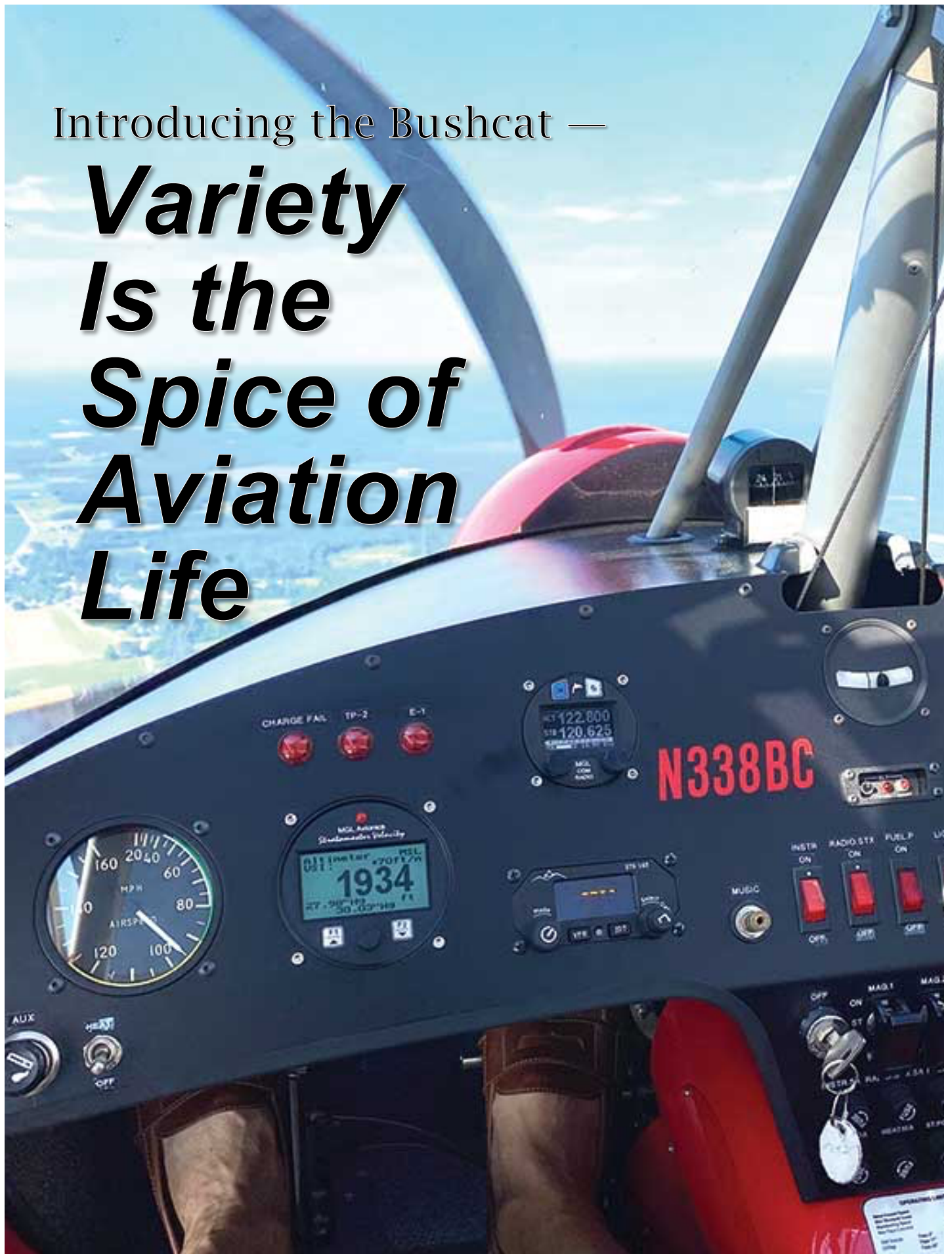


Introducing the Bushcat —

Variety Is the Spice of Aviation Life



Variety Is the Spice of (Aviation) Life

By Mike Jones

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For two decades I have split the clouds comfortably ensconced in the left seat of my sturdy Cessna Centurion, and she's never let me down.

