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Becomes No

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and Blue Skies

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Jet G2+

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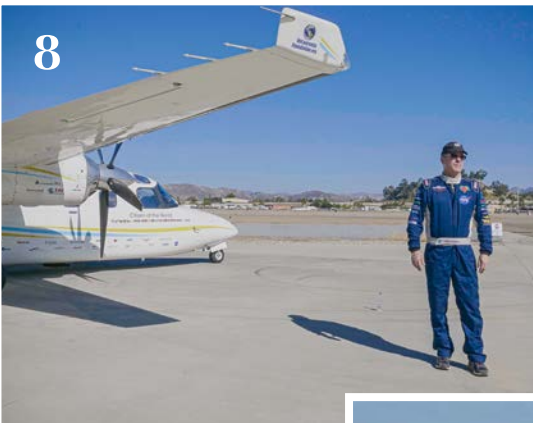
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Editor's Briefing

by Rebecca Groom Jacobs



When Go Becomes No



The following editorial is guest written by Jared Jacobs.

Recently, I decided to take our F33A to Little Rock, Arkansas, to visit family. Between work and personal matters, I had plenty on my mind that morning, and I was ready to get out of town early to make good time.

As soon as I rotated, however, I knew something was up. There was a distinct and unfamiliar vibration in the yoke and floorboards. I scanned my engine instruments and found no obvious abnormalities, so I decided to continue the climb to a safe altitude for further troubleshooting.

As I gained altitude, I did my best to narrow down the source of the vibration. Controllability was fine

despite the shudder I was feeling in the ailerons. When I selected the gear up, there was no noticeable change to the feeling. When I reduced propeller RPM from 2700 to 2500, I noted a slight difference, but could not tell if it was better or worse. All throughout the climb my eyes were glued to the engine gauges as I monitored the indications and aircraft performance. To my relief, all were still completely normal.

Upon reaching a cruising altitude (and with a suitable landing airport nearby), I closed the cowl flaps and conducted a magneto check. Neither action gave me a better understanding of the source of the vibration. The final check was to lean the mixture for cruise and again monitor the engine indications. Every engine indication was exactly as I would have expected.

Having exhausted the troubleshooting possibilities that came to mind, doubt began to creep in my mind. Was I really feeling something that was abnormal? Was it bad enough to abort the trip that I had been looking forward to? Was it worth taking the aircraft to the shop? I had been flying turbine aircraft the last few weeks; maybe I was just being overly sensitive to a totally normal shake coming from a piston engine.

As I convinced myself that this was all in my head, I pressed on. But there was an uneasy feeling still nagging at me...was flying two hours like this a good idea? Should I really continue from the flatlands of Kansas into the Ozark wilderness of Northwest Arkansas with a misbehaving aircraft? If I made it to Little Rock, would I end up being forced to do maintenance at an unfamiliar shop if the issue got worse?

Thinking back, the only thing that made a difference was the reduction in propeller RPM. So, I made another adjustment from 2500 to 2300 and noticed a definite reduction in the vibration. This told me everything I needed to know. From experience, I knew that this engine had run noticeably smoother at 2500 RPM than it did at 2300 RPM on previous flights. This was not normal. Something was different.

Despite the pressure to make it to see family, I made the 180-degree turn back to Wichita. I have made the "no go" decision plenty of times in my professional flying, but for some reason, this decision seemed harder. The only explanation is that my emotional desire to "go" was stronger in this scenario than it's been in the emotional vacuum of corporate flying. Get-there-itis snuck into the

cockpit with me that morning, and I let it take the controls for longer than I am happy to admit.

Decision made, I set a course for Jabara (AAO) instead of our home airport of Augusta (3AU). I had good maintenance options at both locations, but friend and aircraft partner Ryan worked across the street from AAO. I wanted a second set of eyes on this before we decided to put 1RW in the shop. I remained at cruise altitude much longer than I normally would and made a circling descent within gliding distance of three suitable airfields – just in case.

After an uneventful landing, Ryan met me on the ramp at AAO. I went over the story, we checked out a number of theories, and ultimately decided to have the shop dig into the aircraft and see what they could find. I phoned my parents to give them the news, and instead of being disappointed, they were relieved and convinced that I had made the right decision. As an aviator, I knew that I had come to the right conclusion to return when I was sure that the aircraft was behaving differently. Still, hearing confirmation from other parties did make the weight of the choice feel lighter.

So, what did the shop find? Nothing actually. Not anything that would directly lead to the vibration. It was a day later when I had the idea to search BeechTalk for “Bonanza vibration” and saw the first search result titled “Flying with Tip Tanks” and I found the answer. As it turns out, something was different that morning. It was

the first time I topped off our Bonanza with full fuel in the main and tip tanks. Previously unbeknownst to me, when the aftermarket tip tanks are full of fuel, they will cause a very noticeable harmonic vibration which can be felt in the floorboards and yoke of the aircraft. The remedy? Transfer about 3 to 5 gallons from the tips to the main tanks and the vibration will go away. I had obviously never heard of this, so I was caught off guard and never thought to try transferring fuel during my troubleshooting.

Knowing what I know now, I still stand by the choice to abort the flight. When I was sure something was different with the aircraft that I could not explain, there was no good reason to press on, especially with the external pressures I put on myself to make it to the destination. The urge to go should always come second to a clear reason for no. **T&T**

Jared T. Jacobs is an ATP-rated turbine pilot, instructor and mentor. He currently flies corporate aircraft both single-pilot and as crew for a Fortune 500 company. Jared can be reached at jaredjacobs2@gmail.com.

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Cirrus Vision Jet G2⁺

High and Hot Performance Improvements by Rich Pickett



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Hot and high-density altitude operations can affect all aircraft, and turbines are no exception. Light jets particularly can be impacted, and summer operations (even at airports we don't consider mountainous) can be a challenge. Working with Williams International, Cirrus just released the Vision Jet G2+, which addresses some of these limitations, offering significant performance improvements when operating in such situations. Twin & Turbine was offered an opportunity to fly the G2+ this summer.

Previously, I have written articles on the G2 and its innovative Safe Return Autoland update. Those flights took place around low elevation airports in the Eastern United States. Since this upgrade was specifically focused on increased performance at higher density altitudes, I wanted to fly the aircraft to some of my frequent mountain destinations.

Matt Bergwall, director of the Vision Jet product line, flew the second production G2+ out to my home airport Montgomery-Gibbs (MYF) in San Diego. We planned a flight from KMYF to Big Bear (L35), Flagstaff (FLG), then onto Scottsdale (SDL). Both Big Bear at 6,752 MSL and Flagstaff at 7,014 MSL would be a good test of performance with temperatures well above ISA. The G2+ also offers GoGo's AVANCE L3 inflight connectivity service – the first “personal jet” aircraft to do so.

Matt and I did our preflight check of the Vision Jet at the new Crownair FBO at Montgomery, joined by my son, Tigre. Except for the “+” on the jet's logo, you can't tell any differences from the previous G2. All of the performance changes are within the operating parameters of the Williams International FJ33-5A engine. This is the third iteration of the FJ33-5A installed in the Cirrus Vision Jet, all of which produce 1,846 lbs of thrust at sea level. The second version in the G2 improved the climb performance and high-altitude capabilities, allowing Cirrus to raise the service ceiling to FL310 from FL280, providing slightly more range and capabilities. The G2+ iteration, starting with serial number 288, adds to that capability a 4 to 20 percent improvement in takeoff and initial climb performance (with the larger increases at higher altitudes).

On the first legs, Tigre sat in the middle passenger row and served as our videographer. Even at his height (6 feet, 6 inches), the cabin environment provided more than adequate comfort. The far aft row seats offer limited height and legroom but are suitable for children and young adults. The rear outboard seats also have a weight limitation of 90 lbs each. The G2+ offers additional interior finishing options and includes USB-C ports for occupants as well.

