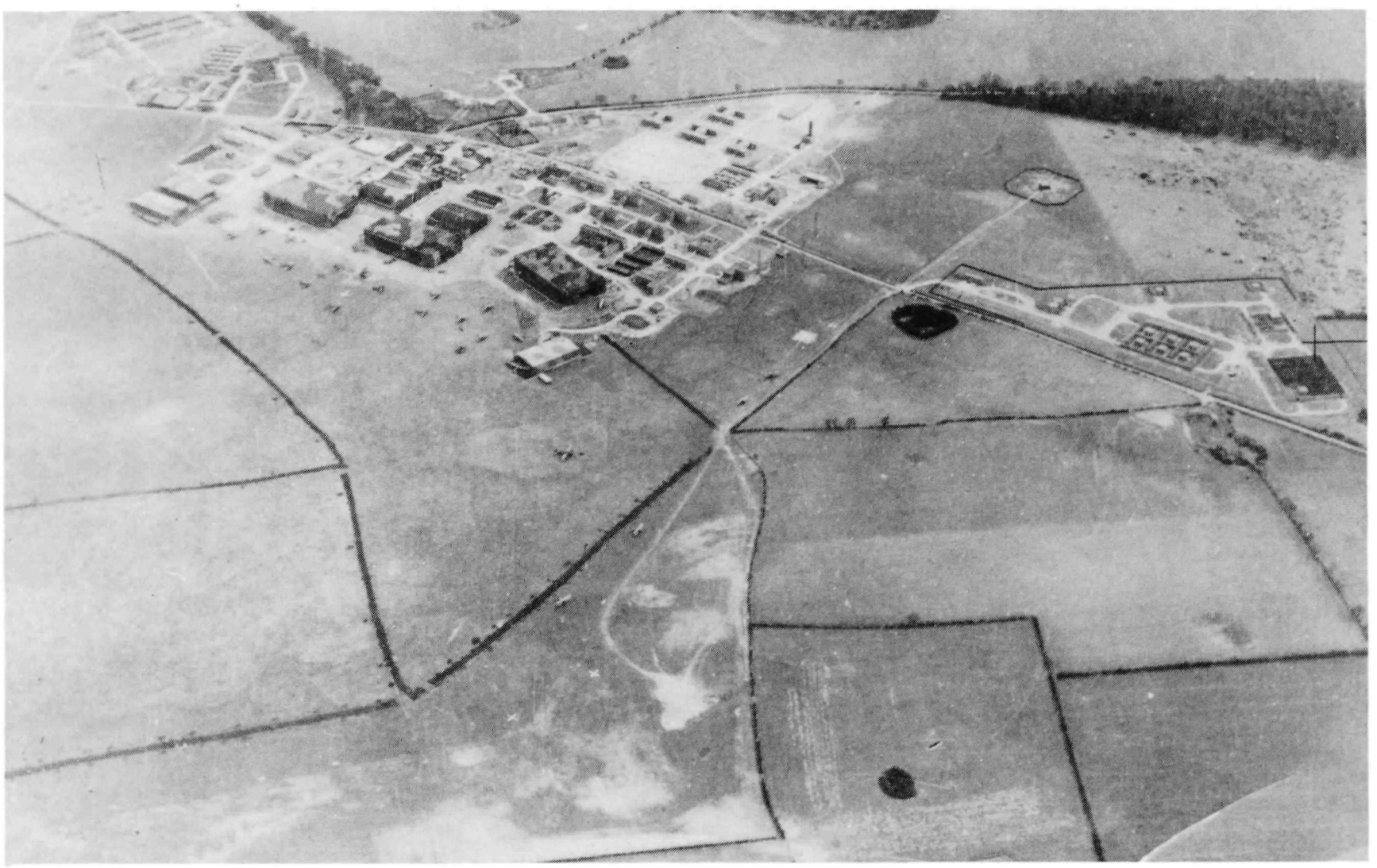
We continue the listing of personal codes compiled by Ray Sturtivant who has also contributed another instalment of the FAA crashes in the post-war years. We will be providing additional codes and photographs when we complete the original series.

COVER PHOTOGRAPHS

The fine view of the Wellesley on the front cover comes via Dave Vincent from the Harry Doube collection and shows L2680 far from home. As one of the quartet from the Long Range Development Unit that set up a world record for range in 1938, it flew 7,162 miles to Darwin and then visited various airfields in Australia.

On the back cover, Stirling N3669 is assembled for "Wings for Victory Week" in March 1943 in front of St.Paul's Cathedral, London.

Last issue's Puzzle Pic airfield was Pershore.



DEFIANT FIGHTERS

Prototype K8310 outside the Boulton Paul factory at Wolverhampton

And in the beginning there was the Bristol Fighter. It was as fast as the S.E.5 and it had the advantage of a gun covering its tail. Once the RFC had worked out suitable tactics, it was a very effective aircraft and no German, having crept up behind his victim, liked to be shot at in this unsporting manner. If the service could put a crew of two in a fighter without appreciable loss of performance, there was a firm place for the Bristol Fighter in the inventory. It was even faster than the Camel, the top-scoring British single-seat fighter of the Great War, a unique achievement.

Except, of course, that it was not unique. On the other side of the Lines, the Hannover CL IIIa was doing a similar job and there were several other types in the same category in other countries. However, the legend grew that a good two-seater pilot could always beat a good single-seater pilot and, inevitably, theory and practice diverged since the quality of pilots varied greatly.

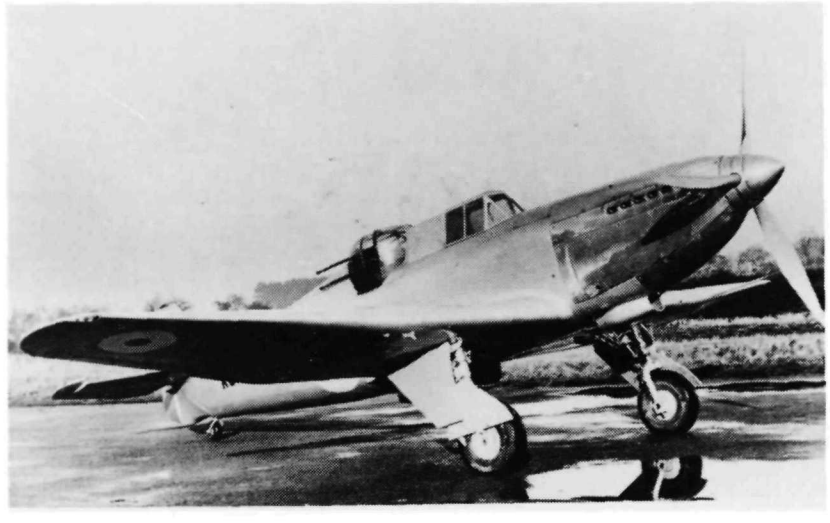
The Bristol F.2B was the best two-seater that Britain produced during World War One and the corps reconnaissance squadrons were glad to get their hands on it to replace vulnerable R.E.8s. It was in this role that the type lived on until the early 1930s. There were no two-seat fighter squadrons in the 1920s; there were few single-seat fighter squadrons either but in the Hart family, the Air Staff found a possible successor.

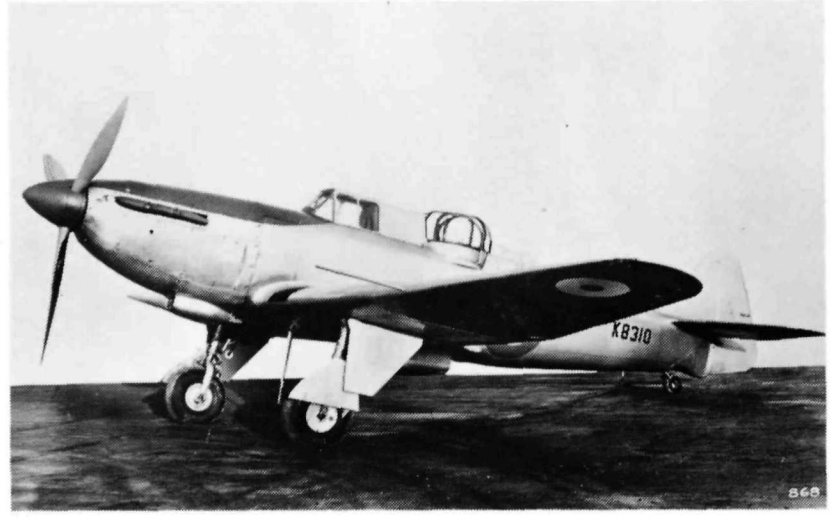
A version of the Hart was modified to be a two-seat fighter and as the Hart Fighter (Later Demon) saw service with No.23 Squadron alongside Bulldogs in 1931. It was faster than the Bulldog and only about 20 mph slower than its stablemate, the single-seat Fury. Its role was a mixed one; escorting day bombers, standing patrols over threatened areas and night interception, the latter on the basis that two pairs of eyes were better than one. It was an effective aircraft for its era and would have probably been as successful as the Bristol Fighter if called upon to engage in operations and far more effective than the multi-seat fighters being spawned elsewhere.

At the end of 1936, Demons were being delivered from the Boulton Paul factory with Frazer-Nash hydraulically-operated turrets. These gave the gunner more protection from the slipstream, enabling him to aim his gun from a steadier platform and thus improve accuracy by a formidable percentage. Behind the gunner, a lobster-back cowl was attached to his harness and folded up and down in synchronisation with his movements.

The turret was significant in that it led to a project for a replacement two-seat fighter which would not only incorporate a much-

K8310 without its exhaust stubs at Martlesham Heath in 1938 and later posed against a masked-off background (BP photos)





Defiant Is of 264 Squadron formate over Kent, September 1941 (via AT)

improved turret but would quadruple the armament carried in it. Despite the success of the Frazer-Nash turret on the Demon, and its own ingenious nose turret for the Overstrand, Boulton Paul was prevented by the Government's penchant for secrecy from selling turrets elsewhere and so lacked the funding to start development of a new turret from scratch. A short cut was available in the form of the de Boysson turret developed by SAMM in France in which the French air ministry showed a profound lack of interest. BP acquired sole rights to manufacture and for development of this turret within the British Empire and two turrets were ordered for trials.

Provision had been made for either four or two machine guns or a 20 mm cannon and at first it was the last-mentioned which seemed to have the most potential as defensive equipment for bombers. An example fitted with four Darne 7.5 mm guns was tested in the nose of Overstrand K8175 and a 20mm Hispano cannon was installed on the turret mounting on K8176 without the cupola.

N1572 coded KO-I for trials with No.2 Squadron at Cambridge in September 1940 (W.H.Shearman)

Specification F.9/35 was issued in April 1935 for a two-seat day and night fighter and it was natural that Boulton Paul would seize the opportunity of making use of its new turret by incorporating it in a modern design. The tactical thinking behind the Air Ministry requirement was a step away from the Bristol/Demon philosophy although the aviation press at the time failed to see it. Whereas the secret of the Bristol's success had been that the pilot flew it as he would a single-seat fighter, relatively secure in the belief that his gunner would cover his tail, the new fighter was to have all its armament concentrated in the turret.

This has led to much criticism in the light of World War Two experience. If only the Defiant had been fitted with eight forward-firing guns and left the gunner to cover the tail with his four, it was argued that all would have been well, assuming the aircraft had been able to get airborne with twelve guns and their ammunition and been able to catch any enemy aircraft with such a load aboard. In fact, the aim in 1935 was to combine the new single-seat and two-seat fighters in attacking enemy bomber formations, the fighters attacking from above and behind while the two-seaters tracked below the formation pouring bullets upward into their bellies.

Defiants of 264 Squadron in July 1940 including L7026 "V", N1535 "A" and L6957 "T".

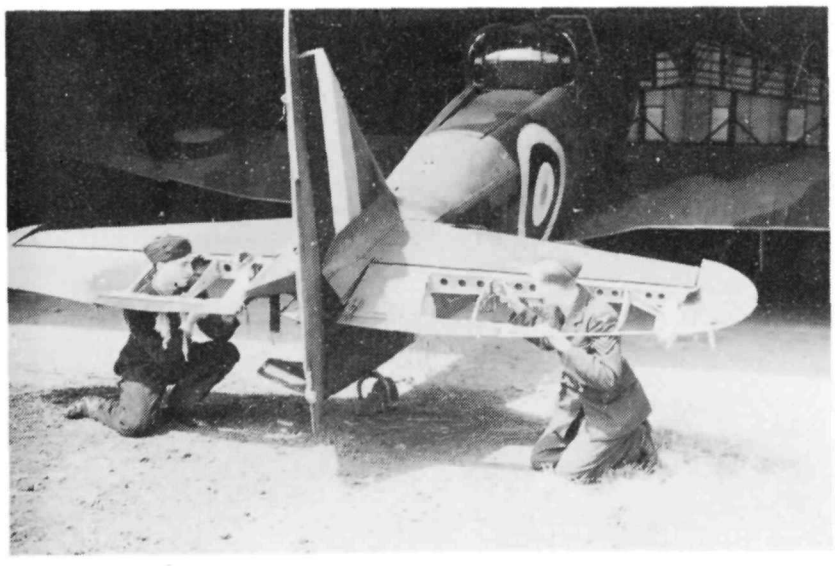
The idea was not new since there had been experiments earlier with 37 mm guns mounted to fire at about 45 degrees upwards, in effect, as light AA guns. The weight factor was a handicap but with relatively-light four-gun turrets, there seemed to be a suitable alternative without an unacceptable loss of performance. It was not envisaged that the two-seaters would engage in dogfights with enemy single-seat fighters except in unavoidable circumstances. If this happened, and the combination of both types of fighter were involved, the speed of the action would not necessarily have meant that enemy fighters could single out the slower two-seaters, especially as the proposed designs bore a close resemblance to each other when seen at a distance. A certain degree of caution on the part of the enemy in fastening on the tail of a Hurricane before making sure it was not a Defiant was desirable, as proved to be the case when the Defiant was first encountered by the Luftwaffe.

Proposals also came from Hawker, Bristol and Armstrong Whitworth but only the Hawker design was taken to prototype stage. The Boulton Paul P.82 emerged as a low wing monoplane and the turret was neatly faired in. The development of the original de Boysson turret had resulted in numerous modifications and improvements. A retractable fairing behind the pilot's cockpit could be lowered to permit the turret to rotate into a forward-firing position and in theory the guns could fire ahead to a point where the bullets just cleared the propeller. This would have done nothing for the pilot's hearing and was never attempted but a series of electrical cut-outs were incorporated to ensure that the guns did not fire into the airframe as the turret swung round.

First flown on 11 August 1937 at Wolverhampton Airport, the prototype K8310 had a Merlin I and initial tests showed a speed of just over 300 mph; its handling characteristics were good and required little attention. To any onlooker, it would have appeared that a rival to the Hurricane had arrived since the turret was still undergoing trials in the Overstrand. The type was, of course, on the Secret List. It was the end of the year before Boulton Paul managed to get its turret back from Martlesham Heath and in February 1938 the prototype went back to A & AEE for armament trials. The first of several delays had begun to hold back delivery of production Defiants.

The second prototype, K8620, flew on 18 May 1939, fitted with a Merlin II and incorporating various modifications. On 30 July 1939, the first production example, L6950, took to the air fitted with the now-standard Merlin III. By this time, mass production had been ordered and the original contract for 87 Defiants (which were delivered to the RAF between August 1939 and May 1940) had been extended to maximum production, in common with other types. The Hawker Hotspur had, in the meantime, foundered on the need of the Hawker-Siddeley factories to produce Hurricanes and Henleys.

One of the surviving Defiants of 264 Squadron shows signs of damage but landed safely. (CH185)



Night fighter Defiants of 264 Squadron (CH4810)

The first six production Defiants were all used for service trials, including simulated combat against a Hurricane. This made it plain that the Defiant had little chance of success in dogfighting against modern single-seat fighters but as an anti-bomber aircraft this was not particularly significant. Single-seat fighters would not be found escorting bombers over Britain and it was not envisaged that the type would be deployed for fighter duties on the Western Front. The crystal balls at the Air Ministry were rather cloudy at this time.

An air gunner demonstrates the cramped conditions of the turret of a Defiant. (CH878)

No.264 Squadron, which had moved from Sutton Bridge to Martlesham Heath to receive its first Defiants in December 1939, was the first to be equipped and suffered the usual teething troubles inseparable with the introduction into service of almost any type of aircraft. No.141 Squadron at Grangemouth was the second - and last - Defiant day fighter squadron to form, receiving its first aircraft in April 1940.

Training in the specialised tactics laid down for Defiants occupied No.264 until May 1940. A series of converging attacks on enemy bombers was worked out; unfortunately, in most cases, to get into the right position tended to entail the active co-operation of the target.

The existence of the Defiant had been revealed in March 1939 but its armament was merely described as "several machine guns". It took some time for journalists, and those members of the public who were interested, to grasp the fact that it did not have the standard Spitfire/Hurricane eight-gun forward-firing armament in addition to its turret gun or guns. Some were still writing about the traditional Bristol Fighter style of combat when the Defiant was engaged in the Battle of Britain, even after numerous photographs had appeared showing no signs of gunports in the leading edge.

