

Visiting Tecnam  
in Italy

Operations  
in Mexico

Industry Insights:  
Raisbeck

# TWIN & TURBINE

FOR THE PILOTS OF OWNER-FLOWN, CABIN-CLASS AIRCRAFT

AUGUST 2023 \$3.95 US  
VOLUME 27 NUMBER 8

Owner's Corner:  
**CITATION M2**



# MAKING THE RIGHT DECISION DOESN'T HAVE TO MAKE YOUR HEAD SPIN

## LET US HELP

When it comes to maintaining or upgrading your aircraft, our priority is to help you interpret the jargon, acting as your consultant to help you make the best decision that fits both your plane and your mission.

Our experts can enhance the comfort and performance of your cockpit and cabin systems, from the convenience of charging outlets and Wi-Fi to high-end performance upgrades.

With over 70 years of experience, we've been doing just that. Our mission is to provide the guidance and expertise you need so that you can focus on what matters the most - flying.



[STEVENSEROSPACE.COM](http://STEVENSEROSPACE.COM)

800-513-9164 | 24/7 AOG: 833-4AOGHELP

Greenville, SC | Nashville, TN | Dayton, OH



## EDITOR

Lance Phillips  
lance@twinandturbine.com

EDITORIAL OFFICE  
2779 Aero Park Drive  
Traverse City, MI 49686  
Phone: (231) 946-7770

## PUBLISHER

Dave Moore

## PRESIDENT

Dave Moore

## PRODUCTION MANAGER

Mike Revard

## PUBLICATIONS DIRECTOR

Jake Smith

## GRAPHIC DESIGNER

Marci Moon

## TWIN & TURBINE WEBSITE

www.twinandturbine.com

## ADVERTISING

Jenna Reid  
816-699-8634  
Jenna.Reid@VPDCS.com

## ADVERTISING COORDINATOR

Betsy Beaudoin  
1-800-773-7798  
betsybeaudoin@villagepress.com

## GENERAL AVIATION ADVERTISING INFORMATION

Aviation.Publications@VPDCS.com

## SUBSCRIBER SERVICES

Rhonda Kelly  
Jessica Meek  
Jamie Wilson  
P.O. Box 968  
Traverse City, MI 49685  
1-800-447-7367

To change mailing address,  
email rhonda.kelly@vpdcs.com

*Twin & Turbine* (ISSN 1092-6402), USPS 24432 is published monthly by Village Press, Inc. with advertising offices located at 2779 Aero Park Drive, Traverse City, Michigan 49686. Telephone (231) 946-3712. Printed in the United States of America. All rights reserved. Copyright 2016, Village Press, Inc. Periodical Postage Paid at Traverse City, MI.

SUBSCRIPTIONS: *Twin & Turbine* is distributed at no charge to all registered owners of cabin-class aircraft. The mailing list is updated monthly. All others may subscribe by writing to: *Twin & Turbine*, P.O. Box 968, Traverse City, MI 49685, or by calling 1-800-447-7367. Rates for the United States and its possessions follow: one year \$15.00; two years \$29.00. Canadian subscriptions are one year \$24.00; two years \$46.00, including GST tax. Overseas subscriptions are one year \$52.00; two years \$99.00, U.S. funds. Single copies \$6.50.

ADVERTISING: Advertising in *Twin & Turbine* does not necessarily imply endorsement. Queries, questions, and requests for media kits should be directed to the Advertising Director, *Twin & Turbine*, P.O. Box 968, Traverse City, Michigan 49685. Telephone 1-800-773-7798. Website: www.twinandturbine.com.

MANUSCRIPTS: *Twin & Turbine* assumes no responsibility for unsolicited manuscripts, photographs, or art work. While unsolicited submissions are welcome, it is best to query first and ask for our Writer's Guidelines. All unassigned submissions must be accompanied by return postage. Address queries and requests for Writer's Guidelines to the editor.

**POSTMASTER: Send address changes and inquiries to Twin & Turbine, Village Press, Inc., P.O. Box 968, Traverse City, MI 49685.**

# Contents

AUGUST 2023 • VOL. 27, NO. 8

## Editor's Briefing

**2 Busiest Airport in the World**  
by Lance Phillips

**4 Tecnam**  
A Family Aircraft Company  
by Rich Pickett



**16 A Unique FBO in Baja Mexico**  
by Rich Pickett

**18 We Have Arrived**  
Going Back In Time at Ocean Reef  
by Kevin Ware

**Industry Insights**  
**22 Raisbeck Engineering**



**8 General Aviation in Mexico**  
by Rick Garner

**14 Editor's Pics**  
by Lance Phillips

**18**



**Owner's Corner**  
**26 Citation M2**

## On Final

**32 Say It Ain't So**  
by David Miller

## COVER PHOTO:

Photo Courtesy of Jessica Ambats

Issues of *Twin & Turbine* are available for free [www.twinandturbine.com](http://www.twinandturbine.com)





# Busiest Airport in the World



"There's something for everyone at EAA AirVenture."

Each year hundreds of thousands make the trek to Oshkosh for the Experimental Aircraft Association's weeklong AirVenture. The event started as a small group of enthusiasts gathering in Milwaukee in 1953, but it soon grew and had to move to Rockford, Illinois in 1959. It was in Rockford that EAA began having warbirds, antiques and aerobatic performances. Attendance grew every year. By 1969, the event had already outgrown the Rockford area, and the move to Oshkosh was approved and executed.

It was in 1998 that the EAA Fly-In Convention became known as EAA AirVenture. It's during that week in July each year that over 640,000 people (as of 2019) and 10,000 aircraft come to Oshkosh's Wittman Regional Airport, becoming the busiest airport in the world.

I've been coming to Oshkosh for quite a few years, mostly working with various companies to promote and facilitate aircraft or other aviation product sales. With so many people from all over the world coming to one place, it's incredibly economical to display that new airplane model, avionics package or whatever else you might want to show off. Plus, for the amateur homebuilt aircraft operators, AirVenture provides myriad opportunities to learn new techniques in building, access hard-to-find

parts and accessories and build camaraderie with others. And the daily airshows and two nighttime airshows do a great job of getting kids (young and old) enthused about aviation and flying.

As I write this, AirVenture is just about to start, and I have a busy schedule trying to absorb everything I can in the few days I'll be in Wisconsin. This year I am attending with a friend who started flying when I did in college but has never been able to get to Oshkosh for AirVenture. It'll be a great opportunity to get a new perspective on the event and hear how it impacts a veteran aviator seeing it all with fresh eyes.

In this issue, we get to travel the world. Rich Pickett describes what it's like to fly a Tecnam from the factory in Capua, Italy. Rich also provides some details of his travels to Mexico and shows us a unique FBO.

If you're ever planning to fly to Mexico, it is always best to be as prepared as possible to minimize risks to the operation. Rick Garner breaks down all the little snags that can turn an otherwise amazing adventure into a nightmare.

Kevin Ware takes us back in time to the Florida Keys when aviation first grabbed his attention, then he fast



forwards to the present and tries to recreate the wonder of the Keys for his wife.

This week at Oshkosh, I will see Raisbeck Engineering's first public display of its EPIC Caravan. Prior to AirVenture, though, I sat down with Raisbeck's Randy Groom to get all the details of the new product and other news from the historic company.

Mathew Keegan didn't come from a family of pilots like lots of us, but flying was always on his mind. He worked on his flight ratings while in college and earned the private certificate the same week he graduated. Skip to today, Mathew is flying his Citation M2 regularly and he takes us through the process of how he got here.

Once again, my camera captured a historically significant twin turbine. This month's Editor's Pic provides insight into Wheels Up's uniquely painted King Air 350i aircraft.

And finally, David Miller describes how to deal with the realization that you have too much airplane. Enjoy.



[lance@twinandturbine.com](mailto:lance@twinandturbine.com)

## Aircraft Widgets Sunshades

**Aircraft Widget Sunshades** are the answer to reducing glare and providing sun protection for the pilot and co-pilot. Made with a smoke-tinted acrylic that reduces light transmission 75%, reduces UV 99% and keeps the cockpit up to 30 degrees cooler. These shades are designed to be left in place during all phases of flight.



Each Sunshade piece is curved to match the curve of the window and windshield, providing a great fit. No modifications or custom installation is necessary.

**Aircraft Widget Sunshades are available for:**  
Piper 1984-present, Phenom 100-300,  
TBM 850-960, Cessna CJ1-CJ3,  
KingAir 200-300. More coming soon!



[www.aircraftwidgets.com](http://www.aircraftwidgets.com)  
800-211-5084



## LOOKING SKYWARD?

Your passion to elevate your business resonates with us. As a leader in aircraft financing, the **1st Source Bank Specialty Finance Group** can prepare you for new altitudes with personal, consultative, and efficient service.

Contact us to discuss your lofty goals.



**1st Source Bank**

[1stsource.com/sfg](http://1stsource.com/sfg) | Member FDIC





# Tecnam

## A Family Aircraft Company

by Rich Pickett



After our article in the *Twin & Turbine* January 2022 issue on Tecnam's largest twin, the P2012, I wanted to learn more about the Italian aircraft company that had designed such useful and innovative aircraft. Francesco Sferra, Tecnam's sales and development manager invited us to Capua, Italy to see their operations firsthand. Capua is in the Caserta Province between Rome and Naples on Italy's western coast. And by the end of the adventure, I had gained such an appreciation of this unique aviation company, which happens to be celebrating its 75th anniversary this year.

As my wife Jane and I arrived at Tecnam's headquarters at the Capua Airport (LIAU), we weren't sure if the GPS was correct. It was an unassuming place in a beautiful setting, with olive and peach trees along the road. A small driveway led us to a gate. After parking, we were greeted with cappuccinos and led to a fascinating museum designed by Stephano Mavilio of Tecnam's marketing and communications department. The museum detailed the roots of Tecnam, including its predecessor, Partenavia, and the original founders, Luigi and Giovanni Pascale. It was an

excellent preamble before learning more about Tecnam. Stephano has also compiled the history of the brothers and their aircraft innovations into a noteworthy book, "The Sky is the Limit: An Aviation Legacy", which is highly recommended for anyone interested in aviation history.

