

A/C SERIAL NO.XM598
SECTION 2B

INDIVIDUAL HISTORY

AVRO VULCAN B.MK.2 XM598/8778M
MUSEUM ACCESSION NUMBER 84/A/1172

- 22 Jan 58
B.MK.2 The fifth and final contract KD/B/01 CB.6 (a) was awarded for 40 Vulcan aircraft with serials in the XM569 - XM657 range. A total of 89 Vulcan B.Mk.2 aircraft were built and incorporated provision to carry the Avro Blue Steel air to surface missile.
- 30 Aug 63 Awaiting collection from Hawker Siddeley Aviation (Avro Whitworth Division) At Woodford.
XM598 was originally built to carry the Skybolt standoff bomb but this project was cancelled. The redundant Skybolt fixtures were put to use during the South Atlantic Campaign to take Martel and Shrike anti - radar missiles.
- 04 Sep 63 To No.12 Squadron at RAF Coningsby.
The RAFM photo collection includes two of XM598 at RAF Lynham during exercise 'Kinsman' in 1963 (P013788 - 013789) in overall white colour scheme.
- 7 Nov 63 Flown by Flt. Lt Haven on round trip to Goose Bay, Canada - Offutt AFB USA - Goose Bay - returning to Coningsby on 12th November. Colour photo, in overall white scheme, upon its return; Aeromilitaria Winter 2004 rear cover.
- 16 Jan 64 Flown in 'Exercise Kingpin' - pilot Flt. Lt. Haven.
- 1 Mar 64 Became part of the Coningsby Wing when all three Coningsby based Vulcan Squadrons, Nos.9, 12 and 35 were amalgamated and centralised into one large unit
- 7 Nov 64 Transferred with No. 12 Squadron from Coningsby to RAF Cottesmore as part of the Cottesmore Wing.
- 01 Dec 64 To Hawker Siddeley for modifications.
- 05 Jan 65 To Nos.9/12/35 Squadrons at RAF Cottesmore.
- 29 Jan 66 To Hawker Siddeley for modifications.
From 1966 the Vulcan B2 Squadrons became fully operational as a low level penetration force using newly developed terrain following radar and nuclear weapons.
- 02 Mar 66 Returned to Nos 9/12/35 Squadrons.
- 1966 Noted on a detachment to RAF Seletar, Singapore, wearing the No. IX Squadron 'bat' on the fin.

29 Dec 66	To Hawker Siddeley for further modifications.
13 Mar 67	Returned to Nos.9/12/35 Squadrons.
29 Nov 67	Damaged - Cat 3R (Repairable on site.)
01 Dec 67	Repaired on site by No.60 MU.
24 Jan 68	Returned to Nos 9/12/35 Squadrons.
21 Feb 68	Further Cat.3R repairs.
09 Apr 68	To Nos 44/50/101 Squadrons at RAF Waddington.
16 May 68	Further Cat 3R damage.
20 May 68	Repaired on site by No. 60 MU.
29 May 68	Back on charge with Nos.44/50/101 Squadrons.
15 Oct 68	To Hawker Siddeley for modifications.
21 Nov 68	Returned to Nos 44/50/101 Squadrons.
1970-71	Reported in service with No.27 Squadron at RAF Scampton, Lincs.
20 May 71	Again to Hawker Siddeley for modifications.
13 Oct 71	Returned to units at Waddington.
5 Feb 74	Pilot's Logbook of Flt Lt Jonathan Tye records 3.20 hour ECM flight with 101 Squadron.
16 Sep 75	Pilot's Logbook of Flt/Lt Jonathan Tye records four –hour 'Convex' flight.
29 Sep 75	To Hawker Siddeley at Bitteswell for maintenance and modifications including fitment of a fintip mounted passive RWR ECM pod.
09 Jul 76	Returned to Nos 9/44/50/101 Squadrons.
23 Nov 78	To RAF St Athan for major overhaul.
26 Feb 79	Returned to units.
9 Mar 79	Accident damage during Flight Test following the major servicing; crew of five. At the top of the climb the AEO noticed that the oil temperature on No.4 engine alternator constant speed drive unit was excessive and the engine was shut down as a precaution and the aircraft returned safely.

Investigation revealed that a clamp had been incorrectly locked during the major servicing and became detached from the ECU air ducting, allowing hot gas to leak, damaging electrical looms and airframe structure.