If you haven't had the opportunity to sit in a Vision Jet, the cockpit is very comfortable, and the panoramic view is

unsurpassed. As I mentioned in my first Twin & Turbine article, the Lee Aerospace CoolView windows block 99 percent of harmful UV and 82 percent of infrared frequencies so you can enjoy the expansive view without getting sunburned.

Matt guided me through the checklists for the starting sequence, which is straightforward. The large Garmin G3000 PFD and MFD displays are accompanied by horizontal-oriented Garmin Touch Controllers (GTCs) – the primary method of controlling the G3000 avionics suite. The orientation and placement of the GTCs are easily accessible by the pilot or co-pilot. Our first leg was a VFR flight from MYF to L35. Cirrus is constantly improving upon its aircraft, and my sound level readings in the cockpit reflected a slight improvement over my previous testing in the G2. While not as quiet as other light jets, the sound level is acceptable using the Bose A20 headsets.

Big Bear Lake and the surrounding area is a beautiful area to fly into as well as mountain bike, ski or hike. At an airport elevation of 6,752 feet and a runway length of 5,850 feet, its location and the surrounding mountains are perfect for conducting flight instruction and evaluating high-altitude aircraft performance. Approaching Runway 26, we were afforded a great view with the lake in the background. Our approach speed was approximately 90 KIAS. The trailing link gear facilitated our smooth landing, and I found the Cirrus Beringer brakes to work extremely well.

We taxied back for departure, a perfect day to evaluate high-altitude takeoff performance. With an OAT of 28 degrees Celsius, our density altitude was 9,700 feet. With takeoff flaps and full takeoff power (N1 – 98.6, N2 – 96), we began our departure on Runway 26. With a V_r of 85 KIAS, I rotated in 24 seconds using less than 2,700 feet of runway. At approximately 5,500 pounds, we were below the maximum takeoff weight of 6,000. Comparing this value with the performance of the original G2, there was at least a 25 percent improvement, more than Cirrus' initial estimates with the new engine configuration.

While the reduced runway requirements were impressive, high-altitude operations are equally important in the departure climb. The second segment climb performance can make the difference in whether you can meet the departure gradients. Our climb rate was 10 to 15 percent above the G2's predicted rate of climb by my calculations. While technically you can operate at takeoff thrust for 5 minutes, Cirrus recommends reducing to Maximum Continuous Thrust (MCT) within two minutes for reduced engine maintenance costs. A good recommendation for any turbine engine.

We then headed over to Flagstaff to test the high-altitude performance, air work and a missed approach. We climbed up to FL310, where we flew over the desert at 310 KTAS consuming 64 GPH (429 PPH). The 7.1 PSID pressurization system held our cabin at 8,000 feet. Along the way, we also wanted to test GoGo's AVANCE L3. Matt had used it earlier to file our flight plan during our flight to Big Bear. The coverage along our route to Flagstaff was intermittent,



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which we later learned was due to a localized temporary signal degradation. When I did connect, we measured a maximum download transmission rate of 2 Mbps.

The AVANCE L3 system also provides a moving map capability, and the onboard entertainment option may be available in the future. The L3 is in the Connectivity Package, which is also included in the Elite Package – a combined

and engaged in the FMS mode, all I had to do was ensure the FMS was programmed correctly and select the appropriate altitudes until we were cleared for the approach. The autothrottle is intelligent enough to adjust for both charted and uncharted holding patterns if necessary. As our airspeed slowed below 190 KIAS on the base leg from CALGU to ZAMAB (IF), I deployed 50 percent flaps. As we became established on the localizer, and with one dot above the glideslope, I lowered the gear. At glideslope intercept, the autothrottle slowed us below the full flaps speed of 150 KIAS, so 100 percent flaps were selected.

The V_{ref} on the Vision Jet varies from 76 KIAS at 4,500 lbs to 89 KIAS at gross weight. The G3000 also features an AOA indicator. The AOA “green donut,” which provides confirmation of the proper V_{ref} and automatically adjusts according to landing configuration and weight, is useful for landing. The autothrottle kept us slightly above the V_{ref} until DA, at which time I pressed the GA (Go Around button), raised the flaps to 50 percent, and the AFCS smoothly moved the throttle to takeoff power and advanced the FMS to the missed approach procedure. All that was left was for me to raise the gear and the remaining flaps. Nothing could be simpler – or safer.

With the missed procedure completed, I reprogrammed the FMS for Scottsdale and sat back for another smooth flight in the Vision Jet, enjoying the panoramic view of Arizona.

Summary

The base price of the Cirrus Vision Jet G2+ is \$2.5 million, slightly above the previous G2. Cirrus is working on a performance upgrade path for the existing G2 fleet, as well as the installation of GoGo's AVANCE L3. Expect those upgrades to be available in 2022. The complexity of performance enhancements may not be a cost-effective solution for the G1s.

The Cirrus Vision Jet is unique and enjoyable to fly, and the latest model is no exception. When comparing my actual flight experience to the preliminary performance data for the G2+, our flights exceeded those values. Pilots of the Vision Jet G2+ will find the number of available airports augmented, fuel and passenger loads increased at higher density elevations, and higher climb rates – expanding their operational envelope. **T&T**



offering of most of the available options and purchased by almost all owners. The nose-to-tail Cirrus Jetstream support program also includes a bundle of internet data usage, varying from 14,000 MB to 30,000 MB depending upon the contracted annual hours and term length. Owners will be able to purchase additional bandwidth as well. Pilots can control the use by a convenient switch located on the left side panel, allowing them to manage their data budget.

Approaching Flagstaff, it was time for some of my favorite flying – stalls and steep turns. As I found in my earlier Vision Jet flights, the plane is extremely well balanced with benign stall characteristics and very easy to fly in any configuration or bank angle. It simply handles like a very fast Cirrus SR22. In order to do steep bank turns, I had to hold the autopilot interrupt to prevent Garmin's stabilization feature (ESP) from reducing my bank.

While I'm a strong proponent of pilots mastering hand flying their aircraft, the automation offered by Garmin in the implementation of the G3000 automatic flight control system (AFCS) goes well beyond the simple term autopilot. The AFCS offers traditional autopilot functions, the always-on stabilization features described above (ESP), and both an FMS and manual selected autothrottle system. I fly jets frequently in very busy airspace in Southern California and find the autothrottle capability very useful to hold specific speeds requested by ATC or required by the procedure itself.

After the air work, it was time to test out this capability again in the Vision Jet. We headed to CALGU, the IAF for the Flagstaff ILS 21 approach. With the autothrottle selected

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. He is also a proud owner of an Eclipse and Cirrus SR22. You can contact Rich at rich@personalwings.com.

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POLE TO POLE

AROUND THE WORLD JOURNEY

by **Grant Boyd**



Looking down at the fuel gauge and seeing only 20 minutes worth of JET A remaining is enough to catch the attention of any aviator, let alone one who is flying across remote, unknown territory. This was just one of the many notable events Robert DeLaurentis recalled from his recent Pole to Pole expedition in his heavily modified 1983 Gulfstream Twin Commander 900.

On November 16, 2019, he started what became an 8-month, 23-day journey that took him to almost two dozen countries. The nearly 140 hours of flying included time over oceans, rainforests, mountains, deserts, plus 12 and 18-hour legs over the vast landscape that makes up the Earth's southernmost and northernmost points.

Of course, when overflying hostile terrain for extended amounts of time with minimal navigation and virtually no safe landing options, there is a considerable amount of psychology at play. During one portion of his North Pole leg, Robert faced five hours without GPS, autopilot, attitude heading and reference, communications, and magnetic compass. Just as with other routine flying applications (i.e., busy commercial traffic patterns, skirting around severe weather, etc.), self-assurance must be intentional during these low margin of error flights.

Mission Behind the Mission

Robert DeLaurentis is a 2,000-plus hour commercially rated pilot with an advanced degree in Spiritual Psychology and a thirst for adventure. He tackles challenging, purpose-created flight profiles with an overarching mission to educate others about the commonalities seen across humanity.

