

KELLY AIR FORCE BASE, BUNGALOW COLONY
100 Area
Kelly Air Force Base
San Antonio
Bexar County
Texas

HAER No. TX-3396

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Southwest System Support Office
National Park Service
P.O. Box 728
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HISTORIC AMERICAN BUILDINGS SURVEY

KELLY AIR FORCE BASE, BUNGALOW COLONY
100 Area
Kelly Air Force Base
San Antonio
Bexar County
Texas

HABS No. TX-3396

Construction Date: Between 1920 and 1932

Present Owner: U.S. Air Force

Original Owner: U.S. Army Air Corps

Present Use: Kelly Air Force Base became Kelly Annex on July 31, 2001, when it realigned under Lackland Air Force Base.

Significance: The Bungalow Colony, constructed to provide residential, recreational, and work facilities for officers and their families, is a self-contained area with excellent examples of the bungalow building type so popular in urban America of the 1920s and 1930s. The district is among the earliest remaining family officers' quarters still standing on any Air Force or Air Depot base in the continental United States, and housed many individuals of national significance in the history of the Air Service and Air Corps.

I. Background

The Bungalow Colony at Kelly Air Force Base contains 71 single and multifamily residences, outbuildings, offices, recreational facilities, utility structures, and landscape features constructed between 1920 and 1960. Fifty of the architectural components were constructed between 1920 and the end of World War II. During this 25-year period, the Colony provided housing and office space for personnel attached to the Aviation General Supply Depot (1917-1921), San Antonio Air Intermediate Depot (1921-1927), Air Corps Training Center (1926-1931), San Antonio Air Depot (1927-1943), San Antonio Air Depot Control Area Command (1943), and San Antonio Air Technical Service Command (1944-1946). Programs and activities carried on at the Depot were of national significance: The facility was one of only three Air Service repair and supply depots to survive the post-1918 demobilization effort; and between 1926 and 1931, the district was the location of the Air Corps Training Center, which coordinated all Air Corps Primary and Advanced Training in the United States. After 1926, the Depot was responsible for at least one-third of the Army's aircraft while serving as "control" for the area in which more than 50 percent of Air Corps flying occurred. During World War II, the San Antonio Air Service Command was control command for 40 sub-depots in a multistate area, while the Depot itself was one of the largest aviation depots in the world.

II. History of the American Bungalow

The development of the bungalow as an American building form was influenced by social and economic forces at work during the first 30 years of the twentieth century. A burgeoning population, shift to urban living, economic expansion, and the resulting need for relatively inexpensive, appropriately designed, single-family housing fit closely with the concept of the bungalow as a house form.

The bungalow also fit the full range of requirements of a growing middle class. Having shed the rigid plan and ornamental dictates of past styles, people began to focus on comfortable and functional housing arrangements. While the rise of urbanism and its population concentrations brought about a need for efficiency and a certain amount of regimentation in planning residential areas, private home ownership, as seen in detached single-family residences with generous yards, was ever in the hearts and minds of Americans. Home ownership was a public symbol of advancement and social respectability. "Our home stands before the eyes of the community as a monument to our achievement and as an illustration of our character." (Southern Architectural Bureau 1922:2-3)

The bungalow house form proliferated because of its flexibility and capacity for accommodating requirements for functional arrangement, comfort, and privacy. Reaching its peak as an architectural style in the decades of the 1920s and 1930s, the bungalow form continued to influence residential design until the late 1940s.

Bungalows were one-story residential structures with a low-pitched, complex roof configuration and a veranda and/or multiple porches. Bungalows varied greatly, but a

number of characteristics were common and were repeated often enough to become identifiable architectural elements of the style. These stylistic elements included patterned drop siding, decoratively cut and detailed rafter ends and gable rakes, wide overhangs with exposed rafter ends and deck, simple knee braces, and complex brackets supporting roof projections at gable ends. Bungalows also displayed battered, or at least articulated, building skirts, articulated (and often battered) porch supports, extruded chimneys, and wood windows and doors.