The usual "war-winning" adjectives spewed forth during the operations after the German invasion of the Low Countries. A Ju 88 was intercepted and destroyed by A Flight of 264 on 12 May off the Dutch coast. B Flight were less lucky when they destroyed four Ju 87s but were bounced by the Bf 109Es of the escort. Five of

N1550, the Mk.II prototype undergoing trials at Boscombe Down in June 1942 (A&AEE)

the six Defiants failed to return to base but two crews subsequently turned up on foot. The planned Hurricanes were not around and the harsh realities of the Battle of France meant that there was little chance of tactics worked out in peacetime being possible when the RAF fighters were invariably outnumbered and being given multiple tasks.

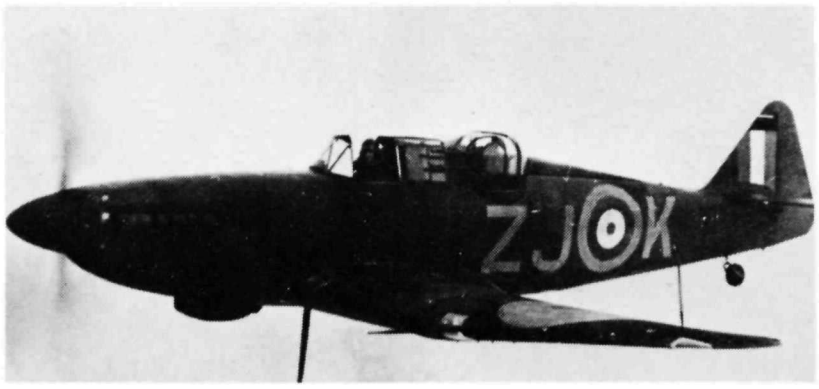
The need to provide fighter cover for the Dunkirk evacuation brought No.264 back into action, apparently with considerable success. On 29 May, the squadron's gunners put in claims for no less than 37 enemy aircraft destroyed, including fifteen Bf 110s and two Bf 109s. It was an early symptom of the Flying Fortress syndrome where every gunner who fired at an enemy aircraft and saw it go downhill claimed it as his kill while back home the debriefing officers added them all up and the PR men took it from there.

There is little doubt that some, if not most, of the enemy fighters assumed the Defiants to be Hurricanes, which were also present in the area. The famous Quartermaster General whose returns remain the basis for German aircraft losses shows fourteen losses for the day. He was, however, fallible and there seems to be proof that the records, intended for the provision of replacement aircraft, did not cover all losses, particularly when re-equipment was taking place with a different sub-type.

Three Defiants are recorded as lost on the 28th while another patrol on the 31st lost five after German fighter pilots had discovered that the Defiant had a blind spot below the tail. Where a single-seat fighter was controlled by an executive, the Defiant had a committee and there was no time for discussion between the pilot, who was in command but had to keep his

L6900 equipped with experimental bomb racks. (A&AEE)

V1110 RA-H of 410 Squadron



T3954 ZJ-K of 96 Squadron

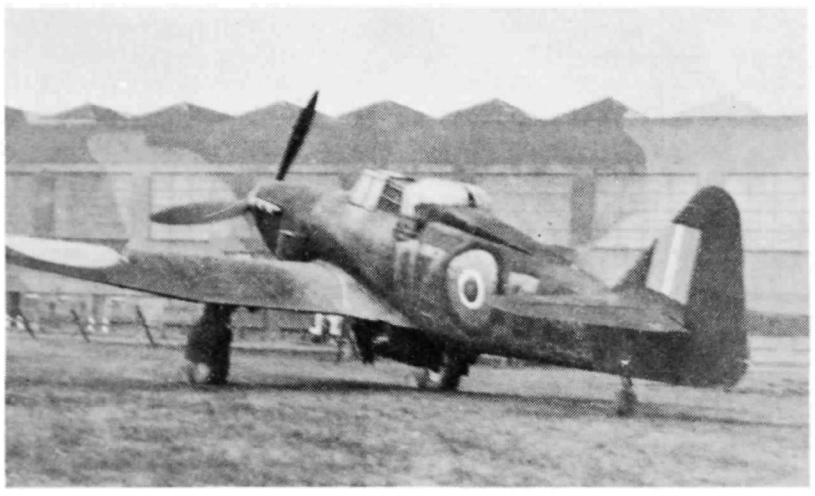
gunner informed of what he was doing, and the gunner, who could see what was happening but could do nothing about it but tell the pilot and wait for results.

In the media, interesting tales spread about the Defiant's methods of destroying enemy aircraft. It was said that the large number of dive-bombers destroyed was accomplished by diving after the enemy, drawing alongside and delivering a broadside from the turret while the hapless German gunner was prevented from swinging his hand-held gun by the slipstream. How the sleek Defiant, lacking dive brakes, managed to formate with a Ju 87 in a dive was not explained. Such was the awe struck in the hearts of German fighter pilots that Hurricane squadrons resorted to painting dummy turrets behind the cockpit, thus deterring any attack by enemy fighters. The latter even reappeared in the obituary to the Defiant's designer, J.D.North, in the late 1970s. Fleet Street never did let facts get in the way of a good story.

No.141 Squadron went into action on 19 July when twelve Defiants were sent to patrol over the Channel south of Folkestone. Only nine actually arrived due to three cases of engine trouble and while cruising around they were jumped by up to twenty Bf 109s of II/JG.2 who appeared to have no difficulty in deciding they were not Hurricanes. Five Defiants went down, one crashed on approach to Hawkinge and another was so badly damaged that it was written off. Only one gunner baled out successfully and he made it from the aircraft that crashed near Hawkinge. Six gunners were lost, including one from the badly damaged Defiant. Of the five pilots shot down, only one was saved, wounded, by a launch. The squadron was withdrawn from the line.

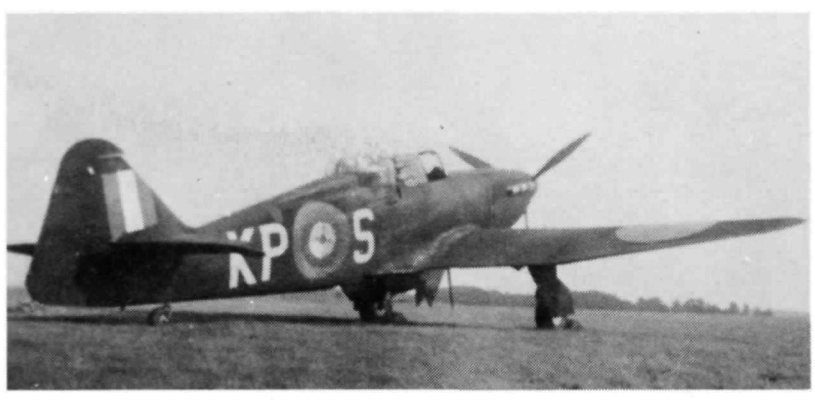
This should have been the end of the Defiant as a day fighter but incredibly No.264 Squadron was sent to Hornchurch in August. Sent forward to Manston on the 24th, they were scrambled as enemy bombs began to fall. As they climbed out of the dust, the German fighter escort attacked

DZ-F of 151 Squadron at Wittering, July 1942

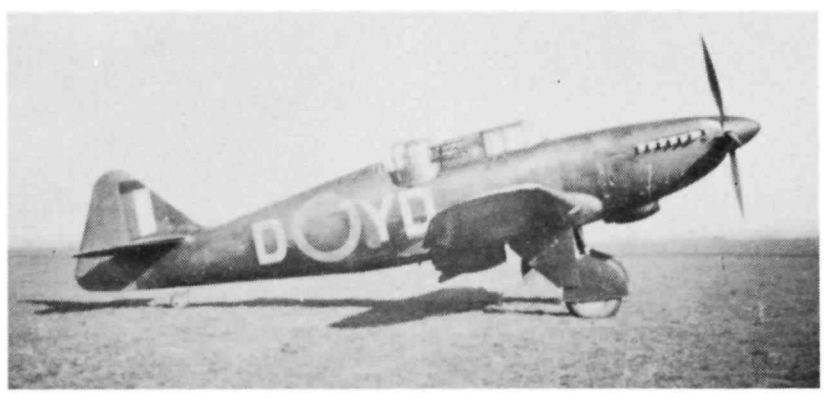


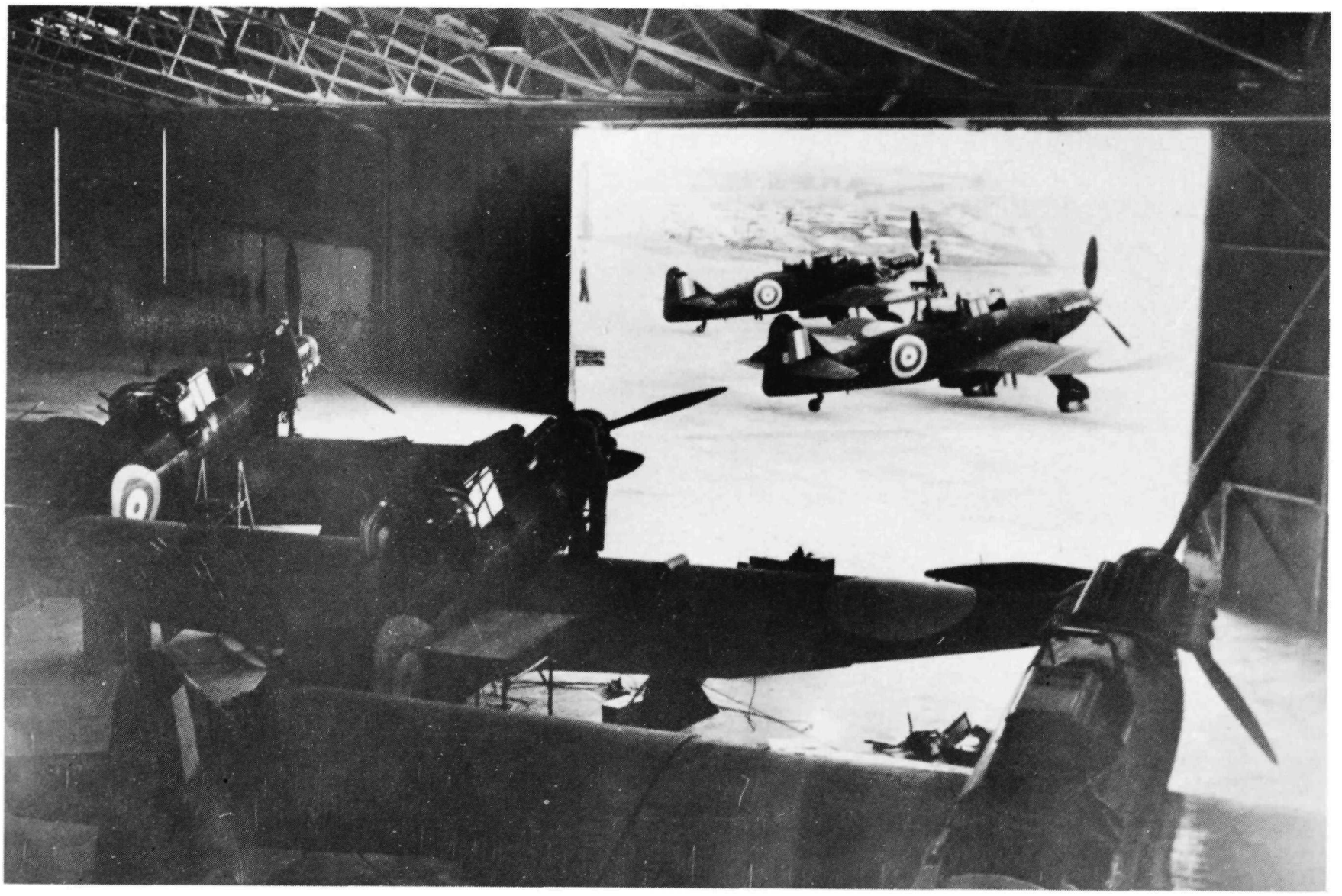
JT-U of 256 Squadron, Squires Gate, 1941 (W/C E.C.Deansley)

T3937 KP-S of 409 Squadron at Coleby Grange, July 1941



N3340 YD-D of 255 Squadron at Kirton-in-Lindsey, 1941





Night fighter Defiants being readied in the flight shed at Wolverhampton. (BP photo)

and destroyed three. The survivors were sent back to Hornchurch in time to endure another raid.

Two days later, the squadron was scrambled from Hornchurch to intercept a formation of Do 17s over Herne Bay but once more found a fighter escort waiting. Three Defiants were shot down by Bf 109s. Six Do 17s were claimed of which one is confirmed by German records as destroyed and another crashed in France. A Bf 109 was also claimed, perhaps one of two that crashed near Ramsgate. This time Defiants were finally withdrawn from daylight operations.

The time had, however, arrived for the Defiant to find its own niche in the defence of the United Kingdom. The two-seat fighter had always had a night role and the Defiants were now tasked with night patrols as the Luftwaffe abandoned costly daylight operations in favour of the cover of night.

Initially, it was an eyeball operation. The new AI radar was being fitted to Blenheims and Beaufighters and the Defiant squadrons had to wait. Nevertheless they had some success and the turret philosophy found justification in the ability of Defiants to fly under enemy bombers, fixing their position by plotting the target against the stars and delivering a blast upwards into the belly. It had a lot in common with the flying artillery of the twenties except that it was being done at night and the guns were transported fast enough to find and keep up with the target aircraft. The tactics were similar to those adopted by German night fighters in their installation of "schrage Musik", 30mm MK 108 cannon firing obliquely upward from behind the pilot in the Bf 110 Ju 88 and Do 17 night fighters. This was highly effective and perhaps there could have been better liaison between Fighter and Bomber Command since at the time the Defiants were hitting the vulnerable undersides of German bombers by using oblique upward fire, ventral turrets were being deleted from British bombers.

Thirteen night fighter squadrons flew Defiants. The original Mk.Is were replaced by Mk.IIs and AI Mk.IV radar began to appear in quantity early in 1941, thus raising the interception rate. In this mark, it was small enough to fit into the Defiant's cramped cockpit. There were a number of very successful teams, including one highly specialised pair who started their night fighting tour as Pilot Officer and AC.2 and ended it as Wing Commander and Warrant Officer!

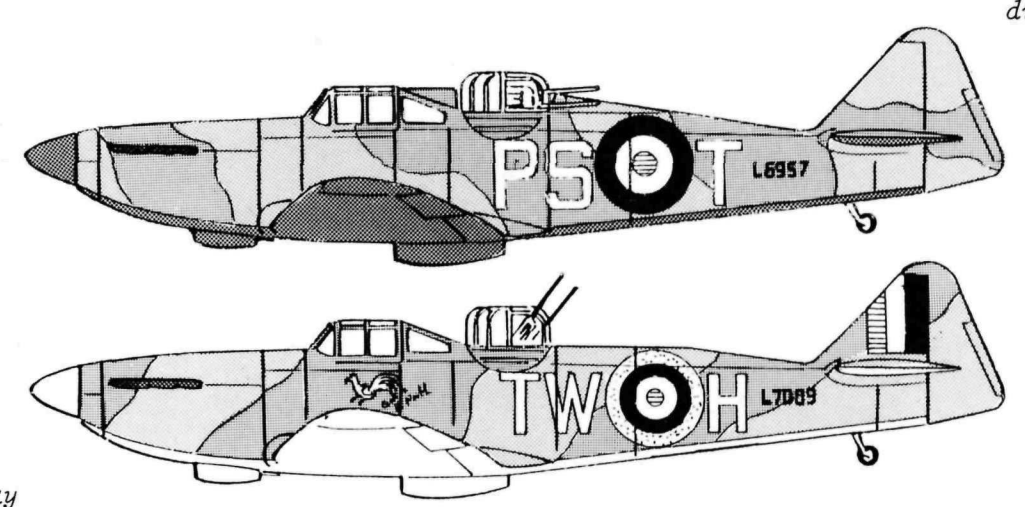
The first Defiant II, N1550, made its first flight on 20 July 1940. This was a converted Mk.I airframe fitted with a Merlin XX and production Mk.IIs began to reach squadrons in February 1941. By then, the night fighters had acquired matt black finish and improved AI Mk.VI radar sets replaced the earlier Mk.IVs

Production of Mk.Is totalled 713, followed by 210 Mk.IIs. The remainder of the total of 1,064 Defiants built were Mk.I target tugs.

Various projects were mooted for the Defiant. A single-seat fighter version was planned as the Battle of Britain progressed to supplement Spitfire and Hurricane production should the standard single-seaters start to run out but this never happened so the Defiant SSF went the way of the Miles M.20 and the single-seat Master.

