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United States Department of the Interior
National Park Service

National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer, to complete all items.

XX New Submission ___ Amended Submission

A. Name of Multiple Property Listing

Historic and Architectural Resources of Randolph Air Force Base, Bexar County, Texas

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

Army Air Corps Training, 1931-1941
Army Air Corps and Air Force Training, 1941-1950

C. Form Prepared by

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organization Thomason and Associates date February 23, 1994

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D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (☐ See continuation sheet for additional comments.)

Signature and title of certifying official Date

State or Federal agency and bureau

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper Date of Action

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

Statement of Historic Contexts

Introduction and Organization

The Multiple Property Documentation Form for the Historic and Architectural Resources of Randolph Air Force Base [AFB], Bexar County, Texas, is organized with reference to two contexts: Army Air Corps Training, 1931-1941, and Army Air Corps and Air Force Training, 1941-1950. A discussion of Randolph AFB's geographical information and historic overview precedes these contexts.

Geographical Information

Randolph AFB is in Bexar County, Texas, approximately 18 miles northeast of downtown San Antonio. The base consists of 3,129 acres bounded on the north by the community of Universal City, on the west by the community of Converse, and on the east and northeast by the community of Schertz. The major access road to the base is Pat Booker Road at its intersection with FM 78.

The terrain of the base is relatively flat with elevations ranging from 705 to 765 feet above sea level. The base lies within the San Antonio River drainage system that includes Cibolo Creek, east of the base, and Women Hollering Creek, channeled within the base. The land around the base consists primarily of residential and commercial development. Within the southern base area lies open farm and range lands.

Randolph AFB has a modified subtropical climate with temperatures averaging 84 degrees Fahrenheit in summer and 52 degrees Fahrenheit in winter. Annual precipitation averages 27.89 inches. High winds occur frequently during spring and summer seasons.

The base is in the Blackland Prairie of the West Gulf Coastal Plain sub-province with level or undulating uplands. Calcareous clay and marl underlies soils in the area of the Taylor and Navarro formations. Soils primarily consist of Houston Black clay and Lewisville silty clay along the broad areas of an old outwash plain and the broad, smooth terraces that parallel Cibolo Creek. Houston black clay is characteristic of moisture retention, causing the earth to expand when wet and shrink and crack during periods of drought. Cibolo Creek provides good, natural drainage into the San Antonio River.

The plan and layout of Randolph AFB is a significant part of its heritage, and is fully described in the following sections. Lieutenant Harold Clark and Brigadier General Frank P. Lahm formulated Randolph AFB's "Air City" concept during the early stages of base planning. The design is innovative in its alignment with prevailing winds, function separations, and underground placement of utilities. The base is rectangular in shape with a central circular housing area. Airfields and hangars are the farthest base functions from base housing. Industrial functions, also separate from housing areas, remain close to the road loop, providing ease of maintenance and transportation. Along the inside of the primary loop road are four groups of administrative buildings. These groups help buffer housing areas from aircraft operations. Community commercial and service areas are spread across the base. Within the base lie 70 miles of roadway and 320 acres of aircraft pavement. A 1989 comprehensive base plan reveals that future growth at the base is limited by the lack of vacant land available for future development.

Army Air Corps Training, 1931-1941

Randolph Field is significant in the area of military history because of its role in the development of the Army Air Corps. Established in 1928, Randolph Field was the first American flying field exclusively designed for training pilots. When the field opened in 1930, it was the "world's largest primary flying school," conducting basic and primary flight training until 1941 (Selvaggi, "A History of Randolph Air Force Base," iii). During the 1930s, Randolph earned its nicknamed as "West Point of the Air," as a pilot and instructor training base, graduating more than 6,800 cadets, hundreds of whom served in World War II national defense operations (Randolph Field, A History and Guide, 48).

U.S. Army experimentation with flying machines began within a few years of the Wright brothers' first successful flight in 1903. The Army purchased an aircraft the Wright Company developed in 1910 and set up training facilities at Fort Sam Houston in San Antonio. In 1916, aviators from Fort Sam Houston flew their first air combat mission, conducting a search for Pancho Villa's outlaw band along the Mexican border. Within a few years the Army developed a small air force consisting of several dozen officers and airplanes (The Official Pictorial History of the Army Air Forces, 33). This fledgling arm of the military rapidly transformed itself into a well trained defense team in preparation for World War I.

Prior to the war, military officials considered aircraft useful for reconnaissance, but little else. Certainly, aircraft were not viewed as offensive weapons. European advances in aviation tactics and aircraft construction took warfare to the skies. Aircraft such as Sopwiths, Fokkers, and Nieuports dueled in the air and bombarded military and civilian targets. By the time the United States entered the war it was apparent that American armed forces lagged far behind in military aeronautics (Ibid, 35). This status rapidly changed during World War I when Army officials expanded its Air Service training. The Army's total number of pilots increased from fewer than 100 to more than 11,000, and the number of flying fields grew from five to 27. These early airfields included Rich and Ellington Fields in Texas, Scott and Chanute Fields in Illinois, and Wright Field in Ohio. Training schools provided instruction for pilots, mechanics, and other aviation technicians.

Mild climate and ideal flying weather in the San Antonio area led to its designation as the Army's central aviation center in 1917. By the end of World War I, three major fields, Kelly No. 1, Kelly No. 2, and Brooks, existed within the San Antonio vicinity, as well as a balloon and airship school. Of these, Kelly was the largest, accommodating more recruits and potential flyers than any other air facility in the country (Ibid, 46). By the end of World War I, San Antonio served as the country's center for military aviation operations.

Throughout the 1920s, Kelly and Brooks Fields continued to function as the largest pilot training centers in the country. In 1922, Brooks Field operated as the Primary Flying School for the Air Service and home of the School for Aviation Medicine. The Advanced Flying School set up headquarters at Kelly Field, along with the Air Service Mechanics School. Heavier-than-air training was at San Antonio while lighter-than-air training moved to Scott Field. Reorganization during the 1920s led to the creation of two Air Service wing headquarters, one at Langley Field in Virginia and the other at Kelly Field. The nation held four air groups, two at Kelly Field, one at Langley Field, and one at Fort Bliss in El Paso, Texas.

Following World War I, several Army officers expressed an interest in establishing an air service

independent of the United States Army. President Calvin Coolidge appointed a board headed by Dwight Morrow to study the request. The board agreed that a separate entity would best serve the needs of national defense. This decision resulted in the Air Corps Act of 1926. A five-year plan within the act strengthened the nation's aviation service, authorizing increases of up to 1,800 serviceable planes, 1,650 officers, and 16,000 enlisted men (Mason, The United States Air Force, A Turbulent History, 112). Due to appropriation cuts, the five-year plan failed to materialize, although much progress occurred as a direct result of the act, including construction of Randolph Field (Glines, The Compact History of the United States Air Force, 122).

The Army Air Corps Act of 1926 created the position for a brigadier general responsible for coordinating and supervising flight training at Kelly and Brooks Fields and provided research and training plans for the School of Aviation Medicine at Brooks Field (Manning, "The Origins of Randolph AFB," 2). General Frank P. Lahm held the new position of brigadier general. Trained by Wilbur Wright in 1909, Lahm was the Army's first pilot (Davis, "Randolph Air Force Base," 9). A strong advocate of air power, the general urged centralization of flight instruction to a single large field. He felt this would provide efficiency of instruction, personnel and operations. Lahm also expressed concerns about commercial and residential development that threatened to limit future base expansion near Brooks and Kelly Fields (Selvaggi, 9).

Federal officials agreed with Lahm about the limitations of San Antonio's existing fields and began to search for a new site. San Antonio residents wished to obtain the new base because of its possible economic benefits (Ibid, 18). Other Texas cities also desired the proposed air base. Houston, Dallas and Fort Worth offered the government land and facilities ranging in value from $200,000 to $10 million as incentives for relocation. In response, San Antonio city leaders promised that sufficient land would be granted to the government free of charge if the base remained within the San Antonio area. Military officials desired retention of a San Antonio site because of the city's favorable climate, which proved suitable for year round flying. In a study undertaken by the Base Weather Officer at Randolph during the 1940s, unsuitable flight days within a six year period totaled only 94, averaging 16 days per year (Ibid, 11-13). In short, San Antonio wanted the base, and the military wanted a San Antonio site. The only problem centered around available land for development. In February 1927, Congress passed a bill to construct housing on a new field near San Antonio at Calf Hill, approximately 10 miles east of the city. This proposal fell through, however, due to disagreement between city and military officials about the site and the refusal of one land owner to relinquish property.

The San Antonio Chamber of Commerce organized a new search in conjunction with General Lahm, who organized a committee to investigate drainage, soil, winds, and living conditions (Ibid, 16). The search area included lands within a 30-mile radius of the city that was divided into 24 farmsteads (Burgoyne, "The Acquisition of Randolph Field," 41). Several citizens offered choice pieces of land at very low cost. The most generous offer came from Harry Landa of New Braunfels who asked that the city take 1,000 acres at no cost and purchase an additional 1,000 acres for $75,000. After nearly a year, military officials selected a 2,300 acre tract of land near Schertz, approximately 18 miles east of San Antonio. On December 31, 1927, the Air Corps accepted a letter from the City of San Antonio and the

Chamber of Commerce describing this 2,300 acre tract of land offered to the government. This was an interesting offer in light of the fact that neither the city nor its chamber owned the land. Furthermore, neither had the funds to buy it.

For nine months, the Chamber of Commerce worked to come up with enough money to purchase the Schertz site. The chamber appointed a committee that studied ways to raise a minimum of $300,000 for the purchase. Although tax hikes seemed appropriate, the city attorney ruled this measure illegal. The board suggested that a newly formed corporation purchase the site with money raised from stock sales. The Chamber of Commerce approved the board's suggestion and began its successful subscription drive for $30,000. Members formed the San Antonio Airport Company in December 1927 and the chamber turned over collected funds to the corporation's new officers (Selvaggi, 20-24).

