

BROOKS AIR FORCE BASE, BUILDING NO. 160
(Brooks Air Force Base, Altitude Laboratory)
7760 Chambers Parkway
San Antonio
Bexar County
Texas

HABS TX-3521-H
HABS TX-3521-H

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
SOUTHWEST SYSTEM SUPPORT OFFICE
National Park Service
U.S. Department of the Interior
PO Box 728
Santa Fe, New Mexico

HISTORIC AMERICAN BUILDINGS SURVEY
BROOKS AIR FORCE BASE, BUILDING 160
(BROOKS AIR FORCE BASE, ALTITUDE LABORATORY)

HABS No. TX-3521-H

Location: 7760 Chambers Parkway
San Antonio
Bexar County
Texas

~~USGS Southton, Texas Quadrangle (7.5')~~
~~Universal Transverse Mercator Coordinates: 14:553029:3246455~~
Google Earth Lat/Long 29.347953, -98.455052

Present Owner: Brooks Development Authority (BDA)

Present Occupant: Air Force Research Laboratory (AFRL) Department of Hyperbaric Medicine

Present Use: Medical treatment and research using hyperbaric and altitude chambers

Significance: Building 160 (Altitude Laboratory) was a key site for space research at the U.S. Air Force School of Aerospace Medicine (USAFSAM). During the 1960s and early 1970s, high-altitude and decompression research, including pressure suit testing and hypoxia studies, as well as space food development, was conducted at Building 160. These studies were critical in understanding the hazards of space, refining protective equipment, and developing feeding systems, all of which directly contributed to the success of the National Aeronautic and Space Administration's (NASA) Apollo missions. In addition, hyperbaric medicine was developed as a specialty in its own right, and continues to be refined by USAFSAM medical specialists today. Building 160 today houses the AFRL Department of Hyperbaric Medicine. A 1,550 square-foot addition called the Davis Hyperbaric Laboratory (Building 160W) was added in 1996.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date(s) of erection: 1959-60
2. Architect: Charles H. Page, Jr, of Texas Architect-Engineer Associates
3. Original and subsequent owners: Air Force
4. Builder, contractor, suppliers: Unknown

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5. Original plans and construction: Original plans are housed with BDA, 8030 Challenger Drive, Brooks City-Base, Texas.
6. Alterations and additions: Building 160 has undergone numerous minor changes since its completion in 1960, including the alteration of some interior finishes and spatial arrangements. A major 1,550 square foot addition, the Davis Hyperbaric Laboratory, was added in 1996.

B. Historical Context:

Building 160 was among the first buildings erected in 1959-60 as part of USAFSAM's new home at Brooks AFB. The multiple-building complex represented the base's expanding role and mission as one of the largest aerospace medical research centers in the world. With research and development goals ranging from space to warfare, USAFSAM has played a central role in the mission of the Air Force as well as NASA. Though the USAFSAM campus was constructed in 1959, the history of Brooks AFB has involved multiple missions beginning with the training of Army pilots in World War I to reserve flight training during the Cold War.

Establishment of Brooks Field and Early Aviation Training, 1917-31

Established on an 873-acre tract of land in San Antonio, Texas, in November 1917, Kelly Field No. 5 grew out of the increasing wartime need for cadets and trainers. In February 1918, the airfield was officially renamed Brooks Field in honor of Cadet Sidney Johnson Brooks, Jr., a San Antonio native who died in a plane crash at Kelly Field No. 2 in 1917. The new commander of Brooks Field, Major Henry Conger Pratt, oversaw the installation's mission of preparing up to 5,000 airmen for wartime service in Europe. In addition, Brooks trained flight officers as teachers of a new British training regimen known as the Gosport System, which utilized innovative controls and speaking tubes to improve communication between instructors and cadets while in the air. The use of the Gosport system at Brooks Field convinced the War Department in October 1918, to incorporate the experimental system at Brooks Field into all Army airfields.¹

In May 1919 the Observation School at Camp Ben Wise in San Antonio, which trained cadets in the use of aerial observation, moved to Brooks Field. As one of five national balloon observation schools, Brooks Field provided surveillance along the U.S.-Mexico border utilizing the 16th Airship Company and the 4th and 5th Balloon companies. The balloon and airship program at Brooks Field, despite the initial investment of manpower and expense, proved to be a short-lived experiment for the San Antonio region. Several accidents involving explosions forced the school to close in 1922.²

