

INDIVIDUAL HISTORY

BAC TSR-2 KO-2 XR220/7933M
MUSEUM ACCESSION NUMBER 84/A/1171

- 6 Oct 60 One of nine development aircraft ordered as part of contract No.KD/2L/02/CB42 (a). Built by British Aircraft Corporation at the former Vickers factory at Weybridge, Surrey.
- 10 Oct 60 Serial numbers XR219 – XR227 allotted for first development batch of TSR.2 aircraft.
- 1963 Under construction. Work No. 02-1A. Scheduled for completion January 1964, but delayed by production problems. Photo of fuselage as of March 1963 – TSR2 – Britain’s Lost Bomber (Burke 2010) p.104. Photo being towed to paint shop – Burke p.107.
- Jul 64 Freshly painted and undergoing final equipment installation. Photo – Burke p.108.
- 9 Sep 64 As it was being backed into a hangar that afternoon, the fuselage fell over on its jack-knifed trailer at A&AEE Boscombe Down, to where it was being transferred from Weybridge as part of the Ministry of Aviation Air Fleet for trials flights, with the wing and ailerons on another trailer. The delivery driver had turned too tightly while avoiding Chief test Pilot Roland Beamont’s parked Lightning T.4. Photo en route - TSR-2-Phoenix or Folly p.152. Photos as lying off trailer - Aeroplane February 2000 pp.90 - 93. Aircraft October 2010 p.24; TSR2 – Britain’s Lost Cold War Warrior (McLelland 2010) p.68. Photo, possibly undergoing repair after the accident – Air Britain Aeromilitaria Winter 2009 p.149.
- 11 Sep 64 Fuselage recovered using air bags. Photos - Aircraft October 2010 p.24; McLelland 2010 p.68; Burke 2010 p.119. Repaired in BAC hangar B3 at Boscombe Down. Photo - McLelland 2010 p.70; Burke 2010 p.270. Most damage was to the port taileron spigot. Completion delayed by some spares robbing for use on flying prototype XR219.
- 27 Sep 64 First prototype TSR.2, XR219, made its first flight – pilot ‘Roly’ Beamont.
- 24 Feb 65 First ground engine runs of XR220 following repair. Delivery of the Olympus 320 engines was considerably delayed.

- Mar 65 Further engine ground runs and fuel flow trials. Photos - TSR-2-Phoenix or Folly p.221; Aeroplane February 2000 p.93. Ground trials completed towards the end of the month. The aircraft was then placed in temporary storage prior to its first flight, planned for the beginning of April.
- 2 Apr 65 Planned first flight date - delayed by minor faults. Intended as the trials aircraft for carriage of external stores, initially to be flown at up to Mach 1 low altitude, then gradually extending the envelope.
- 6 Apr 65 The TSR-2 project was cancelled by Harold Wilson's Labour Government, the announcement coming in that day's Budget Speech by Chancellor James Callaghan. XR220 had been intended to fly that morning, with Deputy Chief Test Pilot the late Wing Cdr James 'Jimmy' Dell as the pilot; this was delayed by the need to replace a faulty fuel pump discovered during pre-flight engine checks that morning.
- That afternoon the TSR-2 project was infamously cancelled in the budget speech and all work suspended before the aircraft could fly, despite Dell's attempts to return to the airfield after lunch to fly the aircraft having heard the cancellation announcement on TV. The aircraft was already impounded when he got there. Various proposals were made to keep some TSR2 aircraft, including XR220, flying on test programmes, but these did not proceed.
- 24 Jun 65 BAC ordered by MoA to hand the airframe over to the A&AEE 'as lying' and provide sufficient spares backing to support 25 hours worth of ground engine running.
- 6 Jul 65 TSR-2 project officially terminated.
- 9 Jul 65 XR220 handed over to A&AEE.
- 65/6 Used at A&AEE, Boscombe Down, for ground running trials (Detuner and engine noise tests) of the Rolls-Royce Olympus 22R-320 engines in support of the Concorde programme. Trials undertaken by Bristol Siddeley Field Service Engineers. Photos - TSR-2 Phoenix or Folly p.236; The Cold War Years (Tim Mason) p.15; McLelland pp.71/72; Burke 2010 p.286. Colour profile at this time - BAC TSR.2 – Lost Tomorrows of an Eagle (Lucas 2009) p.18.
- Feb 66 Tests completed by this date.
- 5 May 66 MoA revoked the airframe's certification as a military aircraft.