Meanwhile, landowners demanded an addition $200,000 for their property, increasing the purchase price to $500,000. City Council reversed the earlier decision about illegal tax hikes and passed an ordinance that allowed collection of funds through taxation. Even with the additional funds, some landowners still refused to sell, raising the purchase price to $600,000. John B. Carrington and local attorney Ernest J. Altgelt finally obtained all purchase rights in the spring of 1928. Altgelt is credited with obtaining land options due to his German background, which enabled him to communicate with German speaking landowners (Burgoyne, 45-47). In the long run, the Airport Company borrowed money from the government and transferred its debt to the city of San Antonio (Selvaggi, 26-28). City Council passed an ordinance allowing this financial arrangement on December 19, 1927. Assured of the site, Congress passed an Air Corps Bill that included an appropriation for building the proposed airfield. President Coolidge signed the bill on February 19, 1928, and site clearance began that October (Randolph Field, A History and Guide, 39-40).

The new airfield's name selection board unanimously agreed upon naming the site in honor of Captain William M. Randolph, an original selection board member. A veteran of World War I, Randolph commanded the 25th Bombardment Squadron in the Panama Canal Zone for three years before receiving an assignment as adjutant of the Air Corps Advanced Flying School at Kelly Field. A plane crash at Gorman Field claimed Randolph's life in February 1928 (Selvaggi, 36-38).

Boasting a revolutionary design for its time, Randolph Field's layout came about when General Lahm appointed a Board of Officers that recommended a circular center bracketed flight lines. Lieutenant Harold L. Clark drew plans reflecting the board's suggestion. Clark received architectural training at the University of Minnesota and the University of Illinois prior to his military career. He worked independently on a design for Randolph Field, commonly referred to as an "Air City" concept. Clark's design centered the field's residential area at the core of the site, with concentric streets. Aircraft ramps and runways extended along three sides of the field, forming a square perimeter that framed the interior wheel-like layout. Despite misgivings of the Quartermaster General, who preferred more traditional streetscapes and linear planning, the Secretary of War approved Clark's design. Historians know of no other 20th century American air defense facility constructed in a similar manner (Mueller, Air Force Bases, Volume 1, 486-494).

Randolph Field's design provided a number of benefits including: flight lines long enough for the

required number of planes; a clear field, regardless of wind direction; safe and expeditious movement of aircraft from hangars to the flight line; a minimum amount of aircraft taxiing, reducing overall maintenance and repair costs; and concentration of base activities in the center of the field, resulting in an economical use of space, time, and manpower.

Throughout the late 1920s, the Army encouraged innovative designs for its installations, in contrast with standardized grid plans utilized during the latter 19th century and World War I era. This change in philosophy mirrored overall trends throughout the country regarding city planning and the "Garden City" concept. To assist in planning, the Army hired city planning advisors such as architect George B. Ford. In 1929, Ford reviewed several new designs for bases across the country, praising them for their curvilinear street patterns, separation of housing from other base facilities, and attention to landscaping (Ford, "New Army Posts for Old," Quartermaster Review, 20-21). Randolph Field's plan impressed Ford. Building placement, large open porches, and distances between dwellings caught prevailing breezes, providing a natural cooling system.

Military post planners considered aesthetics an important component in base design. Lieutenant Howard B. Nurse wrote in 1928 that Army posts should possess unity, consonance in design, diversity, and balance. Base functions, he argued, should naturally radiate back and forth between common centers. Stated Nurse, a ". . . well-planned post with natural beauty well developed goes a long way toward bringing to reality that ever desired slogan 'A Happy Garrison,' and who knows better than our post commandant what big dividends are received in the way of 'results' through the medium of a happy and contented garrison?" (Nurse, "The Planning of Army Posts," Quartermaster Review, 15).

Prior to development, Randolph Field consisted of about 180 acres of land covered with scrub oak and mesquite trees. To clear the land, developers attached one end of a cable to a large tree and the other end to a tractor. The tractor traveled in a circle while the cable uprooted or pushed down the trees. The field's near invisible slope provided good drainage. Workers installed power and communication lines underground to avoid overhead wires, a relatively new and experimental technique. Construction crews sank train tracks into the ground to reduce emergency landing hazards. Obtaining an ample water supply proved most difficult, with only three of nine initial wells providing a steady flow of water. Many officials expressed concerns that water consumption may soon surpass the supply. An additional well drilled in 1942 produced more water alone than all of the earlier wells (Selvaggi, 47-49).

Randolph Field's initial buildings included warehouses, barracks, and officers' quarters. On August 12, 1929, Captain Earl H. DeFord arrived from Kelly as the field's first commanding officer. On that date, the field consisted of a few construction shacks, a Chinese restaurant, and a flag pole (Manning, 7). Captain Arthur W. Parker of the Quartermaster Corps supervised field designs and construction. Because the project was so large, the Corps enlisted the help of several San Antonio architects to design specific buildings. Spanish Colonial Revival design dominated architectural influences, with hollow clay walls covered with stucco, red clay tile roofs, steel casement windows, and ornamental tile in arches and doorways. Murch Brothers Construction Company of St. Louis gained the field's first construction contract, totaling $1.28 million. The firms of Bellows-Maclay of Dallas, George E. Wieland of Austin, and Kenneth L. Colborn of Pasadena, California, accepted major contracts for housing construction

(Construction Completion Reports). Altogether, hundreds of laborers from these contracting firms worked side by side to complete Randolph Field.

The cadet area of the base originally held four buildings consisting of two barracks, an administration building, and an academic building. The barracks each housed 106 men with two men assigned to every individual room. Barracks provided the only form of cadet housing until 1939. Between the barracks, the Cadet Administration Building held offices, a post exchange branch, a barber shop, a gymnasium, a bowling alley, a mess hall, and a kitchen. An academic building, with similar design influences, contained classrooms, offices, a library, and a radio room (Selvaggi, 54-55). Within the central circular portion of the base were Officers' Quarter, most of which were two-story single family dwellings that San Antonio architects Herbert S. Green and John M. Marriott designed. The architects utilized three primary designs with variations in floor plans and primary entrance detailing. One-story noncommissioned officers' quarters utilized standardized designs from the Quartermaster Corps.

Originally base planning called for 18 hangars, each of which held up to 30 aircraft. Base functions demanded that 16 of the hangars remain in use as aircraft storage. Of the two remaining hangars, one served as a gymnasium and the other as an instructional facility. Randolph Field held two hangar lines, with eight hangars on the east flight line and ten on the west flight line. At the end of each flight line was a control tower. The post office, photographic section, and theater were housed in one large administration building completed in 1931, commonly referred to as the "Taj Mahal." Lieutenant Clark, the building's designer, studied various ways in which a variety of functions could be placed within a single building. Atlee Ayres, a local San Antonio architect, expanded on Clark's design, cutting projected expenses by $100,000 (Manning, 9). Ayres included a water tower within the building to reduce potential flying hazards. The building's dome held a weather office. Additional functions included administrative offices, a printing plant, a radio station, a and court room. Towering 147 feet in the air, the Taj Mahal is the focal point for the base and its blue and yellow tile roof is visible from miles away. (Huber, 3).

Formal dedication occurred June 20, 1930, prior to complete construction. More than 20,000 people arrived to witness the ceremony. Captain Randolph's widow, Cornelia Randolph, raised the first flag and 233 planes flew over the field. This air armada was the largest concentration of planes ever assembled (Selvaggi, 67-73). Attending the ceremony were Mayor C.M. Chambers of San Antonio, Governor Dan Moody of Texas, and Major General James Fechet, Chief of the Air Corps. Personnel arrived from Kelly Field in February 1931 and, in October, officers and enlisted men arrived from training headquarters at Duncan and Brooks Fields (Selvaggi, 74-75). On October 25, 1931, with a personnel of 162 officers and 1,432 enlisted men, Randolph Field officially opened as the Air Corps' primary and basic flying school. Major Frederick L. Martin arrived as the field's first commanding officer, having previously commanded at Bolling Field in Maryland (Randolph Field, A History and Guide, 41-42). Randolph's first class of 210 cadets and 99 student officers entered training on November 2, 1931. Consolidation of the nation's various training wings to Randolph Field began in early 1931. The 67th Service Squadron commenced its move from Kelly Field in February, followed by the 46th School Squadron from Brooks Field, and the 53rd School Squadron from March Field in California.

From 1931 to 1939, Randolph Field was the only training field in the country offering both basic

and primary flight instruction. From civilian life and from the graduating classes of West Point, cadets came to Randolph where they studied the theory and practice of flight. Following completion of training at Randolph, cadets continued advanced training at Kelly Field. Cadets completed at least two years of college (or equivalent training) before arriving at Randolph Field ("Cadet Life at Randolph and Kelly Fields," 1). Randolph Field's training program of the 1930s lasted an entire year, with new classes arriving March 1, July 1, and October 15. Cadets completed four months of primary training, followed by four months of basic training. Successful cadets continued with four months of advanced training at Kelly Field. In addition to their studies, cadets kept busy with intramural athletics or attended movies at the Taj Mahal's theater. Evenings and weekends allowed visitation to any site within 50 miles of the base. The base Chapel provided Protestant and Catholic services each Sunday (Ibid, 4).

New arrivals, informally known as "Dodos," received two weeks of basic military training before beginning flight classes. For cadets coming straight from civilian life, this was their first introduction to military discipline and organization. At Randolph, thousands of young men learned to be pilots--and soldiers as well. During the primary phase of flight training, cadets received ground school training in subjects such as principles of flight and aircraft engines. Cadets learned to fly under the direct supervision of instructors and graduated from primary school after completing at least 65 hours in the air. During basic training the cadets progressed from slow moving, training aircraft into faster and more complicated service planes. Complex assignments such as daylight navigation, night flying, formation flying, and cross country flights were required during this phase. In the final phase, advanced instruction, cadets learned to use their aircraft as weapons. They practiced attack and defense formations, bombing, and gunnery. Completion of the advanced phase ended the cadets' training at Randolph Field. Upon graduation they received the silver wings of a pilot, a commission as a second lieutenant in the Army Air Corps Reserve, and their orders calling them to active duty as officers (Selvaggi, 80-81).