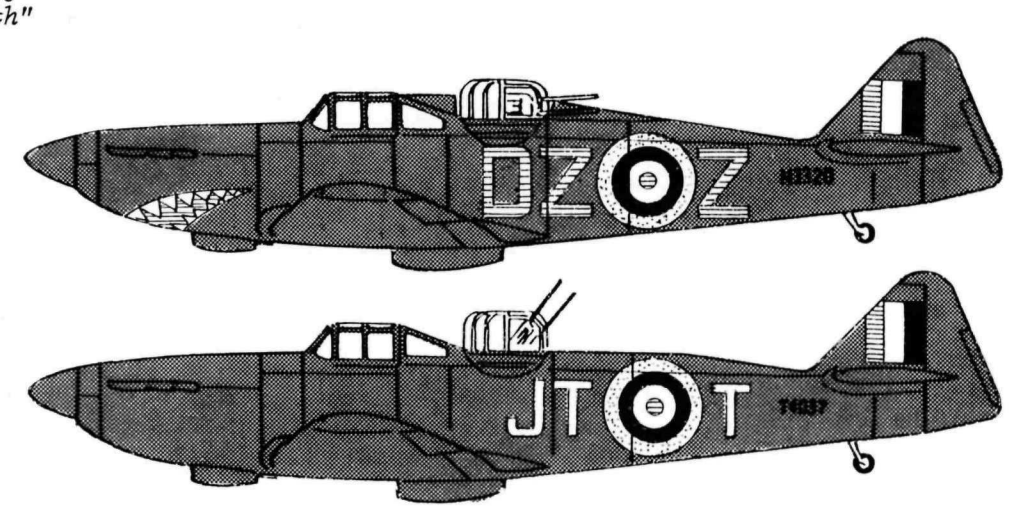
The vulnerability of the Lysander to enemy fighters resulted in a few Defiants being sent to No.2 Squadron for trials as army co-operation aircraft. Although more defensible, they were unsuited for the main role of AC aircraft and were rejected - as was the Anson! The 20mm cannon version of the original de Boysson turret was resurrected and fitted to K8310 but only as part of bomber defence armament trials.

L6957 of 264 Sqn
Dk green/dk earth top
Black/white undersides
divided along centre

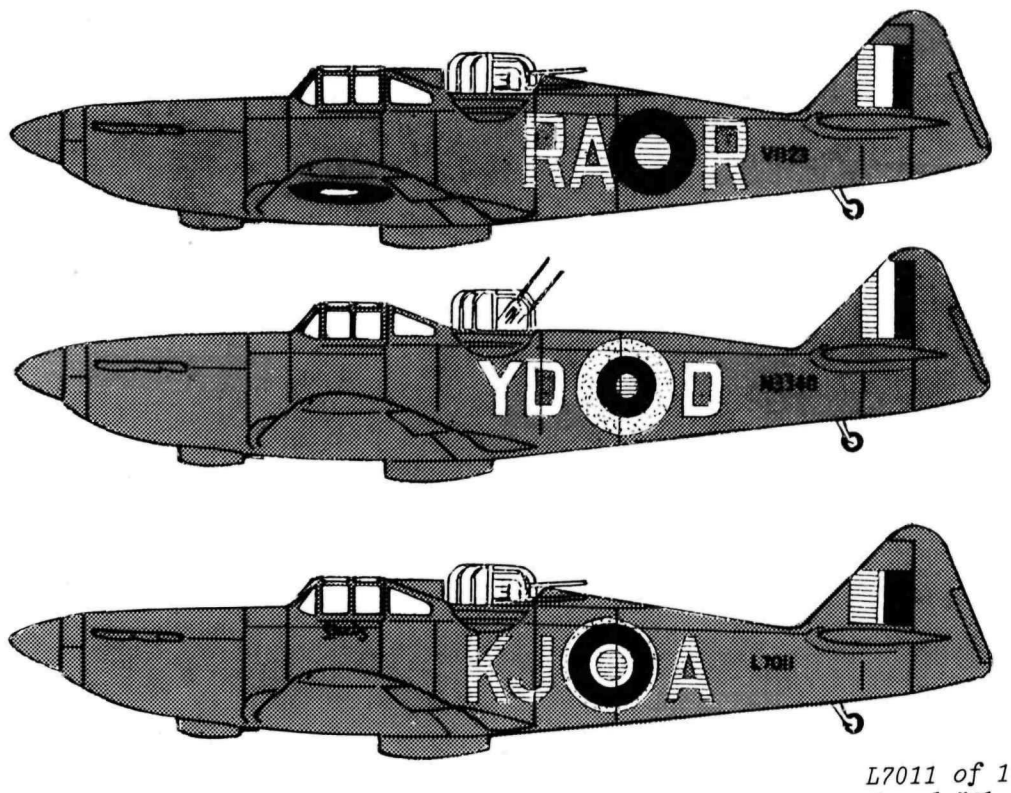


L7009 of 141 Sqn
Dk green/light earth/sky
Named "Cock o' the North"
under cockpit in white

N3320 of 151 Sqn
Red mouth with white teeth
Red codes



T4037 of 256 Sqn
Light grey codes



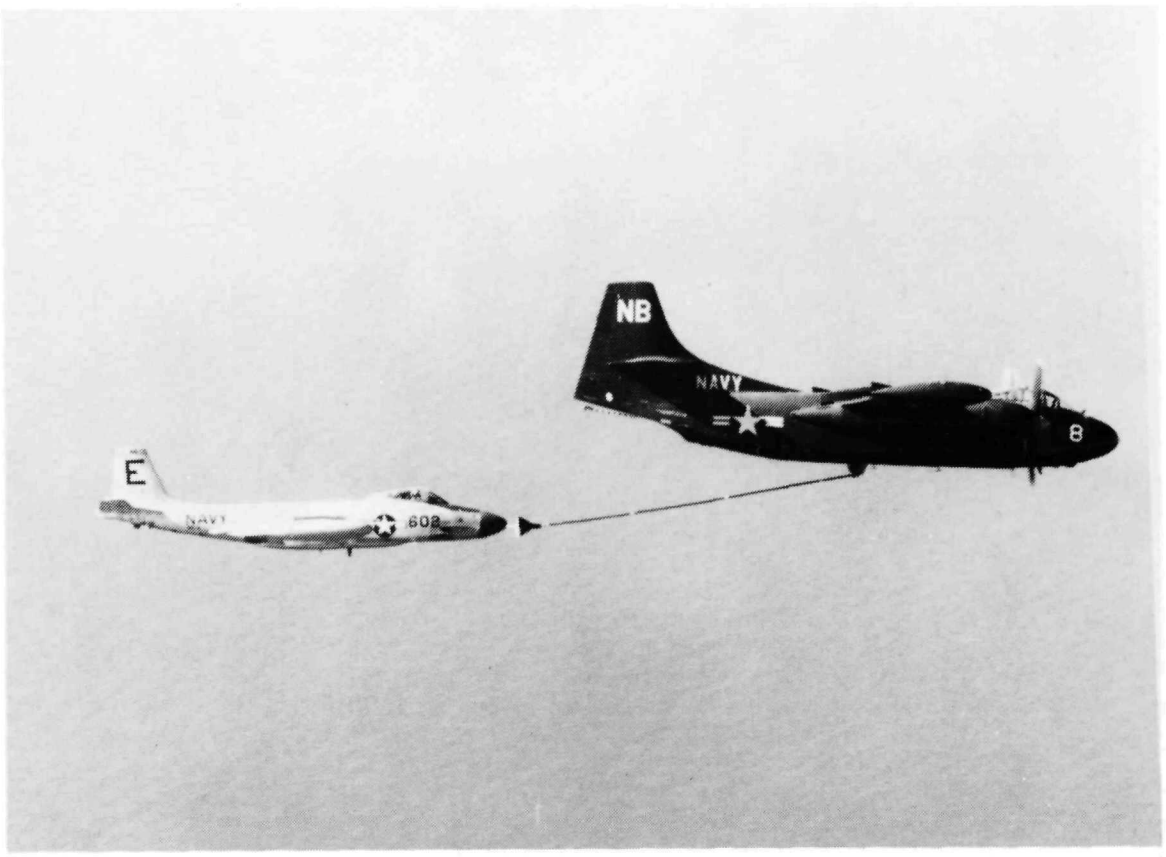
V1123 of 410 Sqn
Red codes

N3340 of 255 Sqn
Light grey codes

L7011 of 11 OTU
Named "Skatz" under cockpit
in white. Red codes

11 night fighters were black overall

NORTH AMERICAN AJ SAVAGE



An AJ-2 of Port Lyautey-based VC-5 refuelling a F2H-4 of VC-4 det 34, assigned to CVG-8 aboard Lake Champlain in the Mediterranean, January 1955. (National Archives)

It is a fact, however surprising, that the remarkable successes enjoyed by US Navy aviation on World War Two were achieved with aircraft designs which largely pre-dated the Japanese attack on Pearl Harbor. At the time, the primary function of the fleet's dive and torpedo bombers was considered to be the destruction of enemy shipping, naval and merchant, together with the shore facilities upon which it relied and so the pre-war BuAer design competitions sought aircraft suited for this task. However, by the time the carrier task forces approached the Japanese homeland in 1945, the enemy Navy had effectively ceased to exist as a surface threat, and so increasing effort was expended against non-naval military and industrial targets. While the 300-mile combat radius of the SB2C Helldiver and TBM Avenger brought large parts of the Japanese islands within reach, and their 2,000-lb maximum bomb-carrying capacity seemed adequate for the job in hand, there were many senior naval aviators who recognised the value of a much longer range and greater bomb load for future attack aircraft designs. Furthermore, with Japan defeated, no potential naval threat could be foreseen from elsewhere on the globe and so post-war planning had to take account of the fact that future targets for the carrier air groups might quite likely be located far inland, or in areas lacking deep-water access.

One of the most influential admirals to reason along these lines was Marc Mitscher, arguably the most successful carrier task force commander of World War Two. In October 1945, following his appointment as Deputy Chief of Naval Operations (Air), he pushed strongly for an aircraft capable of carrying a maximum bomb load of 8,000 lb over a radius of up to 2,000 miles, together with carriers large enough to operate it. Following further discussions within BuAer, a somewhat less ambitious specification was suggested for a bomber that could be accommodated aboard the three large Midway-class carriers then completing or building, Midway, Franklin D Roosevelt and Coral Sea. Eventually, on 28 December 1945, the Chief of Naval Operations' authorisation was obtained for a programme to develop an aircraft powered by a combination of piston and jet engines, and possessing the following characteristics:

Gross weight:	40,000 lb
Max speed:	500 mph at 35,000 ft
Bomb load:	8,000 lb
Combat radius:	1,000 miles

The outline specification was sent to interested manufacturers on 25 January 1946, with final submissions to be in by 1 May. Just five months later, on 24 June, North American was declared the winner of the competition and given a contract for three XAJ-1 prototypes. Shortly after detail design work got underway at Los Angeles, the North American plant was visited by Cdr.F.L.Ashworth, who had been the weapons specialist aboard "Bock's Car" on its mission to Nagasaki. Ashworth had persuaded senior Bureau officials that the nuclear bomb-carrying potential of the AJ should be investigated and the purpose of his visit was to see whether a Nagasaki-type "Fat Man" bomb could be accommodated by the new bomber. With minor changes, the answer was "Yes" and Ashworth was eventually able to arrange for some of the North American engineers to have access to highly classified information about the weapon.

While AJ development and prototype construction forged ahead, the Navy was determined that an interim carrier-based nuclear weapons delivery system should be established as quickly as possible, and selected the Lockheed P2V Neptune as the chosen vehicle. Following take-off tests with two modified aircraft aboard Coral Sea in the spring of 1948, twelve P2V-3Cs were procured for service with Composite Squadron Five (VC-5) at Moffett Field form early 1949. Too large and heavy for regular carrier operations, the plan was for the P2Vs to remain land-based until the threat of an all-out war seemed imminent. They would then be hoisted aboard a Midway-class carrier and transported as close as possible to their targets before being launched. Following bomb drop, they would either return to a friendly air base or, if none was within range,

ditch alongside the parent carrier. Particularly in the early stages of the Cold War there was only one potential target area for nuclear bomb-carrying Neptunes, Europe east of the Iron Curtain. The launch area giving best access to this was the eastern Mediterranean and so it is hardly surprising that all overseas deployments of Midway and her two sisters during the early fifties were to this land-locked sea.

The first XAJ-1 flew on 3 July 1948, powered by two Pratt & Whitney R-2800-44W piston engines of 2,300 hp and a single 4,000 lb thrust Allison J-33-A-19 turbo-jet in the rear fuselage. The three-man crew, two pilots and a navigator/bombardier, sat in a pressurised cockpit near the nose of a fuselage that, at 62 feet, was over one-and-a-half times as long as that of the Douglas AD Skyraider, the other carrier bomber of that era. Up to 10,000 lb of bombs could be conveyed at a cruising speed of 380 mph over a distance of 2,200 miles; no defensive armament was, however, carried. Flight testing proceeded fairly smoothly, although minor problems were encountered with the flight controls and jet engine, while mechanical failure led to the loss of the second prototype in April 1949. The first of 55 production AJ-1s was accepted by the Navy in August that year and VC-5 received its first aircraft the following month. By the end of 1949, seven Savages, as the aircraft had been officially named, were in service at Moffett Field. Further testing and evaluation of the AJ continued well into 1950 and it was mid-August before carrier take-off and landing trials were completed by VC-5 crews. At long last the Navy could boast of an operational, fully carrier-capable, nuclear bomber, though the aircraft's relatively low speed made it very vulnerable to interception by contemporary jet fighters such as the MiG-15. As the number of operational AJs increased, the P2V-3Cs were gradually relegated to crew training duties.

Introduction of the AJ-1 into fleet service ran concurrently with an expansion of the composite squadron organisation. Thus, on 6 January 1950, part of VC-5 was hived off to form VC-6, also based at Moffett until August, when it transferred to Patuxent River on the East Coast. Meanwhile, in June VC-5 had itself moved across country to Norfolk. This relocation to the Atlantic seaboard clearly presaged carrier duty with the Sixth Fleet in the Mediterranean and a further step in this direction was taken on 5 February 1951 when VC-5 flew its six AJ-1s, via Bermuda and the Azores, to Port Lyautey, French Morocco. For much of the Fifties, Port Lyautey was the US Navy's most important air station in the Mediterranean area. Three-aircraft detachments were thereafter provided for short-term deployments aboard Midway-class carriers operating with the Sixth Fleet. In October 1951, VC-5 exchanged duty at Port Lyautey with VC-6, whose AJs remained overseas until the following April. Two additional Savage squadrons had by then been commissioned, VC-7 at Norfolk on 30 October 1950, and VC-8 at Patuxent on 3 December 1951. Until September 1957, these four units, together with VC-9, which had been commissioned at Sanford on 15 January 1953, continued to alternate in providing AJ detachments from Port Lyautey. To delineate the mission with which the squadrons were tasked more clearly, the VC designations were gradually altered to VAH (Heavy Attack) as follows:

VC-5 to VAH-5	3 February 1956
VC-6 to VAH-6	1 July 1956
VC-7 to VAH-7	1 July 1955

AJ-1 124165 of VC-7 aboard Wasp during a training cruise in February 1952. Not the dihedral on the tailplane. The AJ-2s had a taller fin and level tailplane; AJ-1s were later modified to this configuration. (National Archives)

The first production AJ-1 assigned to the Flight Test section of the Naval Air Test Center at Patuxent River, December 1949. (National Archives)

VC-8 to VAH-11 1 November 1955
VC-9 to VAH-9 1 November 1955

The last production AJ-1 was accepted by the Navy in January 1952 and a hiatus of twelve months intervened while North American moved its naval aircraft production facilities from Los Angeles to the old Curtiss plant at Columbus, Ohio, and began turning out the first of 55 AJ-2s. The -2 Savage had a rearranged cockpit, 2,400 hp R-2800-28s and 4,600 lb J-33-A-10 engines, an increased fuel capacity and larger fin. Deliveries spanned the thirteen-month period from February 1953 to March 1954 and were made to the existing five VC squadrons, either supplementing or replacing the AJ-1s. By the end of 1953 VC-5 and VC-6 operated both versions while CV-7 and VC-9 had the -2 only and VC-8 had the -1 only. In June 1952, VC-6 moved from Patuxent to San Diego (North Island), providing Pacific Fleet carriers with their first opportunity of operating the nuclear bomber. From February 1953 until September 1957, the squadron maintained an AJ detachment at Atsugi, Japan, both to support the carrier deployments and help counter the threat posed to the area by Communist China.

Although the aircraft's weight had initially restricted its operation to only the largest carriers, a modification programme for some of the smaller Essex-class provided them with increased aviation fuel capacity and a strengthened flight deck, allowing AJ detachments to be deployed aboard. However, the size of the Savage and its special mission requirements badly interfered with normal air group operations, with the result that the presence aboard of a three- or four-aircraft detachment was none too popular. While the wings could be folded, it was a complicated process that involved the removal of the tip tanks. In fact, to make room for the AJs it was normal procedure for one of the group's fighter squadrons to be displaced to a land base, such as Hal Far, Malta. A somewhat improved relationship between air group and AJ evolved during the mid-fifties, following Navy development of aerial refuelling techniques using the probe and drogue system. The installation of a hose and reel in the AJ's bomb bay converted it into an effective tanker aircraft and so increased the value of the VC/VAH detachments that they eventually became an integral part of some air groups for the full period of their carrier deployments. Tanking operations normally took place at about 20,000 feet with tanker and recipient flying at 210 knots. An F2H-3 Banshee or F9F-6 Cougar would receive up to 500 gallons in about seven to eight minutes. Back aboard the carrier, the AJ could be converted to the nuclear weapons delivery configuration in about two hours. Atlantic Fleet air group detachments were provided from Sanford, Florida, by VAH-7, those for the Pacific Fleet carriers by San Diego-based VAH-6 and VAH-16 (the latter commissioned on 15 January 1958). Also commissioned on that date as a Savage operator at Norfolk was VAH-15, but it supplied no detachments during its twelve-month existence.

