NPS	Form	10-900
(Rev	. 10-	90)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

OMB No. 1024-0018 1794 RECEIVED Y 2280

1. Name of Property

historic name \_\_\_\_\_ Darr School of Aeronautics Hangar No. 3

other names/site number \_\_\_\_\_\_British Flying Training School No. 6 Hangar No. 3

\_\_\_\_\_\_

		<u> </u>	
street & number Southwest of	intersection	of Darr Park	<u>Drive and Lindsey Road</u>
			not for publication $N/A$
city or town <u>Ponca City</u>			vicinity <u>N/A</u>
state <u>Oklahoma</u>	code <u></u>	county <u>Kay</u>	code <u>071</u>
zip code <u>74601</u>			

## 3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this \_\_\_\_\_\_ 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 \_\_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant \_\_\_\_\_\_ nationally \_\_\_\_\_\_ statewide \_\_\_\_\_\_ locally. ( N/A See continuation sheet for additional comments.)

Sionature of certifying official

Date

Oklahoma Historical Society, SHPO State or Federal agency and bureau

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register criteria. ( \_\_\_\_\_ See continuation sheet for additional comments.)

Signature of commenting or other official

Date

State or Federal agency and bureau

4. National Park Service Certification I, hereby certify that this property is: 9/8/2006 entered in the National Register See continuation sheet. determined eligible for the National Register See continuation sheet. determined not eligible for the National Register removed from the National Register other (explain):

La Signature of Keeper Date of Action

5. Classification Ownership of Property (Check as many boxes as apply) \_\_\_\_\_ private \_\_\_\_\_ public-local \_\_\_\_\_ public-State \_\_\_\_\_ public-Federal Category of Property (Check only one box) \_\_\_\_\_ & building(s) \_\_\_\_\_ district \_\_\_\_\_ site \_\_\_\_\_ structure \_\_\_\_\_ object

Number of Resources within Property

Contributing	Noncontributing
	<u>0</u> buildings
0	<u>    0   </u> sites
0	<u>    0     structures</u>
0	<u>    0   </u> objects
1	<u>    0    </u> Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.) \_\_\_\_\_\_N/A

	6. Function or Use					
Histo	pric Functions (Enter catego DEFENSE	ries fr	om instructions)			
	nt Functions (Enter categori <u>COMMERCE/TRADE</u> <u>COMMERCE/TRADE</u>	_ Sub:	m instructions) business warehouse			
7. De	scription					
	tectural Classification (Ent Other: Airplane Hangar: St	cer cat		, an an an 22 a		
Mater	ials (Enter categories from foundation <u>CONCRETE</u> roof <u>SYNTHETICS</u> walls <u>METAL</u> other	instru	ctions)			

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

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)					
XX 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.					
XX 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.)					
A owned by a religious institution or used for religious purposes.					
B removed from its original location.					
C a birthplace or a grave.					
D a cemetery.					
E a reconstructed building, object, or structure.					
F a commemorative property.					
G less than 50 years of age or achieved significance within the past 50 years.					
Areas of Significance (Enter categories from instructions) MILITARY ECONOMICS ARCHITECTURE 					
Period of Significance1942-1944					

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8. Statement of Significance (Continued)
======================================
Significant Person (Complete if Criterion B is marked above)
Cultural Affiliation <u>N/A</u>
Architect/Builder <u>Star Manufacturing Company, builder</u>
Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)
9. Major Bibliographical References
(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)
<pre>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 #</pre>
Primary Location of Additional Data X State Historic Preservation Office Other State agency Federal agency Local government University Other Name of repository:

<pre>====================================</pre>
Acreage of Property <u>Less than 1 Acre</u>
UTM References (Place additional UTM references on a continuation sheet)
Zone Easting Northing Zone Easting Northing 1 <u>14</u> <u>669890</u> <u>4067090</u> 3 2 4 <u>N/A</u> See continuation sheet.
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)
11. Form Prepared By
name/title <u>Cynthia Savage, Architectural Historian, for City of Ponca City</u>
organization <u>ARCH Consulting</u> date <u>March 2006</u>
street & number <u>346 County Road 1230</u> telephone <u>405/459-6200</u>
city or town <u>Pocasset</u> state <u>OK</u> zip code <u>73079</u>
Additional Documentation
submit the following items with the completed form:

Continuation Sheets

# Maps

A USGS map (7.5 or 15 minute series) indicating the property's location. A sketch map for historic districts and properties having large acreage or numerous resources.

# Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner
(Complete this item at the request of the SHPO or FPO.)
nameCity of Ponca City
street & number516 E. Grand, P.O. Box 1450telephone
city or town <u>Ponca City</u> state <u>OK</u> zip code <u>74601</u>

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#### SUMMARY

The Darr School of Aeronautics Hangar No. 3 is a corrugated metal, one-story, prefabricated hangar constructed in 1942 at the Ponca City, Oklahoma, municipal airport as part of a complex for the No. 6 British Flying Training School, operated by the Darr School of Aeronautics Incorporated. Star Manufacturing of Oklahoma City prefabricated and erected the building. Although a drop ceiling has been added to the interior, obscuring the trusses, Hangar No. 3 likely had an identical structural system to Hangar No. 1 and is an example of a Steel, Closed Arch Truss hangar. The foundation of the building is concrete and the round arched roof is clad with a synthetic membrane. Along the roof are two large, symmetrical, nonhistoric, metal, power exhausts, as well as various other small vents. The metal windows are twelve-pane, fixed and twenty-pane, pivot. The majority of windows have several rows of rebar welded across the frames and panes preventing the windows from opening and for security reasons. Some of the windows have painted panes with one window on the front being covered with metal. The defining hangar doors are metal sliding. The primary pedestrian entrance, located in the brick addition on the south side, is glazed slab with large side lights. The majority of the other doors currently in use are nonhistoric, metal slab with narrow rectangular lights. Most of the historic, pedestrian, metal doors have large square lights and have been painted over with rebar welded across them to prevent them from opening. Α utilitarian building, the building is void of ornamental detail.

The building has been slightly changed but maintains its overall historic character sufficient to convey its significance. The changes include the replacement roof covering, the placement of two power exhausts on the roof, the enclosure of one window on the east wall, the addition of five doors and rebar being welded over the other windows and historic doors to prevent opening. The most discernible modification to the building is the 1960s era brick entry addition on the southeast side of the hangar and the construction of a loading dock on the east in 1967. The brick addition has two entries and five fixed windows with brick sills. In 1986, the addition was extended by a metal-roofed awning with flowerbeds being planted to the sides. The loading dock is situated below a nonoriginal, metal sliding door on the east elevation. It has a large concrete ramp with a metal railing on the south side.

Hangar No. 3 is now located within the Darr Industrial Park. In the 1960s, the current occupant of the building began renting the facility from the city, which also owns hangar No. 1. Lindsey Manufacturing Incorporated owns Hangar No. 2, and leases hangar No. 1, located in a line east of Hangar No. 3.

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Unfortunately, the first two hangars have been extensively modified with metal additions being constructed on all four sides of each building. All except one other building of the original Darr School complex have been demolished and the concrete pool infilled. Directly north of Hangar No. 2 and northeast of Hangar No. 3, the weatherboard, front-gabled, Link Instructor building remains extant but with a large metal building attached to the south elevation. The runway of the historic airport has also been lengthened so that it extends in a direct north-south line past the north section line of Section 16. This was done prior to 1965. Originally, the runway stopped about a quarter of a mile south of the section line. Along the south side of the Darr School buildings was a large area for the school's planes which had two taxiways to the runway, one at the end of the runway and one cutting diagonally across towards the historic Ponca City Municipal airport buildings. Notably, the historic, wood, front-gabled barn located directly west of Hangar No. 3 remains extant (see photograph number 4).

