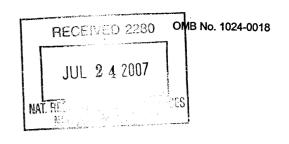
NPS Form 10-900 (Rev. 10-90)

United States Department of the Interior 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 How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. 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 entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property
historic name Grand Canyon Airport Historic District
other names/site number Airport at Red Butte; Red Butte Aerodrome; AR-03-07-04-807
2. Location
street & number app. 2.6 mi. east of jct. of US Highway 180 & Forest Road 305 not for publication N/A city or town Tusayan vicinity X state Arizona code AZ county Coconino code 005 zip code 86023
3. State/Federal Agency Certification
As the designated authority under the National Historic Preservation Act of 1986, 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 propertyX_ meets does not meet the National Register Criteria. I recommend that this property be considered significant nationally statewide _X_ locally. (See continuation sheet for additional comments.) Signature of certifying official Date
Signature of certifying official Date USDA Forest Service Softworker Region, Regional F.P.O. 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.)

4. National Park Service Ce	rtification		
I hereby certify that this prop	erty is:		
entered in the Nationa	l Register		
See continuation			
determined eligible for National Register	tne	······································	
See continuation	n sheet		
determined not eligible			
National Register			
removed from the Nat	onal Register		
other (explain):		4	
Luda	14 colellan		8.31-07
Signature	of Keeper		Date of Action
,			2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
======================================	:=====================================	:	######################################
======================================		======================================	
X pri	vate	• • • •	
pul	blic-local		
	blic-State		
X_ pul	blic-Federal		
dis site stre	lding(s) trict		
Number of Resources with	in Property		
Contributing	Noncontributing		
3	1 buildings		
	sites		
4	structures		
7	objects 1 Total		
Number of contributing re	sources previously liste	d in the National Regi	ster <u>N/A</u>
Name of related multiple p	roperty listing (Enter "N/	/A" if property is not par	t of a multiple property listing.)
			
S. Function or Use	******************		1720 to 2022
			=======================================
Historic Functions (Enter cat			
Cat: TRANSPOR	TATION	Sub: <u>air-related</u>	
DOMESTIC	C/TDADE	multiple dw	elling
COMMERC	E/ I KAUE	business	
	····		

Current Functions (Enter categories from instructions) Cat: VACANT/NOT IN USE Sub:	
Architectural Classification (Enter categories from instructions) LATE 19 th & EARLY 20 th CENTURY AMERICAN MOVE OTHER	EMENTS: Bungalow
Materials (Enter categories from instructions) foundation	RTH
other N/A	ONE (Saliustolie)
Narrative Description (Describe the historic and current condit sheets.)	ion of the property on one or more continuation
8. Statement of Significance	
Applicable National Register Criteria (Mark "x" in one or more be National Register listing)	oxes for the criteria qualifying the property for
X A. Property is associated with events that have broad patterns of our history.	e made a significant contribution to the
B. Property is associated with the lives of pers	ons significant in our past.
X C. Property embodies the distinctive characteric construction or represents the work of a master represents a significant and distinguishable enti- distinction.	, or possesses high artistic values, or
D. Property has yielded, or is likely to yield info	rmation important in prehistory or history.
Criteria Considerations (Mark "X" in all the boxes that apply.)	
A. owned by a religious institution or used for r	eligious 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 signif	icance within the past 50 years.

Areas of Significance (Enter categories from instructions)
TRANSPORTATION: (Grand Canyon air tourism)
ARCHITECTURE
Period of Significance 1927-1956
Significant Dates 1927-28
Significant Person (Complete only if Criterion B is marked above)
N/A
Cultural Affiliation N/A
· · · · · · · · · · · · · · · · · · ·
Architect/Builder _ Shaw, Benson Russell (engineer/builder for hangar)
Shaw, Benson Russell; & Van Zandt, John Parker (engineers/designers of airstrips)
Porter, Bill; Chambers, B.D.; Lockridge, Bill; & Williams, Jack (builders of bungalow)
Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)
9. Major Bibliographical References
Bibliography (Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)
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 #
Primary Location of Additional Data: State Historic Preservation Office
Other State agency
X Federal agency
Local government X University
X Other
Names of repositories: Grand Canyon National Park Museum Archives, Grand Canyon, AZ;
Kaibab National Forest, Williams, AZ; Arizona Historical Foundation, Tempe, AZ; Cline Library, Northern Arizona University, Flagstaff, AZ
Private collection: Eugene Ernest Tissot, Jr., Monterey, CA

10. Geographical Data	

Acreage of Property 90.01 acres (90 acres + 0.01 acres)

UTM References

	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>		<u>Zone</u>	Easting	<u>Northing</u>
1	12	401330	3968180	5	12	401455	3967650
2	12	401710	3968070	6	12	402360	3966960
3	12	402520	3968920	7	12	402300	3966900
4	12	402580	3968870	8	12	401330	3967610

Discontiguous element (entrance sign structure): Zone 12 397995E 2967020N

Verbal Boundary Description The discontiguous district contains two parcels (the airport proper, and a discontiguous entrance sign structure), described as follows:

- (1) airport proper: a polygon containing 90 acres, the vertices of which are shown on the accompanying USGS quadrangle titled "Red Butte"; and
- (2) entrance sign structure: a square parcel measuring 20ft by 20ft (0.01 acre), centering on the structure, the centerpoint of which is indicated on the accompanying USGS quadrangle titled "Red Butte SW."

Boundary Justification The boundary of the airport proper (shown on the "Red Butte" quadrangle) has been drawn to encompass the concentration of remaining resources contributing to the significance of the Grand Canyon Airport and to exclude acreage not directly contributing to the significance of the property. In the case of the entrance sign structure (shown on the "Red Butte SW" quadrangle), the 20ft by 20ft boundary has been drawn to center on and be slightly larger than the structure's footprint of 12ft by 9.5ft.

11. Form Prepared By				
name/title Pat Stein/Owner, Arizona Preservation Co prepared by Giacinta Bradley Koontz/Aviation Historian	nsultants; based on research and an earlier draft			
organization Arizona Preservation Consultants	date Jan. 2007, revised May 2007			
street & number_6786 Mariah Drive	telephone (928) 714-0585			
city or town Flagstaff state	AZ zip code 86004-1232			
Additional Documentation				

Continuation Sheets

Maps

A **USGS** map (7.5 or 15 minute series) indicating property's location. See **two** enclosed USGS 7.5' maps. A **sketch** map for historic districts and properties having large acreage or numerous resources. See enclosed district sketch map.

Photographs

Representative black and white photographs of the property. See b/w Photos 1 through 9.

Additional items See "additional documentation" continuation sheets showing historical photographs.

Property Owners	
Buildings and structures are owned by: name Red Butte Airpark Restoration LLC	
street & number_4117 Guadalupe Street	telephone_(512) 374-0300
city or town Austin	stateTX_ zip code78751
Land owned by: <u>U.S. Department of Agriculture (K</u>	(aibab National Forest), 800 S. 6 th St., Williams AZ 86046

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page1	Grand Canyon Airport Historic District name of property
		Coconino, Arizona county and State

SECTION 7: DESCRIPTION

SUMMARY

Grand Canyon Airport Historic District is a concentration of commercial and residential resources united historically, geographically and aesthetically by the plan of its original developers and subsequent historical users. The discontiguous district includes three buildings (a hangar, a bungalow-style duplex, and a root cellar) and four structures (two airstrips, an above-ground cistern, and an entrance sign structure) that contribute to the importance of the property during its period of significance (1927-1956). The district also includes one non-contributing building (a barn with attached corral) that was constructed after the airport's closure. Despite changes resulting from the airport's 1967-2004 use as a ranch, the district retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association to convey its important role in the development of air tourism to the Grand Canyon.

