Epps Aviation / Diversions / Get-there-itis

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VOLUME 29 NUMBER 12

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Ryan Ortiz courtesy of Pilots To The Rescue

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Celebrating & Looking Forward

As green leaves turn to bare, brown limbs, and warm mornings in t-shirts turn to gloved hands and ski jackets, we perennially look back, celebrating the milestones and remembering some of those who have left us. That's how it always is, and it's good. We also look forward, thinking about how we can better ourselves, challenge ourselves, and become more productive. That's good, too.

Stevens Aerospace & Defense Systems is one of those companies with a long history – one that didn't always involve aviation. J.P. Stevens & Co. started in the 1800s as a textiles manufacturer on the East Coast of the U.S. It was eventually split up and divided into multiple companies after private equity took over, but along the way, its flight department, which had grown to be more than a flight department, continued under the Stevens name.

I have written about Stevens in T&T several times, but when an aviation company reaches a milestone like achieving 75 years of success, it makes sense to celebrate it again and again. Congratulations to Tom Foley, Christian Sasfai, and Phil Stearns. There are a lot more people at Stevens to congratulate for making their story a successful one, but those are the three I know.

Every year, someone leaves us who has imprinted a permanent and lasting influence. This year, we say goodbye to Pat Epps. I wrote about the Epps family and Pat's enduring legacy while he was still with us in 2022. That story is republished here this month.

The southeast general aviation environment wouldn't be the same without the hard work, foresight, and a little bit of luck that Pat Epps brought. Pat encouraged the excitement of aviation for younger generations (like mine). He endeavored to accomplish feats that others couldn't. His spirit was one that lasted until his passing, and the aviation world is better for his being a part of it. Many thanks to Pat and the Epps family for bringing that spirit to us for so many years.

Looking ahead to the new year is invariably an occasion filled with good energy and sensations of growth and newness. I envision lots of great things for 2026. Let's celebrate 2025, say goodbye to and remember those who have been meaningful to us, and look toward a new season of possibility.

Thank you to all of our readers and those who write and publish this magazine. Merry Christmas and Happy New Year.

lance@twinandturbine.com

Stevens has a strong history with Beechcraft.

Pat Epps in his hangar with a Beech Bonanza

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Diversions

by **Ed Verville**

On the ramp at Rifle, CO

On July 11th, I broke my personal record for the number of flight diversions in one day. This was due to winds, a one-way-in one-way-out airport, and possibly the largest line of thunderstorms this year. The TV weather stations had been discussing these storm days before and after. Reporters discussed the weather across the country, including severe thunderstorms and high winds at our destination, triple-digit temperatures in Nevada and Arizona, and the recent flash floods in Texas, New Mexico, and other states.

Before this day, I was flying government dignitaries from coast to coast and around the country. Working with government officials and their security teams can be fun. My colleagues, flying another company's charter jet, were teasing me because they were flying a famous country singer out of Nashville to her next performance venue and knew that I had tickets to her concert. Our last female country singer passenger brought us breakfast tacos. That warmed her way into our hearts.

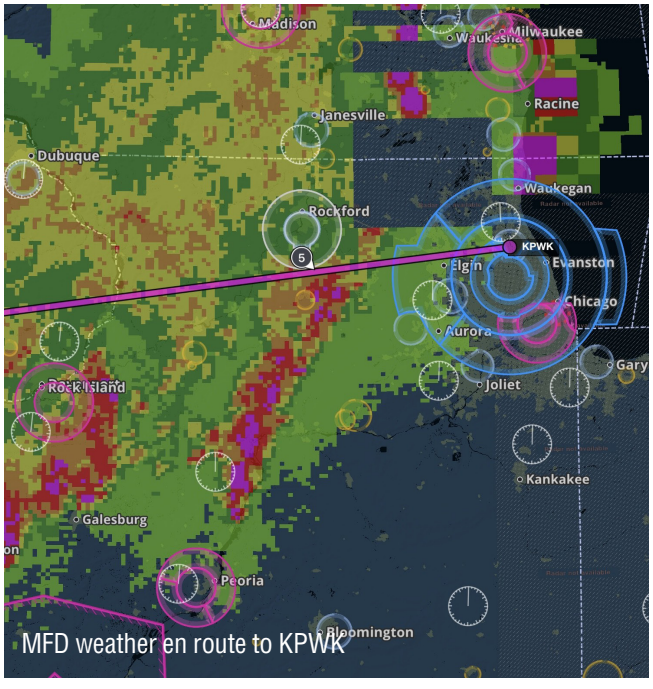
I was in Oakland, California, and the schedule on my JetInsight app indicated that we were to conduct a cross-country reposition flight from Oakland to Halifax, Nova Scotia. This flight was over 2,600 nautical miles and about six hours of flight time. This is a long way to move a jet when it's empty. (read: no paying customer). And as we expected, our trip changed.

Our new "pop-up or ASAP" trip was to fly empty to Aspen, CO KASE, pick up passengers, and continue to Chicago Executive Airport (formerly known as Palwaukee). Due to the mountains, Aspen is one way in on runway 15 and one way out on runway 33. The winds were out of the southwest at 330 degrees with 14 knots gusting to 18,

Ag aircraft at Rifle, CO

Fire-fighting aircraft for fires in Colorado (at KRIL)

Departure from Rifle, CO, Runway 8



MFD weather en route to KPWK

Lightning from the cockpit

which exceeded our airplane's 10-knot tailwind limit for landing at Aspen. To carry out the trip, we had the passengers drive to Rifle, CO KRIL to meet us. This first diversion to Rifle was uneventful. The weather was beautiful, and we flew the ILS to runway 26 via the DME Arc from the COMFR IAF.

PFD en route to KPWK

As we continued our trip, the weather was getting worse in the Chicago area, requiring us to file a routing around the thunderstorms to get to Chicago Executive from the South. The large line of thunderstorms moved faster than we expected toward Chicago, so we decided to stop in Des Moines, Iowa, KDSM, our second diversion. After a little more than an hour, we proceeded on to Chicago with an amended route to come in more directly, a little from the North.

As we continued, the weather hit the Chicago area and stagnated when it reached Lake Michigan. The winds were now gusting to 40 knots out of the West. This was too much of a crosswind for either runway 16 or 34. There was also no instrument approach to runway 34, and we did not think a circling approach at night in a thunderstorm would be prudent. We asked ATC about diverting to Chicago O'Hare International KORD with their runway 28s that aligned with the winds. They laughed and said something about us and 200 airliners. Chicago Midway KMDW triggered the same response. We next considered Gary, IN, KGYY, as we saw some lighter areas on our radar. ATC advised they just had reports of

severe turbulence on that route, but that we could try it if we wanted to. We declined. At this point, we were just trying to get our passengers somewhat close to their destination to minimize further travel hindrances for them.

We saw Rockford, IL, KRFD, in front of us with acceptable weather. We dipped in Rockford for our third diversion without difficulty, but struggled to find ground transportation for our passengers and our crew after landing. After about thirty minutes, things came together, and our passengers were on their way, driving the final leg to KPWK.

Our flight operations department (Ops) said the nearest hotel they could find for us was 1 ½ hours away. We eventually checked into our Marriott Courtyard and called it a day, but only after a 15.4-hour duty day. We "technically" did not violate our FAA duty day as the FAA is quiet on what happens after landing and locating a hotel for the crew.

