WINGTIPS

A QUARTERLY PUBLICATION
OF THE TEXAS DEPARTMENT
OF TRANSPORTATION
AVIATION DIVISION.

REBUILDING ROCKPORT 6

Texas Department of Transportation

SPRING 2018



DAVE'S **HANGAR**

Welcome aboard to new members of the TxDOT Aviation Division staff!

After a long period of being "short staffed" for a variety of reasons, we have recently hired seven new employees, bringing us back up to full staff. I'd like to take this opportunity to introduce you to our new employees.

In our Planning Section, the new employees are Elaine Alvardo, Amy Foster and Kaity Cromwell.

Elaine comes to us from Houston where she worked as a Planner for the TxDOT Houston District, overseeing planning studies for the Houston-Galveston Area Council. Amy Foster spent 16 years with TxDOT's Environmental Affairs Division serving as the Water Team and Stormwater Advisory Team Lead. Kaity Cromwell was born

and raised in the Dallas-Fort Worth Metroplex. Kaity has worked in public service since 2012 and has a background in transportation planning and community development.

In our Engineering Section, the new employees are Steve Harp and Eulalio "EJ" De Leon Jr.

Steve Harp recently joined the TxDOT Aviation Division following 14 years of service with the Texas Department of Insurance (TDI) Engineering Services Program. EJ comes to the Aviation Division as a Construction Inspector after working with the TxDOT Right-of-Way Division as an Outdoor Advertising Code Compliance Agent for the last 5 1/2 years.

In our Grants Management Section, the new employees are Bobby Hidrogo and Becky Vick.

Bobby started his career with TXDOT in the Public Transportation (PTN) Division in 2013. Last, but not least, welcome back, Becky Vick! For those who might not know Becky, she left us two years ago to take a job with Bastrop County where she lives. Now that she is back, she will be working with our grants program as well as again managing our annual aviation conference.

As we welcome new employees, we also say goodbye to two of our truly outstanding employees and friends, Ed Oshinski and Robert Jackson. It is not possible to put into words the contribution that EO has made to both us and the Texas General Aviation Airport System during his 28 years of service working for TxDOT. We will also soon be saying goodbye to Robert Jackson. our Environmental Expert and Planner. Not only has Robert been invaluable in steering us through the environmental challenges associated with airport development projects, but he has been an absolute joy to work with over the past five years and a trusty copilot on several trips to your airports. Ed and Robert, we wish you the best!



IN THIS ISSUE

O	Property International
1	Dave's Hangar

Silent Wings Museum Pays Homage to World War II Glider Program

Roadmap for the Future: Hale County Airport

5 Reaching Its Potential: Lamesa Municipal Airport

6 - 7Rebuilding Rockport

8 - 9 Hurricane Harvey Aftermath: TxDOT Rolls into Rockport

9 Grants Received

10 - 11 Texas Aviation Hall of Fame Names Class of 2018

11 80th Anniversary of the T-6 Texan to Be Celebrated in 2018

ON THE COVER: An aerial view of the Aransas County Airport terminal building (red roof) and the destroyed cinder block hangar, originally built in 1943. Vehicles were parked inside the hangar to protect them from Hurricane Harvey.



SILENT WINGS MUSEUM PAYS HOMAGE TO WORLD WAR II GLIDER PROGRAM

By Chris Sasser Texas A&M Transportation Institute

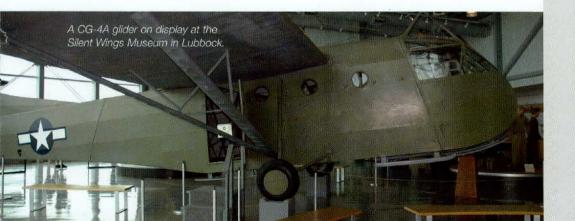
n 1971, former pilots of the U.S. Army Air Force's Glider Program banded together to form the National World War II Glider Pilots Association Inc. Their mission was to establish a forum for glider pilots to interact socially and to provide the framework for the preservation of the history of the U.S. glider program.

