

## John Stroud's series on European post-war piston-engined airliners continues with the Short Sunderland flying-boat



## **POST-WAR PROPLINERS**



The Short Sunderland was one of the truly outstanding aircraft of the Second World War (see Aeroplane, May 1988) and its history in military service is well known and extensively recorded; but probably far less known is its contribution to wartime and post-war air transport.

Late in 1933 Air Ministry issued Specification R.2/33 for a long-range general purpose flying-boat; Short Brothers and Saunders-Roe designed aircraft to meet this specification. Orders for prototypes were awarded to both companies and Short's design was the S.25, a large four-engined high-wing monoplane with single fin and rudder and with wing-mounted stabilising floats.

The prototype S.25 was K4774, c/n S.803, and it made its first flight on October 16, 1937. It was powered by 950 h.p. Bristol Pegasus X nine-cylinder aircooled radials and had an unswept wing. In general outline and size it closely resembled the S.23 C-class Empire Flying-boats which Shorts were building for Imperial Airways to implement the Empire Air Mail Programme.

K4774 was modified to have a swept wing and 1,010 h.p. Pegasus XXII engines and it would appear to be the Pegasus XXII which powered the Sunderland Mk I of which 11 were ordered in March 1936 — L2158–2168, c/ns S.860–870, to Specification 22/36.

Four further marks of Sunderland were to follow: Mk II with 1,030 h.p. Pegasus XVIII and modified armament; Mk III with faired main step to reduce drag; Mk IV with modified tail surfaces (but only two were built); and Mk V with 14-cylinder 1,200 h.p. Pratt & Whitney R-1830 Twin Wasps. Maximum weights were 50,100lb (Mk I), 58,000lb (Mks II and III) and 65,000lb (Mk V).

Including the two Mk IV 'boats and eight production Seafords a total of 749 Sunderlands was built (341 at Rochester, 133 at Belfast, 35 at Windermere and 240 by Blackburn at Dumbarton).

Heading photograph, the Hythe class Sunderland G-AGHZ as Hawkesbury. KEITH WOODCOCK's painting depicts the same aircraft, G-AGHZ Hawkesbury, ex-ML727, which was later sold to Aquila Airways. Sunderlands served with RAF Coastal Command, Royal Australian Air Force, Royal New Zealand Air Force, South African Air Force, Aéronavale, and Canadian and Norwegian squadrons of the RAF. The type remained in service with the RAF until May 1958 and the RNZAF withdrew its last, NZ4116, early in 1967. During the evacuation of Crete a Sunderland took off with 84 on board and in RAF service Sunderlands carried 4,700 tons of food into blockaded Berlin during the Air Lift.

The Sunderland's close resemblance to the C-class 'boats and its large internal volume made it very suitable for transport work. To assist BOAC in its operations and collaboration with RAF Transport Command, the decision was taken to release some to the airline. Six Sunderland IIIs were taken from the Rochester production line, stripped of military equipment and given fairings over the nose and tail gun turret positions. Bench-type seats were fitted. These first six 'boats were JM660-665 and they were registered G-AGER G-AGEW and given camouflaged exteriors. In March 1943 BOAC began



Right, BOAC's Sunderland III G-AGJM after being converted to Hythe class Hythe.

Below, BOAC's Sunderland III G-AGKX unpainted, carrying RAF markings, a Speedbird on the bows and Transport Command code OQZF.



operating Sunderlands between Poole and Lagos.

G-AGES crashed in fog near Brandon Head, County Kerry, on July 28, 1943, and was replaced by JM732/G-AGHV. In August 1943 the airline was allocated another five — ML725-729 — which were registered G-AGHW, G-AGHX, and G-AGHZ—G-AGIB. A further six, ML751—756 as G-AGJJ—G-AGJO, were acquired in January 1944 and a final six, ML786-791, as

G-AGKV—LA, that July and August — making a total of 24.

The Sunderlands were withdrawn from the West Africa route on October 25, 1943, and on that day began a thrice weekly Poole—Cairo—Karachi service. As these flights passed through military areas the 'boats were given Transport Command codes in the series OQZA—OQZZ, although not all sequences were used. Photographic evidence suggests that by then the

Sunderlands were unpainted and that the civil registrations had been removed. For the full list of BOAC Sunderlands with codes and subsequent names see the Table.

From May 10, 1944, the Karachi services were extended to Calcutta, the route being Poole—Gibraltar—Djerba—Cairo—Habbaniya—Bahrain—Jiwani—Karachi—Gwalior—Calcutta. From December 12 direct flights were made across France and on February 20, 1945, Augusta in Sicily was substituted for Djerba. On October 9 the route was extended to Rangoon with G-AGHX operating the first service.