Bungalow interiors typically included three distinct units: the family living rooms, sleeping quarters, and the service area, all of which were divided by neutral zones such as halls. Family living rooms included the living room, which focused on a fireplace; a dining room; and a den, an innovation of the bungalow. These three rooms often flowed into one another, and at least one of them opened directly onto a spacious veranda or porch where the occupants could gain “the object of the bungalow, the utmost benefit of life in open air.” (Lancaster 1985:205; Comstock and Schermerhorn 1990: viii, xii)

A second distinct unit in the bungalow consisted of bedrooms that typically ranged in number from two to four or five. Bedrooms usually opened from a neutral zone such as a hall, which also served to separate the more private bedrooms from the more public living rooms. (Comstock and Schermerhorn 1990: viii)

The third and last unit in the bungalow consisted of the service area, which included the kitchen and bathroom, the formed situated so that cooking odors would not flood the other rooms in the house. The kitchen, which averaged 8 by 12 feet, was imply furnished with a sink, range, table, and cupboards, and was convenient to the dining room. The bathroom, usually only one no matter the number of bedrooms, averaged 7 by 15 feet and held three fixtures: a lavatory, tub, and water closet. The bathroom often was located between the sleeping and living room zones of the house, and its one door opened onto a neutral zone such as a hallway. (Lancaster 1985: 217,219; Comstock and Schermerhorn 1990; xii)

Good bungalow design concentrated upon a “vital, ample family center.” Bungalows also “possessed a well-integrated outer and inner personality” that was casual and yet well-ordered. Naturalness of layout and materials was emphasized, and the building was expected to be surrounded by and blend into an appropriate landscape. (Lancaster 1985: 220) For this reason, and for the numerous opportunities for the integration of the inner house with the out-of-doors afforded by porches and verandas, setting and landscape features were considered to be important elements in bungalow design. Clusters of neighborhoods of bungalows, especially, offered opportunities for the development of integrated landscapes that consisted not only of botanical elements such as trees, but of manmade features such as outbuildings, driveways, sidewalks, and street lighting.

III. Military Housing

Bungalows were widely popular with the private sector of the American public during the early 20th century, but they were less frequently found in the nonprivate sector. On military posts housing usually was constructed according to standardized plans that were developed

under the U.S. Army Quartermaster Corps and proliferated during the latter half of the nineteenth century. The earliest permanent housing of this type at an airfield occurred at Langley Air Force Base, Virginia, where officers' quarters were constructed by 1918. Such housing was always integrated into an overall facility plan, and arrangement and adjacency were according to established standards. Growth of housing requirements was seldom accommodated by the addition of single buildings. Thus, groups of buildings comprising a military housing district were planned and built as multiple building units according to the stylistic, technological, and budgetary constraints of the time.

The Bungalow Colony at Kelly Air Force Base was a district of a slightly different type because it was not constructed according to Quartermaster-generated standardized plans. Instead, the very characteristics of unified building form that distinguished good bungalow design made it possible for the builders of the Kelly/Duncan Field Colony to accommodate minor design changes in such areas as rafter ends, porch supports, brackets, rakes, and siding details without detracting from the visual unit of the District. Most other groups of officers' quarters required rigid duplication of the standardized building form. In the Bungalow Colony, however, additions blended easily into the core building, just as the addition of other bungalows through time blended into the colony as a whole.

Construction of the bungalow neighborhood or "colony," which provided housing for officers associated with the Kelly/Duncan Field Depot, began in 1920 and was substantially complete by 1932, suggesting the project was piecemeal. However, the completeness of the final layout and compatibility of the individual elements suggest that work was guided by a comprehensive plan that resulted in a cohesive district. By the early 1930s, this district consisted of an area bounded by present-day Duncan Drive on the northwest, Crickett Drive on the northeast, the structures facing Mather Street on the southeast, and the structures facing Robins Drive on the southwest.

Single-family residences included 12 homes constructed between August 1920 and December 1927 (present-day Building Nos. 107, 108, 111, 115, 118, 119, 120, 121, 124, 127, 128, and 131); while bachelor officers were accommodated in present-day Building No. 114, and three more families were accommodated in a triplex facing Mather Street (Building No. 132). Outbuildings included servants' quarters (present-day Buildings No. 138, 139, 145, 148, 149, 150, and 151), which were clustered behind present-day Buildings No. 111, 115, 119, 121, 127, and 131; and were associated with an individual officer's residence. Some garages were associated with a specific officer's residence, or were situated in a location which was convenient to multiple quarters.