## EXTERIOR DESCRIPTION

Hangar No. 3 has corrugated metal walls, a concrete foundation and a round arched roof which slopes on either side. The roof is clad with a nonoriginal, synthetic membrane covering which is similar to the historic tar/asphalt roof covering. The roof has various vents, including two large, nonhistoric, power exhausts symmetrically located on the roof. For unknown reasons but possibly related to the steel shortage of the time or the repair/maintenance function likely intended for Hangar No. 3 from the start, the roof of Hangar No. 3 flows seamlessly between the round arched portion and the sloped sides. In contrast, both Hangars No. 1 and 2 have a clerestory between the round arched portion of the roof and the sloped sides.

Manufactured by the Star Manufacturing Company of Oklahoma City, Hangar No. 3 is one of three hangars constructed at the Darr School of Aeronautics in 1942. The USGS map for the Ponca City Quadrangle (dated 1965) shows the complete original school complex, including the pool, and indicates Hangar Nos. 2 and 3 were smaller than Hangar No. 1. Aerial photographs of the school, however, clearly illustrate the hangars were identical in length, or nearly so. Measurements accomplished as part of this nomination indicate Hangar No. 3 measures approximately 135 feet by 218 feet.

Hangar No. 3 is classified as an example of a Steel, Closed Arch Truss Hangar under the typology prepared in the "Historical and Architectural Overview of Military Aircraft Hangars: A General History, Thematic Typology, and Inventory

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of Aircraft Hangars Constructed on Department of Defense Installations" by the United States Army Construction Engineering Research Laboratory for the United States Air Force Air Combat Command in September 1999. The classification is based first on the primary structural material; then, as an example of the prevalent steel division, on the structural system used, truss, girder or longspan joist construction; and finally, the form of the structural cross section over the hangar bay. A false ceiling inside Hangar No. 3 has obscured the structural cross section; however, photographs of Hangar No. 1 under construction (See Section 8) at the Darr School of Aeronautics were provided by Lillian Taylor of Ponca City, a Link Instructor at the school. As all three hangars were fabricated and erected by the same company within a short period of time, the structural system is assumed to be identical for all three buildings.

The east elevation of Hangar No. 3 (see photographs number 1 and 2) is divided into twelve sections and predominately features the large, sliding, hangar doors which historically would have allowed access of airplanes into the building. The doors remain in place, although it is doubtful they have been used as intended for many decades. The doors are divided into eight equal sections which open the width of the arched portion of the building. The door sections are stepped to allow them to slide seamlessly. To accommodate the doors, there are two wider sections on the outside edge of the round arched roof which are taller than the sloped roof area to the rear. The door sections slide into this area. Extending the length of these ten sections is a narrow, corrugated metal, sloped overhang. On the extreme ends of the east elevation, there were two recessed sections of corrugated metal wall. While the northernmost section remains visible, the southernmost section has been obscured by the brick addition on the south elevation.

Within the hangar door area on the east elevation, there are four symmetrical windows. One window is located in each of the second and fourth sections of the hangar door from the center. The windows are metal, fixed, twelve-light. Three of the windows have rebar welded across the two lower sections of lights. The fourth northernmost window has been covered with corrugated metal but the outline of the window remains apparent. Located off-center in the north center section of the hangar door is a nonoriginal, metal, slab, pedestrian door with a small rectangular light. A larger, cut-out area around the door has been filled with modern vertical metal siding. There are two signs on the east elevation; the first on the south center section of the hangar door which reads "OFFICE."

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On the northeast corner of the east elevation, there is a concrete loading dock. The dock was added in 1967 with a below-grade, concrete ramp the width of the end section of the east wall. The concrete ramp measures about 63 feet in length and has a metal railing along the south side. A sliding door of vertical corrugated metal slides to the north above the loading dock, providing access to the interior of the building. A metal bar extends off the east elevation of the building to accommodate the slide of the door. The door was possibly added before construction of the loading ramp as there is a matching door on the southwest corner of the building. The doors were likely added prior to the mid-1960s when the municipal airport runway was extended, resulting in a steep slope north, west and south of the historic hangar which makes access to the west side inconvenient. The door has minimal impact on the integrity of the hangar as it matches the historic material and proportions of that section of the building. The loading dock is more notable due to the obvious change in grade in the front of the building but it too has minimal impact on the overall integrity of the hangar.

The north elevation (see photographs number 1, 3 and 4) is divided into eighteen sections and features three pedestrian doors, one oversize sliding door and thirteen windows. The three pedestrian doors are metal paneled. One door is located in the easternmost section of the wall with a second door located in the third section from the east. A third pedestrian door is located in the third section from the west. A bar across this door prevents it from The oversize sliding door is located just off-center in the ninth opening. section from the west. The metal windows have twenty panes with the middle twelve forming a pivot window. The flanking four windows are fixed. As with other windows in the building, rebar has been welded across the windows to prevent them from opening. The westernmost section of the building has corrugated metal covering the opening. Although historic photographs of the building indicate this opening was a window, strap hinges are visible beneath the metal which suggest the opening has been changed to a door. As the covering material matches the historic material, the alterations to this end of the hangar do not effect the ability of the building to convey its historic significance.

The west elevation (see photographs number 5 and 6) is nearly identical to the east wall. The wall is divided into twelve sections. Eight of the sections compose the large, sliding, hangar door highlighting the wall. On either side of the door is a projected section which matches the height of the door section and is taller than the sloped area to the rear. As with the east elevation, a narrow, corrugated metal, sloped overhang extends across all ten of these

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sections. Forming the extreme end sections of the west elevation are dropped, recessed areas of the wall. Like the east elevation, there are four windows identically placed on each side in the second and fourth sections from the center in the hangar door. The windows are fixed, metal, twelve light with rebar welded across the middle of the lower two sections. Also like the east elevation, there is a sliding door on the southernmost end section. The door slides to the south along a metal slide which extends off the southwest corner of the building. As with the matching door on the east elevation, this door is likely nonhistoric but was probably added prior to the mid 1960s as the USGS map does not indicate the existence of a road behind Hangar No. 3 after this. There are also two large metal light fixtures on both of the recessed end sections of the wall.

The south wall of the building (see photographs number 7 and 8) features five pedestrian doors, nine windows and the brick addition which covers the east one-third of the original elevation. The visible historic portion of the elevation has been divided into thirteen sections with one historic opening per section. Of the five doors, four are historic, metal, paneled with lights which have been painted. Rebar has been welded across all four doors to prevent use. The historic doors are located in the first section of the south elevation from the west corner and, continuing east, there is one in the seventh, tenth and thirteenth sections. The nonhistoric door on the south wall is located in the third section from the east, adjacent to an historic window. This entry has a metal, front-gabled covering above a metal, slab door with a narrow rectangular light. A small concrete pad extends below the door into the grass. As with the north elevation, the windows in the south wall are metal, twenty-pane with a twelve-pane pivot window in the center. Many of the windows have been painted and rebar has been welded across the center of the three rows comprising each window. An air conditioning window unit has been placed in the lower two panes of the window in the eleventh section from the east corner of the wall. Other freestanding heating/cooling units are located off the sixth and eighth sections.