The decision to remove the Balloon and Airship Observation School was part of a 1920 Army Reorganization Bill which stipulated that all flight training for the country would be centered in San Antonio air fields, including Brooks Field. By June 1922, Brooks Field was classified as the only Primary Flying School in the country as a result of the consolidation of two former flying schools in California and Florida. From 1922-31, Brooks Field earned the reputation of being one of the premier aviation training sites in the country and was responsible for developing the young Army Air Service at a crucial period of its growth.

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The system established in 1922 required all military aviators to begin their basic flying training at Brooks Field, with the graduating class moving on to the Air Service Advanced Flying School at Kelly Field. The graduating classes at Brooks later formed the basic structure of the Air Corps for decades to come. The school graduated numerous important aviators including Charles Lindbergh, Frank M. Hawks, Nathan Twining, Jimmy Doolittle, and Barney Giles. Instructors at Brooks were among the most experienced and talented aviators in the country, including Claire Chennault of the famed "Flying Tigers," Russell Maughan and Elwood Quesada.³

In addition to its celebrated graduates and instructors, Brooks Field was also the site of important advances in aviation. In April and September 1929 Brooks Field held public demonstrations of one of the earliest paratroop warfare experiments. In 1930, Colonel William C. Ocker devised a device allowing pilots to fly "blind" with the use of instruments inside the cockpit.⁴

School of Aviation Medicine (SAM), 1926-31

In 1926, SAM was relocated from Mitchell Field, New York to Brooks Field in an effort to improve pilot performance and to learn firsthand from pilots about the medical factors affecting flight. From 1926-31, flight surgeons at SAM generally acted as physicians first and teachers second; their main responsibility was to direct physical examinations to determine the condition of cadets for flying.

In 1931, SAM and the Primary Flying School moved to the newly created Randolph Field in San Antonio, Texas, ending Brooks Field's important aviation training mission. In the 1930s, Brooks was designated a center for observation training and housed several observation squadrons. Escalating tensions in Europe led to the establishment of an Air Corps Advanced Flying School in early 1941, which focused on training pilots in observation skills using single-engine aircraft. Because of lessons learned early in World War II, the Army Air Corps reassessed the importance of aerial observation, placing greater importance upon bombing and pursuit aircraft training. As a result, in 1943, Brooks Field began a training program for the new B-25 bomber, which greatly aided the war effort. Brooks Field became Brooks AFB in 1948 and assumed a new postwar mission as a reserve flight training center which it maintained until 1960 when all flight activities ceased.⁵

SAM: the Space Program to Vietnam, 1959-69

In 1959, SAM, now known as the School of Aerospace Medicine (SAM) was reassigned to Brooks AFB as part of a new Air Force mission to consolidate its aviation and space medicine efforts at one base. From 1959-69, Brooks AFB, as part of the Aerospace Medical Division (AMD), played a key role in providing NASA and the Air Force with innovative and important space medicine research, ensuring the success of the country's efforts in space exploration. Research at Brooks AFB utilized a range of laboratories and research facilities to perform experiments ranging from altitude and pressure experiments to space food nutritional studies. In addition to direct contributions to NASA's Mercury, Gemini, and Apollo programs, Brooks focused much of its space medicine efforts on the Air Force's military space program, the Manned Orbiting Laboratory (MOL). By the mid-1960s, researchers and physicians at Brooks AFB increasingly became involved in the Vietnam War, forcing SAM and AMD to manage dual missions of space and warfare.