One of its first goals was to locate and restore a WACO CG-4A glider for public display. Several glider pilots in the Dallas area learned about a CG-4A glider sitting atop a tire store in Fresno, California. After World War II, the aircraft had been purchased as military surplus, placed on top of the building, and used as advertising. The association purchased the glider, and restoration was completed in time for the 1979 national reunion in Dallas. After the reunion, steps were taken to build a museum to house the CG-4A.

The first Silent Wings Museum opened to the public on Nov. 10, 1984, in Terrell, Texas. By 1997, the pilots realized that a more permanent museum home was needed. Lubbock, where a majority of the glider pilots had trained, offered to provide a new site for the museum. The pilots selected Lubbock as the new location, and the Terrell site closed in January 2001. In October 2002, the former South Plains Army Airfield site opened the new Silent Wings Museum in a building that served as the Lubbock airport terminal from 1949 until 1976. The restored CG-4A glider was a centerpiece of the exhibits.

The museum features a video presentation that provides background about the glider program and footage of gliders in action. And the facility itself is a treasure with its unique architectural design of the old terminal. One of the many highlights is the glass hangar that overlooks the view of the runways at Lubbock International Airport.

The Silent Wings Museum is open Tuesday through Saturday from 10 a.m. to 5 p.m., and Sunday from 1 p.m. to 5 p.m. The museum is closed on Mondays. For more information, visit: https://www.mylubbock.us/departmental-websites/departments/silent-wings-museum/home.



TXDOT AVIATION ADVISORY COMMITTEE

James Schwertner, Chairman (Austin)
Pete Huff, Vice Chairman (McKinney)
Mike Schnell, Member (Spearman)
Fred Underwood, Member (Lubbock)
John White, Member (Corpus Christi)
Shelly DeZevallos, Member (Houston)

AVIATION DIVISION LEADERS

David S. Fulton, Aviation Division Director david.fulton@txdot.gov

Jay Joseph, Deputy Director & Flight Services Director jay.joseph@txdot.gov

Kari Campbell, Director, Grants kari.campbell@txdot.gov

Eusebio Torres, Director, Engineering eusebio.torres@txdot.gov

Greg Miller, Director, Planning greg.miller@txdot.gov

MANAGING EDITOR

Chris Sasser
Texas A&M Transportation Institute
c-sasser@tamu.edu

DESIGN AND LAYOUT

Jason E. Hranicky
TxDOT Publishing and Design Services
Communications Division

PRINTED BY

TxDOT Print Services, Austin, TX Support Services Division

AVIATION DIVISION, TXDOT

125 E. 11th St.

Austin, Texas 78701-2483
512-416-4500 or 1-800-68-PILOT
FAX: 512-416-4510

www.txdot.gov/inside-txdot/
division/aviation.html

Copies of this publication have been deposited with the Texas State Library in compliance with the state Depository Law.

ROADMAP FOR THE FUTURE

Hale County Airport

By Chris Sasser Texas A&M Transportation Institute

ew airports can boast of a history as rich as Hale County airport (KPVW) in Plainview, Texas. Starting out life during World War II, the facility flourished as a military training base. When this airport's military mission came to a close, its civilian role began, and it has been serving the surrounding communities as a commercial and/or general aviation airport since 1946.

The airport no longer has commercial service, and the tower was decommissioned in the 1980s, but the role of the airport in the community is still as robust and vibrant as ever, and it has evolved to serve large business jets, turboprop aircraft, agricultural operations and other general aviation traffic that continues to use the facility.

"When Tim and Stacie (Hardage) acquired the existing FBOs and created Rocket Aviation, they became responsible for making this airport go," said airport board chairman and former Texas House Speaker Pete Laney. "We've always had great support from the city and county as well."

In 2011, the primary airport stakeholders recognized, as many airports in the state have, that a transition needed to be made from one generation's leaders to the next. To develop a roadmap for the future, work began on an airport master plan.

"Developing our master plan was one of the best things we've ever done," said airport manager Stacie Hardage. "It really gave us the focus to identify what needs to be done and then be able to check projects off the list."

