

509 BOMB WING



MISSION

LINEAGE

509 Bombardment Wing, Very Heavy, established, 3 Nov 1947
Organized, 17 Nov 1947
Redesignated 509 Bombardment Wing, Medium, 1 Aug 1948
Redesignated 509 Bombardment Wing, Heavy, 2 Apr 1966
Redesignated 509 Bombardment Wing, Medium, 1 Dec 1969
Redesignated 509 Bombardment Wing, Heavy, 30 Sep 1990
Redesignated 509 Bomb Wing, 1 Sep 1991

STATIONS

Roswell AAFld (later, Walker AFB), NM, 17 Nov 1947
Pease AFB, NH, 1 Jul 1958
Whiteman AFB, MO, 30 Sep 1990

DEPLOYED STATIONS

Mildenhall England, 4 Jun 1952-2 Sep 1952
Andersen AFB, Guam, 10 Jul 1954-8 Oct 1954

ASSIGNMENTS

Eighth Air Force, 17 Nov 1947
47 Air Division, 10 Feb 1951
817 Air Division, 1 Jul 1958
45 Air Division, 30 Jun 1971
Eighth Air Force, 29 Mar 1989
100 Air Division, 30 Sep 1990
Eighth Air Force, 26 Jul 1991

ATTACHMENTS

3 Air Division, 1 Feb 1951–4 May 1951
7 Air Division, 4 Jun–2 Sep 1952
3 Air Division, 10 Jul–8 Oct 1954
7 Air Division, 26 Jan–30 Apr 1956

WEAPON SYSTEMS

F-51, 1947–1948
F-84, 1948
B-29, 1947–1952
B-50, 1949–1951
KB-29, 1951–1954
KC-97, 1954–1958, 1958–1965
B-47, 1955–1965
B-52, 1966–1969
KC-135, 1966–1990
FB-111, 1970–1990
B-2
B-52C, 1966-1969
B-52D, 1966-1969

COMMANDERS

Col William H. Blanchard, 17 Nov 1947
Col John D. Ryan, 1 Aug 1948
Brig Gen Clarence S. Irvine, 15 Sep 1948
Col James A. Demarco, 3 Jan 1950
Brig Gen Hunter Harris, Jr., 15 Jan 1950
Col Thomas S. Jeffrey, Jr., 10 Jan 1951
Col John D. Ryan, 1 Feb 1951
Col Berton H. Burns, Jul 1951
Col William H. Blanchard, 21 Jul 1951
Col Berton H. Burns, C. 15 Jan 1952
Brig Gen William H. Blanchard, C. 7 Apr 1952
Col Wilson R. Wood, 11 Feb 1953
Col Howard E. Jackson, 22 Apr 1953
Col Harold E. Humfeld, (By 12) May 1953
Col Wilson R. Wood, C. 15 May 1953
Col Harold E. Humfeld, 30 Jul 1953
Col Wilson R. Wood, 23 Nov 1953
Col Clifford F. Macomber, 16 May 1955
Col Neil W. Wemple, (By 8) Jan 1957
Col Clifford F. Macomber, (By 29) Jan 1957
Col Brooks A. Lawhon, 11 Feb 1959

