

Reese Air Force Base, Base Library  
(Building No. 421)  
F Street  
Lubbock Vicinity  
Lubbock County  
Texas

HABS No. TX-3486-C

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

**HISTORIC AMERICAN BUILDING SURVEY**  
**Southwest System Support Office**  
**National Park Service**  
**P.O. Box 728**  
**Santa Fe, New Mexico 87504**

**REESE AIR FORCE BASE, BASE LIBRARY  
(BUILDING No. 421)**

HABS No. TX-3486-C

**Location:** Reese Air Force Base  
F Street  
Lubbock Vicinity,  
Lubbock County, Texas

USGS Wolfforth Quadrangle  
13 775775 3720600

**Present  
Owner:** United States Air Force

**Present  
Occupant:** Building is vacant

**Present  
Use:** Building is vacant

**Significance:** Building 421 at Reese Air Force Base (AFB) is significant due to its association with World War II, and as the only remaining building of its kind at Reese AFB. It is one of a large number of 700 Series temporary World War II mobilization buildings constructed on the base. All of these buildings at Reese AFB have now been demolished or moved off of the base. Thus, Building 421 is important as the only surviving example of a World War II temporary building left at Reese AFB. These buildings played an important role in allowing the military to rapidly expand its barracks and personnel support facilities at the beginning of World War II. The building has a high level of historic integrity due to the fact that it retains its original siding and windows, and has had few major exterior additions or alterations.

**Description:** Building 421 was built in 1941-42 as part of the initial construction phase to build barracks, classrooms, administrative offices, and personnel support buildings at Reese AFB, which was then known as Lubbock Army Flying School. The building sits parallel to F Street. Its southwest facade faces a small courtyard that is now lined with two brick dormitories: Building 420, completed in 1957, and Building 320, completed in 1969.

Building 421 has a shallow-pitched gabled roof and is two stories in height. The north elevation has a flat-roofed vestibule with large metal windows and vertical wood paneling on the exterior. The second floor of the north elevation has two wooden double-hung, twelve-pane windows. The second story is capped with a pent, which is a small shed-roofed skirt that projects out from the walls of a building. The official United States Army term for the pent was *aquamedia*. The main roof gable has a small centered rectangular wood ventilator. The west elevation has a first floor with three twelve-pane windows and two metal doors.

The first floor west elevation is capped with a pent. The first floor elevation also has a large shed-roofed wooden porch. A small freestanding brick chimney that rises one story is attached to the first story west elevation by a steel pipe. Another steel pipe rises out of the top of the chimney to a height just above the roof of the building. The second floor of the east elevation has eight twelve-pane wood windows. The south elevation, which is capped by a pent on the first story, has a single twelve-pane window on the first floor which is flanked by two small rectangular windows. The second story has three twelve-pane windows and is capped with a pent. The gable of the south elevation has a small centered, wood-louvered, rectangular ventilator. The west elevation of the building has a single metal door and five wooden twelve-pane windows on the first floor. The second floor has seven wooden twelve-pane windows. The first floor is capped by a pent. The main roof and pents of the building are covered with asphalt shingles; the walls are also covered with asphalt shingles, except for the north vestibule addition.

The interior has a series of small spaces on the first floor which appear to have been used as offices. The upstairs has a large conference room in the center, and suites of small office spaces at each end of the building. The interior space has been remodeled heavily, and is composed of surfaces and materials dating from the 1970s, 1980s, and 1990s.

**History:**

After ten years of campaigning by the people of Lubbock, Texas, the city was selected as a site for a new air training base. The base was part of a military mobilization plan that came into effect after the fall of Poland in 1939 and the declaration of war on Nazi Germany by Britain and France. By April 1940 Congress had ordered the expansion of the United States Army Air Corps. The number of pilots trained annually increased from 7,000 to 30,000. On June 26, 1941, the Army Air Corps Advanced Flying School was officially established at Lubbock.

Preliminary work on building the base began on July 24, 1941. Construction of the base was under the authority of the United States Engineer's Office at Caddoa, Colorado, during the planning stages of the project. The Caddoa office was in control of the project through November 1941. By February 1942, oversight of the project had been transferred to the United States Engineer's Office in Albuquerque, New Mexico. By January 1942, the base was 85 percent complete. The target completion date for the buildings was January 4, 1942, but construction continued until April. Construction of an additional hangar and some minor improvements to the base were carried out in late 1942 under a supplementary contract.

The primary contractor for building the base was Lambie, Moss and Page, a firm which was awarded a lump sum contract for \$3,973,365. W.S. Moss and W.G. McMillan of Lubbock were hired as building construction subcontractors. Their actual role in building the base is somewhat unclear. Cost estimate documents for exterior finishes on the base's wood temporary buildings point to McMillan's

involvement in their construction. Existing documentation does not identify whether McMillan or Moss did work on the base's hangars.