The following morning, we were hoping for an easy day. This was not to be the case. It started easily enough with Ops telling us we were going to do an airplane swap, leave our plane at Rockford, and take an airline flight from Chicago O'Hare to Nashville, TN. Upon landing, we were scheduled to go to the hotel. So, this was still looking good to us. However, when we landed in Nashville, we learned that we were not going to the hotel. Instead, we were to fly a "pop-up" trip from Nashville to Long Island, NY. We were still dragging from the long day before, but after discussing it as a crew, we believed we could do one more leg.

While reviewing the airplane records, we noticed that it had been written up multiple times for a Radar Altimeter inoperative problem; it had been repaired, checked, and approved to fly. We took off from Nashville KBNA and received a "Terrain, Pull UP, Pull Up" Warning audio messages shortly after takeoff. There was no terrain in front of us, and the Radar Altimeter was still not working. We also received a landing gear warning horn alert at 5000 feet and 250 knots. (Another inappropriate message for our altitude and airspeed.) It was difficult to communicate with ATC with the Warning messages going off. (These messages cannot be inhibited by pressing the DCU switches.) We returned to Nashville, KBNA, for a non-emergency, but certainly an urgent return to land.

Upon landing, my co-pilot/SIC (second in command) looked at me and said, "I'm calling in fatigued." He certainly did not get any argument from the rest of the crew. We were all feeling the same way after our fourth diversion! T&T

Ed Verville *is an exper-ienced FAA instructor and examiner for business jet pilots and aircrew programs. He has 15,000 flight hours in more than 100 different makes and models and holds type ratings in the Bombardier CL-65, CL-30, CL-604, and Boeing 747. Ed has been instructing RNP-AR Approaches for the past three years.*

Stevens Aerospace & Defense Systems

Launches Garmin Autothrottle & Autoland STC for King Air 350

by **Lance Phillips**

I treated T&T readers to the history of Stevens Aerospace & Defense Systems in September 2022. The company began a long time ago as the flight department for a growing East Coast textiles firm, The J.P. Stevens Company. That little flight department in Greenville, SC, grew to not only support its company's aircraft but also others on the field as well. This year, Stevens celebrates 75 years in business with three locations in Greenville, Smyrna, TN, and Denver. The company leads the industry in AOG services, paint, interior, engine services, avionics, interiors, and pre-purchase inspections.

Last month, Stevens Aerospace and Defense Systems announced that they had completed and delivered the industry's first and second post-STC King Air 350 Garmin Autothrottle with Autoland (AT/AL) installations.

These aircraft safety modifications were completed at Stevens' Smyrna, Tennessee (MQY) MRO location with back-to-back installations in September and October. As soon as the initial installation was complete, the Stevens Nashville team immediately started installation on a second King Air 350 AT/AL, with more installations scheduled. Both of these installations were installed on

the King Air 350 with stock PT6A-60A engines and four-bladed props, with other engine and propeller configurations expected from Garmin soon.

"There has been an extremely high level of interest in this safety modification over the last several months, with many owners waiting in line for the STC completion", said Gary Brown, Technical Sales for Stevens' MQY MRO. "We've been a leader of the highly popular Garmin G1000NXi flightdeck conversions for King Air for many years, for civilian, military, and government-operated aircraft.

Stevens claims that this modification now makes the plane even safer, more efficient, and gives everyone in the air and on the ground more peace of mind. Completions for this and other Gamin modifications for King Air, Citation, and many other airframes take place at their Smyrna (Nashville), TN, and Greenville, SC, MRO locations.

For more information on Stevens Aerospace, visit www.StevensAerospace.com or contact Phil Stearns, Director of Sales and Marketing at PStearns@StevensAerospace.com. T&T

Lance Phillips *is the Executive Director for the Pinnacle Air Network, a coalition of FBOs, MROs, and aircraft sales and charter organizations. He holds an FAA commercial license with instrument and multi-engine ratings and type ratings in the G100 and Beechjet aircraft. Lance has worked in management and executive leadership roles for pilot training and aircraft manufacturing organizations during his career. In addition to Twin & Turbine, Lance manages Phillips Aero Services and his creative outlet, Air & Asphalt. You can reach him at lance@twinandturbine.com.*

Cloud buildups over the Gulf of Mexico on the Q-route

Planning for Get-there-itis

by **Lawrence Searcy**

The lyrics to Tom Petty's song "Time to Move On" are:

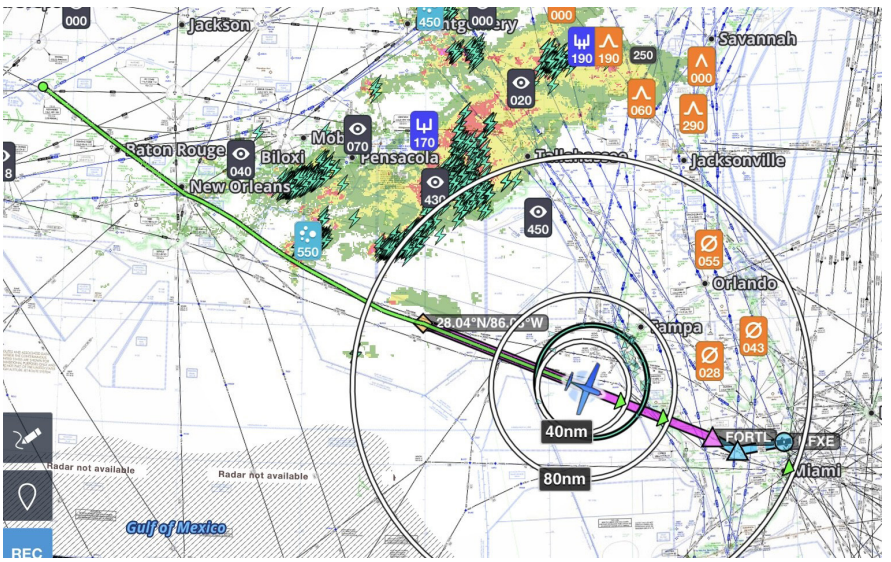
> *It's time to move on, it's time to get going;*
>
> *What lies ahead, I have no way of knowing;*
>
> *But under my feet, baby, grass is growing;*
>
> *It's time to move on, time to get going.*

In the aviation world, this is known as "Get-there-itis." It is the antsy feeling of impatience and anxiety when butterflies toss and turn in your gut. You've just got to get going, no matter what. Google defines it as "an aviation term for the dangerous mindset where a pilot insists on reaching their destination despite hazardous conditions, often due to pressure or a desire not to be delayed."

I would define it a little more harshly as "the irrational desire to get to a final destination despite all relevant information suggesting elevated risks could lead to severe consequences and even death." Get-there-itis occurs at the time in the flight planning process where there is a strong desire to just get to your destination, and rational thought goes by the wayside. You load up the plane and take off without fully considering all the ramifications. Maybe you ignore some weather indications or look the other way at some oil on the ground under the plane. You ignore the information and choose to rationalize that it is normal. Regardless of the circumstance, your mind chooses to ignore relevant facts and make excuses to allow the mission to go forward. It is hard to describe, but the feeling is unmistakable. It is that uneasy feeling at the end of a long trip where the butterflies start, and you just cannot sit still, knowing the destination is at hand.