On 31 March 1956, VAH-1 at Jacksonville received its first Douglas A3D-1 Skywarriors and this new jet bomber gradually displaced the AJ in other heavy attack units. The last AJ-2 carrier deployment terminated in November 1958 and by March of the following year, the type had been phased out of squadron service.

In between production of the AJ-1 and AJ-2 bombers, North American at Columbus provided the Navy with thirty AJ-2P land-based photo reconnaissance aircraft. The -2Ps were similar to the -2 but omitted the bomb bay and had a revised nose section to accommodate a total of five cameras. Entering squadron service in 1952 with VJ-61 at Miramar and VJ-62 at

Jacksonville, they continued in use until early 1960. On 2 July 1956, the VJ designation was altered to VAP. As with the VC/VAH bombers, the photo squadrons deployed many Savage detachments to various areas on the globe. For VJ/VAP-62, the principal overseas base was Naples/Capodichino, although Lajes and Goose Bay were also frequented. In June 1956, VJ-61 underwent a permanent change of station, to Agana, Guam, from where it sent detachments to such exotic locations as Atsugi, Japan, Sangley Point in the Philippines and Bangkok, Thailand. Starting in late 1958, the AJ-2Ps were gradually replaced by the Douglas A3D-2P.

Fortunately for us all, neither the AJ nor its two generations of successors, the A3D Skywarrior and the North American A3J Vigilante, were ever required to perform "for real" in their primary role of nuclear bombers, and indeed their ability to perform such a task rather swiftly became redundant. There were two main reasons for this untimely redundancy. The first was the rapid development of smaller, though more powerful, nuclear bombs that could be carried by small attack aircraft. The second was the effective extension of the combat radius of those smaller aircraft by the use of in-flight refuelling. Moreover, for striking targets deep in the interior of land masses, Polaris missiles made much more sense than manned aircraft. On a practical level, it must be noted that in both major conflicts since World War Two involving the US Navy, Korea and Vietnam, it was the light attack types that proved to be the true workhorses, the F4U Corsair and AD Skyraider in Korea, the A4D Skyhawk in Vietnam. Their larger and heavier cousins either played no part or were mainly used in the subsidiary roles of tanking and reconnaissance. Finally, coming back to the AJ Savage itself, as a bomber it represented no great technological advance, nor did its fleet service supply many headlines. Arguably the aircraft's most important achievement was simply in being able to provide the US Navy with a genuine carrier-based nuclear attack capability at a time when the possession of such was considered vitally important for the survival of carrier aviation in the face of sustained attacks by the Air Force and its Congressional supporters.

AJ-1 No.2 at NAS Anacostia in August 1949, just prior to delivery to VC-5. The fairing above the wing centre section housed the air intake for the jet engine. (National Archives)

AJ Serial Numbers

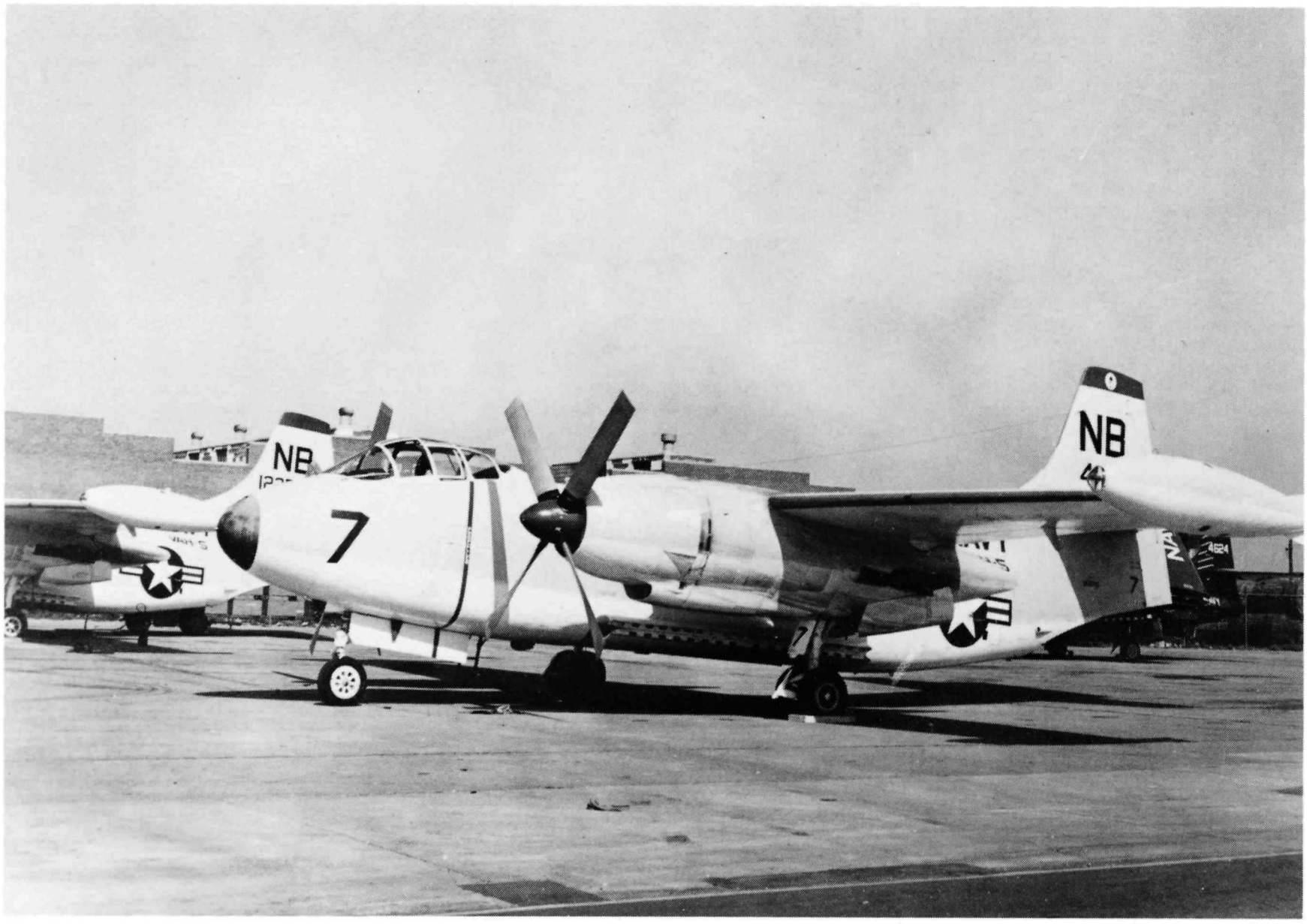
XAJ-1	121460 - 121462	3
AJ-1	122590 - 122601	
	124157 - 124184	55
	124850 - 124864	
AJ-2	130405 - 130421	
	134035 - 134072	55
AJ-2P	128043 - 128054	
	129185 - 129195	30
	130422 - 130425	
	134073 - 134075	

SQUADRONS

VC-5/VAH-5 Tail code NB/GK (from 1957)

Equipment:
AJ-1 September 1949 to September 1957
AJ-2 September 1953 to May 1955

Bases:		
	Moffett Field	
	Norfolk	6.50
	Port Lyautey	2.51
	Norfolk	10.51
	Jacksonville	3.52
	Port Lyautey	10.52
	Sanford	4.53



AJ-1 124178 of VAH-5 at NAS Norfolk in February 1957. *(National Archives)*

	Port Lyautey	10.54
	Sanford	2.55
	Port Lyautey	3.56
	Sanford	10.56
	Port Lyautey	2.57
	Sanford	9.57

VC-6/VAH-6 Tail code NF/ZC

Equipment:
AJ-1 January 1950 to January 1954
AJ-2 April 1953 to January 1957
(Aircraft to VAH-16)

Bases:	Moffett Field	
	Patuxent River	8.50
	Port Lyautey	10.51
	Patuxent River	4.52
	San Diego	6.52

VC-7/VAH-7 Tail code NH/GL

Equipment:
AJ-1 June 1951 to June 1953
AJ-2 May 1953 to February 1959

Bases:	Norfolk	
	Port Lyautey	4.52
	Patuxent River	10.52
	Port Lyautey	10.53
	Patuxent River	4.54
	Port Lyautey	7.55
	Sanford	11.55

VC-8/VAH-11 Tail code NC/GN

Equipment:
AJ-1 December 1951 to January 1958
AJ-2 September 1955 to July 1956

Bases:	Patuxent River	
	Port Lyautey	4.53
	Patuxent River	10.53
	Port Lyautey	2.55
	Sanford	7.55
	Port Lyautey (det Sanford)	10.56
	Sanford	2.57

VC-9/VAH-9 Tail code FG/GM

Equipment:
AJ-1 April 1953 to January 1957
AJ-2 July 1953 to April 1957

Bases:	Sanford	
	Port Lyautey	4.54
	Sanford	10.54
	Port Lyautey	11.55
	Sanford	3.56

VAH-15 Tail code GP

Equipment:
AJ-2 March 1958 to January 1959

Base: Norfolk

VAH-16 Tail code ZH

Equipment:
AJ-2 January 1958 to January 1959

Base: San Diego

VJ-61/VAP-61 Tail code PB/SS

Equipment:
AJ-2P September 1952 to February 1960

Bases: Miramar
Agana 6.56

VJ-62/VAP-62 Tail code TP/GB

Equipment:
AJ-2P August 1952 to December 1959

Bases: Jacksonville
Sanford 10.52
Norfolk 7.55
Jacksonville 8.57

Heavy Attack Training Unit Tail code AN

Equipment:
AJ-1 November 1953 to March 1956
AJ-2 July 1954 to July 1955

Base: Norfolk

Known AJ-2 Refueller Detachments

VAH-7 (Lant)
Det.31 Coral Sea/CVG-17 8.55 - 9.55
Det.33 Intrepid/CVG-4 8.55 - 11.55
Det.34 Lake Champlain/ATG-182 2.57 - 7.57
Det.36 Randolph/CVG-4 7.57 - 2.58
Det.45 Essex/ATG-201 2.58 - 11.58

VAH-6 (Pac)
Det.A Shangri La/CVG-2 11.56 - 5.57
Det.C Essex/CVG-11 7.56 - 1.57
Det.E Yorktown/CVG-19 3.57 - 8.57
Det.F Hornet/CVG-14 1.57 - 7.57
Det.G Lexington/CVG-12 4.57 - 10.57
Det.I Hancock/ATG-2 4.57 - 9.57
Det.J Kearsarge/ATG-3 8.57 - 4.58*
(VAH-16 Det.J from 5.1.58)
Det.N Bennington/ATG-181 10.56 - 5.57

VAH-16 (Pac)
Det.K Hornet/ATG-4 1.58 - 7.58

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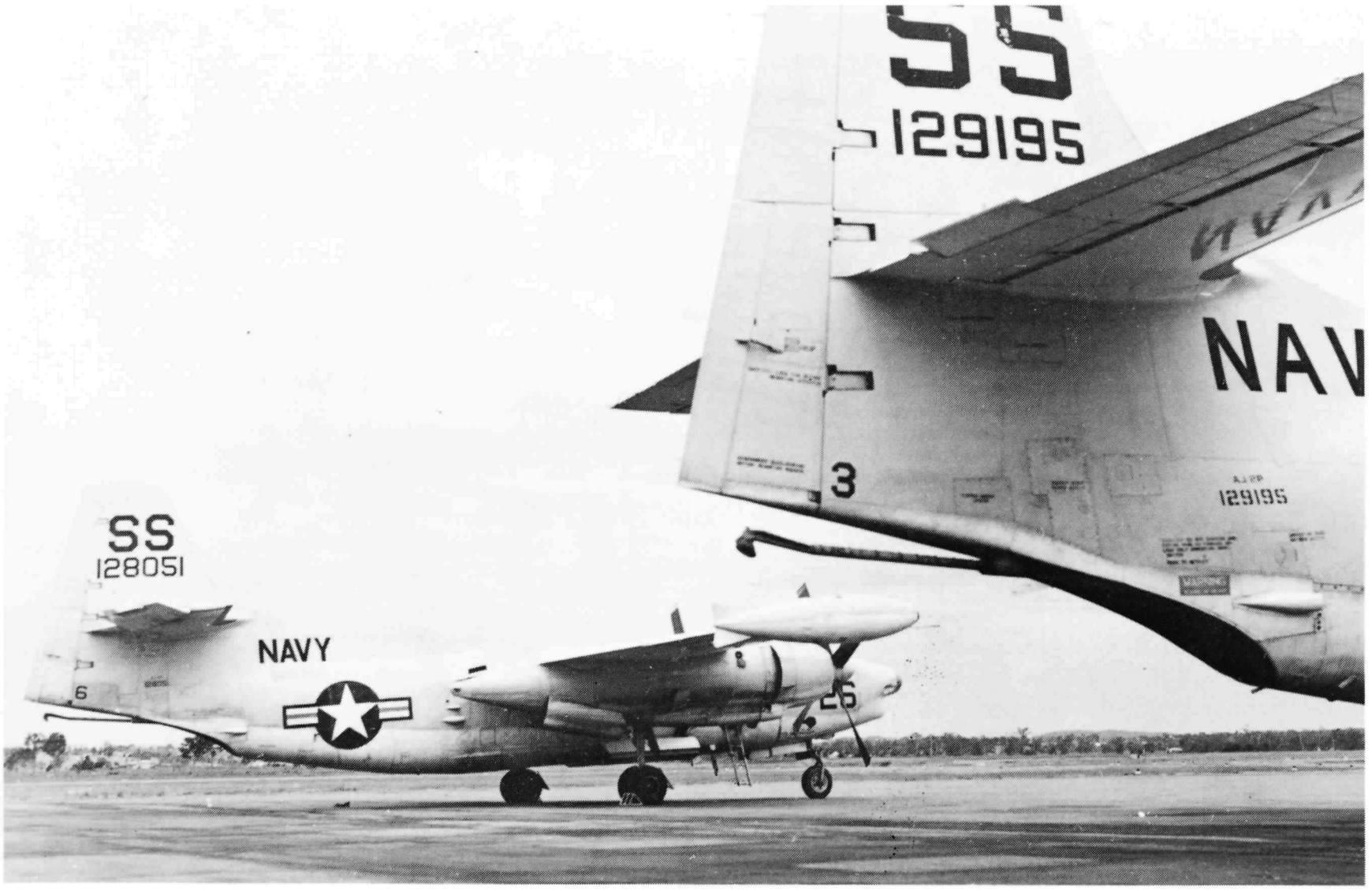


AJ-2Ps 129195 and 128051 of VAP-61 visiting RAAF Amberley, Queensland. (RAAF Amberley)

PRODUCTION

XAJ-1

Serial	Acc.	Allocations	Disposal
121460	2.51	Test a/c at NATC/ NADC/NAMTC/NAMC	Ret Phil 3.57
121461	3.49	Mkrs	DBR 4.49
121462	2.51	Test a/c at NATC/ NADC/NAMC	Ret Phil 6.55