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The USAFSAM Campus

In 1952, with its intention to relocate the crowded facilities at Randolph AFB to Brooks AFB, the Air Force required a new master plan accommodating the new "Aeromedical Center." Early in the planning stages, officers of the Air Force Headquarters in Washington, D.C., had a clear notion of the type of facility they wanted, distinguishing it from other Air Force installations: "Consideration should be given to permanence and preeminence of this facility as an academic institution . . . The quality of construction should be comparable to that of the leading medical institutions in the United States."⁶ In designing the master plan for such an institution, officers of the Headquarters of the Air Force made an unqualified recommendation for the St. Paul, Minnesota firm of Ellerbe & Company, which already had two years experience with an earlier Brooks AFB master plan:

The Ellerbe Company, because of the design over the past twenty-five years of the varied and highly specialized diagnostic research and hospital facilities for the Mayo Clinic at Rochester, Minnesota, is considered eminently qualified to continue this project.⁷

By 1954, however, Ellerbe & Company was unwilling or unable to finish work on the design of USAFSAM. Rising construction costs and the Korean War also delayed work on the project. To complete the building designs, Ellerbe & Company selected Charles Page, Jr. of C.H. Page & Son as a subcontractor. Graduating from the University of Texas School of Architecture in 1932, Charles H. Page, Jr. joined his father, C.H. Page, a prominent Austin architect, in 1936. The new firm specialized in the design of hospitals, schools, and military installations, including the Driscoll Children's Hospital in Corpus Christi, Texas, Bergstrom AFB in Austin, Texas, and flight laboratories at the White Sands Proving Grounds in New Mexico.

Although C.H. Page and Charles H. Page, Jr. were the firm's principals until C.H. Page's death in 1957, the firm often collaborated with other architecture and engineering firms, using some variant of the name "Texas Architect-Engineer Associates," as they did on the plans for the first five buildings constructed for USAFSAM, including Building 100. Architects at C.H. Page & Son were given the task of preparing a contour and building model of the entire site, later identified as 'The Hill,' in order to study at least three possible site plans for the school. Ellerbe's schematic plot plans and site studies were to be used as the basis for Page's work.

The Texas Architects-Engineer Associates completed plans for the first five buildings on the USAFSAM campus: Building 100 (Flight Medicine Laboratory); Building 125 (Research Institute); Building 130 (Research Laboratory Shops); Building 160 (Altitude Laboratory); and Building 180 (Academic Building). Plans for these structures are dated between 1956-58, and all are signed by Charles H. Page, Jr.

Building 160

Although Building 160 was one off the first facilities planned by the Air Force for the new USAFSAM campus at Brooks AFB, lack of funds delayed completion of the building until 1960. Building 160's primary purpose was to house chambers for pilot instruction in the complexities of high altitude flight and research on space cabin environments. Building 160 was divided into two distinct wings for these

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separate missions. Section A contained areas for pressure suit training, physiological training, and night vision training. Section B was geared towards research, and housed laboratories, animal testing and surgical areas, and, most importantly, an open area for pressure, altitude, and climate chambers. Here scientists tested human, animal, and plant physiology under varying conditions of space flight. During the 1960s, high-altitude and decompression research, including pressure suit testing and hypoxia studies, as well as space food development, was conducted at Building 160. The studies were critical in understanding the hazards of space, refining protective equipment, and developing feeding systems, all of which directly contributed to the success of the NASA-manned missions during the Space Race.

The space-cabin simulation work accomplished in Building 160 was part of a series of ground-breaking events in aerospace research. In 1952 Dr. Hubertus Strughold, then Director of the Department of Space Medicine at SAM at Randolph AFB, created the first space cabin simulator from a small pressure chamber in order to perform tests in a simulated space craft environment. By the late 1950s space cabin research was recognized as an essential component of future space exploration, and in 1959 NASA contracted USAFSAM scientists to perform extensive testing using cabin simulators to develop adequate space cabin environments for Gemini and Apollo programs. In 1961 Dr. Billy Welch, Chief of the USAFSAM's Space Ecology Branch, initiated the first cabin-simulation experiment involving two men isolated in the chamber for seventeen days. "The experiment focused on three major activities: internal atmosphere control; managing logistics such as food preparation and human waste removal; and completing performance tasks that measured vigilance, perception, judgement, problem solving and decision making."⁸ The two-man cabin simulator was located in the Building 160.