Homes, garages, and outbuildings were components of the 1920s Bungalow District, an infrastructure that was complemented by a swimming pool constructed in 1922, and a playground. The Bungalow Colony thus constituted a self-contained district with its own entertainment facilities, water supply system, and steam heat system. Street lighting was supplied by regularly spaced electric light standards set on masonry pedestals, which provided a sense of visual cohesiveness to the streetscape.

The Kelly Field Bungalow Colony was an outstanding example of planning that was touted in *The Sun Antonio Light* in January 1922 and provided the first permanent housing for

officers. At the same time, each individual quarters exemplified good bungalow design. A comparison of real estate records for those bungalows completed by 1927 (Buildings No. 107, 108, 111, 114, 115, 118-121, 124, 127, 128, 131, and 132) and for those built on-site by 1943 (Buildings No. 112 and 138) reveals that they included the features that architectural historians have identified as elements in this house type. The buildings were distinguished by complex roof designs with generous overhangs, exposed decorative rafter ends, elaborate gable rake details, spacious multiple porches, a variety of decorative gable braces or brackets, and porch supports of generous proportions made of a variety of construction materials. Porch supports were often battered, as were building skirts. The interiors of virtually every bungalow included the three units and their individual elements as described by Wrenn and Lancaster: a living room with a fireplace as a dominant element, dining room, den, kitchen, two bedrooms, and a nursery, one bathroom, and a connecting hallway. Unusual features in the depot bungalows were the maid's room and bathroom that were integrated into each residence, and the size of the single-family units that ranged from approximately 1,800 square feet to 3,800 square feet.

The residences for the officers who oversaw the operations of the San Antonio Air Intermediate Depot constituted one of the most important building projects at Kelly Fields No. 1 and No. 2 between November 1918 and 1928. It also constituted one of the only large-scale housing construction projects on any air base in the United States given the drastic cutbacks that had occurred after World War I.

IV. Historic context

In August 1913, Chief Signal Officer Brig. Gen. George P. Scriven testified before the United States House of Representatives concerning the establishment of a military aeronautical center in San Antonio, Texas. Expressing an opinion that was endorsed by his subordinate, Capt. William (Billy) Mitchell, Scriven described San Antonio as “the most important strategic position of the South.” (Isbell 1962:42-43) Three years later, a writer for *The San Antonio Light* predicted that the city would be “the most important military aviation center in the United States.” (*The San Antonio Light*, November 5, 1916) Its significance would derive from a system that involved the assembling and training of personnel at the aviation post and their subsequent deployment to stations in others parts of the country. “In other words, this will be the center from which all lines of military aviation work will radiate.” (*The San Antonio Light*, November 6, 1916)

The center of military aviation that the writers envisioned was Kelly Field, a Texas aviation camp that began in 1917 on farmland in south San Antonio and eventually developed into what some historians have described as “the grandfather of all other advanced flying training organizations.” The facility was the “proving ground for aviation enthusiasts” during the 1920s and location of the Air Corps Training Center, the organization that coordinated all Air Corps training in the United States between 1926 and 1931. In the 1930s, Kelly continued to provide Advanced Training for young American fliers “making Kelly the ‘Alma Mater’ of nearly all the Air Corps’ pilots before World War II.” (Browning 1989:3)

A leader in the training of aviators, support crews and in the supply and maintenance of the equipment necessary for an effective air, Kelly also was foremost in the training of a nonflying force. The Air Service and, later, Air Corps needed training pilots. The organization also required a complex logistics network. At an early date, “the inextricable ties between logistical support and combat capability became all too apparent.” (Termena, Peiffer, and Carl [1981]:4)

As one of the three large aviation intermediate depots in the United States after World War I and one of four air depots after 1926, the Air Depot located on a portion of Kelly Air Force Base stored, repaired, and supplied parts not only for the airplanes at Kelly Field but also for planes in a multistate area. Indeed, by 1943 the depot had become “the world’s largest such facility,” (Office of History, San Antonio Air Logistics Center [1980]:90) and by the end of World War II, its role had overshadowed that of the flight training activities at Kelly.¹

