

GRISSOM AIR FORCE BASE, BUILDING NO. 747
(Grissom Air Force Base, Crew Readiness Alert Facility)
Peru
Miami County
Indiana

HABS No. IN-301-B

HABS
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
MIDWEST REGIONAL OFFICE
National Park Service
U.S. Department of the Interior
1709 Jackson Street
Omaha, NE 68102

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GRISSOM AIR FORCE BASE, BUILDING NO. 747 (Grissom Air Force Base, Crew Readiness Alert Facility) HABS No. IN-301-B

Location: Building 747, Grissom Air Force Base, Peru, Miami County, Indiana. The building is located in the southeast quadrant of the base.

Date of Construction: 1960

Original Use: Crew Readiness Alert Facility

Present Use: Vacant

Present Owner: Air Force Base Conversion Agency - Grissom

Significance: Building 747 was used by the United States Air Force to support three major Cold War missions: the Strategic Air Command (SAC) ground alert, to act as a deterrent to Soviet attack; the Post Attack Command Control System (PACCS) mission, which supported the flying SAC command post in the event of a Soviet nuclear attack of the SAC ground base at Offutt AFB; and the National Emergency Airborne Command Post (NEACP) mission to shelter the President of the United States in case of nuclear attack. The building served as alert housing for pilots.

Project Information: The recordation was prepared to satisfy a) the September 2001 Memorandum of Agreement between the Indiana State Historic Preservation Officer, as submitted to the Advisory Council on Historic Preservation, and b) the recordation requirements identified by the National Park Service, Midwest Region, Omaha, in a letter to the Air Force Center for Environmental Excellence (AFCEE) dated 19 November 2001. Portage Environmental, Inc., (PEI), under contract with AFCEE, prepared the recordation for Grissom Air Force Base Conversion Agency. Hardlines Design Company, Inc., (HDC) provided photodocumentation support under subcontract to PEI. Jeff Bates (Photographer), and Mary Crowe (Historian) of HDC photographed the building in April 2002. Parker Atkins (Project Engineer) and Malini Lyman (Environmental Scientist) of PEI prepared the narrative and location map in June 2002.

HISTORICAL INFORMATION

The former Grissom Air Force Base is located in the Pipe Creek Township, in the southwest section of Miami County, near the towns of Kokomo, Peru, and Logansport, Indiana. The base encompasses 2,722 acres, and is surrounded by farmland. The base, formerly a U.S. Navy base named Bunker Hill Naval Air Station, was designated as United States Air Force Storage Branch on 16 November 1951, and was formally reopened as a Tactical Air Command Base on 22 June 1954. The base was home to the 4433^d Air Base Squadron, the 323^d Air Base Group, 4041st Air Base Group, and 305th Combat Support Group. In 1955, the 319th Fighter Interceptor Squadron of the Air Defense Command joined the forces at the base. The Strategic Air Command (SAC) arrived on the scene in the mid-fifties, and SAC's 8th Air Force assumed jurisdiction of the base on 1 September 1957. In May 1959, the 305th Bomb Group and its medium bomber, the B-47 Stratojet aircraft arrived. Later that same year, the first KC-135 Stratotankers were assigned to the same unit. Two years later, Convair's B-58 Hustlers, the first supersonic bombers began replacing the B-47s.

After twenty-six years of bearing the name Bunker Hill, the base was renamed on 12 May 1968 in honor of Lieutenant Colonel Virgil I. "Gus" Grissom, a native of Mitchell, Indiana, who was one of the original seven astronauts. On 1 January 1970, the 305th Air Refueling Wing replaced the 305th Bomb Group, and Grissom became one of the largest tanker bases in the country. The Air Force Reserve became part of the Grissom community in 1971 when the 434th Special Operations Wing and its A-37 aircraft moved to the base. In 1978, a second Air Force Reserve unit was assigned to the base. At the height of its operations, the base was home to one active duty wing and two Air Force Reserve units, sixty KC-135 Stratotankers, and eighteen A-10 Thunderbolt II fighter aircraft. In 1992, the Air Mobility Command took charge of the base due to change in mission. Two units (one reserve, one active duty) were deactivated in 1994. In October that year, Grissom was realigned as an Air Reserve facility and became home to the 434th Air Refueling Wing.

