Form No. 10-300 (Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC: Hangar 9 (Brooks Air Force Base)

AND/OR COMMON: Edward H. White II Museum

2 LOCATION

STREET & NUMBER: Inner Circle Road, Brooks Air Force Base — NOT FOR PUBLICATION

CITY, TOWN: San Antonio — VICINITY OF — CONGRESSIONAL DISTRICT: 23

STATE: Texas — CODE: 48 — COUNTY: Bexar — CODE: 029

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	__AGRICULTURE	X MUSEUM
X BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	X YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	__YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

Contact: Base Commander, Brooks Air Force Base
John Bullard, Base Historian

NAME: U.S. Air Force

STREET & NUMBER: The Pentagon

CITY, TOWN: Washington — VICINITY OF — STATE: D.C.

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: Office of the County Clerk

STREET & NUMBER: Bexar County Courthouse

CITY, TOWN: Houston — STATE: Texas

6 REPRESENTATION IN EXISTING SURVEYS

TITLE: Texas State Historical Survey; National Register of Historic Places

DATE: 1970; 1970 — X FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS: Texas State Historical Commission; National Register

CITY, TOWN: Austin; Washington — STATE: Texas; D.C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	__DETERIORATED	__UNALTERED	X ORIGINAL SITE
__GOOD	__RUINS	X ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Hangar 9 is the lone survivor of 16 similar structures erected at Brooks Field early in 1918. Facing generally northeast-southwest, they formed a segmental arc flanking the north side of a northeast-southwest dirt runway, which today is covered with close-clipped grass Over the years the Army removed the old edifices one by one and eventually announced, in the 1960's, that the last one, Hangar 9, would be demolished as well. At that time aviation enthusiasts and the Bexar County Historical Society asked for and received Air Force permission to restore the hangar to the service's safety specifications. San Antonio citizens and others raised the necessary funds, saw the work carried out, and in 1968 dedicated the refurbished structure, in honor of Astronaut Edward H. White II, as an aviation museum.

The hangar is rectangular shaped and two stories high with a low pitched, gambrel roof supported by wood trusses still held together by the original bolts. White-painted weatherboarding sheathes the sides and ends, except where doors and windows stand. Affixed to the eight-bay-long north side is a center-placed, four-bay-long, one-bay-wide, flat-roofed, white-painted, frame wing. An original fixture, it now houses museum offices and restrooms and is accessible from the exterior by a single door in the center of the north wall and from the aircraft storage area by two widely spaced, single doors in the hangar's north wall.

Except where interrupted by the north wing, each bay of the eight-bay-long north and south sides of the hangar is naturally lighted by a two-tiered, triple window set in a wood frame and displaying six-over-six sashes. The middle four bays on the north side have only upper-level windows. All six wing bays have single-tiered, triple windows with six-over-six sashes.

At each end of Hangar 9, four massive, approximately 16-foot-long, white-painted, board-and-batten, sliding doors stand on flat steel rails and hang from a double, metal track that extends some 16 feet beyond each side of the building to rest on buttressed wood posts This system allows the hangar to be fully open at each end. Also at each end, one of the large hangar doors has a smaller, standard-sized, board-and-batten door for easy individual access when the larger doors are shut. Two widely separated, single, wood doors provide additional entry on the south side.

Inside the hangar the walls are unsealed and the wood trusses exposed. The floor is a concrete slab (original), and upon it rest numerous historical aviation exhibits, including a single-engine Curtiss biplane.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	__ARCHITECTURE	__EDUCATION	X_MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	__ENGINEERING	__MUSIC	__THEATER
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES 1918-1945 BUILDER/ARCHITECT Thomas and Harmon Co.

STATEMENT OF SIGNIFICANCE

The only survivor among several hangars that the U.S. Army Signal Corps Aviation Section built on its hastily established World War I training fields, Hangar 9 is the Nation's oldest Air Force aircraft storage and repair facility. Erected in 1918 and recently restored to serve as an aviation museum, the wood-trussed, white-painted, frame structure symbolizes both early Army efforts to create an effective air arm and the rapid progress made toward that goal under the impetus of war.

When the United States entered the First World War in April 1917, the Army had only 35 pilots and about 200 training planes, none of which mounted weapons. In May, however, the National Defense Council created an Aircraft Production Board, and in the next 18 months American manufacturers produced almost 14,000 planes and 42,000 aircraft engines. Meanwhile the Aviation Section recruited thousands of potential pilots and constructed or leased 18 flying fields at which to train them.