Much of Robert's own worldview was acquired through his 14-year Navy career, where he rose to the rank of Lieutenant Commander as a Surface Warfare Officer. And in

2015, he embarked on a solo around-the-equator flight in a Piper Malibu Mirage. The 26,000-mile trip took him to 23 countries, further opening his eyes to varying cultures.

"I found that there are more similarities than differences amongst people," said DeLaurentis. "What everybody on the planet seemed to want was peace, safety for their family, financial stability, joy and happiness. I found those to be the common threads that really sort of unite everybody together."

Prior to beginning his Pole-to-Pole mission, the "Zen Pilot" (as Robert has come to be recognized) said, "This polar circumnavigation of the 'Citizen of the World' has been created to highlight all the above elements and qualities, desires and dreams; it is the common thread that joins humanity together. We are dedicated to connecting the South Pole to the North Pole and everyone in-between as Citizens of the World – on a mission of one planet, one people, one plane, oneness for humanity."

Pole to Pole Planning

Obviously, traversing both Poles requires ample preparation. The route began at Robert's home airfield in San Diego, with planning initiated a full 24 months prior to the initial lift-off date. While the route would take him to remote and rarely seen locations, much of the prep was related to the polar portion of the trip. With few having flown this route, let alone solo in a twin-engine aircraft (Robert would be the first), there were many unknowns that had to be identified.

Some of the biggest considerations were related to the South Pole's dangerous weather and the fact the Twin Commander lacked the endurance for the big 4,300 nautical mile Pole to Pole jaunt. The airplane was initially capable of flying around 2,000 nautical miles and essentially had to be fully redesigned from nose to tail. One of the most noticeable enhancements was the addition of two MT five-bladed nickel-tipped scimitar composite props. These propellers, which were the first-ever manufactured of the type,



Robert preparing to depart for Antarctica from Argentina.



were fronted by two TPE331-10T Honeywell Turbine engines.

Along with a Gulfstream-initiated pressurization increase in this model from 5.5 PSI to 6.7 and a 10-foot longer wing compared to earlier years, the plane before modification could fly at approximately 28,000 feet and 260 knots, burning roughly 75 gallons of JET A per hour. After further modifications, like the addition of six long-range fuel cells and a ceramic coating, the plane's expected performance rose to nearly 311 knots at 35,000 feet, consuming only 70 percent of the amount of fuel that it had previously. Other enhancements included upgraded Concorde batteries suitable for extreme cold, AMSAFE seatbelt airbags and Avidyne IFD 550/440 Touch-Screen Aviation GPS Navigators. In all, more than 50 modifications and upgrades were incorporated.

"Nothing was left on the table in terms of modifications," said DeLaurentis. "There isn't anything else that could have been done to improve speed, altitude, or range. I had even thought of stripping the exterior paint to save weight but was told that would not be beneficial."

Even with the sheer amount of preparation and aircraft improvements, Robert wasn't entirely sure that the mission would be a success. Some of this concern arose from others vocalizing it wouldn't be possible (including a sponsor). Before too much doubt could creep in, Robert regained his focus and faith in success. "I didn't think I was led down this path to fail," he said.

With improvements and flight testing complete, the aircraft (dubbed the "Citizen of the World") was ready to prove itself. The aircraft took off from San Diego, heading south towards its first stop in the Brownsville, Texas area, then onwards to Central America.

Overcoming the Challenges

Encountering road bumps is an aspect of any aviation mission, and, of course, there were many during a flying adventure of this magnitude. Aside from the 20 minutes of



Kenya's Chairman of the National Environment Management Authority.



Georgia Aviation University Flight School.

fuel that remained while finishing the South Pole portion of the flight, there were obstacles such as unexpected changes in wind or weather, extreme cold below the operating limits, a considerable fuel leak, and the unforeseen COVID-19 pandemic causing closures across many countries' borders.

But despite numerous challenges and delays, the mission was a success. The aircraft completed its intended mission and returned to the United States after nearly nine months of travel.

Aside from a safe return home, there was much Robert took away from the trip and was able to celebrate. Among the positives was the incorporation of several sponsored experiments carried aboard the aircraft during the trip. One was the NASA "Wafer Scale Spacecraft Experiment,"

which took 700,000 photos during the trip and served as an example of the future of spaceflights. Another was the simple addition of 3M double-sided tape to the nose and wingtips of the aircraft, which sought to capture any microplastic particles that may be floating around at altitude.

Mobile STEM Lab

Today, the Twin Commander retains its dedication to education and science, having since been transformed into a mobile STEM lab. One of the highlights of this nationally-touring, flying education vestibule is the transport of a Redbird simulator. The simulator is set up at each airshow or event to allow attendees and children to try their hand at flying the aircraft virtually.

Robert worked with Redbird to integrate several aspects of his



The Citizen of the World team.

excursion into the simulations, with one of the flight options being the flight to the South Pole. One reason this portion of the flight was chosen, other than its unique nature and breathtaking scenery, is the lesson it teaches students. By flying this portion, they learn about the stresses on planes and pilots, while Robert

guides the simulation as a virtual copilot. The students see that even an experienced pilot who has planned a certain trip for several years can still face unexpected challenges.

Since Robert and the Citizen of the World returned to the states in late 2020, touring has largely been on hold due to COVID. Still, the

aircraft was featured at Sun 'n Fun and EAA AirVenture and is expected to be at other shows as activity ramps back up.

Another way the public can experience the Pole to Pole mission is through a 12-part docuseries covering various portions of the flights. One example is Robert's grounding in Spain at the time COVID first locked down countries. Here, he stayed with a group of monks in a monastery and headed to the mountains when the facility was shut down to the public. Other memorable encounters along the way included a dog sled driver in Argentina, a ballerina in Bulgaria, and a Zulu Warrior in South Africa.

While Robert is not currently planning any additional around-the-world flights, he has a premonition that any mission he takes in the future may align with the types of aircraft of tomorrow, such as those with electric or hybrid-electric power plants.

For more information about Robert and his Pole to Pole flight, visit flyingtherulife.com. **T&T**





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Grant Boyd is a private pilot with seven years of experience in general aviation business from marketing to customer service. He has written more than 85 articles for aviation publications and enjoys learning about aircraft/pilots with unique missions. Grant can be reached at grantboyd2015@gmail.com.

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C-26 Metroliner

Twin turboprops answer Army National Guard training site's need for versatility.

by MeLinda Schnyder



The only Army National Guard training site for fixed wing pilots is in the midst of a busy training cycle that officials expect to continue for at least the next two years. The increase in training needs is largely due to aging aviators who have retired and competition from commercial airlines and companies recruiting military pilots.

The Fixed Wing Army National Guard Aviation Training Site – or FWAATS – executes the Army National Guard's fixed wing flight qualification and training program using a small fleet of twin-engine turboprop aircraft: Fairchild C-26 Metroliners and Beechcraft C-12 Hurons, the military designation for the Beechcraft King Air 200.

"A lot of the C-26 Reserve and Army pilots had met their service obligations and retired in the last two years when the hiring was so good out in the airlines," said Chief Warrant Officer 4 Jack Brink, the FWAATS C-26 section lead and a C-26/C-12 standardization instructor pilot.

That created a gap within the Army's aviation units, resulting in a shift in the type of training needed.

"We simply react to the needs of the active Army and the Army National Guard, and recently the pendulum has swung heavily from creating instructor pilots and examiners to needing to fill vacancies on their benches," said Chief Warrant Officer 4 Daniel Latimer, a C-26 standardization instructor pilot. "So for now, the

demand for fixed wing qualification courses has skyrocketed. We all know aviation runs in cycles, and all indications are that in a few years the pendulum will swing back the other way. By then, all the pilots we're training up now will come back to us for more advanced courses, instructor pilot and instrument examiner courses."