PREVIOUS INVESTIGATIONS

The property has been the subject of several historical and archaeological studies. In 1982 pilot Ruth Reinhold published a discussion of the airport and its associated airlines in her book titled *Sky Pioneering* (Reinhold 1982). Six years later, Northern Arizona University conducted a 90-acre archaeological survey at the airport for a then-proposed federal land exchange (Huffman 1988). The survey was followed in 1995 by the most detailed historical study to date, a *Journal of Arizona History* article discussing aviation at Grand Canyon (Warren 1995). More recently, Kaibab National Forest archaeologists evaluated the airport for the National Register, found the hangar to be eligible under Criterion C, and proposed that it be preserved by moving it to the Planes of Fame Museum at Valle Airport, approximately 13 miles southwest of the hangar's present location (Weintraub and Hanson 2005). Those studies, plus new research conducted by an aviation historian (Koontz 2005), provide a detailed understanding of the property's evolution, physical plan, function, and post-historic change. Primary sources documenting the airport are located mainly at Grand Canyon National Park, the Kaibab National Forest, Special Collections and Archives/Northern Arizona University, the Ruth Reinhold Collection/Arizona Historical Foundation, and in the private holdings of Eugene Ernest Tissot, Jr. (Monterey, California).

LOCATION AND SETTING

Grand Canyon Airport Historic District is located in Township 28 North, Range 2 East, Section 1; Township 28 North, Range 3 East, Sections 4 and 5; and Township 29 North, Range 3 East, Sections 28, 32, and 33, within Coconino County, Arizona. The land is owned by the U.S. Department of Agriculture as part of the Kaibab National Forest/Tusayan Ranger District. Improvements to the land are owned by Red Butte Airpark Restoration LLC, which hopes to restore the property in place for occasional use by vintage and small aircraft.

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 7	Page2	Grand Canyon Airport Historic District
		name of property Coconino, Arizona
		county and State

The airport is set amid a mixed conifer forest of pinyon, juniper, and ponderosa pine in the high, thin air of the Colorado Plateau. Natural features that influenced the siting of the airport at this location were the flat terrain (varying little from the official elevation of 6362 ft) and vast, open meadow. At its southern end, the meadow terminates at the foot of Red Butte. This distinctive landmark (see Photo 1) was a navigational aid to fliers in spotting the airport, but also posed a hazard for take-offs and landings.

Located 2.6 miles east of U.S. Highway 180 (State Route 64), the historic airport is accessible via Forest Roads 305 and 329. The rural property is situated approximately eight miles south of Tusayan (the nearest community), nine miles south of the Grand Canyon National Park boundary, and 13 miles south of the canyon's South Rim. The 1964-1966 construction of a modern airport at Tusayan placed tourists in closer proximity to the national park and quickly rendered the Red Butte facility obsolete (Warren 1995).

The property is nominated as a discontiguous district. The airport proper—a concentration of three contributing buildings, three contributing structures, and one non-contributing building--comprises most of the district. The one discontiguous resource is an entrance sign structure on Forest Road 305 near U.S. Highway 180—about 2.6 miles west of the airport—which guided visitors to the airport's remote location. The property is a discontiguous district because the entrance sign structure is geographically separate from the airport proper, and the intervening space lacks historical significance. The location of the airport is indicated by the polygon on the accompanying USGS map titled "Red Butte." The location of the entrance sign structure is indicated by the point on the accompanying USGS map titled "Red Butte SW."

PHYSICAL DESCRIPTION: OVERVIEW

Established in 1927, Grand Canyon Airport was an aerodrome, a term referring to an airfield with associated buildings (Koontz 2005; Zukowski 1996). The facility's primary functions were to transport passengers to and from the Grand Canyon region and to offer scenic flights over the canyon. Its secondary roles were to repair and maintain aircraft and to provide meals and lodging for airport staff, airline crew, and visitors.

The features of the airport during the period of significance (1927-1956) reflected those functions. An entrance sign near Highway 180 alerted motorists to the point where they were to turn off the highway and head east over existing Forest Service roads before arriving at the airport, some 2.6 miles distant. Historical photographs indicate that a ticket house informally marked the entrance to the airport proper. North of the ticket house was a parking area that provided immediate access to the main building of the airport, the hangar, which contained a service bay, workshops, office, and lounges. A detached cistern stood outside the hangar's west wall, and sheds for tools and a generator clustered near the hangar's west and north sides. A forested niche about 700 ft north of the hangar sheltered the airport's residential area, consisting of a duplex, a three-bedroom lodge, two small cabins, and a root cellar. East, northeast, and southeast of the airport buildings sprawled the airfield with its airstrips.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page3	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State
		•

It is interesting to note what the facility lacked. It never had a control tower; instead, a radio room within the hangar maintained ground-to-air communication. The airport also lacked a passenger terminal, per se; lounges along the hangar's south wall accommodated customers and crew while awaiting flights. An absence of airfield landing lights limited night-time use. Nonetheless, Grand Canyon Airport was considered first class and modern for a rural airport of its era, offering not only mechanical and refueling services, but also meals and lodging (Grand Canyon Airlines 2004; Reinhold 1982; Warren 1995).

Grand Canyon Airport Historic District today is a 90-acre property that includes the hangar, two airstrips, a cistern, duplex, root cellar, and entrance sign as contributing elements, and a post-historic barn with attached corrals as a non-contributing element. The main part of the district (see accompanying "District Sketch Map") derives its L-shaped configuration from the inclusion of the airstrips. Two small sheds are also present within the district boundary; however, per instructions in *National Register Bulletin 16A*, they are not substantial enough to be counted as either contributing or non-contributing resources. Similarly, buildings that were historically present but that no longer exist—i.e., the ticket house, lodge, and two cabins—are not counted as contributors or non-contributors. While it is possible that such features could possess historical-archaeological values that might qualify them for the National Register under Criterion D, their research potential cannot be assessed without testing.

DESCRIPTION OF RESOURCES

Hangar (Contributing Building) (Photos 2 through 5)

The hangar was designed and erected by B. Russell Shaw on behalf of J. Parker Van Zandt and other owners of Scenic Airways, Inc. Engineer Shaw had been an aircraft builder and aviator before turning his considerable talents to airport construction. In the late 1910s and 1920s he designed buildings for McCook Field in Dayton and Lambert Field-St. Louis Municipal Airport. After completing the Red Butte hangar for Scenic, Shaw would go on to design and construct buildings at Koch Field in Flagstaff and Sky Harbor Airport in Phoenix. Of those buildings, only the hangar at Red Butte remains (*Coconino Sun* 1928a and 1928b; Gray 1997; Jones 1997; Koontz 2005; Pellegreno 1980).

The steel structural components for the Red Butte hangar were fabricated in the east, shipped to Arizona by rail, and transported to the building site by truck. Assemblage began during the fall of 1927 and was completed by spring of 1928. Pre-formed steel trusses were mounted on I-beams that were anchored to the ground with concrete footings. Struts connected the arched trusses of the roof. The "skin" of the building, consisting of corrugated sheet-metal siding, was affixed to an internal timber frame to which windows and doors could be mounted; the Halstead Lumber Company of Williams, Arizona, supplied the metal siding and lumber. The hangar's rail-and-roller steel doorframes were manufactured by the Richard-Wilcox Company of Aurora, Illinois. When the hangar was finished, B. Russell Shaw inscribed the name of his company in the concrete foundation of the doorframe. The inscription is still visible today (Kintner 1928; Koontz 2005).

