

NASA Dryden Flight Research Center
History Office

Lockheed SR-71A (61-7980 / NASA 844) Flight Log

Compiled by Peter W. Merlin
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NASA crews flew four Lockheed SR-71 airplanes between July 1991 and October 1999. They were used for research and to support the U.S. Air Force reactivation of the SR-71 for reconnaissance missions. The Air Force had retired the Blackbirds in 1990, but Congress reinstated funding for additional flights. Lockheed SR-71A (61-7980 / NASA 844) arrived at NASA Dryden Flight Research Center on 15 February 1990. It was placed into storage until 1992. It served as a research platform until October 1999. Following its final flight, on 9 October 1999, it was again stored at the Center. It was placed on static display in front of DFRC on 14 September 2002. This aircraft made 734 flights during its service life, including 56 NASA flights. It accrued a total of 2,353.6 flight hours.

Flt. 01 / 24 SEP 92 : Functional check flight (FCF), Orbital Sciences Corporation (OSC) frequency scanning experiment in nose. Stephen D. Ishmael/Marta Bohn-Meyer. Max. Mach=3.25, Max. Altitude=78,680 ft.

Flt. 02 / 06 OCT 92 : FCF, OSC F3SAT back-up satellite in passive mode to check prelaunch conditions. Rogers E. Smith/ Robert Meyer Jr. Max. Mach=3.26, Max. Altitude=80,000 ft.

Flt. 03 / 09 MAR 93 : Ultraviolet Charge-Coupled Device (CCD), Southwest Research Institute UV Imaging Sytem (SWUIS) camera experiment. Ishmael/Bohn-Meyer. Max. Mach=3.17, Max. Altitude=82,350 ft.

Flt. 04 / 16 MAR 93 : Ultraviolet CCD, SWUIS camera experiment. Smith/Meyer. Max. Mach=3.24, Max. Altitude=84,050 ft.

Flt. 05 / 15 JUL 93 : Near Ultraviolet Spectrometer (NUVS) experiment, planned sonic boom test with F-16 XL aborted, JP-8 tanker test. Ishmael/Meyer. Max. Mach=3.23, Max. Altitude=81,800 ft.

Flt. 06 / 28 JUL 93 : NUVS experiment, sonic boom test with F-16 XL. Smith/Bohn-Meyer. Max. Mach=1.85, Max. Altitude=48,500 ft.

Flt. 07 / 03 AUG 93 : Handling qualities, NUVS experiment. Ishmael/Meyer. Max. Mach=3.23, Max. Altitude=83,950 ft.

Flt. 08 / 17 SEP 93 : Handling qualities, Optical Air Data System (OADS) experiment. Smith/Ishmael. Max. Mach=3.00, Max. Altitude=76,070 ft.

Flt. 09 / 01 OCT 93 : NUVS experiment, OADS experiment. Ishmael/Bohn-Meyer. Max. Mach=3.17, Max. Altitude=76,500 ft.

Flt. 10 / 06 OCT 93 : Handling qualities, NUVS experiment. Smith/Meyer. Max. Mach=3.03, Max. Altitude=73,025 ft.

Flt. 11 / 13 OCT 93 : Handling qualities, NUVS experiment. Ishmael/Bohn-Meyer. Max. Mach=3.23, Max. Altitude=83,700 ft.

Flt. 12 / 20 OCT 93 : Handling qualities, NUVS experiment. Smith/Meyer. Max. Mach=3.05, Max. Altitude=75,635 ft.

Flt. 13 / 08 DEC 93 : NUVS experiment. Ishmael/Meyer. Max. Mach=3.21, Max. Altitude=77,375 ft.

Flt. 14 / 22 DEC 93 : NUVS experiment, Low Earth Orbit Experiment (LEOEX). Ishmael/Bohn-Meyer. Max. Mach=3.11, Max. Altitude=76,000 ft.

Flt. 15 / 22 DEC 93 : NUVS, LEOEX. Ishmael/Bohn-Meyer. Max. Mach=3.11, Max. Altitude=76,150 ft.