- 23 Mar 79 To British Aerospace Bitterswell for structural modifications.
- 24 Jul 79 Returned to Nos 9/44/50/101/Squadrons.
- 6 Feb 80 Noted visiting RAF Manston, Kent as part of No. 50 Squadron.
- 28 Jul 80 Noted at RAF Valley on No. 9 Squadron strength.
- 6 Sep 80 Noted visiting RAF Lossiemouth. Served with No. 9 Squadron until June 1981, and had rejoined No. 50 Squadron by October 1981.
- 16 Oct 81 Noted at RAF Coltishall
- 26 Oct 81 Noted at RAF Wildenrath, West Germany.
- end
- With the rundown of the Vulcan force and its replacement by Tornados, by the end of March 1982 the Vulcan B2 fleet had been reduced to Nos 44/50/101 Squadrons, all based at RAF Waddington. These were expected to disband by the end of June 1982. The Falklands conflict caused these plans to be revised due to the need for a strategic bomber force.
- 09 Apr 82 Personnel at Waddington placed on standby for possible action in the South Atlantic. At this time XM598 was on the strength of No 50 Squadron. Five Vulcans, including XM598, were selected for possible deployment to the South Atlantic as the only remaining aircraft still fitted with forward and aft Skybolt missile attachment points and refrigeration ducts. The aircraft were given extra ECM and navigation equipment, including jamming pods carried on locally devised starboard underwing pylons and Carousel inertial navigation equipment. Squadron insignia was removed from the fin and the undersides painted Dark sea Grey. The co - pilot received triple offset radar boxes which had been salvaged from a scrap skip at RAF Scampton.
- 13 -17 Apr 82 Air - Air refuelling training carried out with Victor K2's from RAF Marham.
- 26 Apr 82 Noted parked, on airfield unmarked, at Waddington.
- 29 Apr 82 The first two Vulcans, XM598 flown by F/L Withers and crew and XM607 departed Waddington on a non - stop flight to Ascension Island supported by Victor K2's from Marham. Leaving Waddington at 0900 each Vulcan required two in - flight refuellings, arriving at Wideawake at 1800 after a flight of 4000 nautical miles. Colour photo at Wideawake - Wingspan International May/June 2001 p.71.

- 01 May 82 As part of the overall operation 'Corporate', the first of the 'Black Buck' Vulcan missions from Ascension Island were directed against the runway at Stanley airport with the intention of making the airfield unusable by high performance fighter aircraft. On this date the first strike ('Black Buck 1') was launched with XM598 as the primary aircraft piloted by S/L Reeve. However the Captain's direct vision window, although slammed shut on departure refused to seal properly, so the crew were unable to pressurise the aircraft, necessitating a Decision to return three minutes after takeoff. Therefore XM598 returned to Wideawake and Vulcan XM607 successfully bombed the airfield after an eight-hour flight from Ascension Island. Both aircraft carried 21x1000lb bombs.
- 03 May 82 XM598 acted as flying reserve aircraft for 'Black Buck 2'
- 07 May 82 XM598 and XM607 flown back to Waddington.
- 26 May 82 XM598 arrived at Wideawake Airfield, Ascension Island as reserve aircraft for AGM-45 Shrike missile armed anti radar missions, the missiles being carried on underwing pylons, the mountings for these being built by No 5 Squadron RAF St Athan. XM597 flew Shrike armed missions Black Buck 4, 5 and 6 on 28/29, 30/31 May and 2/3 Jun with XM598 as back - up aircraft on each occasion.
- 14 Jun 82 XM598 and XM607 returned to RAF Waddington.
- 22 Jun 82 XM598 transferred to No. 44 Squadron at Waddington.
- 12 Jul 82 No. 44 Squadron markings applied by this time.
- 17 Dec 82 Withdrawn from use by this date, and stored at RAF Waddington pending disposal.
- 21 Dec 82 No 44 Squadron, the last with Vulcan bombers disbanded at RAF Waddington. (No 50 Squadron operated six Vulcans in the flight-refuelling role at Waddington until 31 Mar 84). XM598 retired from operational service.
- 04 Jan 83 Allocated maintenance serial 8778M.
- 07 Jan 83 Attempted morning delivery flight to Aerospace Museum Cosford. Due to severe rainstorms, coupled with having to land on a short runway, the landing was aborted. The rain started as the pilot made his first approach and he made three more attempts before aborting. The aircraft made a second attempt to fly to Cosford that lunchtime but had to return after a few minutes due to a birdstrike. The aircraft overflew Cosford and returned to RAF Waddington; the after flight inspection revealed that XM598 had suffered a bird strike in number three engine. The engine was changed and a 2nd delivery flight arranged, using the same crew.
- 20 Jan 83 Flown to Aerospace Museum Cosford for display following repairs to the damaged engine.
At 12.30 pm the aircraft made a practice approach from the east, on Runway 25.

The Captain, S/L John Reeve made one 'touch and go' landing followed by a final 15 minute circuit before finally touching down at 12.50 pm. The brake parachute deployed immediately and the aircraft stopped in less than two thirds of the runway's length. The crew were met by a welcoming committee and a handing - over ceremony took place. The crew who flew the Vulcan from RAF Waddington were S/L Reeve, co - pilot S/L McDougal, navigator F/L Fletton, and air electronics operator F/L Davies.

The taxiway at Cosford is narrow and because of this the decision was made to tow XM598 to the main museum hangar. The starboard main undercarriage leg became bogged down in the soft grass at the edge of the taxiway, and had to be towed out. Photo - Flypast Jan 1992 p.35.

XM598 had made a total of 1520 flights and 5404 flying hours. It remained on outside display at Cosford.

2004 Repainted prior to moving into position for incorporation onto new Cold War display building. Photo as repainted – Aeroplane January 2005 p.7.

5 May 06 Moved into new National Cold War Exhibition building at the Royal Air Force Museum Cosford, which opened to the public 8 February 2007. Photo on display – Aeroplane March 2007 p.13.

TEXT: ANDREW SIMPSON

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