Old '91N and I have been across the country twice and up and down the East Coast a thousand times. I've floated over a thunderstorm near Atlanta sucking on oxygen at 27,000 feet. Once I caught the jet stream and raced from Omaha to Boston in three hours. When I go camping I take three tents, coolers loaded with ice and beer, plus clothes, chairs and sleeping bags and I still will be hundreds of pounds below max gross. I've flown almost 700 Young Eagles flights and just under a hundred AngelFlight missions. In 2018 '91N and I delivered 10,000 pounds of relief supplies after Hurricane Florence.

You can't ask an airplane to do much better than that, or do it faster, or more safely.

Fish in the Sea

Yet, like a philandering politician, while my heart is true my eyes do wander. My buddy Tom has a beautiful long-fuselage Mooney with a mega-sexy paint job. He's cranking twenty knots more while using less fuel than my Cessna. Yummy.

Then there's George. His speedy and elegant Baron makes me drool, perched high over the tarmac like a leggy celebrity on a red-carpet runway. It's a mini-airliner.

Ken is in the hangar across the way, running a charter business flush with King Airs. For fun he's got the world's most gorgeous Stearman, flawless crimson and brilliant chrome. I'm dying to fly it but I'd spend the rest of the day wiping oil off that beautiful paint.

At our Young Eagles events, Dick flies a mid-wing six-seat Velocity we call the "James Bond plane." Space-age sleek, Dick's plane stops traffic everywhere he goes; all he needs is a tuxedo and a movie star on his arm.

My friend Mitch owns fifteen antique airplanes, all flight-worthy. Notably, Mitch is not married.

I love them all.

But of course, there's the real world. My reality-check appears in the lithe and blonde form of my mostly-sainted wife. She doesn't really understand my passion for flight but has long been tolerant of the Cessna and the dollars it blows out the exhaust. A quick calculation suggests the plane costs roughly \$300 per hour to fly. That's a stack of shekels in anybody's book.



The capable, sophisticated and thirsty Cessna T210, on the grass at Oshkosh.

I'm a true carnivore but no hamburger is worth \$300 unless they're making them of lobsters and truffles. The Centurion also is complicated to fly with databases to be updated, systems to pre-flight and long checklists. There's a

word for Centurion owners who do minimal maintenance and sloppy preflights. They're called "dead."

On the other hand, it is rumored there are planes which can be flown inexpensively. Old planes, small planes, simple planes, sailplanes, even ultralights. To varying degrees these would require some sacrifice of speed, range, or capacity — but at least I'd still be in the sky. It's a nice dream, like a cigar and a whisky in front of a roaring fire on a cold winter evening.

Then my flying buddy Dan calls.

Lose My Number

I should take Dan's phone and hit it with a rock. Whenever Dan calls, it's gonna be expensive.

You may recall Dan; he's the guy who arranged the "Santa Toy Drop" last Christmas which was memorialized in the February 2020 issue of this journal. Dan's a serious pilot, a serial entrepreneur and a chronic optimist. He's enthralled with aviation and has more ideas in a single day than most people have in their entire life. He's the guy in high school all the girls wanted to date and all the Moms were scared they would. When he asks, "What could possibly go wrong?" you can't think of an answer. He's that kind of friend.

So Dan, all fire and smoke and noise, was browsing around the internet and found a bright red Bushcat light sport taildragger for sale. Dan and I have noodled on the Bushcat for a couple of years. But I was working and Dan had his businesses and the time never seemed quite right.

The Bushcat is an amazing little utility plane. Designed by a Russian — and those guys know their engineering — this stubby bird features a roomy cabin with side-by-side seating and helicopter-like visibility. It was built in South Africa as a poacher patrol plane so it is optimized for the most austere flying environment. The plane is tube-and-rag construction; incredibly strong but very

light. You can fly with the doors removed, which must be a hoot. It cruises at 90-100 mph behind a rugged four-cylinder Rotax engine with 100 horsepower. The seats are surprisingly comfortable and low to the floor, legs stretched out as in a Porsche. All in all, the Bushcat is a highly capable plane at a very affordable price.