To understand the ambition behind Tecnam's products, it's necessary to learn about the Pascale brothers, Luigi 'Gino' and Giovanni 'Nino'. They were destined to work in aviation once they started flying model airplanes from their balcony in the 1920s, continuing by building progressively more complex gliders as they grew up. Living in Naples (Napoli) during World War II, they would salvage downed aircraft from the German and allied militaries, searching for components to build their models and later their first airplane. Mavilio's book also chronicles the devastation they encountered during the war.

Just after World War II, they cobbled together a single Continental 65 horsepower engine from the remains of four engines that had been abandoned by the US Army Air Corps in Italy as scrap. A cylinder here, a case there, and somehow finding workable magnetos, they built a working



aircraft engine. They found a propeller from a US Army Piper L4 and soon had the combination running in their garage. Of course, they needed an airplane on which to mount it, so they designed one. Thus, the P48 Astore project was born in their garage in Napoli. With persistence, the brothers completed it in 1950.

Luigi and Giovanni were designers and builders, not pilots, so they began to look for a test pilot for the P48. The first pilot damaged the plane during a taxi run, however, they were not deterred. While looking for a more suitable test pilot, they started their own aviation training, soloing in only four hours. Finally, in April 1951 the P48 Astore took flight with Mario De Bernardi, an ace of the Italian Air Force, at the controls. The following year, with type certificate approval, the Pascales entered their first air race, The Fourth Air Tour of Sicily. Early the next year they designed the P52 Tigrotto (Tiger) a mid-wing design for a Naples businessman. The Tigrotto was followed by the P55 Tornado for air racing.

In 1957 their new company, Partenavia, became the springboard for production aircraft, starting with the P57 Fachiro, a 4-place high-wing airplane. The company mostly produced aircraft for the local Italian market until the 1960s when Partenavia ventured into



international markets. Partenavia also expanded its product line to include two new singles and the development of its first multi-engine airplane, the P68 twin in 1968. The brothers and their team were prolific designers, simultaneously designing and flying a variety of other aircraft including an autogyro and gliders, even one with floats.

In 1981, with pressure from the Italian government, external investors, including the government, took majority ownership shares in the company. It didn't take long to lose the entrepreneurial spirit of the company. In 1986 Luigi and Giovanni left Partenavia and formed Tecnam Aircraft. Initially, they manufactured components for Partenavia, but shortly thereafter Partenavia entered bankruptcy. Vulcan Air bought the bankrupt Partenavia and still provides support and parts for these fine aircraft.

Tecnam expanded its capabilities and produced traditional sheet metal and composite components for other aircraft companies; horizontal tails for ATR, structural parts for Augusta, and even the fuselage panels for Boeing jets. Not satisfied with only building components, they embarked on another aircraft design, the P92 Echo, an ultralight powered by a new lightweight Rotax aircraft engine. The P92 Mentor, updated with the latest advances, is still produced today and ships around the world.

While the first Tecnam aircraft was the ultralight P92, the company's extensive capabilities in designing other aircraft became the basis to expand their offerings with





larger planes. After the P92, they embarked on the development of more advanced single and multi-engine aircraft. In addition to the ultralight, light sport, Part 23 and Part 25 production aircraft categories used in the United States, the Europeans (EASA) and other countries recognize additional classifications. Without going into extensive detail, the additional EASA categories of light aircraft (CS-VLA) offer additional flexibility for pilots in some operations and are more stringent in others. It does allow lighter aircraft to be designed around specific operating environments, but interestingly enough the EASA Light Sport category allows for a slightly higher gross weight than the US.

With their experience building individual components and complete airframes since 1948, Tecnam manufactures 85% of the aircraft parts in-house, providing a high degree of vertical integration and production. We toured their production and saw that integration from cutting small switch panels on CNC equipment to high-pressure water jets producing parts and the milling and assembly of virtually all the components for their retractable gear. With such full control over the entire design and production of large numbers of components, they can quickly integrate design changes into their aircraft. This integration also demonstrably impacts their supply channel, transportation

costs and associated energy consumption. In addition, it has enabled them to have an advantage in controlling production costs.

With a staff of 450, the company annually produces 300 aircraft represented by seven models and numerous variants. Single-engine aircraft include the following: P92, P2002, P2008 JC and P2010. Tecnam's multi-engine models include the P2012 (standard version) and their newest model the P2012 STOL. Flight schools are 55% of their market, followed by commercial at 30% and the remaining private operators. Tecnam also produces special mission versions of some of its aircraft models.

Their innovative spirit is also evidenced by research and development into all-electric and hybrid-powered prototypes. After concluding earlier this year that current battery technology was not mature enough, Tecnam suspended its P-Volt all-electric program. In addition, a hybrid platform powered by a conventional engine in conjunction with an electric motor uses both power sources for climb performance, then relies solely on the combustion engine during cruise flight. With no current plans for production, though, the information and data found will be beneficial for future development.

Tecnam's P2006T has also been used as the test bed for NASA's research vehicle, the X-57 Maxwell. NASA used it to evaluate the potential of electric-motor propulsion in various configurations, replacing the Rotax 912S engines with 60-kilowatt electric motors.

Over 7500 aircraft have been produced by Partenavia and Tecnam over the years. As mentioned, Vulcan Air supports the legacy aircraft of Partenavia, and Tecnam supports its current airplanes through 133 service centers and 70 dealers around the world. Impressively, their aircraft are certified to operate in over 70 countries.

## Flying A Tecnam

Tecnam is probably the only aircraft manufacturer based at an airport with only a grass runway. Every Tecnam flies from this runway for their initial test flight. It isn't uncommon to have new aircraft test-flown by senior management, including Francesco and the grandsons of Luigi and Giovanni, Paolo (CEO) and Giovanni (CMO) who run the company. When Tecnam delivered their first P2012 twin to their launch customer, Cape Air, it was Giovanni at the controls on the flight from Capua to Massachusetts.





Tecnam also has a flight academy co-located in Capua providing a great opportunity to evaluate the use of their planes in a training environment.


Francesco offered us any aircraft in their fleet to fly, from their P92 to the P2012. I chose a P2010 from the Tecnam Flight Academy powered by the Continental CD-170 diesel engine.

Avgas is limited and very expensive in much of the world, and the P2010 with CD-170 is a great choice for those situations where Jet A is the best option. It was also a perfect choice for our planned tour of the countryside and coast down to Napoli and the island, Ischia, where we were headed afterward.

After a pre-flight, Jane, Francesco, and I boarded the high-wing airplane for the flight. Boarding the plane through the large pilot and co-pilot doors is effortless. Rear passengers enter through a third door on the right side. The quality of the interior was excellent, with high attention to detail and comfort for tall pilots. The diesel started easily and even at idle was very smooth with runup procedures you would expect from an engine with the latest technology. Takeoff was straightforward, and soon we were flying over the beautiful Italian countryside viewing farms where the finest buffalo mozzarella originates.

We flew southwest to the coast over Pozzuoli, just north of Napoli, then headed to tour Ischia with Capri in the distance. The P2010, with its smooth handling and ultra-efficient turbo diesel, was fun to fly and made for a great observation platform. Francesco pointed out his favorite locations on the island, and we circled around Ischia and the Castello Aragonese (Aragonese Castle), first established in 474 BC. It was a great way to pick a travel location for the next few days, and we highly recommend it as a vacation destination to explore.

The Napoli Coast on the way home to Capua was just as scenic, with a view of Mount Vesuvius southeast of Naples and one of several volcanos in the Campanian area. Flying over the farming area west of Capua we spotted the Tecnam factory next to the grass runway, outlined by white markers. After flying a pattern to a short landing roll, we were back at the factory in a few minutes.

The aviation community is fortunate to have so many innovative companies and individuals, and we're sure the Pascale brothers would be quite pleased to know that after 75 years Tecnam continues to carry on the spirit of Italian aviation design and manufacturing. 



With 12,000+ hours of piloting more than 100 aircraft models, **Rich Pickett** still has a passion for flying. Rich holds an ATP, CFII SME, SES, glider licenses, and type ratings in the L29, L39, Citation 500/510s/525s, Eclipse 500S, Beechcraft Premier and DA10. His company, Personal Wings, provides training, mentoring and aircraft services. You can contact Rich at [rich@personalwings.com](mailto:rich@personalwings.com).



## EXCELLENCE IN MAINTENANCE, ONE ENGINE AT A TIME.

As an independent, OEM-authorized MRO provider, we offer the most comprehensive and flexible MRO solutions for your P&WC PT6A engine, supporting operators from four overhaul locations and 11 service center locations worldwide. With close to 60 years of experience, StandardAero is the smart choice for your PT6A maintenance needs.

**Contact us today to learn more**





# General Aviation in Mexico

by Rick Garner



Mexico has been a popular destination for general aviation (GA) pilots and aircraft owners for many years and for good reason. It's a country abounding in natural resources, diverse geography, a rich culture, incredible cuisine, fascinating history and a warm and welcoming people. The fact that it sits right on the US border makes it easy to reach by most GA aircraft. For many years, several individuals and flying organizations like CST Flight Services have collaborated with the heads of the different government agencies in Mexico that interact with US GA arrivals in an attempt to simplify and standardize the entry process. CST's efforts over the years have been successful on a number of fronts such as: obtaining official notification from DGAC that US-issued insurance policies are valid for private aircraft and that you do not have to buy "special" Mexican insurance from third parties, obtaining deferrals for almost 10 years for the requirement of 406 MHz ELTs, obtaining official permission for experimental category aircraft to enter Mexico in September of 2008 and again in February 2021, and obtaining an alternate means of filing the Mexican Advance Passenger Information System (APIS) for private flights by sending an Excel template via email to Mexican Immigration.