One of the first initiatives the airport engaged in was to complete two paving projects. Other projects, which were completed in 2017, include:

- replacing the entire electrical system, including all airfield signage, with LED fixtures
- installation of a new primary and supplementary wind cones
- removal of the electrical vault from the old terminal building to a new concrete precast vault
- removal of existing drainage structures that fell within the safety area limits
- · installation of a new storm sewer system

Using recycled materials, the airport constructed a small perimeter road connecting the east and west ramps on either side of the primary runway, which allows fuel trucks to shuttle fuel to both sides of the airport without leaving airport property or crossing the airfield's protected surfaces. Finally, the airport worked with TxDOT to patch and restore the weathered runway to its original 6,000-foot length.

"I'm not sure the average person realizes how critical it is to the future of the community to have a quality airport," said Hale County Judge Bill Coleman. "Certainly in our city and county we understand. This airport is as much of a piece of the puzzle of economic development as anything else."



With the completion of the current projects, all the airport's paved surfaces are rehabilitated, re-marked, and ready to serve the flying public for years to come. The airport updates resulted in the airport being named the 2017 Most Improved General Aviation Airport at the Texas Aviation Conference in San Marcos last April.

"It's important to remember the role that TxDOT Aviation plays," said Plainview Mayor Wendell Dunlap. "I don't know what small communities in Texas would do without their assistance. They provide more than money; they provide leadership, and we have truly seen the benefits here."

REACHING ITS POTENTIAL

Lamesa Municipal Airport

By Chris Sasser Texas A&M Transportation Institute

t first glance, Lamesa, Texas, may not seem like a popular destination. Located 55 miles south of Lubbock, it is a bit out of the way by car. But by air, you couldn't pick a better location for refueling convenience, agricultural use and rangeland firefighting services. Thanks to motivated and experienced leadership, the airport is now starting to fulfill its potential to the community.

Rewind ten years when Lamesa Municipal Airport (2F5) was a dusty outpost with a couple of runways but little else in the way of supporting infrastructure.

"The runways were good, but that was about all the airport had going for it," said Mike Hughes, president of the Lamesa Municipal Airport Advisory Board. "The terminal building was not fit for use. There was no fuel and no courtesy car."

In stepped new airport manager John Farris, who was a county agent familiar with the grant process. He brainstormed with the airport board about what they could do to improve the airport. After upgrading the fuel system in 2010, they knew the terminal building was the next priority.

The airport teamed up with a local foundation to fund and construct a new 1,900 square-foot terminal building, which formally opened in early January 2016. The new terminal is fully equipped with a flight briefing room, an airport manager's office, and a waiting room with a conference table and furniture. There is also an attached two-car garage that stores the airport courtesy car and other airport equipment.

"Because of our location, we get a lot of traffic from people flying in to refuel," said airport board member and flight school operator Harold Holladay. "And sometimes they stay the night. Before we built the terminal building, that was never an option."

Recently, the airport was awarded a 75 percent state and 25 percent local grant to install an automated weather observing system (AWOS) that was commissioned in 2016.

The airport is now busy with activity, including flight training, and corporate and recreational flying operations. Among the airport's most important activities, aerial applicators provide critical support to agri-businesses in the region. The airport also supports area correctional facilities, law enforcement, and rangeland firefighting services.