Col Donald G. Mcpherson, 1 Jun 1960
Col Edward D. Edwards, 10 Mar 1962
Col James O. Frankosky, 21 Oct 1963
Col Joseph V. Adams, Jr., 27 Jan 1966
Col James O. Frankosky, C. 2 Mar 1966
Col Madison M. Mcbrayer, 23 Jan 1967
Col Joseph V. Adams, Jr., 28 Mar 1968
Col Robert E. Blauw, C. 1 Oct 1968
Col William R. Thorstenson, 19 Mar 1969
Col Robert E. Blauw, 20 Sep 1969
Col William R. Thorstenson, 18 Nov 1969
Col Winston E. Moore, 11 Dec 1969
Col John M. Parker, 22 Feb 1972
Col Alan L. Hichew, 14 Jun 1972
Col Isaac M. Glass, 26 Mar 1973
Col Paul W. Maul, 21 Aug 1973
Col Richard A. Burpee, 26 Feb 1974
Col Fredric E. Roth, 1 Apr 1975
Col Guy L. Hecker, Jr., 3 May 1976
Col James M. Greer, 11 Jan 1978
Col Samuel H. Swart, Jr., 4 May 1979
Col John A. Dramesi, 22 Jun 1981
Col Trevor A. Hammond, 21 Dec 1981
Col Denis L. Walsh, 10 May 1983
Col Frederick A. Fiedler, 13 Jun 1984
Col Robert J. Mccracken, 14 May 1985
Col Thad A. Wolf, 27 Feb 1987
Col Orin L. Godsey, 25 Feb 1988
Col William C. Brooks, 28 Feb–30 Sep 1990
None (Not Manned) 30 Sep 1990–31 Mar 1993
Brig Gen Ronald C. Marcotte, 1 Apr 1993
Brig Gen Thomas B. Goslin, Jr., 26 Mar 1996
Brig Gen Leroy Barnidge, Jr., 8 Jun 1998
Brig Gen Anthony F. Przybyslawski, 7 Jun 2000
Brig Gen Douglas L. Raaberg, 22 Apr 2002
Brig Gen Christopher D. Miller, 24 Apr 2004
Brig Gen Gregory A. Biscione, 1 May 2006
Col Garrett Harencak 14 Sept 2007

HONORS

Service Streamers

Campaign Streamers

Decorations

Air Force Outstanding Unit Awards

1 Apr–1 Oct 1968

1 Jul 1981–30 Jun 1982

1 Jul 1982–30 Jun 1984

1 Jun 1995–31 May 1997

1 Jun 1997–31 May 1999

1 Jun 1999–31 May 2001

1 Jun 2003–31 May 2005

Bestowed Honors

Authorized to display honors earned by the 509 Operations Group prior to 17 Nov 1947

Service Streamers

None

Campaign Streamers

World War II

Air Offensive, Japan

Eastern Mandates

Western Pacific

Decorations

None

EMBLEM





Or, in base a label of three Gules below an atomic cloud proper between a pair of wings elevated Azure. **SIGNIFICANCE:** The shield is like a family coat of arms and uses symbols to tell its story. Each symbol on the shield represents some part of the past. First, the Air Force wings represent the branch of service but the wings are not in the familiar out-stretched position. When the ancient Greeks approached a stranger, they raised their arms with the palms outward to show they were carrying no weapons—a sign of peace. The 509 obtained special permission to display the wings in this configuration to show that it, too, comes in peace. The atomic cloud burst represents two things: the fact that the 509 dropped the only two atomic bombs ever in wartime, and that it still uses atomic power as a deterrent to war and defender of peace. Finally, the eldest son symbol shows that the wing is the oldest atomic-trained military unit in the world. (Approved, 10 Jul 1952)

MOTTO

DEFENSOR VINDE X--Defender Avenger

OPERATIONS

On Nov. 17, 1947, SAC activated the 509th Bombardment Wing at Roswell and assigned the group to the wing. Within five years, however, the Air Force inactivated the 509 BG while turning over the lineage and honors of the group to the wing.

Maintained combat proficiency with B-29 bombers and F-51 and F-84 fighters, 1947-1948.

The wing pioneered a new concept in 1948 when it received the 509th Air Refueling Squadron, one of the first two such units ever created, and its air refueling KB-29Ms. With the addition of tankers, the 509th's bombers could reach virtually any point on earth.

Charged with strategic bombardment training and air refueling, 1949-1958. Deployed as a wing several times in the early 1950s, three times to England and once to Guam, and also deployed individual squadrons at other times.

The dawning of a new decade brought more changes to the wing. In June 1950, it began receiving

B-50s. In January 1954, the KC-97 aerial tanker replaced the aging KB-29Ms. The wing entered the jet age in June 1955 when it received the first all-jet bomber: the B-47.