Brink and Latimer are two of only three full-time C-26 instructors at the FWAATS, which operates from the Northcentral West Virginia Regional Airport in Bridgeport, West Virginia. They expect to see twice as many C-26 students this year and next and there will be an increase among King Air trainees as well.

In a normal year, approximately 100 pilots and nonrated aircrew

members are trained at the FWAATS across both platforms. The schoolhouse trained about half that number in 2020 due to COVID-19 restrictions and this year has started with a full schedule.

While it's the only facility dedicated to fixed wing training for the Army National Guard, FWAATS also trains pilots from the active and reserve components of the United States Army. There are generally three types of students FWAATS sees: a regional pilot with enough fixed wing time but no Army aviation experience; a rotary pilot making the switch to fixed wing flying; and a pilot who qualified in Army fixed wing flying decades ago but got out for some reason.

"Maybe they got out of the military and got back in, or they flew helicopters for a while," said Latimer, who has 19 years of federal service time, starting as a Marine and switching to become an Army aviator with the Mississippi National Guard and then joining the FWAATS in 2016. "They still meet the prerequisites to come here, and we're just knocking off the cobwebs and reconnecting them with today's Army aviation."

Lt. Col. Wade A. Johnson, commander of the FWAATS, and Chief Warrant Officer 4 Bill Douglass, the program's senior standardization instructor pilot, oversee a team of 23 personnel conducting fixed wing initial qualification and graduate-level qualification training, such as instrument examiner, maintenance test pilot and instructor pilot courses.

Origin of the FWAATS

In addition to training C-26 and C-12 aircrews, the FWAATS was also the Army's only aircrew training facility for the Short C-23 Sherpa aircraft for several years. The Army divested the platform and the last FWAATS C-23 course was in 2013. From 2001 through 2020, the FWAATS has trained more than 2,600 pilots and non-rated aircrew members including more than 1,400 C-12 students, about 800 C-23 students and approaching 400 C-26 students.

But their efforts started a few years earlier. In the 1980s and 1990s, the

Army National Guard set up four accredited regional aviation learning institutions of excellence, called Army Aviation Training Sites (AATS). The FWAATS, formed in 1996, is the only one of four that offers fixed wing training. It was created to provide the U.S. Army Aviation Center of Excellence at Fort Rucker in Alabama with a professional and reliable training resource and surge capacity to meet the Army's fixed wing training

requirements here and abroad, in support of combatant commands engaged in decisive action operations.

The Army used King Air 90 aircraft designated U-21 as far back as 1964 and was the first branch of the military to use the King Air variant C-12 Huron, starting in 1974. The Army National Guard first started using C-26 in the 2000s when the U.S. Air Force ended its use of the C-26 and dispersed its inventory to

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266	BEECHJET 400A
195	BOEING BBJ
503	CHALLENGER 300
40	CHALLENGER 600
26	CHALLENGER 601-1A
121	CHALLENGER 601-3A
54	CHALLENGER 601-3R
325	CHALLENGER 604
7	CHALLENGER 800
148	CITATION 500
340	CITATION 525
318	CITATION BRAVO
187	CITATION CJ1
96	CITATION CJ1+
240	CITATION CJ2
225	CITATION CJ2+
476	CITATION CJ3
174	CITATION CJ3+
368	CITATION CJ4
189	CITATION ENCORE
74	CITATION ENCORE+
392	CITATION EXCEL
14	CITATION I
280	CITATION I/SP
445	CITATION II
54	CITATION II/SP
155	CITATION III
124	CITATION LATITUDE
247	CITATION M2
467	CITATION MUSTANG
130	CITATION S/II
323	CITATION SOVEREIGN
105	CITATION SOVEREIGN+
310	CITATION ULTRA

285	CITATION V
31	CITATION VI
122	CITATION VII
329	CITATION X
38	CITATION X+
253	CITATION XLS
301	CITATION XLS+
1	DIAMOND I
32	DIAMOND IA
16	DORNIER ENVOY 3
304	ECLIPSE EA500
75	EMBRAER LEGACY 500
100	EMBRAER LEGACY 600
53	EMBRAER LEGACY 650
247	EMBRAER PHENOM 100
328	EMBRAER PHENOM 300
80	FALCON 10
22	FALCON 100
16	FALCON 200
242	FALCON 2000
27	FALCON 2000EX
34	FALCON 20C
15	FALCON 20C-5
17	FALCON 20D
1	FALCON 20D-5
10	FALCON 20E
49	FALCON 20F
75	FALCON 20F-5
197	FALCON 50
8	FALCON 50-40
118	FALCON 50EX
178	FALCON 900
24	FALCON 900C
116	FALCON 900EX
156	GLOBAL 5000
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14	GULFSTREAM G-300
24	GULFSTREAM G-400
313	GULFSTREAM G-450
11	GULFSTREAM G-500
602	GULFSTREAM G-550

27	GULFSTREAM G-II
12	GULFSTREAM G-IIB
111	GULFSTREAM G-III
175	GULFSTREAM G-IV
338	GULFSTREAM G-IVSP
204	GULFSTREAM G-V
38	HAWKER 1000A
2	HAWKER 125-1A
2	HAWKER 125-1AS
12	HAWKER 125-400AS
2	HAWKER 125-600A
1	HAWKER 125-600AS
61	HAWKER 125-700A
72	HAWKER 4000
223	HAWKER 400XP
44	HAWKER 750
153	HAWKER 800A
14	HAWKER 800B
398	HAWKER 800XP
42	HAWKER 800XPI
88	HAWKER 850XP
187	HAWKER 900XP
2	JET COMMANDER 1121
2	JET COMMANDER 1121B
2	JETSTAR 731
4	LEARJET 23
12	LEARJET 24
2	LEARJET 24A
7	LEARJET 24B
20	LEARJET 24D
8	LEARJET 24E
6	LEARJET 24F
4	LEARJET 25
19	LEARJET 25B
4	LEARJET 25C
45	LEARJET 25D
4	LEARJET 28
32	LEARJET 31
182	LEARJET 31A
26	LEARJET 35
398	LEARJET 35A
21	LEARJET 36
33	LEARJET 36A

32	LEARJET 40
243	LEARJET 45
225	LEARJET 45XR
92	LEARJET 55
6	LEARJET 55B
8	LEARJET 55C
307	LEARJET 60
623	PILATUS PC-12/45
149	PREMIER I
1	SABRELINER 40
7	SABRELINER 40A
2	SABRELINER 40EL
2	SABRELINER 40R
4	SABRELINER 60
5	SABRELINER 60ELXM
68	SABRELINER 65
7	SABRELINER 80
1	SABRELINER 80SC
67	WESTWIND 1
1	WESTWIND 1123
14	WESTWIND 1124
50	WESTWIND 2

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57	CHEYENNE IIXL
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1,038 KING AIR B200
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796 PILATUS PC-12 NG
197 PILATUS PC-12/47
296 PIPER JETPROP
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4 ROCKWELL 681 HAWK
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90 SOCATA TBM-700B
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480 CESSNA 340A
49 CESSNA 402B
BUSINESS LINER
110 CESSNA 402C
20 CESSNA 404 TITAN
312 CESSNA 414
430 CESSNA 414A
CHANCELLOR
36 CESSNA 421
30 CESSNA 421A
335 CESSNA 421B
713 CESSNA 421C
38 CESSNA T303
100 DIAMOND D42
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3 PIPER 600A AEROSTAR
44 PIPER 601 AEROSTAR
4 PIPER 601B AEROSTAR
182 PIPER 601P AEROSTAR
21 PIPER 602P AEROSTAR
509 PIPER CHIEFTAIN
20 PIPER MOJAVE
280 PIPER NAVAJO
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COMMANDER
3 ROCKWELL 560
COMMANDER
11 ROCKWELL 560A
COMMANDER
7 ROCKWELL 560E
COMMANDER
6 ROCKWELL 560F
COMMANDER
12 ROCKWELL 680 SUPER
3 ROCKWELL 680E
14 ROCKWELL 680F
COMMANDER
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2,875 CIRRUS SR22
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11 MOONEY OVATION ULTRA
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several other branches. Along with the Army National Guard, the Air National Guard and the Navy still fly the C-26.