AJ-1

122590	9.49	Test a/c at NATC	DBR Patuxent 6.50
122591	8.49	VC-5/VC-6/VC-5/ NOTS/NASWF/NOTS/ VC-9/VAH-9/VAH-11	DBR Sanford 7.57
122592	8.49	VC-5/VC-6/VC-5/ NOTS/VC-9/VAH-9/ VAH-11	DBR Sanford 11.56
122593	8.50	NA at Downey	WO Downey 8.50
122594	11.49	VC-5/VC-6/NATC	WO Patuxent 4.2.53
122595	10.49	VC-5/VC-6	WO Patuxent 13.11.50
122596	10.49	VC-5/VC-6/NATC/ VC-8/HATU/VAH-11/ VAH-5/VAH-11/NA at Columbus	Ret LP 10.62
122597	10.49	NATC/VC-5/VC-9/ VC-8/VC-9/VAH-5	DBR Pt.Lyautey 9.56
122598	11.49	VC-5/NOTS/VC-7	WO Pt.Lyautey 6.9.52
122599	12.49	VC-5/NOTS/VC-7/ VC-6/VC-9/VC-5/ VAH-5/VAH-11	DBR Sanford 10.57
122600	12.49	NATC/VC-5	WO Sanford 11.8.53
122601	12.49	NATC/VC-5/VC-9/ VAH-9/VAH-5	Ret LP 9.57
122157	1.50	Project Sandia	DBR 8.50
122158	1.50	NATC	Ret LP 4.58
124159	1.50	VC-5/VC-6/VC-5/ VC-8	DBR Sanford 9.55
124160	1.50	VC-5/VC-6/VC-8/ VAH-11/VAH-9/ VAH-5/VAH-11	Ret LP 7.57
124161	6.50	NATC/NADC/VAH-11	Ret LP 7.57
124162	6.50	VC-5/VC-7/VC-6/ VC-5/VAH-5/VAH-11	Ret LP 10.57
124163	7.50	VC-5	WO Norfolk 27.10.50
124164	7.50	VC-5/VC-6/VC-5/ VC-8/VAH-11/ VAH-9/VAH-11	Ret LP 9.57
124165	9.50	VC-5/VC-7/ VC-6/VC-8	WO Patuxent 7.9.54
124166	8.50	VC-5/VC-6/VC-8/ VC-9/VAH-5/ VAH-11/VAH-9/ VAH-5/VAH-11	Ret LP 5.58
124167	7.50	VC-5/VC-6/VC-7/ VC-9/VC-8/VAH-11/ VAH-5/VAH-11	Ret LP 7.57
124168	8.50	VC-5/VC-6/VC-5/ VC-8/HATU/VAH-5/ VAH-11/China Lake	Ret LP 4.58
124169	8.50	Project Sandia	WO 8.6.51
124170	9.50	VC-6/VC-9/VAH-9/ VAH-11/VAH-5/ VAH-11	Ret LP 1.58
124171	9.50	VC-5	WO Norfolk 6.3.51
124172	9.50	VC-5/VC-7/VC-8/ VAH-11/VAH-9/ VAH-5/VAH-11	Ret LP 8.57
124173	9.50	VC-6	WO Pt.Lyautey 29.11.51
124174	10.50	VC-5/VC-7/VC-6/ NATC/VC-5/VAH-11	Ret Norfolk 5.56
124175	8.50	VC-5/VC-7/VC-5/ VAH-5/VAH-11	Ret LP 8.57
124176	8.50	VC-5/VC-7/VC-6/ VC-5/VAH-5	DBR Pt.Lyautey 9.56
124177	9.50	VC-6/VC-8/VAH-11	DBR Key West 11.55
124178	9.50	VC-5/VC-7/VC-5/ VC-7/VC-5/VC-6/ VC-8/VC-5/VAH-5	Ret LP 10.57
124179	9.50	NATC/NADC/NAMTC/ NADC/VC-5/VAH-5	WE Sanford 27.2.56
124180	10.50	NOTS/VC-6/VC-5	DBR Jacksonville 8.52
124181	10.50	NATC/PEU/NATC/ NAMTC	Ret Norfolk 2.57
124182	10.50	VC-6/VC-5/VC-9/ NADC/VC-5	DBR Sanford 6.55
124183	10.50	VC-8	DBR Patuxent 11.54
124184	11.50	VC-5/VC-6/ VC-9/VAH-9	DBR Pt.Lyautey 12.55
124850	5.51	P&W/VC-5/VC-7/ VC-8/VC-9	DBR Sanford 8.55
124851	5.51	VC-6/VC-8/VC-9/ VAH-9/VAH-5/ VAH-11	Ret LP 11.57
124852	5.51	VC-6/VC-8/VC-5/ VAH-5/VAH-7/VAH-9/ VAH-11/VAH-5/ VAH-11	WO Sanford 27.10.56
124853	10.51	VC-5/VC-6/VC-7/ VC-9/VC-8/VC-9/ VAH-9/VAH-11	DBR Sanford 5.57
124854	10.51	VC-5/VC-6/VC-7/ VC-5/VC-8	DBR Pt.Lyautey 7.55
124855	11.51	VC-5/VC-6/VC-7/ VC-5/VC-9/VAH-5	DBR Pt.Lyautey 10.56
124856	10.51	VC-5/VC-6/VC-7/ VC.8/HATU/VC-9/ VAH-9/VAH-11	Ret LP 7.57
124857	12.51	VC-8/HATU/VC-5/ VAH-5	DBR Pt.Lyautey 10.56
124858	12.51	VC-8/VC-9/VAH-9	DBR Naples 1.56
124859	5.51	VC-7/VC-8/VC-7/ VC-8/VC-9/VAH-9/ VAH-11	Ret LP 6.58
124860	6.51	VC-5/VC-8/VC-9/ VAH-9/VAH-11	Ret LP 10.57
124861	10.51	NATC/VC-8/VC-9/ VAH-9/VAH-11	DBR Pt.Lyautey 2.57
124862	11.51	VC-8/HATU/VC-5/ VAH-5	Ret LP 10.57
124863	12.51	VC-8	DBR Patuxent 1.53
124864	1.52	VC-8/VC-5/VAH-5	DBR Pt.Lyautey 9.56

AJ-2

130405	2.53	NASWF/VAH-6/ VAH-16	Ret LP 1.59
130406	4.53	VC-7/VC-9/VJ-62/ VC-6/VC-8/VAH-11/ VAH-9/VAH-7/VAH-15	Ret LP 12.59
130407	3.53	NATC/VC-8/ VAH-11/VAH-9	WO Sanford 3.7.56
130408	3.53	NATC/NOTS/VAH-6/ VAP-61/VAH-16/ NATFSI	Ret LP 12.59
130409	4.53	VC-6/VAH-6/VAH-16	Ret LP 8.58
130410	4.53	VC-6	WO San Diego 23.8.55
130411	5.53	VC-6/VAH-6	Ret LP 3.58
130412	4.53	VC-7/VC-6/ VAH-6/VAH-16	Ret LP 5.58
130413	5.53	VC-7/VC-6/ VAH-6/VAH-16	Ret LP 1.59
130414	5.53	VC-7/VC-5/VC-9/ VC-7/VAH-7/VAH-6/ VAH-16	Ret LP 1.59
130415	5.53	VC-7/VAH-6/VAH-16	Ret LP 1.59
130416	5.53	VC-6/VAH-6/ VAH-7/VAH-15	DBR Norfolk 12.58
130417	5.53	VC-6/VAH-6/VAH-16	Ret LP 7.58
130418	6.53	VC-7/VAH-6/VAH-16	Ret Alameda 8.59
130419	6.53	VC-7/VC-9/VC-7/ HATU/VAH-7	DBR Sanford 8.56
130420	6.53	VC-7/VAH-6/VAH-16	Ret LP 1.59
130421	6.53	VC-7/VC-8/VAH-11/ VAH-7/VAH-15	Ret LP 1.59
134035	6.53	VC-9/VC-5/VC-6/ VAH-6/VAH-16	Ret LP 1.59
134036	6.53	VC-7/HATU/VC-6/ VAH-6/VAH-16	Ret LP 6.58
134037	6.53	VC-9/VC-5/VC-6/ VAH-7/VAH-15	Ret LP 1.59
134038	7.53	VC-9/VC-5/VC-7/ VAH-7	DBR Sanford 2.56

134039	7.53	VC-9/VC-7/VAH-7/ VAH-15	Ret LP 2.59
134040	7.53	VC-9/VC-5	WO Pt.Lyautey 8.11.54
134041	7.53	VC-6/VJ-61/ VC-6/VAH-6	Ret LP 9.57
134042	7.53	VC-7/VC-5/VC-6/ VAH-6/VAH-16	Ret Alameda 8.59
134043	7.53	VC-9/VC-5/VJ-62/ VC-6/VAH-7	Ret LP 3.59
134044	8.53	VC-6/VAH-6/VAH-16	Ret Alameda 8.59
134045	8.53	VC-9	WO Sanford 10.2.45
134046	9.53	VC-9/VC-5/VC-6/ VAH-6/VAH-16	Ret LP 11.58
134047	8.53	VC-6/VAH-6/VAH-16	Ret Alameda 8.59
134048	11.53	VC-6/VAH-6/VAH-16	Ret LP 4.59
134049	9.53	NATC/VC-6/ VAH-6/VAH-16	Ret LP 1.59
134050	8.53	VC-7/HATU/VC-7/ VAH-7	Ret Norfolk 1.59
134051	9.53	VC-5/VC-9/VC-7/ VAH-7/VAH-15	DBR Norfolk 4.58
134052	9.53	VC-5/VC-7/ VAH-7/VAH-15	Ret LP 2.59
134053	9.53	VC-5/VAH-7/VAH-15	Ret LP 1.59
134054	9.53	VC-5/VC-6/ VAH-6/VAH-16	Ret LP 1.59
134055	9.53	VC-5/VC-9/ VC-7/VAH-7	Ret Norfolk 11.57
134056	10.53	VC-6/VAH-6/VAH-16	Ret LP 7.58
134057	10.53	VC-6	WO Atsugi 6.8.54
134058	10.53	VC-6/VAH-7	Ret LP 3.59
134059	10.53	VC-6/VAH-6	Ret LP 12.57
134060	11.53	VC-6/VAH-6	WO USS Shangri La 10.1.57
134061	11.53	VC-6/VAH-6	Ret LP 10.57
134062	11.53	VC-6/VAH-6	Ret LP 8.57
134063	12.53	VC-9/VAH-7/VAH-15	Ret LP 1.59
134064	2.54	VC-5/VC-7/VAH-7	DBR Sanford 3.56
134065	1.54	VC-9/VC-7/ VAH-7/VAH-15	Ret LP 1.59
134066	2.54	VC-5/VC-7/VAH-7	DBR Sanford 3.57
134067	2.54	VC-5/VC-7/ VAH-7/VAH-15	Ret LP 2.59
134068	2.54	VC-6	DBR San Diego 1.56
134069	2.54	VC-6/VAH-7/VAH-15	Ret LP 2.59
134070	2.54	VC-6	WO Atsugi 1.3.55
134071	3.54	VC-6/VAH-6/VAH-16	Ret LP 7.58
134072	3.54	VC-6/VAH-6/VAH-16	DBR USS Hornet 4.58

AJ-2P

128043	5.52	VJ-62/VAP-62	DBR Norfolk 6.57
128044	5.52	VJ-62/VAP-62	Ret LP 2.60
128045	5.52	NATC/VJ-62/ VAP-62	Ret LP 2.60
128046	8.52	VJ-62/VAP-62	Ret LP 1.59
128047	8.52	VJ-62/VJ-61/VAP-61	WO Miramar 21.7.56
128048	10.52	VJ-61/VAP-61	Ret Agana 2.60
128049	6.54	VJ-62/VAP-62	DBR Norfolk 6.57
128050	8.52	VJ-61/VAP-62	Ret LP 12.59
128051	3.54	VJ-62/VAP-61	Ret Agana 2.60
128052	7.52	VJ-62	DBR Sanford 2.53
128053	9.52	VJ-61/VJ-62/VAP-62	Ret LP 2.60
128054	9.52	VJ-61/VAP-61	Ret Agana 11.59
129185	10.52	VJ-61/VAP-61	Ret Agana 2.60
129186	8.53	VJ-62/NATC/VAP-62	Ret Jacksonville 11.59
129187	4.54	VJ-61/VAP-61	Ret Alameda 11.59
129188	4.54	VJ-61/VAP-61	Ret Agana 10.59
129189	6.54	VJ-62-VAP-62	DBR Jacksonville 5.58
129190	10.52	VJ-62/NATC	Ret Norfolk 10.56
129191	11.52	VJ-62/NAMTC/ NADC/VAP-62	Ret LP 12.59
129192	3.54	VJ-61	DBR Atsugi 5.56
129193	10.53	VJ-62/NATC/ VJ-61/VAP-61	DBR Oppama 5.59
129194	10.53	VJ=62/VAP-61	WO Agana 18.10.58
129195	11.52	VJ-62/VAP-61	Ret Agana 2.60
130422	4.54	VJ-61/VAP-61/ VAP-62	Ret LP 2.60
130423	1.54	VJ-61/VAP-61	Ret Norfolk 3.57
130424	3.54	VJ=62/VAP-62	Ret LP 2.59
130425	5.54	VJ-61/VAP-61	DBR Agana 9.58
134073	3.54	VJ-62/VAP-61	Ret Agana 2.60
134074	5.54	VJ-62/VAP-62	Ret LP 2.60
134075	4.54	VJ-61/VAP-61	DBR Agana 3.57

Abbreviations

Acc	Acceptance date
ATG	Air Task Group
CVG	Carrier Air Group
DBR	Damaged and not repaired
HATU	Heavy Attack Training Unit
LP	Litchfield Park, Arizona
NADC	Naval Air Development Center
NAMC	Naval Air Material Center
NAMTC	Naval Air Missile Test Center
NASWF	Naval Air Special Weapons Facility
NATC	Naval Air Test Center
NATF(SI)	Naval Air Test Facility (Ships Installations)
NOTS	Naval Ordnance Test Station
PEU	Parachute Experimental Unit
Ret	Retired
Project Sandia	Nuclear weapons development project at Albuquerque, New Mexico. The organisation later became NASWF
WO	Missing or destroyed in accident

Note: The locations given for the accidents to individual aircraft are those of the units concerned at the time of the accident, not necessarily the location of the aircraft involved.

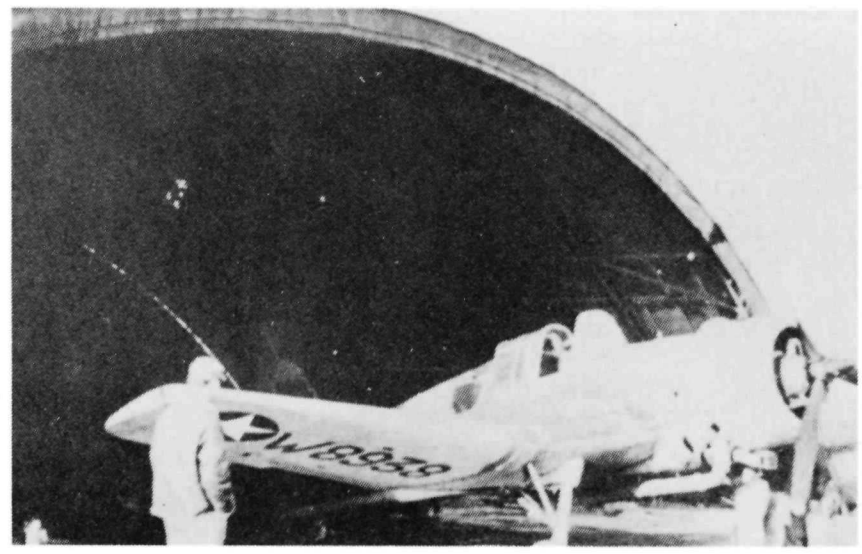
The Savage graveyard: AJ-2 130417, recently retired from VAH-16, at Litchfield Park, Arizona, in 1959. (AAHS)

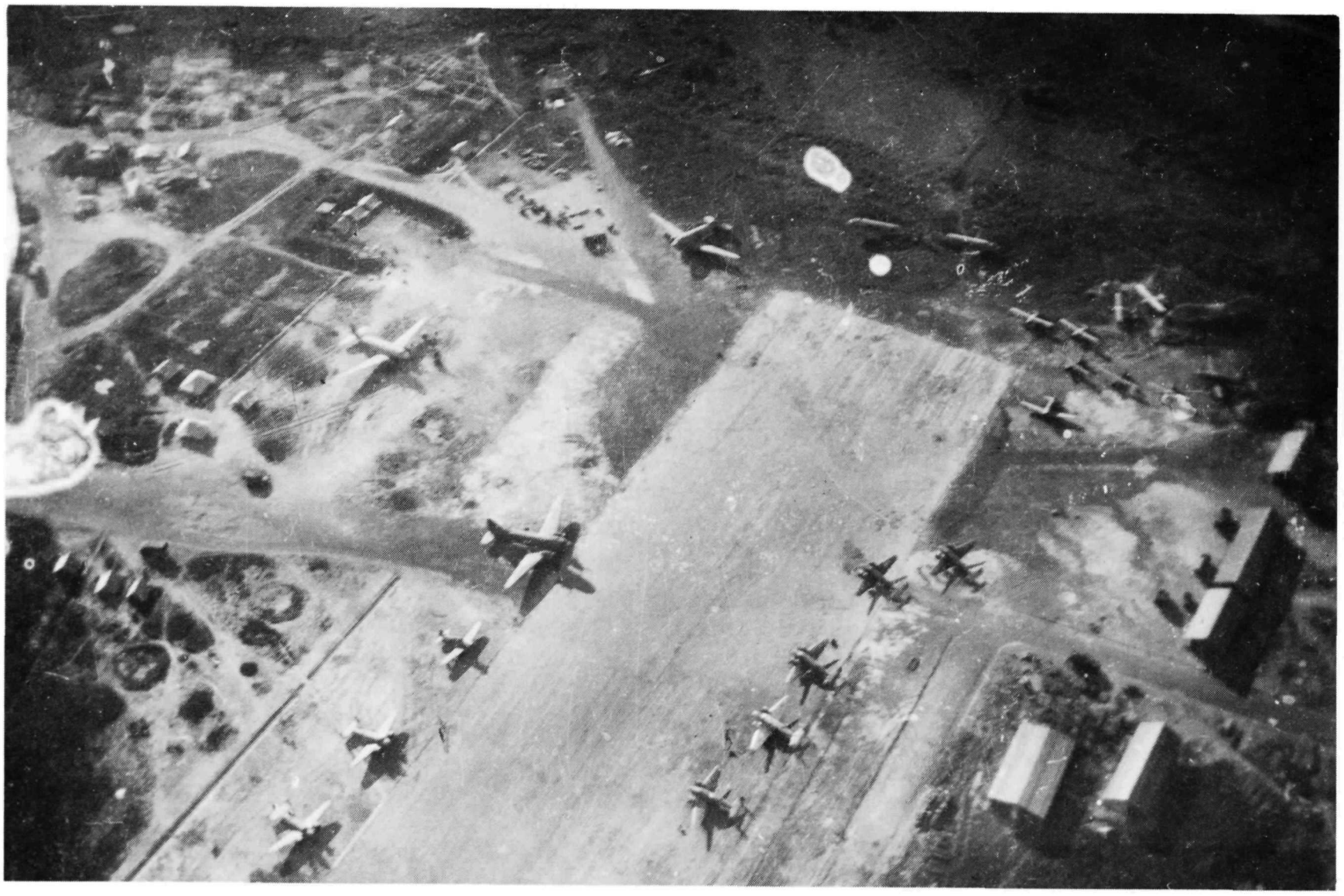
PICTURE PAGES

Top: Ventura AE728 lies in a forlorn state carrying the markings of No.34 OTU in Canada. The photograph is stated to have been taken in August 1942 but details of the circumstances are not known. (via Andy Thomas)