For pilots, this feeling usually occurs waiting at the FBO, studying flight conditions, the weather (enroute and at the destination), all while trying desperately to leave on time. After all, you and your passengers are already at the airport, bags are all packed, and passengers are anxious to get going. Nothing is as boring as waiting around an FBO looking for something to do while waiting out the weather. As a pilot, you don't want to disappoint your family or passengers by leaving them stranded on the way to a vacation or on the way home when everybody needs to get back to work and family. You look up at the sky, hoping to see a path forward, and the butterflies start as you weigh the options. Numerous times, I have been in an FBO only to hear another pilot say, "Let's go, we have a window, and we need to leave now." I'm not saying that is always a bad indication, but those words imply a sense of urgency that can spell disaster if the conditions are not weighed correctly.


My Malibu Mirage parked in Andros



Weather along the Q-route in ForeFlight

On a trip to the Bahamas in 2021, a group of friends planned on flying three planes into Andros, Bahamas, for a multi-day fishing trip on the island. It was my first international trip to the islands and the second for the other two planes. Each of us had another couple on board, and we all planned to arrive at about the same time and return home the same way. Two of us departed from central Louisiana while the third was leaving from San Antonio, Texas. In the group was a TBM 850, and Cessna 421, and I was flying our Piper Malibu Mirage. Different planes, different capabilities, but all pressurized and long-haulers.

On the way over, the TBM and I flew the Q-routes over the Gulf of Mexico from the Leeville VOR in south Louisiana without any problems. We considered going over land and around the Gulf and flying south down the Florida coast, but a large weather system prevented that route. We landed in Fort Lauderdale for customs and then on to Andros. Unfortunately, our friend from San Antonio could not avoid the system moving south and made the right decision not to try and fly through it. For a day and a half, he tried to rationalize a route that would get him safely to the islands. After all, he had filed his EAPIS paperwork to fly internationally, had the customs and borders sticker, and an appropriate radio license. The "Get-there-itis" was eating away at him as he studied all the relevant weather information for multiple routes. We were on conference with him many times discussing the flight and the pros and cons of moving forward. In the end, he made the right decision to fly commercially and meet us there a little late.

On the way back, the exact opposite happened. The weather getting out of the Bahamas was perfect all the way into Fort Lauderdale. After


Andros

clearing customs, we studied the enroute weather back to central Louisiana, and a system was moving in across the gulf. There were buildups along the coast and then some out over the gulf. We came to two different conclusions on our routes back, taking into consideration our own minimums and the performances of the two aircraft. The TBM pilot was able to fly back over the Q-routes with his ability to climb out quickly to altitude and outmaneuver a storm moving north to south. The Malibu Mirage did not have the speed or the climbing ability in the summer to get over the storm, so we decided to fly north around the storm along the coast. Headwinds and maneuvering around the storm required a stop in Dothan, Alabama, which was well north of our route, but kept us safe from the storm cells moving north to south. With the stop, we lagged behind the TBM by more than 3 hours getting home. I really wanted to follow him out over the Q-routes, and I had to suppress the desire to keep up with my buddy in the plane ahead. In the end, we made the right decision, had some Frito Pie at the FBO, and discarded the urge to try to take the short route and get home earlier.

I remember being in Customs in Fort Lauderdale and thinking, "I can make it over the Q-route." I could feel the "Get-there-itis" creeping in. We had spent four hard days on the water searching for bone fish, and a few late nights in the bar. The stress of flying friends and wanting to get everyone home was foremost on my mind. I was tired, and I was ready for the trip to be over and to be in my own bed. I remember talking it over and regretting I was taking the safer route while watching my buddy in the TBM climb out over the water on ForeFlight. In the end, however, we both made the right decisions. He knew his plane and his abilities, and I knew the limitations of my plane and abilities. Launching out over the gulf to get home was not in my plans that day. My logbook notes mention that the trip home "took forever because storms were in the way with really bad headwinds. Had to go way north, then to the west to miss the storms. Frito Pie was delicious."


Fishing boats along the beach at lunchtime

I think a lot of our flight planning skills are built in early in our training. At that time, we are flying locally or in the traffic pattern, working on our skills. Weather briefing is a lot of looking up at the sky and seeing if there are any clouds. As we get more accomplished and start flying with instruments and in weather, our flight planning becomes more sophisticated and forward-looking over vast portions of the country. But sometimes I think we rationalize back to our early training and forget that the weather where we sit now is not the same as the weather 400 or 800 miles away in a few hours. More importantly, the

The author with a bone fish trophy

weather in several days, at the end of the trip, will be different than at present. We need to train to look ahead and prepare for the inevitability that a trip will be delayed. When I take friends or family with me on the plane, one thing they will always hear is that they need to set aside two days in front of the trip and two on the back side. As the weather picture clears in advance of the trip, those days can be narrowed to provide certainty on departure and return times. If the passengers can't live with a delay, then they need to make other arrangements.

With that in mind, I let my passengers know early what my plan is. In the week before a cross-country trip, I routinely begin looking at weather and flight planning so that I can alert anyone with me about possible contingencies. Weather planning more than five days out can be unreliable at best. But that does not mean it doesn't have value. Trends can be spotted, and weather systems can be tracked. Then the first question needs to be asked. With the information I have today, (1) can I make the trip safely and (2) get where I need to go without incident on the route I am planning (3) on the day and at the time I want to leave? If the answer is yes, then just keep confirming those parameters have not changed up until the time of the trip, and look forward to a good flight.

If the answer is no, then more considerations need to take place. First, is there an alternate route I can take without the risks? In many high-performance pressurized planes, going 150 to 200 miles out of the way may not actually take up that much time and fuel. Or it might simply require an extra stop, but one that won't require cancelling the trip. If another route is not an option, then you take what I call a "bonus day" and wait it out until conditions improve and the journey can be made safely. Maybe you get an extra margarita or two with an extra day of vacation. If the alternate route works, perform the same analysis as mentioned above.

If your trip is less than five days, it is important to perform the task for the launch and return portions to be sure you know what is happening on the way back, well in advance of getting stranded somewhere in a long-lasting weather system.

This week I am planning our Thanksgiving trip to Dallas to visit our daughter and celebrate my wife's birthday. From there, we will head to South Texas for the Thanksgiving holiday and return home a week later. I am looking at the weather for all three legs of the trip. For the return trip, that means looking almost two weeks out and may not offer a lot of value – but I am still looking at it.

I started watching the weather early, and it already looked like adjustments needed to be made. The early forecast is showing a strong system moving into the region over Dallas on the day we are supposed to arrive. To prepare, I let everyone know we are either leaving a day early or a day late. I called the hotel and checked availability for the day early, and the cancellation policy if we need to arrive late. The restaurant could not rebook us on such short notice, but we can certainly find a meal in Dallas without a reservation. With everything planned in advance, there is no anxiety to make the trip happen on schedule.