The FWAATS works in conjunction with the Operational Support Airlift Activity at Fort Belvoir, Virginia, which manages the Army National Guard's fixed wing share program of roughly 50 C-12 aircraft and 11 C-26 aircraft, moving the aviation assets to where they are needed most.

Until recently, two C-26 were deployed overseas and nine positioned stateside. All 11 are now stateside and distributed among

the National Guard's Fixed Wing Flight Detachments nationwide. However, it's expected one or two C-26 units will cycle back overseas in the next couple of years.

The most common Army National Guard missions for both aircraft types are strategic level transport of personnel and cargo. Over the past year, both models also supported the Army National Guard's work related to the pandemic. The Guard's fixed-wing force alone has flown nearly 600 COVID-related missions, moving nearly 2,200 passengers and almost

20,000 pounds of cargo including ventilators and medical supplies.

FWAATS' Current Fleet

The King Air and the Metroliner help the FWAATS meet its goal of delivering high-quality, low-cost training for Army aviators. While OSA-A frequently rotates the aircraft in the Army National Guard inventory amongst state units, the schoolhouse typically keeps their aircraft longer in order to coordinate training course schedules with scheduled maintenance. FWAATS contracts with Amentum/DynCorp International for King Air maintenance and M7 Aerospace for Metroliner work.

Throughout the year, the number of C-12 Huron aircraft on the FWAATS ramp ranges from three to five depending on the number of students enrolled. They employ a mix of models including the C-12U in standard cargo and key leader/strategic level transport configuration and the C-12R, which can be modified with EFIS glass cockpit instrumentation for reconnaissance missions. This prepares the student pilots to return to their units and start flying the C-12 variants currently assigned to that unit.

Fort Rucker also offers C-12 training, but the FWAATS is the only spot for C-26 Army training. The Army National Guard is the only entity in that branch currently flying the aircraft type. C-26 qualification students typically come to the West Virginia site two at a time, having started with two weeks in San Antonio on the only C-26 simulator in the U.S. and then spending three weeks in an aircraft at the FWAATS.

To support the increase in training needs, there are now two C-26 assigned to the schoolhouse. Both rolled off the production line in 1992 and upgraded to Collins Proline 21 avionics in 2007. Metroliner #513 arrived at FWAATS in 2020 after multiple years in Afghanistan. Metroliner #527 has been a trainer for the FWAATS for the past 22 years, where it has accumulated 10,000 hours.



FWAATS relies on Fairchild C-26 Metroliners and Beechcraft C-12 Hurons.



"Nearly every former and current Army C-26 pilot has flown this aircraft at one point or another here at FWAATS," Brink said.

While operating the C-26 was more of an opportunity that popped up than a proactive choice by the Army National Guard, the aircraft has earned its way into the heart of the pilots.

"The C-26 is versatile, it's rugged and it has proven itself over time in a variety of missions," Latimer said. "It can go from medical transportation to be set up for surveillance or for hauling passengers and cargo, or for a combination of all that. Versatility is the name of the game for the Army – and the military in general. A platform that allows us to dynamically adapt with whatever the demand is or the changing environment is ideal for the military. The C-26 is great for that, plus, it has some of the best avionics that the Army flies, so that enables our pilots to get into remote locations and inclement weather. It's just a really good all-around plane."

Training in the aircraft is appreciated, too.

"Anybody who has flown that aircraft knows and appreciates that the C-26 is unique in its handling capabilities," said Brink, who flew a combination of helicopters and fixed wing aircraft on active duty for 16 years and joined the West Virginia National Guard as a full-time fixed wing instructor in 2019. "You have to fly the aircraft in order for it to do what you want it to do. Even if the autopilot is doing what it's doing, there's a lot of hands-on flying. I love flying the C-26 because it forces you to have those stick and rudder skills that might be degraded flying something else." **T&T**

MeLinda Schnyder is a writer and editor based in Wichita, Kansas. She writes most often about aviation, business and travel. She worked 12 years in the corporate communications departments for Beechcraft and Cessna Aircraft Company. MeLinda can be reached at mvschnyder@gmail.com.

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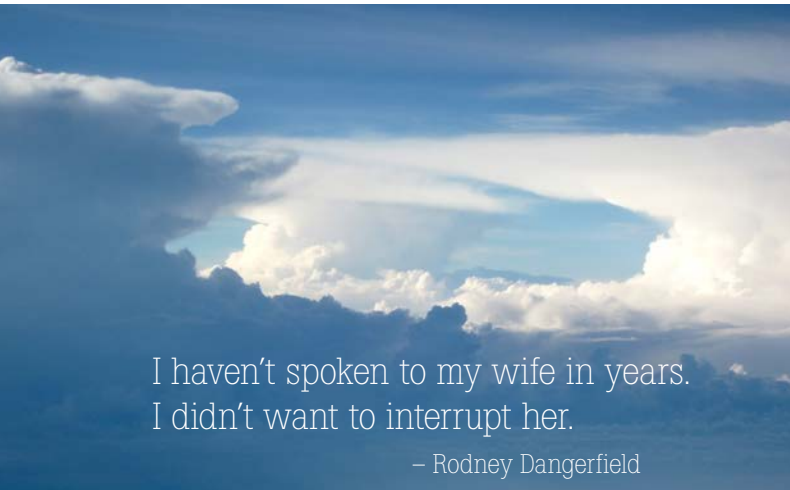
From the Flight Deck

by Kevin R. Dingman



Vernacular Disease

Sharing the radio with other pilots.



I haven't spoken to my wife in years.
I didn't want to interrupt her.

– Rodney Dangerfield

Last month while flying my trusty Guppy-MAX at 38,000, I heard a guy flying a turbine single in the 20s report to center that he went through some tops and experienced severe turbulence and plus-or-minus 2,000 feet altitude excursions. While shocking that he went there, the more astonishing part of the event? Yet another turbine-single guy checked in shortly after the report and center advised him of the previous guy's angst. The second guy responded that it didn't look too bad, and he would proceed straight ahead – through the same spot and at the same altitude as the first guy. After center made a stronger recommendation that he should deviate around the weather, the second guy acquiesced.

Please trust this airline guy when I say don't fly within 15 to 20 miles of any cumulus with tops above 18,000, with nimbus after the cum-u-low or not – even the popcorn-like stuff from 10-25,000 can rattle teeth and spill your coffee. And don't wait too long to ask for a deviation around the upwind side of said beasts lest you encounter something similar to the following.

Rookie

It is better to remain silent and be thought a fool, than to open one's mouth and remove all doubt.

– Abraham Lincoln

You've been picking your way around the cumulus at FL260, and you've waited a bit too long to ask for a 20-degree deviation around the upwind side of a wide, towering cumulonimbus 50 miles on the nose. When you try to call center, a squeal comes over your headset from someone on the radio stepping on someone else. You release the PTT and hear:

"Sorry, I think I blocked somebody...good afternoon New York how ya doin'? This is Rookie Nine Oh Six checkin' in. We're with ya outa' sixteen for two three oh, on a three ten heading and 260 knots assigned by the last guy, and we're goin' around some weather – request three six oh... and ah, we're runnin' a little late due to our inability to stop talking, so after we're done deviating, any chance we could maybe to direct Chardon? Really appreciate it."

After a short delay, you hear: "Rookie nine zero something calling New York, I was on the landline coordinating. Say again your request."

Your finger is still resting on the PTT switch as your chin drops to your chest. Now you know for sure that you waited too long to request that 20-degree turn. Even if that other "rookie" guy uses proper radio discipline during his second call, you will now need 40 degrees to sufficiently avoid the bubbling beast in front of you. You pray that you have time to get in a word edgewise before making the turn on your own without clearance and making a mayday/emergency call to cover the deviation.