## New Political Landscape

As many are aware, there is a new political party in Mexico, led by the current president, that has swept into

power at the federal, state, and municipal levels across the country. This new party has been making significant changes to laws and leadership across those institutions that interact with GA arrivals. The following is a summary of what those changes have been and how they impact GA to varying degrees at Mexican airports.

## Changes to Agencies That Interact With GA

By decree, the Mexican Federal Police (Federales) were disbanded and replaced with a new entity called the National Guard (Guardia Nacional) which was formed in March 2019 and staffed primarily by military personnel. While still technically a civil organization, it is controlled by the military. Presently, the Guardia Nacional provides security at international airports and at many domestic airports in Mexico, and they are usually the first government agency that an arriving aircraft will encounter. Their degree of interaction with aircraft crews and passengers varies widely between Mexican airports.

Mexico's Civil Aviation Authority formerly known by its acronym of the DGAC was also replaced by decree with the Agencia Federal de Aviación Civil (AFAC) in October 2019. During the transition process, the top leadership at the central level, as well as the airport comandancia level, were replaced by former military personnel, primarily from the Mexican Air Force. The AFAC is the agency that issues entry permits to foreign aircraft via their central office and local offices at the Mexican international airports, and they are the ones who can conduct random ramp checks on aircraft arriving at Mexican airports.

In July 2021 another decree replaced Mexican Customs with a new entity called Agencia Nacional de Aduanas de México (ANAM) which falls under the control of the Mexican military. The former civil servants that functioned as Customs officers were terminated and replaced by military personnel. Mexican Customs is present at all Mexican international airports and reviews crew and passenger luggage and cargo on arrival and when departing the country.

On March 16, 2023, a new law, Ley de Protección del Espacio Aéreo Mexicano (Mexican Airspace Protection Law), went into effect empowering the Mexican military to





**GOBIERNO DE MÉXICO GOBERNACIÓN IEM**

**ESTADOS UNIDOS MEXICANOS**

FORMA MIGRATORIA MÚLTIPLE (FMM)  
ESTA FORMA DEBE SER LLENADA DE MANERA INDIVIDUAL POR TODO EXTRANJERO QUE SE INTERNE A MÉXICO, INCLUIDO EL PERSONAL DIPLOMÁTICO/  
This form must be completed individually by all foreigners entering Mexico, including diplomatic personnel.  
REGISTRO DE ENTRADA/ENTRY REGISTRATION

Registrar datos como aparecen en el pasaporte / Fill in with your personal information as it appears in your passport

1. Nombre(s) / First (& middle) name(s)	2. Apellido(s) / Surname	3. Nacionalidad / Nationality
4. Fecha de Nacimiento / Date of birth	5. Sexo / Sex <input type="checkbox"/> Femenino/Female <input type="checkbox"/> Masculino/Male	6. No. Pasaporte / Passport No.
7. País de Residencia (En caso de México, Entidad Federativa) / Country of Residence (In case of Mexico, Federal Entity)	8. No. de Tarjeta o Forma Migratoria / Immigration Form or Card No.	
9. Vía de internación / Entering by <input type="checkbox"/> Aérea/Air <input type="checkbox"/> Marítima/Maritime <input type="checkbox"/> Terrestre/Land	10. Nombre de la aerolínea o embarcación / Airline or vessel name	
11. Vuelo o matrícula de la aerolínea o embarcación / Flight or vessel registration No.	12. Entidad Federativa y Ciudad de destino en México / Federal Entity and City of destination in Mexico	
13. Domicilio en México durante su estancia (Nombre del hotel, calle y número) / Address in Mexico during your stay (Hotel name, street and number)		

Declaro bajo protesta de decir verdad que toda información que aquí he proporcionado es correcta y completa, consciente de las consecuencias legales de declarar con falsedad ante la autoridad / I declare under penalty of perjury that all information I have provided here is correct and complete, and I am aware of the consequences of making false declarations to the authorities.

Fecha/Date:

01 215160476

Firma del extranjero/Signature: \_\_\_\_\_

---

**USO OFICIAL / OFFICIAL USE**

ESTANCIA MÁXIMA HASTA 180 DÍAS

☐ Visitante Actividad no Remunerada ☐ Visitante Actividad Remunerada ☐ Visitante Razones Humanitarias

ESTANCIA MÁXIMA 30 DÍAS

☐ CANJE ☐ REPOSICIÓN

TIPO DE VIAJE

☐ Turismo ☐ Negocios ☐ Tránsito ☐ Otro ☐ Tripulación ☐ Estudios

ÚNICAMENTE PARA EFECTOS ESTADÍSTICOS

☐ Pasaporte no Originario ☐ Tarjeta de Visitante Razones Humanitarias o con Fines de Adopción ☐ Tarjeta Residente Temporal o FMMI o FMI

☐ Tarjeta de Residente Temporal o FMMI o FMI de Inmigrado

Temporalidad:  días

SELLO DE ENTRADA

01 215160476

that at the major airports that receive the highest volumes of visiting GA aircraft, like Cancun, Puerto Vallarta, the two Cabo airports, Toluca, Guadalajara and Monterrey, the impact has been less significant due to the efforts of the airport operators and local FBOs to keep things operating smoothly. Operators using ground handlers typically fare better because they have somebody on the ground who understands the proper procedures and speaks the language. However, in all fairness to ground handlers, they cannot interfere with the actions of federal officials doing their duties. So, their abilities to minimize the inconveniences can sometimes be very limited, and it is also not in their best interests to antagonize those federal officials with whom they must interact every day.

At the other end of the spectrum, international airports and domestic airports that receive little GA traffic can sometimes be more onerous. What we have experienced firsthand is a lack of coordination between the different agencies which has provoked delays in arrival and departure processing, frustration on the part of crew and passengers as well as misplaced documents. For example, the National Guard (Guardia Nacional) will often request that all contents of the aircraft be removed and placed on the ramp to be searched on arrival and departure. Once complete, they may tell you that you can return your items to



guarantee the security, sovereignty and independence of Mexican airspace. How this new law will affect the AFAC and Servicios a la Navegación en el Espacio Aéreo Mexicano (SENEAM), the civil entity that provides ATC services in Mexican airspace, has yet to be seen.

In the past, visitors entering Mexico had to complete a Forma Migratoria Múltiple (Multiple Immigration Form – FMM) for immigration control. The FMM is a two-part form that you fill out upon entering Mexico and the immigration officer would stamp both parts of the form and return one part to the visitor. Upon departing Mexico, the visitor would surrender their part of this form. However, the present government is phasing out that form, and it is being replaced with a simple entry and departure stamp in the visitor's passport. Depending on the international airport that you operate from in Mexico, you may or may not have to complete the form. It will depend on what stage of the implementation process they are in at that airport.

## The Effect On General Aviation

It is difficult to imagine that these massive changes would be trouble-free during the transition. The reality is



the aircraft only to have the Customs agent come behind them and tell you to unload everything and bring it into the airport building. As these agencies rarely identify themselves, it is hard to tell who is who.

Another area of concern has been that these government officials are using cellphones to take pictures of crew and passenger documents containing personally identifiable information (PII) such as Airmen Certificates, Medical Certificates and Passports. The ownership of these cellphones, the location where the images are being stored and the steps being taken to protect that data have never been explained.



Unfortunately, we have seen the AFAC deny entry into Mexico for experimental category aircraft or pilots using BasicMed, even though their own published regulations specifically state that experimental aircraft and BasicMed are allowed with no specific individual approvals. Another issue that continues to pop up is AFAC inspectors wanting to see type ratings on pilot certificates for aircraft that do not require type ratings. Fortunately, we have been able to clear up type rating issues by working with the AFAC inspectors.

### **Other Issues Affecting Private Aircraft That Continue From the Past**

There are other issues affecting private aircraft arrivals in Mexico which many veteran travelers may be familiar with that continue to exist and have nothing to do with the changes made by the actual government.

#### **Mexican Customs**

Under Mexican Customs law, only a pilot who can prove that they own the aircraft they are flying can bring anything into Mexico other than basic clothes and personal effects. Sporting equipment, electronic equipment other than a laptop or an iPad, and anything else you might want to

have with you are not allowed entry and can be taxed or confiscated. Even though the law allows the owner-pilot to have passenger privileges in this regard, many customs agents are unaware of this allowance and frequently deny them this privilege. If the Mexican Customs agents do not have access to a working X-ray machine to scan bags when arriving or departing the country, customs agents may open all bags of crew and passengers for manual inspection. This means that any personal contents inside your bags may become public knowledge very quickly to all those present in the customs arrival area making the process either exciting or humiliating depending on whether you are the spectator or the person being inspected.

#### **Immigration**

Mexican immigration officers are usually very courteous and professional although sometimes they misapply article 14A of the Mexican tax code which assesses an approximately \$100 USD fee on GA aircraft if they arrive outside of "normal" operating hours or on weekends and/or holidays. The Mexican tax code specifically states that this fee is not to be applied to private flights, yet immigration officers at certain airports apply this fee to all aircraft arrivals regardless of the type of flight or the hours of operation.



Another caveat of Mexican immigration law is that pilots do not pay certain immigration taxes unless they remain in the country for more than one week. This sometimes catches pilots by surprise when immigration officers tell them that they have overstayed their time and are charged an additional fee. This is not a fine but simply the same charge that passengers have to pay.

### AFAC

When you enter Mexico in a private aircraft, you must obtain an entry permit for the aircraft. There are two types of entry permits: A Single Entry Permit (SEP) and a Multiple Entry Permit (MEP). A SEP is valid for 180 days or until the aircraft departs the country, whichever comes first. A MEP is valid for the calendar year, and an aircraft can enter Mexico as many times as the operator wishes during the year without paying for a new permit, provided that the aircraft does not remain in the country continuously for more than 180 days at a time. A MEP specifies the crew that brought the aircraft into the country when the permit was issued, and the use of the aircraft by a different crew can invalidate the MEP. Be aware that neither a Single Entry nor Multiple Entry Permit is valid unless it is accompanied by the original receipt for payment of that permit. If you have a MEP and you plan to enter Mexico towards the end of the calendar year, or if you plan to celebrate the new year in Mexico, you should obtain a SEP when you enter. The MEP expires on December 31st, and if you have an AOG incident or if you decide at the last minute to remain in Mexico for the new year, you could face a very unpleasant situation.