And that right there sums up the singular benefit of general aviation. "Get-there-itis" doesn't have to be a negative. If you plan well in advance and account for the contingencies, the anxiety about getting to a destination goes away. So, what if you have to spend another day fishing in the Bahamas or getting another excellent meal in Dallas? T&T

Lawrence S. Searcy Jr *is a 1300-hour private and instrument-rated pilot with TBM 700A (current), Mooney M20J (prior), and Piper Malibu Mirage (prior) experience. Lawrence is an avid pilot, flying approximately 130 hours a year for business and pleasure throughout the United States.*

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16	GULFSTREAM G-I
15	GULFSTREAM G-II
12	GULFSTREAM G-IIB
87	GULFSTREAM G-III
175	GULFSTREAM G-IV
319	GULFSTREAM G-IVSP
202	GULFSTREAM G-V
113	GULFSTREAMG 600
32	HAWKER 1000A
5	HAWKER 1000B
7	HAWKER 125-1A
2	HAWKER 125-1AS
1	HAWKER 125-600A
55	HAWKER 125-700B
66	HAWKER 4000
216	HAWKER 400XP
53	HAWKER 750
142	HAWKER 800A
16	HAWKER 800B
408	HAWKER 800XP
44	HAWKER 800XPI
100	HAWKER 850XP
176	HAWKER 900XP
213	HONDA JET
4	LEARJET 23
44	LEARJET 24
64	LEARJET 25
3	LEARJET 28
614	LEARJET 31
22	LEARJET 35
56	LEARJET 36
140	LEARJET 40
470	LEARJET 45
102	LEARJET 55
418	LEARJET 60
17	LEARJET 70
158	LEARJET 75
294	PREMIER I
6	SABRELINER 40A
2	SABRELINER 40EL
2	SABRELINER 40R
5	SABRELINER 60
9	SABRELINER 60ELXM
48	SABRELINER 65
11	SABRELINER 80
1	SABRELINER 80SC
1	SUKHOI SBJ
3	SYBER JET SJ30
52	WESTWIND 1
14	WESTWIND 1124
47	WESTWIND 2

TURBOPROPS - 16,319

CHIEF PILOTS & OWNERS

COUNT	AIRCRAFT
210	AVANTI
1	AVRO RJ70
483	CARAVAN 208
2275	CARAVAN 208B
37	CHEYENNE 400
140	CHEYENNE I
21	CHEYENNE IA
218	CHEYENNE II
49	CHEYENNE III
39	CHEYENNE IIIA
58	CHEYENNE IIXL
238	CONQUEST I
292	CONQUEST II
77	DAHER TBM-700A
96	DAHER TBM-700B
113	DAHER TBM-700C
383	DAHER TBM-850
134	DAHER TBM-900
70	DAHER TBM-910
102	DAHER TBM-930
138	DAHER TBM-940
66	DAHER TBM-960
165	DE HAVILLAND DHC
49	EPIC E1000
1	FOKKER 70
37	JETSTREAM 31
70	JETSTREAM 32
64	JETSTREAM 41
32	KING AIR 100
474	KING AIR 200
21	KING AIR 200C
8	KING AIR 200T
261	KING AIR 250
46	KING AIR 260
190	KING AIR 300
10	KING AIR 300LW
695	KING AIR 350
91	KING AIR 350C
35	KING AIR 350ER
397	KING AIR 350I
6	KING AIR 350IER
73	KING AIR 360
7	KING AIR 90
7	KING AIR A/B90
65	KING AIR A100
155	KING AIR A200
32	KING AIR A90
89	KING AIR A90-1
93	KING AIR B100
1154	KING AIR B200
118	KING AIR B200C
121	KING AIR B200GT
6	KING AIR B200SE
8	KING AIR B200T
46	KING AIR B90
306	KING AIR C90
40	KING AIR C90-1
193	KING AIR C90A
402	KING AIR C90B
78	KING AIR C90GT
112	KING AIR C90GTI
165	KING AIR C90GTX
18	KING AIR C90SE
257	KING AIR E90
172	KING AIR F90
29	KING AIR F90-1
5	MERLIN 300
14	MERLIN IIB
5	MERLIN III
27	MERLIN IIIA
45	MERLIN IIIB
14	MERLIN IIIC
4	MERLIN IV
11	MERLIN IV-A
34	MERLIN IV-C
91	MITSUBISHI MARQUISE
16	MITSUBISHI MU-2F
1	MITSUBISHI MU-2G
11	MITSUBISHI MU-2J
28	MITSUBISHI MU-2K
10	MITSUBISHI MU-2L
18	MITSUBISHI MU-2M
23	MITSUBISHI MU-2N
25	MITSUBISHI MU-2P
46	MITSUBISHI SOLITAIRE
70	NEXTANT 400XT
1	NEXTANT G90XT
1081	PILATUS PC-12 NG
836	PILATUS PC-12/45
216	PILATUS PC-12/47
300	PIPER JETPROP
91	PIPER M500
263	PIPER M600
601	PIPER MERIDIAN
292	QUEST KODIAK 100
3	QUEST KODIAK 900
15	ROCKWELL COMMANDER
6	STARSHIP 2000A
54	TURBO COMMANDER 1000
21	TURBO COMMANDER 690
134	TURBO COMMANDER 690A
136	TURBO COMMANDER 690B
80	TURBO COMMANDER 840
27	TURBO COMMANDER 900
26	TURBO COMMANDER 980

TWIN PISTON - 7,649

OWNERS

COUNT	AIRCRAFT
37	BARON 56TC
1677	BARON 58
428	BARON 58P
119	BARON 58TC
3	BARON A56TC
355	BARON G58
108	CESSNA 310
167	CESSNA 340
552	CESSNA 340A
50	CESSNA 402B
124	CESSNA 402C
27	CESSNA 404
317	CESSNA 414
452	CESSNA 414A
42	CESSNA 421
28	CESSNA 421A
309	CESSNA 421B
707	CESSNA 421C
59	CESSNA T303
112	DIAMOND D42
20	DIAMOND IA
186	DUKE B60
80	PIPER 600 AEROSTAR
3	PIPER 600A AEROSTAR
45	PIPER 601 AEROSTAR
4	PIPER 601B AEROSTAR
201	PIPER 601P AEROSTAR
24	PIPER 602P AEROSTAR
589	PIPER CHIEFTAIN
26	PIPER MOJAVE
301	PIPER NAVAJO
255	PIPER SENECA
74	ROCKWELL COMMANDER
168	ROCKWELL SHRIKE

HIGH PERFORMANCE MOVE-UP SINGLES - 10,002

OWNERS

COUNT	AIRCRAFT
393	BEECH BONANZA
441	CESSNA 182
55	CESSNA 206
428	CESSNA P210N
22	CESSNA P210R
58	CESSNA T182
1220	CIRRUS SR20
3733	CIRRUS SR22
2048	CIRRUS SR22T
121	MOONEY ACCLAIM
37	MOONEY ACCLAIM ULTRA
407	MOONEY OVATION
12	MOONEY OVATION ULTRA
263	PIPER MALIBU
199	PIPER MATRIX
565	PIPER MIRAGE

Blackhawk Aerospace – Masters of Performance

by **Rich Pickett**

It was 1999 at the Aurora FBO in McGregor, Texas (KPWG), and Jim Allmon, who had previously worked at RAM Aircraft, approached two friends, Dale Griffin and Matt Shieman, regarding the idea to improve the performance of turboprop aircraft. Jim's work at RAM proved the value of providing upgraded engines for piston aircraft and seeded the idea of replicating it with turboprops.

The three partners formed a company now known throughout aviation as a household name, Blackhawk. As pilots, they all knew operators were always looking at ways to improve the performance of their aircraft beyond the OEM design. Starting with a Cessna Conquest I owned by Dale, they proceeded to procure an existing STC to upgrade that twin to the Pratt and Whitney Canada (P&WC) PT6A-135A engines. The project was a success, and within a few years, their progress was enough to enter collaborative work with Pratt and Whitney Canada on additional aircraft upgrades.