Until 1939, the military and civilian population at Randolph Field totaled around 3,000. The training schools graduated between 250 and 300 cadets annually to advanced training at Kelly Field. In anticipation of American participation in World War II, more flying schools were added to the Air Corps in July 1939. This resulted in reorganization at Randolph Field with the emphasis on basic rather than primary training (Randolph Field, A History and Guide, 46). Due to the large numbers of pilots the Army Air Corps needed, civilian instructors under Army direction were given responsibility for primary training.

Throughout 1939 and 1940, training courses at Randolph Field were completely reconfigured to produce the largest number of pilots in the shortest amount of time. The first expansion program in the summer of 1939 called for 5,500 pilots to be trained by July 1, 1941, and an additional program called for 7,000 pilots annually. Classes for cadets were streamlined. Training that originally took months to finish was completed within weeks. Colonel Idwal H. Edwards arrived at Randolph Field in December 1940 and commanded the base as it entered the war years.

Army Air Corps and Air Force Training, 1941-1950

The establishment of Randolph Field directly impacted its surrounding area, especially throughout the war years. From 1940 to 1941 the number of personnel living at the base doubled. Commercial and residential areas developed north and west of the base, providing housing and other basic services for cadets and their families. The adjacent town of Schertz grew rapidly and the base's gateway community of Universal City was founded during these years of development.

Prior to 1941, the Army greatly expanded its quota of pilots and soldiers in anticipation of American involvement in World War II. During the spring of 1941, the Army Air Corps' quota was increased to 30,000 pilots each year. To accommodate this enormous increase, three Army Air Corps Training Centers were established: the Gulf Coast Training Center with headquarters at Randolph Field; the Southeast Air Corps Training Center at Maxwell Field in Alabama; and the West Coast Training Center at Moffett Field in California. All told, some 100 aviation schools were either in operation or under construction by 1942 (Randolph Field, A History and Guide, xv).

Randolph Field's wartime assignment was to train 12,000 pilots annually. Facilities were expanded to handle classes of 400 or more cadets. A new class entered the training program every five weeks. New cadets, informally known as "Dodos," received two weeks of basic military training before beginning flight classes. Cadets learned to fly under the direct supervision of instructors and graduated from primary school after completing at least 65 hours in the air. During basic training, cadets were required to complete complex assignments such as daylight navigation, night flying, formation flying, and cross country flights. Advanced instruction served as the final phase of training in which cadets practiced attack and defense formations, bombing, and gunnery. Training squadrons utilized three plane types: the Consolidated Vultee BT-13A, the BT-5, and the North American BT-9. Two of the squadrons used Texan and Warhawk planes. The Bomber Training Group utilized Curtiss-Wright AT-9 planes with an all metal fuselage and wings (The Official Pictorial History of the Army Air Forces, 176-180). Upon graduation cadets received the silver wings of a pilot, commission as second lieutenants in the Army Air Corps Reserve, and orders calling them to active duty as officers (Selvaggi, 80-81).

On July 30, 1942, the 647 cadets of Class 42-H comprised the largest class ever to complete the regular basic school at Randolph Field (Ibid, 107). In addition to pilot training, the Gulf Coast Training Center offered training to thousands of bombardiers, navigators, and aerial observers. Basic flight training continued until March 1943 when the Central Instructors School took over as the Field's primary mission, offering basic, primary and advanced courses for flight instructors. Air instructor schools were divided into seven groups; four to train flyers and three to accommodate ground training (Ibid, 108-112). By the end of the World War II, Randolph's Central Flying Instructors School had graduated more than 12,500 instructors.

On April 5, 1945, the Central Instructors School was transferred to Waco, Texas. This transition ended the "individual training" method at Randolph and turned the field's attention toward "crew training." Crew training assigned a group of individuals to perform individual tasks, allowing a single crew to remain on duty for days at a time. "Perhaps the most marked significance of this change was that it was a symbol, a recognition of a new concept" (Ibid, 121). This vast reduction not only signified the end of World War

II, it also reflected the beginning of the Cold War period in which military strength was significantly reduced. Randolph's first B-29, the "Hobo Queen," was incorporated into use in January 1945 for personnel involved in Very Heavy Bombardment [VHB] training. B-29 crew training continued throughout the Korean conflict, ending in 1954 (Ibid, 126-129).

The importance of air power during World War II led to the designation of the Air Force as a separate service on September 18, 1947. Randolph Field was officially renamed Randolph Air Force Base on January 13, 1948. Most pilots trained after 1945 were World War II veterans who were sent through refresher courses before receiving training in newer model planes. In December 1950, Randolph AFB graduated its first combat crews, and by January 1952 crew training had become Randolph AFB's official primary mission. Randolph AFB graduated its last class of individually trained pilots on August 23, 1951, "a date and event that brought to a close Randolph Field's most fabulous era, the time when it was the pilot training center of the world" (Ibid, 124). The United States Air Force converted its aircraft to all jet models during the 1950s and the base's first jet training program began in 1954.

In addition to training, Randolph Field provided support for the School of Aviation Medicine. The organization's predecessor, the Army Air Medical Service, was established in 1917 to inspect flying conditions and train personnel as "flight surgeons" or "physical directors." In 1922, the service was recognized as a Special Service School and changed its name to the School of Aviation Medicine [SAM]. SAM moved to Brooks Field in 1926 to provide care for training pilots, as well as to observe trainees. The organization was included as an original component of Randolph Field and moved onto the base in 1931. SAM's research was supported by branches in Santa Ana, California, Nashville, Tennessee, and the San Antonio Aviation Cadet Center throughout World War II (Ibid, 149-155).

When Randolph AFB phased out its B-29 Transition Training Program in 1956, it was thought that SAM would become the base's primary mission. However, the USAF Helicopter School was transferred from San Marcos, Texas, to Randolph AFB and the Tanker Aircrew KC-97 Course replaced the B-29 program as the base's primary mission. This program was phased out in 1958. Randolph AFB continued to train pilots until 1971 when it changed its mission to instructor training. Today, the base's 12th Flying Training Wing serves as the nation's only Air Force pilot instructor training center. Each year the 559th and 560th Flying Training Squadrons graduate more than 600 instructor pilots. Randolph AFB also serves as the Headquarters for Air Education and Training Command [AETC].

Associated Property Types

Architectural Overview

Randolph Field's uniformity of design, plan, materials, and craftsmanship resulted from careful coordination between the Department of the Army and local architectural firms. Overseeing the project was Captain Arthur W. Parker of the Quartermaster Corps (Selvaggi, 46). Because the contract for the project was so large, San Antonio architects Atlee B. Ayres, Raymond Phelps, and Emmett T. Jackson were selected as members of the Architects Advisory Committee to assist the army in the allotment of work connected with the preparation of plans and specifications (Letter from Captain Arthur W. Parker to Atlee B. Ayres, December 2, 1939). The committee's suggestions on assignments would be used as a guide in tendering contracts for the work at Randolph Field.

The consulting engineer for the construction of Randolph Field was Willard E. Simpson of San Antonio, who was responsible for assisting Captain Parker and head the committee of architects and engineers for the project. The approach for the design and construction at the base was described by Simpson in January 1930. Simpson stated that "Local architects and engineers are undoubtedly better qualified to handle the work here due to the fact that they have been long familiar with local climatic, material, and labor conditions. Local architects and engineers are being given the opportunity to show the advisability of handling the work in their offices instead of government offices" (San Antonio Light, January 5 1930, 7:1).

A list of tentative architectural design assignments was drawn up by the committee for 23 local architects or architectural firms. Of these only eleven were elected initially. These firms or architects and their designs were:

ARCHITECT	LOCATION	FACILITIES DESIGNED
Ralph H. Cameron	San Antonio	Facility 900
Henry T. Phelps	San Antonio	Facilities 241, 230, and 237
Adams and Adams Carleton W. Adams	San Antonio	Facility 671
Ayres and Ayres Atlee B. Ayres and Robert M. Ayres	San Antonio	Facility 100
Emmett T. Jackson	San Antonio	Facilities 901, 902, 903, 905, and 907 (Flying Cadet Barracks based on Jackson's design, but altered by the Quartermaster Corps)

ARCHITECT	LOCATION	FACILITIES DESIGNED
John M. Marriott	San Antonio	Officers' Quarters in the Octagon
Herbert S. Green	San Antonio	Facility 300 and Field Grade Officers' Quarters
Harvey P. Smith	San Antonio	Facility 500
Robert B. Kelly	San Antonio	Facility 200
George Willis	San Antonio	Facility 675
Phelps and Dewees Raymond Phelps and Dahl Dewees	San Antonio	Facilities 110, 112, and 220

The firm of Eickenrocht and Cocke (Marvin Eickenrocht and Bartlett Cocke), was selected in 1933 to complete the work on Building 584, the Post Childrens' School (List of assignments in the Ayres and Ayres Collection). During World War II, the firm of Phelps, Dewees, and Simmons designed Building 661, Aerial Medical Research, and Bartlett Cocke designed Building 245, the Steam Cleaning Building.

Designs for the remaining buildings such as the fire station, garages, electric substations, and pump houses came from the Office of the Quartermaster Corps. The Quartermaster Corps was the Army agency directly responsible for approving building designs and overseeing construction. Their staff was composed of professional engineers, architects, and designers. While the Corps itself was composed of military personnel, civilian architects and planners were employed through the civil service. The first chief of the Engineering Division of the Construction Service was Lieutenant Colonel Francis B. Wheaton who had worked with the firm of McKim, Meade, and White. Other Quartermaster architects also had distinguished credentials but no one person has been identified as being the primary designer of the standardized plans during these years (Grashof, "A Study of United States Army Family Housing Standardized Plans," Vol. 1, 54).