Another issue that pops up at certain airports is where AFAC officials require that the pilot's medical certificate class matches their airman certificate and not the privileges being exercised. For example, a pilot with an Airplane Transport Pilot Certificate may be required to have a First Class Medical Certificate even though they are flying their own personal Cessna 182. Trying

to explain to some AFAC officials how a First Class Medical Certificate can become a Second Class and then a Third Class per 14 CFR 61.23 becomes even more entertaining.

Ramp checks have always been an issue in Mexico, and that has not changed. Always be prepared to have valid aircraft and crew documents ready along with the appropriate entry permit. Insurance policies of private aircraft issued in their country of registry are valid in Mexico if they include Mexico in the territory coverage and the liability insurance

minimum is at least \$300,000 USD. For charter aircraft, it is a completely different story. Operators of aircraft that are used for both private and charter need to be extremely careful that if the aircraft is being flown privately into Mexico and an insurance policy (Non-Mexican or Mexican) is presented to the Mexican AFAC that indicates that the policy is for commercial purposes, then the entire operation could be considered as commercial, and the operator will have to present additional proof that the operation is actually private. Otherwise, the operator could be detained, fined, etc. for not having the appropriate permits for charter operations in Mexico.

While not required by regulation, we strongly recommend that if the aircraft is not registered in the name of the pilot or one of the passengers, you prepare a notarized letter identifying the legal owner of the aircraft and that the owner is authorizing the crew to fly the aircraft and the passengers to be aboard the aircraft on an international flight to Mexico. Furthermore, the letter should clarify that the flight is a private, non-commercial flight. This letter can serve to defuse any misconceptions that a private flight may be a charter flight or that the aircraft may be stolen. Sometimes, this letter can help to avoid the \$100 fee mentioned above that is erroneously charged by Mexican immigration by proving that the flight is private. Sometimes.

### SENEAM Airspace and Overtime

This is a topic worthy of its own article. Mexican airspace fee calculation and payment is a topic that will confuse and frustrate even the most seasoned international operator. Suffice it to say that if you flew through the Mexican flight information region (FIR), even if it was due to a vector by US ATC at the border, and you neither landed nor departed from a Mexican airport on that flight, you owe Mexico airspace fees.

If you depart or arrive at the beginning or at the end of an airport's normal operating hours, you may incur SENEAM overtime fees which cannot be paid at the airport. Furthermore, if you requested an extension to the airport's normal operating hours for an early or late operation, the SENEAM overtime fees cannot be paid along with the airport fees. SENEAM overtime fees, like Mexican airspace fees, are paid through a separate process in Mexico through a Mexican bank. Contact us for instructions on how you can inquire directly with SENEAM if airspace or overtime fees are owed.

### Safety

The elephant in the room. While the theft of aircraft in Mexico has not been an issue for many years, personal safety has gained a lot more attention recently. For a crime to occur, you need a victim and the right environment. Avoid being a victim. Don't draw attention to yourself by wearing expensive clothes, jewelry, personal effects and/or by bragging about your success and/or wealth. Don't create the environment. Avoid going "off of the beaten path", don't interact with strangers no matter how innocuous they might appear, avoid using the same taxi driver unless you





really know who they are. Avoid border towns. For many years they held the allure of being places where “anything goes,” and you can get away with almost anything. Border towns are also magnets for the type of people who flourish in these environments.

Another issue pertains to using app services like Uber. While Uber is a legally protected service in Cancun, there have been major conflicts between the taxi drivers in Cancun and Uber drivers. These conflicts have spiraled into violent encounters between taxi drivers, Uber drivers and passengers. Until the authorities get a handle on this simmering problem, be very careful with what ground transportation service you use while in Cancun.

Planning for the worst is usually the mantra of pilots. We recommend fueling on arrival in a foreign country and leaving enough fuel on board to at least get back to the US border or to another country known to be a safe haven. We also recommend having two satellite-based communications devices, one for the crew and one for the passengers. While satellite phones are ideal, they are also terribly expensive. Devices like the Garmin InReach bring satellite connectivity to a more reasonable level using text messaging. If you are dependent on cellphone or landline technology, you are exposed to getting cut off from the rest of the world and from each other if there is a natural or manmade disaster that interrupts those services.

The US State Department has a couple of useful services for international travel:

**US State Department - Smart Traveler Enrollment Program**

<https://travel.state.gov/content/travel/en/international-travel/before-you-go/step.html>

<https://step.state.gov/>

**US State Department - Safety and Security Messaging App**

<https://travel.state.gov/content/travel/en/international-travel/before-you-go/about-our-new-products.html>

## Summary

Mexico continues to be a very attractive and popular destination for the owners and pilots of GA aircraft. With so many new personnel entering these Mexican government agencies, some inconveniences are to be expected as they become proficient at the new tasks they are being assigned to do. In the meantime, the best strategy is to pack an extra case of patience and a large bottle of good humor. After all, it could be worse; you could have flown on the airlines. **T&T**

**Rick Gardner** is the Director of CST Flight Services, which has been providing International Trip Support services for the past 19 years to owner pilots and professional pilots alike. Rick is also the authorized representative for the Aircraft Owners and Pilots Association (AOPA) in The Bahamas, the Caribbean, Mexico and Central America. You can contact Rick at **rick@cstflightservices.com**.



## Connected

- When you want
- With whom you want
- At minimal cost
- Worldwide





# Enhanced King Air Performance

**IS** ThrustSense®  
Full Regime Autothrottle

Standby Display Unit serves as pilot's interface



From takeoff to landing and through all phases of flight, ThrustSense® enhances the ability to operate your King Air smoothly and consistently. It automatically prevents over-torque and over-temperature while providing speed and VMCA protection. ThrustSense increases situational awareness in flight and reduces pilot workload.

Available for retrofit on the King Air 200 and King Air 300 and standard equipment on board the King Air 260 and King Air 360.

**IS** Innovative  
Solutions & Support  
[www.innovative-ss.com](http://www.innovative-ss.com)



For ThrustSense Autothrottle  
information contact 610-646-0340  
or [sales@innovative-ss.com](mailto:sales@innovative-ss.com)



# Editor's Pics

by Lance Phillips








2015 was an interesting time for us at Beechcraft. A year earlier Beech was acquired by Textron, and Textron Aviation had formed bringing three historic brands together—Beechcraft, Cessna and Hawker. One of the things that made Beechcraft very attractive to Textron was its newly-minted partnership with Wheels Up. By May 2015, Wheels Up had taken delivery of around 31 Beechcraft King Air 350i aircraft. The 350i had improved upon the 350 by providing more payload and range while also adding a quieter cabin with WiFi. It also included Rockwell Collins' new Pro Line Fusion avionics, a ground-breaking touch-screen system never seen before.

The big pink 350i delivered to Wheels Up was painted that way to help generate awareness for breast cancer research at the Dubin Breast Center at Mount Sinai in the hopes of someday eliminating the disease. This was the 35th King Air taken by Wheels Up, part of its second bulk purchase of King Airs from Beech.

Throughout the years Wheels Up would apply several other liveries to help bring about awareness to various initiatives. There was a teal King Air highlighting ovarian cancer; a red one for heart health; a camouflage 350i benefiting the Tragedy Assistance Program for [military] Survivors; and an orange one to help raise awareness for food insecurity and Feeding America.

I had been working for quite a while with my counterpart at Rockwell Collins determining which past King Airs could qualify for a retrofit of the new Pro Line Fusion avionics. King Airs have been flying since 1964 in many configurations and with myriad avionics packages, so it took a lot of thought to figure out what it would take, and how far back we could go, to offer fielded aircraft the Fusion upgrade. Many thanks to my friend Joe Razo from Collins (now retired tending his orchards and doing some consulting) for helping to unravel years of King Air tribal knowledge.

Back to the big pink 350i. This photo was taken on August 14, 2015, at around 8 a.m. We were getting ready to deliver it a few days later to Wheels Up and were going to make a big deal about it. I just happened to be in our delivery hangar at Beech Field on the east side of Wichita and had my little powerhouse Sony RX100 ii camera with me. I took 164 photos of this plane that morning, and they're all still in my Adobe Lightroom app. It's great to go back to photos you haven't looked at for years and find one or two that you didn't notice before.

Let me know if you've seen this 350i or other Wheels Up special liveried King Airs flying around. Happy shooting. 



# A Unique FBO in Baja Mexico

by Rich Pickett



They were not simply intent to build an impressive medical facility but also realized the need to provide an ambulance service as well. The ambulances are based at the airport and can serve a large portion of Baja.

They also recognized that cooperation with an established hospital is important and collaborated with St. Luke's Hospital, located in San Jose Del Cabo, to operate the facility and the ambulance service. The association with the hospital allows patients with insurance, including many US and Canadian insurance providers, coverage for medical care. This gives additional peace of mind for people traveling to Baja, especially those without specific travel insurance.