Centre: Reverse Lend-Lease in the shape of Master III W8958 of the 4th Fighter Group at Debden in 1943. (L.Nitshe via Andy Thomas)

Bottom: London K8930 at Rose Bay in March 1938 when four boats of No.204 Squadron flew out to celebrate the 150th Anniversary of Sydney. The visit was prolonged by the disintegration of a propeller, necessitating a long wait for replacements to arrive for all propellers to be replaced and causing great mental anguish for the crews anxious to get back to winter at Mount Batten. The Rose Bay slipway has yet to be built. (via Norman Wiltshire)



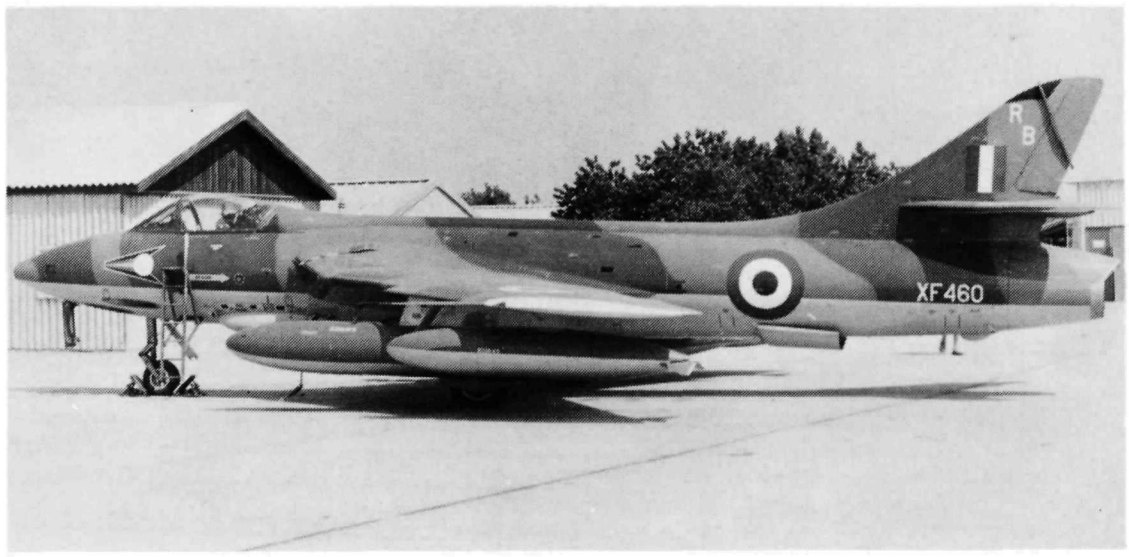


Top: Allan Church hung out of a Sentinel to take this photo of a corner of Mingaladon in 1945. Visible are Dakotas, Expediters, Harvards and Sentinels. At the end of the runway are what appears to derelict Daks. Could one be KN594 shown in AM.2/86?

Centre: Anson C.19 VM308 after the crash listed in AM.1/90 on 24 April 1959, photographed next day by Ron Barker.

Bottom: Mr.L.Harvey enlarged a couple of small prints taken by Mr.L.R.Wright in 1945 showing Sunderlands at Jui. Four were scuttled off Cape Sierra Leone in June 1945 (DV959, WK582, ML859, ML863). Why, since seven others were SOC at Jui at the same time?

PERSONAL CODES PART 4



Hunter FR.10 XF460 "RB"

PMcLB Wing Commander Bond changed his code to this on taking over Hornet F.I PX273 in 3.46. The unit altered its title to the Eastern Sector on 12.7.46, still based at Horsham St.Faith, and Bond continued with this aircraft, being killed when it crashed in cloud into a hill 4 miles east of Penderyn, Brecon, on 30.9.46.

PMO Seen on Spitfire XVI TD376 at 29 MU High Ercall in 6.48. Its last unit before going into storage had been 84 Group Support Unit at Thruxton until 10.45.

PN Used around 9.52 on Anson T.20 VS509, which was then with Station Flight Bassingbourn, at that time the home of 231 OCU.

PN The code was also used by Flight Lieutenant R. 'Phred' Neal of 1417 Flight at Khormaksar, initially on Hunter FR.10 XF429, then by 3.67 on XF436.

PP Typhoon RB380 carried this code when flown by Group Captain R.P.R.Powell, DFC, who commanded 121 Wing from 5.4.45 to 7.45

PPH Used at Ta Kali around 10.42 on Spitfire Vc BR498 by Wing Commander Peter Prossor Hanks, DSO, DFC, AFC, then Wing Commander Flying, Malta. Also used by him in 1948 as Wing Commander Flying of 123 Wing at Wunstorf on Tempest V NV708 (previously 'JCB')

PS Javelin FAW.9 XH722 at Tengah in 1961/62 bore this code when flown by the CO of 60 Squadron, Wing Commander Peter Smith, MBE.

PST A captured Messerschmitt Bf 108 had this code applied when flown shortly after VE-Day by Group Captain P.S.Turner, DSO, DFC & Bar, the CO of 127 Wing.

PT Squadron Leader P.D.Thompson, OC Flying at Biggin Hill, flew this code on Meteor F.8 WL134 until 9.55, when it was transferred to Hunter F.5 WP186. He initially shared the latter aircraft, which consequently had his initials on one side of the fin and 'DGS' on the other. By 7.56 his initials were on both sides of the fin, but by the following year they were only on the port side with 'JC' on the starboard side, 41 Squadron colours being applied.

PW Used at Westhampnett by Wing Commander H de C.A. 'Paddy' Woodhouse, the CO of 16 Sector (later 16 Wing), successively on Typhoons JP671 from 8.43 to 12.43, JR219 from 12.43 to 2.44 and MN141 from 2.44 until the Wing disbanded on 16.4.44.

PW This code was also used, probably all by Wing Commander P.R.W.Wickham, DSO, DFC on Mustang IV KM237 of Station Flight Peterhead/Dyce to 9.45, then on Spitfire F.21 LA284 at Turnhouse, and by the mid-fifties at Duxford on Meteor F.8 WK887 (which also used code 'JH').

PWB Used around 1.45 on an unidentified Spitfire V at 57 OTU Eshott, possibly by Wing Commander Peter G.Wykeham Barnes, DSO, OBE, DFC, AFC, who certainly used it in 1951 when Station Commander at North Weald on Vampire FB.5 VZ841.

RA Air Commodore R.L.R.Atcherley, CB, CBE, AFC used this code in 1945 when in command of the Central Fighter Establishment at Tangmere on Meteor III EE235, and possibly also on Spitfire LF.IX MK868. As AOC 12 Group from 5.51, on promotion to Air Vice-Marshal, he flew the code from Newton until about 1956 on successive Meteor F.8s WF707, WK680 and WK927.

RA This code was also used around 1955/56 on Hunter F.5 WP108 by Squadron Leader R.Aytoun, DFC & Bar, the CO of 263 Squadron at Wattisham.

RAB Spitfire IX '194' (prefix uncertain) was flown with this code by Lieutenant Commander Rolf Arne Berg, DFC, who was Wing Commander Flying of 132 Wing from 4.44 until he went missing on 3.2.45.

RB Used by Wing Commander R.'Razz' Berry, the Wing Commander Flying of 322 Wing, on an unidentified Spitfire FB.VIII around 1944.

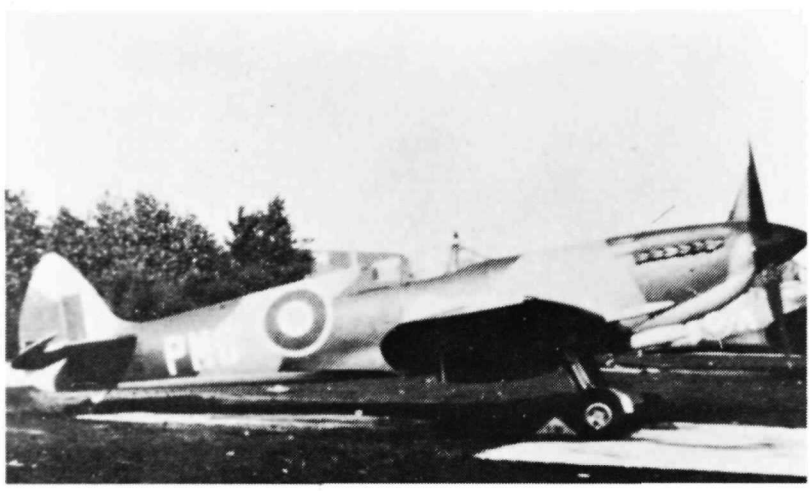
RB Also used on an unidentified Spitfire HF.IX at the Fighter Leaders School, Milfield around 6.45.

RB This code was also used by Wing Commander R.P.Beamont, DSO, DFC, probably on Tempest V JN749 when he was Wing Commander Flying with 150 Wing in 4.44, and certainly in a similar post with 122 Wing on Tempest V JN751 from 9.44 until shortly before he was shot down on 12.10.44. Released after VE-Day from being a prisoner of war, he flew an MW-serialled Tempest II with this code from 9.45 at Chilbolton where he formed a Tempest II Wing which had been intended for Tiger Force.

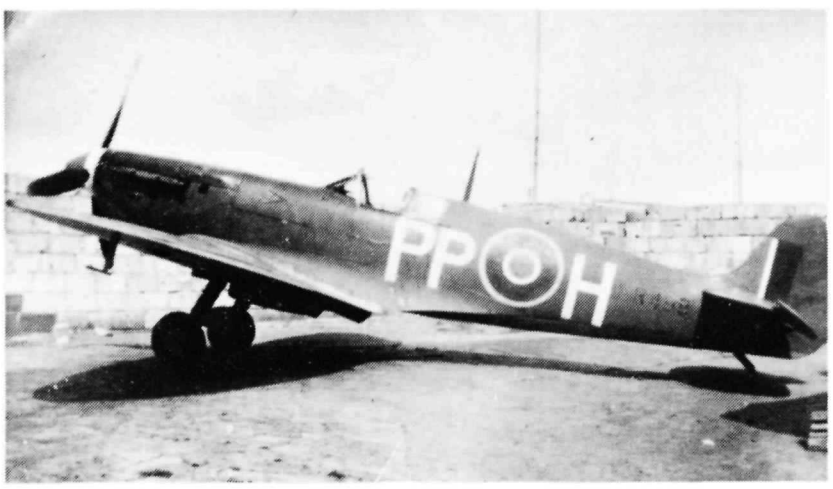
RB Yet another use of this code was by an unidentified Flight Lieutenant of 1417 Flight at Khormaksar, on Hunter FR.10 XR460 from 12.67 into 1967.

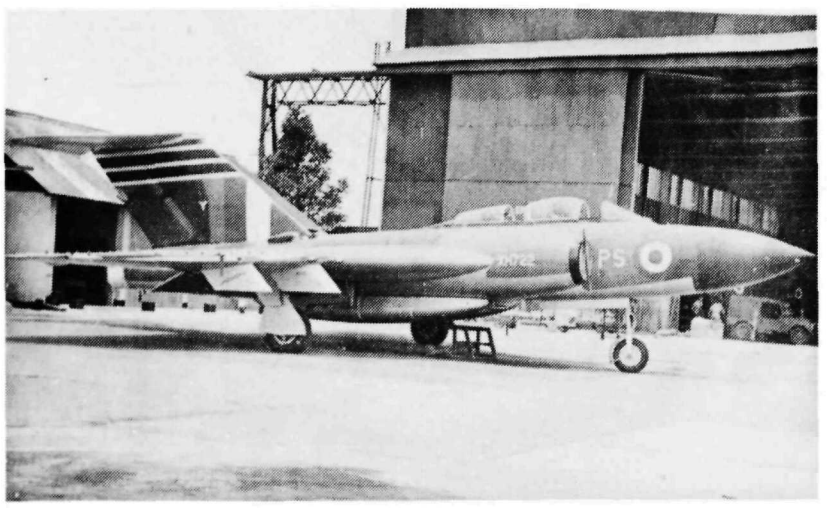
RBH Meteor III EE241 carried this code with the Central Fighter Establishment at Tangmere during 1945.

Spitfire XVI TD376 "PMO"

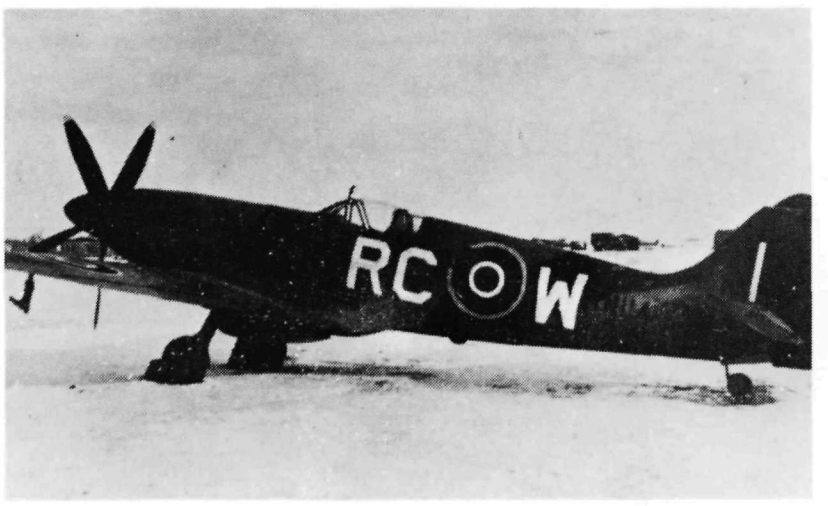


Spitfire VC BR498 "PPH" at Hal Far





Javelin FAW.9 XH722 "PS" at Tengah



Spitfire XIV RN114 "RCW" with 39 Wing

RBL Reportedly used on an unidentified Spitfire FR.IX of 244 Wing around 8.45, possibly by Wing Commander Robert B.Lees.

RC Mosquito B.35 VP178 of 139 Wing at Wahn bore this code in 1950 when flown by Wing Commander R.W.Cox, the Wing Commander Flying.

RC The code was also used in 1966 on Hunter FR.10 XE589 by Squadron Leader R.C.Chambers, the CO of 1417 Flight at Khormaksar. This aircraft also used code 'JM'.

RCH Meteor F.8 WL116 was flown during 1957/58 with this code at Turnhouse by Wing Commander R.C.Haine, DFC, the Station Commander.

RCW Used on Spitfire XIV RN114 of 39R Wing around 1.45 by Wing Commander R.C.A.Waddell, DSO, DFC, then Wing Commander Flying until 15.5.45 when he was promoted to Group Captain on taking over command of the Wing, which disbanded on 7.8.45.

RD Wing Commander R.T.P.Davidson, DFC used this code at Westhampnett as Wing Commander Flying of 121 Airfield Headquarters on Typhoon JP496, which he had previously flown there as CO of 175 Squadron with the code HH-W. A Typhoon with this code was seen at 55 OTU Annan in 10.43 may have been this machine during a visit. In 1.44 he became Wing Commander Flying of 143 Wing at Ayr and later Funtington and Hurn, flying MN518 with this code until he was shot down in another machine on 8.5.44, MN518 being then recoded 'MJ' for his successor.

RD The code was resurrected at Leconfield in 1957 by Squadron Leader Robert H.Dixon, the CO of 92 Squadron, Hunter F.6 XG239 being replaced by XF521 with this code after it crashed on take-off whilst on detachment to Nicosia on 11.1.58. Both these machines were used by his predecessor with the code 'MH'.

RDE An unidentified Tempest V was probably flown by Wing Commander R.Deacon Elliot, DFC, who was OC Flying Wing, 84 Group Support Unit, from 24.2.45 until 15.5.45 when he became Wing Commander Training with Headquarters 2nd TAF to at least 11.45.

RDF This code was used on an unidentified Spitfire IX at Debden around 3.45.

RduV Wing Commander D.le Roy du Vivier, DFC & Bar, used this code on Spitfire LF.IX MJ628 when Wing Commander Flying with 324 Wing from 17.3.44.