Over 200 buildings were built on the base, ranging in function from hangars to machine shops to barracks, administrative offices, mess halls and recreation buildings. Although metal hangars and other buildings were built with more permanent materials, the majority of structures built were wood-frame temporary buildings that were intended to have a lifespan of approximately five to seven years. Building 421 was one such wooden temporary building. It appears on maps of the base dating to as early as 1943, and was most certainly part of the original construction campaign of 1941-42.

Wood temporary buildings in the United States Army have a long history. A few buildings of this type were probably built as barracks around the end of the Civil War. Other examples were built during the Indian campaigns of the west during the late nineteenth century. Wood temporary barracks were built extensively in World War I, and their design was standardized by the government. These buildings were simple wood balloon frame structures heated by stoves that were generally coal fired. During World War I, the need for a new barracks design was recognized; and some design work was completed as early as 1917.

Building 421 at Reese AFB is an example of the 700 Series Mobilization Type Construction of the United States Army. Although the origins of this design can be traced back to World War I, the definitive drawings for the 700 Series structure were delineated between 1937 and 1940 by Major Elsmere J. Walters, Advisory Architect of the Construction Division. The buildings were an improvement over World War I temporary buildings in that the 700 Series had a forced air heating system that kept the smokestack for the heater actually separate from the building, reducing the risk of fire. The buildings were also better ventilated. Another safety improvement of the 700 Series was a second door with a fire escape. Because of rising health and sanitation standards for military living facilities, the 700 Series also provided more cubic feet of living space per resident than had the old World War I barracks.

Barracks were the most common use for the 700 Series temporary buildings, but they were also used for everything from mess halls to recreational buildings and administrative offices. Most of the temporary buildings at Reese AFB were originally used as barracks, but some of these buildings were used for other purposes.

The 700 Series buildings were constructed with building techniques and materials superior to those used in World War I buildings of similar function. The 700 Series utilized stud rather than plank-frame construction. These buildings also had concrete foundations and footers, as opposed to the treated-timber post foundations of the World War I predecessors. Plumbing and electrical conduits were also installed, a welcome improvement over the outside latrines and showers necessary under the old type of mobilization building.

Speed of construction and economy were two important factors in the design of the 700 Series buildings. The structures were designed with simple framing that was relatively easy to reproduce. This was done in anticipation of wartime labor shortages that would limit the number of well-trained carpenters available to build the structures, leaving the work to less-skilled laborers. The walls were built of stud-framed sections, with the first and second floor walls built separately; most privately built balloon-frame homes were built with a single framed structure for each side of the building.

Building 421 is a fairly typical 700 Series mobilization building, although the structure does have a few distinctive features. The original plans used to build the 700 Series buildings built at Reese AFB specified narrow-lap wood siding as the main exterior cladding material. However, it is evident that the words "wood siding" were crossed out on the plans and replaced with a hand-written indication that asbestos siding was to be used instead. Historic photographs from 1943-44 indicate that the asbestos siding currently on the building is the original cladding material. The use of asbestos was probably motivated by the wood shortage precipitated by the construction boom at the beginning of United States involvement in World War II. It also may have been motivated by economic factors. A report on comparative costs for exterior finishes for temporary barracks at Lubbock was generated by subcontractor W.G. McMillan in April 1941. The report demonstrated that covering the buildings with asbestos shingles would be more cost effective than covering the buildings with wood siding. The report also indicated that the cheapest alternative would be to cover the building exteriors with stucco. Despite its low cost, the Army Air Corps rejected the stucco option, and in the end the buildings were covered with asbestos shingles. Asbestos may have been a compromise that provided better protection for the buildings than the stucco while costing less than the wood siding specified in the construction drawings.

One feature that gives the exteriors of these buildings a distinctive appearance is the use of pents to protect the windows. A pent is a small shed-roofed skirt projecting from the side of a building. The pents on 700 Series buildings are small shed roofs that extend out above the building's windows. Since the windows were an important feature in the ventilation of the building, it was thought that they should be left open as much as possible, even during rain. The pents were included to keep rain out of the windows. However, the pents were useless in a blowing rain, where the wind propelled water droplets sideways into the building despite the pents. A 1991 United States Army publication entitled *Interim Report, WWII Temporary Building Documentation Project*, states that the official United States Army term for the pents on 700 Series buildings was *aquamedia*. In the end, the pents were judged to be ineffective, and were eliminated from later designs for temporary barrack buildings.