The Bushcat light sport airplane is a joy to fly. It's a two-seat taildragger with side-by-side seating, which is a rarity. The plane is available in a nose-wheel configuration

Dan sends me the link. Cool photos: fat tundra tires on a plucky red and black taildragger. That's interesting, I text back.

It's just out of annual, everything is picture-perfect, he replies. Wouldn't that be fun, I mumble, feeling my knees getting weak.

He calls the owner. There's another bidder, but he's up in Canada. There's a deal to be made. My head is spinning. How am I going to tell Annie?

The tires are brand new. The plane cover is tossed in, and that closes the deal. I'm in!

In a trance I call the escrow company. Contracts are emailed. Insurance is purchased. Deposits are made. The next thing I know I'm up at Mansfield Municipal Airport (1B9) near Boston, looking at my new baby. I am now the proud owner of — oh, no — two airplanes!

Check-Out

The previous owner is a charming fellow named Joe Marinelli who lives near Norwood, MA. Joe is all-in to aviation with his private ticket and an instrument badge in the works. Unhappily, he found renting an aerial steed is more affordable than all the maintenance, hangar and insurance costs of owning. When he gave me the keys there was real sadness in his eyes.



The author (light blue shirt) with Joe Marinelli, the previous owner of Bushcat N338BC. Joe took excellent care of his plane and there have been no mechanical problems of any sort.

Did I mention the insurance? Those party-pooping gremlins have this crazy idea that people should actually know something about an airplane before taking it into the skies without adult supervision. Over two days — waiting out some nasty afternoon breezes — Joe and I cautiously accumulated the requisite three hours of dual. As the sun set over the grass runway at Mansfield I was grinning from ear to ear.

The following morning was warm and bright, the perfect way to start a long cross-country to bring my new baby home. I drove my rental car to the hangar — thanks for the gate codes, Joe! — and carefully loaded my stuff into the

Bushcat. I also bought a sandwich to-go from the airport restaurant; food would be scarce on the long trip home.

Check-list in hand, I taxied to the grass runway, eased the throttle in and raised the tail as the airspeed indicator came alive. Joe's missing 200 pounds made a big difference. With a Rotax roar and one small hop the Bushcat eagerly jumped into the air. Whoa, Nellie, I yelled... aren't we supposed to roll on the runway for a while before flying? I could almost hear the Bushcat howl in reply, "We don't need no stinkin' runway!"

Nose-high and climbing at 900 feet per minute, the Bushcat quickly cleared the pattern. I turned westward with the morning sun at my back.



This Bushcat is configured for day/VFR only flight. The simplicity of the panel is a surprise and a delight, especially when compared to the complexity of the "go-anywhere, go anytime" Centurion. Here I fly her over Connecticut.

I've flown in and around Connecticut frequently, but always high. Down low it's different. It's intensely green, sparsely settled and gorgeous to the eyes.

Church steeples pop primly through the leafy overgrowth. Narrow two-lane roads wind along rivers. Moss-covered fieldstone walls mark the farms of pilgrims centuries gone. Hartford glimmered distantly off my right wing while Waterbury shimmered off the left. Visibility had to be 100 miles in the COVID-clean air. With a little trim the plane flew hands-off. I danced across the Housatonic River and dialed up Danbury Tower (KDXR).

One of the joys of flying an unusual airplane is nobody knows what it is. Danbury tower finally decided I was a Grumman Bearcat, although they must have been puzzled how a plane with 2,000 horsepower stays in the air at 90 mph. When they cleared me to land on Runway 26 on a four-mile final I was pleased with my set-up. Oh, how pride goeth before a fall.

Runway 26 at Danbury is protected by a 250-foot hill as steep as a ski slope. Once clear of the granite most skilled flyers chop-and-drop, fluttering down the hill like an autumn leaf on a blustery afternoon. Skilled? Not me, not that morning.

The Bushcat and I reached the crest of the hill in good form, flaps down, nose high. When we plunged down the embankment the Bushcat accelerated like a cheetah on steroids. Over the numbers I was outside the white arc at 85 mph with about six feet of altitude. Good thing it is a long runway.