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page 4	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State
		oounity and otate

The completed building had a T-shaped plan, measuring approximately 80 by 90 ft, with an east-west orientation. The roof was arched, with the eastern third standing about 5 ft higher than the western two-thirds. The lower roof bore the words "GRAND CANYON AIRPORT" in 15-ft lettering, while the upper roof displayed an arrow pointing north. The principal elevation, facing east toward the airfield, featured the massive hangar doors. Above them, signage noted the airport's altitude and carried the name and logo of Scenic Airways. A windsock graced the apex of the roof, and hinged, six-light windows (each measuring 3 ft square) punctuated each hangar wall. Five-panel doors provided access along the north, south, and west elevations. A ledged and braced (Z-pattern) door, built within one of the hangar's giant rail-and-roller doors, provided easy access from the east.

Six wood-framed rooms along the north and south sides of the hangar served as mechanics' shops, a radio room, an office, and lounges. Each had a shed roof, corrugated sheet-metal roofing, horizontal wooden siding (with planks measuring 10 inches wide), and tongue-and-groove flooring. Double-hung, one-over-one sash windows and a porch along the south side of the office and lounges afforded fine views of Red Butte.

The building changed little during its decades of use as a hangar. Starting around 1930, the logo and name of Scenic Airways were replaced with the name and various sequential logos for Grand Canyon Air Lines (and its successor, Grand Canyon Airlines). The faded remnants of signage for those carriers can still be seen today. A minor alteration occurred when a 4-by-4-ft closet or restroom was added to the west end of the office and lounge area early in the hangar's history. While its exact date of construction is unknown, the addition had the same exterior siding as the lounges and office and was compatible with their design.

After the airport closed, it became part of the Ten-X Ranch, a cattle outfit that was headquartered about seven miles north of the airport. From its founding earlier in the twentieth century, the Ten-X had expanded until, by the 1960s, it held grazing rights to much of the land south of Grand Canyon. Acquisition of the airport facility was intended to support the ranch and assist in its future growth. The rancher, Gregg Gibbons, used the airport hangar as a barn and partitioned its open bay into cattle stalls. In one instance, a portion of a 1930s Grand Canyon Air Lines sign became a stall divider. The rancher converted the machine shop/radio room to a tack room by adding saddle stands, and the ranch brand ("77 Bar") was spray-painted on a few door jambs. Fortunately, historic details—such as a workbench with a 1941 Wilton vise, a row of mechanics' cabinets, and an overhead hoist—were left in place. Within the past two years, the owners of Red Butte Airpark Restoration LLC have removed the cattle stall partitions with the exception of the 1930s sign.

Two Airstrips (Two Contributing Structures)

The original landing strips were engineered by B. Russell Shaw and J. Parker Van Zandt and built in 1927-1928. They were constructed simply by leveling the ground with earth-moving equipment to remove rocks and brush and to fill any rodent burrows. They were never paved or surfaced with gravel. Repeated use and seasonal maintenance kept sage and grass at low levels for safe take-offs and landings (Freeman 2005; Koontz 2005; Warren 1995).

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 7	Page5	Grand Canyon Airport Historic District
Section/_	rage	
		name of property
		Coconino, Arizona
		county and State

The more northern of the two airstrips was oriented northeast/southwest and was originally 4000 ft long. By the end of the historic period (1956), it was extended to its current length of 5500 ft. The southern airstrip was oriented northwest/southeast and was 3800 ft long, a length it retains today. A 1964 Jeppesen Airway Manual indicates that the northern and southern airstrips bore the designations of 2L/20R and 11/29, respectively (Freeman 2005; Jeppesen 1964; U.S. Geological Survey 1956).

Historical photographs, archives, and knowledgeable individuals indicate that the airstrips accommodated many types of aircraft during the historic period. Such craft included the B1 Mahoney Ryan, Bach-3, Boeing F4B Tomcat, DC3, Ford Tri-Motor, Grumman F3F-2, Lincoln Standard, Monocoup, Orion, Stearman, Stinson (Detroiter), Stinson Tri-Motor, Travel Air 4000, Travel Air 6000A, Vega, and Waco (Koontz 2005; Larkins 2005; Ryan Aircraft 2005; Zukowski 1996). Aircraft were not necessarily confined to the airstrips; the open terrain made it possible for planes to land "all-fields" (in any direction) within the meadow, depending on weather conditions and pilot discretion (Koontz 2005).

During the late 1950s and early 1960s (after the period of significance) two additional dirt airstrips were constructed—again, by leveling the land with earth-moving equipment. Both are visible on a 1961 aerial photograph and are described in the 1964 Jeppesen manual. Airstrip 2R/20L, measuring 5400 ft long, was oriented northeast-southwest. Airstrip 1/19 was oriented north/northeast to south/southwest and was 9100 ft in length. Neither of the new structures adversely impacted or functionally replaced the older airstrips. The 5400-ft strip paralleled and did not touch 2L/20R. The 9100-ft strip intersected 2L/20R and 11/29 at two points but did not diminish their integrity. The district boundary does not encompass the 5400-ft and 9100-ft airstrips because they are non-contributing (post-historic) structures and their inclusion would approximately double the acreage of the nominated property.

When the airport closed and became part of a ranch, the Forest Service in 1967 instructed the permittee-rancher (Gregg Gibbons) to rehabilitate the land by disking and planting the airstrips plus 500 acres of surrounding meadow. By 1972 the area had been disked and planted, as seen from disc rows discernible on aerial photographs. Gibbons also stated in 1984 correspondence to the Forest that he had disked and planted crested wheat on the airstrips and surrounding acreage (Russell 1966; Schroeder 2006).

Disking and planting did not fully return the airstrips to a natural state, as the Forest had hoped. On the contrary, the Gibbons family viewed the structures as amenities, and used the airstrips and a private plane to access their other ranches. Gregg Gibbons first flew into Red Butte by private aircraft in 1957 and last flew in around 2003 (personal communication, T. Avery to P. Stein, 2006).

Today the two historic airstrips and the two more modern ones are readily apparent from the air, although not from the ground. They are overgrown with sage and grasses, and are not maintained. Prairie dogs have colonized the meadow, dotting the airstrips with burrows. Nonetheless, the aerodrome can accommodate emergency landings for many types of aircraft. Private pilots have landed small fixed-wing aircraft as recently as February 2005, and a commercial helicopter company continues to practice touch-and-go landings almost

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page <u>6</u>	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

daily, without mishap. The two historic airstrips qualify as district contributors because they are visible from the air, they maintain their historic characteristics (length, alignment, material), and they are still functional.

The Cistern (Contributing Structure) (Photo 4, to left)

Located two feet behind the hangar is a detached cistern. Its exact date of construction is unknown, although the structure is clearly depicted on photographs dating from the 1930s. Via an efficient network of gutters and pipes, the cistern captured and stored rooftop runoff from the hangar, thus helping the airport meet its water needs.

The structure has a rectangular plan measuring 12 ft by 22 ft with a north-south orientation. Walls are of local sandstone laid in a random ashlar pattern with concrete mortar. The gabled roof stands about 8 ft tall at the ridgeline. Gable ends and roof are covered with corrugated sheet metal. Markings on the sheet metal indicate that it is "28 Gauge," and made or supplied by "Globe" (perhaps the Globe Machinery & Supply Company of Des Moines). Two-foot-square hatches in the gable ends provide views to the water level within the cistern.