I first visited the medical clinic in February when I stopped by the FBO. Juan Rangel Martinez, the executive director, and Horacio Rolon, the general manager, are

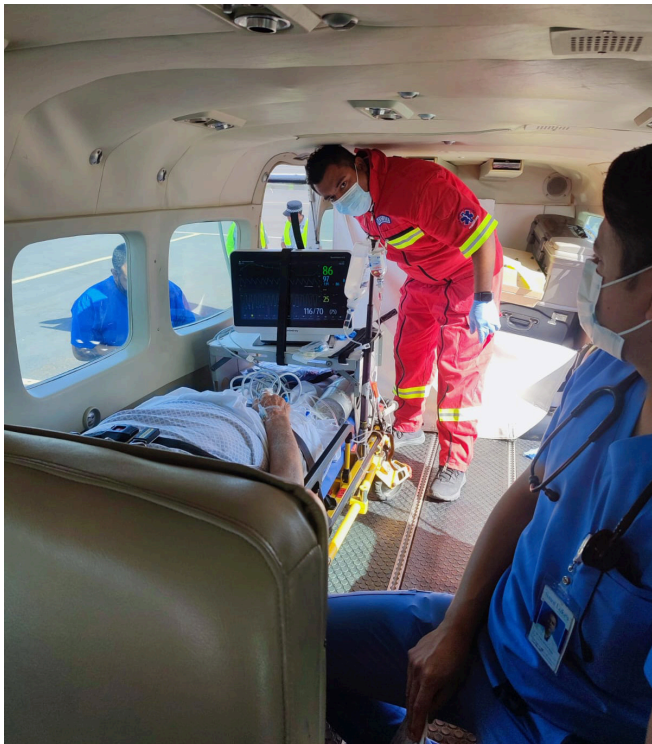
I've had the opportunity to visit FBOs that range from simple to elaborate, having landed at over 900 airports. Some with cafes, others with hotels; I've even found a swimming pool for visiting aviators at one. Not until I visited Loreto (MMLT) in Baja Sur California, Mexico, one of the airports and FBOs I fly to regularly, have I found one with an Emergency and Urgent Care clinic inside the facility.

I've been traveling to Loreto since the 1990s, a beautiful area to visit, and in January of this year, Loreto Aviation Services opened a comprehensive Urgent Care and Emergency medical clinic within its FBO. Wherever you travel, there may be the need to obtain medical services, and when that travel takes you to remote areas, it can be a challenge to find care. The Baja peninsula is 700 nautical miles long, with no large communities in a significant portion of this beautiful area. There are medical professionals in these communities; however, the closest emergency medical facility to Loreto is San Jose Del Cabo, 200 nautical miles by air south. That equals a six-hour drive.

Loreto Aviation Services' parent company also owns hotels and resorts in the Loreto area. With tourism growing there, they recognized the potential need to provide quality, advanced emergency and urgent medical care to the local community and visitors. Without a doubt, the availability of local medical services enhances the appeal of the area to some visitors.







friends who happily showed me around. I fly to Mexico frequently and was in Baja on a whale-watching adventure with Baja Bush Pilots (BBP) and had flown down from Mulege, another great spot, to get fuel for our Cessna T206.

This new medical facility is impressive. In addition to the resident physician, the staff includes an imaging technician, lab chemist, nurse and support staff.

They have two examination suites, an X-ray imaging room, a pharmacy, a lab, and offices in the clinic, just steps away from the FBO lobby area and the new café. With their ambulance service, they can be dispatched to other areas in Baja with a physician or nurse on board, in addition to the EMTs, and stabilize the patient on return to the Loreto clinic. When they need additional services beyond the capabilities there, their ambulances, including air ambulances, can be utilized to transport patients to St. Luke's Hospital in San Jose Del Cabo.

Our family has been flying throughout Mexico for nearly forty years, and this new clinic offers extra comfort knowing that such advanced treatment options are now available in this region of Baja. It's one more advantage to simplify a sometimes harrowing ordeal. This clinic is also a great way to show the value of airports to the local community. **T&T**



With 12,000+ hours of piloting more than 100 aircraft models, **Rich Pickett** still has a passion for flying. Rich holds an ATP, CFII SME, SES, glider licenses, and type ratings in the L29, L39, Citation 500/510s/525s, Eclipse 500S, Beechcraft Premier and DA10. His company, Personal Wings, provides training, mentoring and aircraft services. You can contact Rich at [rich@personalwings.com](mailto:rich@personalwings.com).



35% to 85% off!  
New Surplus Aircraft Parts



**The Worlds Leading Supplier of New Surplus and Used aircraft parts for nearly anything that flies!**  
**From Single and Twin Cessnas, to Pipers and jets like Citations.**

**Check with us for parts like:**

- Airframe
- Exhaust Systems
- Piston Engine
- Wheels and Brakes
- Turbine Engine
- Overhauled Propellers
- Continental
- Hardware: AN, MS, NAS
- Lycoming
- Pre-sewn Fabric Envelopes
- Overhauled Rotables
- And More!

**Free Online Inventory Search**  
[www.preferredairparts.com](http://www.preferredairparts.com)

**Preferred Airparts, LLC**  
 Div. of JILCO Industries, Inc.  
**800-433-0814**  
 Toll free, U.S. & Canada  
 Tel. 330-698-0280 - Fax. 330-698-3164  
[sales2@preferredairparts.com](mailto:sales2@preferredairparts.com)  
**We Buy Worldwide!**  
 Sales Hours: 8:15am to 5:30pm EST

**GET** Your Airplane Built **Into an** Executive Desktop Model



**ORDER EASILY**

**866.580.8727**

direct: +1.602.635.4646

[FACTORYDIRECTMODELS.COM](http://FACTORYDIRECTMODELS.COM)



**FDM**



# We Have Arrived

## Going Back in Time at Ocean Reef

by Kevin Ware



I was 17 years old, sitting in the hotel's blue 1963 Corvair van next to a 3,000-foot private runway on the north end of Key Largo, waiting for a guest to arrive from Chicago. The red and white Piper Comanche with the engine making a distinctive roar circled the airport once and then landed, the tires making a chirping sound as they touched the hot pavement. It rolled up to the ramp, and as a teenage airplane nut, I could hardly contain myself. This was no ordinary Piper Comanche, it was the new one that had a 400-horsepower, 8-cylinder Lycoming engine under the cowl. It was an airborne hot rod easily capable of 220 miles per hour; the fastest

single-engine piston airplane made in the US at the time. As I got out of the van, I was almost drooling.

The pilot waved at me nonchalantly as the propeller stopped moving, and a minute or two later he stepped out onto the wing carrying a small suitcase. My job as the hotel bellboy was to take him a mile or so to the hotel and help get him checked in. He was a friendly guy and must have recognized my enthusiasm. During the brief van ride, he mentioned he had just flown down from Chicago, where it was snowing and he was very glad to be in the nice 80-degree weather in the Florida Keys. I listened to his story about the flight in absolute awe and promised myself,

that someday, I was going to do what he, in such a seemingly casual fashion, had just done.

Years went by. I moved away from the Florida Keys to the Seattle area, obtained a commercial pilot's license, became a flight instructor, and flew all sorts of general aviation aircraft for a living while working through college. I also got married, and probably more often than I should have told my wife who was born in Norway all kinds of embellished stories about the luxurious hotels I had worked at in the sunny Florida Keys. After finishing college, medical school and residency, we settled down to raise a family. Once my medical career was under way, I





was still able to do some professional flying, as well as own a few different planes personally.

More than thirty years passed, and then by chance, there was a medical meeting I needed to attend in Orlando, Florida, and owning a Cessna 340, I elected to fly it down from Washington State. My wife, quite curious about how many of my old Florida Keys stories were true, suggested that after the meeting I take her to some of those high-end resorts so she could see just how luxurious they were, and if there was any truth at all to my stories about beautiful tanned girlfriends and jetsetters.

So, after the meeting, we flew the 340 down from KORL to KMTH (Marathon), the airport closest to where I had lived on the Keys. We rented a car and drove up to Islamorada, where I had made a reservation to stay at one of the first waterfront motels I had worked at. As we drove up to the entrance, I could tell right away that it somehow was not the fancy high-end place of my memory. But it only got worse. We checked in and drove the rental car to the faded door of our assigned room. The room was hot and smelled like stale cigarettes. I could not help but notice that the walls were all exposed concrete block, albeit painted. My wife looked around and gave me

a bemused and knowing smile, but being the kind person she is, chose to say nothing.

That evening for dinner we drove to a nearby roadside restaurant that I recalled (with hazy memory) as somewhat decent. The place was mostly empty, had plastic chairs and vinyl tablecloths, and a greasy cardboard menu. The waitress was thin and shrunken from too much sun and tobacco. While my wife was studying the menu, I asked the waitress if she had lived on the Keys long. She replied, yes, all her life in fact and asked why I wanted to know. I replied that many years ago I had attended high school there, and wondered if she might know any

of the kids from that time. She offered a puzzled look, asked what year that was, and started eying me up and down very carefully. Then she suddenly grabbed me by the shoulders in a very possessive and familiar way and burst out with "Kevin, I am Sandy, we played in the band together... remember me?"

While I stumbled

for words my wife almost fell off her chair laughing.

Clearly, this whole thing about flying back to my old high school-era stomping grounds in my own aircraft was not going as planned — no tanned girlfriends or jet-setting hotels this time around. Hoping things would improve the next morning, I called the last hotel I had worked at before leaving the area as a kid. It took some doing for me to convince the reservation clerk I was not some kind of bum, but when I told her we would be arriving in our own, private, twin-engine, pressurized and air-conditioned aircraft she finally came over to my side and made the reservation.





The only  
proven,  
all-digital  
fuel senders  
available.



“

*Zero regrets. Get ready for a  
new level of fuel assurance.*

*- John H. (Verified Purchaser)*

FUEL SENDERS  
**70,000+**  
INSTALLED

**CiES Inc.**  
info@ciescorp.com  
www.ciescorp.net

After securing the new reservation, we promptly checked out of the cement block motel, drove the rental car back to KMTH, got back in the 340, started the engines, turned the air conditioner on high, and departed for the far north end of Key Largo.