The dominant architectural style utilized at Randolph Field was Spanish Colonial Revival. This style reflected a renewed interest in Spanish Colonial architecture of the 18th and 19th centuries. Buildings in this style were generally constructed with stucco exteriors, had roofs of red clay tile, and large open porches. The aircraft hangars differ in reflecting the Art Moderne style. The Art Moderne style was popular in the 1920s and 1930s and stressed the use of smooth surfaces, corner pylons, and streamlined massing. The influence of this style can be seen in the hangar's stepped corner pylons with stucco surfaces. No other major architectural style was identified during the survey.

Spanish Colonial Revival was one of two architectural styles preferred for Army buildings during the 1920s and 1930s. A discussion of the architecture of army posts in 1928 analyzed architectural trends

in America and stated that the most suitable style would be one that ". . . has acquired some degree of national character and that has become familiar to and is understood by a majority of the people" (Nurse, 11). Two styles were felt to meet these requirements, the Georgian or Colonial Revival style, and the Spanish Colonial Revival style. The Spanish Colonial Revival style was promoted as the proper style for army buildings in the Southwest and parts of the South. Not only was this style appropriate due to its historical traditions in the Southwest but it was also practical through the use of local products such as tile roofs and stucco wall surfaces.

Terminology for the Spanish Colonial Revival style varies in several recent publications on American architectural history. John Blumenson separates the Spanish Mission style of the early 20th century from the Spanish Colonial Revival (Blumenson, Identifying American Architecture, 5-9). According to Blumenson, the Mission style is simple in form with round arches supported by stucco piers, and large buildings may have towers, curvilinear gables, and small balconets. In contrast, the Spanish Colonial Revival style is distinguished by its ornate low relief carvings highlighting arches, columns, window surrounds, cornices, and parapets. Virginia and Lee McAlester divide the Spanish Revival movement into two categories, Mission and Spanish Eclectic (McAlester, A Field Guide to American Houses, 409-429). According to these authors, Mission houses feature curvilinear, or "mission," gables at the roof line while the Spanish Eclectic style borrows decorative details from the entire history of Spanish architecture. Finally, Alan Gowans refers to the Spanish Colonial Revival style has having the sub-styles of Mission, Mediterranean, Pueblo, and Proto Modern (Gowans, The Comfortable House, 105-120).

The architecture at Randolph AFB is primarily a mixture of both the Mission and Spanish Colonial Revival or Spanish Renaissance Revival styles. Many of the industrial and service buildings have curvilinear or mission style gables or parapet walls in addition to ornate cast stone detailing with arcaded loggias. Although a number of the buildings at Randolph AFB have Mission detailing, the overall architecture of the base suggests the proper terminology is the Spanish Colonial Revival. The overall design and detailing of the dwellings also falls more into the category of the Spanish Colonial Revival style. The Spanish Renaissance Revival style has characteristics such as decorative and enriched arched entrances, enriched window cornices, and arcades. Many of the barracks and school buildings were designed in the Spanish Renaissance Revival style. The Taj Mahal is regarded as an example of the Spanish Mediterranean style with its tower and dome.

Buildings constructed at Randolph Field in the early 1930s have a remarkable degree of similarity in their use of materials. More than 95 percent are of hollow core tile construction with the remaining five percent of concrete block construction. Walls on almost all of the masonry buildings were finished with a stucco surface.

The wall building unit used in the majority of the masonry buildings was a hollow core tile known as the "Heath Cube." The Fraser Brick Company manufactured the Heath Cube at their plant in Seguin, 16 miles east of Randolph Field (Army and Navy Courier, July 1930, 50). Hollow core tiles were used in building construction by the late 19th century and this material was especially popular in the Southwest. These tiles had several advantages over brick and concrete including lightness of weight, air spaces that assist in producing a dry wall, and large size of the units that enabled greater economy and speed in

construction. Architect Frederick Heath of Tacoma, Washington, developed the Heath Cube, which is an eight inch cube. The outer walls (shells) are paralleled by two interior webs, spaced close together, and the cubes can interconnect in a variety of arrangements. The cube equaled six bricks in height including mortar joints. The cube possessed load bearing strength for heavy construction yet its lightness reduced the load on footings.

Building foundations are of poured concrete in a pier and beam configuration. Roofs of the dwellings were built with Mission red clay tiles while those of other buildings were either of tile or composition roofing. Entrances varied depending on the building's function and use. Dwellings were built with glass and wood doors in rectangular and rounded arched designs and most dwellings retain these original doors. Glass and wood doors, or steel doors were used for many of the industrial and service buildings; however, many of these have been replaced with modern metal and glass doors in recent decades.

Windows for the majority of the buildings were multiple light steel and glass casement design. Temporary wood buildings constructed in the 1930s and 1940s were generally built with six-over-six wood sash units. The replacement of the original steel sash windows has been extensive in recent years. Windows in all of the dwellings have had their windows replaced with aluminum sash windows. Window replacement has also been common on many of the administrative and service buildings. Another materials change in recent years has been the enclosure of many of the original arcaded porches for additional indoor living or office space. Porch enclosures have occurred to the majority of dwellings as well as many of the original cadet barracks and other buildings.

Randolph Field is distinguished by its lush foliage and wide variety of landscaping. In Lieutenant Clark's plan, ample room was left for landscaped open space and vistas such as along North Park and South Park. This emphasis on landscaping and vistas was in keeping with the influential Garden City movement of the period. The Garden City movement promoted extensive landscaping and communal parks as part of overall community design and this was an important component of Clark's plan for Randolph Field (Roth, A Concise History of American Architecture, 266-267).

One of the first steps taken in the development of Randolph Field was the establishment of a nursery to produce plants suitable for the climate. Twenty acres were set aside to be used as propagation of plants and several large greenhouses were constructed ("The United States Army Air Corps Training Center and Flying School, Randolph Field, Texas," 5). Plants were collected from New Mexico, Arizona, and West Texas, and transported to the field by air. In 1938, Randolph Field's collection of cacti, sotol, yucca, and other desert plants were described as one of the finest in the San Antonio area (Ibid). An estimated 250,000 plants were to be included in Randolph Field's design that would ". . . excel in extent and variety the proposed Texas Botanical Gardens at Austin" (Texas and Texans, February 9, 1931). Captain Norfleet G. Bone was put in charge of the nursery and in addition to the plants he had Live Oak and Spanish Oak trees dug up at Leon Springs and transplanted to Randolph.

The local chapter of the Daughters of the American Revolution provided 120 oak trees during the George Washington Bicentennial year of 1932. These trees line the present day Washington Circle, Military Plaza, North Park, and South Park (Manning, 9).

In the design of the base, utilities were kept underground as much as possible for both practical and aesthetic reasons. Underground tanks and wires would reduce the hazards for flyers and also maintain the open appearance of the base. Gasoline distribution was through an aqua system that operated on the hydraulic system (Randolph Field, A History and Guide, 25). Gasoline was stored in 300,000 gallon tanks tightly compressed by water to prevent dangerous vapor build up. The same pressure forced the fuel through a system of pipes to 32 servicing pits. The only utility that could not be placed underground was the water tank in the Taj Mahal.

Base landscape features include structures and objects such as streetlight fixtures and flagpoles. These features are discussed in further detail in the Randolph Field Historic District nomination.

Multiple and Single Family Dwellings

Description

The majority of the Officers' and Noncommissioned Officers' Quarters [NCO] at Randolph AFB are single family dwellings constructed in 1931. In addition to these dwellings there are also two sets of multiple family dwellings constructed between 1931 and 1950. These multiple family dwellings are outside of the inner Military Circle in the northeast and south sections of the base.

The earliest multiple family dwellings constructed at Randolph AFB are 68 NCO duplexes completed in September 1931. These duplexes are two-story units constructed in the Spanish Colonial Revival style. They were designed with two incised porches and a central stucco chimney on the main facade. Interiors were designed with three bedrooms and a sleeping porch on the second floor. This same plan was used to construct an additional 16 NCO duplexes in the base's south residential area in 1934. The design for these duplexes are Quartermaster Corps standardized plans also constructed at Langley Field, Virginia, Maxwell Field, Alabama, and Ft. Sill, Oklahoma.

In recent years these duplexes have been altered through the enclosure of the porches with wood and stucco panels and the addition of new entrances and windows. Despite these alterations, the overall plan, design, and materials of these duplexes remain to the degree that they would be considered Contributing to the Randolph Field Historic District. They retain their original stucco exteriors, clay tile gable roofs, original exterior dimensions, and support the overall Spanish Colonial Revival architectural theme of the base.

The second set of multiple family dwellings are the ten, eight-unit NCO row houses built in 1950. These row houses are in the northeast section of the base and were extensively remodeled around 1990. Alterations included the addition of new doors and windows, new stucco exteriors, and horizontal belt courses. The buildings no longer retain integrity of design and materials and are not included within the boundary of the Randolph Field Historic District.

Randolph AFB contains a significant collection of single family, Spanish Colonial Revival dwellings constructed during the early 1930s, designed by the Army's Quartermaster General and San Antonio architects. Dwellings are within the residential area of Military Circle, with space allowances of at least 50 feet between each dwelling. Communal garages provide parking facilities for each dwelling.

During the 1920s upgrading of the Army's housing facilities for its officers and noncommissioned officers was an important concern. More than half of the entire Army in the continental United States was living in temporary structures built in 1917, or in buildings dating as far back as the Civil War (Grashof, Vol. 1, 41). Very little construction of modern quarters took place from 1921 to 1926 and complaints concerning housing were widespread. The Army's housing situation finally reached such a critical stage that in March 1926 Congress enacted Public Law No. 45 to allocate $110 million over a ten year period for permanent building construction at Army posts. The first money was made available in 1927 and hundreds of new dwellings were built over the next few years.