RDY Used on an unidentified Spitfire IX by Wing Commander R.D.Yule, DSO, DFC & Bar as Wing Commander Flying with 125 Wing at Detling around 4.44. He also used it on Meteor F.8 WF695 of Station Flight Horsham St.Faith as Wing Commander Flying until he was killed in this aircraft on 11.9.53. He had been participating in a Battle of Britain flypast rehearsal when he was hit by WK938 while avoiding a Hurricane, and he spun into the ground at Woolwich after the tail of the aircraft was cut off.

REB Wing Commander R.E.Bary, DSO, DFC flew Kittyhawk III FR507 whilst Wing Commander Flying of 239 Wing around 9.43.

RF Hunter F.6 XE621 carried this code in 1956 when flown at Linton-on-Ouse by Squadron Leader R.H.G.Freer, the CO of 92 Squadron.

RFB Used on an unidentified Spitfire V by Wing Commander R.Findlay Boyd, DSO, DFC & Bar when Wing Commander Kenley Wing around 3.42 - 4.42.

RGD Meteor F.8 WH404 carried this code at Waterbeach in 1956/57 when flown by Group Captain R.G.Dutton, DSO, DFC, the Station Commander, from 12.55.

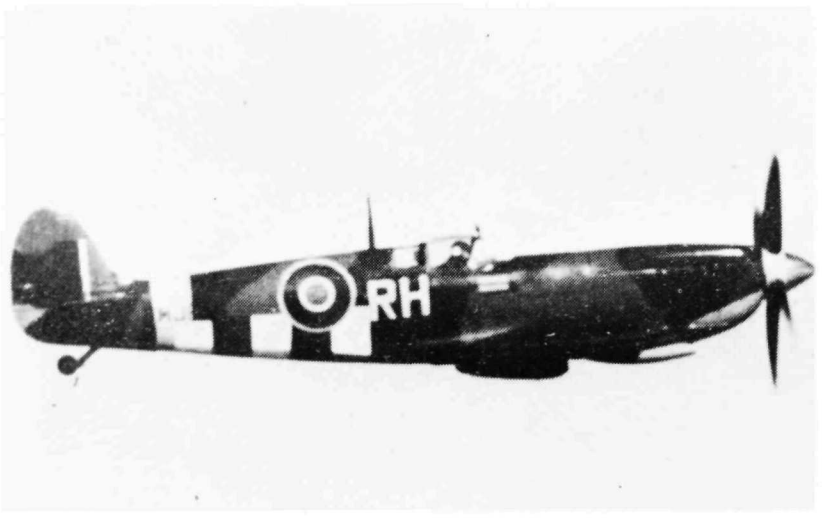
RGD This code was also used on Meteor F.8 WK969 of 12 Group Communications Flight at Newton around 6.57 by Squadron Leader R.G.Dixon.

RH Air Marshal Sir Roderic M.Hill, KCB, MC, AFC used this code on a number of aircraft, first as AOC Air Defence of Great Britain by 3.44 until becoming AOC-in-C Fighter Command from 15.10.44 until 14.5.45. The first known example was Spitfire Vb AA916 of Station Flight Northolt, which became ADGB Communications Squadron on 1.5.44, then Fighter Command Communications Squadron on 1.10.44. He also used it in 1944/45 on Spitfire LF.IX MJ843 (also coded 'JMR') and Tempest V JN876 (also coded 'RMH' and 'EAY'). In 1945 he also used Mosquito FB.VI HR343 with this code (also coded 'AAC'),

RHC Spitfire LF.VIII MV432 of 906 Wing in Burma used this code when flown by Wing Commander R.N.H.Courtney, who was Wing Commander Flying from 4.7.45, becoming CO 15.9.45 until 11.45

RHG Wing Commander R.H.M.Gibbes, Wing Leader of 80 Wing RAAF used this code on Spitfire LF.VIIIs A58-307 and A58-497 in 1944/45.

Spitfire IXC MJ843 "RH"



Spitfire IX PT672 painted as "WR-RR", 1980

Typhoon IB MN518 "RD", 143 Wing

RHH Code used on an unidentified 134 Wing Spitfire IX by Wing Commander R.H.Harries, DSO & Bar, who was briefly Wing Commander Flying from 5.7.44 to 12.7.44. He then transferred to a similar post with 135 Wing, until 1.45, flying Spitfire LF.IXs PT658 and PT758, which may have also carried this code.

RIKE Group Captain R.I.K.Edwards, DFC, AFC, the Station Commander at Tangmere, used this code in 1934 on Meteor F.8 WL176, and in 1958 on Hunter F.5 WP123 (also coded 'HEW')

RJ Code used by Flight Lieutenant R.Johns of 1417 Flight at Khormaksar on Hunter FR.10s XE5499 (also coded 'GC') and XE614 in 1964/67.

RJ An unidentified Sabre F.4 is reported to have carried this code with Station Flight Wildenrath around 6.54. It is possible the machine concerned was XB669 of 71 Squadron, which ran off the end of a wet runway into a road ditch on 1.7.54 when piloted by the Station Commander, Group Captain R.J.Gosnell, DSO, DFC, in which case the code is more likely to have been 'RJG'.

RLRA Air Vice-Marshal Sir R.L.R.Atcherley, CB, CBE, AFC, the AOC 12 Group, carried this code in small letters underneath the cockpit of his Meteor F.8, misreported as WK818.

RLS Used on Vampire FB.5 VZ305 by Wing Commander R.L.Smith, OBE, the Station Commander Ouston around 1954/55. It carried 607 Squadron colours on the port boom and those of 608 Squadron on the starboard boom.

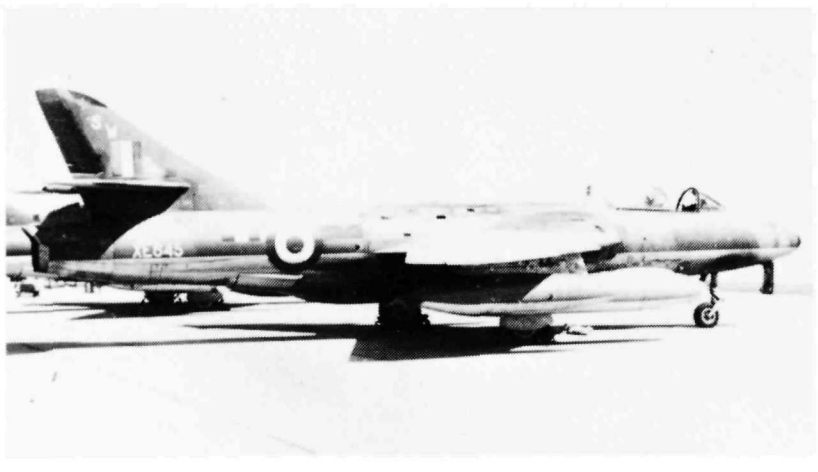
RM Wing Commander R.Marples, DFC, the Wing Commander Flying with 124 Wing flew Spitfire LF.Vb EP245 at Perranporth around 2.45, probably with this code, replacing it shortly afterwards with 'RM'-coded Spitfire LF.IX MK308. He was killed in an accident on 26.4.44, though not in either of these aircraft.

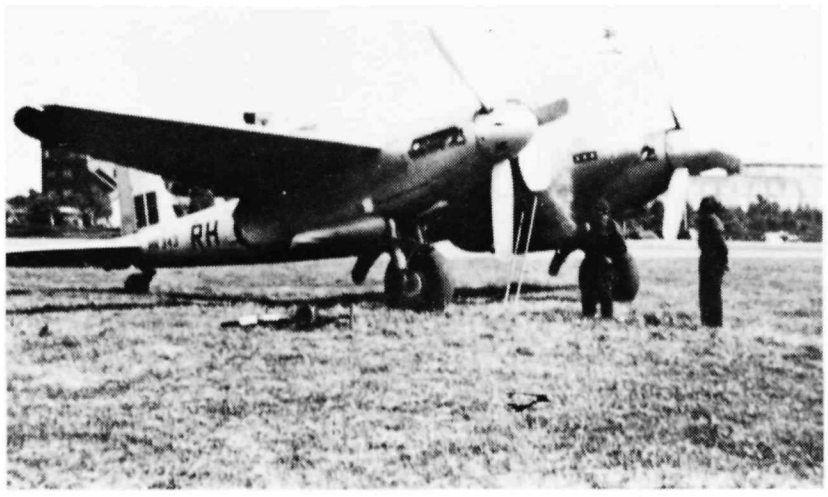
RM This code was later used on an unidentified Spitfire of the Fighter Leaders School at Milfield around 3.45 - 4.45.

RMG Squadron Leader E.M.Goodale, the commanding officer of 26 Squadron, adapted a normal code for this squadron to personalise Mustang I AM148 around 7.42 - 8.42.

RMH In addition to using his more normal 'RH', Air Marshal Sir Roderic M.Hill, KCB, MC, AFC, the AOC-in-C Fighter Command until 14.5.45, applied this code to Tempest V JN876 at Northolt in 1945.

Hunter FR.10 XE645 "SW"





Mosquito VI HR343 "RH" with FCCS

RPB Wing Commander R.P.Beamont, DSO, DFC, the Wing Commander Flying of 122 Wing in 9.44 used this code, in addition to his more usual 'RB', on Tempest V JN751. The following month he was using the 'RPB' code on an unidentified EJ-serialled Tempest V, but he was shot down and taken prisoner on 12.10.44.

RR An unidentified Typhoon was flown with this code around 10.42 by Wing Commander Denys E.Gillam, DFC, AFC, the Duxford Wing Leader. Gillam evidently preferred to use duplicated letter codes instead of his own initials (see also 'ZZ')

RR Lieutenant Colonel R.H.Rogers, the CO of 40 Squadron, SAAF from 9.44, flew Spitfire LF.IX PT672 with a normal squadron code adapted as 'WR-RR', his initials being staggered and painted somewhat smaller than the squadron code.

RST An unidentified Spitfire carried this code at Biggin Hill around 1941/42 when flown by Wing Commander R.Stanford Tuck, DSO, DFC & 2 Bars, who was Wing Leader there from 17.12.41 until being shot down 28.1.42.

RT This code was used on Spitfire LF.16 SL551 of 203 AFS at Keevil and later Chivenor in 1947. It may have related to the CO of the school.

RWO Wing Commander R.W. 'Bobby' Oxspring, DFC & 2 Bars used this code on Meteor III EE482 when he was Wing Commander Flying of the Metropolitan Sector at North Weald in 1946. He also used in a similar post at Church Fenton in 1953/54 on Meteor F,8 WF677, which also bore codes 'MS' and 'PFS' at different times.

SB This code is reported as having been carried on an unidentified Typhoon bearing the name 'Silver Bullet' with the Day Fighter Leaders School element of the Central Fighter Establishment at West Raynham around 3.45, but confirmation is lacking.

SC Hunter F.4 XF304, which had previously been coded 'MR', bore this code with the Caledonian Sector at Turnhouse from 2.54. As no senior officer had these initials, they are assumed to have stood for Sector Commander

SCW Group Captain S.C.Widdows, DFC used this code as Sector Commander, Eastern Sector, Horsham St.Faith from 1952 to 1954 on Meteor F.8 WA773 (also coded 'KBBC') and later WK795 (also coded 'JE' and 'JW').

SD Spitfire Vc EF541 carried this code with 145 Wing at Perranporth in early 1944.

Hornet F.1 PX216 "WA-TN" at Linton-on-Ouse

Spitfire VIII JF814 "WDF"

SEP This code was carried by an unidentified Hurricane I flown by the RAF ADC at North Front, Gibraltar in 1.43, being replaced in 1.43 - 2.43 by a Spitfire.

SF Meteor T.7 WH209 of Station Flight Linton-on-Ouse around 7.53 carried this code with 'KR' superimposed. It may simply have stood for Station Flight.

SFS An unidentified Mustang III bore this code with 133 Wing in 1944 when flown by Wing Commander Stanislaw F.Skalski, DFC & 2 Bars, who was Wing Commander Flying from 1.44 to 6.44.

SM Spitfire Vb AB202 of Station Flight North Weald bore this code around 8.42 when flown by Wing Commander F.D.S.Scott-Malden, the Wing Commander Flying.

SS Spitfire LF.IX RK853 carried this code in 1945. It is stated to relate to Wing Commander Stanislaw F.Skalsi, DFC & 2 Bars, who had earlier used 'SFS' with 133 Wing.

SW Hunter FGA.9 XE645 carried this code with 8/43 Squadron at Khormaksar in 1966/67. The code indicated Strike Wing.

TBB Group Captain T.B.de la P.Beresford, DSO, DFC, the CO of 324 Wing from 31.3.45 until at least 5.45, used this code on Spitfire LF.VIII MB973.

TE Hurricane FB.IIb KZ675 of 587 Squadron bore this code around 9.44. It may possibly have related to the CO, Squadron Leader Edwards.

TH Meteor NF.11 WD645 was flown by an unidentified CO of 256 Squadron at Ahlhorn in the mid-fifties

TJJ Spitfire IX MH530 was seen with this code on a dump in the Middle East in 1946.

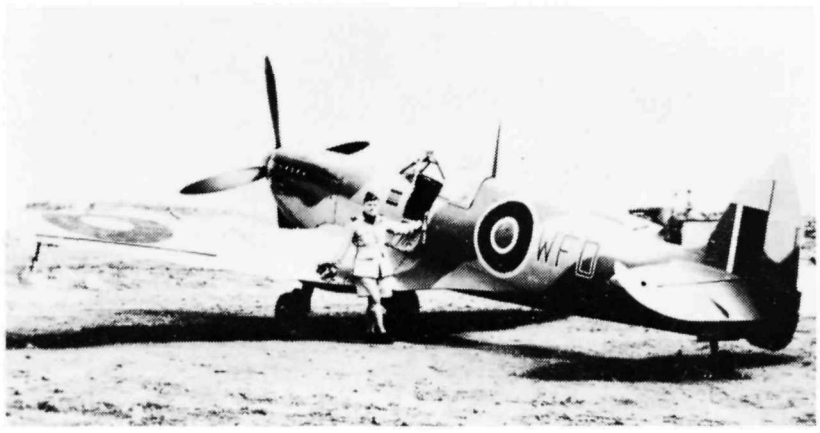
TM Tempest V SN212 had this code at Northolt around 8.45, at which time it was officially on charge to 3 Squadron in 122 Wing. It might possibly have related to Group Captain C.S. ('Tim') Morice, DSO, MC, who had earlier commanded 121 Wing.

TP Used on Venom NF.2 WL858 of 23 Squadron at Coltishall around 7.54.

TP Also used on Sabre F.4 XB589 of 234 Squadron at Geilenkirchen around 1955/56. A possible candidate for this code is Thomas Prickett, who was CO of Tangmere 1949/51

TR An unidentified Mustang III of 133 Wing at Andrews Field in 3.45 was flown by Group Captain Tadeusz H.Rolski, DSO, the CO from 16.2.45 to 7.8.45.

TRB Seen on Spitfire LF.16 TE455, which was flown by 1 (Pilot) Advanced Flying Unit at Finningley from 8.47, the unit becoming the Flying Refresher Unit in 6.49. A possible candidate is Group Captain Thomas Roper Burne, DSO, AFC.



Spitfire F.21 LA232 "TT"

TSW Proctor III LZ707 carried this code with Station Flight Northern Sector at Linton-on-Ouse around 5.52. It might possibly have related to Wing Commander T.S.Wilkinson.

TT Used on Spitfire F.21 LA232 of 12 Group Communications Flight at Church Fenton between about 6.46 and 4.48, it was the personal aircraft of the AOC 12 Group, Air Vice-Marshal Thomas Cathcart Traill, CB, OBE, DFC.

TUL An unidentified Spitfire with this code was flown on several occasions by Potgeiter of 74 Wing Calibration Flight at Halton in 4.42.

TV An unidentified Spitfire Vb with this code at Tangmere belonged to Squadron Leader Thomas Vybiral, DSO, DFC, the CO of 312 Squadron. It may relate to AR511 which was on squadron strength around that time and which he flew.

TW An unidentified Tempest V of 486 Squadron had this code around 2.44. It may therefore have related to 148 Wing, of which it then formed part for a short period.

VA An unidentified Spitfire IX reportedly carried this code with 323 Wing in Italy around 6.44 - 7.44, though no officer with these initials can be identified in the Wing ORB for that period.

VAN Carried on Meteor F.8 EG237 of the 1st Belgian Fighter Wing at Beauvechain around 1951.57. Believed to relate to Van Eeckhout.

VL Mosquito NF.36 RL151 carried this code at one time. It served only with 39 Squadron at Fayid from 7.49 to 12.49 and 219 Squadron at Kabrit from 4.51 to 11.52.