Flt. 16 / 25 JAN 94 : NUVS, LEOEX, hot refuel and turnaround. Smith/Meyer. Max. Mach=3.04, Max. Altitude=77,600 ft.

Flt. 17 / 25 JAN 94 : NUVS, LEOEX. Smith/Meyer. Max. Mach=3.04, Max. Altitude=77,600 ft.

Flt. 18 / 07 JUL 94 : Sonic boom test, Dynamic Auroral Viewing Experiment (DAVE). Ishmael/Bohn-Meyer. Max. Mach=3.16, Max. Altitude=77,750 ft.

Flt. 19 / 13 JUL 94 : handling qualities, DAVE. Smith/Meyer. Max. Mach=3.18, Max. Altitude=77,700 ft.

Flt. 20 / 21 JUL 94 : NUVS, DAVE. Ishmael/Bohn-Meyer. Max. Mach=3.19, Max. Altitude=80,300 ft.

Flt. 21 / 31 AUG 94 : NUVS, DAVE. Smith/Bohn-Meyer. Max. Mach=3.05, Max. Altitude=75,700 ft.

Flt. 22 / 25 OCT 94 : NUVS, DAVE. Smith/Bohn-Meyer. Max. Mach=3.21, Max. Altitude=80,000 ft.

Flt. 23 / 15 FEB 95 : Sonic boom flight with F-16XL (NASA 849). Smith/Meyer. Max. Mach=1.27, Max. Altitude=31,500 ft.

Flt. 24 / 16 MAR 95 : Sonic boom flight with F-16XL and YO-3A (NASA 718). Schneider/Bohn-Meyer. Max. Mach=1.26, Max. Altitude=34,100 ft.

Flt. 25 / 22 MAR 95 : Sonic boom flight with F-16XL and YO-3A, handling qualities. Ishmael/Meyer. Max. Mach=1.28, Max. Altitude=33,000 ft.

Flt. 26 / 24 MAR 95 : Sonic boom flight with F-16XL and YO-3A. Schneider/Bohn-Meyer. Max. Mach=1.63, Max. Altitude=48,000 ft.

Flt. 27 / 29 MAR 95 : Sonic boom flight with F-16XL, YO-3A, and F-18A (NASA 843). Schneider/Meyer. Max. Mach=1.56, Max. Altitude=48,200 ft.

Flt. 28 / 05 APR 95 : Sonic boom flight with F-16XL, YO-3A, and F-18A (NASA 851). Smith/Bohn-Meyer. Max. Mach=1.54, Max. Altitude=47,600 ft.

Flt. 29 / 12 APR 95 : Sonic boom flight with F-16XL, YO-3A, and F-18A (NASA 850). Ishmael/Bohn-Meyer. Max. Mach=1.28, Max. Altitude=44,300 ft.

Flt. 30 / 20 APR 95 : Sonic boom flight with F-16XL, YO-3A, and F-18A (NASA 850). Schneider/Meyer. Max. Mach=1.35, Max. Altitude=44,300 ft.

Flt. 31 / 25 MAY 95 : Sonic boom flight with YO-3A, handling qualities, ferry flight to Palmdale for Linear Aerospike SR-71 Experiment (LASRE) modifications.. Smith/Bohn-Meyer. Max. Mach=1.92, Max. Altitude=49,000 ft.

Flt. 32 / 14 MAR 96 : Low-speed FCF, ferry flight to DFRC. Schneider/Bohn-Meyer. Max. Mach=0.98, Max. Altitude=26,650 ft.

Flt. 33 / 22 MAR 96 : High-speed FCF, engine trim-up, no-drag-chute landing. Schneider/Bohn-Meyer. Max. Mach=3.22, Max. Altitude=80,400 ft.

Flt. 34 / 12 JUL 96 : Simulated LASRE mission (pod off). Schneider/Meyer. Max. Mach=2.15, Max. Altitude=60,000 ft.

Flt. 35 / 13 JUL 96 : Simulated LASRE mission (pod off), handling qualities. Smith/Meyer. Max. Mach=1.75, Max. Altitude=42,000 ft.

Flt. 36 / 30 JAN 97 : Handling qualities, crew proficiency. Smith/Bohn-Meyer. Max. Mach=2.27, Max. Altitude=62,750 ft.