The structure appears unmodified from the historic period. It is in good condition and continues to impound runoff from the hangar. Between February and June of 2005, following a winter of moderate snowfall, the cistern was observed to be nearly full (Koontz 2005).

Bungalow-Style Duplex (Contributing Building) (Photo 6)

A duplex and a root cellar are the only surviving resources from what was historically the residential portion of the airport, a complex that also included the small but rustically elegant Grand Canyon Airport Lodge and two cabins. The cabins were removed between 1949 and 1953. The lodge burned in October 1994 (Schroeder 2006).

An inscription inside the duplex indicates that it was built by Bill Porter, B. D. (or R.D.) Chambers, Bill Lockridge, and Jack Williams in the summer of 1928. The first-named individual was probably William S. Porter, operator of a lumber and contracting business in northern Arizona from 1923 to 1929 (Lewis Historical Publishing Company 1958). Chambers and Lockridge have not been identified. The last-named individual was probably Jack Miller Williams, an airport employee and photographer who worked at the Red Butte facility in the late 1920s.

The duplex is a one-story, woodframe bungalow measuring 32 ft by 36 ft with a 7 ft by 28 ft front porch. The building has a sandstone and concrete foundation; clapboard siding; sandstone fireplaces and chimneys laid in a random ashlar pattern; and a low-pitched, front-gabled roof. Its most striking feature is its rigidly symmetrical massing. The principal (east) elevation features two central, five-panel doors flanked by paired, double-hung, one-over-one windows. The porch has a stone and pole foundation, wooden deck, rustic pole columns and railings, and a gabled roof. The gable end of the porch is vented, with a balconette railing across the front of the vent.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page7	Grand Canyon Airport Historic District
	<u> </u>	name of property
		Coconino, Arizona
		county and State
		•

The interior of the duplex is divided longitudinally into mirror-image north and south quarters. Each quarters contains a living room (with fireplace) at its east end, a kitchen in the middle, and a bedroom (with small closet and bathroom) at its west end. Interior details include coffered ceilings in the living rooms, five-panel doors, built-in kitchen and living room shelving, and pine (or fir) flooring

The original function of the duplex was to provide living quarters for airport staff. After 1966, the building housed ranch employees. The latter group added a 6 ft by 9 ft mud room outside the north kitchen door, erected an 8 ft by 16 ft screened porch at the south kitchen door, and carved dozens of ranch brands above the mantle of one fireplace. The present owners (Red Butte Airpark Restoration LLC) found the building in very poor condition in 2005. A leaking roof had accelerated inner decay, causing some of the ceiling and wallboard to fall. The owners made the building more weather-tight by replacing three layers of deteriorated rolled roofing with one new layer. They also cleared the interior of fallen debris, vagrants' trash, and rodent middens.

Today the overall condition of the building remains poor. However, the historic integrity remains high. Major exterior character-defining elements, with the exception of the original roofing material, are intact. The post-historic mud room and screened porch have not compromised the historic integrity to any significant degree. Also, enough of the original interior fabric remains in place to guide future restoration/rehabilitation efforts.

Root Cellar (Contributing Building) (Photo 7)

Like the duplex, the root cellar is a surviving remnant of the residential area of the airport. The root cellar is located about 125 ft northwest of the duplex. The semi-subterranean building stands about 6 ft above and 4 ft below ground. Its rectangular footprint measures 17.5 ft by 19 ft with an east-west orientation. The floor is earthen, the walls are of dry-laid tabular sandstone, and the roof is of unpeeled juniper poles overlain with soil. A single, centrally-placed juniper log supports the gabled roof; traces of stucco adhere to the eastern gable end. Five concrete steps and a wooden-plank bulkhead door on the east side lead down to a five-panel door, which, in turn, provides access to the cellar. Inside, wooden shelving units line the north and south walls.

Although its exact date of construction is unknown, the root cellar clearly appears in photographs dating from the 1930s. It functioned as a cold-storage chamber for perishables consumed in the lodge, duplex, and cabins. Despite its rather primitive appearance, the root cellar was wired for electricity. Electricity to this building and others at the airport was supplied by an on-site diesel generator (no longer present).

The root cellar is in good condition and retains high integrity, closely reflecting its historical appearance. The building remains a strong contributor to the district.

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page8	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State
		•

Barn with Attached Corral (Non-Contributing Building) (Photo 8)

West of the hangar and cistern lies a small, rectangular barn with attached livestock corral. These features were constructed after the facility became a ranch in 1967 and remained in use until the ranching permit ended in 2004 (Koontz 2005).

The one-story barn has a footprint measuring about 14 ft by 46 ft with an east-west orientation. The foundation consists of concrete blocks (inscribed "A&A Trailer") and railroad ties. The floor is earthen, walls are of woodframe construction, and the roof is gabled. The siding and roofing incorporate burned lumber and discarded sheet metal from buildings and sheds that were formerly present at the airport. The sheet metal siding on the eastern end of the building is relatively new and is stamped "TAIWAN." The attached corral is constructed of juniper posts, lumber, and wire. A circular pen at the corral's southeast end is made of upright, unpeeled juniper poles attached to a milled wood and wire frame.

The barn with corral is in good, usable condition. It does not contribute to the district because its construction post-dates the period of significance (1927-1956).

Entrance Sign Structure (Contributing Structure/Discontiguous Element) (PHOTO 9)

This resource is the one discontiguous element of the district, being situated approximately 2.6 miles west of the airport proper. Its function was to alert motorists to the point where they were to turn off the highway and proceed over existing Forest Service Roads 305 and 329 before arriving at the remote air facility. The structure was built in March, 1934, by Grand Canyon Air Lines pilot Irving Kravitz and stonemason Tom Gordon (Koontz 2005; Kaibab National Forest var.).

The structure is 12 ft long, 9.5 ft wide, and 14 ft tall. Its sandstone walls are laid in a random ashlar pattern with concrete mortar. A 10-ft long wooden pole, projecting from the structure at a height of 12 ft, once bore signage indicating the direction to the airport. The sign was removed after the airport closed, and half of it currently lies in the airport hangar. Benches are built into two exterior walls. A small doorway in the southeast elevation and a small window in the northwest one suggest that the entrance sign structure may also have served as a ticket booth, although there is no direct historical evidence that it was used in that manner. More likely, the structure provided airport motorists with a temporary shelter in which to escape the wind or wait out a storm. Despite the removal of its historic signage, the substantial structure possesses good integrity and contributes to the district.

INTEGRITY

The principal components of the Grand Canyon Airport at Red Butte during the historic era were a ticket house, hangar, two airstrips, cistern, duplex, root cellar, lodge, two cabins, and an entrance sign structure. The cabins were removed between 1949 and 1953, the ticket house was demolished between 1967 and 1972, and

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page9	Grand Canyon Airport Historic District
	•	name of property
		Coconino, Arizona
		county and State
		·

the lodge burned in 1994 (Schroeder 2006). The remaining resources—i.e., the hangar, airstrips, cistern, duplex, root cellar, and entrance sign structure—still convey a strong sense of the aerodrome's design and plan. Even the casual visitor can detect that the open meadow was the airfield, the hangar was the dominant building, and the residential area was tucked inconspicuously in a forested pocket away from the noise and hubbub of the hangar. The one non-contributing resource—the barn with attached corral—does not constitute a notable intrusion within the district.