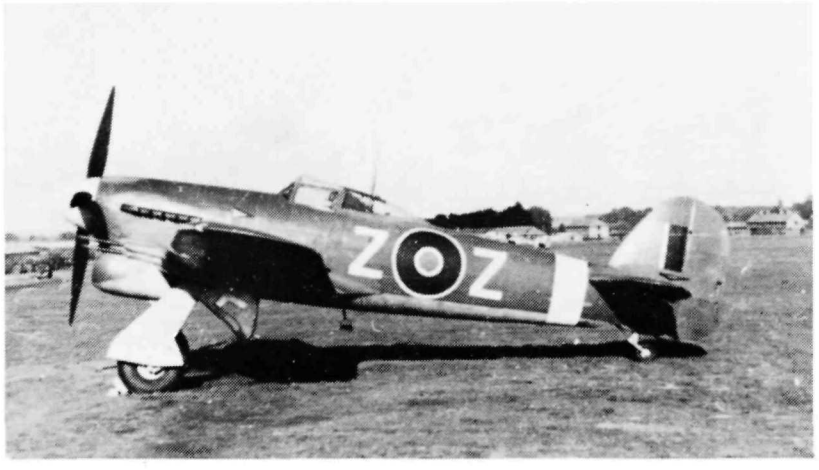
VSB Used on Meteor F.8 WK991 by Air Commodore V.S.Bowling, CBE, Sector Commandant, Northern Sector at Linton-on-Ouse around 1953/55 (also coded 'ES' and HH'). On becoming AOC 11 Group in 6.56 he transferred the code to Meteor F.8 WK943, which was based at Odiham.

WAS Wing Commander W.A.Smith, DFC, AFC, used this code on Vampire FB.5 WA340 when Wing Commander Flying at Fassberg around 19561/53. He later used it on Vampire FB.5 WA419 when Station Commander at Ouston in 1956. This latter aircraft carried a small 'WAS' beneath the cockpit, the normal code letter 'E' and the colours of both 607 and 608 Squadrons.

WATN Hornet F.1 PX216 carried this code around 1948/49 with the Yorkshire Sector at Linton-on-Ouse. The code related to the Wing Commander Operations, Wing Commander W.A. ('Tiny') Nel, DSO, DFC and the aircraft was painted silver overall with red spinners and pale blue codes, of which the letter 'T' was painted somewhat higher.

Hunter FGA.9 XJ673 "XX" of 20 Sqn

Typhoon IB R7698 "ZZ"



FLEET AIR ARM AIRCRAFT ACCIDENTS AND LOSSES 1950

Date	Type	Serial	Unit	Location	Cause
4.1.50	Firefly AS.5	WB287	812 Sqdn	HMS Glory off Malta	Crashed 200 yds off starboard beam after diving in erratic manoeuvre
8.1.50	Firefly FR.1	PP566	1830 Sqdn	Meikle Bin, Kilsyth Hills, N of Glasgow	Radio reception trouble, passed over airfield then crashed into hillside
24.1.50	Seafire F.47	VP438	800 Sqdn	Changi	Engine trouble; hit trees on attempted forced landing
29.1.50	Sea Hornet F.20	VR860	801 Sqdn	HMS Implacable	Tail hit rounddown and snapped; aircraft bounced and skidded along deck; hit No.1 barrier stanchion with port wing
7.2.50	Sea Hornet F.20	VR855	801 Sqdn	HMS Implacable	Bounced after fast approach; starboard wing struck two Bofors guns and aircraft alighted in deck park
12.2.50	Seafire F.17	SX129	1831 Sqdn	Adlington Hall, nr Chorley, Lancs	Dived out of cloud into ground; DBF
10.2.50	Firefly FR.1	MB468	766 Sqdn	Lossiemouth	Swung on landing; both undercarriage legs collapsed
17.2.50	Harvard T.2b	KF553	1832 Sqdn	Culham	Engine cut on TO; wheels-up landing in field
19.2.50	Firefly FR.1	PP431	826 Sqdn	HMCS Magnificent	Lost at sea
20.2.50?	Sea Fury FB.11	VX629	799 Sqdn	Yeovilton	No details
22.2.50	?	?	?	HMS Illustrious	Crashed in sea
25.2.50	Firefly FR.4	VH125	825 Sqdn	HMCS Magnificent	Struck rounddown; starboard oleo collapsed; skidded along deck and went over starboard side
27.2.50	Sea Fury FB.11	VR939	No.1 Ferry Flight	1m S of Culham	Engine trouble on TO for ferrying to Donibristle; crashed, burst into flames on touch down in wood just outside perimeter
7.3.50	Firefly FR.1	PP464	827 Sqdn	HMS Triumph in Far East waters	No details
9.3.50?	Seafire F.15	SW813	1833 Sqdn	HMS Illustrious	Barrier crash; overturned, caught fire
14.3.50	Seafire F.47	VP492	800 Sqdn	HMS Triumph in Far East waters	Broke back landing
21.3.50	Sea Fury FB.11	VX668	892 Sqdn	HMS Vengeance	Jinked to starboard after TO; increased rate of turn, half rolled and fell into sea; pilot rescued by destroyer
21.3.50	Firebrand TF.5	EK692	813 Sqdn	HMS Glory	Engine failure; tried to land on ship but lacked power; ditched alongside
22.3.50	Sea Fury FB.11	VW716	804 Sqdn	50m W of Gibraltar, from HMS Glory	Stalled into sea on TO
1.4.50	Firefly FR.1	PP434	827 Sqdn	HMS Triumph in Far East waters	No details
5.4.50	Firefly FR.1	PP481	827 Sqdn	HMS Triumph in Far East waters	No details
8.4.50	Firefly FR.1	PP542	827 Sqdn	HMS Triumph in Far East waters	No details
11.4.50	?	?	17 CAG	Predannack	Power failure on TO after ADDL;overshot runway and overturned
17.4.50	Firefly FR.1	?	827 Sqdn	off Kure, Japan	Collided with Mustang of 77 Sqdn RAAF, both aircraft plunged into sea
23.4.50	Seafire F.15	SR611	1832 Sqdn	Highmoor Cross, Nettlebed, Oxon	Lost control during battle formation practice; collided with SX290 which landed safely; crashed in orchard
25.4.50	Firebrand TF.5	EK797	813 Sqdn	Off Portland	Ditched after throttle linkage parted; pilot picked up by HMS Headingham Castle
15.5.50	Barracuda TR.3	RJ965	815 Sqdn	HMS Implacable	Heavy landing; port undercarriage collapsed
15.5.50	Sea Fury FB.11	VX630	736 Sqdn	HMS Illustrious	Landed to starboard; hook engaged, aircraft struck starboard after pop pom mounting and caught fire
17.5.50	Sea Hornet F.20	TT199	801 Sqdn	In sea off HMS Implacable	Collided with VR851 at 10,000ft; both fell in sea towards Mull of Galloway
17.5.50	Sea Hornet F.20	VR851	801 Sqdn	In sea off HMS Implacable	Collided with TT199 at 10,000ft, both fell in sea towards Mull of Galloway
24.5.50	Sea Fury FB.11	VW589	804 Sqdn	HMS Glory of Malta	Hooks failed to engage; went over port side
12.6.50	Sea Hornet F.20	VR862	801 Sqdn	HMS Implacable off St. Kilda	Port wing folded after TO; crashed in sea 100 yds ahead of ship
20.6.50	Seafire F.15	SW805	1832 Sqdn	HMS Theseus	During deck landing practice, tail oleo collapsed after landing; stern damaged
21.6.50	Seafire F.15	SW921	1832 Sqdn	HMS Theseus	Starboard oleo collapsed after heavy landing
23.6.50	?	?	?	nr Lossiemouth	Missing over sea

Date	Type	Serial	Unit	Location	Cause
26.6.50	Seafire F.15	SW828	767 Sqdn	Yeovilton	Wheels up landing after engine failure
26.6.50	Firefly FR.1	PP585	827 Sqdn	HMS Triumph in Far East	Barrier crash
28.6.50	Sea Hornet F.20	VZ713	801 Sqdn	N of Cape Wrath	While carrying out exercises with another aircraft, crashed in sea from tight turn at 100 ft and exploded on impact
10.7.50	Firefly FR(AS).5	VT375	817 Sqdn	Treburick Farm, St.Merryn	Engine trouble; forced landed, crashed through hedge and caught fire
12.7.50	?	?	Culdrose	HMS Illustrious	Crashed in sea and sank
26.7.50	Meteor T.7	VW436	702 Sqdn	St.Mounts Bay, Cornwall	Disintegrated in air and crashed in sea
26.7.50	Sea Fury FB.11	TF960	Anthorn	Beach in N.Ireland	Engine trouble; attempted wheels down landing on duty runway; undershot, touched down on soft ground, overturned
28.7.50	Seafire F.47	VP473	800 Sqdn	HMS Triumph in Korean waters	Shot down by USAF B-29, possibly in mistake for a YAK-9. Pilot picked up by destroyer
29.7.50	Sea Fury FB.11	VW665	804 Sqdn	HMS Glory	Forced landed after loss of power
10.8.50	Firefly FR.1	MB552	1830 Sqdn	Ciampino	Undercarriage collapsed on landing
21.8.50	Firefly AS.5	WB255	810 Sqdn	HMS Theseus in Mediterranean	Pushed overboard by WB293
21.8.50	Firefly AS.5	WB293	810 Sqdn	HMS Theseus in Mediterranean	Bounced along deck park pushing WB255 overboard and damaging VT485
6.9.50	Seafire F.17	SX242	1831 Sqdn	HMS Illustrious	Misjudged flare; bounced over all wires into safety barrier
8.9.50	Firefly FR.1	MB687	827 Sqdn	HMS Triumph in Korean waters	Fast landing; bounced tail up into No.2 barrier; both undercarriage legs torn off; difficulty in folding wings so jettisoned
12.9.50	Firefly FR.1	MB589	766 Sqdn	½m S of Cuminestown, Aberdeenshire	Flew into ground on low level navex
12.9.50	Seafire F.15	SW876	767 Sqdn	HMS Illustrious	Tracking from starboard to port, bounced as wire engaged; port oleo collapsed
13.9.50	Seafire F.15	PR371	766 Sqdn	Moray Golf Course, Lossiemouth	Stalled at 100ft on approach and crashed inverted
13.9.50	Firefly AS.5	WB285	796 Sqdn	St.Merryn	Bounced landing; opened up to go round again, torque stalled from 150ft; crashed inverted on airfield and burst into flames
13.9.50	Martinet TT.1	RG974	Stn Flt St Merryn	8m N of Trevose Head	While towing winged target, shot down into sea by Culdrose Sea Fury
14.9.50	Sea Hornet F.20	VZ710	801 Sqdn	Lee-on-Solent	During aerobatic demonstration for Argentine cadets, looped from fast low run and failed to pull out of resultant dive
25.9.50	Firefly AS.5	?	719 Sqdn	N of Port Ellen, Islay	Hit mountainside on navex
26.9.50	Firefly FR(AS).5	VT489	817 Sqdn	HMAS Sydney	Finished approach high with deck pitching; bounced at No.7 wire, engaged Nos.2 & 3 barriers
26.9.50	Sea Fury FB.11	VW587	807 Sqdn	Hadden Hill, New Territories, Hong Kong	Crashed into hill during ground attack exercise against Army MT; DBF
27.9.50	Sea Fury FB.11	VW706	804 Sqdn	HMS Glory, last seen 17m ENE Cape De Palos	Lost touch with flight in heavy storm
1.10.50	Firebrand TF.5	EK774	813 Sqdn	5124N 0210E	Engine failure; ditched in rough sea
6.10.50	Firefly AS.5	WB418	812 Sqdn	off Gozo	Crashed into deep water during air manoeuvres after colliding with VT423 which landed safely at Hal Far
6.10.50	Sea Fury FB.11	VW574	736 Sqdn	Culdrose	During ADDLs, swung off runway on TO; nosed over on to back in soft ground
8.10.50	Firefly AS.5	WB281	810 Sqdn	HMS Theseus in Korean waters	Floated over wires and bounced, damaging WB281, WB369 and WB376. Pushed overboard
17.10.50	Sea Fury TF.10	TF927	736 Sqdn	HMS Illustrious	Lost height during turn while landing; crashed in sea inverted
31.10.50	Mosquito PR.16	MM273	728 Sqdn	off Malta	Turned steeply to port and crashed in sea while carrying out single-engined landing
14.10.50	Firefly AS.5	VX426	810 Sqdn	HMS Theseus in Korean waters	Destroyed in deck accident
7.11.50	Tiger Moth T.2	BB865	Stn Flt Gosport	Ryde Town, Isle of Wight	Dived into ground during aerobatics
17.11.50	Sea Fury FB.11	TF972	736 Sqdn	¾m W of Lizard	Port wing tip struck by propeller of another aircraft during squadron form up; crashed in sea
18.11.50	Sea Fury FB.11	VX625	804 Sqdn	Hal Far	No details
24.11.50	Sea Fury FB.11	VW234	807 Sqdn	HMS Theseus in Far East	Taxied into deck park damaging Fireflies WB375 and WB376
30.11.50	Firefly F.1	DK498	766 Sqdn	Lossiemouth	Third in stream TO; jinked to starboard TO, developed into steepening turn through 160 degrees, when starboard wing touched ground; cartwheeled and caught fire
30.11.50	Firebrand TF.5	EK764	813 Sqdn	HMS Implacable	Crashed on landing
6.12.50	Sea Hornet F.20	VZ715	801 Sqdn	HMS Implacable	Crashed on flight deck
24.12.50	Sea Fury FB.11	VW541	807 Sqdn	HMS Theseus off Korea	Ditched

BOOKSHELF

HISTORY OF THE WORLD'S GLIDER FORCES
by Alan Wood Patrick Stephens £17.50

The German glider-borne attack on Fort Eben Emael during the first hours of the German invasion of Belgium on 10 May 1940 marked the beginning of airborne operations using gliders to ensure that small groups of men went into action together and not strewn around the countryside as was the case with the well-established parachute forces. It was a logical result of pre-war proposals in several countries to use glider trains to deliver goods (mainly mail and newspapers) by casting off gliders at various points en route. Nothing came of these projects but the idea was sown in the military mind.

This book chronicles both the operations in which gliders took part and the equipment used by those countries which formed airborne forces. Each significant operation is detailed and supported by good maps.

The glider-borne forces were of short duration and after the end of the war there was little scope for their use before the task of dropping groups of soldiers behind enemy lines was taken over by the helicopter.

A useful book for anyone interested in air-borne operations.

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AIRCRAFT OF THE SPANISH CIVIL WAR
by Gerald Howson Putnam £35.00

Another Putnam in the new and apparently-standard A.4 format describes the aircraft used in the Spanish Civil War, a subject that has not had the coverage it deserves. It ended over fifty years ago but there are still myths about the types involved. A book published recently brought out the Curtiss, Boeing and Martin again, of which only the Boeing 281 in a sole example was to be found in Spanish skies, where it was described as a "rattletrap". This did not stop the US press from declaring the the Civil War "showed the lead of US airplanes"! It appeared that anything with two wings was a Curtiss, one wing was a Boeing and two engines was a Martin and to insular American writers, anything resembling these was an obvious copy.

In fact, the war was a rehearsal for the approaching world war in that it involved effective fighters and bombers that were in large-scale service in September 1939. The I-16 and SB-2 showed that Russian industry could produce competitive fighters and bombers while the Bf 109s and He 111s equipped both German and Spanish Nationalist squadrons, as did the less-effective CR 32s, SM 73s and SM 81s arriving from Italy.

The armed forces involved produced a lot less paperwork than their World War Two equivalents so much detail has been unrecorded but this is an invaluable reference to the 280-odd types that served in Spain. Since around 3,500 air-craft were involved, not all these types were in quantity service!

Among the unusual types depicted are the Romano R.83, PWS 10 and Martinsyde F.4 single seat fighters, Hispano E.30 and Hanriot H-437 trainers and Ford Trimotor transports. The latter are oddly captioned as being at the Ford factory at Dearborn, Michigan, but posed in front of the unmistakable WW.1 hangars at Ford, Sussex, where Henry decided to put his European base for some reason!

Expensive but essential to military aviation historians.

MILITARY AIRCRAFT MARKINGS AND PROFILES
by Barry C Wheeler Hamlyn £14.95

A colourful collection of side-views forms virtually all of this book with a 13-page section, half text and half photographs, providing a very generalised introduction to the subject.

The drawings are the well-known Pilot Press examples found in Air International and Air Enthusiast and are classified under types, so there is nothing too exotic among them. World War One is represented by a page each for the Avro 504, S.E.5A, Camel, Albatros D.V plus two for the Fokker Triplane. Six pre-war types are illustrated with some others that were in full-scale service during World War Two. There are some captioning glitches; the Vulcan B.Mk.1 was followed by the B.Mk.II...

If one likes looking at good colour drawings this is a pleasing book and it also saves searching through files of magazines to find a colour scheme of one of the 138 types included. No Wellingtons or Wildcats! But don't expect a detailed work on military aircraft markings.

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THE ROYAL AIRCRAFT FACTORY by Paul R.Hare
Putnam - £25.00

Back to the traditional format for this addition to the Putnam range. Hopefully, it is intended to keep all the British manufacturers in the same size.

The original RAF had to change its name to the RAE in April 1918 and at the end of World War One gave up designing aircraft to concentrate on the development and testing of aeronautical ideas. But while it did build its own aircraft, several memorable types emerged. The S.E.5A was one of the best fighters of the war, the B.E.2C did an excellent job for its time until events caught up with it and the R.E.8 was not too bad either.

There is no picture of the S.E.5B so we found one! Nor the Farnborough Ram but.....

Another hole on the Putnam shelf has been filled and although there is little new in the way of aircraft, the long introduction gives a good account of the Factory.