Photo by Ted Carlson

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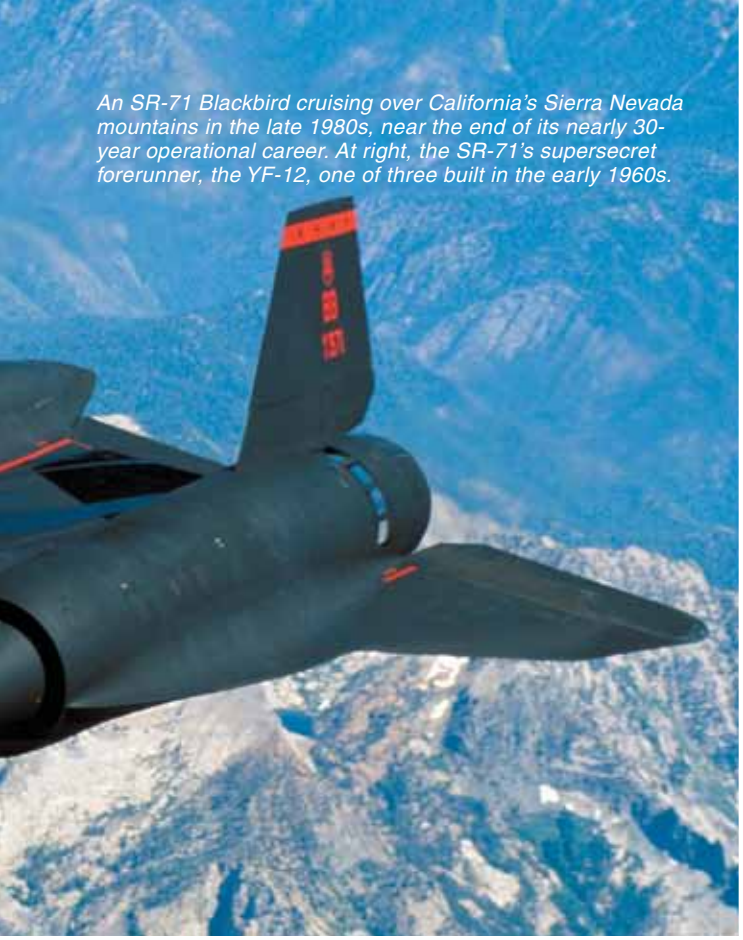
*As a potential solution to politically sensitive basing issues, the concept of operating U-2s from aircraft carriers was explored in Operation Blue Gull V. This U-2R landed on and flew from the aircraft carrier USS* America *in 1969. At right, a modern U-2S works in the pattern at Beale AFB, Calif.*

Lockheed Martin photo



*An SR-71 Blackbird cruising over California's Sierra Nevada mountains in the late 1980s, near the end of its nearly 30-year operational career. At right, the SR-71's supersecret forerunner, the YF-12, one of three built in the early 1960s.*

Lockheed Martin photo

# Cold War From on High

## The U-2 and SR-71 were two of the most famous and successful aircraft of all time.

**Photos from the collection of Warren E. Thompson**

*The dangerous but essential business of strategic reconnaissance during the Cold War and beyond fell to two platforms: the U-2 and the SR-71. The CIA's 1953 request for an aircraft that could reach 70,000 feet and fly 1,700 miles led to the U-2. It first flew in 1955 and was operational the following year. Its cutting-edge status was short-lived, though: The 1960 shootdown of Francis Gary Powers in Russia compelled a solution that was not only high-flying, but fast enough to escape surface-to-air missiles. Eventually, this led to the triple-sonic SR-71.* ***|1|*** *The thirsty SR-71 needed to be refueled shortly after takeoff and just before entering and immediately after leaving enemy airspace.This one is pulling up to a tanker.* ***|2|*** *An early bare-metal U-2A, soon after USAF started flying the aircraft. Lockheed Martin built 48 of the U-2A models.*