The location of the airport is unchanged. The facility is as rural today as it was during the historic era; thus, the district retains strong integrity of setting and feeling. The modern conversion of the property from an airport to a ranch resulted in a series of modifications affecting materials and workmanship, but such changes were generally confined to the interior of the hangar and duplex. One exception was the re-roofing of the duplex with new rolled roofing, an intervention taken within the past two years to stabilize the resource and prevent further deterioration. The cistern and root cellar remain virtually unchanged from historic times and are strong contributors to the district. The substantial entrance sign structure now lacks its signage, but is otherwise unchanged and still contributes to the district. The exterior materials and workmanship of the hangar and duplex retain sufficient integrity to qualify those buildings as contributing resources.

The disking and planting of the airstrips and surrounding meadow after 1967 were intended to return the land to a natural (i.e., pre-airport) state. Such actions were not successful in eradicating the airstrips of the historic airport. The two structures qualify as contributors because they are still visible from the air, they maintain their historic characteristics (length, alignment, material), and they are still functional.

The integrity quality of association diminished when the resource closed as an airport. However, the facility has served as an unofficial aircraft facility since that time. The 1967-2004 permittee used it for flying to and from his other ranches; the field can still accommodate a variety of aircraft for emergency landings; a helicopter company frequently practices touch-and-go landings there; and small, fixed-wing aircraft still occasionally use the property.

When the airport served as a ranch from 1967 to 2004, the rancher moved a trailer, above-ground storage tanks, and farming equipment onto the property. Those features were removed once the grazing lease ended. The result is that the district now more strongly conveys its historic appearance than it has for the past forty years.

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section7	Page10	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

LIST OF CONTRIBUTING AND NON-CONTRIBUTING RESOURCES (keyed to district sketch map)

1. Hangar (contributing building)

- 7. Barn with corral (non-contributing building)
- 2. NE-SW Airstrip (contributing structure)
- 3. NW-SE Airstrip (contributing structure
- 4. Cistern (contributing structure)
- 5. Bungalow-style duplex (contributing building)
- 6. Root cellar (contributing building)

Not shown on the district sketch map is the entrance sign structure, a contributing structure that lies approximately 2.6 west of the airport, near U.S. Highway 180. The entrance sign structure is the resource that makes this property a discontiguous district.

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8	Page11	Grand Canyon Airport Historic District
		name of property
		Coconino, Arizona
		county and State
		•

SECTION 8: STATEMENT OF SIGNIFICANCE

SUMMARY

Grand Canyon Airport Historic District is significant under Criterion A for its role in promoting and facilitating air tourism to Grand Canyon. It was the home of the first aerial sightseeing company that served the national park. For forty years the facility provided travel amenities that included not only mechanical and refueling services but also meals and lodging. The district's main building, the hangar, possesses additional significance under Criterion C as the work of a master aeronautical engineer, B. Russell Shaw. The period of significance begins in 1927 with the construction of the airport and ends in 1956, signifying the property's continuing importance through the end of the historic period. The latter date also marks the year when the airport staged the recovery effort for a mid-air collision that shaped the nation's modern air traffic control system.

SIGNIFICANCE UNDER CRITERION A

The earliest organized effort to develop air tourism to Grand Canyon occurred in 1925 when Bob Hausler, a former army pilot, criss-crossed northern Arizona to promote Tri-State Airways, a private carrier. Hausler's plan involved picking up railroad passengers in Winslow and Kingman, Arizona, and flying them over the national park. The scheme quickly failed for lack of investors (Warren 1995).

Although unsuccessful, Hausler's effort stimulated others to consider the possibilities of commercial aviation at the canyon. Among them were brothers Emery and Ellsworth Kolb — photographers, river explorers, and owners of a popular curio shop on the South Rim. In 1925 Emery applied for and received permission from the Forest Service to build an airfield just outside the park boundary. Emery cleared an airstrip in an open meadow and waited for the hum of aircraft. When a year passed and no planes landed, he convinced Charley Mayse of Tucson to give the facility a try. Mayse landed and took off in June 1926, pronouncing the airstrip short but in good condition. That event was one of only two occasions on which Kolb's field was ever used (Reinhold 1982; Warren 1995).

Undaunted by indifference toward his airfield, Emery Kolb suggested a joint venture to William Stout. Stout was, in the words of one aviation historian, "perhaps the most self-publicized aviation manufacturer of the 1920s" (Warren 1995:157). Stout had worked for Henry Ford prior to forming the Stout Metal Airplane Company in the 1920s, and designed what would later become the Ford Tri-Motor passenger aircraft (Koontz 2005).

Kolb's correspondence arrived just when Stout was preoccupied with selling his manufacturing business to Ford and starting his own airline company, and so he instructed his chief pilot to investigate the Arizona proposal. The pilot, J. Parker Van Zandt, flew to the Southwest in the summer of 1926, conferred with aviation colleagues, studied air conditions at the canyon, met with Kolb, and talked to officials from Kolb's competitor, the Fred Harvey Company (Reinhold 1982; Warren 1995).

NPS Form 10-900-a (8-86) OMB No. 1024-0018

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8	Page12	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State
		county and State

As negotiations with Kolb faltered, Van Zandt developed a different plan. He formed a syndicate that incorporated an airline called Scenic Airways. Scenic's investors included Bill Stout, Hall Roosevelt (younger brother of Eleanor Roosevelt), and Charles Boettcher II (a wealthy Colorado aviator), among others (Cook 1992; Koontz 2005; Warren 1995).

Scenic Airways in 1927 obtained permission from the Forest Service to develop an airfield south of the national park. The setting—a large meadow north of Red Butte—was idyllic. The cost to develop the meadow into an airfield would be minimal. Although the site did have limitations, being 12 miles from Grand Canyon Village and not easily accessible from either the Grand Canyon Railroad or the state highway, work proceeded on the new "Grand Canyon Airport" (Reinhold 1982).

By the fall of 1927 the facility had its first airstrip in place and a hangar under construction. On October 3rd of that year, before the airport was completed, Van Zandt flew Scenic's first sightseeing flight over the canyon. His passengers were three Fred Harvey officials (Van Zandt 1978).

A mishap occurred before the airport's official opening. In late 1927, a cast and crew from the Pathe Bray Motion Picture Company was said to be lost in Glen Canyon, northeast of the national park (the rumor later proved to be a publicity stunt). The government sent a military plane to join in the search effort. The aircraft landed at Grand Canyon Airport to refuel, but crashed upon takeoff in trees adjacent to the strip. Fortunately, there were no fatalities (Suran 1991).

Despite the inauspicious start, the airport opened on schedule in the spring of 1928. In March, Van Zandt announced to stockholders that the facility was completed; its fully modern hangar--with workshops, lounges and office--awaited business. Scenic Airways flew its first paying sightseers over the Grand Canyon in April 1928. A month later the company placed its first Ford Tri-Motor in service. Expansion continued during the summer of 1928 with the addition of a duplex, lodge, and cabins offering meals and overnight accommodations to airport staff, flight crews, and visitors. Red Butte was one of the first airports in the state to offer such a broad range of travel services (Freeman 2005; Koontz 2005; Reinhold 1982; Warren 1995).