I yanked the power to idle. My airspeed slowly faded away and I carefully pulled the nose higher. Eventually the tundra tires hit the concrete, probably at 65 mph. You know the punchline: I bounced. And bounced again. The tail zigged. I zagged. I added a burst of power. I bounced again. The runway edge loomed alarmingly close so I jammed on the right rudder. The right tire, on the low side, skidded across the pavement with a head-turning squeal. Eventually, all three tires settled to the ground. I was still on the concrete. The big parts of the airplane were still attached. My heart was pounding. Success!

Note to self: do not flare the Bushcat at idle power; she sinks like a stone and bounces like a basketball.

The rest of the day was far less entertaining.

Cruising the Jersey Shore

The first thing I learned at DXR was that the Bushcat is a magnet for airport geekery. Every line guy, student pilot and charter captain wanted to see it, to check out the recumbent seats, to gawk at the translucent wings. Shaking them off the plane delayed me twenty minutes.



Rotax operators will recognize this position: the author is “burping” the oil system in the engine. After 15 or so pulls on the prop the engine releases a flatulent gurgle of oil, which means the system has been pre-lubricated and is ready for start.

My departure from Danbury was completely uneventful — you could almost hear the guys in the tower placing their bets on my fate. I toodled down the Hudson River at 1,100 feet, playing “I-Spy” with the people in the skyscrapers. South of the Narrows Bridge I made a beeline for the New Jersey shoreline and climbed to slightly cooler air.

Navigation was easy. All I had to do was keep the Atlantic Ocean on my left and North America on my right and I’d get home. You can’t get lost if your navaid is an entire continent.

For two hours the Bushcat and I floated along the beaches as low as 500 feet, looking for cute girls and tiny bikinis. That was bad planning on my part

because the beach was on the co-pilot's side. But with a grand total of seven hours in the plane this was not the time to experiment with flying from the right seat.

Here's a useful tip for other light sport pilots: an FAA sectional completely fills your cockpit. Before take-off fold the chart to the section you need, because refolding a chart in bumpy air with one hand is almost impossible.

Eventually the cockpit warmed so I climbed higher. The folks at Rotax know their stuff because while I was sweating the oil temp never budged from its appointed 195 °F. I arrived at my next stop in just under three hours, thoroughly wrung-out from the turbulent summer air. This landing was much less exciting and I taxied to the fuel pump with confidence.

Wildwood, New Jersey (KWWD) is the southern-most airport in the Garden State. Like a game of whack-a-mole, as soon as my engine stopped pilots, line guys and hangers-on popped out of the woodwork to inspect the Bushcat. I ate my slightly wilted BLT and downed some Gatoraide. I bought a full twelve gallons at the self-service pump but the line-guy was so excited to see the Bushcat he pumped it for me and even ran their balky credit card machine.

Down to Williamsburg

One more leg would do it for the day. I “blasted” down the runway semi-proficiently and turned south, staying in the middle of the Delmarva peninsula. This isolated two-hundred mile thumb of farms and beaches separates the Atlantic from Chesapeake Bay and encourages inbreeding among the locals. South of the



Yes, the Bushcat is slow, but hugely economical. In twenty years of flying the Centurion I have never seen fuel receipts like these.

restricted airspace at Patuxent Naval Air Station I turned west and flew over salt water for about thirty minutes. The Rotax never wavered.

Eventually I arrived at Williamsburg, Virginia (KJGG), home to fabulous golf, a truckload of American history, and a giant waterpark, all closed by Mr. Covid. A female instructor was hogging the UNICOM explaining crosswinds to somebody. That grabbed my attention because crosswinds can be tricky for a short-coupled taildragger. As I started to flare I decided I didn't like the approach. I hit the gas and floated skyward. I'm getting smarter.

As I scooted by the terminal I noticed the giant American flag was hanging straight down: there was no crosswind at all. Feeling confident (or lucky) I raced through the pattern and this time the magic was just right. I touched down on the centerline, skipped once and rolled into a nicely controlled taxi, stick back in my lap. My sister, an avid birdwatcher, snapped a flurry of great photos as the engine flopped to a stop.