With the return of peacetime conditions BOAC embarked on the refurbishing of the Sunderlands to proper airline

Below, BOAC Short Sunderland III G-AGHW in wartime camouflage at Rod-el-Farag, Cairo. Right, BOAC's Hythe G-AGEU Hampshire after passing to Aquila Airways.







standard. There were three interior layouts: H.1 with 16 passengers on the main deck; H.2 with a promenade deck and H.3 with 24 seats. The Sunderland's front turret fairing was retained — it slid aft — to facilitate mooring. After conversion the 'boats were known as the Hythe class and had names beginning with H. One, G-AGKX, was further modified with faired bows and tailcone and became the sole Sandringham 1,

with Pegasus engines.

On the last day of January 1946 BOAC used a Hythe 'boat to reopen the United Kingdom—Singapore flying-boat service, at a frequency of three flights a week, and from February 17 to April 2 G-AGJM made a 35,000-mile survey flight from Poole to Australia, New Zealand, Hong Kong, Shanghai and Tokyo and return. Flying time was 206hr 9min and the 'boat was under the command of Capt R.C. Parker. During the course of this tour G-AGJM became the first British airliner to alight on the Wang-poo at Shanghai and on Tokyo Bay.

On May 12, 1946, BOAC in collaboration with Qantas opened the first postwar United Kingdom—Australia flyingboat service, twice weekly from Poole to Sydney via Marseilles, Augusta, Cairo, Basra, Bahrain, Karachi, Calcutta, Rangoon, Singapore, Sourabaya, Darwin and Bowen to a 5½-

Above left, G-AGJM Hythe with nose turret fairing slid aft for mooring. Above right, one of the Hythe class cabins with upper bunk stowed.

day schedule. G-AGJN operated the first service as far as Singapore, where Qantas took over with G-AGJL. The first westbound flight left Sydney on May 18 with G-AGJK flying to Karachi and G-AGJJ from Karachi to Poole,

A weekly *Dragon* service between the United Kingdom and Hong Kong was opened on August 24, 1946, with G-AGLA flying the first outward journey and G-AGKZ flying the first westbound. A weekly Singapore—Bangkok—Hong Kong service began on August 26.

GrAHER alighted on the Zambezi above Victoria Falls, the first to do so, on December 11, 1947, during a proving flight to South Africa before introduction of Solents; and on the last day of March 1948 BOAC transferred its flying-boat base from Poole back to Hythe, with G-AGEW operating the first service out of Southampton the next day.

On February 16, 1949, G-AGJO arrived at Southampton on the last sector from Australia, completing the last BOAC service to be operated by Sunderlands. During their service with the airline they had flown 25,117,246

miles and carried 79,793 passengers.

Eight 'boats were lost during their six years of service — G-AGES crashed in fog in County Kerry on July 28, 1943; G-AGET was burned out on the Hooghly at Calcutta while refuelling on February 15, 1946; G-AGEV was damaged beyond repair in a heavy alighting at Poole on March 4, 1946; G-AGEW was damaged on take-off and sank at Sourabaya on September 5, 1948; G-AGHV capsized in a storm on the Nile at Cairo on the night of March 9-10, 1946; G-AGHW crashed on Brighstone Down in the Isle of Wight on November 19, 1947; G-AGIB crashed in Libya on the night of November 5-6, 1948; and G-AGJO was damaged beyond repair at Hythe on July 21, 1948. G-AGKX, as mentioned, was converted to the Sandringham prototype; G-AGKV and G-AGKW were returned to Shorts; G-AGKZ was scrapped and the remaining 'boats were sold to Aquila Airways.

Aquila used its Sunderlands on a fortnightly Southampton—Lisbon —Funchal (Madeira) service begun on June 11, 1949, and weekly Madeira— Lisbon services, having made the first survey flight with G-AGEU on March 24–25.

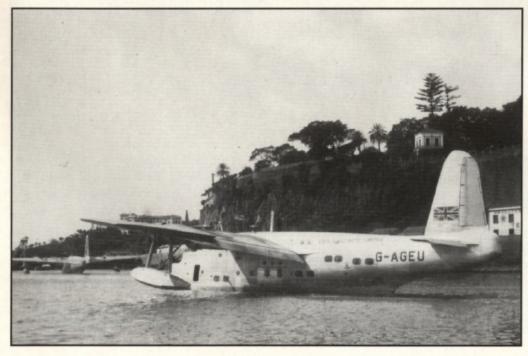
Berlin Air Lift

Apart from the 'boats taken over from BOAC, G-ANAK was registered to Aquila. This was the Blackburn-built PP162 but it was not converted and was damaged beyond repair in a gale at Hamble in November 1954.

It should be mentioned that in addition to the RAF Sunderlands' contribution to the Berlin Air Lift, Aquila's Sunderlands made more than 260 flights to Havel Lake with supplies for Berlin.

BOAC and Aquila Airways were not the only commercial operators of Sunderlands, other 'boats carrying the registrations of Australia, New Zealand, the Argentine, Uruguay and the Virgin Islands. A number of these civil 'boats were converted by Short Brothers & Harland at Belfast and given numbers prefixed by the letters SH and the suffix C.