The "temporary" nature and arrangement of existing post buildings elicited numerous recommendations for more comfortable quarters (Chambers, Quartermaster Review, March-April 1928, 24). These recommendations included individual houses, instead of shared quarters, and shared mess halls. In 1928, the Quartermaster General developed housing designs that provided various quarters based upon rank. Wherever funds would allow, field and general officers were to be provided dwellings with a living room, dining room, kitchen, four bedrooms, and two baths. For officers of the grade of captain or below, similar dwellings with three bedrooms would be provided. For noncommissioned officers, dwellings with a living room, kitchen, two bedrooms, and a bath would become standard (Ibid, 25). From 1927 to 1929, Congress appropriated funds for the construction of quarters for 238 commissioned officers' families and 181 noncommissioned officers' families.

In order to construct this large number of quarters, the Quartermaster Corps designed a series of dwellings for use throughout the country. These standardized plans were based primarily on the Colonial Revival or Spanish Colonial Revival styles, which was the policy of the Quartermaster Corps. Porches were provided for most dwellings as were automobile garages. Two-story quarters were preferred over one-story quarters due to lower costs per square foot (Grashof, Vol. 1, 52). Appropriations for individual officer dwellings were increased in 1928 from a maximum of $12,000 and to $14,500 (Quartermaster Review, March-April 1931: 13). This additional funding enabled designers to plan for larger and more comfortable quarters and was available for the officers' quarters at Randolph Field.

The largest single family dwelling constructed at Randolph Field is the Commanding General Quarters directly behind the Taj Mahal (Facility No. 300). This two-story dwelling was constructed in 1931 and was designed by San Antonio architect Herbert S. Green. The dwelling has a central two-story section and flanking one-story wings. The rear yard is enclosed by a tile and stucco wall and at the rear is a two-car garage built in 1942. The interior retains its original design including a full height living room.

Exclusive of the Commanding General Quarters, a total of 173 single family designs were built at Randolph Field in 1931. All of the dwellings were constructed of hollow core clay tile with stucco exteriors. Roofs were designed in hipped or gable forms with clay tile roofs and ceramic tiles were used for entrance and window surrounds. To provide for greater variety, the Quartermaster Corps reversed floor plans and varied entrance designs. Interiors were designed with hardwood floors, plaster walls, and plaster ceilings. Fireplaces were installed in each unit with varied designs including ceramic tile surrounds. Staircases were built with wrought iron balusters and newel posts. Openings between rooms are both rectangular and arched in design.

The most common house form built at Randolph Field was a standardized plan for one-story Company Officers' Quarters. A total of 52 of these dwellings were constructed from Quartermaster Corps standardized plan OQ-51. This design is a hipped roof dwelling with two projecting gable roof bays on the primary facade. On the primary facade is a tripartite picture window and glass wood door at the entrance. The roof extends to shelter a porch area on the primary and rear facades. Variations of this dwelling include reversing the floor plan and the addition of an extra bedroom on a rear wing. Similar design quarters are known to have been built at Fort Sam Houston, Texas, Fort Bragg, North Carolina, and March and Rockwell Fields in California.

Two-story dwellings follow floor plans reflective of vernacular Gable Front and Wing and I-House designs (Jakle, Common Houses in America's Small Towns, 161 and 217 and McAlester, 92 and 96). The Gable Front and Wing form was widely used in the United States from the 19th century to the development of Ranch style houses in the 1940s. The I-House family are traditional British folk forms transplanted to America and used widely throughout the 19th and 20th centuries. This is one of the most common house plans used in the country and it was adapted for many different styles including the Spanish Colonial Revival (Ibid).

The Gable Front and Wing form was used for 26 identical plan dwellings designed by San Antonio architect John M. Marriott. These dwellings are a variation of the Quartermaster Corps' Plan No. OQ-59 that was also used for quarters at Hamilton Field in California. These dwellings have a two-story projecting gable roof bay and a lateral one-story wing. Variations of this plan include reversed floor plans and two different entrance designs. Marriott also designed ten similar plan dwellings with one-story arcaded porches on the primary facade.

A two-story, Gable Front and Wing form was used for other dwellings at the base. Ten dwellings were designed by San Antonio architect Herbert S. Green and are a variation of the Quartermaster Corps' Plan No. OQ-58. This standardized plan was also used for quarters at Fort Sam Houston, Texas. Green's design features a one-story arcaded porch on the primary facade and inset ceramic tile panels over the windows. This floor plan was also reversed for variation. Eleven two-story dwellings with arcaded porches on the main facade were designed by John M. Marriott. He also designed an additional 27 standardized plan dwellings with single bay entry porches.

The I-House variations have a basic plan of two rooms divided by a central hall with a rear two- and one-story ell. These dwellings were also designed by Marriott who varied them through differing entrance designs, arcaded porches on the front and rear facades, and through reversing the floor plans. Marriott designed 18 standardized plan dwellings with rectangular entrances, 15 with arched entrances, and 14 with arcaded porches on the main facade.

The exteriors of the Officers' Quarters are presently of cream colored stucco. Several references to these dwellings soon after their construction mention that they are of stucco ". . . in various soft shades of color as well as white" ("The United States Army Air Corps Training Center and Primary Flying School, Randolph Field, Texas," 2). It is not known what these "soft colors" originally were or when the dwellings were repainted in their present color scheme. The Works Progress Administration [WPA] Guide written in 1942 states that the Officers and NCO Quarters are ". . . varied as to exterior details and

coloring" (Randolph Field, A History and Guide, 24).

Due to faulty roof construction the majority of Officers' Quarters leaked during wet weather. The Hot-Kold Heating units were also criticized for their noise and for the location of the outlets near the ceiling which resulted in uneven heat. Repairs to these quarters were necessary within a few years and new gas and steam radiators were installed to provide additional heat. Most of this work was completed by the WPA (Manning, 8).

The single family dwellings at Randolph AFB comprise the largest historic property type at the base. These dwellings retain much of their original form, plan, and materials and all are considered Contributing to the Randolph Field Historic District.

Significance

Multiple and single family dwellings are significant under Criteria A and C for their association with the aviation training mission of Randolph Field from 1931 to 1950 and for their architectural design. All of the dwellings in the original section of the base were constructed between 1931 and 1934 to house married officers and noncommissioned officers, and their families. Commissioned officers from second lieutenants to majors were primarily responsible for the teaching assignments at Randolph Field. These officers directed various departments in the ground school, served as Flying Commanders, and Flight Instructors (Randolph Field, A History and Guide, 90). Noncommissioned officers such as sergeants were responsible for many assignments at Randolph Field such as drill instruction, and overseeing maintenance and mechanical assignments. The Officers' and NCO quarters provided housing for thousands of base personnel between 1931 and 1950 and were integral to the missions at Randolph Field.

The dwellings were designed in the Spanish Colonial Revival style from designs by the Quartermaster Corps, and San Antonio architects John M. Marriott and Herbert S. Green. The designs for the dwellings included stucco exteriors, roofs of clay tile, and inset ceramic tile decoration. Large porches are on many of the dwellings. The dwellings retain much of their original integrity and design.

A total of 84 multiple family duplexes and 174 single family dwellings were constructed at Randolph Field between 1931 and 1934. These dwellings comprise 258 of the 342 Contributing buildings in the Randolph Field Historic District.

Registration Requirements

Multiple and single family dwellings may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, a multiple or single family dwelling must be a fine example of a particular style or possess notable design elements and detailing. The dwelling must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, no dwelling was identified as meeting individual eligibility requirements.

To be historically significant, a multiple or single family dwelling must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no dwelling, was

identified as meeting individual eligibility requirements.

Multiple and single family dwellings may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these dwellings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. The dwellings should retain their original orientation and spatial relationship with adjacent buildings. The enclosure of porches with stucco and wood panels has occurred on all of the multiple family dwellings constructed between 1931 and 1934. Despite this alteration these dwellings retain the majority of their overall exterior design and detailing. Many of the single family dwellings have also had their porches enclosed with glass or screen panels. These dwellings are also considered to retain the majority of the overall design and detailing.

Under these registration requirements, all of the multiple and single family dwellings constructed between 1931 and 1934 would be considered Contributing to the Randolph Field Historic District. The grouping of duplexes constructed in 1950 has been significantly altered and no longer retains integrity of design, workmanship, and materials. No other multiple or single family dwellings built from 1931 to 1950 were inventoried at Randolph AFB.

Automobile Garages

Description

During the late 1920s the Quartermaster Corps designed automobile garages for residential areas of their bases. This emphasis on garages was in response to the dramatic increase in automobile ownership during the decade that saw automobile registration in America jump from six to 23 million. Shared or community garages provided an economical way of accommodating automobiles for two or more officers' quarters. Most automobile garages were built to serve the officers and NCO Quarters.

At Randolph Field the Quartermaster Corps designed a standard community garage plan. This garage was built with walls of either concrete or hollow core tile and stucco, foundations of poured concrete, and a shed roof resting on wood joists. The automobile bays were left open and each bay was divided by vertical unhewn wood posts. The garage floor was paved with gravel. Each car stall was 9.5 feet wide and access into the garage was through an 11-foot wide entry gate. Each stall held a store room separated by a wood partition wall.

The design for these garages continued the Spanish Colonial Revival theme of the base. The exterior walls are of concrete and stucco and the walls curve to low concrete posts that bracket the automobile and pedestrian entrances. Small vents provide ventilation into the storage rooms.

The automobile garages at Randolph Field are identical in plan except for the number of bays or car stalls. Two eight-car garage plans were used for Facilities 313 and 603. A ten-car garage plan was used for six buildings (Facilities 319, 403, 409, 513, 519, and 609). The most common garage plan is a twelve-car garage plan was used for eight buildings (Facilities 357, 372, 447, 462, 557, 570, 645, and 658). One

16-stall garage was also built in 1931 adjacent to the East NCO club (Facility 594). This garage has been extensively remodeled and no longer retains integrity of design and materials. A two-car hipped roof garage was built in 1943 adjacent to the Commanding General Quarters (Facility 301).