According to the long-time owner of Lindsay Manufacturing Incorporated, the brick addition was constructed on the south elevation in the 1960s. The woodframed, screened awning and surrounding flowerbeds were added in 1986. The brick addition covers the southernmost recessed section of the east elevation and extends about a third of the way down the south wall. The addition has two entries, both under the awning, and five windows. All of the windows in the addition are metal, fixed, rectangular, single pane with a projected brick sill. There is one window on the east wall of the addition and four windows on

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the south wall. Two of the windows are located west of the awning with no other covering. Under the west edge of the awning is the current primary entry for the building. The pedestrian door is single, glazed slab with equal-sized, full-height sidelights to either side. A window is located off-center to the west between the primary door and the second pedestrian entrance. The secondary door is metal slab with a metal screen door and a concrete step. To the immediate east of the door is the fourth window. The addition was added to facilitate use of the building as an office and warehouse. While the addition does not match the historic materials of the building, it also does not significantly impact the ability of the building to convey its historic role as an airplane hangar.

#### ALTERATIONS/ADDITIONS

Hangar No. 3 has been slightly changed by the replacement of the original roof covering with a modern, synthetic, membrane roofing material. As the materials are similar, this alteration does not significantly alter the feel of the building. Other changes to the hangar include the painting of the historic doors and windows and placement of rebar to prevent use of them. These modifications do not alter the historic fenestration pattern and, thus, have a negligible impact on the building's integrity. Additionally, one window on the east elevation has been covered with metal and five nonhistoric entries have been added to the original walls. The covering of the window with matching material is insignificant. The five entries, consisting of the two pedestrian doors on the east and south elevation, the two sliding doors on the northeast and southwest corners and the covered door on the northwest corner of the building, also do not significantly impact the building as they match the rest of the building in material and design. The loading dock off the sliding door on the east elevation is more noticeable but it also does not significantly alter the feel or association of the building. Of all the changes, the brick addition on the south elevation is the most notable. Located on what would have been the backside of the hangar, the addition does not interfere with the ability of the building to convey its significance.

The setting of the building has also been modified. While the other two hangars of the historic complex remain in place, the additions around them effectively sever the historic connection between the three buildings. Additionally, only one of the other school buildings remain extant. It also has been added onto, destroying its historic integrity. A gate has been placed to the northeast of Hangar No. 3, allowing the premises to be secured. While the area around the hangar remains a grassy field, a fairly steep slope

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surrounds the building on the north, west and east sides. This was likely done when the runway was extended before the mid 1960s. Notably, Hangar No. 3 was historically located west of the main section of the school's building. As such, it was always somewhat isolated.

Despite the changes, Hangar No. 3 retains its ability to convey its historic role as an airplane hangar. The building maintains its integrity of location, design, materials and workmanship. Most importantly, it maintains an appropriate feeling and association of this important World War II resource.

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## SUMMARY

The Darr School of Aeronautics Hangar No. 3 is eligible for the National Register of Historic Places under Criterion A for its association with military aviation training during World War II. The hangar's impact on the local economy of Ponca City is also historically significant under Criterion A. Additionally, under Criterion C, the hangar is architecturally significant as an example of a World War II-era prefabricated airplane hangar. Constructed in 1942, the hangar remained in use by the Darr School of Aeronautics until the school ceased operation in April of 1944.

## BACKGROUND

The city of Ponca City originated in 1893, following the Cherokee Strip land run on September 16<sup>th</sup> of that year which opened the area to non-Native American settlement. For many years, the area had been used by cattlemen for grazing purposes and, before that, as a hunting ground for Native Americans. The land comprising the Cherokee Strip in what is now northern Oklahoma, excluding the panhandle, was given to the Cherokee tribe in 1828 by the federal government. Following the Civil War, as part of the Reconstruction Treaty of 1866, the Cherokee Nation conveyed the eastern one-third of the Strip to the federal government for the purposes of relocating various other Native American tribes. The Cherokee tribe retained control of nearly six million acres of prime grassland to the west. This grassland soon became popular with cattlemen. The Cherokee tribe quickly began collecting grazing fees, allowing the Strip to become a major economic support for the Cherokee government.<sup>1</sup>

Despite the encroachment by the cattlemen, the Cherokee Nation retained ownership of the Cherokee Strip until the early 1890s. In 1889, the Jerome Commission, a federally-authorized committee, began to negotiate with the various tribes holding "surplus" lands in what is now western Oklahoma. Typically, the government considered any land remaining after each man, woman and child of the tribe received an allotment of 160 acres as surplus. After

<sup>&</sup>lt;sup>1</sup>"Souvenir Program: Ponca City, Oklahoma, Cherokee Strip Celebration, September 16, 1941," (Available Ponca City Vertical File, Research Library, Oklahoma Historical Society, Oklahoma City, Oklahoma, 1941), 6. See also Arrell Morgan Gibson, <u>Oklahoma: A</u> <u>History of Five Centuries</u>, 2<sup>nd</sup> edition, (Norman, Oklahoma: University of Oklahoma Press, 1991), 169-170.

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much discussion, the Cherokee tribe finally agreed to cede ownership of the six million acres of surplus land in the Strip in exchange for \$8.5 million dollars. This action paved the way for the Cherokee Strip land run of September 16, 1893.<sup>2</sup>

Immediately following the land run, two communities existed in the vicinity of the new townsite. Located about three miles north was the federal government townsite of Cross and, to the south, the Ponca Indian agency, called Ponca by the federal government and White Eagle by locals. Attracted by a convenient ford across the Arkansas River, "New Ponca" quickly attracted many residents with a post office being established on January 12, 1894. The post office officially changed the name of the community to "Ponca" on July 7, 1898 as the original Ponca post office, established in 1879 at the Ponca Indian Agency, changed its name to Whiteagle. On October 23, 1913, the name "Ponca City" was formally approved for the community by the United States Post Office.<sup>3</sup>

By September 1894, New Ponca secured a rail connection from the Sante Fe Railway, which previously only serviced the nearby community of Cross and the Ponca Indian Agency. This connection quickly spelled the doom of Cross as residents were induced to move to the thriving community of New Ponca. Cross continued to exist in some form until 1927 when the area was incorporated into the city limits of Ponca City.<sup>4</sup>

In 1900, Ponca's population stood at 2,528. By the time of Oklahoma's statehood in 1907, the number of residents only grew by one, bringing the total population to 2,529. Three years later, the official census recorded 2,521 citizens, a loss of eight. Related to the oil developments, Ponca City's population shot to 7,051 by 1920 and more than doubled to reach 16,136 in 1930. Growth slowed but did not halt during the turbulent years of the 1930s so that in 1940, the number of residents in the community reached 16,794. The war years also resulted in a notable increase in new citizens for the city.

<sup>2</sup>Gibson, <u>Oklahoma</u>, 179-180.

<sup>3</sup><u>The WPA Guide to 1930s Oklahoma</u>, (Lawrence, Kansas: The University Press of Kansas, 1986), 188. See also George H. Shirk, <u>Oklahoma Place Names</u>, 2<sup>nd</sup> edition, (Norman, Oklahoma: University of Oklahoma Press, 1987), 170 and 195.

<sup>4</sup>"Souvenir Program, " 8-12 and <u>WPA Guide</u>, 356.