Initial construction of the Bungalow Colony occurred at a most unusual time in the history of the American Air Service. With the conclusion of World War I and signing of the Armistice in November 1918, demobilization had occurred rapidly and military funding had been cut drastically. On a national level, appropriations of \$952,304,758 in 1919 were followed by \$28,123,503 in 1920, while the numbers of officers (5,575) and enlisted men (26,948) in June 1919 decreased to 1,168 officers and 8,428 enlisted men in January 1920. (Anonymous n.d.d.:16-17); Johnston 1942:59; Boden 1967:59-61, 76; Kreis 1988:23)

Kelly was not immune to cutbacks. As one of fifteen air fields that were retained by the Air Service after the war, Kelly was left with 200 officers and 3,000 enlisted men. The Supply Depot was placed on civilian employee status and functioned thereafter with a complement of approximately 10 officers and from 500 to 1,000 civilians who were divided among departments such as Supply, Engineering, Utilities, Transportation, and Quartermaster. (McGaffey 1955:10; Office of History, San Antonio Air Logistics Center [1980]:21, 76) The depot’s “control area” consisted of all Air Service activities within the Eighth Corps Area, a region that was the location of approximately 50 percent of all flying activities in the continental United States.

The deterioration of World War I temporary structures, together with the persistent demands upon Kelly personnel to provide flight training and supply and maintenance services, created an environment that led one commander of Kelly Field to comment on the dearth of adequate accommodations for the officers who remained at the facility and on the low morale that had resulted. Indeed, Col. Henry C. Pratt declared in February 1919, “I do not believe that accommodations are as bad at any other field in the country.” (Browning 1989:5) A general lack of funds made it highly unlikely that the situation would be rectified, however, and Pratt’s criticism was left unaddressed for the remainder of his tenure.

Pratt was followed by Maj. William Henry Garrison, Jr., commander of Kelly Field and of the San Antonio Aviation Supply Depot. Garrison’s life and achievements can only be

¹ The Depot was known by different names over time. Among the names were: Aviation General Supply Depot (1917-1921), San Antonio Air Intermediate Depot (1921-1927), San Antonio Air Depot (1927-1943), San Antonio Air Depot Control Area Command (1943), San Antonio Air Service Command (1943), San Antonio Air Technical Service Command (1944-1946), San Antonio Air Materiel Area (1946-1974), and San Antonio Air Logistics Center (1974-). Source: Office of History, San Antonio Air Logistics Center, n.d.d:n.p.

described as a series of innovative responses and solutions to restrictive situations. Born in Brooklyn, New York, on January 29, 1885, Garrison attended school in Brooklyn and La Ville Ouchy Lousanne, Switzerland. He entered West Point with the class of 1907, but after “a bout with the Academic Department,” he was dismissed. Undaunted, he re-entered West Point within two weeks via a new congressional appointment and graduated with the class of 1908. (Office of History, San Antonio Air Logistics Center n.d.c.)

Between 1908 and 1917, Garrison saw mounted service at a number of posts and camps before being assigned to the Middletown, Pennsylvania, Air Depot as commanding officer. He appears to have become interested in aviation about that time, but he was discouraged in his attempt to enter the Air Service. Undaunted, he “begged and borrowed” informal flight instruction from friends, and in 1918, “without benefit of Brooks or Kelly Field” (then the location of all flight training in the United States), he received rating as a junior military aviator. As one author described Garrison, he was “perhaps the only man in the history of the Air Corps to become a pilot without attending a flight school.” (Office of History, San Antonio Air Logistics Center, n.d.c.)

Garrison was assigned to be commanding officer at the Aviation General Supply Depot of February 21, 1919, at which time he reiterated Col. Pratt’s assessment of the need for housing for those officers attached to the depot. Like Pratt, Garrison was refused permission or money to build quarters. Unlike his predecessor, however, Garrison proceeded to demonstrate what one author described as his consistent refusal to admit defeat. (Office of History, San Antonio Logistics Center n.d.c.) Ample construction materials were available as a number of World War I wooden temporary buildings were being demolished at Kelly, and by early 1920 the War Department bowed to the commander’s persistent demands. Garrison received a limited amount of funding and selected a site on the north boundary of Kelly Field No. 1 that had been leased by the government from San Antonio resident D.J. Allen. The future residential area was bounded by the Kelly Field No. 1 Depot on the southeast and east, and by land that comprised the Kelly Field No. 2 flying school on the west and southwest. Land to the north was largely vacant.