Temporarily had no refueling unit during 1958.

Phased down for inactivation in late 1965, but was converted to a B-52/KC-135 wing in 1966.

Supported SAC combat and contingency operations in Southeast Asia with KC-135 aircraft and crews, Nov 1966–Dec 1975, with B-52 aircraft and crews, Nov 1966–Sep 1969, and with B-52 crews, 1970.

From 1 Apr to 1 Oct 1968 and 26 Mar to c. 20 Sep 1969, more than one-half of the wing was involved in SAC operations in Southeast Asia.

From Nov 1969 to Dec 1970, the wing had no bombardment aircraft but continued refueling operations and performed FB-111 ground training.

Resumed bombardment flying training in Dec 1970 and assumed FB-111 alert commitments from 1 Jul 1971 until Sep 1990.

Won the SAC Bombing and Navigation competition and the Fairchild trophy in 1979, 1981, 1982, and 1983.

Awarded the Sanders trophy for best air refueling unit in 1982. Moved on paper to Whiteman on 30 Sep 1990, but not manned until Apr 1993.

Over the next two decades, little changed for the 509th BW as it became SAC's fighter-bomber experts. However, a decision by the Department of Defense in 1988 to close Pease created major changes for the famous 509th.

Headquarters SAC decreed that the 509th would not inactivate but transfer to Whiteman AFB to become the first B-2 Stealth bomber unit. As such, the wing moved to Whiteman on Sept. 30, 1990, without people and equipment. That same day also saw most of the wing's squadrons inactivated.

This took place since the wing was expected to remain non-operational until the arrival of the first B-2 drew nearer. While the wing waited for that date, several more changes occurred. On Sept. 1, 1991, SAC changed the wing's name to 509th Bomb Wing. A second change occurred on June 1, 1992, when the Air Force disestablished SAC. Concurrently, the 509th became part of the newly created Air Combat Command.

The wing's hibernation at Whiteman lasted more than two years. However, on April 1, 1993, the Air Force returned the 509th to operational status as people were again assigned to the wing.

The wing grew larger on July 1, 1993, when it accepted host responsibilities for Whiteman from the 351st Missile Wing.

On July 20, 1993, the 509th took another important step when it received its first fixed-wing aircraft in almost three years: a T-38 complete with a B-2-style paint job. After this, the wing's attentions turned to the arrival of the first B-2.

For the next several months, this passion consumed all 509ers. Finally, on Dec. 17, 1993, the first operational bomber, named "The Spirit of Missouri," touched down on the Whiteman runway. Not only did the date mark the 90th anniversary of the first powered flight by the Wright Brothers, it also fell on the 49th anniversary of the original activation of the 509th Composite Group. As more B-2s arrive at Whiteman, the 509th continues to pioneer the operation of this unique aircraft.

On 10 May 1996, the B-2 fleet was grounded for eight days while tailpipe clamps were inspected for cracks. The stand-down was ordered after mechanics at Whiteman discovered cracks in one aircraft's clamps; each bomber has eight of these titanium clamps. During the eight-day period, 25 of 72 tailpipe clamps inspected were found to be faulty and were replaced B-2 operations resumed on 18 May 1996.

In July 1996, the 509th announced that had received the first 17 GAM-84 bombs for the B-2. Northrop Grumman and Hughes Aircraft Co. reportedly delivered 128 GAM; to Whiteman by the end of 1996. The bombs are considered an interim step for the B-2, providing precision-attack capability until the JDAM is fielded later in this decade.

The 509 BW once again made history on September 17, 1996, when three B-2s dropped three inert GBU-36 weapons, a new, highly accurate Global Positioning System-Aided Munition, which used the GPS-Aided Targeting System. The following month, three B-2 visited the Nellis AFB, NV target range and released 16 2,000-pound GBU-36 bombs from an altitude of 40,000 feet. Amazed range personnel discovered all 16 projectiles hit close enough to their targets to be confirmed as 16 kills. This unprecedented display of airpower was quickly briefed to a gathering of senior AF operational planner who realized the key question was no longer, "how many planes are needed to destroy a target?" but rather "how many targets can one plane destroy?"