The original plan and design of the majority of the garages remain relatively unaltered. The most common change to these buildings is replacement of the wood support columns with modern metal columns. Some garages have also received replacement of their original roof joists and roof surface with steel beams and composition roof materials. Despite these alterations, the garages retain sufficient integrity to be included as Contributing to the character of the district.

Significance

Automobile garages are significant under Criterion A for their support of the base's aviation training mission from 1931 to 1950, and under Criterion C for their contribution to the base's architectural character. The garages were designed to provide space for automobile parking and storage facilities for housing in the central section of the base. The garages were sited to serve anywhere from eight to twelve dwellings. The garages were utilized by commissioned officers who were responsible for teaching and flight instruction at the base. The garages were designed with Spanish Colonial Revival detailing to complement the adjacent housing. Although modest in scale and design, the garages contribute to the overall Spanish Colonial Revival appearance of the Randolph Field Historic District.

Registration Requirements

Automobile garages may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, an automobile garage must be a fine example of a particular style or possess notable design elements and detailing. The building must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, no automobile garage was identified as meeting individual eligibility requirements.

To be historically significant, an automobile garage must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no automobile garage was identified as meeting individual eligibility requirements.

Automobile garages may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms, and original exterior structural materials. The garages should retain their original orientation and spatial relationship with adjacent buildings.

Under these registration requirements, all of the automobile garages built during the period of significance would be considered Contributing to the district except Facility 594. The majority of automobile garages have not been extensively altered and retain their original integrity.

Service Buildings and Structures

Description

Service buildings and structures are those originally built, or presently used, to provide a particular base service. These services include shopping facilities, food service, fire and safety services, schools, and medical services. The Chapel provides religious services for the base and is also included in this category.

The majority of the service buildings and structures on the base were constructed in the early 1930s in the Spanish Colonial and Spanish Renaissance Revival styles. The most notable of these are the Chapel (Facility 102), the Post Exchange (Facility 200), and the Hospital (Facility 675).

The Chapel was built in 1934 and designed by the Quartermaster Corps. The Chapel is adjacent to the Taj Mahal and is a fine example of the Spanish Colonial Revival style. The building has not been extensively altered and retains its original form and plan. The Post Exchange was designed as the base's shopping area and is distinguished by its central courtyard and arcaded loggia entrance. The building was constructed in 1931 and designed by architect Robert B. Kelly. Although somewhat modified, its essential form and design are apparent. The base Hospital is also an example of the Spanish Renaissance Revival style and was designed by architect George Willis in 1931 (Facility 675). The Hospital has an impressive cast stone surround at the entrance and has not been significantly altered.

Several buildings were constructed to provide temporary lodging and mess services. Bachelor Officers' Quarters A and B are identical plan, two-story buildings constructed in 1931 to provide temporary officer quarters. Both buildings were designed in the Spanish Renaissance Revival style by the San Antonio architectural firm of Phelps and Dewees and have two-story arcaded open loggias. The Bachelor Officers' Mess is two-story Spanish Renaissance Revival building also designed by Phelps and Dewees in 1931. This building retains its original open arcaded loggia and steel casement windows.

The remaining service buildings are generally modest, one-story structures of clay tile and stucco construction with Spanish Colonial Revival influences. Examples of these buildings include the Guard House (Facility 235), the Post Children's School (Facility 584), and the Post Bakery (Facility 216). All three are of similar construction and materials. Both the Guard House and Post Children's School were built with open arcaded loggias on the main facade that have been enclosed in recent years.

The majority of service buildings and structures retain their original design and plan and are within the boundary of the Randolph Field Historic District.

Significance

Service buildings and structures may be significant under Criteria A and C for their association with the base's aviation training missions from 1931 to 1950, and for their architectural design. The Chapel (Facility 102) has been the center for religious services at the base since its construction in 1934. The building houses the offices of the Base Chaplain's responsible for overseeing Protestant and Catholic services. During the 1930s and 1940s the Chapel was the site of hundreds of weddings, baptisms, and funerals for base personnel. The Chapel is a fine example of the Spanish Colonial Revival style and it retains much of its original design and integrity.

The Post Exchange (Facility 200) was designed to serve as the central shopping area for the base.

The building was designed with a central courtyard and originally contained a grocery department, a general sales department, a cafe and bar, a shoe shop, a tailor shop, and a beauty shop. During the 1930s and 1940s the building continued to provide essential shopping services for base personnel. The building has been somewhat altered but retains most of its original form and plan. The Hospital (Facility 675) served as the base's primary medical facility. The Hospital was built with a total of 200 beds and contained various surgical wards, a dental clinic, and laboratories. The building is a notable example of the Spanish Renaissance Revival style and it retains much of its original design.

The Bachelor Officers' Quarters (Facilities 110 and 120) and Bachelor Officers' Mess (Facility 112) were built to provide housing and dining facilities for unmarried officers. Each of the Bachelor Officers' Quarters were built with 40 sets of quarters including a parlor, bedroom, and bath. The Mess Hall was built with a kitchen and dining room at the rear of the quarters. These three buildings were integral in providing housing and dining facilities for unmarried officers and all three buildings are notable examples of the Spanish Renaissance Revival style.

Other buildings contained essential services for base operations such as the Guard House (Facility 235), the Post Children's School (Facility 584), the Post Bakery (Facility 216), and the "Dope" Storage Building (Facility 237). These buildings supported various operations of the base's aviation training missions and were designed in the Spanish Colonial Revival style.

Registration Requirements

Service buildings and structures may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, a service building or structure must be a fine example of a particular style or possess notable design elements and detailing. The building must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, the Chapel (Facility 102) was identified as meeting individual eligibility requirements. The Chapel is significant for its Spanish Colonial Revival architectural design, which includes its original bell towers, enriched door surround, and clay tile roof. Designed by the Quartermaster Corps, the Chapel is a particularly notable example of this style. The Chapel is included as a Contributing building in the Randolph Field Historic District.

To be historically significant, a service building or structure must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no service building or structure was identified as meeting individual eligibility requirements.

Service buildings and structures may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. The properties should retain their original orientation and spatial relationship with adjacent buildings. The addition of post 1950 windows and

doors, and the enclosure of open porches with glass and stucco panels has occurred to a number of the properties. These buildings or structures shall be considered Contributing if their overall plan, design, and exterior materials are intact and they evoke feelings and association of their era of construction.

Under these registration requirements, Facilities 102, 110, 112, 118, 120, 200, 202, 205, 216, 237, 235, and 675 would be considered Contributing to the Randolph Field Historic District.

Administrative and Operations Buildings

Description

Administrative and Operations Buildings are those originally built or presently used for administrative offices, training classrooms, and base operations. The most prominent of these buildings is Building 100, the Base Administration Building, also known as the Taj Mahal. Constructed in 1931, the Taj Mahal is the tallest building on the base and was designed by the San Antonio architectural firm Ayres and Ayres. The building contains offices, the base theater, and the base water tower. The Taj Mahal is the most visible building at Randolph AFB and is noted for its architectural design. The building was listed in the National Register of Historic Places on August 27, 1987.

All six of the original Air Corps Barracks buildings were converted into offices in the 1960s and 1970s (Facilities 399, 491, 581, 497, 499, and 663). Facilities 497 and 499 were extensively altered and joined together into one building. The original open arcaded bays were filled in and a new entrance bay was added on the primary facade. These alterations result in the loss of integrity of design and the building is considered Noncontributing to the Randolph Field Historic District. The remaining four buildings have not been extensively altered and retain their original design and plan.

The six buildings which originally comprised the Cadet Barracks and Academic complex have all been converted into administrative offices. These include the Academic Building (Facility 900), Cadet Barracks A, B, C, and D (Facilities 901, 902, 903, and 907), and the Cadet Administration and Recreation Building (Facility 905). The Academic Building displays its original casement windows, entrances, overall plan and design, and interior detailing. Cadet Barracks A and D (Facilities 901 and 903) also retain their original design and detailing. Both buildings have open arcaded verandas, steel casement windows, and original wood doors which originally led to cadet quarters. The design of the Cadet Administration and Recreation Building is also intact and displays an open arcaded veranda, decorative entrance surrounds, and steel casement windows.

Cadet Barrack B (Facility 902) was extensively altered in recent years on both the exterior and interior. Alterations include filling the open veranda area with glass and metal panels, adding new windows and doors, and remodeling the interior. Due to these alterations the building no longer retains integrity of design and materials.

The School of Aviation Medicine (Facility 671) is a Spanish Renaissance Revival style building which has been converted to offices. This building retains most of its original steel casement windows and ornate cast stone surrounds at primary entrances. Another notable building is the Spanish Colonial Revival style Aerial Medical Research Lab completed in 1942 (Facility 661). This two-story building features a

large arched entrance on the primary facade.

Four frame buildings were constructed between 1941 and 1945 to serve as additional administrative offices and classrooms. Three of these, Facilities 103, 148, and 157, were built to the northeast of the Taj Mahal. All three have been extensively altered in recent years and no longer retain integrity of design and materials. Facility 662 was built at the rear of the Aerial Medical Research Laboratory and has been altered through added siding materials and replacement windows. This building is included as Noncontributing.

Significance

Administrative and Operations buildings may be significant under Criterion A and C for their association with the base's aviation training missions from 1930 to 1950 and for their architectural design. The most prominent administrative building is the Administration Building known as the Taj Mahal (Facility 100). This building was constructed to serve as the base headquarters and is a notable example of the Spanish Mediterranean style. This building is listed in the National Register.