Judging from aerial photographs, it seems clear that Maj. Garrison had formulated a plan that was comprehensive in scope. While the focus of his campaign had been to provide housing for depot officers, he also appears to have had some concern for their families and their overall quality of life, as well as a firm grasp of the infrastructure necessary to create a self-sufficient community. In general, the Bungalow Colony was oriented to Frio City Road, the main thoroughfare through Kelly (present-day Duncan Drive), and was organized around three narrow streets that provided access to all facilities: present-day Robins Drive, Mather Street, and Crickett Drive. The commander’s home, with its impressive formal garden, faced Frio City Road, while the other officers’ quarters faced Robins Drive and Mather Street. A swimming pool was adjacent to Crickett. Additional recreational facilities, which included a polo field, were located to the north, while a fenced playground for children was located on the site of present-day Building No. 108. Heat for the homes was provided by a steam heating plant behind present-day Building No. 111, and the neighborhood had its own water supply as well (see present-day Building No. 141).

By 1922, eight bungalows had been constructed for depot officers (present-day Buildings No. 107, 111, 115, 118, 119, 120, 121, 124), and construction probably had begun on a ninth bungalow (present-day Building No. 128), which was completed in April 1923. An infirmary had been converted to a Bachelor Officers' Quarter (present-day Building No. 114). Nonresidential structures included garages (106, 122, and 152), a swimming pool (present-day Building No. 102), and a pump house (at the location of present-day Building No. 141). Street lighting was provided by tall standards surmounted by glass globes placed at regular intervals, all of which were described in a newspaper article titled "Pretty Bungalow Colony at Kelly Field," *The San Antonio Light* drew attention to the fact that the use of salvaged materials and government carpenters had made possible the extremely economical character of construction, and pointed to the amenities that made the colony so attractive. Houses were built sufficiently far apart to set each off to advantage, and grounds were attractively landscaped. Sidewalks, curbs, trees, and shrubs were all installed, and "the government [had] left no stone unturned to make conditions desirable for officers stationed at the Air Service Depot." (*The San Antonio Light*, January 1, 1922)

Major Garrison remained at the depot, living in the Bungalow Colony until mid-1922 when he was sent to the Command and General Staff School at Fort Leavenworth. He was followed by Maj. Frank D. Lackland, namesake of Lackland Air Force Base in San Antonio, who had served as commander of the Aviation Repair Depot at Montgomery, Alabama, in 1920. (DuPre 1965:132-133) It was during Major Lackland's tenure that Kelly Field No. 1, location of the depot, was renamed Duncan Field and began to operate independently of Kelly Field No. 2.

By 1926, when Maj. J.H. Pirie became commanding officer of the San Antonio Air Depot at Duncan Field, Duncan Field's mission was maintenance and supply, while Kelly Field No. 2 remained the site of the Air Corps' Advance Flying School. In addition, Duncan Field in general, and the Bungalow Colony Historic District specifically, became the site of the U.S. Air Corps Training Center. Situated in a World War I-era frame building that had been moved to the site in November 1926 (a portion of present-day Building No. 105), the Training Center provided a "single local head for the coordination and control of all flying training matters..." (Office of History, San Antonio Air Logistics Center [1980]:30-31) It remained the coordinating organization for Primary and Advanced Flight Training in the United States until the center was moved to the newly constructed Randolph Field in San Antonio in 1931. (McGaffey 1955:6)

Beginning in 1926, the director of the new Air Corps Training Center was Brig. Gen. Frank P. Lahm, the first man to be rated a pilot in the U.S. military service. Born in Mansfield, Ohio, on November 17, 1877, Lahm made his solo flight in 1909 after setting an endurance record with his teacher, Orville Wright. He was the U.S. Army's first airplane pilot and first balloon pilot, and after service during World War I and on the War Department General Staff, he was promoted to brigadier general in July 1926 as assistant chief of the Air Corps. (DuPre 1965:133-134)

Upon his arrival at Kelly Field, Lahm apparently was taken with the residences at the Bungalow Colony, for despite the fact that he was not attached to the depot, he managed to obtain an assignment to Quarters No. 1 (present-day Building No. 107). His coup brought an immediate response from the officer he probably had displaced, Maj. J.H. Pirie, commander of

the depot. Pirie requested that the chief of the Air Corps refrain from assigning quarters in the Bungalow Colony to any officers who were not attached to the Depot Command, particularly because he lacked enough bungalows to accommodate those officers already at the depot. (Pirie 1926) The ever increasing workload at the depot as personnel attempted to serve all the flying fields in the Eighth Corps area after 1925, together with Pirie's displacement from Building 107 by Brig Gen. Lahm, may have generated the need for construction of more quarters at Duncan Field.