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				county	and St	cate	9			
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Reaching 20,180 in 1950, the population again flourished during the 1950s with a twenty-one percent population increase bringing the 1960 population to 24,441. Growth stabilized during the next two decades with the number of Ponca City residents reaching 26,238 in 1980.<sup>5</sup>

Until about 1910, Ponca City was economically dependent on the surrounding agricultural community. For years, the famed 101 Ranch operated nine miles south of Ponca City. Covering 110,000 acres, the ranch was home to the renowned 101 Ranch Wild West Circus which continued to operate until the late 1920s. Even after 1910 and the discovery of oil in the area, Ponca City served as an "...important grain and flour shipping point." Through the early 1940s, the Ponca City Mills was considered one of the city's largest industries.<sup>6</sup>

Oil production in the area around Ponca City began prior to 1909 with discoveries on the Ponca Indian Reservation south of town and, to the east, on the Osage lands. This attracted the attention of several Pennsylvania oilmen, most notably E.W. Marland and L.H. Wentz. Both of these oilmen enhanced Ponca City by providing numerous employment opportunities and financing various civic improvements, such as Marland's Pioneer Women Statue and Lew Wentz's Ponca City Educational camp. With large oil fields in the vicinity, including the Ponca, Burbank and Shidler fields, and many oil-related industries in the area, Ponca City has continued to thrive for decades.<sup>7</sup>

One of the larger oil-related developments in Ponca City of lasting economic importance was the location of E.W. Marland's immense refinery. The Marland Refining Company was taken over by the Continental Oil Company in 1929 when Marland's oil prowess hit the skids. By 1941, the Continental Oil Company employed 2,500 workers in Ponca City and the refinery was characterized as

<sup>7</sup><u>WPA Guide</u>, 188-189.

<sup>&</sup>lt;sup>5</sup>Ponca City Historic Preservation Advisory Panel, "Historic Context for Ponca City, Management Region 2," (Available Oklahoma State Historic Preservation Office, Oklahoma City, Oklahoma, n.d.), 12.

<sup>&</sup>lt;sup>6</sup>WPA Guide, 356. See also Moore, "Ponca City," (Available Ponca City Vertical File, Research Library, Oklahoma Historical Society, Oklahoma City, Oklahoma, n.d.), 2-3. See also "Souvenir Program," 32.

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"...the largest in the state and one of the most modern in the world." The name of the refinery had also been changed to Conoco by that time, which it continues to operate as to the present time. By the mid-1930s, the Empire Oil and Refining Company also operated a refinery in Ponca City, in addition to a host of smaller related industries.<sup>8</sup>

Aided by the thriving economic conditions, the city of Ponca City took an early interest in aviation developments. In 1919, the first airport was started by the city. Using surplus World War I planes and an "...army type tent..." as a hangar, the airport was located on the Nonnamaker farm with two flying instructors teaching eager students how to fly. From 1921 to 1926, a second air field was sponsored by Glen and Frank Wigton at the Rough Face Indian farm south of the city. A third field was used from 1927 until December 1930 at the Perry Linch farm which was located southwest of the I.O.O.F. cemetery. In 1928, "...local air enthusiasts (decided) that the time had come for Ponca City to expand aviation facilities...". At that time, the city acquired a lease on school land located northwest of Ponca City on which to build their new air field. Dedicated on July 4, 1930 in the name of Everett Taylor, the first Oklahoma aviator to die in World War I, the city continued to expand and develop the airport so that by 1941 "Ponca City rank(ed) as the number one aviation center of northern Oklahoma."<sup>9</sup>

# HISTORIC SIGNIFICANCE

On September 1, 1939, as Hitler's Germany invaded Poland, Britain and France declared war on Germany. This formal start to World War II in Europe came only after years of escalating tension, marked by political instability in many regions and successive acts of aggression by Germany and its allies. Despite various neutrality acts legislated from the mid-1930s forward to keep the United States isolated from involvement in another World War, the federal government increasingly sought to provide aid to those countries resisting Germany. Evidence of this conflict of policy is found in the Neutrality Act of 1939. The act allowed Allied countries to buy arms and other necessities on a cash and carry basis while American ships were restricted from belligerent ports and other identified war zones. The fall of France in the spring of 1940

<sup>9</sup>The Ponca City (Oklahoma) News, 11 August 1945. See also "Souvenir Program," 32.

<sup>&</sup>lt;sup>8</sup>Ibid., 189-191.

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and Italy's entrance into the conflict in June of that same year resulted in a marked increase in the United States' defense spending and war-related production, aiding the nation's economic recovery from the devastating depression of the previous decade. Efforts to bolster the British in their fight also escalated. The War and Navy Departments, under the authority of a World War I law which allowed "old" equipment to be traded for new, released stockpiles of arms, planes and munitions to the manufacturers. The manufacturers, in turn, sold these items to Britain under the terms of the Neutrality Act of 1939.<sup>10</sup>

In late 1940, it became clear that a new policy to aid the British must be established. With Britain's credit reaching its limit and the Johnson Act of 1934 prohibiting direct loans from the United States government, President F.D. Roosevelt "...created an ingenious device to bypass that issue and yet supply British needs." Introduced to Congress on January 10, 1941, the Lend-Lease Bill allowed the president to "...sell, transfer, exchange, lend, lease, or otherwise dispose of arms and other equipment and supplies..." to any nation deemed by the President to be essential to the country's defense. After extensive debate, particularly by Isolationists who saw the act as a direct road to war, the bill became law on March 11, 1941 under the name "An Act to Promote the Defense of the United States."<sup>11</sup>

Shortly before passage of the Lend-Lease act, General Arnold, Deputy Chief of Staff and Chief of the Army Air Corps, presented an idea to the British Air Attache and senior member of the British Purchasing Committee in Washington, D.C., Air Commodore George Pirie. The concept called for six civilian flying school operators to establish training schools in the United States to train British airmen. The Army Air Corps was prepared to supply 260 primary and 285 advanced trainer planes with the civilian operators constructing new facilities at an estimated cost of \$400,000 to \$500,000 each. It was anticipated that the schools would turn out 1300 pilots a year with the schools charging \$25 per

<sup>&</sup>lt;sup>10</sup>George Brown Tindall, <u>America: A Narrative History</u>, 2<sup>nd</sup> edition (New York, New York: W.W. Norton & Company, 1988), 1164-1171.

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hour for primary training and \$35 per hour for advanced.<sup>12</sup>

Aspirations for an aviation training school arose in Ponca City as early as September 1940 when it became apparent the federal government would be in need of expanded training facilities. The Chamber of Commerce quickly organized an Aviation Committee to bring a "military field" to Ponca City. The creation of the British Flying Training Schools (BFTS) in March 1941 quickly attracted the interest of the Aviation Committee. In early May 1941, the local newspaper indicated the Spartan School of Aeronautics would open a BFTS in Ponca City. According to the paper, Spartan was one of the largest private aviation schools in the United States to train army air corps cadets. Aiding the hoped-for selection of Ponca City for one of the BFTS was General G.C. Brant's, head of aviation in the Eighth Corps area, recommendation to the British government of Ponca City as a desirable site.<sup>13</sup>

For various reasons, by June 1, 1941, it appeared Ponca City would not get a BFTS; however, continued talk of a possible Army Air Corps training school maintained the aspirations of local officials. While the Army Air Corps recommended Ponca City as a site for a Royal Air Force (RAF) school, British officials were interested only in airfields that were ready for use. The Ponca City existing municipal airport was unavailable for use as the Civil Aviation Authority's (CAA) was already using the facility and army regulations prohibited commercial ports from being used for military training. As such, a new airfield would have to be constructed. Thus, the first BFTS in Oklahoma went to Miami instead, where it was located on an airfield built by a private individual.<sup>14</sup>

Although Ponca City had yet to receive a military aviation site, Oklahoma itself was at the "...Foreground of Aviation Preparedness...". Among other defense-related activities, Tulsa was home to a 21 million dollar bomber assembly plant; Oklahoma City was site of a 19 million dollar army air depot

<sup>12</sup>Hugh Morgan, <u>By The Seat of Your Pants: A Consideration of</u> <u>the Basic Training of RAF Pilots in Southern Rhodesia, Canada and</u> <u>the USA During World War II</u>. (Newton, 1990), 109-110.