General contractors Lambie, Moss and Page, along with the Army Corps of Engineers, were commended for improving the design and construction process of the 700 Series building as it was constructed at Lubbock Field. A field report from September 6, 1941, from the Bureau of the Budget related that the general contractor had saved about 25 percent of the standard labor costs of the project by

having the walls of the wooden barracks building pre-fabricated on a template at a central mill on the construction site. The walls were then erected with the use of cranes. The author of the 1941 field report was very impressed with the technique. The 1941 field report also stated that the strength of roofs of the 700 Series building had been improved by the Corps of Engineers, so that the roofs could withstand the high winds common on the plains of the Lubbock area. The author of the report stated that "the Corps of Engineers specifications require twelve pound asphalt building paper on sheathing covered with two-ply fifteen pound hot mopped course, and topped with fifty-five pound slate coated roll roofing lapped with one half its stripes running from eave to eave over the ridge, a metal eave edge being inserted over the second course and under the roll roofing." The report also stated that at the time, work on the base was approximately 8 percent complete. By February 25, 1942, a subsequent report indicated that the building work at the base was 95 percent complete. Building 421 was probably built sometime between the completion of these two reports.

Although the 700 Series was a barracks design, at Lubbock Field these buildings were sometimes used for other purposes, including classrooms, supply buildings, and as the base record keeping and publication office. A 1943 base map labels Building 421 as a sixty-three man enlisted mens' barracks, a phrase often used to describe 700 Series buildings. This seems to indicate that the building was a barracks in 1943, but the reference may be to the building's construction type, not its actual function. A 1950s real estate record identified Building 421 as the base library, and this same record also noted that 1945 real estate records had identified the building as a library; an early inventory of buildings on the base also identified Building 421 as the library. Although this inventory is undated, examination and comparison with dated base maps seems to date it to the pre-1945 period. Evidence thus indicates that Building 421 was probably one of a small number of 700 Series buildings on base that was used for purposes other than barracks.

Evidence indicates that Lubbock Field's base library served largely as a repository of technical information during World War II. A list of magazine subscriptions for Lubbock Field's library was recorded on a September 1942 memo sent to Adjutant General William W. Dick of Army Air Forces Headquarters by Major Richard Ryan of the Office of the Chief of Field Services at Wright Field in Dayton, Ohio. Almost all of the periodicals were aviation, mechanical, military, or engineering journals. Titles included *American Aviation*, *Aero Engineering Review*, *Army-Navy Journal*, *Mechanix Illustrated*, and *Library Journal*. It is not known if materials for recreational reading were included in the library. If the periodicals list is an indication of the overall character of the library, it was probably predominantly technical in content.

Lubbock Field was closed on December 31, 1945, and the base was converted to a housing area for veterans, and a meeting place for National Guard and military reserve groups. The use of Building 421 during this time is unknown. Lubbock Field was re-activated on August 1, 1949, and transfer to Lubbock Field of the 3500th Pilot Training Wing from Barksdale AFB, Louisiana, was completed October 5, 1949. On Armed Forces Day in 1950, it was announced that Lubbock

Field had been designated a permanent installation, and was re-named Reese Air Force Base. Records have clearly established that Building 421 served as the Reese AFB library during the 1950s.

The original interior space of Building 421 was open. Plans from early 1955 show a large central open space on the first and second floors, with a small number of offices and a lavatory on the bottom floor. In late 1955, the first major alterations were made to the building interior, as a wall was built dividing the large open space on the second floor into two smaller spaces. In 1964, more extensive alterations were made to the building. The plan was to convert the building from a library to a combination library and office space. A new stairway was added to the interior of the building, spaces were further enclosed, and a small vestibule was built on the northwest side of the building. The building remained this way until 1982, when further remodeling work was made to the interior. The first floor at that time was divided into a small series of office spaces. Carpeting was installed, and the wood interior walls of the building were covered with drywall. The building became exclusively an office building at this time. In the 1990s, the building was used for educational purposes.

In 1995, Reese AFB was recommended for closure, and on January 24, 1997, the last class graduated from Reese AFB. In September 1997, the 64th Flying Training Wing at Reese AFB was officially de-activated, and the base was formally closed on September 30. Some Air Force staff have remained at Reese AFB to facilitate the conversion of the base into a civilian industrial facility. Building 421 has stood vacant since the base was formally closed, and is scheduled for divestiture from federal ownership at this time. Currently, the Air Force has no plans to demolish the structure. Plans for the civilian industrial park are not sufficiently advanced to indicate what the future of Building 421 will be once the Air Force has turned Reese AFB over to civilian authorities.

**Sources:** "Central Correspondence Files, U.S. Army Air Forces 1939-1944." Record Group 18, entries 293-295. National Archives, College Park, Maryland.

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