Business was brisk. During the summer of 1928, chief pilot Carlyle LaMar Nelson logged more than 500 Scenic passenger flights plus numerous exploratory, photographic, and charter flights. Among his passengers were humorist Will Rogers and son, who flew the length of the canyon on a return flight from a Hopi Snake Dance. Private planes, some with famous pilots, also used the airport. Arctic explorer and aviator Lincoln Ellsworth visited the airfield and canyon in December of 1927, and Charles Lindbergh touched down on April 20, 1928, while scouting airports for a transcontinental route (Kintner 1928; Koontz 2005; Reinhold 1982; Williams News 1928).

In addition to serving tourists and aviators, the airport occasionally helped the Forest Service achieve resource management goals. By the late 1920s the Kaibab National Forest north of the canyon had become overpopulated with deer. The Forest Service captured eight fawns, airlifted them to Red Butte, and released

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8 Pa	nge <u>13</u>	Grand Canyon Airport Historic District
	-	name of property
		Coconino, Arizona
		county and State
		ب ب ب ب ب ب ب ب ب ب ب ب ب ب ب ب ب ب ب

them in an effort to revive their numbers there. The transplant was so successful that some of the progeny were taken back to the North Rim some 15 years later--this time by truck (Reinhold 1982).

Scenic Airways' early success at Grand Canyon allowed the company to expand. In November 1928, the airline began constructing a winter headquarters and "dude flight school" in Phoenix. That facility opened in 1929 as Sky Harbor Airport. In the same year, the airline cleared a strip on the North Rim at VT Park and began offering transcanyon flights. Impressed by the fact that Scenic had safely served 7,200 passengers since its inception, Park Superintendent M. R. Tillotson in 1929 agreed to a contract between the carrier and the Fred Harvey Company, whereby business was solicited and flights sold from the park's El Tovar and Bright Angel lodges (Anderson 2000; Reinhold 1982; Warren 1995).

Scenic Airways became a casualty of the Great Depression; however, Grand Canyon Airport survived. The lovely meadow with its nearly-new facilities offered an irresistible temptation to aviator Jack Thornburg. With funding mainly from Ray Schaf, Thornburg purchased the Red Butte facility and formed Grand Canyon Air Lines. On May 6, 1931, he took his first sightseers aloft. Demand for the aerial tours was soon strong enough that the company needed a plane larger than its single-engine Stinson. Glover "Roxy" Ruckstell, a racecardriver-turned-aviator, came to the rescue with enough capital to purchase a Ford Tri-Motor (Reinhold 1982; Warren 1995).

Ruckstell took an active role in managing the company and airport. When Winslow-based Navajo Airways began promoting sightseeing flights to Grand Canyon in 1931, Ruckstell offered the two Park Service concessionaires—Fred Harvey on the South Rim and Utah Parks Company on the North Rim—a commission in exchange for an exclusive right to provide air transport in the park. Approved by Superintendent Tillotson, the arrangement gave Grand Canyon Air Lines a virtual monopoly in that market (Warren 1995).

Grand Canyon Air Lines attracted the nation's best aviation talent. A memorable event at Red Butte during the Ruckstell era was Amelia Earhart Putnam's visit in September of 1935. The renowned aviatrix stayed a few days so that Ernest Eugene Tissot, Sr., Chief Mechanic for Grand Canyon Air Lines, could tune her Lockheed Vega for what would be a record-breaking cross-country flight. Considered one of the finest aircraft mechanics in America, Tissot had previously worked with Earhart during her solo Hawaii-to-Oakland flight, and had also worked for Charles Lindbergh (Koontz 2005; Warren 1994).

Roxy Ruckstell used his Grand Canyon contacts in 1935 to secure the Park Service concession for air service to Hoover Dam and Lake Mead. Expansion to the Nevada market meant that the airline needed more planes. Ruckstell negotiated with Jack Frye of Transcontinental & Western Air to take on used T&WA Ford Tri-Motors at bargain prices. The deal not only gained Ruckstell the support and cooperation of the larger airline, but also neutralized T&WA as a potential competitor (Warren 1995).

The addition of aircraft, personnel, new routes, and an airport at Boulder City, Nevada, caused Grand Canyon Air Lines to spiral into debt. By the end of 1937 Ruckstell disposed of his Tri-Motors and sought a new owner for the Red Butte and Boulder City fields. He convinced Walter Douglas, Jr., the new owner of G&G Airlines

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8	Page14	Grand Canyon Airport Historic District name of property Coconino, Arizona
		county and State

(formerly owned by Douglas's godmother, Congresswoman Isabella Greenway), to take over the facilities. In the spring of 1938, Douglas formed Grand Canyon *Airlines* (one word), a subsidiary of G&G, to operate in northern Arizona and Nevada (Koontz 2005; Reinhold 1982; Warren 1995).

The Red Butte operation initially did not meet Douglas's expectations. Personnel problems and bureaucratic snarls caused inefficiencies that translated into debt. Tapping his family's considerable wealth, Douglas propped up the operation, restructured it, and had it running smoothly by the time the United States entered World War II (Warren 1995).

The airport experienced an interruption of commercial and private use during the war, when the government took over airports as a security precaution. Civilian flying at Grand Canyon Airport resumed in 1946. The airport faced new challenges in the post-war era. The end of the war unleashed a surplus of pilots, some of whom went into competition with Grand Canyon Airlines. In 1948, former military pilot Jim Fanscher started offering "Scenic Skyways" air tours to the canyon from a surplus army airfield at Valle, 13 miles south of the Red Butte facility. In 1950, Edwin J. Montgomery offered scenic helicopter flights from Tusayan, a mile south of the park boundary (Anderson 2000; Reinhold 1982; Warren 1995).

Disheartened and in failing health, Walt Douglas leased his canyon sightseeing business and Red Butte airport to Hudgins Brothers in 1951. The four brothers systematically eliminated their competition until, by 1956, they were the only air tour business operating at the Grand Canyon. They bought out Walt Douglas and incorporated a new Grand Canyon Airlines, which remains in business today (Warren 1995).

The Grand Canyon Airport at Red Butte continued to promote and facilitate aerial sightseeing to the canyon through the end of the historic period. At the close of that era, the airport played a role in an aviation disaster. On June 30, 1956, a United Airlines DC-7 and a Trans World Airlines Super Constellation collided over the canyon en route from Los Angeles to Chicago. Aviation historians believe that the collision occurred because the pilots flew through and around cloudbanks to give passengers a better view of the canyon. The incident was the most fatal airline disaster of its day, leaving 128 dead and no survivors. Red Butte airport served as the staging area for the recovery effort (Hanson and Weintraub 2005; Muller 2006; Reinhold 1982).

Repercussions from the crash were felt throughout the airline industry. Public uproar resulted in passage of the Federal Aviation Act, establishment of the Federal Aviation Administration, tighter regulation of America's air space, and commercial use of cockpit voice recorders ("black boxes"). Arizona meanwhile initiated an ambitious program to build fifty state-owned airports equipped with state-of-the-art technology (Muller 2006; Reinhold 1982).

Arizona chose Tusayan to be the site of the new Grand Canyon Airport. Construction began in 1964 and ended two years later. The new airport rendered the old one obsolete; the Red Butte facility closed by the end of 1967. From 1967 to 2004 the old airport became part of the Ten-X Ranch (see Section 7) (Reinhold 1982; Warren 1995).

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8	Page15	F	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State
			•

Activities at Tusayan opened the floodgates of aerial sightseeing at Grand Canyon. The Red Butte airport had annually facilitated hundreds of flights carrying only a few thousand passengers each year. By comparison, more than 80,000 flights per year—10,000 per month during summer—carried 750,000 passengers on 30- to 60-minute tours by the year 2000, making Grand Canyon "the most overflown national park in the world" (Anderson 2000:76). Air tourism became one of the most heated and complex controversies confronting park managers in modern times. Grand Canyon Airport Historic District is significant under Criterion A as the place where air tourism to the national park began and where it gained a foothold.