Three RAAF Mk IIIs were converted to civil aircraft for Trans Oceanic Airways for Sydney — Lord Howe Island services and other operations. These were A26-2 (ML731), A26-4 (ML733) and



A26-5 (ML734) which became respectively VH-AKQ Samoa Star, VH-AKO Australis and VH-AKP Tahiti Star. On November 1, 1947, New Zealand

On November 1, 1947, New Zealand National Airways took over operation from the RNZAF of Auckland — Fiji services and used three ex-RNZAF Sunderlands — NZ4102-4, which became ZK-AMF Tokomaru, ZK-AMG Mataatua and ZK-AMK Takitmu. ZK-AMG operated the first Auckland —Suva—Labasa service and the 'boats also worked to Norfolk Island, Tonga and the Cook Islands. On January 1, 1949, ZK-AMG inaugurated an Auckland—Wellington—Chatham Island service.

Much later NZ4108 was converted to near-Sandringham standard for Ansett Flying Boat Services as VH-BRF *Islander* to replace a 'boat lost at Lord Howe Island. This Ansett 'boat is still airworthy and I will mention it again next month.

Below, Trans Oceanic Airways Sunderland III VH-AKO Australis on the lagoon at Lord Howe Island. Bottom, Sunderland III E-J156 at Belfast after conversion to airline standard for CAUSA. G-AGWW became CX-AFA.

BOAC Sunderland IIIs				
G-AGER	JM660	OQZR	Hadfield	To Aquila Airways
G-AGES	JM661	OQZS	unconverted	Crashed in Ireland 28/7/43
G-AGET	JM662	OQZT	unconverted	Burned out Calcutta 15/2/46
G-AGEU	JM663	OQZU	Hampshire	To Aquila
G-AGEV	JM664	OQZV	Hailsham	dbr at Poole 4/3/46
G-AGEW	JM665	OQZW	Halton, later Hanwell	Sank Sourabaya 5/9/48
G-AGHV	JM722	OQZB	Hamble	Capsized Cairo 9-10/3/46
G-AGHW	ML725	OQZC	Hamilton	Crashed Isle of Wight 19/11/47
G-AGHX	ML726	OQZX	Harlech, later Harlequin	
G-AGHZ	ML727	OQZY	Hastings, later Hawkesbury	To Aquila
		or		
		OQZZ		
G-AGIA	ML728	OQZA	Haslemere	To Aquila
G-AGIB	ML729			Crashed near Sollum 5-6/11/48
G-AGJJ	ML751	OQZJ	Henley	To Aquila
G-AGJK	ML752	OQZK	Howard	To Aquila
G-AGJL	ML753	OQZL	Hobart	To Aquila
G-AGJM	ML754	OQZM	Hythe	To Aquila
G-AGJN	ML755	OQZN	Hudson	To Aquila
G-AGJO	ML756	OQZO	Humber, later Honduras	dbr Hythe 21/7/48
G-AGKV	ML786	OQZD	Huntingdon	To Shorts
G-AGKW	ML787	OQZE	Hereford, later Hotspur	To Shorts
G-AGKX	ML788	OQZF	Himalaya	Cvt Sandringham 1. To Aquila
G-AGKY	ML789	OQZG	Hungerford	To Aquila
G-AGKZ	ML790	OQZH	Harwich	Scrapped
G-AGLA	ML791	OQZI	Hunter	To Aquila

No code or name has been traced for G-AGIB and OQZY and OQZZ have both been reported for G-AGHZ. Names were allocated after conversion to Hythe class.

In addition to wartime allocation BOAC had the Mk IIIs G-AHEO (JM716) Halstead and G-AHER (PP142) Helmsdale which both passed to Aquila; G-AHEP (DD860) was allocated the name Hanbury but was not converted and returned to the RAF. Mk V G-AHJR (SZ584) was lent to BOAC for cargo work and returned to the RAF.



Five Belfast Sunderland conversions went to South America. SH.5C EJ156 became G-AGWW and went to Compañía Aeronáutica Uruguayana SA (CAUSA) as CX-AFA General Artigas; SH.6C ML876/G-AGWX was bought by Compañía Argentina de Aeronave-gación Dodero for CAUSA but first went to Corporación Sudamericana as LV-AAS, passed to Aviación del Litoral Fluvial Argentina (ALFA) as Rio de la Plata and was flown by CAUSA as CX-AKF; SH.60C DP195 went to CAUSA as CX-AKR Capitan Bosio Lanza; SH.69C EJ171 and SH.70C EK579 went to Aerolineas Argentinas as LV-AHH Rio de la Plata and LV-AHG Uruguay. SH.5C and 6C were Mk IIIs and the others Mk Vs.

> Next month: the Short Sandringham