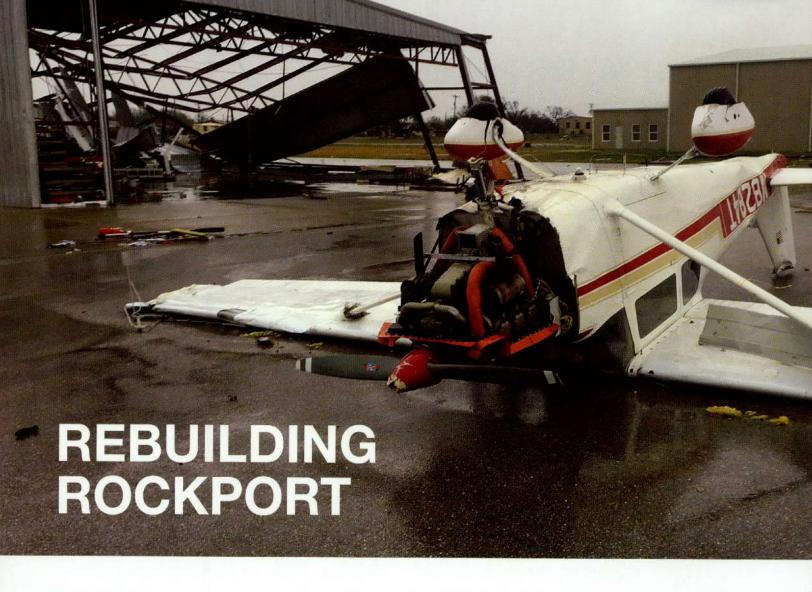
The new terminal building at Lamesa Municipal Airport. The 1,900 square-foot terminal building formally opened in early January 2016. PAL AIRPORT

The airport is set to undergo a major runway and taxiway rehabilitation project in the next year and installation of a precision approach

path indicator (PAPI) to runway 7-25.

All of these improvements resulted in the airport being named the 2017 Airport of the Year at the Texas Aviation Conference in San Marcos.

"Certainly it's a great honor to be named the airport of the year," said Farris. "The airport board remains focused to make the airport a priority and to work with the city, county, and state to make improvements where needed."



By Chris Sasser Texas A&M Transportation Institute

ugust 25, 2017, is a day that
Rockport, Texas, residents
will never forget. It was the
day Hurricane Harvey, a Category 4
hurricane, made landfall at peak intensity
at Rockport with winds of 130 mph,
becoming the first major hurricane to
make landfall in the United States since
Wilma in 2005.

A day earlier, Aransas County Airport manager and Air Force veteran Mike Geer studied the gathering storm clouds as he prepared to ride out the hurricane in the terminal building. A native of the Dallas area, Geer had spent summers vacationing in Rockport while growing up, but nothing could prepare him for what was to come.

"Harvey lulled us to sleep a little bit," explained Geer. "We weren't sure how strong it was going to be or where it was going to make landfall. By the time it intensified to the point where it was a major hurricane with the potential for a lot of destruction, it was too late."

Rockport is a tourist destination, and the majority of the hangar tenants at the airport were from out of town, making it a priority for Geer and his staff to visit every building to ensure everything was prepared for the storm.

"We were limited on staff, so things like installing the storm windows on the terminal building took two employees a full day," noted Geer. "We tried to secure a few portable buildings, but there was no chance for them to make it. Those

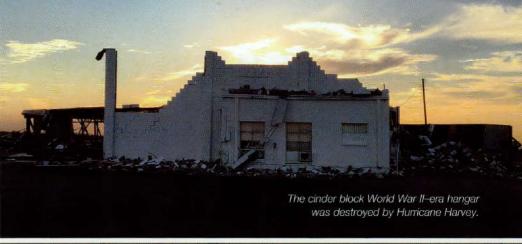
were hours wasted. We just didn't know, though; it was such a powerful storm."

Among the damaged buildings included an original 1943 airport hangar that collapsed at 9 p.m., and the storm did not officially arrive until 11 p.m.

Geer, a member of his staff, and a few family members spent hours huddled in the terminal building waiting out the massive storm.

"The last reading I saw on our ASOS (Automated Surface Observing System) was 143 mph with gusts of 160 mph before we lost it," noted Geer. "The building took the north wind pretty well, but when the eye passed and the winds shifted to the south, you could see the southern wall flex in and out. That's when we went to our 'hunker down' spot to a storage room in the center of the building."







The hurricane lasted all night. When it was over, Geer went outside to assess the damage.

"We woke up at 7 a.m. and were checked on by several local officials," said Geer. "Then everything came naturally. We knew we had to have a place where helicopters could safely land. Then we had to make our fuel system operational."

