INDIVIDUAL HISTORY

<u>DE HAVILLAND COMET 1XB F-BGNZ/XM823/ G -APAS/8351M</u> <u>MUSEUM ACCESSION NUMBER 84/A/1186</u>

Built at Hatfield, Herts. The last of 21 Comet 1 aircraft to be completed. Constructors number 06022.

- 16 Mar 53 First flight following completion at Hatfield.
- Delivered to Air France as F BGNZ as the third of three Ghost 50 Mk 2 powered improved Comet 1As ordered by that operator 16 Nov 51. Total flying hours 13.35. These export Comets had increased all-up weight with 44 seats and greater fuel capacity compared to the BOAC series 1 aircraft, and an increased cruising altitude of 40,000ft. The Air France aircraft carried a livery of white fuselage upper surfaces, natural metal lower fuselage side and wings, with titling, registration, and fuselage cheat line in blue.
- 28 Jul 53 Certificate of Airworthiness issued.
- 8 Sep 53 Entered service with Air France on its first regular service with a jet airliner. Operated on the weekly Paris (Le Bourget) Rome Beirut service which had started on Wednesday 26 August 1953 (Beirut at that time being a sophisticated holiday destination) using Comet F-BGNY, with the return run being made on Thursdays. Routes from Le Bourget to Cairo, Algiers (a route of 832 miles) and Casablanca commenced the following month. The return flights from Casablanca were timetabled at 4 hrs 20 minutes, from Algiers 3.5 hours, and from Cairo 6 ¾ hours including a one-hour stop at Rome.

Air France also intended to use its Comets on services to the Far East.

- 11 Jan 54 Withdrawn from Air France service when the BOAC Comet fleet was grounded for inspection following the loss of BOAC Comet G-ALYP over the Mediterranean off Elba the previous day. At the time of withdrawal the aircraft had flown 371 hours and made 211 landings.
- 7 Feb 54 Test flight including two landings.
- 18 Feb 54 Returned to the manufacturers at Hatfield for modifications (similar to those applied to BOAC aircraft) required by the Abel Committee aimed at engine failure and other possible causes of the unexplained BOAC Comet losses. Hours flown on arrival at Hatfield from Le Bourget 372 hours 22 minutes (213 landings). Delivered with the British class B markings G 5 23.

See 'A View From the Ground' Aeroplane, October 2002 p.63; 'NZ being the first Comet to receive attention at Hatfield as part of a major modification programme, including installing a drooped wing leading edge and strengthening undercarriage doors.

- Test flown (2 1/2 hours) at Hatfield following modifications (including lining engine-bay doors with thin stainless steel sheet) with the return to Air France anticipated the following day, but the loss of BOAC Comet G -ALYY which crashed off Naples on this date causing the immediate grounding of all Comets and the resulting withdrawal of the Comets Certificate of Airworthiness 4 days later prevented this.
- The delivery to Air France did not proceed and following purchase by the Ministry of Supply in April along with the two other Air France machines and two from the RCAF the aircraft went instead to RAF Kemble for sealed storage, with regular checks up to 21 May 1955.
- 9 Jun 55 Released from storage and flown from Kemble to Hatfield for further storage
- 22 May 56 Test flown from Hatfield as G 5- 23. Several further test flights made up to 24 Sep 56.
- To De Havilland's at Broughton, Chester for a conversion programme, becoming a Comet 1XB. Fitted with De Havilland Ghost 50 Mk 4 engines with 5,500 lb static thrust each, strengthened fuselage, rounded windows and other modifications. The last such Comet conversion to take place.
- 23 May 57 Registered to Ministry of Supply as G APAS
- 29 Nov 57 First flight after rebuild, from Chester. Test flights continuing until 7 Jan 58.
- 10 Jan 58 Issued with Certificate of Airworthiness.
- 29Jan 58 Delivered to Ministry of Supply (later the Ministry of Technology) air fleet for trials work and based at Hatfield.
- 30 Jan 58 Handed over to the De Havilland Propeller Co, Hatfield, Herts for special flying duties measuring radiant intensity and flight trials of experimental infrared guidance equipment in connection with the research into infra red weapon programmes, initially for the Red Top and Firestreak air-to-air missiles. The preparation work took almost two years, and marked the commencement of a research programme which continued for the next ten years and included several tasks in the USA, based at Edwards Air Force Base, including trials for the USAF. Colour schemes worn included overall black with Day-Glo centre fuselage and silver and white similar to Transport Command aircraft in which the aircraft began and ended its trials career. On one occasion test pilot George Aird suffered a fire warning incident when a leak of hot gasses triggered the fire warning mechanism.

A double hydraulic failure led to a 30mph run off the end of the runway with all four engines shut down. There was no pressure for the brakes or nosewheel steering and the flaps were halfway down.

There was just enough pressure in the flying control circuits to enable Aird to rudder away from an approaching blockhouse at the end of the runway before stopping on the grass. The problem was due to a defective hydraulic hose and faulty non - return valve.

- 10 Feb 58 Issued with serial XM823 under contract 6/Acft/15321 CB. Photo as XM823 de Havilland Comet (Ashworth, 014723) p.3
- 15 May 58 Authorisation given for transfer to English Electric at Warton for use in conjunction with English Electric P1 (Lightning) trials.
- 22 Oct 58 Civilian registration cancelled.
- 10 Aug 61 To De Havilland Aircraft Co at the Handley Page airfield at Radlett, Herts for work on contract KD/L/019/CB10 (a). The de Havilland Propeller Company became part of the Hawker Siddeley group in April 1961.
- 21 Aug 61 Returned to De Havilland's at Hatfield, Herts for continuation of trials.
- 27 Nov 61 Damaged during refuelling operation and repaired.
- 2 Dec 61 Departed for America via Prestwick, Keflavik (Iceland), Goose Bay (Labrador). Toronto, Tinker and on to Edwards Air Force Base, not returning to Hatfield until 6 May 1962. During this visit the aircraft, fitted out as a flying laboratory to measure infra red radiation participated in tests with a Convair B-58 Hustler at Edwards AFB as part of 'Operation Rose Petal' before moving to Patrick AFB for further tests.