- 14 Oct 66 Engines removed for further use and stored at the MoA's Central Stores Depot at Sevenhampton, near Swindon, Wilts. Aircraft stored outside at Boscombe Down and offered by MoA to various bodies including RRE Pershore, Empire Test pilots School, RAE Bedford/Farnborough and various RAF departments, but only the RAF Air Historical Branch was interested.
- 1 Feb 67 Transferred to MoD/Air as Museum Aircraft.
- 2 Feb 67 Allotted instructional serial 7933M.
- 11 Apr 67 Allotted by MoD to RAF Museum store at RAF Henlow, Beds.
- 20 Jun 67 Delivered by road to Henlow via Andover and moved by No. 71 Maintenance Unit, RAF Bicester, minus engines and some cockpit fittings including both canopies; replacements for some of these came from unidentified TSR2s at Shoeburyness from 1968 onwards. Photo of fuselage in transit - Aeroplane February 2000 p.94. Photo stored at Henlow - Roundel June 1991 Back Cover.
- 4 May 75 By road to Aerospace Museum, RAF Cosford, Salop. Photo loaded and ready for departure – Burke 2010 p.286. Photo after delivery - TSR-2; Phoenix or Folly p.236. Also Air Extra No. 13 p.16.
- 1978/79 Restoration work underway by volunteers. Further restoration in 1990, with refitting of cockpits including ejection seats using spares acquired via Henlow. Photos of refurbished cockpits – Scale Aircraft Modeling December 2005 pp.671-672.
- 3 Aug 98 One of a large number of aircraft donated to RAF Museum by the MoD.
- 18 Jun 00 Displayed outside for RAF Cosford Airshow. Photo - Aircraft Illustrated August 2000 p.73 and September 2000 p.32-33; Aeroplane September 2000 p.15. Detail photos as of 2006 – Flypast June 2006 pp.74-75; Royal Air Force Celebrating 90 Years p.124.
- 1 May 09 Specially placed on outside display for RAFM Cosford's 30th Anniversary celebration. Photo – Aircraft Illustrated July 2009 p.22.
- For detail and cockpit shots see BAC TSR.2 – Lost Tomorrows of an Eagle (Lucas 2009)

XR219, the only TSR-2 to fly (first flight 27 September 1964) was finally scrapped in 1982 after initial delivery (along with sister aircraft XR221 delivered earlier) to Shoeburyness Ranges on 14 August 1966 for 'vulnerability and lethality trials'; the uncompleted XR222, c/n XO-4, the fourth of nine ordered, is preserved at the Imperial War Museum Duxford, having survived at Cranfield College of Aeronautics from October 1965 to March 1978. A nose section (test forebody T5) is also preserved at Brooklands Museum, Weybridge; this was used in summer 1964 for canopy jettison and ejection sequencing tests at RAE Farnborough, being mounted in front of a blower tunnel; it was rescued from Farnborough Dump in 1992. The RAF Museum collection also includes a number of TSR.2 related items, including a Martin Baker Mk 8VA ejection seat (displayed at RAFM Cosford), RR Olympus 320 ECU and reheat unit (Cosford display), sighting equipment, instruments, control column grip, undercarriage parts and engine and Ferranti FLR radar components.

TEXT; ANDREW SIMPSON

© ROYAL AIR FORCE MUSEUM 2010