At the risk of sounding like Joan Rivers, can we talk – like pilots? Sometimes, apparently not. Along with talking-like-we-text, I suppose we shouldn't be surprised that our normal, everyday language (colloquial) has permeated most aspects of society: business, politics, literature, music and the workplace; even our piloting workplace. Some abbreviations born of texting are already being used with the "free text" function of our ACARS (Aircraft Communication Addressing and Reporting System). It just doesn't fit comfortably in my own aircraft-radio-workplace at the pointy end of an airliner. The beloved radio discipline I was taught in GA and the Air Force has become contaminated. It's happening more and more and it's not simply my hyperbole hypochondria. Many aviators seem to have contracted a vernacular disease.

Permit Me

There was a time when a restricted radio-telephone operator's permit was mandatory for new U.S. pilots – like

the one I have with a barely legible 1972 stamped on it. Even though no formal training was required to obtain the permit, there was an implicit understanding that pilots were “different” from folks using other communication devices. As a result, we should act and speak accordingly. CFI's, ATC and other pilots were adamant about something called “radio discipline,” and utmost respect would be used in both directions. Pilot-controller phraseology was mandatory and brevity would be the statute, with no banter, joking, lying or even exaggerating.

As a new student pilot, you may have listened to recordings of pilot/controller jargon in order to assimilate the new dialect as well as its protocols and cadence. The entire alphabet and number system had an aviation pronunciation. We even possess several of our own words and phrases: copy and copy that, roger and roger that, say again and squawk ident, for example. And since we use them more often than the general population, a case could be made for our squatter's rights to the words affirmative, negative, standby, upwind, downwind, crosswind, final and a myriad of airplane components, maneuvers, procedures and instruments.

Read-Back/Hear-Back

What is radio discipline? It's the professional manner in which we abide by strict brevity in our communication and the use of standardized aviation terminology and phraseology that is our patois. It is clear and unambiguous two-way communication. Emphasis added because it seems ATC sometimes is in a transmit-only mode; this despite years of highlighting read-back/hear-back errors during mishap investigations. We have long assumed that the absence of an acknowledgment or a correction after reading back a clearance was implicit confirmation that our read-back was correct and approved. This may not be true. We should confirm a clearance to complete the transfer of information. Radio discipline is not only an understanding of terminology and phraseology but the structure and cadence which facilitates the efficient transfer of information.

Radio cadence is the rhythm of the conversation, the tempo of the transmit-receive-respond-acknowledge sequence – it's the controller-pilot radio pulse. Not so much when it's just you and the controller, but when there are five other airplanes and the controller, a cadence will develop. It's recognizing how to wait after another aircraft or the controller stops talking, anticipating the point in time at which you should key the mic and take your turn – similar to picking a spot to enter a busy lane of traffic. The cadence is different for center, approach control, tower and from one approach control to another depending on the level of traffic.

Talk low, talk slow and
don't say too much.

– John Wayne



When you combine discipline and smooth radio cadence with an experienced, calm, gravelly voice, you get a cross between John Wayne, Chuck Yeager and Walter Cronkite with the resultant efficient transfer of information. It used to be that less experienced GA and regional airline folks tried to imitate the way airline and fighter pilots sounded on the radio. Not just the words and intonation, but the cadence and composure as well – the “coolness.” As seen in the opening of this story about mister “Rookie” pilot, I must shamefully admit that many Part 121 pilots have forfeited the mantle, honor and responsibility of that professional-sounding poise. The higher flight levels are often contaminated with verbose, entitled pilots that don't know how to share the radio. They also don't understand the reason for pointing out to someone that they have transmitted on guard. And it's not because guard is only for emergency use, it's because someone has typically made an unrecognized switch error.

My Bad

Some think that the pilot that talks the fastest wins. My dad taught me that often the faster we go, the “behinder” we get. Partial callsigns, use of colloquial language and poor manners can come to the surface and overtake discipline if

we don't think before we speak. We are all guilty: me, you, GA, regional, mainline, military and controllers. Most of the time we and our brethren use good radio discipline. But others can sound like truckers on a CB radio. In response to an ATC instruction from O'Hare ground control, I once heard a regional pilot say to the controller: "Whatever." Another pilot employed a common colloquialism of our times: "My bad." I was equally stunned to hear a captain on the PA as I commuted to work announce that due to weather, things in Chicago were "screwed up." Must be he didn't know the word for which many interpret "screwed up" to be a euphemism. Apparently, I must try harder to keep up with these new words in the AIM and Air Traffic Controller's handbook.

How do we filter out colloquial contamination, and what is the course of treatment for our vernacular disease?

Do:

- Use only standard aviation terminology and phraseology
- Learn to use and recognize radio discipline
- Slow down a bit; speak at a normal rate
- Reply to all radio calls directed at your call sign
- Build situational awareness (SA) by listening to calls directed at other aircraft
- Call the ATC facility by its correct name
- Let others finish before you key the mic to speak

(sometimes they hesitate mid-sentence so wait one or two seconds after their last word)

- Use your full call on the first transmission, and if an airliner, use it every time
- Abbreviate your GA call sign when appropriate
- If you have a request, say "[your call sign], request." And wait for a reply before you continue
- Question instructions that are unclear or unexpected
- Limit "pleasantries" when there is more than just you and the controller on the frequency

Don't:

- Use non-standard, slang or colloquial language or phrases
- Clip your transmission by late keying or early release of the mic
- Miss radio calls directed at your call sign
- Block other radio transmissions
- Say "Checking-in," "With you," or "This is"
- Blurt out a request without first transmitting "request" and then hearing "go ahead with your request"
- Reply with your Mach when asked your speed, or speed when asked your Mach
- Switch immediately to the next sector frequency – pause for a second or two just in case ATC gives you a corrected frequency or they tell you no, that was not for you (similar sounding call signs)

The advertisement is split into two main sections. The left section has a white background and contains the 'airtext' logo, which consists of a blue speech bubble icon with a face and the word 'airtext' in a bold, sans-serif font, followed by 'Email • Talk • Text' in a smaller font. Below the logo is a stylized illustration of a grey commercial airplane. At the bottom of this section, the website 'goairtext.com' is written in large blue letters, with '5¢ a text' in smaller grey letters below it. The right section features a cartoon illustration of a female pilot with dark hair and bangs, wearing a blue jacket over an orange shirt, and holding a black tablet. She is standing in front of a pink airplane seat. The background of this section is a light green sky with yellow suns.

Just the Vaccination Please

Status quo, you know, is Latin for 'the mess we're in.'

— Ronald Reagan

I have witnessed an obvious decline in radio discipline over the last 50 years. In order to rejoin the professional sounding pilots of yesteryear, perhaps some of us need a vernacular vaccination. While using and listening to the radio (or to your spouse, like Mr. Dangerfield said), don't interrupt, think before you speak, be brief and use proper terminology – lest you clog the radio and block someone that needs to make a coffee-saving request. **T&T**

Kevin Dingman has been flying for more than 40 years. He's an ATP typed in the B737 and DC9 with 28,000 hours in his logbook. A retired Air Force major, he flew the F-16 and later performed as an USAF Civil Air Patrol Liaison Officer. He flies volunteer missions for the Christian organization Wings of Mercy, is employed by a major airline, and owns and operates a Beechcraft Duke. Contact Kevin at dinger10d@gmail.com.

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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.



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Green Grass and Blue Skies

by Grant Boyd



Left to right: Ryan Walker, Dean Walker, Bob Walker, and Ted Walker.

What started as a Christmas gift from a mechanically inclined dad to his seven-year-old son in 1953 gradually evolved and grew into what is now known as Walker Mowers – a family-owned manufacturing business headquartered in Fort Collins, Colorado. The miniature model Caterpillar custom-built and gifted by Max Walker laid the groundwork for the 210-employee company that produces 13 different models of American-made, professional-grade zero-turn lawn mowers.