Twenty minutes later I was circling the runway at the Ocean Reef Club, just as I had seen the Comanche 400 do way back when. The 340's tires made the same chirping sound as I landed, and I taxied up to the same exact spot the Comanche had parked all those years ago. Waiting there next to a white Ford van was a sun-bleached high school-aged kid who reminded me much of myself all those years ago. On the way back to the hotel, I explained that decades before I had held his exact job and asked him to give us a tour of the resort. It had grown somewhat, but to my relief was indeed just as fancy as I had told my wife. Our room faced the water, was cool and elegantly decorated — with no cement blocks showing. That evening we had a very

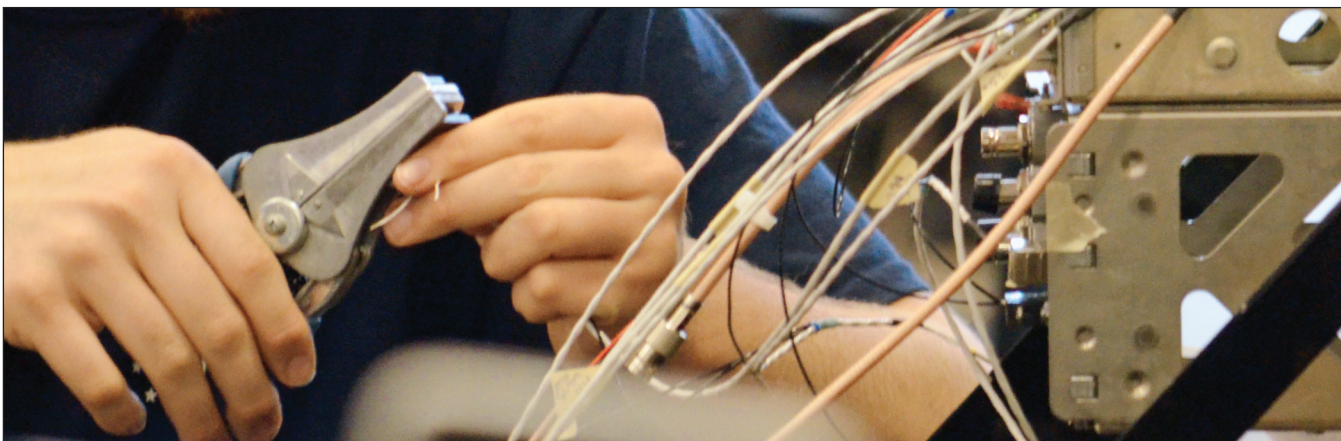
nice romantic dinner at the resort restaurant with white tablecloths on a secluded table for two facing the water.

After dinner, with a light breeze blowing off the water, we were walking around in the moonlight under the palm trees when my wife said, “Well, I guess we finally arrived”. And with her help and that of the Cessna 340, that is just what happened. **T&T**



**Kevin Ware** is an ATP who also holds CFI, MEII and helicopter ratings, has more than 10,000 hours and is typed in several different business jets. He

has been flying for a living on and off since he was 20, and currently works as a contract pilot for various corporations in the Seattle area. When not working as a pilot he is employed part time as an emergency and urgent care physician. He can be reached at [kevin.ware2@aol.com](mailto:kevin.ware2@aol.com).



# Upcoming AEA Training



[aea.net/training](http://aea.net/training) • [aea.net/training](http://aea.net/training) • [aea.net/training](http://aea.net/training) • [aea.net/training](http://aea.net/training) • [aea.net/training](http://aea.net/training) • [aea.net/training](http://aea.net/training)



# BLACKHAWK YOUR TRUSTED PARTNER



## COMPREHENSIVE MAINTENANCE SOLUTIONS

**BEFORE YOU BUY AND FOR THE LIFE OF YOUR AIRCRAFT**

- Pre-purchase Inspections
- Phase, DOC, Hourly & Calendar Inspections
- Aircraft Systems Troubleshooting & Repair
- Landing Gear & Engine Overhaul Services
- Engine & Avionics Upgrades
- Airframe Repairs & Modifications
- Fuel System Calibration
- Drop-in Maintenance

**KING AIR** 90 | 200 | 300/350

**CESSNA** 500 | 560/XL | 650  
CJ 525 | CJ1/2/3

**CONTACT BLACKHAWK FOR A QUOTE TODAY**

+1 (309) 314 4169 | [conrad.theisen@blackhawk.aero](mailto:conrad.theisen@blackhawk.aero)



**BLACKHAWK**  
A E R O S P A C E  
T E C H N O L O G I E S

**BLACKHAWK.AERO**



# Raisbeck Engineering

by Lance Phillips

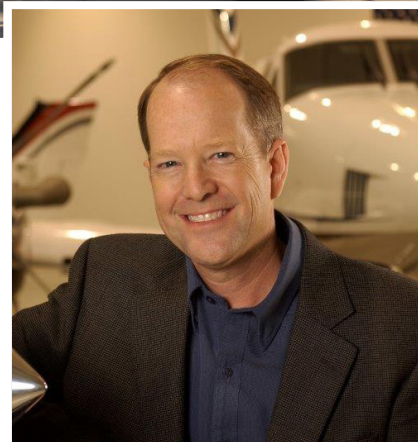


**T**his month, we had the pleasure of talking with Raisbeck Engineering's senior consultant, Randy Groom. Randy has had a long career in general aviation, and much of his work has focused, directly or indirectly, on improving the performance and/or utility of Beechcraft and Cessna airplanes through Raisbeck's FAA supplemental type certificate (STC) work.

Randy has been flying since high school, and he continued to fly charter and instruct others during his undergraduate work in zoology at Oklahoma State University, later earning an MBA. After college, he approached multiple aircraft OEMs to see if someone out there could use an eager, experienced pilot with raw business acumen. Cessna answered the call. They needed a sales training instructor to write a curriculum

for the Conquest turboprop program. While on the west side of Wichita, one of Randy's OSU graduate friends, who happened to work on the east side of town (Beechcraft territory), let him know that Beech was looking for an assistant regional manager. There would be a lot of flying and working with the Beech dealer network. That sounded pretty good, so he made the switch.

We could literally write a whole article on Randy's progression in aviation, but this article is about Raisbeck, so I'll abbreviate some of Randy's next adventures. From Beechcraft, Randy was recruited by one of Beech's (and Raisbeck's) dealers, Piedmont. After years of working toward and earning the number two leadership role at the company, he was brought back to Beechcraft, this time in executive leadership. He later started a robust consulting business. Soon,



another executive leadership role opened in Vero Beach, Florida (yep, Piper this time).

**Lance Phillips:** Randy, thank you for joining me today. With AirVenture just around the corner, will Raisbeck display anything new this year?

**Randy Groom:** This year the EPIC Caravan, which has never been seen before, will be on display. In addition,





we'll have a fully-equipped Raisbeck EPIC King Air B200 at the show.

**LP:** The EPIC Caravan was announced last year in April. What models does the STC pertain to and what does it do for performance?

**RG:** The STC applies to Caravan 208B models. It's comprised of a composite cargo pod fairing and dual metal aft body strakes. Operators will realize at least a five-knot cruise speed increase and better range. The new pod fairing reduces drag greatly and only weighs 38 lbs. The strakes significantly improve lateral stability. Interestingly, the majority of our prospective clients for the EPIC Caravan are international operators, so we are going all over the world demonstrating and talking about it. It's super exciting for us.

**LP:** Tell me a little about the new five-blade swept propeller STC for King Air 300s.

**RG:** It's a significant enhancement to the heavy 300s, including the 350, 360 and MC-12W. Operators will realize increased thrust and cruise speed, lower noise and better landing performance. They're carbon fiber and weigh almost 54 lbs. less than the original props. They also look very cool and have unlimited blade life.

**LP:** Raisbeck STCs are standard equipment on Textron Aviation's King Air production line. How is the relationship with the OEM, and do you anticipate any new programs with other OEMs in the future?

**RG:** As you know, we have a strong and healthy relationship with Textron Aviation. Raisbeck ram air recovery systems are standard on the King Air 260, and Raisbeck aft strakes and wing lockers are standard on the 360. We're



excited about our Caravan programs and hope to possibly have some new STCs for the current production EX in the future.

As far as other OEMs, we don't have anything planned necessarily, but we're always looking for opportunities to improve performance and utility for operators.

**LP:** What is unique about the EPIC packages? Obviously, there are other propeller and aircraft upgrades out there, even from the OEMs themselves.

**RG:** The EPIC packages come with certified performance in the form of certified flight manual supplements. This means that Raisbeck has done the work and invested funding into proving our performance upgrades through flight testing, which has then been certified by the FAA. For instance, our King Air 200 EPIC Platinum program provides operators with swept-

blade propellers, ram air recovery, enhanced leading edges, dual aft body strakes and high-float gear. Operators can also take credit for the runway performance, which is incredibly important and differentiates Raisbeck's upgrades because we went to the expense of certifying everything.

**LP:** With Raisbeck's recent announcement of the five-year general service administration (GSA) multiple

award schedule (MSA) agreement with the US government, can you talk about anything new on the horizon?

**RG:** Yes, the GSA schedule is significant because it makes Raisbeck's products accessible through a simplified buying process to state and federal government agencies. It certainly expands our footprint in the federal government marketplace. Last year, we completed a large US Army contract in which we added our five-blade propellers to around 42 C-12s, the military's King Air B200 equivalent. We definitely want to increase our government and special mission activities, and that's why we have pursued the GSA certification.

**LP:** From a personnel standpoint, the last three years at Raisbeck have been pretty dramatic. The whole aviation world mourned James Raisbeck's passing in August 2021. What other





The new five-bladed propellers for the King Air 300 series.

changes have occurred and where do you see Raisbeck's direction moving forward?

**RG:** James Raisbeck's passing was definitely a huge loss for the company. Raisbeck Engineering was his brainchild, and his entrepreneurial spirit went into the company. He set us on an incredible trajectory. Since his passing though we have brought in a new president Hal Chrisman, new engineering leadership, and new sales and marketing leadership, as well as our new CFO, Don Graves. Hal is focused on positioning Raisbeck with strong talent going forward. And he has the complete support of our ownership at Acorn Growth who acquired Raisbeck in 2016. They're always interested in how they can help reinvest in Raisbeck and support future opportunities.