Blackhawk King Air 350 - Chris Dunkin - Chief Pilot & Sales Mgr.

With the knowledge they gained from the original Conquest upgrade, Blackhawk, now back in their hometown of Waco, Texas, embarked on a similar performance upgrade with the PT6A-135A engine on the Beechcraft C90 King Air, expanding to other 90 series King Airs. This venerable workhorse upgrade results in a 36% increase in horsepower, and possibly more importantly, better climb and a higher realistic cruising altitude and resulting speeds.

The Blackhawk King Air performance upgrades continued throughout the model line, offering various power upgrades through the King Air 350 models. With each STC, they have gained more experience in the design and implementation of their upgrades,

Blackhawk King Air 350 - Engine Nacelle

Blackhawk TBM 700 PT6A-66D Exterior View

and in many cases, offering multiple engine options tailored to their clients' needs. Of course, operators may also opt for a propeller upgrade at the same time, and Blackhawk offers MT and Hartzell options.

Blackhawk Aerospace is now one operating unit of a new consolidated entity, Blackhawk Aerospace Technologies (BAT), created by New State Aviation Holdings. BAT also includes the well-known aviation entities – AVEX, Columbia Avionics and Aircraft Services, Finoff Aviation, and several other companies. AVEX, based in Camarillo, CA, has been a leader in Daher TBM sales and service. The inclusion of Columbia Avionics brought several STCs that had been developed for Citation Jets, and other capabilities.

Started by Chris Finnoff, Finnoff Aviation has been the premier provider of powerplant and propeller upgrades on the venerable Pilatus PC-12 for years. I've flown several PC-12 aircraft with the Finnoff P&W PT6A-67P upgrade, which provides a very cost-effective upgrade to this turboprop.

This combination of entities and expansion of services has resulted in a synergistic advantage, providing performance and avionics upgrades, as well as sales and service on a variety of aircraft.

With their expanding footprint, BAT has multiple locations. Recently, I had the opportunity to visit Waco, Texas, and spend time with members of the Blackhawk team. Since I had flown aircraft with their upgrades, I wanted to know the people behind the products and gain insight into the upgrade process.

Lining the Waco office walls are STCs that have been issued to Blackhawk and the companies that have been acquired throughout their corporate history. It is like walking through a hall of aviation fame, from the design perspective. Blackhawk continues to expand its offerings and is in the process of obtaining FAA approval for new performance upgrades.

I was planning to fly their King Air 350 XP67A Upgrade at Waco, and during my visit, the company was in the process of completing the approval process for one of their latest STC projects, upgrading the TBM 700. Something they accomplished just a few days later at the end of September.

Flying the King Air 350 XP67A

On the ramp in front of their Waco hangar was one of their most significant upgrades, a Beechcraft King Air 350. This King Air had undergone an extensive avionics upgrade to the Collins Pro Line Fusion offering. I have flown Fusion in a variety of aircraft, and it offers substantially more functionality than the Pro Line 21 that was previously in this aircraft and is standard in the latest King Air 350i.

Not only did this King Air have avionics, interior, and exterior upgrades, but it also sported the Blackhawk performance upgrades. This package mates composite 5-bladed MT propellers with two new Pratt & Whitney Canada PT6A-67A engines. These engines produce a maximum of 1,200 shaft horsepower, flat-rated in this installation to 1,050 horsepower. Compare this with the standard installation of PT6-60A engines with a maximum output of 1,000 horsepower at 15,000 MSL. The Blackhawk upgrade offers the operator the ability to have 2,100 horsepower at their disposal, well up to FL250. This additional power results in a substantially higher rate of climb, higher cruise speeds, and the ability to climb above the weather under a wider variety of conditions. This was an aircraft I wanted to fly.

Chris Dunkin, who has been at Blackhawk for 20 years, would be flying with me on the demonstration flight. Chris has been involved in many Blackhawk programs over the years and has been the primary development test pilot for this project. As I walked up to the aircraft, the first differentiator I saw was the MT propellers. With the five blades versus the standard offering of four blades, there is slightly more ground

clearance, an important factor for any turboprop, especially one that can access grass or gravel runways. This propeller also eliminates the ground idle limitations of the stock offering, which simplifies management.

The engine nacelles are slightly different, perhaps to accommodate the larger engine. The 67A has a 4-stage axial compressor, versus the standard 3-stage, which is the primary source of the increased performance. With this new engine, maximum ITT values increase. For takeoff, the maximum ITT is 850° C, which max continuous is only slightly less at 840° C. While most of us would not operate an engine right up to the maximum allowable ITT regularly, it is nice to know that the high limits can be used when you need to optimize your King Air's performance.

Chris and I were planning a flight up to FL340 to see how this plane performs. The start-up procedure is virtually identical to the stock aircraft, with one exception. The larger engines take just a little more time to spool up due to their larger size, which makes sense.

With our flight plan loaded into the Fusion avionics, it was time to launch from Waco. The MT propellers offer a slight noise reduction in the cabin of 3-4 dB as well as less vibration. After departure, except for a short level off by ATC, we climbed up to our cruising altitude. As expected, there was a significant difference in the climb rate with the -67A engines. At 13,000 MSL, we were climbing at 2,600 FPM, 160 KIAS/200 KTAS. Climbing through FL210 at 2,700 FPM and 151 KIAS/220 KTAS, the Blackhawk King Air was just getting warmed up! Just before reaching FL340, we were still climbing at 1,300 FPM with 130KIAS/227KTAS.


Blackhawk TBM 700 XP66D - Pedestal with 850 Mode Switch


Blackhawk King Air 350 - Climbing through FL300

We made it to our cruising altitude of FL340 in less than 18 minutes, even with the slight ATC delay. This is especially impressive in comparison when compared with 44 minutes with the original engines. Time is money, and now we were flying around Texas at 325 KTAS, which compares with 267KTAS without the upgrade. Our ITTs were at 814° C, 72% Torque, with a fuel burn of 330 PPH per side, all well within limits.

If you haven't had an opportunity to fly the King Airs, take it whenever one comes your way. The King Air 350 is a large aircraft and is very enjoyable to fly. With 2,100 flat-rated horsepower out on the wings, it is a very stable platform, and at our cruise speeds, it had many characteristics of light jets – stable, with substantial power reserve. After exploring the handling characteristics and having


Blackhawk TBM XP66D Flight Deck

fun, it was time to return to Waco in the Blackhawk King Air 350 and take a look at another Blackhawk project.

The latest upgrade

With so many performance STCs under its umbrella, Blackhawk has released another significant program, the TBM 700 XP66D upgrade. I had the opportunity to view this latest offering. With over 300 TBM 700 aircraft produced, this engine upgrade will be very popular. Blackhawk replaces the 700-horsepower PT6A-64 with a new PT6A-66D engine providing an increase of 150 horsepower. With this 21% increase in power, akin to the TBM 850, pilots will be able to climb to FL310 in 21 minutes, which reduces the time by 7 minutes. Once there, they will be able to fly up to 25 knots faster than the standard TBM 700.

In my experience flying the TBMs, this upgrade also adds additional safety margins with the increased horsepower. On those flights with OATs above ISA, it is always nice to have the additional power, and of course, the additional speed is always welcome! The Blackhawk XP66D upgrade operates in a similar, but different process from the TBM 850 to limit takeoff power to 700 horsepower until after takeoff. In the case of the TBM 850, there is an additional flap selector position above 0 flaps to access the higher horsepower. With the Blackhawk upgrade, the pilot engages an 850 switch – that is enabled only when the flap selector is in the up position. Using this interlock process obviates the need to alter the flap selector. Now, all the pilot needs to increase from 100% to 121% torque is to retract the flaps and press the button.