The Bushcat has a low wing-loading, which means relatively few pounds of airplane for each square foot of wing. This makes the plane vulnerable to gusty winds and pilots should always be ready to trigger-ready for the "go-around" decision.

Ah, sisters. A wonderful invention. They give a lot and demand little which was good because there was nothing left in my tank. She dragged my tired butt home, poured me a beer, cooked me a steak, and by the time the moon rose over the cowshed I was asleep on her couch, recharging my personal battery for the last leg home.

Bright and early the next morning we were back out at the Williamsburg Airport. The early sunshine made the Bushcat glow orangey-red, nose high in the air. My birdwatching sister studied the cowling intently through her camera lens.

“You know, Mikey,” she opined, somewhat muffled by the camera in her face, “your new plane has the same beak as an Arctic puffin.” So be it: the plane is named Puffin.

I made a smooth departure out of Williamsburg and dashed for home. With headwinds, the flight took about two and a half hours at 85 mph. About half-way across North Carolina I heard Dan in his Cherokee, intercepting me using ADSB. A few minutes later he appeared at my side, respectfully distant and safe. He snapped photos as we covered the miles chatting about the plane, the scenery and the magic of flight.

Hangar-Talk

All in all, this was a great adventure. My landing at Pinehurst (KSOP) was uneventful. We tucked Puffin into my hangar since the harsh North Carolina sunshine would make mince-meat of her fabric wings. Like a bag of dirty laundry, my loyal Centurion was tossed on to the ramp until another hangar can be found. She'll do fine.

When the Centurion lands people say, nice plane. When Puffin pulls up, people coming running. The Centurion is the plane for going places. In the Bushcat, the flight is the destination.

Photo Credits:

All Bushcat photos are courtesy Judy B. Jones Photography, Williamsburg, VA. The Cessna T210 on the grass at Oshkosh is courtesy of George Pergaminelis of Melbourne, Australia.

Two Planes, Side by Side

It's very interesting to compare the Bushcat to the Centurion or even to a basic Skyhawk; the design engineers had different objectives and limitations. Consider the flight from Mansfield to Pinehurst, which is just about 560 nautical miles. In the Centurion, this would be a nonstop non-event in about 3.5 hours at 14,000 feet (headwinds, remember). Puffin took almost nine hours and three fuel stops to accomplish the same distance at 1,500 above the tobacco fields. The Centurion would have burned every bit of 60 gallons of avgas costing about \$350. Puffin used 38 gallons costing about \$190.

Here's a side-by-side comparison of the two airplanes:

Specifications	Cessna "Centurion"	Skyreach "BushCat"
Landing Gear:	Retractable	Fixed, taildragger
Seats:	6	2
Length (ft.):	28.1	18.6
Wingspan with Tip Tanks (ft.):	42.5	31.5
Height (ft.):	9.6	7.5
Wing area, with Tip Tanks (sq. ft.):	185.0	146.2
Empty Weight (lbs.):	2,303.0	720.0
Useful Load (lbs.):	1,697.0	600.0
Useful Load as % of empty weight:	74%	83%
Max. Gross Weight (lbs.):	4,016	1,320
Wing Loading (lbs./sq. ft.):	21.6	9.0
Fuel Capacity, with Tip Tanks (gals)	120	25

Fuel Burn, Cruise, ROP (gals./hr.):	18.5	5.5
Power (hp):	310	100
Typical Oil Consumption (qts/10 hrs.):	1	Nil
Cockpit Width (in.):	42	47
Maximum Speed (knots):	204	91
Cruise Speed (knots):	193	82
Stall Speed (knots, full flaps):	58	32
Range with Reserves (nm):	900	582
Service Ceiling (feet):	27,000	12,000
Rate of Climb (ft/min.):	930	900
Takeoff Roll to Clear 50 ft.:	2,160	328
Landing Distance Over 50 ft.:	500	328
Max Crosswind (knots)	21	28



About the Author



With about 40 hours of tailwheel time, Mike Jones is not quite ready for his bush-pilot rating. He's based in Pinehurst, NC and is eagerly looking forward to testing Puffin's durability on grass strips across all the mid-Atlantic states, such as the Triple Tree event in autumn. You always can reach him at PilotMike2012@gmail.com.