Flt. 37 / 14 FEB 97 : Handling qualities, stability and control. Schneider/Meyer. Max. Mach=2.10, Max. Altitude=60,500 ft.

Flt. 38 / 18 MAR 97 : Crew proficiency. Schneider/Bohn-Meyer. Max. Mach=2.17, Max. Altitude=62,750 ft.

Flt. 39 / 02 APR 97 : Crew proficiency, "hot time" on aircraft. Schneider/Meyer. Max. Mach=3.04, Max. Altitude=78,400 ft.

Flt. 40 / 23 MAY 97 : Crew proficiency. Smith/Bohn-Meyer. Max. Mach=3.22, Max. Altitude=80,700 ft.

Flt. 41 / 30 MAY 97 : Crew proficiency. Schneider/Meyer. Max. Mach=3.22, Max. Altitude=80,500 ft.

Flt. 42 / 26 JUN 97 : Crew proficiency, air data calibration, stability and control. Smith/Bohn-Meyer. Max. Mach=3.19, Max. Altitude=80,000 ft.

Flt. 43 / 17 JUL 97 : Crew proficiency, simulated LASRE mission (pod off). Schneider/Meyer. Max. Mach=2.20, Max. Altitude=55,000 ft.

Flt. 44 / 25 JUL 97 : Crew proficiency, simulated LASRE mission (pod off). Smith/Bohn-Meyer. Max. Mach=2.20, Max. Altitude=60,200 ft.

Flt. 45 / 31 OCT 97 : LASRE aerodynamics. Schneider/Meyer. Max. Mach=1.19, Max. Altitude=33,000 ft.

Flt. 46 / 19 DEC 97 : LASRE aerodynamics. Smith/Bohn-Meyer. Max. Mach=1.61, Max. Altitude=50,050 ft.

Flt. 47 / 04 MAR 98 : LASRE cold flow test. Schneider/Meyer. Max. Mach=1.58, Max. Altitude=41,300 ft.

Flt. 48 / 19 MAR 98 : LASRE cold flow test. Smith/Bohn-Meyer. Max. Mach=1.63, Max. Altitude=50,050 ft.

Flt. 49 / 15 APR 98 : LASRE ignition test, LOX carry. Schneider/Meyer. Max. Mach=1.78, Max. Altitude=51,000 ft.

Flt. 50 / 23 JUL 98 : LASRE LOX cold flow test, pod purge evaluation, crew proficiency. Smith/Bohn-Meyer. Max. Mach=0.92, Max. Altitude=32,350 ft.

Flt. 51 / 29 OCT 98 : LASRE LOX cold flow test, pod purge evaluation, final LASRE flight. Schneider/Meyer. Max. Mach=1.40, Max. Altitude=41,200 ft.

Flt. 52 / 30 JUN 99 : Handling qualities with LASRE model removed, pod purge evaluation. Schneider/Meyer. Max. Mach=2.25, Max. Altitude=55,000 ft.

Flt. 53 / 15 JUL 99 : Handling qualities with LASRE model removed, pod purge evaluation. Smith/Bohn-Meyer. Max. Mach=2.73, Max. Altitude=63,800 ft.

Flt. 54 / 16 AUG 99 : Handling qualities with LASRE model removed, pod purge evaluation, boundary-layer rakes installed. Schneider/Meyer. Max. Mach=3.03, Max. Altitude=67,800 ft.

Flt. 55 / 27 SEP 99 : Handling qualities with LASRE model removed, pod purge evaluation, boundary-layer rakes installed. Smith/Bohn-Meyer. Max. Mach=2.70, Max. Altitude=64,000 ft.

Flt. 56 / 09 OCT 99 : Flight demonstration for Edwards AFB air show, last flight of SR-71. Smith/Bohn-Meyer. Max. Mach=3.21, Max. Altitude=80,100 ft.

Sources:

SR-71 program chronology by Mike Relja
DFRC Flight Operations Office Daily Logs
Monthly Aerospace Projects Update memoranda
Weekly Aerospace Projects Highlights