A few days after the storm struck, Matthew Heinze with the Texas Department of Transportation arrived with a crew to assist in the cleanup (see accompanying story on p. 8). With Heinze and his crews' assistance, they worked to clear the runways and taxiways of storm debris. Runway 18-36 was used for emergency response vehicles, while 14-32 reopened for fixed-wing use.

"It was all part of the plan we had in place," explained Geer. "We knew this was going to be an active hurricane season, so we planned that we could use our 'spare pavement' and land for the first responders to use. At one time we had over 1,200 people, which included emergency responders and utility workers, living at the airport."

In all, seven total structures were destroyed. An entire plane was lost that was later found mangled against a game fence on the other side of the airport. The airport also lost almost half of its T-hangar customers because the hangars or planes were no longer usable.

Geer was proud to have the airport as a staging area in the aftermath of the storm for the citizens of his community.

"It's the highest ground in the county," said Geer. "We did exactly what I wanted our airport to do during the days and months after the hurricane."

For Geer, who already had big shoes to fill taking over for long-time airport manager Gene Johnson in 2014, rebuilding the airport after this unprecedented disaster presents the challenge of his career.

"I've thought about this many times, and what if I had just one more day or even a few more hours, what would I have done?" said Geer. "I think that's the biggest lesson learned. I'll take action a lot sooner and in a lot more meaningful ways. We're going to learn from this event and move forward to have a better, stronger airport."

HURRICANE HARVEY AFTERMATH

TxDOT Rolls into Rockport

By Chris Sasser Texas A&M Transportation Institute

n the days following Hurricane Harvey, Texans from across the state stepped up to assist their neighbors on the coast. The Texas Department of Transportation (TxDOT) Austin District's Special Crews unit was part of the first responder team to arrive in Rockport following the devastating storm.

"Typically on emergency response, we're the first ones they call as we have experience with heavy equipment and have flexibility with our availability," explained crew supervisor Matthew Heinze. "We can gather our team together and leave at a moment's notice."

The team was tasked with going to San Antonio on Aug. 24, 2017, and staging there prior to landfall. Friday afternoon, Heinze received notification that the crew would be involved in a Department of Public Safety (DPS) Incident Reentry Assessment Team (IRAT), which was a first for TxDOT.

"The DPS leads this team under the Governor's direction, and it's the first team that goes in when the hurricane arrives," explains Heinze. "It consists of DPS, Texas Task Force 1, public utility officials from other cities, and an ambulance strike force team. The reason we were brought in was that in the event of road obstructions, we could clear the road with our equipment. We also had nearly 30 charter buses for civilian evacuation."

The next morning, the crew joined forces with the DPS team, forming a nearly mile-long convoy down to Rockport. Once there, the TxDOT crew cleared city streets, even opening a road so that a cell phone tower could be restored.

On the second day in Rockport, the TxDOT crew learned of the extensive damage at the airport and that airport staff needed help to get the airport reopened.

"When we got there, what we saw was total devastation," said Heinze. "The terminal was fine, but there were hangars down, doors were blown off, and planes were scattered everywhere. The old World War II cinder block hangar was leveled. We made contact with (airport manager) Mike Geer, and he gave us a punch list. We told Mike everything he needed to be done we could do, but I did ask a favor. And that was if our team could stay in the terminal. Of course, he agreed and gave us the pilot's lounge with a kitchen area. It was perfect, and we stayed there four days."

For these four days, Heinze and his crew assisted Geer and his staff by sweeping runways, recovering the fuel truck, which was trapped in a collapsed hangar, removing storm windows, and basically helping out with whatever needed to be done.



One story included the sweeping of runways with what Heinze referred to as the "procurement" of a TxDOT sweeper. According to Geer, they needed a sweeper, so Heinze left and then showed up with one. The team used the borrowed sweeper to clear the runway, and planes could land again.

"We were even pressed into RAMP services as well," laughed Heinze. "We are all aviation nuts, so however we could help out there, we were more than happy to."

"I couldn't have asked for better team players," said Geer.

"Once he (Heinze) saw the concern on my face that we needed this airport back open, he did whatever we needed."