**LP:** What can we expect from the Raisbeck team in the future?

**RG:** We carefully study general aviation platforms where we believe there are opportunities to increase performance or utility. There is also room for growth in our parts business. Raisbeck has FAA parts manufacturing authorization (PMA) and partners with other manufacturers. We see opportunities for growth in that business.

**LP:** In closing, what would you say is the biggest selling point for the Raisbeck upgrades to King Airs and Caravans?

**RG:** Honestly, it's the smile on a pilot's face when they push the power levers forward on an EPIC-equipped King Air and are demonstrably forced back into their seat by the additional thrust or when they see the increased climb, cruise speeds or stopping performance on the runway. It's real performance that can be seen and felt by the crew and passengers. And as for the workhorse Caravan, it is all about providing more speed, fuel economy and a better bottom line for the operators. They're special enhancements.

Many thanks again to Randy Groom for spending time with me. Now I am looking forward to a future article on the real-world experience of flying one of these EPIC Raisbeck aircraft. **T&T**

## Pilots N Paws®

is an online meeting place for pilots and other volunteers

who help to transport rescue animals by air. The mission of the site is to provide a user-friendly communication venue between those that rescue, shelter, and foster animals; and pilots and plane owners willing to assist with the transportation of these animals.

Joining is easy and takes just a minute of your time.

[www.pilotsnpaws.org](http://www.pilotsnpaws.org)



**WINGMAN MED**  
We keep you flying!

**FREE  
Consults!**



*Simplify your FAA Medical*  
[wingmanmed.com](http://wingmanmed.com)







## Ice Shield® Wing De-Ice Boots Will Help You Break The Ice this Winter Season



Emphasizing quality, value, service and selection, Ice Shield has become the preferred brand for aircraft de-icers. Owner / operators are switching from the OEM replacement to Ice Shield deicing products because of the durability, reliability, and availability of products. Ice Shield Wing Boots are offered in standard glue application, and pressure sensitive adhesive (PSA) application.

**Visit [Ice Shield.com](http://IceShield.com) or contact an  
Authorized Distributor today for more information.**

**Ice Shield & Ice Shield PSA products are available for sale worldwide!**

**[IceShield.com](http://IceShield.com) • 800-767-6899 • [info@iceshield.com](mailto:info@iceshield.com)**



## Citation M2

“I do a lot of contract flying and stay current in Citation 525's, Phenom 300, Citation X, and the Citation Sovereign. I'm actually getting ready to get a type rating in the Mustang because I'm determined to get typed in all of the Citation-series jets. That's the goal that I'm working on right now. Contract flying has been a lot of fun and being in Southern California, the hub of aviation, has been great to rekindle relationships and has really brought me back to aviation,” explained Mathew Keegan of Ladera Ranch, California.



Keegan's present involvement in aviation is not something he forecasted two and a half decades ago when he first stepped into the cockpit.

“I didn't come from a family of pilots, but flying was always something I wanted to do. I made just enough money putting myself through school that after paying for classes and rent, any little bit of money that was left over went to my flight training. So, it took me some time, but I got my private pilot certificate the same week I graduated. And I figured that flying was more fun than anything else that I was doing, so I decided to figure out how to do it for a living.”

After moving to Southern California from the northern part of the state, Keegan worked for his uncle, detailing



yachts. But his eyes were always turned skyward. After a short stint at sea level, he began a two-year internship with American Flyers in Santa Monica. He got his instrument rating, commercial license, and CFII in the first year of the program and then started instructing for the company.

Keegan advised that he worked through aviation during the uncertain times post 9/11. Elaborating, he explained, “I woke up one day and was like, ‘You know what, I don't



know if I want to do this anymore. I want to be a pilot, but I just don't know if I want to be a professional pilot!"

A little time out of the cockpit was beneficial, as it provided him the time to start his organic commodity business. Of course, after starting this venture, he still had skyward ambitions and was, fortunately, able to balance aviation and growing the company that now has an international footprint.

"As the business did better, I was still flying. But I was flying for pleasure. And as it continued, my budget got a little better, and I was able to buy different airplanes. So, the airplane was also really a practical business tool for me. Fortunately, I had a lot of experience as a CFI, so moving into different airplanes wasn't terribly complicated for me and I was insurable."

Prior to the M2, Keegan most recently owned a Beechcraft G58 Baron. He flew the light twin for several years prior to moving higher into the flight levels, even keeping it for a few more years after acquiring his M2. But this memorable highlight of Keegan's aviation life was followed by the tragedy of natural disaster.

"In 2017, I bought the Citation M2. It was new, and I took delivery on the 27th of September before flying it home to Sonoma County in Northern California where I was born and raised. Then only about a week later, we lost our home in the Tubbs Fire. I was actually in Washington D.C. when the wildfires happened. I hopped in the plane and flew home. That's when we started our next journey southward."

Keegan and his wife, Sarah, decided to use the total loss as a catalyst for the next chapter of their lives. Ultimately, they decided to move to Orange County. The move south has been beneficial for the couple, especially Keegan's undying love for aviation.

"What has been so interesting about this whole thing is that it really made me go full circle back to where I started all this and my objectives for flying. Flying for me has been a practical tool for my own business, but I'm also just a geek about flying and love aviation. I now do mentor flying with people and have been training a friend for a couple of years in his Kodiak 100. He went from literally zero time flying, with me in the right seat, being amazed by aviation, to recently completing his commercial certificate."

When not helping others realize their aviation goals in his free time, Keegan likes to race motorcycles, sports cars, and Baja trucks. So, it's not a surprise that flying the Citation X as captain is a dream come true for the speed-driven aviator. The need for speed similarly permeates his personal aircraft choice, although he advised that there are important tradeoffs between models within the light jet market segment — even amongst product families.

"What I have found out about the M2 is that it does at least what the book says it's going to do. And you can't say that about a lot of airplanes. It is fantastic," he began.

Keegan continued, discussing a few of the distinct differences between the nine-seat 525-series aircraft and another Citation he had once considered stepping into. "I personally don't need more seats. What I wish it would do is go



**When it comes to PT6A  
Service & Support,  
there's unmatched strength in the**  
**POWER  
OF ONE.**

For more than 50 years, Covington has remained true to the power of one. We are one family. Servicing engines from one manufacturer. With one guiding commitment: To build our company one relationship, and one engine, at a time. And, as the one and only family-owned Pratt & Whitney Canada factory-designated overhaul facility, no one knows the PT6A better, nor delivers more uncompromising support. All with a level of trust and compassion you simply won't find anywhere else. Call or visit us today. It would be our privilege to put the power of one to work for you.



918-756-7862 | [covingtonaircraft.com](http://covingtonaircraft.com)  
Se Habla Español | FAA Repair Station No. CP2R750K





At the time Keegan was considering moving out of the Baron, he explained that he considered Pilatus PC-12s, King Airs, and Citations, but surprisingly no other companies' jets.

"In our family, there are four of us. My daughter is fourteen now, and my son will be nine in July, so we have a young family, and a very high percentage of the time I fly myself and maybe two others. It's rare that someone is in every seat. So, we looked at the King Airs, which have more seats, but my wife isn't a big fan of turboprop altitudes. We had chartered a bunch of different planes to see which we could live with," he began.

"I wanted to find something that I could be a true owner-operator [single pilot] and didn't need a plane to fly to Europe. Flying that far doesn't fit my mission, and you buy a plane to fit 80% of your missions, which the M2 fits perfectly. I didn't really look at the Phenoms. What I thought about was that the M2 was pretty new and was a nice upgrade over the CJ1, which was a good size for us — so I chose it."

Keegan can talk nearly non-stop about this aircraft and the others he has flown. Routinely, these conversations happen with fellow aviation enthusiasts in the cockpit,

another couple hundred miles and I wish it would go just a little bit higher. But if you want to go farther and higher, you need a CJ3+ and you get a couple of extra seats. I just couldn't justify the extra cost for the extra seats, and you can buy a lot of extra jet fuel for the price difference. Given that I don't put someone in every seat, it wasn't necessary for me. The M2 performance is very close to the CJ3+. The 3+ will go a little higher and climb a little better. The speed difference though, is kind of negligible. It is faster, but not that much faster."

# TURBINES INC.

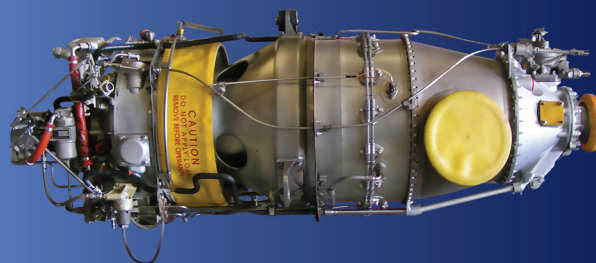
PRATT & WHITNEY PT6A

## FLAT RATE OVERHAUL

NO B.S. - NO BUREAUCRACY

ENGINE	BASIC	CAPPED PRICE
PT6A-11 / -21	\$ 169,000	\$ 240,000
PT6A-27 / -28	\$ 180,000	\$ 245,000
PT6A-34 / 34AG	\$ 190,000	\$ 255,000
PT6A-112	\$ 169,000	\$ 225,000

Engine must be a normal time expired core with no missing parts. Basic price includes accessory overhaul. Basic price does not include CT Blades or 1st Stage Reduction Gears. Replacement parts may be new PWC, overhauled PWC or PMA. Pricing does not include life limited parts, freight, insurance or taxes.



812.877.2587  
[turbines@turbinesinc.com](mailto:turbines@turbinesinc.com)  
[f/turbinesinc](https://www.facebook.com/turbinesinc)  
[youtube.turbinesinc.com](https://www.youtube.com/turbinesinc.com)  
[in linkedin.com/company/-turbinesinc/](https://www.linkedin.com/company/-turbinesinc/)



as he often “gives back” his time through mentor flying—something which he’s benefitted from greatly as a mentee.