<sup>13</sup><u>The Ponca City News</u>, 6 May 1941, 12 May 1941, 1 June 1941 and 14 September 1941.

<sup>14</sup>Ibid., 1 June 1941 and 27 July 1941.

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and mammoth army airplane base; Enid had been selected for a 4 million dollar flying school by the War Department; both American and English fighter pilots were being trained at Tulsa, Muskogee, Chickasha, Yukon and Miami; bids had been made for a bombing and machine-gunning range near Cherokee on the Great Salt Plains; airport improvements were underway at numerous airports statewide; and, "...hundreds..." of pilots had graduated from civilian training schools in many cities with aircraft workers being training in public schools and colleges. Notably, the municipal airport at Ponca City was home to the civilian Ponca City School of Aeronautics, operated by Tom Smyer.<sup>15</sup>

While Ponca City lost out to Miami for location of the first BFTS in Oklahoma, by the end of July 1941, plans were again underway for location of a school in the community. Importantly, the federal government had recently lifted the restriction on locating training schools at commercial airports. However, a school was not assured in Ponca City as the terms of the contract still had to be finalized. At the crux of the negotiations was if the city, under state law, could turn over complete authority for the port to a private entity.<sup>16</sup>

On the 4<sup>th</sup> of August 1941, a contract was signed with the Darr School of Aeronautics for establishment of a BFTS at Ponca City. The terms of the contract allowed the city of Ponca City to retain control of the entire airport but granted usage rights to the Darr School. The existing services at the airport, consisting of Braniff Airways, the Ponca City School of Aeronautics and Continental Oil Company, were undisturbed. The city also agreed to expand the airport from 240 acres to 520. Land north and east of the airport was quickly acquired to achieve this. While the majority of this land was leased by the city, 40 acres were purchased from the school land department. Maintaining title to ten acres for runway purposes, the city sold the remaining thirty acres to the Darr School.<sup>17</sup>

Harold S. Darr of Chicago owned the Darr School of Aeronautics. During World War I, Darr was an instructor for the U.S. Army Air Corps. Following the war at different times, Darr worked for the Curtiss-Wright company, managed the St. Louis, Missouri, municipal airport, and was a flight engineer for American

<sup>15</sup>Ibid., 4 July 1941;
<sup>16</sup>Ibid., 27 July 1941.
<sup>17</sup>Ibid., 5 August 1941.

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Airlines. In about 1938, Darr opened his first aviation school, the Chicago School of Aeronautics. Subsequently, the Army Air Corps restricted all military training to airfields south of the Mason-Dixon line, forcing Darr to shift the Chicago school to civilian training and open other military training schools in the south. Prior to selection of Ponca City for a BFTS, Darr was operating three other military flight training schools, one at Augusta, Georgia, another at Albany, Georgia, and a third at Lakeland, Florida. While these schools were originally constructed to train American fliers, by August 1941, British fliers were also receiving training there. The Ponca City school was to be the first which offered primary through advanced courses at the same site.<sup>18</sup>

Each class at the Ponca City BFTS was to number about 50 cadets with a new contingent arriving every five weeks. The wash-out rate for each class was estimated by Darr to be between twenty and forty percent with failed trainees being sent to gunnery or bombardier schools. Before coming to the United States, the cadets went to Canada, either Montreal or Quebec, for "processing," a three month period in which military drills and other RAF "fundamentals" were taught. In order to accommodate the three levels of training, the school needed various types of aircraft, ranging from "...the standard primary trainer built by the Stearman factory in Wichita, through the speedy and powerful AT-6 built by the North American Aviation company." The intermediate plane was to be the army's standard Vultee BT-15. All planes were to be "...standard U.S. models in every case,...". Purchased by the federal government, the planes were loaned to the British under the lend-lease act.<sup>19</sup>

Within days of the contract being signed, work on the school site was moving forward. The Darr School's engineer, P.W. King, established a temporary office at the First National Bank Building. King had previously worked for Darr, building and organizing the other three military flight training schools. With speed a significant requirement as cadets were expected to arrive before the end of the month, King employed a number of locals in development of the campus. Local cartographer Joe Williams quickly surveyed the site. G.J. "Joe" Cannon was employed to aid King on the design aspects of the school. Cannon, who also designed the Ponca City library and three schools during the twenty years he had been in Ponca City, focused on the principals of serviceability

<sup>18</sup>Ibid., 5 August 1941 and 14 September 1941.

<sup>19</sup>Ibid., 5 August 1941.

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and comfort in laying out the buildings and campus. Dick Sherbon was named general contractor. Working in Ponca City for over thirty years, Sherbon previously constructed the Roosevelt and Garfield schools, as well as many downtown buildings. The Ed Cooley Plumbing Company of Ponca City received the plumbing contract and the Braker Electric Company was awarded the electrical contract.<sup>20</sup>

Construction work on "...Ponca City's first major national defense project..." was slated to begin August 11, 1941. The previous Friday, August 8, 1941, the local carpenters union and the air school made a joint announcement stating that "All competent carpenters reporting to the work site,..., (would) be hired." Prior to being hired, the men had to supply proof of their skill and join the local union. With city workers "...rushing work of laying power lines and water mains," civil engineers set the stakes for the first buildings on Saturday, August 9, 1941. Except for the two proposed hangars, the school buildings were to be frame construction on concrete foundations. The hangars were to "...be of heavier type construction."<sup>21</sup>

Surprising local contractor Sherbon, five hundred job-seekers "swarmed" the building site on Monday, August 11, 1941. With nearly twenty-four men beginning the work of laying foundation markers and preliminary carpentry tasks, the others were sent to the Oklahoma State Employment Agency for registration. Of the "...nine or more..." proposed buildings for the campus, immediate attention was focused on construction of a barracks, the mess hall and canteen, a hangar and an office/classroom building. Due to a nationwide shortage, anxiety quickly arose over problems in procurement of the pipe for the water mains. The power lines were expected to be up by the next day or so.<sup>22</sup>

With construction activity underway, personnel for the school began to arrive in Ponca City. Significant for the Ponca City economy, Darr estimated that the number of school personnel had to stay within ninety percent of the student enrollment. As such, with a student population of 200, the school was anticipated to have an operating staff of 180. While many jobs were filled by

<sup>20</sup>Ibid., 6 August 1941, 10 August 1941 and 14 September 1941.
<sup>21</sup>Ibid., 8 August 1941 and 10 August 1941.
<sup>22</sup>Ibid., 11 August 1941.

