

INDIVIDUAL HISTORY

**SAUNDERS ROE SR.53 XD145**  
**MUSEUM ACCESSION NUMBER 69/A/696**

- 53 Designed to meet Ministry of Supply requirement F.124T (issued 21 Feb 1952) for a new aircraft put forward in a design competition. Specification F.138D, issued 16 June 1953, was written around the proposals from Saunders Roe (Saro) which projected a clipped delta wing aircraft
- 8 May 53 Contract 6/Aircraft/8703/CB.7(c) for construction of three prototype SR.53 aircraft issued, their serial numbers having been allotted on 24<sup>th</sup> October 1952.
- 56 One of two SR.53 aircraft built by Saunders Roe at East Cowes, Isle of Wight (from three actually ordered) as mixed-power plant interceptors powered by one de Havilland Spectre rocket motor and one Armstrong Siddeley Viper turbojet.
- Jun 56 Rolled out in great secrecy at Cowes, as the first prototype, then transported by road to A&AEE Boscombe Down for final assembly.
- 16 Jan 57 First engine runs at A&AEE Boscombe Down. Photos at this time - Aeroplane Monthly Nov 94 p.33; Wingspan July 92 p.11; Aircraft Magazine July 2010 p.30.
- 4 Apr 57 Defence cuts in the Duncan Sandys white paper meant cancellation of the SR.53 and SR.177R production variant; the third aircraft (XD153) had already been cancelled in Jan 54; funding of the remaining two SR.53 prototypes for experimental purposes continued however.
- May 57 Taxying trials commenced.
- 16 May 57 20-minute first flight at Boscombe Down, flown by John Booth. Photos - Aeroplane Monthly Mar 85 p.150; Aeroplane Monthly Nov 94 p.33; Wingspan Jul 92 p.11-12.  
Pilot Sqn Ldr John Stanley Booth DFC. See also Flight 24 May 1957 pp. 697 - 700.
- 27 May 57 Second flight, featuring air-air photography.

- Sep 57 Both aircraft shown at the SBAC Farnborough show, with XD145 in the flying programme (cut short at one point by a spurious engine fire warning) and XD151 on static display. Photos of XD145 - Aeroplane Monthly Mar 85 p.150; Aeroplane Monthly Nov 94 p.34; Wingspan Jul 92 pp.9 – 11; Aeromilitaria Spring 2011 back page.
- Oct 57 XD145 temporarily withdrawn from flying after a flash-back in its rocket engine caused minor damage and its fuel system was also modified.
- 5 Jun 58 Second prototype XD151 crashed on take off from Boscombe Down, killing Sqn. Ldr Booth. XD145 made 14 flights after this date (From Feb.1959) flown by new Saunders Roe Chief Test Pilot Lt. Cdr. Peter 'Sheepy' Lamb DFC .In this programme to complete study of the flight envelope an altitude of 56,000 feet was reached and a speed of Mach 1.45.
- 23 Feb 59 'Sheepy' Lamb's first flight in the SR.53. 30-minute familiarisation and handling flight. All Ensuing flights flown by him from Boscombe Down.
- 4 Mar 59 Further 30 minute familiarisation and handling flight.
- 12 Mar 59 35-minute flight to explore Buffet Boundaries.
- 24 Mar 59 30-minute flight, again to investigate buffet boundaries.
- 20 Apr 59 30-minute flight to check Manual reversions.
- 11 May 59 30-minute flight to investigate Supersonic levels. XD145 went supersonic for the first time, following the fitting of instrumentation to measure possible aileron flutter. Flown by 'Sheepy' Lamb.
- 14 May 59 30-minute flight to further investigate Supersonic levels.
- 29 May 59 30-minute flight - Supersonic levels.
- 7 Jul 59 25-minute flight. Supersonic levels and altitude of 45,000 feet attained.
- 14 Jul 59 30-minute flight reaching speeds up to Mach 1.28.
- 20 Jul 59 P.E. Calibration - 30 minute flight.
- 25 Aug 59 20-minute flight reaching supersonic speeds at up to 50,000 feet.

- 13 Sep 59 High speed runs up to Mach. 1.46.
- 20 Oct 59 Last flight of XD145, having made a total of 15 further flights since 23 February 1959. Pilot Cdr. Lamb. During the flight the Viper flamed out at 56,900 feet after the rocket had been used. The aim of the flight was to reach maximum altitude and the Viper fortunately relit at the third attempt at 10,000 feet to land at Boscombe Down. Total flying hours 17.45.
- 29 Dec 59 Allotted for aerodynamic research with Saunders-Roe Ltd. Contract Kc/2P/04/CB.7 (b)
- 5 Aug 60 Aircraft released following abandonment of contract, the Ministry of Aviation having instructed Saunders-Roe on 29 July 1960 not to undertake any further work on the aircraft.
- 2 Dec 60 By road to the Ministry of Technology Rocket Propulsion Establishment, Westcott, Aylesbury, Bucks where it was used for a time for ground running trials of various rocket engines.
- c. May 69 Collected from Westcott by No.71 Maintenance Unit and stored at RAF Henlow, Beds for the RAF Museum.
- 13 Nov 78 Engineless airframe to RAF Brize Norton for restoration by the 11-strong SR53 Restoration Society, part of the Brize Norton Aviation Society. Photo on delivery - Aviation News 1-14 Jan 82. The undercarriage was restored using BAC Lightning and Dominie wheels, missing instruments were replaced courtesy of RAF Wattisham and a pair of Firestreak missiles obtained from RAF Binbrook to fit to the wing-tip mountings, with the aircraft restored to its all white colour scheme. The ejection seat was overhauled by Martin Baker at Denham, and a Spectre engine, probably the original from the aircraft, obtained from the RAFM store at Henlow. The aircraft was completely re-sprayed in 1981.
- 30 Nov 81 Restored aircraft rolled out at RAF Brize Norton. Photos - Aircraft Illustrated Feb 1982 p.88; Aeroplane Monthly Feb 82 p.63; Aviation News 1-14 Jan 1982.
- 2 Mar 82 To Aerospace Museum RAF Cosford, Salop for display as part of the Research and Development Collection, where it remains. Photo as delivered - Wrecks and Relics 9th Edition (1984) p.167. As more recently displayed - Air Pictorial Nov 96 p.602; Aircraft Illustrated September 2000 p.33; Aeroplane September 2000 p.15; Air Britain News December 2000 p.1808; aeroplane Museums Guide 2004 p.M.61.

18 Jun 03 By road to RAF Fairford for the Royal International Air Tattoo '100 Years of Flight' exhibition during the display held 19<sup>th</sup> – 20<sup>th</sup> July. Returned to RAFM Cosford 28<sup>th</sup> August 2003. Photos – Aeroplane October 2003 p.10; Aviation News September 2003 p.661.

**TEXT; ANDREW SIMPSON**

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