Cabin simulator and pressure chamber studies evolved by using larger vessels capable of housing more people for longer periods. The four-man simulator located in Building 170 was essential to the Air Force's MOL project. However, tests continued to be performed routinely by airmen in the smaller simulators. On February 1, 1967, a sudden fire consumed the two-man simulator in Building 160, where two airmen, Richard Harmon and William Bartley, Jr., were tending test-subject rabbits in a pure oxygen atmosphere. A spark from a Teflon-coated wire immediately caused the oxygen atmosphere to catch fire, killing both airmen within moments. The fire at Brooks AFB followed an almost identical tragedy at the launch site of Cape Kennedy, Florida on January 27, 1967, when a flash-fire ripped through the Apollo I space capsule where Lieutenant Colonel Virgil Grissom, Lieutenant Commander Roger Chafee, and Lieutenant Colonel Edward White II were performing final tests in a pure oxygen atmosphere. All three men were killed instantly. Building 160 was renamed the Harmon Bartley Altitude Laboratory in honor of the two airmen killed in the Brooks AFB accident.⁹

Building 160 was also an area of pioneering work in hyperbaric medicine, which had been developed in the late 1950s to treat altitude decompression sickness. The USAF Hyperbaric Medicine Program supported studies of the pathophysiology and treatment of altitude-related problems, and expanded research to include the effects of high-dose oxygen therapy for other diseases. By 1965, the USAFSAM staff was providing treatment for a wide variety of conditions such as gas gangrene, carbon monoxide poisoning, and air embolism. In 1974 the Hyperbaric Medicine Division was established at USAFSAM.¹⁰ Since then, the Brooks AFB facility has continued to perform world-class treatment and hyperbaric medicine research, and the Davis Hyperbaric Laboratory, a 1,550 square-foot addition (Building 160W) was added in 1996 to accommodate growing medical applications of hyperbaric research.

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PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: Building 160 was designed as one of the first five buildings of the USAFSAM campus at Brooks AFB, and reflects the International Style of the surrounding buildings. However, Building 160 served as the Altitude Laboratory, and primary consideration in its design was given to suitability for extremely demanding technical requirements. Building 160 housed laboratories and pressure chambers that required a controlled environment, so it is almost entirely lacking in fenestration except at the northwest entrance. The remainder of the of the building features blank facades of aluminum siding.
2. Condition of fabric: Building 160 is in good condition.

B. Description of Exterior:

1. Overall dimensions: Building 160 is roughly rectangular in plan, but is divided into two distinct units. Unit A, on the east side, measures 119'-4" x 170'-8" and Unit B, on the west, measures 154'-8 x 135'-10".
2. Foundation: Concrete pier-and-beam foundation
3. Walls: Exterior walls are insulated aluminum panels on 6" metal studs. At the entry on the north facade, the parapet and upper level are sheathed with smaller insulated metal panels with a porcelain enamel finish, while the lower level is covered in face brick.
4. Structural system, framing: Floors and roofs are concrete one-way solid slab systems. Wall framing is steel columns encased in concrete.
5. Porches, stoops, balconies, bulkheads: A 7" concrete porch extends 6'-2" beyond the main entry on the north facade and incorporates a wheelchair ramp. A secondary entry on the south facade has a similar porch.
6. Chimneys: Air ventilators are located on the penthouse roof.

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7. Openings:

- a. Doorways and doors: There are several types of exterior doorways on Building 160:
 - hollow metal double doors with inset glazed panels, set into a surround of flat insulated metal wall panels;
 - flush hollow metal double doors set directly into the corrugated metal wall panels;
 - roll-up metal louvers of varying widths;
 - and the main entry doors, which are two pairs of double doors of tempered heat-absorbing polished plate glass set into aluminum frames, with glazed transoms.
- b. Windows and shutters: The only windows in Building 160 are the full-height bays on either side of the double doors at the entry on the building's north side. These are of tempered heat-absorbing plate glass set in aluminum frames with glazed transoms.

8. Roof:

- a. Shape, covering: Flat concrete roof with built-up roofing.
- b. Cornice, eaves: Building 160 has a short parapet wall of insulated aluminum panels with an aluminum cap at the parapet level.
- c. Dormers, cupolas, towers: Building 160 has a 50'-7" x 89'7" penthouse with insulated aluminum wall panels on a steel framework. A steel frame structure encased in concrete supports the flat roof, which is covered with built-up roofing.