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locals, the Darr school transferred a number of key personnel from their other schools. As such, the local population received another boost with the arrival of the married staff's families. Types of jobs available at the school included flying instructors, mechanics, base personnel such as dispatchers and office employees and ground school officials and instructors. Additionally, the school required a number of employees to attend to the daily needs of the students, including managers, cooks and serving personnel.<sup>23</sup>

One of the first men appointed to operate the school had Oklahoma connections. Lieutenant D. Ross Ellis was named flight director. A reserve officer in the United States Army Air Corps, Ellis was a native of Stillwater and a 1930 graduate of Oklahoma A&M College. Previous to coming to Ponca City, Ellis was a "flying officer" at the Darr Aero-Tech school in Albany, Georgia. Other key personnel at the school were Ground School Director, V.L. "Casey" Jones, another Darr school employee from Georgia; Mechanical Maintenance Chief, Herbert Glaser, former chief mechanic at the Albany school; and, Chief Pilots Henry Jurger and B.G. Dewitt. Initial flight instructors at the school were Joe Monger and Robert Lucas. Seven additional flight instructors arrived from Darr's Aero-Tech facility in Albany, Georgia, just days before the cadets. Due to the shortage of flight instructors, the school also began accepting applications from local, experienced pilots without instructor's ratings. The school would then provide an instruction course to prepare the pilots for the civil aeronautics administration exams. While readying themselves for the exam, the pilots were paid a salary by the school and, after passing the federal exams, immediately hired as instructors. 24

Although the concrete foundations for three frame buildings were ready to be poured and the power lines installed by August 16, 1941, temporary arrangements were needed to house the fifty airmen expected to arrive within days. The Ponca Military Academy agreed to the use of their dormitories, mess hall and classrooms with the expectation that the opening of their fall term on September 8, 1941, would not be delayed. Additionally, a "...temporary frame shack" was erected on the west side of the airport as an airport headquarters for the students. The first class of RAF pilots arrived in Ponca City on the

<sup>23</sup>Ibid., 24 August 1941 and 7 September 1941.

<sup>24</sup>Ibid., 12 August 1941, 14 August 1941, 18 August 1941 and 19 August 1941.

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August 26, 1941, evening train.<sup>25</sup>

Developments at and for the school continued at a rapid pace. An appeal to Ross Rizley, eighth district congressman, finally resulted in shipment of the four-inch water pipe needed to connect the campus to the municipal hangar. Construction activity at the school accelerated with stringing of electric lights over the grounds to allow work at night. Deliveries of the needed aircraft also began to arrive at the airport with twenty-eight planes on hand when flight training for the British pilots began on August 29, 1941. Days later, Ellis began contract negotiations for land five miles southwest of the city to use as an auxiliary landing field. Used for landing practice by fliers at the primary level, the auxiliary field would be prepared by a planting of winter rye grass. Advanced students would use the municipal airport runways and facilities, including a new radio tower built especially for the BFTS purposes.<sup>26</sup>

In the first week of September 1941, talk was circulating that the school would be enlarged past the initial 200 student number assigned the school by the RAF. Additionally, Darr announced the barracks would be finished by October 1, 1941, but the campus would not be opened for use until completion of the mess hall shortly after. How this affected the opening of the Ponca Military Academy's fall term was not addressed. The school's first prefabricated hangar was also due to be delivered before the end of the month. The steel frame hangar was to be clad with sheet metal. Measuring 204 feet by 146 feet, the hangar would be "...considerably larger..." than the municipal airport's hangar. Darr estimated that it would take about a week for the hangar to be erected, "...once the ready-built hangar parts (were) on the ground."<sup>27</sup>

The flight instruction at the Darr school was fast-paced and rigorous. Attending class for four hours a day, the cadets also were assigned at least four hours of "barracks study" or homework each day. Additionally, the pilots

<sup>25</sup>Ibid., 17 August 1941, 20 August 1941, 25 August 1941 and 27 August 1941.

<sup>26</sup>Ibid., 20 August 1941, 21 August 1941, 25 August 1941, 28 August 1941, 31 August 1941, 4 September 1941 and 14 September 1941.

<sup>27</sup>Ibid., 7 September 1941.

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spent either a morning or afternoon in the air every day that weather conditions allowed. The school used several innovations to cram a year's worth of instruction into five months. This included "...sound movie films for visual education...," the use of slides to identify friendly and hostile aircraft and Link trainers. Basically a flight simulator, a Link trainer was a machine which held "...a normal combat plane cockpit inside a cradle which rotates in all directions and at all angles, just as the cockpit of a plane." An automatic recorder traced the "flight," allowing the instructors to determine if the student's flying ability was up to "par." The trainer also provided valuable experience in "blind flying," a major focus of the school's ground school instruction. Initially, the Link trainers were planned for installation into the hangars but a specific Link Instructor Building was eventually constructed at the school.<sup>28</sup>

On schedule and with the arrival of the second contingent of cadets imminent, the first two barracks were completed by October 1, 1941. Work on the other two barracks was in the "advanced stage," and "little" other exterior construction work remained except for the hangars, sidewalks and landscaping. Orders for the pouring of the concrete foundation for the first hangar had been received by October 1, 1941, and Ellis indicated the steel parts for the hangar would be ready as soon as the concrete was set. Rain during the week delayed the scheduled move of the cadets from the Ponca Military Academy to the Darr school for a day as the lack of sidewalks and landscaping made the school grounds "...one big quagmire." To alleviate this problem, the school contracted for landscaping services with the Schell Nursery Company of Tulsa. The landscape plan, which included thirty types of perennial plants, forty Chinese elm trees, twenty-one American elms, Virginia cedars and Japanese quince, was designed by Darr, King and the nursery experts.<sup>29</sup>

Construction activity at the school picked up again in mid-October 1941 when two new buildings, a library/recreation hall and a Link trainer building, were scheduled for erection. To maintain the balance of the campus, the buildings were planned for opposite sides of the site. Construction of the school's first hangar awaited delivery of the prefabricated components, postponed from late September to October 26, 1941. In the meantime, a second auxiliary field

<sup>28</sup>Ibid., 14 September 1941 and 1 October 1941.

<sup>29</sup>Ibid., 1 October 1941, 5 October 1941, 6 October 1941, 12 October 1941 and 14 October 1941.

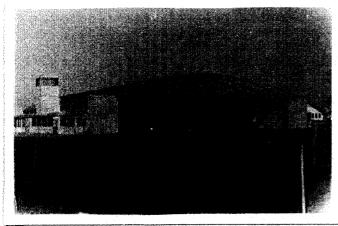
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for the school was leased on October 20, 1941. Consisting of a 160-acre site five miles northwest of the airport, the new field was located in the Prairie Chapel neighborhood. Work on both auxiliary fields was delayed by rain, which also affected the stretch of road from the airport north to the school. First District County Commissioner Ira Taylor announced plans to black top the road as soon as funds permitted. In the meantime, sand was spread on the road to stabilize it during wet weather.<sup>30</sup>

Inclement weather slowed work at the school "...almost to a standstill..." for several weeks in October/November 1941. While the steel and other parts of the hangar had finally arrived at the site, delayed by the nationwide rush on steel, the Star Manufacturing firm of Oklahoma City awaited better weather to erect the building. Notably, Star Manufacturing, now called Star Building



Hangar No. 1 Courtesy Lillian Taylor

Systems, continues to operate in Oklahoma City. The company was formed in 1927 to construct "tool boxes" and "dog houses" for Oklahoma's, particularly Oklahoma City's, oil fields. These products were small, portable, metal buildings erected near the derricks to house men and equipment. Beginning in the late 1930s, the company began prefabrication of aviation hangars throughout the Midwest. By late October 1941, the company was responsible for the construction of nearly sixty hangars that year alone. In addition to the hangars at the Darr School in Ponca City, the company

received a \$135,000 contract for erection

of hangars at the Lake Charles, Louisiana, Advanced Single-engine School. During the war years, the company also expanded into construction of warehouses for the military.<sup>31</sup>

<sup>30</sup>Ibid., 21 October 1941 and 26 October 1941.