On their certification aircraft, Blackhawk also did an extensive upgrade of the TBM 700, including full modernization of the avionics with a complete Garmin suite. Coupled with a beautiful custom paint design and new interior, this upgrade package is perfect for those TBM 700 owners who love their aircraft and want to fully utilize the capabilities of their aircraft without purchasing a newer model, and save a substantial amount of money in the process.

Why Upgrade versus Overhaul

One of the decisions for operators is whether to simply wait to overhaul their existing engines or upgrade. The overhaul cost for a PT6A-60 or PT6A-64 engine is now approaching $800K each, and the additional cost of a propeller overhaul. If you choose this path, you save money; however, the performance is the same.

With the performance upgrade, owners exchange their timed-out engines for new powerplants. The new engines also include the P&WC Enhanced New-Engine Warranty for 2,500 hours/5 years with prorated coverage out to the TBO of 3,600 hours. This upgrade also includes an entitlement for the P&WC Line Maintenance Training, which is a perfect opportunity for an operator's maintenance technicians to learn more about these engines.

What do you do with your existing engines if they still have time to be overhauled? The upgrade package includes incentives to update your plane before overhaul by providing financial credit for each hour on engines that have not attained TBO. It makes sense to upgrade early, receive more hour credits, and enjoy the performance upgrades sooner!

Blackhawk offers a variety of performance upgrades for other turboprop aircraft as well, more than we could cover in one article. I look to the future to write about additional turboprops flying one of the Blackhawk upgrades. T&T

With 14,000+ hours of piloting more than 100 aircraft models, **Rich Pickett** *is still passionate about flying. Rich holds an ATP, CFII SME, SES, glider license, and type ratings in the following aircraft: L29, L39, Citation 500/510/525, Eclipse 500S, Beechcraft Premier and Dassault Falcon 10. He runs his company, Personal Wings, with his son Tigre. Personal Wings provides training, mentoring and aircraft services. You may contact Rich at* **rich@personalwings.com.**

Epps Aviation

Reprinted and updated from T &T 2022

by **Lance Phillips**

1965 Pat Epps and a Mooney M20

Becoming a household name in any field takes a mixture of fortune, planning, and hard work. In the general aviation world, the name Epps is not only ubiquitous for these qualities but is also known for a family legacy of military and civilian aviators who have excelled at services for pilots and at instilling passion in new generations of flyers.

Possibly none have encapsulated this legacy more than Georgia's first family of aviation. That is the family of Ben T. Epps of Athens. Ben was Georgia's first licensed pilot who designed and flew his own aircraft as far back as 1909 in his little Washington Street shop in Athens. Just a few years after the Wright brothers flew their first controlled flight at Kittyhawk, Ben's first aircraft, powered by a 15-horsepower motorcycle engine and sitting on three bicycle wheels, took flight and flew 100 yards at around 50 feet over the hilly Athens terrain. By the time the calendar turned to 1917, it only made sense that Ben further support his burgeoning aviation industry in Georgia by starting Rolfe-Epps Flying Service, also in Athens, offering flying lessons, aerial photography, and passenger flights. But while designing and building planes and founding an industry, Mr. Epps was busy raising a family.

One of 9 children, Ben's youngest son, Pat, born February 23, 1934, didn't start with a silver spoon. He had to work to earn everything he accomplished. The work started early, too, especially being the youngest of 6 boys and 3 girls, all most certainly proud and competitive pilots, except 1 sister who stayed land-based. Surrounded by this incredible family, and a life filled with otherworldly memories, one of his first memories around airplanes occurred when two of his older brothers, quite comically, used him for ballast as their dad was rebuilding one of his planes. Young Pat, kicking and screaming, alerted all around to his unhappiness about the situation. Next memory: he's sitting on his mom's lap in a Ford Tri-Motor – the first recollection of actually flying. But amid these surreal first memories, and around the time of the Tri-Motor ride, Pat's whole life trajectory could have been disrupted by the fatal takeoff crash his dad incurred while piloting one of his own aero creations in 1937.

Pat Epps was only 3 years old on that dreadful day at Athens Airport (KAHN), now named after the family patriarch. But luckily for us all, Pat's mom encouraged him and his siblings to continue with their aviation aspirations. All five brothers and two sisters became pilots.


1974 Aerobatic Bonaza

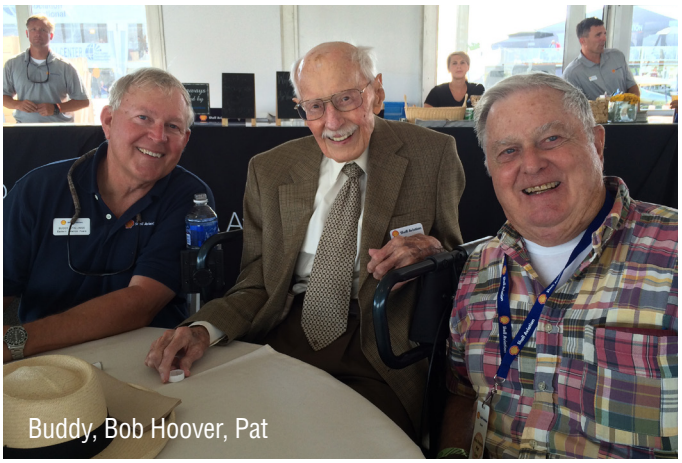
1985 Pat and a Learjet

And by the time he was 15, Pat was winning awards and competitions like the Southeastern Free Flight Model Sailplane Contest. He'll tell you with a grin, though, that he was a late bloomer, not soloing until he was 18.

During high school, continuing to learn as much as he could about the inner mechanics of engines and systems, Pat took a job as an automotive maintenance technician. At the same time, he was taking flying lessons from his older brother, Doug, ultimately soloing in a Piper J-3 Cub before attending Georgia Tech. Before completing a mechanical engineering degree in 1956, he worked summers in Yakima, Washington, in a machine shop. Through Georgia Tech's Air Force ROTC program, Pat also earned a commission as a second lieutenant, and after graduation, he went to work at Boeing as a flight test engineer on the 707 prototype program. In 1957, Pat signed on for active duty in the Air Force, earning his wings in 1958 in the Beechcraft T-34. He then transitioned to the C-97 Stratofreighter, a military variant of Boeing's 377 Stratocruiser airliner. Pat left active duty in 1963, taking a job with his brother George in Huntsville, Alabama, and was honorably discharged from the Air Force at the rank of captain in 1965.

While in Huntsville, George and Pat answered an ad in Flying Magazine recruiting Mooney dealers. This started Pat's long success at selling airplanes as the brothers became Mooney Aircraft Company's newest dealers for Georgia and Alabama. Concurrently, Epps Air Service started operations with 19 employees, a hangar, and some offices at Atlanta's DeKalb-Peachtree Airport. Shortly after, Epps expanded its maintenance capabilities and purchased Hangar 2 in November of that year. During all this, Pat was flying back and forth between Atlanta and Huntsville to support the business in both cities. The next year, the brothers purchased a competitor, Chamblee Aviation, and started their own flight school at PDK. To close out the 60s, Epps built 22 new T-hangars on newly leased land at the airport in 1969.