C. Description of Interior:

1. Floor plans:

a. First floor:

- Unit A, on the east, has a large training area measuring 119'-4" x 47'-0" on the east side of the building, classrooms and offices on the north side, training rooms, locker rooms, an equipment room and service areas in the center, and training and control rooms on the south, divided by two horizontal corridors. A vertical corridor separates Units A and B.
 - Unit B contains a row of laboratories on the north side, and laboratories, study carrels, and animal holding and testing rooms to the south. A large, irregular expanse to the west contains climate, pressure, and altitude chambers.
2. Stairways: Building 160 contains a single stair for access to the rooftop penthouse. It is located at the eastern end of the northern corridor of Unit A, and is of a single-landing plan.

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3. Flooring: Floor finishes include terrazzo in corridors, and ceramic tile and vinyl tile on concrete in laboratory spaces.
4. Walls and ceiling finishes: Wall finishes in the corridors are of glazed structural units to a height of 7' 0", with plaster extending to ceiling height and capped by wood molding. Corridor ceilings are finished with acoustical ceiling tiles in a metal suspension system.
5. Openings:
 - a. Doorways and doors: Typical interior doors are 3'-0" x 7'-0" flush wood doors with wood louvered vents in their lower portions and vision panels.
 - b. Windows: Some laboratory spaces have fixed-glass vision panels set into the glazed structural unit finish in corridors.
6. Decorative features and trim: There are few decorative features in Building 160. Corridors have a terrazzo baseboard and simple wood moldings at ceiling level.
7. Hardware: Standard commercial-grade hardware with brushed chrome finish is used throughout Building 160.
8. Mechanical Equipment:
 - a. Heating, air conditioning, ventilation: Central heating and air conditioning.
 - b. Lighting: Typical light fixtures are 2' x 4' recessed fluorescent troffers set into a suspended acoustical ceiling system. All light fixtures were replaced in 1984.
 - c. Plumbing: Men's and women's toilets are located in each unit of Building 160. Other plumbing fixtures found in Building 160 include laboratory sinks, mop sinks, and drinking fountains.
 - In Unit A the men's toilet has three water closets, four urinals, and four lavatories and the women's toilet has five water closets and six lavatories.
 - Unit B contains a men's toilet with three water closets, two urinals, and four lavatories and the women's toilet has two water closets and two lavatories.

D. Site:

1. General setting and orientation: Building 160 is located at the corner of Chambers Parkway and Sidney Brooks, just east of the center of the USAFSAM complex of

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buildings. Its north facade faces towards the rolling lawn of Building 155. Its south and east sides are bordered by paved parking areas.

2. Historic landscape design: Historic site plans show no landscaping, only a concrete walkway approaching the north entry, and terminating at the entry's small granite porch. Walkways then extend along the entire north facade and east facade. The east, west, and south facades of Building 160 feature concrete pads for equipment. Most of these are now enclosed by aluminum wall panels.

PART III. SOURCES OF INFORMATION

- A. Original architectural drawings: Original architectural drawings by the firm of Texas Architect-Engineer Associates, dated December, 1956, are on file with the BDA, 8030 Challenger Drive, Brooks City-Base, Texas.
- B. Early views: Multiple early views of Building 160 exist in the archives of the Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base, as well as in the Page and Son firm records collection at the Austin History Center, Austin, Texas.
- C. Interviews: N/A
- D. NOTES

¹ Martha Freeman, "Appendix L: Historic Context: Brooks Air Force Base, An American Flying Field, 1917-1946," in *Brooks Air Force Base – Historic Preservation Plan* by D.E. Peter, M.B. Cliff, J. Freeman and K.L. Kane. Geo-Marine, Inc., Plano, Texas, L-3.

² Brooks Air Force Base, *The First Seventy-Five Years*, (n.p., 1992).

³ Brooks Air Force Base, *Commemorative Program, Pride in the Past, Faith in the Future – Brooks Air Force Base, 1917-1992*, (San Antonio Press, 1992), p. 9.

⁴ Freeman, "Historic Context," L-23.

⁵ *Commemorative Program*, 1992.

⁶ Department of the Air Force, HQ, Washington DC to Chief of Engineers, Department of the Army, (June 5, 1952), Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base.

⁷ Department of the Air Force HQ to Chief of Engineers, Department of the Army, Revision of "Advance Planning FY53" Document. Various Minor Changes, (June 12, 1952), Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base.