The majority of the administrative and operations buildings at the base were originally built for other functions. The most prominent of these are the six Air Corps Barracks buildings (Facilities 399, 491, 581, 497, 499, and 663), and the six buildings which comprise the Cadet Barracks and Academic Complex (Facilities 900, 901, 902, 903, 905, and 907). The Air Corps Barracks buildings were designed to house Air Corps cadets training for combat flying. Each building contained cadet quarters with bathrooms, a mess hall and kitchen, and social rooms. Air Corps cadets were housed in the barracks during their months of training. The buildings were designed in the Spanish Colonial Revival style and most barracks buildings retain their original design and plan. During recent decades these buildings were converted from barracks to administrative offices.

The School of Aviation Medicine was originally the home of a basic and extension course for officers of the Medical Department (Facility 671). The three-fold functions of the school were: Instruction and Training, Investigation and Research, and Conduct of an Extension Course (Ibid, 114). The course work was focused on understanding the particular medical attention required by flyers due to the specific mental and physical challenges of flying. This school was at Mitchel Field in New York and Brooks Field in San Antonio prior to its move to Randolph Field in 1931. The school was the only one of its kind in the Army and graduated hundreds of Flight Surgeons into the Army Air Corps and Air Force during the 1930s and 1940s (Ibid, 116). In 1967, the building was converted into administrative offices.

Another notable building is the Aerial Medical Research Lab completed in 1942 (Facility 661). During early World War II, the increased demands at the Hospital required additional research and laboratory space. This need was met by the construction of the Aerial Medical Research Lab which was designed in the Spanish Colonial Revival style. The building has been converted to offices and retains its original architectural design.

Registration Requirements

Administrative and Operations buildings may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, an administrative and operations building must be a fine example of a particular style or possess notable design elements and detailing. The building must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, no building was identified as meeting individual eligibility requirements with the exception of the previously listed Taj Mahal (Facility 100).

To be historically significant, an administrative and operations building must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no administrative and operations building was identified as meeting individual eligibility requirements with the exception of the previously listed Taj Mahal (Facility 100). The Taj Mahal is included as a Contributing building in the Randolph Field Historic District.

Administrative and Operations buildings may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. The properties should retain their original orientation and spatial relationship with adjacent buildings. The addition of post 1950 windows and doors, and the enclosure of open porches with glass and stucco panels has occurred to a number of the properties. These buildings or structures shall be considered Contributing if their overall plan, design, and exterior materials are intact and they evoke feelings and association of their era of construction.

Under these registration requirements, Facilities 100, 399, 491, 581, 661, 663, 671, 900, 901, 903, 905, and 907 would be considered Contributing to the Randolph Field Historic District.

Recreational Buildings and Structures

Description

Recreational buildings and structures are properties used for outdoor and indoor recreation. These buildings and structures include tennis courts, swimming pools, youth halls, and Officers' Clubs.

Three buildings were constructed as recreation centers for officers and noncommissioned officers. The largest of these is the two-story Officers' Club (Facility 500) at the center of the housing area. This building was designed in the Spanish Colonial Revival, style by architect Harvey Smith in 1931. The building was designed with an open arcaded loggia and hipped roof tower. The building contains dining halls, meeting rooms, and other areas for socialization. In recent decades the building has been substantially altered and no longer retains its architectural integrity. Two NCO Club buildings, identical in floor plan, were constructed by the Quartermaster Corps in 1931 in the east and west sections of the base (Facilities 598 and 693). Both were designed in the Spanish Colonial Revival style with open arcaded

loggias on the main facades. The arches differ from other loggias on the base in that they have Gothic, rather than round, arches. Both buildings retain their original design and integrity, despite the fact that both facilities have rear modern additions.

The Quartermaster Corps constructed three bath houses adjacent to the swimming pools on the base. The largest is the Officers' Club Bathhouse which features an original arched entrance and hipped clay tile roof (Facility 503). Two identical plan bathhouses were built adjacent to the west and south pools (Facilities 666 and 981). These buildings are of clay tile and stucco construction and have narrow vent openings and a stepped roof parapet on the main facade. Both of the original swimming pools at the south pool and Officers' Club remain and are large elliptical designs of concrete construction.

A building constructed by the WPA for use as a Boy Scout Meeting Hall is in the northeast section of the base adjacent to the nursery and greenhouse (Facility 1143). The building is of stone veneer construction and was completed in 1940. The building is outside the boundary of the Randolph Field Historic District and does not appear to possess individual historical or architectural significance.

The base contains two tennis courts built in 1938 (Facilities 390 and 983).

Significance

Recreational buildings and structures may be significant under Criterion A and C for their association with the base's aviation training missions from 1930 to 1950 and for their architectural design. The most prominent recreational building is the Officers' Club in the center of the housing area (Facility 500). The Officers' Club was a major social and recreational center for the base but in recent decades it has been extensively altered.

Both of the NCO Clubs were built as social centers for Noncommissioned Officers (Facilities 598 and 693). These buildings were used for meetings, dances, and other recreational activities. Several large pools and bathhouses were also built to provide swimming facilities for both officers and enlisted men. These facilities are significant for their role in promoting the health and welfare of base personnel during the 1930s and 1940s.

Registration Requirements

Recreational buildings and structures may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. Under these registration requirements, no recreational building at Randolph AFB met individual eligibility requirements.

To be historically significant, a recreational building or structure must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no recreational buildings or structures were identified as meeting individual eligibility requirements.

Recreational buildings and structures may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties

should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. Some properties should retain their original orientation and spatial relationship with adjacent buildings. The addition of post 1950 windows and doors has occurred to a number of the properties. These buildings or structures shall be considered Contributing if their overall plan, design, and exterior materials are intact and they evoke feelings and association of their era of construction.

Under these registration requirements, Facilities 390, 502, 503, 598, 666, 693, 694, 980, 981, and 983 would be considered Contributing to the Randolph Field Historic District.

Aircraft Hangars and Towers

Description

Randolph Field's aircraft hangars and flight towers are along the east and west flight lines. The east flight line contains eight aircraft hangars and one flight tower designated as Facilities 3, 4, 5, 6, 7, 8, 12, 13, and 16. The west flight line contains ten aircraft hangars and one flight tower designated as Facilities 62, 63, 64, 66, 70, 71, 72, 73, 74, 75, and 76. These buildings are directly related to aircraft storage, maintenance, repair, and flight instruction.

All 18 of the aircraft hangars were completed during the summer of 1931 with the Completion Reports signed on August 24, 1931. The hangars were constructed from standardized plans designed by the Quartermaster Corps. Each hangar was designed to have a capacity of 30 planes. The hangars have walls of hollow core tile with one-inch thick stucco exteriors. The gable roofs were originally composed of corrugated metal on steel trusses and foundations are of poured concrete. Each hangar is rectangular in plan with Art Moderne influenced corner pylons. These pylons are also of hollow core tile and stucco construction and have smooth walls surfaces, vertical banding, and flat roofs. Windows are of multiple light steel and glass design and the hangar doors are of steel and glass sliding track design. The hangars were built for the Quartermaster Corps by contractor Kenneth L. Colborn.

Two different floor plans were used for the construction of the hangars, "Type Y" and "Type X." The Type Y Hangar was built with a one-story, 60-foot-wide annex on one facade. This annex was placed in the central section of the building equidistant between the corner pylons. The annex was used as offices and storage for the hangar. The Type Y Hangar was constructed at a cost of $31,442.50. Type Y Hangars constructed at Randolph Field include: Hangar K (Facility 3), Hangar L (Facility 4), Hangar D (Facility 63), Hangar E (Facility 64), Hangar F (Facility 70), Hangar G (Facility 71), Hangar I (Facility 73), and Hangar J (Facility 74).

The Type X Hangar was built in a similar floor plan except that its one-story annex was built the full width of the building between the pylons. This annex was also designed to hold offices and storage areas for the hangar. The Type X hangar was built at a cost of $34,379.05. Type X Hangars constructed at Randolph Field include: Hangar M (Facility 5), Hangar N (Facility 6), Hangar 0 (Facility 7), Hangar P (Facility 12), Hangar Q (Facility 13), Hangar R (Facility 16), Hangar C (Facility 62), Hangar H (Facility 72), Hangar U (Facility 75), and Hangar V (Facility 76).

Since their construction there have been a number of changes and alterations to the hangars. All of the Type Y Hangars had their annex enlarged in 1940 to the length of the pylons similar to the Type X designs. The windows in all of the annexes were filled in with wood and stucco either in 1966 or ca. 1985. Three of the hangars have had their original windows on their side facades covered with metal panels. Additions to five of the Type X Hangar annexes occurred in 1939 and 1940. The original open floor space of seven hangars were altered in the 1950 and 1970s with the introduction of separate partition walls for office and workshop space. This occurred to Hangars C, D, E, N, 0, P, and Q. Hangar F was converted into a gymnasium in 1942. Hangars I and G were converted into warehouses during the 1960s.

The hangars at Randolph AFB comprise a significant property type from the base's original period of construction. The hangars were built to house and service the aircraft used for primary and basic training, and were integral to the mission of the base. Despite their alterations and additions, the hangars continue to retain their original integrity. The hangars retain the majority of their original windows, sliding track hangar doors, and exterior wall treatments. All 18 of the hangars are considered Contributing to the Randolph Field Historic District.

The two flight towers, Facilities 8 and 66, are standardized plan buildings constructed in 1932. They were designed by the Quartermaster Corps at a cost of $38,567.93. Designated as the Operations and Parachute Buildings they were originally built with open arcaded loggias on the first story facing the flight line. The original observation towers, or cabs, were replaced in 1939 and 1961. The open loggia on Facility 8 has been enclosed with glass. Despite some alterations both buildings retain much of their overall plan and design.