From April 1964 grounded sister ship XM829, C/N 6021, ex Air France F-BGNY/G-AOJU (latterly registered XM829 from March 1958, and allocated to the A&AEE, Boscombe Down for Decca/Dectra Navigation trials from 14 June 1961) at Stansted Fire Training School provided spare parts including engines, these being fitted on 10 April 1964.

First flown 22 May 1953, delivered 7 July 1953, F-BGNY operated the first Air France turbojet service on 26 August 1953 on the Paris – Rome – Beirut route.

It had flown to Stansted on 20 February 1964, and survived for some time as a training airframe for lifting-bag experiments until finally burned in November 1970.

22 May 64 Further infra-red trials to contract KU/R/041/CB51 (a), concluding 14 August 1964.

The marks G -APAS and G - 5 - 23 were carried again later but not officially restored and the aircraft reverted to XM823 with Hawker Siddeley Dynamics Ltd.

Undated colour photo as XM823 – Aeromilitaria Spring 2012 p.41

21 Apr 65 Further Hatfield based trials – AJ168 air to ground missile development (data link trials); loan extended to 30 April 1967.

Apr 67 The logbook of George Aird (photocopy on file) records trial flights measuring background readings around Pershore and North Wales in XM823 on April 3rd/4th/7th/12th/17th/12th/21st and 25th

1 May 67 Final trial flight - three hours at 35,000 feet over East Anglia.

6 May 67 Aircraft released from Trials work. Stored at Hatfield pending disposal.

It was originally expected that the aircraft would go to the British Historic Aircraft Museum at Southend, Essex but this move did not occur.

30 Nov 67 Aircraft struck off Min Tech charge.

23 Feb 68 Approval given for transfer to RAF Museum.

Following a 50 minute test flight earlier in the day, with a crew of four made a 45 minute flight from Hawker Siddeley Aircraft Ltd at Hatfield to No.27 Maintenance Unit RAF Shawbury, Salop for outdoor storage. Photo during last flight – Nimrod The Centenarian Aircraft (Gunston 2009) p.58.

Photo dated 13 Sep 1970 - British Aviation Review Dec 1979 p.451. (moving into a hangar in 1973) following transfer to the MoD (Air) as a future exhibit for the RAF Museum. After take off the aircraft made a low level 'beat up' of Hatfield - Photo Flypast June 1994 p.51. The pilot signed off the flight as 'very satisfactory!' Co-pilot was George Aird AFC (logbook extract on file) Declared non - effective aircraft upon arrival at Shawbury at 16.00. Total flying hours 1218.15; 602 landings. Initially stored outside at Shawbury, and later hangared.

Late 68 Two engines exchanged for life expired engines by Hawker Siddeley Aviation for use in their high speed wind tunnel, with the other two similarly exchanged in February 1974.

16 Jun 73 Struck off RAF charge.

Jul/Aug 78 Dismantled for movement and repainted in full BOAC livery by British Airways engineering staff from Heathrow - a livery which it had never carried in service but was chosen to represent the former BOAC Comet fleet in the British Airways Museum fleet then being assembled. The aircraft had originally been scheduled to join the museum collection at RAF Colerne, Wilts.

- 17 Sep 78 Pickford's and British Airways staff moved the aircraft in three sections by road from Shawbury to the nearby Aerospace Museum, RAF Cosford, Salop. Photos British Airways News 6 Oct 78 p.2. Allocated Instructional serial 8351M (not worn)
- Sep/Oct 78 Following reassembly at Cosford the aircraft remained on external display until 2006. Painted in BOAC colours by December 1978. Photos- Aircraft Illustrated May 1979; Flypast July 1999 p.92; The DH.106 Comet An Illustrated History Martin Painter Air Britain 2002pp.136-137.
- Aug 97 When Comet IV XV814 was scrapped at Boscombe Down, parts salvaged included the port undercarriage bogie, to replace the cracked unit on G APAS.
- 3 Aug 98 One of a number of aircraft gifted to the RAFM by the MoD.
- 4 Dec 2006 Moved to indoor display at Cosford in Hangar 1. Photos Wrecks and Relics 21st Edition; Aviation News April 2015 p.37.

Aircraft Form 700s held by DoRIS, ref. B3191 - 94

The fuselage of fellow Air France Comet 1A 06020/F-BGNX, the first Air France Aircraft first flown 6 May 1953 and delivered 12 June 1953, is preserved by DH Heritage at Salisbury Hall, Herts. It returned to the UK 27 June 1956 as G-AOJT and was dismantled at the Royal Aircraft Establishment, Farnborough in August 1956. The cocooned fuselage was delivered to Salisbury Hall on 20 March 1985, and is currently undergoing extensive conservation.

The nose of BOAC Comet 1 G-ALYW survives incorporated into the former RAF Exhibition Flight Nimrod MRA.4 simulator 'XV238' originally sold privately in France and now in the Netherlands.

The Science Museum at Wroughton have the nose of ex BOAC Comet 1A G-ANAV, and the ex RCAF Comet 1A/1XB 'VC5301' nose is stored at Rockcliffe in Canada.

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