The seventies at PDK were eventful as well. Pat was laser-focused on serving his customers and facilitating growth in Atlanta. The beginning of the decade saw Epps start its own Part 135 charter service, and in 1979, the company opened a new customer terminal building,


Buddy, Bob Hoover, Pat

Epps and Pilatus

along with Hangar 4 and 10 additional T-hangars. Also, that year, Epps hosted the annual NBAA convention at its site. Once a Georgia-centric aviation company, Epps was beginning to be known nationally.

The 80s were all about expansion at PDK; hangars 5, 7, and 8 were built along with a new road connecting everything. It was also a decade in which Epps realized a passion for serving the needs of an underserved aviation community by offering flight training for the physically handicapped.

As new wave music transitioned to grunge in the 90s, Pat Epps was prolific in personal and professional projects. We rewind to 1981 for a moment. Pat is interested in uncovering a WWII Lockheed P-38 Lightning aircraft

buried 265 feet beneath the ice of Greenland. He joins and eventually leads the Greenland Expedition Society (GES) in an 11-year, 7-expedition mission to uncover an aircraft from the Lost Squadron, a group consisting of 2 B-17s and 6 P-38s. The squadron had been flying for hours in some of the North Atlantic's worst weather, and all were low on fuel. The 8 aircraft were forced to go down on an icecap in Greenland on July 15, 1942. Having known of the Lost Squadron and being spurred on by a friend looking to own a P-38, Pat Epps helped form and lead the GES with the eventual recovery of P-38 "Glacier Girl" during the summer of 1992.

Back in PDK, Epps Air Service was expanding, as was Epps' recognition in the industry for his accomplishments:

- 1990 - Hangar 3 built
- 1991 - New turbine maintenance hangar built
- 1992 - First GPS installed by Epps Avionics
- 1993 - NBAA Convention at PDK, First EAA Young Eagles rally
- 1994 - Pat participates in the 50th anniversary of the D-Day paratrooper drop in Normandy, France
- 1995 - Epps participates in Special Olympics Airlift
- 1996 - Epps becomes a Pilatus authorized sales and service center
- 1999 - Hangar 6 built

The reader may remember from our introductory article that the 90s also included the creation of the Pinnacle Air Network, of which Epps is a founding member. Of the 10 founding companies in the Network, Epps was the only one not specifically a Beechcraft dealer; however, it continued to grow its Beech service and support business. Billy Hulse, a principal at Atlanta-based River Capital, well known in the general aviation industry as the president and CEO of the Hangar One chain of FBOs, which was later sold to Beech Aircraft (later Raytheon) in 1983, encouraged Pat Epps to help found the group of 9 dealers, and in the process, Epps became the 10th member of Pinnacle in 1994. The Pinnacle Air Network continues to this day, now comprising 19 of the most successful aviation companies in North America. Most of the original Network companies are still in existence and thriving, several of which by different names through merger and acquisition.

The 2000s have been no less active. Pat performed for large crowds with the intent of bringing enthusiasm for aviation to America's younger generations.

- 2000 - Pat performs for EAA at Oshkosh in his '74 Bonanza N8176R
- 2002 - Several large accomplishments at Epps
- Appointed Cirrus Authorized Service Center
- Formal Non-Destructive Inspection programs established for teardown work on P-3, S-3, C-130, and F-22 aircraft
- P-38 "Glacier Girl" returns to flight on October 22
- 2005 - Epps' 40th anniversary
- 2007 - Pat Epps honored as the John P. "Jack" Doswell award winner during the NBAA Convention in Atlanta
- 2011 - Pat Epps honored twice:
- Harrison Ford Aviation Legacy Award winner at the 8th Annual Living Legends of Aviation event in Beverly Hills, CA
- Inducted into Georgia's Aviation Hall of Fame in Warner Robins, GA

Glacier Girl returns to flight


Pat and a Beechcraft Bonanza


Mr. Epps and Harrison Ford

Epps charter PC-12


Pat and wife Ann in Middlesboro, Kentucky

- 2013 - Pat Epps mourns the loss of his and his company's biggest supporter, his wife Ann Hailey Epps
- 2015 - Epps Aviation 50th Anniversary

In 2019 and 2020, Epps Aviation hosted the Super Bowl and then gave its customer terminal building a substantial facelift. Until a couple of years ago, the business was run by Pat's children, his daughter Elaine as president, while her sister Marian handled finances as CFO. And their continued growth through customer satisfaction is their top priority, evidenced by Epps Aviation's accomplishment of the ARGUS platinum rating for its charter business. Most recently, though, the family took a step back and sold the business, which continues to this day.

We all love the stories of visionary people and companies who, through a unique mix of grit, smarts, and usually quite a bit of luck, come to be known as household names. But grit, smarts, and luck aren't really an adequate summary of what it takes to become a success and lead in a field full of leaders and innovators, and visionaries. And the formula for getting there isn't always the same. In fact, it's usually different in every case. For Pat Epps, a man who never envisioned himself as an aviation business owner, much less one who has shaped the industry in myriad ways, the path to success was a long and winding road. Sometimes the stars align, and the coalescence of opportunity and strategy takes form and shape up to meet a unique need or offer a new way of doing something. That's called innovation - one of those often-overused buzzwords that have taken hold in the business of aviation. An appropriate synonym for that buzzword could be "Pat Epps," the legend who could still be found talking aviation at the FBO he founded in Atlanta, nearly up until the day he passed. The aviation world will miss Pat Epps. T&T


Pat and the Epps team

Michael Schneider and Pilots to the Rescue

by **Grant Boyd**

Michael Schneider, Daniel Baumel, and another volunteer

Pilots To The Rescue was founded in 2015 and coordinates with rescue and adoption facilities across the country to find space for dogs and cats who have been abandoned or returned to animal shelters by their previous owners.

For most of its history, the group has relied upon a fleet of Piper Cherokee PA-32s to transport animals. Moving from a single-engine piston to a turboprop is a big step, and the capability gained means something different for every operation. The move to a Kodiak 100 has allowed Pilots To The Rescue to fly even more rescue animals than before. To date, they have saved the lives of over 4,500 animals.

As the organization's mission expanded, going from flying 17 animals during its first year to just over a thousand in 2023, Michael Schneider, its co-founder and executive director, began searching for a way to upgrade their aerial capabilities. Speed, payload, range, and operating costs were important considerations, but cargo area size was perhaps the most important, as the PA-32 was only able to carry about ten dogs per flight. Dispatchability was also at the forefront of Schneider's mind, as well.

"Last year, we had a horrific year of maintenance. We had three PA-32s, and they were on the ground more than they were in the air," Schneider said. "With the aircraft,

Loading up the Kodiak

Volunteers readying the animals

it's recommended that oil changes be done every 25 hours, and that's part of the reason we had three airplanes. If one was down for an oil change, and another was down for an alternator or blown engine, then we would still have one to fly – and we were flying close to 500 hours per year. We had a lot of difficulty trying to keep those pistons up and running, so I really wanted to get a turbine aircraft."

Such an aircraft was out of reach until a private donor generously provided a two-million-dollar contribution, which allowed the group to really expand its wings. There were several models Schneider considered, but he quickly gravitated to one particular turbine powered option.