SIGNIFICANCE UNDER CRITERION C

The district's hangar possesses additional significance under Criterion C as the work of a master aeronautical engineer, Benson Russell Shaw (1894-1961), known in aviation circles as B. Russell Shaw. The Ohio native began constructing airplanes at the age of 15, taught himself to fly at age 16, and flew in air shows while still in his 'teens. He honed his aeronautical skills by working for the Wright Brothers Company in 1916-1917, first as draughtsman and later as head of its Engineering Department. While employed for the Wright-Martin Aircraft Corporation, he supervised the completion of the Franco-British Flying Boat that won the Aero Club Cup in 1917 (Who's Who in American Aeronautics 1925).

A graduate of Marquette University, the engineer turned his attention toward airport design during World War I. In 1918-1919 he served as Final Design Engineer for McCook Field, an experimental facility near Dayton. In the latter year, he opened his own consulting office in New York City. His major contracts included serving as Consulting Engineer to the Lawson Airplane Company and to the Japanese Imperial Navy. Stints as Technical Supervisor for air races in Detroit, St. Louis, Miami, Dayton, and Baltimore during the mid 1920s enhanced his reputation as a well-rounded aviation expert (Washington Star 1961; Who's Who in American Aeronautics 1925).

After completing the Grand Canyon Airport hangar in the spring of 1928, Shaw undertook two additional Arizona assignments. In 1928 he designed hangars and a small terminal for Koch Field, Flagstaff's municipal airport. Later that year he drew plans for Phoenix Sky Harbor, the summer headquarters for Scenic Airways. Nationally, his largest project involved the redesign of Lambert Field when it was converted to St. Louis Municipal Airport in the late 1920s (Reinhold 1982; Washington Star 1961).

Few of Shaw's works have survived. McCook Field was discontinued as an airport in 1927; its airfield and buildings were eventually replaced by a housing development (Parkside Homes) and a recreational/sports facility (Kettering Field). The Koch Field airport no longer exists; its site is now part of the Flagstaff suburb called Doney Park. The St. Louis and Phoenix facilities are still important airports, but expansion and remodeling at them have obliterated traces of Shaw's designs.

The Grand Canyon Airport hangar at Red Butte is the only known example of Shaw's work that has survived in Arizona. The Red Butte hangar also may be one of only two 1920s hangars remaining in the state. The other

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 8	Page16	Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

example was constructed in 1929 for Transcontinental Air Transport in Winslow. The Winslow hangar differs from the Red Butte one in form and materials, and there is no evidence that Shaw was involved in its design or construction (Gray 1997; Jones 1997; Koontz 2005; Pellegreno 1980; Weintraub and Hanson 2005).

NPS Form 10-900-a (8-86) OMB No. 1024-0018

United States Department of the Interior

National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 9	Page <u>17</u>	Grand Canyon Airport Historic District
	•	name of property
		Coconino, Arizona
		county and State

SECTION 9: MAJOR BIBLIOGRAPHICAL REFERENCES

Anderson, Michael F.

2000 Polishing the Jewel: An Administrative History of Grand Canyon National Park. Grand Canyon Association, Grand Canyon, AZ.

Asbury, Frank

1994 Yours Sincerely: A Biography of Jack Williams. H.T. Press, Phoenix.

Coconino Sun (Flagstaff, AZ)

1928a "Flagstaff Aero Club Is Organizing for Ground Work and May Buy Ship." January 13, section one, page 1. 1928b "St. Louis To Have Air Port Lindbergh Used." January 27, section one, page 3.

Cook, Blanche

1992 Eleanor Roosevelt: Volume One 1884-1933. Viking Press, New York.

Freeman, Paul

2005 Abandoned and Little Known Airfields: Northern Arizona. www.airfields-freeman.com/AZ/Airfields AZ.

Grand Canyon Airlines

2004 Our Historic Picture Gallery. www.grandcanyonairlines.com/gca.

Gray, Carroll F.

1997 Master List of Aeroplane Exhibitions (July 1909 to November 1915). Unpublished manuscript located in private collection of Carroll F. Gray, Encino, CA.

Huffman, Jim

1988 FLEX/Old Grand Canyon Airport Archaeological Survey, Coconino County, Arizona. Northern Arizona University Archaeological Report No. 1024, Flagstaff, AZ.

Jeppesen, Inc.

1964 Jeppesen Airways Manual, Grand Canyon Airport, 1964. Jeppesen Company.

Jones, Michael D.

1997 Desert Wings: A History of Phoenix Sky Harbor International Airport. Jetblast Publications, Tempe, AZ.

Kaibab National Forest

var Red Butte/Grand Canyon Airport file. Heritage Resource Section, Supervisor's Office, Kaibab National Forest, Williams, AZ.

Kintner, Mrs. J. E.

1928 "By Air from Grand Canyon to Phoenix and Los Angeles." Coconino Sun, January 6, page 8.

Koontz, Giacinta Bradley

2005 *Draft* National Register nomination for Grand Canyon Airport. Copy on file, Arizona Preservation Consultants, Flagstaff, AZ.

United States Department of the Interior

National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 9	Page18	Grand Canyon Airport Historic District	
		name of property	
		Coconino, Arizona	
		county and State	
		·	

Larkins, William T.

2005 The Planes of the San Francisco Airdrome 1931-1940. *American Aviation Historical Society Journal*, 3/18/2005, www.Aerofiles.com.

Lewis Historical Publishing Company

1958 History of Arizona: Volume III, Family and Personal History. Lewis Historical Publishing Company, Inc., New York.

Muller, Seth

2006 Lessons from a Tragedy: The 50th Anniversary of the Big Canyon Crash. *Mountain Living Magazine*, June, pages 18-21.

Pellegreno, Ann

1980 lowa Takes to the Air, Volume One, 1845-1918. Aerodrome Press, Story City, IO.

Ryan Aircraft

2005 www.pilotfriend.com/aircraft.

Reinhold, Ruth

1982 Sky Pioneering: Arizona in Aviation History. The University of Arizona Press, Tucson, AZ.

Russell, John W.

1966 Untitled map showing Grand Canyon Airlines special use area to be plowed and seeded. Copy on file, Heritage Resources Section, Supervisor's Office, Kaibab National Forest, Williams, AZ.

Schroeder, Melissa R.

2006 Kaibab National Forest comments on Giacinta Bradley Koontz' draft National Register nomination for the Grand Canyon Airport. Copy on file, Arizona Preservation Consultants, Flagstaff, AZ.

Suran, William C.

1991 With the Wings of an Angel: A Biography of Ellsworth and Emery Kolb, Photographers of Grand Canyon.

Manuscript on file, Special Collections and Archives, Cline Library, Northern Arizona University, Flagstaff, AZ.

U. S. Geological Survey

1956 Red Butte SE, Ariz. 7.5' topographic map. USGS, Denver.

Van Zandt, J. Parker

1978 Letter to Jerry Terstiege, General Manager, Grand Canyon Airlines, dated April 24. Reproduced at www.grandcanyonairlines.com/gca.

Warren, Ronald L.