On 1 January 1997, the USAF determine that B-2s at Whiteman had reached a limited capability for delivering conventional weapons. On 1 April 1997, the USAF declared the 509th and its B-2s ready to take on nuclear and conventional combat missions. On that date, six B-2 Spirits (of 13 at the base at the time) became part of the SIOP (Single Integrated Operations Plan), the Pentagon's nuclear-warfighting plan. Two more B-2s were scheduled to be added to the SIOP on 1 January 1998.

Unfortunately, just days after the announcement of nuclear readiness, the Air Force had to ground its B-2 fleet. On 8 Apr 1997, the bombers were removed from flying status after an engine-shaft assembly broke during flight. An investigation revealed that the housing of the shaft

assembly had nearly undetectable cracks that caused the shaft to turn in a slightly elliptical pattern rather than a circle. The bombers returned to flying status in mid-April.

The B-2 first saw combat on March 23, 1999, during NATO operations in Serbia and Kosovo, the first sustained offensive combat air offensive conducted solely from US soil. Over a period of two months, the 509 generated 49 B-2 sorties flown directly from Missouri to Europe and return. Although the B-2s accounted for only 1 percent of all NATO sorties, the aircraft's all-weather, precision capability allowed it to deliver 11 percent of the munitions used in the air campaign. The missions lasted an average of 29 hours, demonstrating the global reach of the B-2.

Following the terrorist attacks on New York City and Washington, D.C. on September 11, 2001, the 509 quickly transitioned to a wartime mode by joining forces with the 314th Airlift Wing, Little Rock, Ark., and the Missouri Air National Guard's 139th Airlift Wing, St. Joseph, Mo., to send Missouri Task Force-1 to assist rescue efforts at the World Trade Center.

In October 2001 the B-2 bombers led America's strike force in Afghanistan, hitting the first targets in the country to "kick down the door" for the air campaign which followed. The bombers again flew from Missouri to their targets before landing at a forward location in the Indian Ocean to exchange crews which the engines continued to run. The combat missions lasted more than 40 hours, with the aircraft operating continuously for more than 70 hours without incident before returning to Whiteman.

After twice proving its ability to fly combat missions from Missouri, the wing stepped up efforts to deploy the B-2 from forward locations. By late 2002, the AF had completed special shelters for the aircraft at an overseas operating location. The shelters provided a controlled climate similar to the facilities at Whiteman for specialized work on the aircraft skin in order to maintain its stealth characteristics. This ability to sustain operations from a forward location added a new dimension of flexibility to potential air campaigns.

The new shelters were put to use when the B-2 bombers again led a coalition air strike against the regime of Saddam Hussein, beginning on March 21, 2003. The famous "shock and awe" campaign saw unprecedented use of precision-guided munitions by the B-2 in an effort to minimize collateral damage and destroy key targets. The campaign also marked another milestone for the 509 BW, as B-2s flew combat missions from both Whiteman AFB and a forward deployed location simultaneously.

On December 17, 2003, the world celebrated the centennial of the first powered flight by the Wright Brothers. At the same time, the 509 Bomb Wing celebrated the 10-year anniversary of the Spirit of Missouri's arrival at Whiteman. Only a decade after delivery, the B-2 was now a proven weapon system, a veteran of three campaigns and first-ever forward deployment. In recognition of the maturity of the system and the unit, the Air Force declared the B-2 Fully Operational Capable.

Since that day in 2003, the B-2's forward presence has become a reality and proved that it can deliver combat airpower, any time and any place. The deployment to Guam, which began in February 2005, provided a continuous bomber presence in the Asia Pacific region and augmented Pacific Command's establishment of a deterrent force. The 80-day tour, the longest in the bomber's 13-year history, also marked the first B-2 deployment since the aircraft was declared fully operational.