<sup>&</sup>lt;sup>31</sup>Ibid., 26 October 1941 and 2 November 1941. See also "History of Star Building Systems," <u>Star Building Systems</u>, <u>http://www.starbuildings.com/History.aspx</u>, retrieved 23 April 2006. David Alexander of the company was contacted by the author on 24 April 2006 concerning possible plans or other information related to the hangars at Darr School. According to Alexander, the company

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The Star Manufacturing Company began erecting the massive Hangar No. 1 at Ponca City on November 6, 1941. The wall sections, as well as all of the framework pieces, were manufactured at the firm's Oklahoma City plant. Hangar No. 1 included an airport traffic and radio tower on the roof. Despite earlier projections of a week, assembly was expected to take three weeks. Work was also being pushed on the Link trainer building with construction of the library/ recreation hall awaiting these other developments.<sup>32</sup>

Hangar No. 1

Courtesy Lillian Taylor

In early December 1941, the school achieved its maximum quota of 200 students. Just days later, the United States formally entered the war following Japan's attack on Pearl Harbor. Three days after Pearl Harbor on December 10, 1941, the school announced plans for erection of a fence around the barracks, training buildings and hangar area to prevent possible sabotage. Additionally, entrance to the school would require an identification badge with the main gate having an around-the-clock watchman. Local men were hired to guard the planes twenty-four hours a day, being armed both with guns and a deputy sheriff commission. Floodlights were also scheduled for installation in all areas occupied by tied-down planes. Notably, sabotage was specifically ruled out by a coroner's jury investigating the first fatal crash of pilots from the school in late January 1942.<sup>33</sup>

By late December 1941, the Link trainer building and recreation building were nearing completion. The hangar building was also nearly finished but required pouring of the concrete ramp and service apron between it and the city runways. Cold weather delayed the concrete pour but a temporary ramp was expected to

archives plans for only twenty years before disposing of them and, as such, the company did not have any information concerning the Darr hangars.

<sup>32</sup>Ibid., 7 November 1941.

<sup>33</sup>Ibid., 4 December 1941, 10 December 1941 and 28 January 1942.

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allow use of the building by mid-January 1942. Plans for erection of the second hangar at the school were also underway. Located directly west of Hangar No. 1, the second hangar was expected to be the same size as the first. Like the first, it would also open to the east with ramps connecting it to the airport runways.<sup>34</sup>

Work on Hangar No. 2 at the Darr school did not commence until mid-March 1942. Weather again caused considerable delays as snow covered the building site. Star Manufacturing once more prefabricated the building in Oklahoma City before erecting it in Ponca City. By early April 1942, the framework was nearly done. While construction activity continued at the school, including construction of Hangar No. 3, the local newspaper ceased the detailed reports. Partially attributable to a lessening amount of new activity, this was also due to a shift in the school's ownership. On April 1, 1942, the United State's War Department "...assumed Darr's contract with the British." At the same time, the school buildings and site were sold to the Defense Plant Corporation, which numbered the site PLANCOR 1482. The property was then leased back to the school for continued operation.<sup>35</sup>

In August 1942, a year after the establishment of the school, a wings ceremony at the school included a cadet parade in front of the hangars decorated with British flags. Additionally, the concrete swimming pool located east of the school buildings was officially opened for use. Beginning in November 1942, the school was enlarged with additional barracks and an administration building to accommodate a doubling in the number of students from 200 to 400. In all, seventeen buildings were constructed on the school grounds. This included six barracks, a mess hall, hospital infirmary, ground school buildings, Link trainer building, recreation hall, administration building, utility garage and three hangars. The Darr School of Aeronautics expended \$400,000 total for

<sup>34</sup>Ibid., 26 October 1941, 28 December 1941, 11 January 1942. and 30 July 1997.

<sup>&</sup>lt;sup>35</sup>Ibid., 12 March 1942 and 2 April 1942. See also Scott D. Murdock, "Ponca City Airport - British Flying Training School #6," <u>Royal Air Force Training in Oklahoma during World War II</u>, <u>http://www.airforcebase.net/aaf/raf\_ok.html</u>, retrieved 11 January 2006.

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Darr School of Aeronautics, Ponca City Courtesy Bret Carter; copyright Historic Images, LLC

construction work.<sup>36</sup>

The school continued to train British airmen through the spring of 1944. To maximize the facilities and output of trained airmen, American pilots were also admitted to the Darr School beginning in November 1942. The increased need for students at the BFTS was also linked to the English decision in July 1942 to shift all RAF flight training programs at United States Army bases to installations of British dominions. In addition to the British having "...developed her training capacity in the dominions...," the change was made "...because of the rapid strides in American training." Although causing some apprehension, the change did not involve the immediate closure of the BFTS as these installations were based on private contracts between the British government and civilian operators.<sup>37</sup>

A February 1, 1944, announcement of the school's planned closure took the community by surprise. Initially attributed to a cut-back program declared by the Army Air forces in early January 1944, subsequent accounts from the RAF

<sup>36</sup>Ibid., 9 August 1942 and 23 April 1944.

<sup>37</sup>Ibid., 19 March 1944. See also <u>The Daily Oklahoman</u>, (Oklahoma City, Oklahoma) 24 July 1942 and Morgan, <u>By the Seat of</u> <u>Your Pants</u>, 126-127.

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delegation in Washington indicated the school was closed at the request of the owner. Overall, a November 1943 review of aircrew requirements revealed that due to success in the air war both the British and American forces needed to reduce the out-put of combat pilots. As such, the last induction of American cadets at the BFTS was scheduled for December 1943. To economize the reduction, it was determined that one of the BFTS would be closed to maintain full capacity at the other schools. The Darr School at Ponca City was thus selected to close.<sup>38</sup>

At first, the closing was anticipated to occur around June 1, 1944, about the time all of the cadets then at the school would complete their training. In mid-March 1944, the closure plans were accelerated to mid-April 1944 when the current advanced class graduated. The remaining classes were to finish up at the other BFTS. As planned, the 16<sup>th</sup> and final class of British and American airmen at the Darr School of Aeronautics received their wings in a ceremony on April 16, 1944. The following day, the remaining 64 cadets "...zoomed playfully low over Ponca City in farewell..." as they flew their planes to their new BFTS to complete their training. The school was not immediately deserted as several British officers, Army Air personnel and school employees remained to conclude the school's business.<sup>39</sup>

As federal government property, use of the school was restricted to government projects until after the end of the war. Nonetheless, the Ponca City Chamber of Commerce began exploring reuse options for the facility even before the last students disappeared on the horizon. A veterans hospital topped the Chamber's list but the government instead announced in June 1944 that the facility would be used to store "semi-dead" trainer planes. With the first planes arriving on August 1, 1944, the school grounds contained over five hundred plans by October 1944. At that time, the federal government announced plans to sell the school, along with its toluene and aviation gasoline plants in Ponca City and eleven other "war plants" in Oklahoma. The government, however, retained ownership of the Darr school through June 1946 when the city of Ponca City secured a promise of release in order to lease the property to the Piper Aircraft Corporation for establishment of a Midwestern branch. The company closed the plant in March

<sup>39</sup>Ibid., 19 March 1944, 16 April 1944 and 17 April 1944.

<sup>&</sup>lt;sup>38</sup>Ibid., 1 February 1944 and 19 March 1944. See also Morgan, By the Seat of Your Pants, 126-127.

