

Chanute Air Force Base, Hangar 1
(Building 1)
Curtiss Street
Rantoul Vicinity
Champaign County
Illinois

HABS No. IL-1185-D

HABS
ILL
10-RAN.V)
1D-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
Rocky Mountain Regional Office
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

HISTORIC AMERICAN BUILDINGS SURVEY

Chanute Air Force Base, Hangar 1
(Building 1)

HABS No. IL-1185-D

Location:

Curtiss Street
Chanute Air Force Base
Rantoul Vicinity
Champaign County
Illinois

HABS
ILL
10-RANTV,
ID-

Present Owner:

United States Air Force
OL B, AFBCA
501 East Sopwith, Suite A
Rantoul, Illinois 61866

Present Occupant:

Vacant

Present Use:

Vacant

Significance:

From its establishment in 1917 as a military aviation school, until its closure on September 30, 1993, Chanute Air Force Base (AFB) has served almost continuously as a technical training center for the United States Air Force. As one of the oldest military installations in the Air Force inventory, Chanute AFB has played an important role in the development of the American air defense system. Since its construction, the area of the Historic District has served as Chanute's administrative core, and the design and construction of the buildings and structures within the District reflect the extraordinary growth of the installation just prior to and during the early years of World War II. It was during that period that the base was rapidly transformed from a collection of neglected wooden World War I-era buildings into the permanent brick and steel features that remain as the Chanute AFB Historic District.

Hangar 1 is one of four hangers that dominate the landscape within the Chanute AFB Historic District. The hangars were built in response to the massive mobilization required by World War II and served not only as hangars, but also as school laboratories from the time they were completed in 1940 and 1941. The four hangars make up the eastern boundary of the Chanute AFB Historic District.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Date(s) of erection: 1939-1940. (Dates from the construction report and drawings.)

2. Architect: Office of Quartermaster General (OQMG), Construction Division.

3. Original and subsequent owners: United States Army, United States Air Force.

4. Contractors: J. L. Simmons Company, Decatur, Illinois.

5. Original plans and construction: Plans for the building were drawn by the Construction Division of the Office of the Quartermaster General.

6. Alterations: There have been modifications to the interior and exterior of this building, including removal of windows, altering entrances, and covering transoms with metal or stucco panels.

B. Historical Context:

Established in 1917, Chanute AFB is one of the oldest Air Force installations in the United States. During World War I Chanute Field provided pilot training and afterwards temporarily became a storage facility. In 1921 the Air Services Mechanics School was transferred to Chanute from Kelly Field, Texas. When the Wilcox Bill (49 U.S. Stat. 610) was passed by Congress in 1935, the large-scale expansion of Chanute began and, in the next ten years, it changed from a neglected World War I Field into a centralized, subdivision-type collection of brick and steel buildings. More than 200,000 military students would graduate from its various technical schools between 1940 and 1945 and over 1,000,000 students would pass through its doors before its closure in 1993.

In general, the history of Chanute AFB parallels the history of American military aviation and its built environment reflects the economic and military priorities, architectural styles, and concepts of military installation planning common to the OQMG and the Corps of Engineers (COE). The buildings and structures within the Historic District, including this building, reflect Chanute's "Great Renaissance" period (1938-41).

Construction of Hangar 1 and Hangar 3 began in 1939; both were completed in February 1940. Their adjoining schools were completed in March 1940, with occupancy in May, at a total cost of \$864,878 for Hangar 1, and \$751,575 for Hangar 3. The J. L. Simmons Company of Decatur, Illinois was awarded the contract to build both hangars. The construction report for the base dated December 27, 1940, states that "These hangars should be classified as School Laboratories rather than as Hangars housing flying planes. At present the Mechanics Department of the Air Corps Technical School is using both of these buildings with double shift classes from 6 AM to 10 PM."

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character: This large utilitarian hangar with a brick-clad training school wrapped around three sides, is industrial in design and does not fit into an established architectural classification.

2. Condition of fabric: Hangar 1 is in good condition.

B. Description of Exterior:

This building is a three-story, wide gambrel roof hangar with a one-story, brick-clad, flat-roofed school structure surrounding it on three sides. The total size of the building is 218,004 square feet with dimensions of 362 ft 1in by 602 ft.

The hangar itself is approximately 200 ft by 285 ft and has steel beam truss framing, covered with corrugated metal siding and corrugated wire-glass skylights on a concrete foundation and slab. The front of the hangar faces northeast. The main hangar entrance is 250 ft wide by 37ft high and consists of a series of twelve sliding doors that open six to a side. Each door is 21 ft wide by 37 ft high and has a metal frame with three rows of four paneled units, each unit of which has 24 wired lights (six rows of four). The doors run on iron rail tracks that can be hand operated and were designed and built to be moved by two men. Above the doors, is a centrally located tail door that increases the height of the door to allow the tails of larger planes into the hangar. There are eight vents in each gambrel end.

The one-story school structure is U-shaped and wraps around the hangar on three sides. The foundation is poured concrete with a beveled head that rises five feet above the ground. Above the concrete, the building is constructed of steel-reinforced brick walls laid in common bond (eight stretcher rows/one header row) with crushed stone mortar. There are 30 bays on the Curtiss Street side of the building, 15 bays on each side elevation, and eight bays on each side of the rear or hangar side; the walls are decorated with a series of string courses. The standard window bay consists of a square, flat-head unit that has three metal-framed sections with smaller hinged portions in each section. The sections together have 65 wire-reinforced lights (five rows of 4/5/4 lights) on concrete sills. The corner bays have smaller windows of 40 lights (five rows of 4/4 lights), most of which have been painted.

Each entrance is flanked by two wide, stone-capped pillars with a chevron-patterned brick, central panel. The panel above the door is gabled with a stone cap and an inset stone, name panel; two sets of double-leaf doors have a four-light transom above. Many entrances have an eagle plaque and "Dyess Hall" sign in metal letters. Some entrances have their original flanking light fixtures.

The roof is topped with eight rows of shed roofs of wood sheathing and asphalt shingles on steel trusses. The saw-tooth roofs with skylights/vents on the vertical side run the length of the rooftop. Other features include copper gutters and down spouts, decorative frieze, and brick dentils.

C. Description of Interior

1. Floor plan: See attached floor plans.

2. Summary Description: The hangar interior is a large, cavernous space. There are three hinge arches that are 90 ft high, each with a span of 275 ft from center to center of the end pins.

The interior of the school has painted concrete block walls; tile over concrete floors, (except the bath rooms which have terrazzo), and dropped acoustical tile ceilings. It contains many classrooms that appear to maintain their original dimensions. The construction report describes the interior as follows:

"The inside faces of exterior walls and schools and partition walls forming toilets, pump pits, transformer vaults, vestibules and minor rooms for special purposes are of buff glazed structural units. Other partitions in Schools are steel, in general not tight to roofs. Exposed roof sheathing, as well as structural steel is painted cream; partitions are buff, with doors and trim warm brown.

Heating is by cast iron radiation, unit heaters and unit ventilators in accordance with the needs of the occupancy of various rooms of the building. Electric lighting in Hangars, classrooms and shops is provided by a combination of mercury-vapor and incandescent lamps."

D. Site:

Four large hangars make up the eastern boundary of the Historic District, Hangar 1 is the northern-most hangar. The training school portion of Hangar 1 faces Curtiss Street; adjacent to the hangar on the east are concrete aprons and further east is the air field.

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

Original drawings for the buildings on Chanute AFB are currently housed in Building 62, Chanute AFB, Illinois.

B. Historic Views:

A large collection of historic photographs is located in the Museum Building (Hangar 4), Chanute AFB, Illinois.

C. Bibliography:

D. E. McGillem and Associates, Inc., 1990. Historic Inventory Chanute Air Force Base.

King, Thomas F. and Paige M. Peyton, 1991. Chanute AFB, Illinois Historic Evaluation.

U. S. Air Force, 1940. Chanute Field, Office of the Constructing Quartermaster, Chronological Report of Construction Program, December 27, pp. 2-3.

PART IV. PROJECT INFORMATION

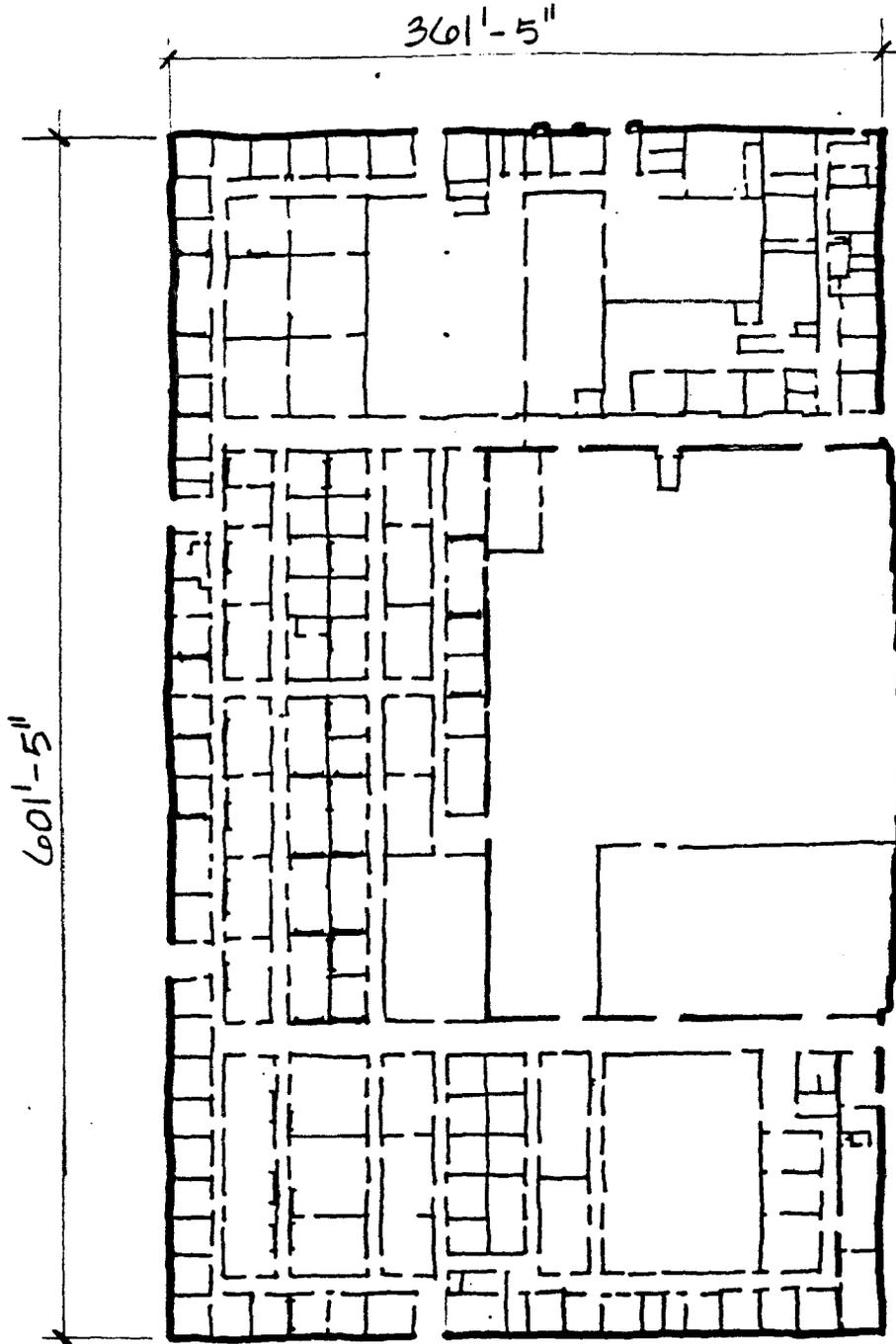
National Register and HABS documentation for the Chanute AFB Illinois Historic District is the culmination of the Section 106 process initiated during the preparation of the Disposal and Reuse Environmental Impact Statement (EIS) for Chanute AFB. The EIS was precipitated by the Congressional decision to close Chanute AFB as directed by the Base Closure and Realignment Act (BRAC) of 1988. A Memorandum of Agreement among the U. S. Air Force, the Illinois State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation, Eastern Division, has been drafted.

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NORTH

GROUND FLOOR

DRAWN : 11/12/93