Northrop Grumman on Tuesday celebrated the 20th anniversary of the first B-2 delivery. The Spirit of Missouri arrived at Whiteman AFB, Mo., on Dec. 17, 1993, ushering in a new era of precision strike. It can carry both conventional and nuclear weapons, and is the only aircraft that combines stealth, long-range, large payload, and precision weapons, states a Dec. 17 Northrop Grumman release. "For 20 years, the B-2 has been one of the nation's most decisive, most effective weapon systems for defending America's interests around the world," said Brig. Gen. Thomas Bussiere, commander of the 509th Bomb Wing at Whiteman. "It deters our enemies and assures our allies of our capabilities and our commitment." Dave Mazur, vice president and B-2 program manager at Northrop Grumman Aerospace Systems, said the B-2's strength lies not only in its warfighting capabilities, "but also in the passion and the spirit of innovation of the men and women who have kept it lethal and effective against evolving threats for the past 20 years." He added, "It remains one of America's most important symbols of strength and freedom." 2013

Some significant firsts associated with the B-2 include:

- The first operational delivery of munitions by the Spirit of California on Sept. 23, 1994;
- First B-2 appearance at a Red Flag exercise on Jan. 20, 1995;
- First B-2 flight to Europe by the Spirit of Missouri, June 10-11 1995;
- The first B-2 mission over the Pacific by the Spirit of Kansas, on Sept. 1, 1995; and
- The longest B-2 flight to date by the Spirit of Washington, a 25-hour, non-stop, round-trip flight to Santiago, Chile, on March 10, 1996.
- Three B-2s successfully executed the first live drops of the GAM on Oct. 8, 1996, at the Nellis range complex. The bombers scored 16 kills with 16 munitions
- The first operational combat mission was flown on the first night of Operation Allied Force, March 24, 1999.
- The first operational combat mission was flown on the first night of Operation Allied Force, March 24, 1999.
- During Operation Allied Force the B-2s flew less than 1 percent of the combat sorties but dropped 11 percent of the total bombs.

SPIRIT OF PENNSYLVANIA was the 15th B-2 delivered and the first Block 30 aircraft to arrive at Whiteman. The jet was named during a ceremony at Willow Grove Reserve Air Station in Philadelphia, having been directly flown there from the Northrop Grumman manufacturing

facility at Palmdale. Arriving in Philadelphia on 7 August 1997, the bomber departed for Whiteman two days later. On 6 November that year it performed a test drop of inert JDAM at the Utah Test Range. On 9 March 1998 93-1087 expended the first ever load of Mk 82 500-lb bombs to be dropped from a B-2, the ordnance hitting an island at the Faradon range in the Pacific Ocean. The aircraft's nose gear door (see page 62) is notable for its absence of crew names, painted over in the interests of security and the nine mission markings.

B-2A 93-1086 SPIRIT OF KITTY HAWK, 13th BS/ 509th BW, Whiteman AFB, October 2005
SPIRIT OF KITTY HAWK was the 13th B-2 to be delivered to the 509th BW, and the third Block 20 aircraft built. It arrived at Whiteman on 30 August 1996, but was not named until 17 December, when a christening ceremony for the aircraft took place on the 52nd anniversary of the founding of the 509th BW. The unit was known as the 509th Composite Wing when formed, and led by a certain Col Paul Tibbets. The actions of the wing in August 1945 arguably made the unit the most famous in the USAAF. The aircraft was named during a ceremony at Seymour Johnson AFB in North Carolina.

B-2A 90-0041 SPIRIT OF HAWAII, 393rd BS/ 509th BW, Whiteman AFB, February 1996
SPIRIT OF HAWAII was the ninth Block 10 aircraft to be delivered, arriving at Whiteman on 10 January 1996. If 50 B-2As had been constructed, it would have been possible to name each aircraft after a state in the Union. After all, it has been claimed that components and subsystems for the jet are manufactured in every state! Nineteen of the twenty-one B-2As are named after states.