Brooks Air Force Base--originally known as Gosport Field and later as Brooks Field--was one of the new training sites. It differed somewhat from the others, however, for when it opened in March 1918 its staff trained new instructors in the experimental Gosport system of teaching flying. Devised earlier by the British, the method was adopted subsequently for all U.S. Army flight-training centers. After turning out scores of World War I pilots and new instructors, Brooks in mid-1919 temporarily became a center for balloon-flight instruction, but 3 years later heavier-than-air craft returned. The Army made Brooks a primary flying school, and during the next 9 years, 5,573 students reported here for pilot's training. A partial list of the field's instructors and students, many of whom have a direct associatic with Hangar 9 and all of whom are memorialized by it, reads like an honor roll of pioneer military aviators. Included are: Claire Chennault, Thomas D. White, Jimmy Doolittle, John Macready, William C. Ocker, Charles A. Lindbergh, and Nathan F. Twining.

History

When the United States entered the First World War in April 1917, the Army lacked an effective air arm. Responsibility for aerial opera-

tions lay with the Signal Corps' Aviation Section, which had only 35 pilots and about 200 training planes of dubious military value. True, only a little more than 13 years had lapsed since the Wright brothers' first successful manned flight in a powered airplane, but as early as 1914 France had boasted 171 trained pilots and 260 planes, and Germany, according to some reports, had manufactured more than 500 military aircraft. The lagging condition of American military aviation was due in part to lack of money. In 1898 the War Department awarded Samuel P. Langley $50,000 to develop a man-carrying version of his powered glider, and in 1907 the Board of Ordnance and Fortification ordered construction of a plane that could carry two people at a speed of 40 miles per hour, but not until 1911 did Congress vote a specific aviation budget. It allotted the Army $125,000 with which to purchase planes and conduct aeronautical experiments. That appropriation enabled the corps to establish its first flying school (at College Park, Md.), but identical sums the next 2 years did not allow expansion of the program. Although Congress increased subsequen appropriations, these remained woefully short of the amounts needed to keep up with European military aviation. One official Air Force history describes the service's situation in 1917 as bleak:

> Little or nothing was on hand, either of planes, fields, instructors, curricula; or--most important of all--experience that would indicate what was needed. The United States had never trained an aviator for actual combat overseas; and there was no one who knew what kind of instruction was necessary for radio operators, photographers, or . . . enlisted personnel.[1]

The official history might have added that the United States also lacked an air doctrine. No decision had been made about what role aircraft should play in warfare. Should their mission be observation only, or did it include offense and defense?

Once it became clear that the Nation's difficulties with Germany would result in a declaration of war, military and civilian officials alike moved to correct the deficiencies in American military aviation. Three days before Congress approved the war declaration, the National Advisory Committee for Aeronautics, a research agency entirely sepa-

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[1] Quoted in Carroll V. Glines, The Compact History of the United States Air Force (New York, 1963), 72.

rate from the Signal Corps, asked American aircraft manufacturers what kind of reconnaissance planes they could provide and in what quantity. The replies proved inconclusive, but nevertheless in May the National Defense Council created an Aircraft Production Board which promptly announced that the United States could build at least 3,500 aircraft in its first year of production. Congress, meanwhile, came under increasing pressure from the civilian Aero Club of America, Secretary of War Newton D. Baker, and finally from President Woodrow Wilson to provide funds for a large fleet of planes. In July the solo voted $640 million for an air force. Many companies, especially in th automobile industry, now hastened to join the Curtiss Company, Boeing, Vought, and others in aircraft production. Two noted automobile engineers, Jesse G. Vincent and J. G. Hill, developed plans for a light-weight, V-8 "Liberty" engine, which they later converted to 12 cylinders. By October 1918 U.S. factories were turning out "Liberties" at the rate of 4,200 a month, and by Armistice Day total aircraft engine production equaled about 42,000. Aircraft production for this same period totaled almost 14,000.