Lockheed Martin photos

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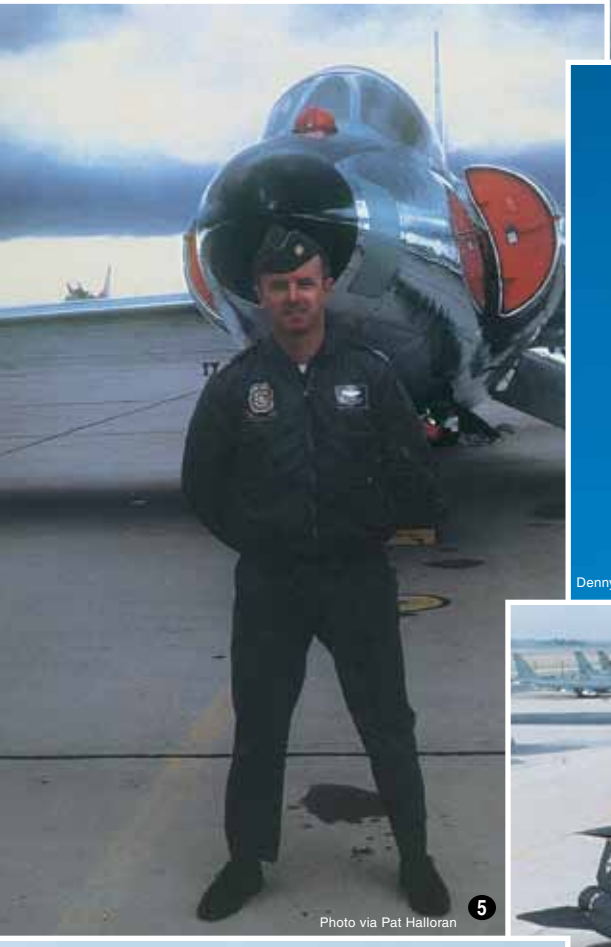

Photo via Pat Halloran

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Denny Lombard/Lockheed Martin photo

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*Lockheed based the aircraft on the main fuselage of the XF-104.* ***|3|*** *As USAF was phasing the SR-71 out, 11 of Beale's remaining aircraft pose for a family photo in 1989.* ***|4|*** *A Blackbird gets airborne. Its Pratt & Whitney J58-P4 engines could each produce 32,500 pounds of thrust, pushing the craft to record-breaking speeds.* ***|5|*** *The first public display of a U-2 at an air show, at Patrick AFB, Fla., in 1960. Maj. Pat Halloran stands in front of his airplane. He eventually logged 1,700 hours in the U-2 and 600 more in the SR-71.*


1 Lockheed Martin photos

*|1|* *NASA flew the U-2 for high-altitude research at the edge of space, and also as a cover for more clandestine flights. This U-2 in NASA livery went to the Robins Air Force Base museum in Georgia shortly after this photo, circa 1989.* ***|2|*** *An SR-71A with Lockheed's "Skunk Works" logo on the tail. The company built both the U-2 and the SR-71, and has been closely associated with secret USAF projects. This aircraft today is at the Edwards AFB, Calif., Air Force Flight Test Center Museum.* ***|3|*** *Lockheed test pilot Robert Gilliland, shown here, made the first SR-71 flight in December 1964. He reached Mach 1.5 on the first sortie.* ***|4|*** *A Blackbird fuels up from a specially configured tanker loaded with JP-7 fuel. This fuel had a higher flash point than standard jet grades, so as to withstand the heat of sustained triple-sonic flight.* ***|5|*** *A U-2 lands after a long mission, circa 1965.*