B-2A 88-0329 SPIRIT OF MISSOURI, 13th BS/ 509th BW, Whiteman AFB, September 2005
SPIRIT OF MISSOURI was the third stealth bomber to be delivered to Whiteman, the aircraft arriving at the base on 31 August 1994. It was reported that the jet made an appearance at the 'Wings over Houston' airshow on 20-21 October 2001, performing its flypast as it returned from a mission over Afghanistan. The cheers from the crowd were said to have drowned out the engine noise of the bomber as it overflew Ellington Field.

B-2A 82-1071 SPIRIT OF MISSISSIPPI, 325th BS/ 509th BW, Whiteman AFB, October 2001
The 19th B-2A to be delivered, and the first Block 30 aircraft, this jet was given the unofficial nickname the Black Widow. The bomber was given its official name during a ceremony at Jackson Air National Guard Base in Mississippi. Along with SPIRIT OF LOUISIANA, this jet was one of the first into battle during OEF when it performed a 43.5-hour sortie from Whiteman on 6 October 2001. It returned home to Missouri on the 8th following a crew change in Diego Garcia.

B-2A 82-1070 SPIRIT OF OHIO, 393rd BS/509th BW, Whiteman AFB, January 1997
SPIRIT OF OHIO was the 14th Spirit to be delivered, and the fourth Block 20 aircraft. The jet participated in several temperature testing evaluations during its early years in service. In 1993, it underwent 1000 hours of temperature testing at McKinley Climate Laboratory at Eglin AFB, Florida, during which it experienced temperatures of between 45 and 120 degrees Fahrenheit. The jet's performance at the other end of the temperature spectrum was evaluated three years later during a deployment to Eielson AFB, Alaska. It is perhaps no surprise, therefore, that the aircraft earned the nickname FIRE & ICE, which was painted onto its nose gear door. The latter

was given to the USAF Museum at Wright-Patterson AFB for attachment to the collection's B-2 static test airframe.

B-2A 89-0127 SPIRIT OF KANSAS, 393rd BS/ 509th BW, Whiteman AFB, July 1997

The sixth Block 10 aircraft delivered, SPIRIT OF KANSAS was issued to the 509th on 18 February 1995. The aircraft performed the wing's first ever mission over the Pacific Ocean when it flew to the Hawaiian Islands to mark the 50th anniversary of VJ-Day on 1 September that same year. In 1997, this aircraft performed the first ever mission of a B-2A to the UK when it conducted a flypast at the Royal International Air Tattoo at RAF Fairford. As usual with all B-2As visiting the UK, the jet was escorted by two F-15Es from the 48th FW at RAF Lakenheath.

B-2A 93-1085 SPIRIT OF OKLAHOMA, 393rd BS/ 509th BW, Whiteman AFB, December 1998

SPIRIT OF OKLAHOMA was the 11th aircraft to be delivered to Whiteman, and the first Block 20 machine. The 509th would perform its first Block 20 sortie with this jet on 1 June 1996, and two-and-a-half years later, on 8 January 1999, this aircraft would be the last Block 20 airframe to leave Whiteman for Palmdale. There, it was modified to Block 30 status, after which the bomber became one of the first B-2s to see combat in OEF.

B-2A 82-1066 SPIRIT OF AMERICA, 393rd BS/ 509th BW, Whiteman AFB, October 2001

The brazenly patriotic Spirit of America was the last B-2A to be delivered, in Block 30 form, in early 2000. Perhaps it was quite fitting that SPIRIT OF AMERICA was also one of the first bombers to see combat in OEF. The aircraft logged a 44.3-hour sortie and went into action alongside the SPIRIT OF GEORGIA, which flew for just over 40 hours. Interestingly, this aircraft now shares its name with an F-22A Raptor which rolled off the Lockheed Martin production line at Marietta, Georgia, on 9 April 1997 - just eight days after the 509th received its initial operating capability. The nose gear door of SPIRIT OF AMERICA had patriotic artwork applied to it (see page 62) in the wake of the 11 September 2001 attacks, as did many other USAF and US Navy aircraft.