It wasn't long after he gave his son this scaled-down earthmover (originally powered by pedaling) that the opportunity to outfit it with



a gasoline engine become evident. Consequently, the “Power Track” was born. While it gained considerable local interest shortly after its debut in 1955, a limited set of tools, equipment, materials and capital prevented its commercial potential.

Nonetheless, Max Walker continued thinking of ways to utilize his mechanical aptitude in more ways than just in the fields of his farm. As fortune would have it, a friend remarked about the potential to create a gasoline-powered golf car. At that time, batteries could not take golfers through a whole round, and there was a need for a transportation method that could last 18 holes and beyond. Max quickly created a prototype of what would become known as the Walker Executive Golf Car.

Strong demand for these gasoline-powered golf cars remained for six or so years until improvements in electric battery life, at which time their design and intellectual property rights were sold. With this initial manufacturing success, several things became clear. Most evident, though, was Max's ability to translate market demand into a viable product and the engineering prowess to make this idea a reality.

Aiding the Walker legacy throughout the years has been the continued inclusion of aviation in company operations. In 1945, Max's dad, Wesley, purchased a Culver V for his two sons, who taught themselves to fly on their southwest Kansas farm. In 1947, the Culver was traded in for a used North American Navion, which was then traded for a new Ryan Navion the following year. The two aircraft were operated for a total of 10 years in support of business and farm operations, ultimately being replaced by an Aircoupe. The two-seater was flown by the family for the next few years, although less for business and more for leisure.

After a 15-year hiatus from flying that coincided with challenging business transitions and new product designs, the family obtained a brand-new Turbo Arrow from Piper Aircraft in 1977. Coincidentally, this was the

same year Walker Manufacturing Company created the product that their name has become most synonymous with for producing.

After mowing with a “cumbersome and slow” rear-engine riding mower, Max and his two sons, Dean and Bob, channeled their varied equipment manufacturing and design experience into the lawncare vertical. As a result, their first compact tractor was created – designed to be “fast, easy to operate, and would deliver a beautiful cut.” Several prototypes were developed over the course of two years, and the design was then taken on an agricultural show tour. The product garnered significant interest that resulted in the production of the company's first 25 mowers in 1980. As they say, “the rest is history.” Today, 170,000 mowers later, the Walker Family is still at the helm producing durable products, continually improved based upon customer feedback.

The familial legacy of hard work and virtue was passed down by Max (who passed in 2011) and those before him. Another thing that has remained in the bloodline through the generations is the apparent love for aviation. There are seven pilots within the immediate Walker family – many of whom are actively involved in the family business in one facet or another.

Bob, who currently serves as Chairman, was the young kid on the receiving end of the miniature Caterpillar Christmas present in '53. The strong mechanical influence of his father rubbed off on him, and he ultimately pursued a Mechanical Engineering degree from LeTourneau University. Upon graduation, he worked as a military aircraft structures engineer at Cessna Aircraft Company prior to joining his dad in the manufacturing business. Before school, he learned to fly in a Cessna 150 and continues to fly to this day, primarily in his Rans S-7.

Shortly after Bob learned to fly a Cessna, his brother Dean Walker graduated college and received his Private Pilot Certificate in a

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2C	10W	6AE
2E	10Z	3AB
2R	11F	9AD
2S	11G	1AE
3C	11P	4AE
3E	11Q	6AE
3Q	12A	3AF
4B	12B	5AF
4H	12E	8AG
4J	12H	9AG
4K	12K	4AJ
4X	12T	7AJ
4Z	12X	6AK
5A	13F	8AK
5T	13G	4AL
5X	13I	8AL
6A	13P	7AH
6C	13Q	3AN
6E	13R	4AN
6H	13S	7AN
6N	13V	8AN
6P	13Y	9AN
7G	14D	4AP
7L	14E	6AP
7N	14F	1AQ
7Q	14G	4AQ
7T	14N	7AQ
7V	14Y	2AR
7Y	14Z	8AR
7Z	15G	9AS
8B	15H	6AT
8C	15Q	8AT
8G	15R	2AU
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Piper Cherokee 140. He grew up “building vehicles and creative transportation devices that any young boy would only dream of” and has been integral in designing company products since his college graduation in 1975. Today, he is Walker Mowers’ vice chairman and executive vice president.

TBM 700C2. Additionally, they recently acquired a 1988 King Air 300 that is currently undergoing an avionics upgrade to G1000 NXi, an interior refurbishment, and a fresh paint job at Stevens Aerospace. Alongside the turbine stock, they have several tailwheel aircraft in their hangar space, including a 1999

technical services functions. He says that the typical mission is an early morning departure from Colorado with midday meetings the same day. Depending on the agenda, the group is potentially home that night or will continue making additional flights and visits in a certain region of the country.

The company’s King Air, which is expected to enter service this November, will allow them to further build upon their ability to visit their valued suppliers and customers whenever the opportunity arises. While they considered a Pilatus PC-12 to expand their aerial footprint, they explained it didn’t improve on the TBM’s mission profile “other than useful load and cabin volume.”

The new aircraft will be important as business increasingly requires more employees at different locations for site visits. Ryan, who will soon get his type rating at King Air Academy, noted, “We believe in developing deep and long-lasting relationships with our supply chain, distribution network and customers, and there is still no better way to accomplish this than being together, in-person. It isn’t uncommon to have six adults in the TBM, and zero fuel weight, even in the TBM, is a limitation on some flights. The King Air 300 will drastically increase the weight and the number of passengers we can transport.”

Another reason the family chose the twin-turboprop is its power plant redundancy. They frequently depart between 3 and 5 a.m., potentially in or over extensive weather and often over mountains. They also added that the aircraft is a “reliable, respected, and a proven airframe that also cruises faster, flies higher and can top more weather issues coming out of Colorado.”

Looking further into the future, Ryan’s son and oldest of four, Max, is set to become one member of the next generation of Walker pilots. At only 10 years old, he loves flying in the Rans S-6S and wants to be a “half-time lawn mower maker and half-time pilot... like his dad.”



The Walker fleet includes a Piper Saratoga, TBM 700C2, King Air 300 and multiple tailwheel aircraft.

Dean’s two sons, Ted (vice president of engineering) and Ryan (president), both pursued initial flight ratings during high school, completing their PPL requirements in 2000. The two brothers learned to fly in their father’s Super Cub. Ted, the older of the two, earned a Mechanical Engineering degree while Ryan earned a business degree, both from Olivet Nazarene University.

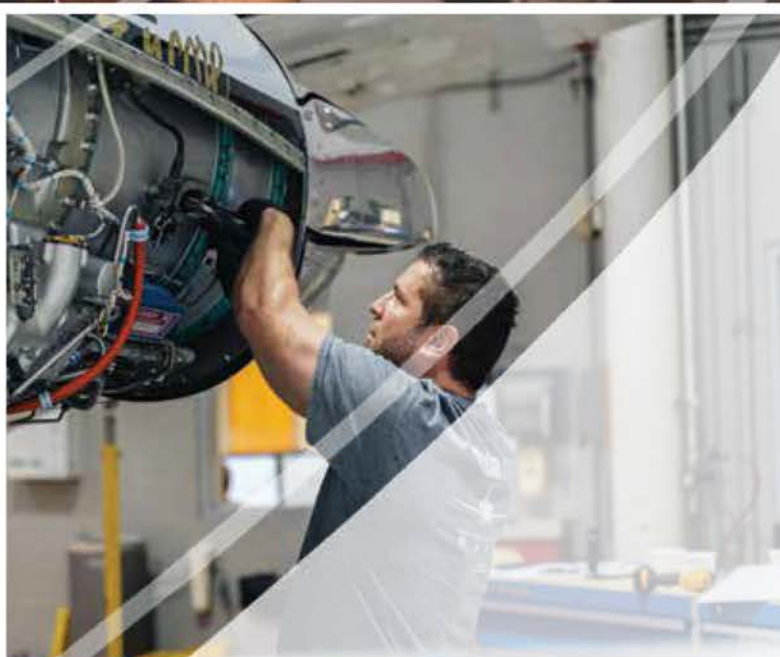
These four Walker family members average around 2,300 flight hours each. All hold at least an ASEL and an Instrument rating. Ryan is also a commercially rated CFII and A&P with AMEL and ASER ratings.