- 1994 Amelia Earhart and Grand Canyon. *O'Pioneer*, the newsletter of the Grand Canyon Pioneer Society, Vol. 5, No. 8, August, pages 3-4.
- 1995 Aviation at Grand Canyon: A 75-Year History. The Journal of Arizona History, Vol. 36, No. 2, pages 151-172, Summer.

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 9 Page 19	Grand Canyon Airport Historic District name of property Coconino, Arizona	
	county and State	

Washington Star

1961 Obituary for Benson Shaw, Pioneer Airport Builder, Banker. www.earlyaviators.com/eshaw.htm.

Weintraub, Neil S., and John A. Hanson

2005 Restoration of the Ten-X Ranch Headquarters Site, A Heritage Resources Report, Tusayan Ranger District, Kaibab National Forest, Arizona. Report 2005-06. Copy on file, Heritage Resources Section, Supervisor's Office, Kaibab National Forest, Williams, AZ.

Who's Who in American Aeronautics

1925 Entry for B. Russell Shaw, Consulting Aeronautical Engineer. Reproduced at www.earlyaviators.com/eshaw.htm.

Williams News (Williams, AZ)

1928 "Williams, Grand Canyon, Denver-Lindbergh Stops at Williams." April 20, page 1.

Zukowski, John (editor)

1996 Building for Air Travel: Architecture and Design for Commercial Aviation. Art Institute of Chicago.

Personal communication

Thad Avery to Pat Stein, July 17 and August 24, 2006, Flagstaff, AZ.

United States Department of the interior

National Park Service

NATIONAL REGISTER OF HISTORIC PLACES

CONTINUATION SHEET

Castian	Dhataa	Dage	20
Section	Photos	Page	20

Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

PHOTOGRAPHIC INFORMATION

The following information is the same for all 2006 black-and-white photos (Photos 1 through 9) accompanying this nomination:

- 1. Grand Canyon Airport Historic District
- 2. Coconino County, AZ
- 3. Pat H. Stein
- 4. July 2006
- 5. Arizona Preservation Consultants, 6786 Mariah Drive, Flagstaff, AZ 86004
- 6. View south/southeast, showing general setting with hangar in center, airfield to left, and Red Butte in distance
- PHOTO 1
- 6. View north, showing south elevation of hangar (contributing building)
- 7. PHOTO 2
- 6. View north/northwest, showing south and east elevations of hangar (contributing building)
- 7. PHOTO 3
- 6. View southeast, showing north and west elevations of hangar. The cistern (contributing structure) and a small shed are seen immediately behind the hangar. A corner of the non-contributing barn is to the extreme right.
- 7. PHOTO 4
- 6. View southwest, showing interior of hangar
- 7. **PHOTO 5**
- View northwest, showing the bungalow-style duplex (contributing building)
- 7. PHOTO 6
- 6. View northwest, showing the root cellar (contributing building)
- PHOTO 7
- 6. View north, showing the barn with attached corral (non-contributing building)
- PHOTO 8
- 6. View southeast, showing the Grand Canyon Airport entry sign structure (contributing structure)
- PHOTO 9

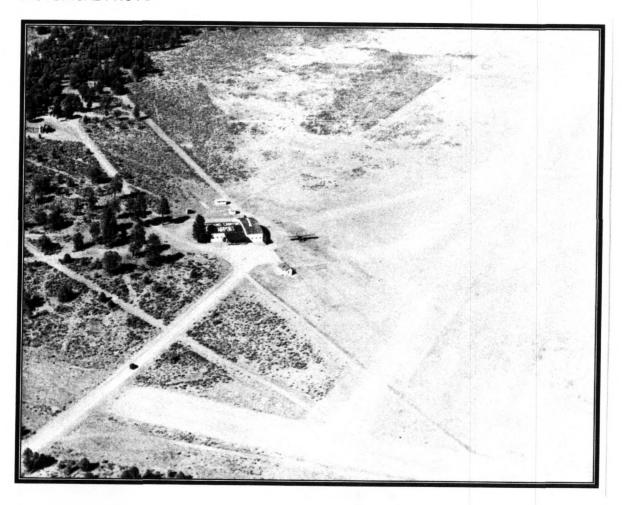
United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section Additional Documentation Page 21_

Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

HISTORICAL PHOTO



Grand Canyon Airport Historic District, Coconino County, AZ
Copy of historical photo showing aerial view of airport circa 1930
Photographer unknown. From the private collection of E. E. Tissot, Jr., Monterey, CA

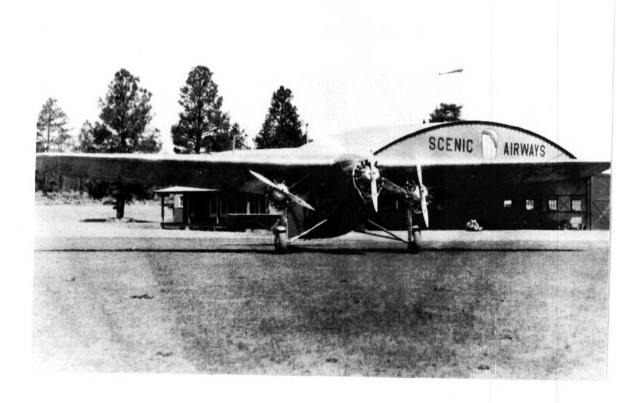
United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section Additional Documentation Page 22

Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

HISTORICAL PHOTO



Grand Canyon Airport Historic District, Coconino County, AZ
Copy of historical photo showing a Ford Tri-Motor at hangar circa 1928-1929; note "Scenic Airways" signage Photographer unknown. From the private collection of E. E. Tissot, Jr., Monterey, CA

NPS Form 10-900-a (8-86)

United States Department of the InteriorNational Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section Additional Documentation Page 23

Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

HISTORICAL PHOTO



Grand Canyon Airport Historic District, Coconino County, AZ
Copy of historical photo showing airport activity circa 1940 with "Grand Canyon Airlines" signage on hangar. A Grand Canyon Airlines Travel Air A-6000A is to right of hangar. An American Airways DC-3 is to left.

Photographer unknown. From the private collection of E. E. Tissot, Jr., Monterey, CA

NPS Form 10-900-a (8-86)

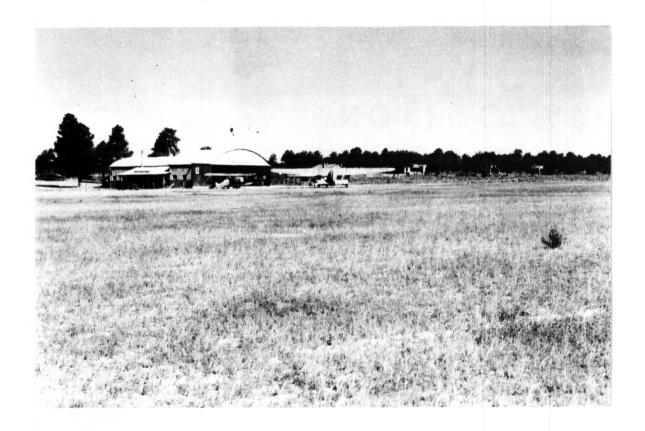
United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section Additional Documentation Page 24_

Grand Canyon Airport Historic District name of property Coconino, Arizona county and State

HISTORICAL PHOTO



Grand Canyon Airport Historic District, Coconino County, AZ
Copy of historical photo, circa 1932-1936, showing airfield (foreground), hangar (left of center), roof of duplex (above plane in center), lodge (to right of large plane), and two cabins (far right)
Photographer unknown. From the private collection of E. E. Tissot, Jr., Monterey, CA