B-2A 82-1068 SPIRIT OF NEW YORK, 410th TS/ 412th TW, Edwards AFB, January 1996

Serving with the 410th TS at Edwards AFB, SPIRIT OF NEW YORK was the first Block 30 aircraft built. Another jet with its fair share of nicknames, it has been called Navigator, Ghost and Afternoon Delight. It is the only B-2A which is located at Edwards AFB. One of the luminaries to fly the aircraft with the 410th TS is Lt Col Michael T Good, who is scheduled to be a Mission Specialist for an up and coming Space Shuttle flight, having trained with the National Aeronautics and Space Administration as an Astronaut. Lt Col Good was a B-2A test pilot, flying the SPIRIT OF NEW YORK, between 1994 and 1997.

B-2A 89-0128 SPIRIT OF NEBRASKA, 393rd BS/509th BW, Whiteman AFB, September 1995

The seventh aircraft to be delivered to Whiteman was the SPIRIT OF NEBRASKA, which was the seventh Block 10 B-2 built. The jet arrived at Whiteman on 28 June 1995, but it was not named until a ceremony was held at Offut AFB, Nebraska, several months later. Offut was the home of Strategic Air Command - an outfit synonymous with the Cold War and America's nuclear deterrent. No sooner had the B-2A entered service than SAC was disbanded on 2 June 1992. Ironically, SAC never saw its most advanced aircraft serve under its command and instead the B-

1 B was dubbed 'SAC's last bomber'. On the same day that the SPIRIT OF NEBRASKA was named, two of the 509th's T-38 Talons were christened SPIRIT OF WARRENSBURG and SPIRIT OF SEDALIA.

B-2A 90-0040 SPIRIT OF ALASKA, 393rd BS/ 509th BW, Whiteman AFB, March 1996

SPIRIT OF ALASKA was the tenth aircraft to be delivered to Whiteman. The jet's arrival on 10 January 1996 was a highly significant event, as it 92 marked the halfway point in the raising of the 509th's bomber force. The aircraft was also one of the Spirits to make the voyage across the 'Pond' to events in England when, in 2000, it was part of the static display at RAF Mildenhall for that year's Air Fete.

B-2A 88-0328 SPIRIT OF TEXAS, 393rd BS/509th BW, Whiteman AFB, February 1996

This aircraft was nicknamed Pirate Ship as well as having its official title as a tribute to the Lone Star State. Interestingly, this nickname, like all of those given to the early B-2As, fell out of use once the jet had been given its official moniker, and the Spirits have not inherited the tradition of obtaining highly individual and characteristic names as bestowed on their B-1 B and B-52 brethren. The Flag Patch for this aircraft, like many of those adorning the hangars of other B-2As at Whiteman, features vertical red and white bars, a top view of the bomber and the blue silhouette of the characteristic shape of the State of Texas.

B-2A 88-0332 SPIRIT OF WASHINGTON, 325th BS/ 509th BW, Whiteman AFB, June 1995

The fourth operational B-2A to be delivered to the USAF, SPIRIT OF WASHINGTON received its name as an honour to the staff of the Boeing Company, who played a major, if sometimes unsung, role in the aircraft's development. Boeing was responsible for the B-2A's fuel systems, weapons delivery systems and landing gear, which, coincidentally was based upon that used for the 767 airliner. Some structural components, including the outboard and aft-centre sections of the fuselage, were also constructed within Boeing's massive manufacturing plants in Seattle.

B-2A 88-0330 SPIRIT OF CALIFORNIA, 13th BS/509th BW, Whiteman AFB, December 2005

The second B-2A to be delivered to Whiteman was Block 10 jet SPIRIT OF CALIFORNIA. Following the aircraft's arrival on 17 August 1994, 88-0330 performed a test flight on 23 September during which it conducted the first ever munition drop by a Spirit on the Utah Training and Test Range. The aircraft delivered two inert 2000-lb Mk 84 bombs on the range. On 11 December 1995, SPIRIT OF CALIFORNIA escorted SPIRIT OF GEORGIA back to Whiteman after its naming ceremony. 88-0330's flight on this date marked the 509th sortie performed by the 509th BW.