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Building 747 was originally constructed in 1960 to provide alert housing for the SAC Ground Alert Mission. The facility was constructed in the southeast quadrant of the base near the airfield, adjacent to two existing Christmas tree shaped, concrete alert aprons designed to hold up to eleven aircraft. The larger apron, "Yankee", was configured to hold seven aircraft, while the smaller one, "X-Ray", could hold up to four aircraft on alert status. To the west of the building was a parking lot with rows of power sockets for charging the truck engines. The trucks were used to transport the crews to and from the planes on winter nights. Several small gable-roof outbuildings and a large, rectangular, raised air conditioning unit were constructed adjacent to the east side. To the west stood Building 738, a 30' guard tower built of metal scaffolding and topped by a small one-storied command post for military police.

SAC Ground Alert Mission

Formal announcement for activation of formal alert operational crews occurred when the Soviets launched the Sputnik satellite in late October 1957. In 1959, SAC hired Leo A. Daly, an architectural engineering firm with substantial World War II military experience to design three sizes of standardized crew quarters, that became known as "moleholes" for their partially subterranean configuration: 18,000 square feet (seventy men); 22,500 square feet (100 men); and 31,000 square feet (150 men). Made of reinforced concrete and concrete-block construction, moleholes were of two-story height, with one story below ground. These windowless alert quarters were identical everywhere, with tunnel-like egress covered in corrugated steel. SAC built approximately sixty-four such moleholes during the period. Building 747 at Bunker Hill, Indiana was one of approximately eleven such 150-man moleholes constructed in 1959-60.

In response to Soviet Union's arms build up, SAC developed the concept of maintaining a percentage of its aircraft on ground alert twenty-four hours a day. This alert operation meant that bombers and tankers with weapons loaded and crews ready for take-off were available on the runways at all times in case of an attack. The alert posture was intended to achieve the capability of launching bombers within fifteen minutes of being ordered to do so. SAC's 305th Bombardment Wing included 454 officers, 3,100 airmen, and 286 civilians moved to Grissom AFB bringing KC-135 Stratotankers and B-47 Stratojet bombers with them. The wing was activated at Grissom AFB in 1961, at which time it went on alert. The B-58 Hustler supersonic bombers replaced the B-47 bombers at Grissom the same year. Grissom was one of two installations under SAC to use this aircraft. The SAC ground alert at Grissom consisted of B-58 Hustler bombers from 1961-69. Up to eleven planes sat on the Christmas tree alert aprons "X-ray" and "Yankee", and their crews were stationed at the alert facility on ground alert twenty four hours a day.

The planes and the crews would rotate, each crew being stationed at the alert facility for one week. Eleven crews of six people were changed every Thursday. They were checked in and out of the gated area at the nearby traffic check house (Building 746). The incoming crews were briefed and then went for training at a number of buildings. They could go anywhere on base that had a klaxon to recall them for alert exercises. The crew slept in the alert facility. When the klaxon rang, the crews jumped into the trucks parked adjacent to the facility, then drove out to the planes and prepared for take-off.

The B-58 bomber aircrafts were loaded with nuclear bombs including one large one in central pod. The nuclear weapons were kept in two of the multicubicle magazines, A and B (Buildings 757 and 759) adjacent to the alert aprons, and were set and loaded by the munitions crew.

The 305th Bombardment Wing was on ground alert during the Cuban Missile Crisis in 1962 and was also active in the SAC global deterrent force, taking planes to the Pacific and European bases on monthly missions. The B-58s were phased out in 1969-70, and the mission of the base was changed from bombing to refueling. The 305th Bomber Wing was deactivated, and the 305th Air Refueling Wing, which flew EC-135 aircraft, was activated. The wing provided support for the war in Vietnam, including the 1975 evacuation of Saigon, and for the rescue of the Cambodian-seized merchant ship, the *Mayaguez*. It was also the first tanker unit to work with the new B-1 bomber. Twenty-four hour ground alert continued using KC-135 refueling tanker aircraft, which supported bomber aircraft on alert at other Air Force bases.

In 1979-80, the reserve wing, the 434th Tactical Fighter Wing, received the A-10 Thunderbolt II aircraft, replacing its A-37 aircraft assigned in 1971. In 1988, the 305th Refueling Wing began to use modified KC-135 "R" model aircraft, and supported the United States invasion of Grenada.

Post-Attack Command Control System (PACCS)

From 1966-90, PACCS twenty-four hour airborne alert was held at Grissom AFB with two radio relay EC-135 aircraft. In 1961, PACCS began operations at Offutt AFB, and came to Grissom AFB in 1966. Its mission was to have an airborne SAC command post available in an EC-135 aircraft, in case the SAC underground command center at Offutt AFB, alternate command posts, or ground-based communications were destroyed by Soviet nuclear attack. This flying command post, headed by a SAC general officer, monitored communication systems linking the various SAC underground and alternate flying command posts, the National Military Command Center, the NEACP, the SAC Airborne Command Post, and the Airborne Launch Control Center aircraft.