GRANTS RECEIVED

Castroville Municipal Airport

\$400,000

Install a Jet A fuel system.

Lancaster Regional Airport

\$1,200,000

Design and construction of terminal building and new terminal auto parking with entrance road.

Franklin County Airport

\$490,000

Replace PLASI's with precision approach path indicator 2's Runway 13; replace rotating beacon and tower; replace medium intensity runway lights Runway 13-31; and install new guidance signs, new vault, and lighted windcone.

Aransas County Airport

\$882,300

Construct new hangar with office; and construct apron for new county hangar.

Littlefield Taylor Brown Municipal Airport

\$770,000

Rehabilitate and mark Runway 1-19 and Runway 13-31; rehabilitate taxiway A and B; overlay stub taxiway to Runway 1; rehabilitate apron; and reconstruct southern portion of apron.

Hillsboro Municipal Airport

\$515,950

Rehabilitate and mark runway, terminal area pavement, hangar access taxiways, terminal apron, taxiways, and run-up areas; construct hangar access taxiway south of apron area.

Eagle Lake Regional Airport

\$1,786,000

Rehabilitate and mark Runway 17-35; rehabilitate apron and taxiway; replace/repair culvert on north end of Runway 17; expand apron; construct/reconfigure south end connecting taxiway to Runway 35 new threshold; rehabilitate AG pad; rehabilitate hangar access taxiway; replace medium intensity runway lights/vault/relocate threshold/precision approach path indicator 2's Runway 17-35.

TEXAS AVIATION HALL OF FAME NAMES CLASS OF 2018

By General Aviation News

fficials at the Lone Star Flight Museum (LSFM) have revealed the names of the five new inductees into the Texas Aviation Hall of Fame.

Established in 1995, the Texas Aviation Hall of Fame honors and recognizes Texans and Texas companies or organizations that have made significant and lasting contributions to the advancement of aviation. There are currently 71 members in the Hall of Fame.

The five new members were selected from more than 100 nominees by a panel of aviation historians, experts, and the LSFM Board. This year's honorees are Captain James Lovell, Congressman Sam Johnson, Azellia White, Brigadier General Noel Parrish (1909–1987), and Thomas (1883–1954) and Paul (1887–1954) Braniff.

The Class of 2018 will be officially inducted into the Hall of Fame on Saturday, May 5, 2018, at the Lone Star Flight Museum's 2018 "Flights of Fancy" Gala to be held in the museum's new, \$38 million home at Houston's Ellington Airport, which opened in September 2017.

Captain James Lovell

After attending the United States Naval Academy and serving several assignments as a naval aviator flying F2H Banshee fighters, Jim Lovell transitioned to a career as a Navy test pilot. Due to the high degree of skill and professionalism demanded of test pilots, NASA often sought them as recruits for the space program. Lovell joined the second class of NASA astronauts in 1962 and participated in the Gemini and Apollo programs. He flew four space missions, including two to the Moon.

He is remembered most as the commander of the ill-fated Apollo 13 mission. The six-day mission in April 1970 was hailed a "successful failure" after the crew of three, led by Lovell, returned safely in a critically damaged spacecraft.

After his retirement from the Navy and NASA in 1973, Lovell settled in Houston, where his astronaut training had taken place, and continued to work in the private sector.

Congressman Sam Johnson

Prior to his 27 years of service as a congressman in the U.S. House of Representatives, Sam Johnson was a United States Air Force colonel and decorated fighter pilot. Johnson is a combat veteran of both the Korean and Vietnam wars. He flew 62 combat missions in Korea and downed a MiG-15 while flying the F-86 Sabre. Between his service in the two conflicts, Johnson flew F-100 Super Sabres with the Air Force's precision demonstration team, the Thunderbirds. On Aug. 16, 1966, while on his 25th combat mission over Vietnam, Johnson's F-4 Phantom II was shot down, and he spent seven years as a prisoner of war, including 42 months in solitary confinement. After his release in 1973, he returned to his home state of Texas and established a real estate business, but his thoughts turned again to public service. Johnson served in the Texas House of Representatives for more than five years, beginning in 1985, and assumed his seat in the U.S. House of Representatives in 1991, where he has been re-elected continuously since. As an elected official, Johnson has championed causes for his electorate and veteran's rights. He will retire from Congress this year.