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Photo via Pat Halloran 4

3 Photo via Robert Gilliland

5 Photo via Pat Halloran

*I1I A pair of U-2As, assigned to the Special Projects Branch, over Edwards during the early 1960s. The U-2 has received near-constant modification, and today's models feature interchangeable noses, depending on mission sensor requirements.* ***I2I*** *The SR-71 routinely operated above 70,000 feet. Its altitude, combined with its speed, foiled every one of the 4,000 attempts to shoot it down over its more than two-and-a-half decades in service. Over its life, the special white paint necessary for lettering and national markings was deleted because of its expense. Normal paint would burn off at high speeds.* ***I3I*** *The SR-71 production line in California. Lockheed built the Blackbird under the tightest security.*

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Lockheed Martin photos


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Denny Lombard/Lockheed Martin photo


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*I4I An SR-71 is slowly towed down a main road to its final rest at Lackland AFB, Tex., in June 1990.* ***I5I*** *The U-2s were heavily tasked throughout the Vietnam War. This one is readied for a mission at Bien Hoa in December 1964, early on in the US involvement. Note the unusual antennae on the aircraft's spine behind the wing's trailing edge.*

Eric Schulzinger/Lockheed Martin photo

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Lockheed Martin photos

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Photo via Don Emigholz

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***I1I*** *At the height of their career in the 1970s, two Blackbirds present a sinister silhouette on a foggy flight line. The SR-71 operated routinely overseas from Kadena AB, Japan, and from RAF Mildenhall, Britain, but was temporarily based overseas at many locations throughout Europe, the Far East, and Southwest Asia.* ***I2I*** *An SR-71 on a test flight mission with a NASA F/A-18 flying close chase.* ***I3I*** *In 1988, NASA obtained an ex-USAF TR-1A, a short-lived designation for a much-modified U-2 variant.* ***I4I*** *This SR-71 was the first flight test model, serial no. 64-17950.* ***I5I*** *The U-2R was a vast improvement over earlier versions. It was more than 33 percent larger than previous models, boasting a 6,000-mile ferry range and the ability to reach 75,000 feet altitude. This first production model of the U-2R made its first flight in August 1967.*

***I1I*** *Before the USS* America *carrier trials, U-2 pilots practiced on an airfield marked off with carrier dimensions. Although the experiments were a success, the cost of keeping one carrier configured to allow U-2 operations was deemed too high.* ***I2I*** *An SR-71 at Kadena in 1969. Blackbirds supported air strikes by keeping close watch on targets in North Vietnam. A B-52 bomber is in the background.* ***I3I*** *A U-2 on descent at U Tapao AB, Thailand, in 1972, sharing the base with B-52s. U-2s supported the air war with pre- and post-strike target imagery.*

Denny Lombard/Lockheed Martin photo

Photo via George Riddick

Photo via Bruce Chavis

Photos via Robert Gilliland


***I4I*** *Test pilot Gilliland in the Blackbird. Gilliland had flown F-84s in Korea, and built many hours in the F-104. It was this latter experience that made him a natural for SR-71 test flight work.* ***I5I*** *Gilliland prepares to take off on a test flight of an SR-71.*


Photo via Carl Berger

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Lockheed Martin photos

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*I1I U-2s are crowd-pleasers when they can be spared for an air show. This one is on static display at Carswell AFB, Tex., in 1966. I2I Clarence "Kelly" Johnson, the engineering genius who led development of both the U-2 and the SR-71, poses with the U-2C. Johnson's Skunk Works at Lockheed came up with the F-104, the F-117 stealth fighter, and dozens of other secret projects. I3I The D-21 was an unmanned drone that could be launched from the back of the A-12 version, modified and dubbed M-12 or M-21. I4I The SR-71 ended its career in high style. On March 6, 1990, it flew its last USAF mission, from Palmdale, Calif., to Dulles Airport, outside Washington, D.C. During the flight, it set four speed records, which still stand. The aircraft is on display at the Smithsonian Institution's Dulles facility.*

Denny Lombard/Lockheed Martin photo

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*I5I Some of Lockheed's Skunk Works employees get rare recognition in an undated group portrait with a U-2.* ■