From 1961 until 1990, PACCS was on twenty-four hour airborne alert. Called the *Looking Glass* because its command mirrored the SAC command post at Offutt AFB, the airborne SAC command post aircraft was joined in 1962 by two auxiliary post aircraft, the East Auxiliary Command Post stationed at Offutt AFB with *Looking Glass*, and the West Auxiliary Command Post stationed at Ellsworth AFB. The third component consisted of two radio relay EC-135 aircraft stationed at Grissom AFB in 1966.

These two radio relay aircraft from Grissom AFB served as both a radio link between *Looking Glass* and NEACP at Andrews AFB and as a refueling aircraft, operated by the 70 Air Refueling Squadron, to refuel *Looking Glass* or NEACP. The Grissom AFB mission was to set up all communications among the aircraft. When the PACCS mission was moved to Grissom in 1966, it shared the Alert Facility with SAC. PACCS crews had priority in use, and were sequestered from other SAC alert crews. The aircraft sat on the *Yankee* runway.

National Emergency Airborne Command Post (NEACP)

The NEACP program came to Grissom AFB in the 1980s. From the 1980s to 1990, various NEACP crews brought the E-4 aircraft to Grissom AFB for alert exercises. The NEACP mission was to provide an airborne emergency post for the National Command Authorities during a war, in case of destruction of ground-based facilities. Initially, NEACP crews were quartered in Building 747, taking priority over SAC and PACCS alert missions. The Grissom AFB mission was to send an E-4 aircraft to Washington D.C. to pick up the President and keep him airborne until the conditions were safe to land.

ARCHITECTURAL INFORMATION

Building 747 is a rectangular two-story concrete block building constructed on a concrete foundation with a shallow-pitched gable roof of concrete and gypsum, pierced on the east slope by a chimney. The basement is approximately 19,967 square feet, the second floor is approximately 13,055 square feet, and the total area of this building (excluding the tunnels) in accordance with the 8 January 1959 design plans is approximately 33,022 square feet. This building was constructed partially underground with the walls of the lower story sheltered by an earthen berm. Gabled entrance wings with double doors and single pane glass extend from the north and south sides, and shallow entrance bays with similar double doors extend from the west and east sides.

The windowless building was built with ten large tunnel-like egress covered in corrugated steel. Two of these tunnels are located on the north side, two are located on the south side, three are located on the east side, and three are located on the west side. Each of the tunnels was equipped with single entry doors. The tunnels slope downward to the lower floor of the building and were designed to provide for rapid egress and deployment of aircraft. The upper floor of Building 747 contained the command post, a briefing room, dining room, offices, and several recreation areas, which are described in more detail below. The lower level was originally designed with fifty-five bedrooms. Fifteen of these bedrooms were designed as two-man rooms and forty were designed as three-man rooms. Each of the tunnels previously described entered vestibules in the basement for emergency exit. Rooms in the basement were accessed through two east/west corridors and three bisecting north/south corridors. All of the corridors begin and end at a vestibule leading to a tunnel. Three staircases are located between the lower level and the upper level.

The lower level contained two bathroom/shower areas, which included a 36' x 16' airmen's facility and a 31' x 16' officer's facility. The lower level also housed the mechanical room for this facility, which contained the boiler, air conditioning system, and the chimney. This boiler room measured approximately 45' x 28' and was centrally located in the north side of this building. Two pump rooms were located below the lower level of this structure. The pump rooms measured 9' x 5' and were located on opposite sides of the building. The upper level had nine outside entrances/exits and contained one main corridor through the length of the building, which bisected four minor corridors leading to rooms in the facility.

This floor contained a briefing room, a television room, a kitchen and dry storage room, the airmen's dining room, the officer's dining room, the officer's lounge, the airmen's lounge, a communication room, a card room, a library/reading room, eight enhanced work planning (EWP) rooms, a weapons storage room, an airmen's toilet facility, an officer's toilet facility, two offices, a control room, a storage room, and a garbage room. The roof on this building was designed as a five-ply built-up style with shallow pitch of approximately 1/8" per foot and was penetrated on the east slope by a chimney from the boiler room.