“I can think of four mentors that I’ve had in aviation. My uncle David Boyce, a retired Cal Fire helicopter pilot, was the one that took me in the air for the very first time and had always been very supportive. Marco Grillo was my chief pilot at American Flyers and taught me what it means and what it takes to be a professional pilot. Then, Jim Yoder taught me how to fly jets and how to apply all the knowledge in my career to be a safe and competent jet pilot. Finally, Will Whiteside has always reminded me that aviation is a life’s journey. Together, Will and I have flown everything from RC airplanes to actual WW2 Warbirds including the T6 and Mustang together as well as modern jets like the M2 and Citation X. I am very grateful to have these people in my life,” Keegan began.

“As such I find it important for me to mentor the next generation of pilots as well. I believe that people get too hung up on the minimum hour requirements for various ratings and forget what they are really trying to do. That is to become a safer and more competent pilot which is never accomplished by doing the absolute minimum. We need to enjoy the process and remember that we all started to learn to fly because we love it and it’s just something we have to do.”

He is always excited to provide an overview of the very capable aircraft.

“The M2 is a real happy airplane in the mid-30s. It will go to 410, and we can direct climb there in 26 minutes. At that altitude, we burn maybe 720 pounds an hour – in total. When we are heavy, when we first get up there, it’s a bit shy of 400 knots – depending on the day and temps. 390 or 395 knots for sure when you first get up there, and then after an hour or two you are doing 400 knots. But in the mid-30s, you go right up there and are doing 400 knots. So that’s usually where we operate it. I only go up higher if I’m going longer distances, and have flown the plane an awful lot between the east and west coast.”

Overall, Keegan has been very pleased with his M2. Coming up on six years of ownership, he states that he has logged roughly 1,600 hours in the plane. Coupled with his thousands of hours of experience in other turbine aircraft, what could come next in his ownership journey is anyone’s guess.

It would be a tough decision, but he noted that his next aircraft could be a CJ4 – if he were to ever move up from the M2. But as he’s joked with other pilots, his long list of Citation type-ratings is punctuated by a Phenom 300 ticket. And as he’s learned through the headwinds and tailwinds of life, each chapter is full of surprises. **T&T**

*Keegan’s flying adventures can be found on Instagram under @mathewscottkeegan.*

## Your Beechcraft Parts Source

New Overhauled Used



Over 180,000 Part Numbers Available!



[www.selectairparts.com](http://www.selectairparts.com)

**“Call Us. We Speak Beechcraft!”**  
**1-800-318-0010**

## Give your plane a higher purpose.



### Wings of Hope’s Airplane Donation Program

Give your plane a new life by donating it to Wings of Hope. Your plane, even if it is no longer airworthy, can play an essential role in our mission of changing and saving lives through the power of aviation. Our donation process is easy and the tax benefits are significant.

[wingsofhope.ngo](http://wingsofhope.ngo)



Questions? Contact Mike Piccirilli at 314-705-9250  
or [mike.piccirilli@wingsofhope.ngo](mailto:mike.piccirilli@wingsofhope.ngo).



**Maintenance  
Paint & Interior  
Avionics**



**CENTRAL**  
— FLYING SERVICE —



**Choose Central Flying Service for ALL your Maintenance Needs**  
Servicing Beechcraft King Air Since 1948

+1 501-975-9650      Little Rock, AR (LIT)      [www.central.aero/select](http://www.central.aero/select)

## Had Enough \$100 Hamburgers? Fly to help land, water and wildlife



Chris Crisman/TNC/LightHawk



Learn more at  
[www.lighthawk.org/volunteer](http://www.lighthawk.org/volunteer)

## Ad Index

1st Source Bank .....	3
AEA .....	20
Airtex .....	12
Aircraft Widgets .....	3
Avidyne Corporation ....	Back Cover
Blackhawk Aerospace Technologies .....	21
Central Flying Service .....	30
CIES Corporation .....	20
Covington Aircraft Engines .....	27
Factory Direct Models .....	17
Ice Shield/SMR Technologies .....	25
Innovative Solutions & Support .....	13
Lighthawk .....	30
Pilots N Paws .....	24
Preferred Airparts LLC .....	17
Select Airparts .....	29
StandardAero .....	7
Stevens Aerospace & Defense Systems .....	Inside Front Cover
Turbines Inc. ....	28
Veterans Airlift Command .....	Inside Back Cover
Wingman Med .....	24
Wings of Hope .....	29



**TO ADVERTISE IN TWIN & TURBINE  
MAGAZINE CONTACT:**

**JENNA REID,**  
ADVERTISING DIRECTOR  
[JENNA.REID@VPDCS.COM](mailto:JENNA.REID@VPDCS.COM)  
816-699-8634

**ADVERTISING, JENNA REID**  
816-699-8634  
Email: [Jenna.Reid@VPDCS.com](mailto:Jenna.Reid@VPDCS.com)



# TWIN & TURBINE

FOR THE PILOTS OF OWNER-FLOWN, CABIN-CLASS AIRCRAFT

---

## Written **By** Pilots **For** Pilots

---



[www.twinandturbine.com](http://www.twinandturbine.com)

---

Product Reviews | Turbine & Piston Operations | Safety & Training  
Market Trends | Aircraft Upgrades | Industry News | Lifestyle Features

---





## Say It Ain't So

**H**ave you ever come to the realization that you are flying too much airplane? There's probably a fair number of us in that situation. But what happens if you realize that you have more airplane than you can afford?

This spring, I came to that realization.

Citations are fantastic airplanes. My 2010 Citation Mustang is one of the best examples out there. New paint, interior, avionics upgrades, you name it. I had no intention of selling it, but my thinking went something like this:

- Continuing economic slowdown
- Topsy turvy world events
- Resale market just peaking after historic highs
- Nice profit in the Mustang
- Desire to leave a little something for my kids and grandkids

I read my friend Dick Karl's emotional farewell to flying his Citation Jet single pilot due to astronomical insurance costs. Luckily, I still have underwriter interest, but for how long?

The hardest part was telling Patty. "You will just buy something else, you always do," she said. "But this is probably the last jet for us," I answered.

And so, without a resolution to the next airplane dilemma, I decided to sell N396DM.



Cody Honeyman and the fine folks at Textron Aviation had a buyer within days. Jon Bradford, the new owner, arrived in Dallas with an aviation entourage and fell in love with the Mustang just like I did. "I won't sell it unless you join Citation Jet Pilots," I told him. "Okay, if that's what it takes, you have a deal."

The folks at Galaxy FBO in Addison helped me pack all of our accumulated stuff. "I'll be back with another airplane someday," I yelled over the whine of a Citation X on the ramp.

I made the delivery flight to the San Antonio service center for the pre-buy knowing it might be my last time in the left seat as PIC. I kept hoping for a call from the buyer's rep telling me they had found something very unusual in the aft baggage compartment and were calling off the closing. No such luck. It was the smoothest process of any airplane I have owned.

So, what's next?

I went straight from single-engine piston aircraft to twins early in my aviation career. Back in the early 80s, there were almost no single-engine turbine options. Right or wrong I am partial to two engines, albeit realizing that often the second engine just gets you closer to the accident site.

I called my insurance broker to ask about downsizing to a Baron or a Duke. "Expect a 25 percent premium increase," they said. "You're kidding. The Mustang is faster, flies at FL410 and has a much higher hull value," I argued.

"We just like you flying the Mustang. It's something you are familiar with and God knows you've had plenty of them," came the response.

Now, I need to find something I can easily afford. In the meantime, I'm off to Wichita for another recurrent in the Mustang simulator.

'Cause you never know what's just past that next cloud. Fly safe. **T&T**

**David Miller** has owned and flown a variety of aircraft from light twins to midsize jets for more than 50 years. With 6,000 plus hours in his logbook, David is the Director of Programs and Safety Education for the Citation Jet Pilot's Safety Foundation. You can contact David at [davidmiller1@sbcglobal.net](mailto:davidmiller1@sbcglobal.net).



# COMBAT WOUNDED THEY'VE GOT HE<sup>RT</sup>, THEY NEED WINGS

Imagine returning home from combat facing devastating injuries  
and long-term hospitalization-- in a facility hundreds of miles away from your family.

Imagine somebody brings you together.



The VAC provides free air transportation to wounded veterans and their families for medical and other compassionate purposes through a national network of volunteer aircraft owners and pilots.

**FIND OUT HOW YOU CAN MAKE A DIFFERENCE.**

[VeteransAirlift.org](http://VeteransAirlift.org)

952-582-2911





## NOW IS THE TIME TO MODERNIZE YOUR FMS

Upgrade your **CJ1+, CJ2+, CJ3** for **LPV, SVS** and more.

Upgrading with Avidyne's ATLAS & IFD-Series FMS systems provides the most cost-effective SBAS/LPV solution for your CJ1+, CJ2+ and CJ3 aircraft.

Integrated GPS Legacy Avionics Support (GLAS™) solves the SBAS interface issues inherent with most legacy EFIS systems, and with 3D Synthetic Vision, Jeppesen® Electronic Approach Charts and wireless connectivity to Foreflight® and other 3rd party Apps, Avidyne FMS solutions provide all the modern features and functions you need to extend the useful life and utility of your aircraft at a dramatically reduced cost.

ATLAS & IFD-Series FMS. Now is the time.

### Features & Capabilities

- GPS Enroute & Approach operations including: LP, LPV, LNAV, LNAV/VNAV
- Integrated GLAS™ technology provides clean interface to legacy EFIS systems
- Hybrid touch screen plus knobs & buttons
- 3D Synthetic Vision
- Jeppesen® Electronic Approach Charts
- Integrated WiFi connectivity with Foreflight® and other 3rd-party EFBs



Contact your MRO or Avidyne BizAv Sales at  
+1.321.751.8520 for more info.

[sales@avidyne.com](mailto:sales@avidyne.com)

**AVIDYNE®**  
[avidyne.com/bizav](http://avidyne.com/bizav)