B-2A 89-0128 SPIRIT OF NEBRASKA, 393rd BS/ 509th BW, Whiteman AFB, September 1995

This planform view of 89-0128 SPIRIT OF NEBRASKA illustrates the complex flap arrangement on the aft side of the wings, as well as the hidden engine inlets. The aircraft is also painted in a blue-grey colour, and is not black as more commonly thought.

B-2 Crashes at Guam

A B-2A bomber, Spirit of Kansas, from the 509th Bomb Wing at Whiteman AFB, Mo., crashed on Feb. 23 just after taking off from Andersen AFB, Guam. The two pilots ejected safely, but one of them suffered a spinal compression and required medical attention, Air Force officials said. This

was the first-ever crash of the stealth bomber, which entered USAF's inventory in 1993. The B-2 fleet now stands at 20 aircraft. The crash took place as Spirit of Kansas, along with three other B-2s from Whiteman, were leaving the island for home after a four-month deployment. They had been on Guam since mid-October 2007 as part of the now-standard rotation of USAF's B-1B, B-2A, and B-52H bombers to the Pacific region to maintain a continual presence there as a means of dissuading aggression. 2008

On 23 February 2008, at 1030 hrs local (0030 hrs Zulu), a B-2A, T/N 89-0127, assigned to the 509th Bomb Wing, Whiteman Air Force Base (AFB), Missouri crashed during initial takeoff from Andersen AFB, Guam. The Mishap Mission was a scheduled return from Andersen AFB to Whiteman AFB concluding a 4-month continuous bomber presence deployment. The Mishap Aircraft (MA) was number two on takeoff behind the lead aircraft, using standard one-minute formation spacing between bomber aircraft. The two-person crew consisting of Mishap Pilot 1 (MP1) and Mishap Pilot 2 (MP2) successfully ejected from the aircraft during the mishap. MP1 sustained minor injuries, was treated locally and then released. MP2 suffered a spinal compression fracture and was treated at Tripler Army Medical Center in Hawaii before returning to Whiteman AFB. He is expected to reach full recovery. The MA was destroyed at a total loss of \$1,407,006,920. Andersen AFB addressed environmental remediation associated with the mishap. The Board President found, through clear and convincing evidence, that distorted data introduced into the MA flight control computers caused an uncommanded, 30 degrees nose-high pitch-up on takeoff resulting in a stall and subsequent crash. Moisture in the MA port transducer units (PTUs) during an air data calibration caused an unnecessarily large "bias" or correction to the air data system. Using this "moisture distorted" data, the MA flight computers calculated inaccurate airspeed and a negative angle of attack (AOA) which contributed to an early rotation and uncommanded pitch-up on takeoff. Loss of all air data resulted in degraded flight controls response and stability of the MA. The nose-high attitude and heavy gross weight of the MA resulted in deterioration of airspeed. The end result was a low-altitude stall, culminating in a roll and yaw to the left. The lack of airspeed and altitude denied MP1 the ability to recover the MA. As the left wing made contact with the ground, the Mishap Crew successfully ejected. The MA impacted the ground and was destroyed by fire. Moisture in the PTUs, inaccurate airspeed, a negative AOA calculation and low altitude/low airspeed are substantially contributing factors in this mishap. Another substantially contributing factor was the ineffective communication of critical information regarding a suggested technique of turning on pitot heat in order to remove moisture prior to performing an air data calibration.

DEPARTMENT OF THE AIR FORCE UNIT HISTORIES

Created: 29 February 2024

Updated:

Sources

Air Force Historical Research Agency. U.S. Air Force. Maxwell AFB, AL.

The Institute of Heraldry. U.S. Army. Fort Belvoir, VA.

Air Force News. Air Force Public Affairs Agency.