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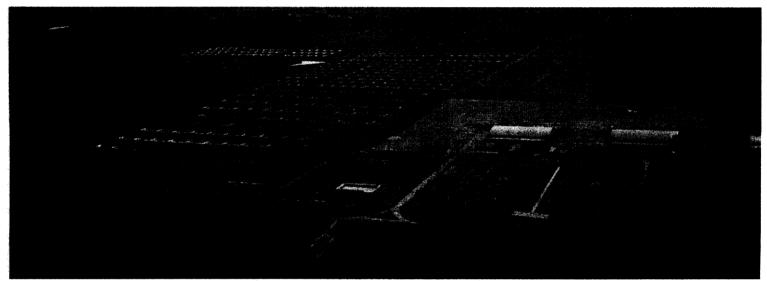
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Darr School probably post-August 1944

Courtesy Bret Carter; copyright Historic Images, LLC.

Within a week of the Darr school's closing on April 17,1944, the impact of the school on the local economy was known. During its thirty-three months of existence, the school spent a total of \$1,112,744 in Ponca City. Included among this was \$400,000 for the development of school buildings and site; \$613,690 for groceries, gasoline and other equipment; and, \$68,000 for beds, kitchen items, office equipment and other related items. The city itself received \$31,054 for utilities and rent payments. Significantly, these figures do not include money expended by school employees, cadets "...and others who received a total payroll of \$4,187,086..." in the community. With a final capacity of 400 cadets, the school required ninety-eight airplanes at a time and a total of 3,738,202 gallons of gasoline to keep the students in the air. On average, the school employed "...between 400 and 500..." people for maintenance, administration and school "...business office work...".<sup>41</sup>

While not all of the school employees would have been originally from Ponca

<sup>41</sup>Ibid., 23 April 1944.

<sup>&</sup>lt;sup>40</sup>Ibid., 14 April 1944, 30 April 1944, 8 May 1944, 22 June 1944, 1 August 1944, 8 October 1944 and 20 October 1944. See also <u>The Daily Oklahoman</u>, 20 October 1944, 5 June 1946 and 7 March 1948.

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City, a significant number of locals were employed at the school. As with other war-time industries, the school also employed a number of women, such as Ponca City native Lillian Taylor. Ms. Taylor was employed at the school from its earliest days through closure. A licensed pilot, Ms. Taylor worked as a Link Instructor. The expansion of employment opportunity for women during the war years was critical to the women's movement of later decades.

The school's role in training aviators for war-time service is also historically significant in a military context. At the Darr School alone, 1,113 British combat pilots received their wings. An additional 125 American pilots graduated from the school. In all, 7,452 cadets were trained at the BFTS through 1945. While British pilots were also trained at regular military air bases operated by the United States Army Air Corp, "No scheme training for the RAF in America produced a larger number of trained pilots." Obviously, pilot training was crucial to the success of Allied forces during World War II. From the onset through the cessation of hostilities, the war in the air was critical for victory. Notably, by the time the Darr School closed in April 1944, British and American forces had secured air supremacy, allowing them "...to concentrate on their primary urban and industrial targets, and when the time came, to provide cover for the Normandy landings."<sup>42</sup>

The only resource associated with the school which maintains its historic integrity is Hangar No. 3. The last hangar constructed at the school in 1942, the building served as a repair and maintenance facility. As such, while not as quixotic as Hangar No. 1, it was crucial to the school's operation and mission. Located closest to the municipal airport, the hangar retains a feeling and association with this critical period in our national history and the history of aviation in Ponca City. As the last remaining, readily identifiable building of the Darr School of Aeronautics, also known as British Flying Training School No. 6, Hangar No. 3 embodies the military and economic significance of the school for Ponca City.

#### ARCHITECTURAL SIGNIFICANCE

The Darr School of Aeronautics Hangar No. 3 is architecturally significant as

<sup>&</sup>lt;sup>42</sup>"Darr Training School: #6 British Flying Training School," <u>http://www.kaycounty.info/NCOHA/darrschool.html</u>, retrieved 27 January 2006. See also Morgan, <u>By the Seat of Your Pants</u>, 128-129 and Tindall, <u>America</u>, 1208.

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an example of a World War II-era, prefabricated, metal hangar in Ponca City. Of the three such hangars constructed in Ponca City at the Darr School, only Hangar No. 3 retains its historic integrity sufficient to convey its historic appearance, feeling and association. Located within the vicinity of Hangar No. 3 is the historic airplane hangar at the municipal airport in Ponca City. This striking building also merits historic and architectural recognition for its association with the development of aviation in Ponca City. However, the circa 1930 hangar is strikingly different from Hangar No. 3 in both materials, design and ornamentation.

A utilitarian building constructed for the purposes of storing and repairing aircraft, Hangar No. 3 does not possess elaborate architectural features and decorative detail. Constructed of corrugated metal panels laid over a steel framework by the Star Manufacturing Company of Oklahoma City, the building is representative of the practical buildings hurriedly erected to provide training facilities during the war. Due to its functional design and location, the building is architecturally unique within the community.

While a comprehensive survey of the nineteen World War II-era air bases<sup>43</sup> in Oklahoma has not been undertaken, Hangar No. 3 merits architectural recognition as an example of an aviation hangars of its type and time. The other hangars at the Darr School in Ponca City, under private ownership, have lost their integrity due to massive additions which have overwhelmed the historic buildings. According to local historian Paula Denson, the buildings at the Miami BFTS school were demolished within the last few years. Similarly, two of the four World War II-era hangars at the Chickasha municipal airport, site of a military air training school managed by civilian operators Wilson and Bonfils, were recently demolished after being damaged in the destructive tornado of 1999. As utilitarian buildings, World War II airplane hangars are grievously threatened as airfields across Oklahoma seek to upgrade and modernize their facilities. While the replacement buildings are similar, if not identical, in material and method of construction, the new flat-roof buildings lack the character and presence of the World War II, prefabricated, metal hangars such as Hangar No. 3 in Ponca City.

<sup>&</sup>lt;sup>43</sup>For a list of World War II airfields in Oklahoma see page 166 of Lou Thole's <u>Forgotten Fields of America, Volume Two: World War</u> <u>II Bases and Training, then and now</u> (Missoula, Montana: Pictorial Histories Publishing Company, 2000).

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Overall, the Darr School of Aeronautics Hangar No. 3 is historically significant for its association with the training of British and American combat pilots during World War II. The training provided at the school was critical to the pilots' success and, in turn, the overall effort to win the war. Additionally, the hangar is also representative of the major economic impact the school had on Ponca City. Finally, Hangar No. 3 is architecturally noteworthy as an example of an increasingly rare, World War II-era, prefabricated, metal, airplane hangar.

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VERBAL BOUNDARY DESCRIPTION

From the gate located on the southwest corner of the intersection of Darr Parr Drive and Lindsey Road, proceed southwest 59 feet to the northeast corner of the loading dock ramp, then 63 feet straight west along the side of the loading dock to the northeast corner of the building, then 218 feet west to the northwest corner of the building, then 135 feet south to the southwest corner of the building, then 218 feet east to the southeast corner of the building, then 121 feet north to the south side of the loading dock, then 63 feet east to the southeast corner of the loading dock, then 14 feet north to the point of beginning. The boundaries encircle the building, including the projected, attached loading dock ramp.

The property is located within the current city limits of Ponca City. It sits on the northwest side of the Darr Industrial Park and northeast of the Ponca City Municipal Airport in the northeast quarter of the northwest quarter of Section 16, Township 26 North, Range 2 East.

## BOUNDARY JUSTIFICATION

The boundaries include the property directly associated with Hangar No. 3. The remaining grounds of the Darr School of Aeronautics has lost its integrity due to the insensitive treatment of the remaining three extant resources and demolition of thirteen other original buildings.