In the meantime, the Army, having established its first tactical air unit in 1916 with only eight planes, recruited men for flight training, and thousands of would-be pilots volunteered. Selecting only about half of these, the Army sent them first to 8 weeks of ground school at one of eight large engineering colleges and then to flight school at one of 18 leased or hastily constructed flying fields One of these specially built training centers was Gosport Field, later Brooks Field and now Brooks Air Force Base, near San Antonio, Tex. Although nearly all the installation's original structures have been razed, original Hangar 9, erected in 1918, remains as a symbol of these early Army efforts to make effective military use of the airplan

The War Department chose San Antonio as a training center because of its favorable climate, good water supply, and convenient transportation facilities. Happy at the prospect of the economic boost that an air base would give the community, the San Antonio Chamber of Commerce assembled an 873-acre tract south of the city and offered it as a site for the training field. The Army accepted, and military and civilian officials broke ground on December 8, 1917. Thomas and Harmon Company began constructing the facilities immediately afterward. The first commanding officer, Maj. Henry C. Pratt, arrived on February 16, 1918, and the first aircraft landed here on March 28, 1918

In the field's first few years, the Army utilized it for various purposes. During the war a primary mission of the installation was

training flight instructors in the Gosport System of teaching flying. Devised earlier by the British, the method was adopted eventually for all U.S. Army flight-training centers. Among other things, the Gospor program required that an individual student remain with the same instructor throughout his primary flight training. This system became so closely identified with the San Antonio base, that for some time it was known informally as Gosport Field. Its formal name, Brooks Field, memorialized San Antonio pilot Sidney J. Brooks, Jr., who died in a crash at Kelly Field in 1917. In May 1919, a few months after World War I ended, the Army redesignated Brooks Field a balloon and airship school. A now-demolished balloon hangar was erected, and for some 3 years the field provided the setting for training lighter-than-air-craft pilots and ground crews.

Meanwhile in 1920 Congress passed the Army Reorganization Act, which established the Air Service as a combatant arm of the line, coordinate with the Infantry, Cavalry, and others. The new law authorized 1,500 officers and 16,000 enlisted men for air duty. This represented a reduction in the number of personnel from wartime, and even this figure was never realized in the 1920's due to lack of funds Still, creation of the Air Service represented an important step forward for military aviation.

As part of the reorganization effort, in 1922 the Army chose Brooks Field as the site for a primary flying school. Heavier-than-air craft returned, and the next 9 years proved one of the most significant periods in the post's history. More than 5,500 students reported here for training, and a partial list of the field's instructors and students, many of whom have a direct association with Hangar 9, reads like an honor roll of pioneer military aviators. Included are: Claire Chennault, Thomas D. White, Jimmy Doolittle, John Macread William C. Ocker, Charles A. Lindbergh, and Nathan F. Twining. During this same decade airmen at Brooks also conducted the world's first series of paratroop experiments. Mass air drops in 1929 demonstrated the practicality of tactical paratroop warfare.

In 1931 the Army relocated Brooks' primary flight school at nearby Kelly Field and assigned an aerial observation group to Brooks. During World War II, pilot-training returned and continued after the war for 14 years in the form of reserve activities. In 1959 the Air Force relocated its School of Aviation Medicine at Brooks, and in 1963 officials dedicated a new $40 million complex of buildings that today form the nucleus of the U.S. Air Force School of Aerospace Medicine as well as headquarters for the Aerospace Medical Division.

Bullard, John W., "History of Brooks AFB, 1917-1975." Mimeographed (San Antonio: Brooks Air Force Base, n.d.)

Chandler, Charles deF., and Frank P. Lahm, How Our Army Grew Wings: Airmen and Aircraft Before 1914 (New York: The Ronald Press Company, 1943.)

Glines, Carroll V., The Compact History of the United States Air Forc (New York: Hawthorn Books, Inc., 1963).

"History of Brooks Field" in Brooks Field Yearbook (August 1944), 32-33.

Holley, I.B., Jr., Ideas and Weapons: Exploitation of the Aerial Weapon by the United States During World War I (New Haven: Yale University Press, 1953).

United States Air Force News Release No. 68-476, November 7, 1968. Office of Information, Aerospace Medical Division, Air Force Systems Command, Brooks Air Force Base, Texas.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

(See continuation sheet.)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY less than one acre.

UTM REFERENCES

	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
A	1 4	5 5 4 0 1 0	3 2 4 6 0 2 0	B			
C				D			

VERBAL BOUNDARY DESCRIPTION

The boundary of the nominated property coincides with a line that extends entirely around Hangar 9 at a distance of 30 feet from the plane of the main block's northeast and southwest end walls and 45 feet from the main block's northernmost and southernmost side walls.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE
George R. Adams, Managing Editor

ORGANIZATION
American Association for State and Local History

DATE
April 1976

STREET & NUMBER
1400 Eighth Avenue South

TELEPHONE
615-242-5583

CITY OR TOWN
Nashville

STATE
Tennessee

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ____ STATE ____ LOCAL ____

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER