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NPS Form 10-900
United States Department of the Interior
National Park Service

OMB No. 1024-0018

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AUG 21 2015
Nat. Register of Historic Places
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form*. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. **Place additional certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).**

1. Name of Property

Historic name Norden Bombsight Storage Vaults

Other names/site number KHRI #009-97

Name of related Multiple Property Listing World War II-Era Aviation-Related Facilities of Kansas

2. Location

Street & number 9047 6th Street [ ] not for publication

City or town Great Bend [ ] vicinity

State Kansas Code KS County Barton Code 009 Zip code 67530

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this _x_ nomination __ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property _x_ meets __ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

__ national _x_ statewide __ local Applicable National Register Criteria: _x_ A __ B __ C __ D

Patrick Zollner 8-11-15
Signature of certifying official/Title Patrick Zollner, Deputy SHPO Date

Kansas State Historical Society
State or Federal agency/bureau or Tribal Government

In my opinion, the property _x_ meets __ does not meet the National Register criteria.

Signature of commenting official Date

Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:

_✓_ entered in the National Register ____ determined eligible for the National Register

____ determined not eligible for the National Register ____ removed from the National Register

____ other (explain:)

for Edson M. Beall 10-5-15
Signature of the Keeper Date of Action

5. Classification

Ownership of Property
(Check as many boxes as apply.)

	private
x	public - Local
	public - State
	public - Federal

Category of Property
(Check only **one** box.)

	building(s)
	district
	site
x	structure
	object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
		sites
2		structures
		objects
2	**0**	**Total**

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions.)

DEFENSE/Air Facility

Current Functions
(Enter categories from instructions.)

VACANT/NOT IN USE

7. Description

Architectural Classification
(Enter categories from instructions.)

NO STYLE

Materials
(Enter categories from instructions.)

foundation: CONCRETE
walls: CONCRETE
roof: CONCRETE
other: METAL DOORS

Narrative Description

Summary

The Great Bend Army Air Field (AAF) Norden Bombsight Storage Vaults, built in 1943, are utilitarian concrete structures designed by the Army Corps of Engineers for the storage and issue of the Norden Bombsights during World War II. The buildings are located at the Great Bend Municipal Airport, 9047 6th Street, five miles west of Great Bend, Kansas in Section 3, Township 20 South, Range 14 West. The buildings are nominated to the National Register of Historic Places under the Multiple Property Submission (MPS), *World War II-Era Aviation-Related Facilities of Kansas*. The buildings are eligible for nomination under Criterion A in the area of Military, falling within the MPS subtype of *Storage Building*, significant as an extant structure built for the World War II Air Field.

Elaboration

Architectural Description

The Great Bend AAF Norden Bombsight vaults consist of two one-story buildings placed in an L-shaped configuration and surrounded by a concrete pad. The buildings are constructed of poured concrete approximately eight inches thick. They have poured concrete roofs.

The Bombsight vaults are located in the central portion of the Great Bend Municipal Airport, just east of the runways (Figure 1.) The vaults coordinates are 38.346536 latitude and -98.852856 longitude. The former Army air field includes two World War II hangars[1], six brick chimneys from previous hangars and the two concrete Norden bombsight storage bunkers, as well as several modern buildings

The smaller north building is oriented to the north with two north doorways. The building has a sloped roof and sits on a raised concrete foundation. The building has an east-west measurement of 16 feet, a north-south measurement of 13 feet and a height of approximately ten feet. The building is L-shaped, with a six-foot square cut out of its southwest corner.

The north building's north façade has two metal doors that swing outward set in metal frames. The metal frames are surrounded by wood. Each thick metal door has a handle that connects to an interior locking mechanism, now disabled. Two concrete steps lead to each doorway, which is topped with a concrete lintel and a metal grate. The east and west elevations consist of concrete walls. The south elevation has two metal grates near the roof with concrete sills. The building has two interior rooms. The east room is approximately five feet square. The west room is approximately 12 feet deep and 10 feet wide, with a lowered fiberboard ceiling.

The larger south building[2] is oriented to the east, sits on a raised concrete pad and has a flat roof. The building measures approximately ten feet deep and 40 feet long. The east façade has five doorways rimmed in metal, but only bay two retains its metal door. The east façade once had five upper and five lower square openings. The five upper openings and two of the lower openings are now filled with concrete. The north, south and west elevations are concrete walls. The five interior rooms are approximately seven-and-a-half feet wide and nine feet deep.

[1] The airport's remaining B-29 hangar is scheduled for demolition in 2015.
[2] A post-war shed, now removed, once fronted this building.

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

[X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.

[ ] B Property is associated with the lives of persons significant in our past.

[ ] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.

[ ] D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)
Property is:

[ ] A Owned by a religious institution or used for religious purposes.

[ ] B removed from its original location.

[ ] C a birthplace or grave.

[ ] D a cemetery.

[ ] E a reconstructed building, object, or structure.

[ ] F a commemorative property.

[ ] G less than 50 years old or achieving significance within the past 50 years.

Areas of Significance
MILITARY

Period of Significance
1943-1945

Significant Dates
1943

Significant Person
(Complete only if Criterion B is marked above.)
N/A

Cultural Affiliation
N/A

Architect/Builder
US Army Corps of Engineers—Architect
Patti-McDonald Construction Co.—Builder

Period of Significance (justification)
The period of significance, 1943-1945, includes the years that the buildings were used for Norden Bombsight storage during World War II.

Criteria Considerations (justification)
N/A

Narrative Statement of Significance

Summary

The Great Bend Army Air Field Norden Bombsight Storage Vaults, 9047 6th Street in Great Bend, Barton County, Kansas are nominated to the National Register of Historic Places under Criterion A, significant at the local level in the area of Military as part of the MPDF, "World War II-Era Aviation-Related Resources of Kansas". The structures fall within the MPS subtype, *Storage Building*, significant as an extant structure built for the World War II Air Field. The structures were designed by the Army Corps of Engineers for the storage and issue of Norden Bombsights. The vaults were constructed in 1943 as part of a national defense strategy that placed air fields in south central and southwest Kansas.

The impetus for this nomination came out of Section 106 mediation resulting from the proposed demolition of a National Register-eligible B-29 hangar at the Great Bend Army Air Field. The city's proposal to demolish the hangar required a permit from the Federal Aviation Administration. The city of Great Bend, the owner of the property, agreed to nomination this hangar and the Norden Bombsight Storage Vaults to mitigate for the loss of the B-29 hangar.

Elaboration

On September 30, 1942, the Great Bend Chamber of Commerce received a message from Senator Arthur Capper: "Civil Aeronautics Administration has just allocated 1 million dollars for construction of air field at Great Bend."[3] This was the first official information that an air base would be built at Great Bend, although government representatives had already been exploring the area for several weeks. The chosen site was five miles west of the town in four sections in Buffalo and Liberty townships.

The Great Bend base was originally activated to serve as a satellite base to the Smoky Hill Army Air Field in Salina, so early planned construction was limited.[4] Essentials were completed first, with the first runway concrete poured in December 1942.[5] Base construction proceeded quickly with non-essential wartime materials. The Army Corps of Engineers (Corps) oversaw all military construction during World War II. The Corps was a technical branch of the Army that specialized in construction and maintained a large and efficient field organization.[6] The Great Bend Army Air Field reflected decisions made by the Corps to conserve materials in every way possible. Non-critical materials—wood, concrete, tarpaper—were substituted for critical materials whenever possible. Construction was limited to bare necessities.

The mission of the Air Field changed in February 1943. An expansion of the field's infrastructure was announced to prepare the base for a new assignment—training personnel for the new B-29 Very Heavy Bomber.[7] Approximately 145 new buildings were constructed that included barracks, administration buildings, a hospital and new, larger hangars designed especially for the B-29 Superfortress.[8] The sturdy Norden Bombsight vaults were likely built during this 1943 airfield expansion by the Patti-McDonald Construction Company, the Kansas City firm awarded the contract for most of the buildings at the air field.[9] The building is labeled as "Bombsight Storage" in a 1945 station layout plan.

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[3] "An Air Field Here" *The Great Bend Tribune*, 30 September 1942, 1.

[4] "U.S. Army and Air Force Wings Over Kansas" *Kansas Historical Quarterly*, Summer and Autumn 1959, (reprint) 20.

[5] "Concrete Slab Poured For Army Air Base Runway" *The Great Bend Tribune*, 17 December 1942, 1.

[6] Susan Jezak Ford "World War II-Era Aviation-Related Facilities of Kansas" *National Register of Historic Places Multiple Property Documentation Form*, approved 25 September 2012, E13.

[7] "Heavy Bombardment Units At Great Bend" *The Hutchinson News*, 28 February 1943, 9. Great Bend was one of four Kansas air fields designated for B-29 training. Other Kansas bases were Smoky Hill AAF in Salina, Walker AAF near Hays and Pratt AAF

[8] "Finishing Touch Is Being Put On Air Base Buildings" *The Great Bend Tribune*, 18 February 1943, 5.

[9] "U.S. Army and Air Force Wings Over Kansas", 21.

Norden Bombsights were developed in the 1920s by American engineer Carl L. Norden for the US Navy. The Bombsight was vital in conducting high-altitude strategic bombing. It served a crucial role in defining air war strategy during World War II. Charles Bright describes the devices in the *Historical Dictionary of the U.S. Air Force:*

> Precision bombing required meticulous control; to accomplish this, the Norden incorporated a gyrostabilized automatic pilot. The mechanism was modified in 1941 by the Minneapolis Honeywell Company and designated the Army C-1 autopilot. This modification enabled a bomber to be flown on a straight, level course, giving the bombardier a steady platform on which to operate the bombsight during the bombing run. Also known as the "Blue Ox" the Norden could quickly calculate and correct directional changes due to wind drift. Flying at a preset altitude, it could rapidly compute the correct bomb release angle for a constant speed of closure to the aiming point. Under optimal conditions on an undisturbed run, the accuracy of the device was excellent. However, any last second changes in the altitude of the bomber, such as those encountered during battle, could markedly influence the accuracy of the sight.[10]

The Bombsight storage buildings built at the Great Bend AAF were labeled second-generation Norden vaults. Early Bombsights were stored in concrete vaults within wood buildings. The second-generation vaults were built at bases around 1943 as the devices were reclassified from secret to restricted. The military realized that strategic bombing would play an important role during World War II and that the Norden Bombsight would be crucial in that goal. The second-generation vaults, such as those built at the Great Bend AAF, were more secure, placed within an open area and used only for storage. The structures helped ensure the secrecy of this advanced technology. [11]

During 1944 and 1945, the primary mission of the Great Bend Air Field was to serve as a combat training base under the B-29 Superfortress project, preparing the B-29 aircraft and their crews for the Pacific front.[12] The base served as a staging area, where air crews would practice flying the massive airships and maintenance crews would learn the mechanics of the airplanes. Great Bend also became one of the first redeployment installations in the country. During early 1945, European theater echelons were trained in B-29 maintenance before departing for the Pacific.[13]

Activity at the Great Bend AAF decreased dramatically during mid-1945. No new trainees were assigned to the base. During the summer of 1945, the base's primary mission was to discharge or transfer qualified soldiers. The base was officially placed on standby on December 31, 1945 and buildings were inactivated.[14] The field was declared surplus in June 1946 and the city of Great Bend was granted a permit to acquire it.[15] The air field was deeded to Great Bend via three Quitclaim Deeds in December 1947, October 1948 and June 1949.[16] The former Bombsight vaults have served as storage but are currently vacant.

The Great Bend AAF Norden Bombsight storage vaults were an integral component of World War II airfield construction in Kansas. A 2008 survey of World War II Airbases identified five extant sets of Norden Bombsight

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[10] Charles D. Bright, Historical Dictionary of the U.S. Air Force (New York: Greenwood Press, 1992), as quoted by the National Park Service website "Aviation: From Sand Dunes to Sonic Booms, A National Register of Historic Places Travel Itinerary" accessed 4 January 2015. <http://www.nps.gov/nr/travel/aviation/sec.htm>.

[11] http://www.nps.gov/nr/travel/aviation/sec.htm

[12] Air Force Historical Research Agency records, "Great Bend Base History", September 1944, 1187. (CDB2229 on file at Barton County Historical Society.)

[13] "U.S. Army and Air Force Wings Over Kansas", 24.

[14] "U.S. Army and Air Force Wings Over Kansas", 24.

[15] "Great Bend To Take Over Army Airport" *The Hutchinson News*, 15 June 1946, 8.

[16] US Army Corps of Engineers Kansas City District, *Preliminary Assessment Report/ Great Bend Army Airfield*, February 2008, 4-1. (On file at Barton County Historical Society.)

Storage Vaults in Kansas at Great Bend, Walker, Dodge City, Herington and Pratt air bases. The Pratt structures were listed in the National Register in 2012. Another set at McCook Army Air Base in Nebraska is also listed in the National Register. The Great Bend structures housed the most secretive and advanced technology of the period. They retain integrity of design, feeling and association. They are significant as important reminders of Kansas' contribution to World War II.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Air Force Historical Research Agency records. "Great Bend Base History", September 1944. (CDB2229 on file at Barton County Historical Society.)

"An Air Field Here." *The Great Bend Tribune*, 30 September 1942.

"Concrete Slab Poured For Army Air Base Runway." *The Great Bend Tribune*, 17 December 1942.

"Finishing Touch Is Being Put On Air Base Buildings." *The Great Bend Tribune*, 18 February 1943.

Ford, Susan Jezak. "World War II-Era Aviation-Related Facilities of Kansas." *National Register of Historic Places Multiple Property Documentation Form*, approved 25 September 2012.

"Great Bend To Take Over Army Airport." *The Hutchinson News*, 15 June 1946.

"Heavy Bombardment Units At Great Bend." *The Hutchinson News*, 28 February 1943.
Bright, Charles D. *Historical Dictionary of the U.S. Air Force*. New York: Greenwood Press, 1992.
http://www.nps.gov/nr/travel/aviation/sec.htm.

"U.S. Army and Air Force Wings Over Kansas." *Kansas Historical Quarterly*, Summer and Autumn 1959, (reprint).

US Army Corps of Engineers Kansas City District. *Preliminary Assessment Report/ Great Bend Army Airfield*, February 2008. (On file at Barton County Historical Society.)

Previous documentation on file (NPS):

____preliminary determination of individual listing (36 CFR 67 has been requested)
____previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____
____recorded by Historic American Landscape Survey # _____

Primary location of additional data:

__x__State Historic Preservation Office
____Other State agency
____Federal agency
____Local government
____University
____Other
Name of repository: **Kansas State Historical Society Archives**

Historic Resources Survey Number (if assigned): __

10. Geographical Data

Acreage of Property Less than one acre

Provide latitude/longitude coordinates OR UTM coordinates.
(Place additional coordinates on a continuation page.)

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

	Latitude:	Longitude:		Latitude:	Longitude:
1	38.346536	-98.852856	3		
2			4		

Verbal Boundary Description (describe the boundaries of the property)
The nominated property is located in the NW ¼ of the NE ¼ of Section 3, Township 20S, Range 14W, near the southwest corner of C and 6th streets at the former Great Bend Army Air Field. The nomination boundary is defined by the concrete pad that holds the storage vaults.

Boundary Justification (explain why the boundaries were selected)
The nominated property includes only the concrete vaults and their pad as defined by the latitude and longitude coordinates. This nomination does not include any authority property beyond the hangar

11. Form Prepared By

name/title Susan Jezak Ford

organization Citysearch Preservation date February 24, 2015

street & number 3628 Holmes Street telephone 816-531-2489

city or town Kansas City state Missouri zip code 64109

e-mail citysusan@gmail.com

Property Owner: (complete this item at the request of the SHPO or FPO)

name Great Bend Municipal Airport/ City of Great Bend

street & number 9047 Sixth Street telephone 620-793-4168

city or town Great Bend state Kansas zip code 67530

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management. U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Additional Documentation

Submit the following items with the completed form:

Photographs

Submit clear and descriptive photographs. The size of each digital image must be 1600x1200 pixels (minimum), at 300 ppi (pixels per inch) or larger. Key all photographs to a sketch map or aerial map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photograph Log

Name of Property: **Great Bend Army Air Field Norden Bombsight Storage Vaults**

City or Vicinity: **Great Bend**

County: **Barton** State: **Kansas**

Photographer: **Susan Jezak Ford**

Date Photographed: **December 8, 2014**

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 4: West elevation, camera facing southeast.
2 of 4: Northeast elevation, camera facing southwest.
3 of 4: North façade, camera facing south.
4 of 4: Southeast elevations, camera facing northwest.

Figures

Include GIS maps, figures, scanned images below.

Photograph 1. West elevation.

Photograph 2. Northeast elevation.

Photograph 3. North façade.

Photograph 4. Southeast elevation.

Figure 1. Site plan. (Google maps accessed December 2014.)

Figure 2: Contextual Aerial Image. Google Earth, 2015.