Members of the family collectively own a fleet of aircraft, all of which the pilots fly and share. For business and other purposes, they fly a 2000 Piper Turbo Saratoga and 2003

Rans S-7, a 2011 Rans S-6S, a 2008 American Champion Scout, and the same 1950 Piper Super Cub that Ted and Ryan learned to fly in.

Which family member takes the left seat in the aircraft when flying for business depends on who is available and other factors. Although Ted has now completed his initial TBM training, he typically flies the Saratoga. This aircraft is most often used for supplier visits, shows and events travel. They also use this aircraft for currency flying and maintenance logistics for the TBM. Both are maintained in Denver at Arapahoe Aero.

Ryan is almost exclusively the one flying the TBM, which is usually flown within the continental United States to fulfill supplier relationships, sales, marketing, and



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Other pilots in the family are Suzanne, Dean's wife, and her two sons Dan (deceased in 2008) and Kyle (Private ASEL, pending instrument rating). Bob's grandson, Jacob, is currently pursuing an Aeronautical Science degree at Liberty University and is a practicing flight instructor with the goal of flying for American Airlines.

The Saratoga and the TBM (and eventually the King Air) are kept at KFNL, less than 15 miles from the Walker Mowers manufacturing facility. Except for the Super Cub that stays with Kyle in Nashville, the taildraggers are hangared at a grass strip adjacent to that facility. The 2,200-foot by 40-foot turf runway (65CO) is a common starting point for many of the family's weekend adventures across Colorado. "We fly locally in Northern Colorado and enjoy flying the mountains, when weather permits, and the eastern plains of the state. We also enjoy exploring local airports and

Saturday morning breakfast at the Barnstormer Restaurant in Greeley, Colorado (KGXY)."

The family tirelessly continues to build upon years of hard work and customer dedication by increasing the distribution of their product line, currently exported to nearly 30 countries. In the future, they foresee opportunities for more flying and possible fleet additions, with one thing for certain: No matter where business takes them, the Walkers will continue abiding by the family rule of owning airplanes that they can fly themselves. **T&T**

Grant Boyd is a private pilot with seven years of experience in general aviation business from marketing to customer service. He has written more than 85 articles for aviation publications and enjoys learning about aircraft/pilots with unique missions. Grant can be reached at grantboyd2015@gmail.com.

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En Route

King Air Gathering 2021 Approaches

by Kim Blonigen

Available spots for the 2021 King Air Gathering (KAG) held September 23-26 are filling up fast. If you think you might like to attend, register now as space is limited. The Gathering is being held this year at the Beechcraft Heritage Museum located adjacent to the Tullahoma, Tennessee Regional Airport (THA). Those flying in will have reserved parking.

If you arrive early enough on Sept. 23, starting at 1 p.m. and running every hour until 5 p.m., there will be guided museum tours from “special” tour guides – four people who have personal knowledge of Beechcraft history. That evening enjoy is a Welcome Cocktail Reception sponsored by Blackhawk Aerospace, with heavy hors d'oeuvres compliments of the King Air Academy. Friday and Saturday will be filled with seminars given by top-notch speakers including:

- Vice-chairman of the National Transportation Safety Board (NTSB) Bruce Landsberg
- Textron Aviation Senior Air Safety Investigator Peter Basile
- Textron Aviation Manager of Turboprop Product Support Kim Burton
- King Air expert, pilot and author Tom Clements
- King Air maintenance expert Dean Benedict



- President and CEO of Crutchfield and King Air pilot and owner Bill Crutchfield
- Founder of Raisbeck Engineering James Raisbeck

Among the breakout sessions are avionics presentations from Garmon and Collins Aerospace, tips for pilots using EFBs ForeFlight or Garmin Pilot, and a deep technical dive into PT6 engines or a closer look at the various autopilots on the King Air models. There will also be time to meet with King Air-specific vendors who will have exhibits located in the conference area for face-to-face time during breaks.

Friday night will commence with the inaugural “King Air Hall of Fame” awards, followed by cocktails and Nashville barbecue with local entertainment hosted by Stevens Aerospace & Defense Systems. You won't want to miss celebrating those who helped make the King Air what it is today while also enjoying the tastes and sounds of Nashville. To register and find more detailed information, go to kingairgathering.com. **T&T**

First Citation Excel Eagle Delivered

CitationPartners and Yingling Aviation reported that the first Citation Excel Eagle was recently delivered to North Central Aviation in Blaine, Minnesota.

In January of this year, using an all-new process designed and developed by CitationPartners, a fleet of Citation Excels began its transformation to Citation Excel Eagles. The converted aircraft includes extensive inspections by the original manufacturer, numerous new parts and systems, Garmin G5000 avionics, new interior and a complete strip and paint.



“This is light years beyond your typical, garden variety re-furb; it is a true nose-to-tail transformation of the aircraft,” said Russ Meyer, Chairman Emeritus Cessna Aircraft Company.

The marketplace has responded enthusiastically. All six Eagles scheduled for delivery in 2021 are under contract. Phase Two of the Citation Excel Eagle program is coming soon with deliveries planned for 2022. For more information visit citationpartners.com. **T&T**



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Sound Advice

Would you use a surgeon who did everything in the operating room by themselves? I don't think so. You want a team of folks ready to help if needed.

Then why do we resist using professional help when buying and selling airplanes? Here are two stories to illustrate.

In the '90s, I was in love with the Falcon 10. One of the sweetest airplanes ever designed. I found one for sale at Dallas Love. It had everything I wanted but it was no bargain. Another one popped up on the market at an airport near me. I flew to see it.

The salesman was young, smooth and knowledgeable. This particular Falcon was \$400,000 less! It had no damage and the price included a completely new interior to our specifications. I reviewed the logbooks – all in French! What a great pedigree. The salesman even flew Patty and me to an interior shop in Wichita in his Westwind so that we could spec out our new interior right down to the gold-plated seat belts.

What a deal! I could get all I wanted for much less money. This deal was once in a lifetime. I was ready to write the check.



One day before the transaction, my copilot Rick asked me a question: "Dave, do you think we should have those logbooks translated into English?"

"I guess so," I answered. So, we spent \$500 and got an eyeful.

Turns out the sweet little Falcon had been hit by a catering truck in Rome, Italy traveling about 45 miles per hour. The collision severed the cockpit from the nose of the airplane. The remains had to be trucked back to France and spent close to 2 years in repair.

I almost became the dumbest owner of that airplane. Rick's advice saved the day. The sales guy later went to prison.

Fast forward 30 years.

During the pre-buy of my King Air C90A, the buyer required a borescope. This is a common inspection where a tiny camera is inserted into the engine to look for any abnormalities. A small crack was noticed on the inner vane ring of one engine. The buyer wanted it repaired to the tune of \$40,000.

I was going to have to make a major price concession in order to save the deal.

Having learned my lesson on the Falcon, I retained a maintenance manager, Bill Gorin of Tailwind Services, to look after my airplane. A late-night call to him ensued. I explained my predicament.

He drafted a letter to the engine manufacturer with details of the engine and its history. In less than 24 hours, we had a positive response that the crack was allowed and not an issue. Bill saved me \$40,000.

My takeaway is this: Pay for experienced advice every time you buy or sell an airplane. It just might save your deal.

You may have noted my comments about selling my C90A King Air. What in the world am I thinking now? Stay tuned.

Fly safe. 

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.



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