"Why did we choose the Kodiak? Well, I was looking at Caravans, and that's the first thought everybody has when you think of a single-engine turboprop with lots of room in the back. But I noticed that they were at a pretty high premium in the used market, around half a million to a million more than the Kodiak. Someone had suggested that I take a look at the Kodiak, which has a lot of great things about it. And one of the best points about the airplane for us is that we could actually fit it in our existing t-hangar," he said.

"So, we decided to go that route, and somebody suggested that we work with 'Mr. Kodiak' himself, Mark Brown, for the acquisition. We managed to find a plane that, while it had some risks associated with it, we were willing to take a calculated risk and went with it. And boy was it worth it."

According to Schneider, their aircraft (serial 98, manufactured in 2013) had spent most of its life in China. A businessman there had purchased several new aircraft from the factory but went bankrupt, and the aircraft sat untouched on the ramp for ten years.

"Then they were imported back to the United States and refurbished. If the factory didn't do the work, I wouldn't touch them, but they were refurbished from tip to tail," he explained. "The work included a light engine overhaul at Covington. Outside of needing a paint job, the plane was in excellent condition. There was some heartache with the acquisition, as well as some delays and costs we weren't expecting. But in the end, you can't really tell the difference between our plane and a brand-new Kodiak."

Pilots To The Rescue is based at Essex County Airport (KCDW) in Caldwell, New Jersey, and the reach of their rescue flights has been growing thanks to the new aircraft. They have flown more than 400 hours since starting to actively fly the aircraft in October and expect to log more than double that by year's end.

"We are now going further than we did before. The plane's not much faster than the PA-32 was, but we have been going further and doing overnights for certain rescue groups. So, at this point, I would say our operation is east of Texas and really focuses on the East Coast – especially in the Carolinas, Georgia, and Tennessee. A lot of times,

Volunteers happily welcome the cargo

Tetris in action

people will meet us somewhere, and then we will fly the animals the rest of the way, and we have four ground transport vehicles. They have become an integral part of our organization just because it's a drop in the bucket cost-wise. We could buy 40 used sprinter vans for the cost of a Kodiak," Schneider said.

"There is no shortage of animals to rescue, and the Kodiak has been a game changer for us. For one, in the PA-32, we were limited to ten or so crates of carrying sizes, whereas in the Kodiak, we can carry nearly twice as many. The game of Tetris, moving crates in and out, is a lot easier with the huge baggage door, and we are now able to stack crates two by two. The extra space is a big change for us and has made everything so much easier, and it also allows us to bring along another passenger or two to help out during the flight."

It truly 'takes a village' with reducing animals, and Pilots To The Rescue has hundreds of volunteers they lean on to make their mission successful. Everyone who flies for the group is a volunteer, and there are about ten pilots currently insured on and actively flying the Kodiak.

An example of the organization's work is a flight that Schneider completed alongside volunteer co-pilot Baumel and a reporter on June 7th. They transported 23 dogs and seven cats (523 pounds in total) from KCDW to KCRE in North Myrtle Beach, South Carolina, and back.

As Schneider flies the Kodiak more, he becomes more and more enamored with the aircraft. He believes it competes very well against other similar aircraft.

"I will say that the Kodiak next to the Caravan is a better performing aircraft, just with the simple fact that it was certificated in the early 2000s, versus the Caravan, which was certified in the 80s. And the Caravan was originally designed to carry pallets and packages, whereas the Kodiak is really a modern-day bush plane," he began.

"And the way that the wing is designed, you can be in a full stall and still have full aileron control. When Mark showed me that on our demo flight, I was surprised. It defied logic, right? Because every plane you've been in during a stall, you aren't going to be turning, and it would be going into a spin. The Kodiak is built really well, and I think it's really underrated. I do understand, though, why a lot of operations want to get into a Caravan, and there's certainly way more of them out there. I would imagine parts and services are a little easier to come by, although the Kodiak is not a hard plane to work on. It's just that sometimes you have to be patient with getting certain tools for repairs and stuff like that."

The group estimates an hourly cost of around $750, accounting for an engine reserve. Flying Part 91, they hope to get 5,000 hours out of the PT6A-34 and are actively pursuing a fleet expansion.

"We are halfway to purchasing a second one [Kodiak]. Having another plane adds to redundancies, since AOG events and annual inspections happen. It also cuts down on fatigue and the necessary need for overnights for pilots if we can place a second plane somewhere down south. The trips could be done all in one day, switching the animals between the two, as opposed to flying all the way down and coming back the next day," he said.

"It's an expensive asset, with fuel, maintenance, insurance, and everything else, but it is worth it. The reason why we are being cautious is that we don't want to be aircraft-rich and reserve-cash-poor. But when the timing is right, we are going to another Kodiak. Who knows when that will happen; you never know, there are some very generous people out there." T&T

Grant Boyd *is a private pilot with eight years of experience in aviation business, including marketing, writing, customer service, and sales. Boyd holds a Bachelor's and a Master's of Business Administration degree, both from Wichita State University, and a Doctor of Education degree from Oklahoma State University. He was chosen as a NBAA Business Aviation "Top 40 Under 40" award recipient in 2020.*

Ad Index

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The Terrifying Go-Around

"Citation three nine six delta mike, you are following 172 three miles ahead, and you are sixty knots faster." Addison Tower was planting a warning message. It was IMC, and approach control had vectored me a little tight on this drizzling spring morning. "Okay, I said, we're slowing to minimum approach speed."

It didn't take long for this plan to explode.

"Six delta mike, cancel approach clearance and fly the published missed." Crap. Now what?

Why is such a simple clearance so unsettling?

For most of us, the missed approach is something we seldom do outside of the simulator or annual training in the airplane. And even then, we usually know when the maneuver is coming. It's just not something we do often enough in the real world to accomplish smoothly. When it happens unexpectedly, we fumble.

Pickle, power, pitch, flaps, gear, flaps. Go around toggled. Takeoff power. Oops. Too much power, and the nose is pitching too much. Why are the passengers yelling? I can't talk to them now. What was the go-around altitude? What's the autopilot doing? Why is the airplane not climbing?

We should all be comfortable executing a go-around

Most unplanned go-arounds are just ugly. And in the airline world, the unplanned go-around sometimes results in a truly dangerous unstabilized situation.

To make matters worse, we associate go-arounds with a failure of our flying abilities.

You have probably been on a commercial flight and experienced a go-around. And what is the first thing that popped into your mind?

"I wonder who screwed up? Was it the captain or the controller?" Somebody made a mistake.

Let me propose to you that the act of a go-around is the best example of a command decision you can make in an airplane. Say that previous sentence out loud to yourself.

If you think about it, virtually every landing accident you see on the national news could be avoided by simply going around. By giving yourself some time to think. An opportunity to try it again or divert elsewhere. Yet we think we can fix the situation. We continue down a bad path to one that is even worse.

And when we find ourselves on an approach in situations that really require a go-round, we often don't. We continue the approach because we don't want to admit failure.

We can fix it. Until we can't.

What if we could change our beliefs? What if a go-around was celebrated instead of criticized? What if ATC didn't ask in a critical tone for the reason? Years ago, a chief pilot typically questioned the crew's decision to go around. Today, there are more and more flight departments that commend this decision. That's a step in the right direction.

But if we are going to do it more often, we need to get better at it.

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, speaks nationally and writes on a variety of aviation safety topics. You can contact David at* **davidmiller1@sbcglobal.net**.

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