The years 1926-1932 saw considerable new construction in the Bungalow Colony as an old barracks building at Kelly Field was remodeled into six sets of quarters (present-day Buildings No. 132 A-B-C). Another residence garden and garage/servants' quarters complex was built for the commanding officer of the depot (present-day Building Nos. 108 and 109, Feature 0), and one additional bungalow was constructed for a depot officer (present-day Building No. 127). About the same time, some minor alterations were made to the original group of bungalows as families apparently decided to make use of what originally had been maids' rooms and baths. In 1928, Building 145 was constructed for servants' quarters behind Building 115. By about 1931-1932, servants' quarters had been added to the garage at present-day Building 107, and the grouping of servants' quarters behind present-day Building No. 119 had been completed (present-day Building Nos. 148, 148, 150 and 151).

One writer has described the period of the 1930s at Duncan Field as having been typified by tight budgets but close camaraderie among officers and aviation luminaries such as Col. Thomas H. Chapman, Brig. Gen. Frank P. Lahm, Maj. A.W. Robins, Lt. Col. Henry B. Clagett, Capt. Benjamin F. Giles, Brig. Gen. Morris Berman, Maj. John P. Richter, Lt. Col. Lester T. Miller, Maj. Gen. Nathan F. Twining, and Lt. Col. Clements McMullen. (Anonymous n.d.b.:n.p.) By the late 1930s, however, the United States was again preparing for war, and those preparations had a direct impact on depots and flying fields such as those at Duncan and Kelly.

Congress had passed the Wilcox-Wilson bill in August 1935, paving the way for the construction of new depots. And after 1939, the Roosevelt administration "began to shower the hitherto neglected Air Corps with lavish attention." (Termena, Peiffer, and Carlin [1981]:9, 46) Significant funding made possible the largest construction episode that San Antonio had experienced since World War I, and provided the necessary funds to construct numerous new buildings at Duncan Field. Within the boundaries of the Bungalow Colony Historic District, the Depot Headquarters (Building No. 105) underwent major alterations in 1942 when two additions measuring 40 feet by 96 feet, 10 inches and 52 feet by 8 inches by 100 feet were made to the rear of the building. Additional space was made available with construction of a Sub-Depot Office (Building No. 143) and Finance Building (Building No. 144). On Crickett Drive, the 1937 recreation office (Building 140), originally composed of several World War I structures, was extended southward more than 100 feet to create a bachelor officers' quarters and mess in 1943. Finally, two additional bungalows were constructed: Building No. 112 on Robins Drive and Building No. 133 on Mather Street. Completed by 1943, the two homes were similar to the other bungalows in the colony and provided housing for the officers who worked at the depot during the World War II effort.

In 1943, flight training ceased at Kelly Field and depot functions expanded as the field was turned over to the Air Service Command to be used for logistical purposes. Kelly and Duncan were rejoined under the World War I name, Kelly Field. By the end of the year, Kelly was known as the home of the San Antonio Air Service Command, the largest aviation depot in the world and control command for 40 sub-depots and logistics in a four-state area. (Office of History, San Antonio Air Logistics Center [1980]:80, 81, 90) Activity and personnel peaked in 1944, then rapidly declined as the end of the war brought reorganization and the phasing out of personnel.

While the end of the war brought many changes, the function of Kelly Field remained essentially the same. Similarly, the Bungalow Colony, having developed steadily between 1920 and 1943, maintained its World War II configuration with few changes. Today, it remains a physical reminder of the period when Kelly and Duncan fields played roles of national significance in the development of the modern Air Force, and of the numerous occupants who played key roles in the history of military flight and logistics.