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⁸ Purificato, R. "Brooks' space cabin tests propel NASA toward moon," *Discovery*. June 18, 1999.

⁹ Edward B. Alcott, *Aerospace Medical Division: Twenty-Five Years of Excellence, 1961-1986*, (Brooks Air Force Base, History Office, 1986), pp. 43-44.

¹⁰ *Ibid*, pp. 82-83.

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1. Primary and unpublished sources:

Brooks Air Force Base, *Commemorative Program, Pride in the Past, Faith in the Future, Brooks Air Force Base, 1917-1992*. San Antonio Press, 1992.

Brooks Air Force Base, *The First Seventy-Five Years*. N.p., 1992. Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base.

"Department of the Air Force HQ, Washington DC to Chief of Engineers, Department of the Army." June 5, 1952. Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base.

"Department of the Air Force HQ to Chief of Engineers, Department of the Army, Revision of 'Advance Planning FY53' Document. Various Minor Changes." June 12, 1952. Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base.

2. Secondary and published sources:

Alcott, Edward B. *Aerospace Medical Division: Twenty-Five Years of Excellence, 1961-1986*. N.p., 1986. Courtesy of the Museum (Hangar 9), Brooks Air Force Base, Texas.

Freeman, Martha. "Appendix L: Historic Context: Brooks Air Force Base, An American Flying Field, 1917-46." Geo-Marine, Inc., Plano, Texas, 1995.

Purificato, R. "Brooks' space cabin tests propel NASA toward moon." *Discovery*. (June 18, 1999.)

E. Likely sources not yet investigated: The archives at the Edward H. White II Museum of Aerospace Medicine in Hangar 9 at Brooks City-Base contain a wealth of documentation that merits further exploration.

F. Supplemental Materials:

LIST OF ACRONYMS

AFB	Air Force Base
AFRL	Air Force Research Laboratory
AMC	Aerospace Medical Center
AMD	Aerospace Medical Division
AMRL	Aerospace Medical Research Laboratory
ARL	Aeromedical Research Laboratory
BDA	Brooks Development Authority
BHF	Brooks Heritage Foundation
BRAC	Base Realignment and Closure
DOD	Department of Defense
HSD	Human Systems Division
ICBM	Intercontinental Ballistic Missile
MISS	Man in Space Soonest
MOA	Memorandum of Agreement
MOL	Manned Orbiting Laboratory
NASA	National Aeronautics and Space Administration
NHPA	National Historic Preservation Act
NPS	National Park Service
SACS	San Antonio Conservation Society
SAM	School of Aviation (Aerospace) Medicine
SHPO	State Historic Preservation Office
USAFSAM	U.S. Air Force School of Aerospace Medicine
WAC	Womens Air Corps

PART IV. PROJECT INFORMATION

A. Federal Agency:

Air Force
311th Human Systems Wing
Brooks City-Base
San Antonio, Texas.

- B. Project Causing Adverse Effect: The Brooks City-Base project is a cooperative partnership between the Air Force and the non-federal community in which the physical assets of the former Brooks AFB have been transferred from the Air Force to BDA, a local municipality under Texas statute. Under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its enabling regulations 36 CFR 800, the transfer of Federal property is an adverse effect that must be mitigated via a Memorandum of Agreement (MOA) between the lead federal agency, the State Historic Preservation Officer (SHPO) and other consulting parties invited to participate in the consultation.

In consultation with the Texas SHPO, the Air Force determined that seventeen buildings at

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Brooks City-Base were eligible for inclusion in the National Register of Historic Places. The Air Force developed an MOA in consultation with the Texas SHPO, City of San Antonio and BDA to mitigate the adverse impact that transfer would have on the seventeen historic properties at the former Brooks AFB. The MOA was also signed by two concurring parties, the San Antonio Conservation Society (SACS) and the Brooks Heritage Foundation (BHF). The MOA stipulated multiple measures, including preparation of a Historic American Buildings Survey (HABS) Level II documentation report. The Air Force, through the 311th Human Systems Wing, hired Earth Tech, Inc. to oversee the preparation of HABS documentation. Under contract to Earth Tech, HHM Inc. of Austin, Texas, gathered historical and architectural information and prepared a historic context and the HABS forms.

The following individuals contributed to this report:

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