Significance

The hangars and flight towers are significant under Criteria A and C for their association with the aviation training mission of the base and for their Art Moderne architectural design. The hangars were constructed in 1931 to provide facilities to house and maintain training aircraft. The hangars were also built with offices and shops for classrooms and administrative functions. The hangars were designed to accommodate up to 30 planes which were used for basic and primary flight instruction. Due to their role in aircraft maintenance and operations, the hangars were integral to base training missions of the 1930s and 1940s. The flight towers were also significant as the center for scheduling flight operations and monitoring aircraft in the air and on the ground.

The design of the hangars reflects the Art Moderne style with their stepped corner pylons and smooth exterior surfaces. The plans for the hangars came from standardized Quartermaster Corps designs and are the only major buildings on the base not constructed in the Spanish Colonial style or related styles. The Art Moderne style was used for a variety of Military and industrial buildings of the period and the hangars retain much of their original design.

Registration Requirements

Aircraft hangars and towers may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, a hangar or flight tower must be a fine example of a particular style or possess notable design elements and detailing. The building must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, no building was identified as meeting individual eligibility requirements.

To be historically significant, a hangar or flight tower must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of particular importance in Randolph Field's historic contexts. Under these registration requirements, no hangar or flight tower was identified as meeting individual eligibility requirements.

Aircraft hangars and flight towers may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. The buildings should retain their original orientation and spatial relationship with adjacent buildings.

Under these registration requirements, Facilities 3, 4, 5, 6, 7, 8, 12, 13, 16, 62, 63, 64, 66, 70, 71, 72, 73, 74, 75, and 76 would be considered Contributing to the Randolph Field Historic District.

Industrial and Infrastructure Buildings and Structures

Description

Industrial and infrastructure buildings and structures were constructed to provide specific functions or infrastructure support for base operations. These types of buildings include warehouses, general storage buildings, water pump stations, and power stations.

The largest industrial buildings on the base are the Engineering Shops (Facility 241) and the Post Garage (Facility 208). The Engineering Shops were built in 1931 and designed by architect Henry T. Phelps. The building consists of three interconnected sections each with curvilinear gables on the primary facades. The primary facades also display decorative cast stone surrounds at some windows and entrances. The Post Garage consists of four interconnected sections which also have curvilinear gables on the primary facades. The Post Garage was built in 1931 and designed by the Quartermaster Corps.

Other notable industrial buildings are the two warehouses built adjacent to each other on C Street West (Facilities 220 and 224). Both buildings were constructed in 1930 in identical plans designed by the Quartermaster Corps. The buildings have decorative cast stone surrounds at the entrance, inset tile panels, and a stepped parapet at the primary facade. The buildings were originally constructed with monitor roofs and clerestory windows.

The Nursery and Greenhouse Building was constructed in the northeast section of the base in 1931

and is of stone veneer rather than stucco tile construction (Facility 1144). The building was used as offices for the adjacent nursery (now demolished) and is of concrete construction with a rubble course stone veneer. The building is outside of the boundary of the Randolph Field Historic District and it does not appear to possess individual architectural or historical significance to meet National Register criteria.

The majority of the remaining industrial buildings include shops and storage buildings of clay tile or concrete block construction. These buildings are utilitarian in design with little or no decorative elements. They display stucco exteriors, flat and gable roofs, and both wood sash and steel casement windows. Examples of these buildings include the Steam Cleaning Building (Facility 245) and the Gas Storage Building (Facility 242).

The base contains a number of infrastructure buildings including ordnance magazines, water pump stations, and electric substations. Several ordnance magazines are in the northeast section of the base and are metal standardized plan buildings (Facilities 1164, 1165, and 1166). Identical plan pump stations with hipped roofs are scattered throughout the base and are connected with the water supply system (Facilities 501, 664, and 982). Three flare houses for flammable material storage are also on the base (Facilities 10, 67, and 243).

Significance

Industrial and infrastructure buildings and structures may be significant under Criteria A and C for their association with the base's aviation training missions from 1931 to 1950, and for their architectural design. The Shop Area was in the northwest section of the base to provide for a centralized area for warehouses and industrial functions. The primary buildings in this area include the Engineering Shops (Facility 241) and Post Garage (Facility 208). The Engineering Shops were built to contain machinery for repairing and testing aircraft engines. Following repair, the engines were taken to the Engine Test Building for fine tuning (Facility 229). The Post Garage was the maintenance and repair center for motorized vehicles used for transportation. Two large warehouses, Facilities 220 and 224, were built to provide general storage for materials essential to base operations.

In addition to the centralized Shop Area, small industrial and infrastructure buildings are scattered throughout the base. These buildings and structures are part of the base's water, sewage, and power supply systems and are essential for base operations.

Registration Requirements

Industrial and infrastructure buildings and structures may be significant for both their association with Randolph Field's aviation training mission and for their architectural style. To be architecturally significant, an industrial or infrastructure building or structure must be a fine example of a particular style or possess notable design elements and detailing. The building must also possess integrity of setting and location, design, workmanship, and materials. Under these registration requirements, no industrial or infrastructure building or structure was identified as meeting individual eligibility requirements.

To be historically significant, an industrial or infrastructure building or structure must be associated with an individual of particular importance, be associated with an important event or occurrence, or be of

particular importance in Randolph Field's historic contexts. Under these registration requirements, no industrial or infrastructure building or structure was identified as meeting individual eligibility requirements.

Industrial or infrastructure buildings and structures may also meet registration requirements if they form a significant grouping, or are part of a significant grouping, which retains integrity of setting and location. To be eligible these buildings must be at their original locations, retain their integrity of materials, design, and workmanship, and evoke feelings and associations of their era of construction. Contributing properties should retain the majority of their original plan and form, original roof forms and materials, the majority of original window and door openings, and original exterior materials. The properties should retain their original orientation and spatial relationship with adjacent buildings. The addition of post 1950 windows and doors has occurred to a number of the properties. These buildings or structures shall be considered Contributing if their overall plan, design, and exterior materials are intact and they evoke feelings and association of their era of construction.

Under these registration requirements, Facilities 10, 67, 77, 208, 220, 224, 229, 230, 241, 242, 243, 245, 260, 501, 664, 668, and 982 would be considered Contributing to the character of the district.

Geographical Data

The boundary of the "Historic and Architectural Resources of Randolph Air Force Base, Bexar County, Texas" is the existing boundary of Randolph Air Force Base.

Summary of Identification and Evaluation Methods

The Multiple Property Documentation Form for Randolph AFB is the result of an intensive historic and architectural investigation completed in 1993. In June 1992 the National Park Service [NPS] contracted with Thomason and Associates, Preservation Planners of Nashville, Tennessee, to complete the scope of work outlined under the terms of Contract Number 1443CX-1200-92-008. This scope of work included the survey of all buildings and structures constructed prior to 1951 at Randolph AFB, the completion of a Survey Report, the completion of a Cultural Resource Management Plan, and the preparation of National Register nominations for eligible properties. Survey Coordinator Ralph Newlan conducted the base survey, and Principal Investigator Philip Thomason prepared the National Register nominations and other project products.

The Survey Coordinator completed a file search prior to initiating the on site survey. This file search included an examination of historical data at the following locations:

Air Training Command Historian
Randolph AFB History Office
Texas Historical Commission, Austin
Architectural Drawings Collection, University of Texas at Austin
Center for American History, University of Texas at Austin
Institute of Texan Cultures, San Antonio
Military Archives, Suitland, Maryland
Corps of Engineers, Fort Worth District
Austin History Center, Austin
Daughters of the Republic of Texas Library at the Alamo, San Antonio
Trinity University, San Antonio
Air Force Museum, Wright-Patterson AFB, Dayton, Ohio

The file search resulted in extensive documentation on the acquisition, development, history, and architectural development of Randolph AFB. This information is included in the Multiple Property Documentation Form and Randolph Field Historic District nomination.

The survey phase of the project consisted of a comprehensive examination of existing documentation, an on site investigation of 382 buildings and structures built prior to 1951, and the compilation of survey data. The survey was completed in accordance with Historic American Building Survey/Historic American Engineering Record Level III of the Secretary of the Interior's Standards and Guidelines (Federal Register 48:190, pp. 44716-44742, September 29, 1983). The Survey Coordinator examined every pre-1951 property on the base, driving or walking all accessible roads and streets to collect data on each property. The survey team typed data gathered in the field onto computerized inventory forms. Finally, the team photographed each property, producing black and white prints.

Information gathered on each property was incorporated into a Historic Sites Inventory Form created expressly for the Randolph AFB project. The forms were designed jointly by Thomason and Associates and the Texas Historical Commission.

Each building was photographed with PlusX 125 black and white film. At least two black and white contact prints were included with each survey form. Historic photographs were also gathered from the Base Historian. The Randolph Field Historic District boundary with Contributing and Noncontributing properties are included on United States Geological Survey 7.5 minute quadrangles and base maps.

In addition to source materials utilized during the survey, evaluation of historic contexts and areas of significance involved examining other research and documentation. Consulted primary source materials outlining the early years of the Army Air Corps and the development of airfields include the following:

Anderton, David A. A History of the U.S. Air Force. New York: The Military Press, 1989.

Brown, Jerold E. Where Eagles Land, Planning and Development of U.S. Army Airfields, 1910-1941. New York: Greenwood Press, 1990.

Mason, Jr., Herbert Molloy. The United States Air Force, A Turbulent History, 1907-1975. New York: Mason/Charter, 1976.

Maurer, Maurer. Aviation in the U.S. Army, 1919-1939. Washington, D.C.: Office of Air Force History, United States Air Force, 1987.

Mueller, Robert. Air Force Bases, Volume 1. Washington: Office of Air Force History, 1982.

These sources contain extensive information on the overall history of the Army Air Corps and the Air Force during Randolph AFB's period of significance. The publication, Where Eagles Land, contains information concerning planning and development of airfields across the country and details innovations comprised in Randolph Field's original design and layout. These sources assisted in establishing the significance of Randolph Field within the national contexts of United States Army and Air Force aviation and airfield development.

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