Azellia White

Born in Gonzales, Texas, in 1913, Azellia White followed her husband Hulon "Pappy" White to Alabama as he pursued a career as a mechanic with the Tuskegee Airmen. While at Tuskegee Field, White took to training and flying in a Taylorcraft airplane and earned her pilot's license in 1946. She would frequently take air trips around the South in pursuit of better shopping opportunities. At the completion of World War II, White and her husband returned to Texas. White continued to fly and, along with her husband and two other Tuskegee Airmen, started the Sky Ranch Flying Service in South Houston.

Sky Ranch served as an airport for the segregated black community and provided instruction to veterans interested in flying. The company closed its doors in 1948, but the pioneering aspect of Sky Ranch made its mark on the community. Mrs. White continues to serve as an inspiration to aspiring aviators, and the Aviation Science Lab at Houston's Sterling High School is named in her honor.

Brigadier General Noel Parrish (1909–1987)

Noel Parrish graduated from Rice Institute (today Rice University) in 1928 and enlisted in the United States Army in 1930. His service took him all around the country, including Fort Crockett, near Galveston, with the 13th Attack Squadron, and to Randolph Field as a flying instructor. In 1941, Parrish was assigned the role of Assistant Director of Training of the Eastern Flying Training Command at Maxwell Field, Alabama, where he oversaw the "Tuskegee Experiment." Choosing to forego combat duty, Parrish took command of the Tuskegee Army Airfield in December 1942. The field was the home base for training of the Tuskegee Airmen, the first African-American aviators in the U.S. armed forces. Parrish is remembered for his willingness to call out blatant racism against black aviators and for the steps he took to desegregate the airfield. After his military retirement in 1964, Parrish returned to Houston and obtained master's and doctorate degrees in history from Rice.

Thomas (1883-1954) and Paul (1887-1954) Braniff

Brothers from Kansas, Tom and Paul were the founders of Braniff Airways. Paul's plan to use fast airplanes with short turnaround times quickly found favor with his brother Tom and other investors. Braniff Airways was officially formed in November 1930 with passenger and airmail flights between Oklahoma and Texas using two Lockheed Vegas.

By 1934, Braniff Airways had moved its base of operations and maintenance from Oklahoma City to Dallas; the administrative offices followed in 1942. The company continued to grow through mergers and expansion with flights across the United States and South America. While both Braniff brothers died in 1954, the airline continued under various names and leadership until 1982.

80TH ANNIVERSARY OF THE T-6 TEXAN TO **BE CELEBRATED IN 2018**

By General Aviation News Staff

he venerable T-6 Texan first flew on Sept. 18, 1938, and the North American Trainer Association (NATA) is celebrating this 80-year milestone at several airshows in 2018.

The major celebration will occur at EAA Airventure in Oshkosh, Wisconsin, on July 24, 2018.

NATA is actively recruiting T-6 owners and pilots to bring their Texans to Oshkosh to be a part of the 80th anniversary celebration. Each year at Oshkosh, there are about 50 Texans on the flight line. This year, NATA officials are striving to bring 80 of these historic aircraft to the big show. Pilots flying their Texans to Oshkosh are encouraged to register on the NATA website.

The North American T-6 Texan is a two-seat aircraft used as the advanced trainer for World War II pilots. Designed by North American Aviation and first flown in 1938, the Texan quickly became the most popular trainer aircraft for the U.S. military in the 1940s and 1950s. More than 15,000 Texans were built between 1938 and 1947, and about 500 are still flying today.



WINGTIPS

WINGTIPS is an official publication of the Texas Department of Transportation Aviation Division. The intent of WINGTIPS is to keep the aviation community and others informed of local developments in aviation.

Printed circulation: 4,000

Comments and suggestions are welcome. Submission of articles is subject to space and editorial review and should be directed to the editor at: wingtips@tamu.edu