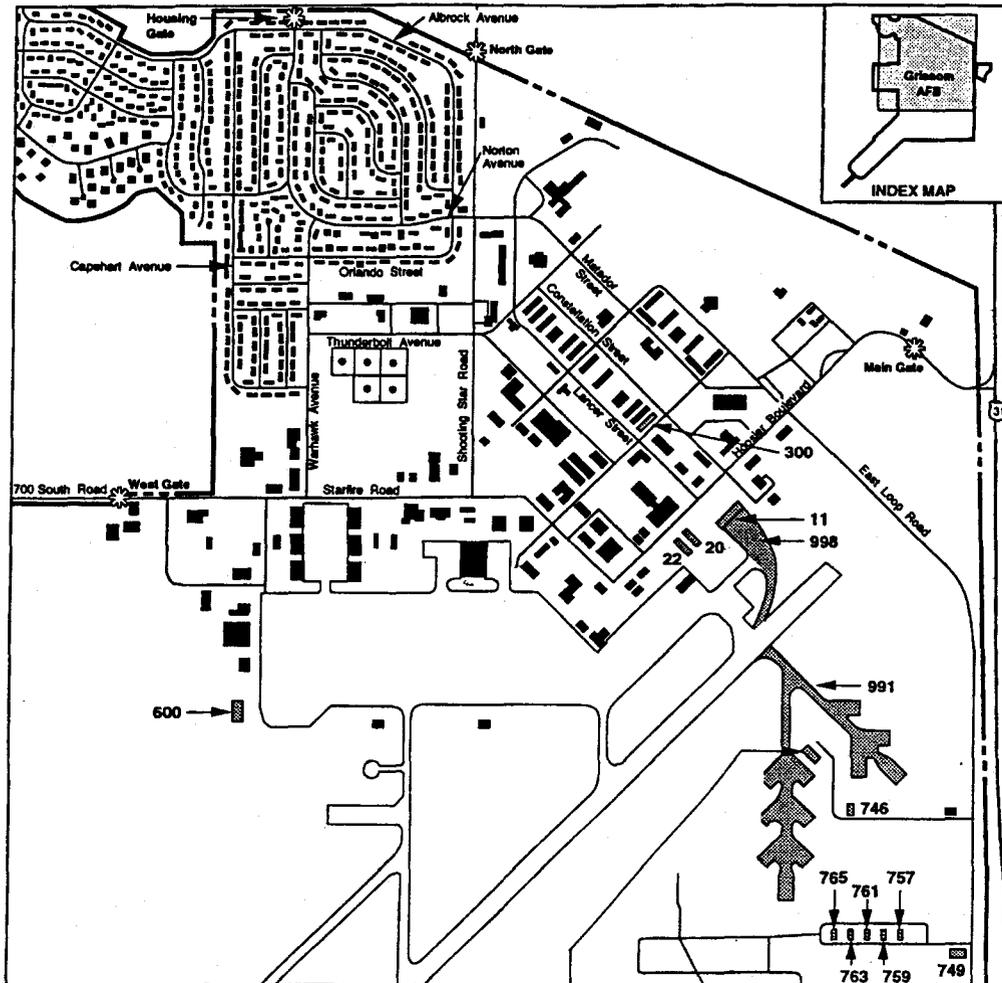
The building was remodeled twice in the 1980s. Renovations in the early '80s included re-roofing, removal of select wainscot panels and vinyl wall coverings, the removal of select interior walls, the installation of a curtain wall in the airmen's bathroom to accommodate women, the removal of select acoustical panels, the installation of new paneling and quarter round molding, the installation of both straight and curved acoustical curtain walls, the installation of a new formica counter top with cabinets in the kitchen, the removal and replacement of a small concrete slab outside of the kitchen, the installation of new vinyl textured wall board, acoustical ceiling panels, carpet, wainscot, shoe molding/base boards, lighting, ceramic tile, and insulation in the tunnels. It also appears that the concrete masonry interior walls received new paint.

Renovations in 1987 included the removal and replacement of the concrete loading dock outside of the kitchen, the removal and replacement of select doors, the construction of new interior partition walls, the removal and replacement of the stage in the briefing room, new carpet, the removal of select interior curtain walls, the removal of exhaust hoods in the kitchen, and other minor cosmetic interior upgrades.

The loading dock project included the removal of the concrete intermediate foundation wall, the dock wall and footing, the retaining wall and footings, loading ramp, and dock slabs. The installation of the new concrete ramp and loading dock included addition of a grease interceptor pit, a new kitchen measuring approximately 16' x 20', a new concrete retaining wall and footings, three rubber bumpers in the dock, a new sanitary sewer manhole, aluminum guard rails, new curb sections, and new sections of concrete sidewalk.

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BUILDING 747

