

Velocity News

Spring 2014

Our Community

Velocity Sudamérica and Aviation in Argentina

by Alec Rhodius

Hello Velocity flyers and newcomers! I hope everyone had a fantastic Christmas and that we're all doing our best to start 2014 on the right track with positive and new ideas! Happy New Year to all!

A Little Background

It's a great honor for me to have been asked to share some insight regarding aviation and canard flying in South America; especially since I've only been involved in this field for a short time. Let me begin by introducing myself and sharing a little of my background. I'll soon turn 55, and I've wanted to fly since I was 5. As a child, I remember making my family laugh when asked what I wanted to be when I grew up; my answer at the time was an airplane racer. In that era, such an

answer just didn't make any sense. Today, however, we're fortunate to be blessed with such things as the [Red Bull Air Races](#) and even a few jet-propelled Velocities (we'll get back to that later)!

Anyway, getting back to my history, airplanes have always been a part of my life. My Uruguayan uncle was the South American representative for Beechcraft and Piper. He used to fly various singles and twins to visit us at our Argentinean farm. We still have some 8mm films of our then 75-year-old gardener, Don Martín, climbing into an airplane for the first time. I was probably about four, so the footage looks like something from 130 years ago! As an aborigine of the Araucano Tribe (originally from Chile), just imagine if Don Martín were to come across one of today's Velocities – with Skyview glass

In this Issue

Community: **Velocity Sudamérica**

Repeat Offenders: **W J Wilbeck**

Ten Years Ago: **Velocity Views 2004**

Featured Aircraft: **Ferrells' Fox**

Our Builders: **Building an Engine V**

Flying News: **First Flights**

First Flight: **Jorge Bujanda part II**

Builder Updates: **Progress Reports**

Workshop: **Builders' Tips**

Editor's Desk: **Ties that Bind Us**

Air Tales: **Pilot Bloopers**

FAA Data: **Aircraft Updates**

VOBA Page: **Membershiop Mailing**

Velocity Owners and Builders Association

VOBA

displays and joystick control inputs, not to mention the engine at the back and the canard up front – he might have thought he was going to be kidnapped by extraterrestrials. Technology has certainly evolved!

A Powerful First Impression

When I first came across [Velocity Aircraft](#) in 2010, I thought, *this is the plane for me!* No wings to climb over, front door access, glass panels, joystick controls, pusher props, winglets, the canard out front.... I realized this was going to be a slightly difficult endeavor,

contacted the holding bank with a conservative offer, which, astonishingly, was accepted! This would serve as our Demo plane.

Soon after, I met Duane Swing at Oshkosh, and began working on our dealership. Duane must have thought I was just some crazy South American guy wasting his time. Following several conversations – discussing real business & numbers, describing how

Throughout our dealings, Duane, Scott Swing, and John Abraham have always been very thorough and professional. They are all great businessman and extremely accommodating. Just imagine how many people of different cultural backgrounds they have dealt with over the years. After several back-and-forth emails and many more telephone calls, they have all repeatedly answered my numerous questions and attended to my frequent requests.

Aviation in Argentina: Facts and Figures

The aviation community in Argentina is very small. From what I have gathered, there are at most 4,200 airplanes flying, both civil and private. Of those, something like $\pm 2,000$ are small

general aviation (GA)

airplanes, including piston twins. Going further, I'd wager only about 400 exceed the 100-knot mark. The remaining 1,600 are mostly trainers: C-150, C-152, Tomahawk, and PA-28 models, among others. There are approximately 50 small flight schools, most with about four airplanes each. Only four schools have large GA fleets, with 18 or so trainers apiece. I'd guess there are about 300 ultralights at [GEZ-EAA](#), and probably another 500 flying around the rest of the country. In addition, there are probably another 400 unclassified flying machines, and a



as general aviation works in South America, explaining that English is my second language—and that aviation English is another language altogether—Duane then understood how I could generate so many “*whys*.” Despite all this, he agreed to our dealership, and Velocity Sudamérica was created with the purchase of a Velocity KIT from the Factory.

today I only have 500 hours in four years of flying, and—at the time—I didn't understand why Velocities don't have flaps! Nevertheless, I purchased a Velocity for my personal use, a 1995 200-hp SUV-RG top loader (N27TR), and immediately had the *Stair Door* modification done. Then, after seeing an advertisement for a 1994 180-hp SUV-FG top loader (N556V), I

similar number of unfinished projects hanging from the rafters in hangars at the nation's airstrips.

People often ask why, in such a big country, there is so little aviation going on. A major consideration is the relationship of aviation costs (airplanes, engine, parts, etc.) to the cost of living. Currently, the unofficial exchange rate of Argentinean pesos to US dollars is 12:1—and will soon be even higher! The official rate is 8.00 pesos to every dollar. Consider for a moment: an average salary is about \$5,000 pesos/month. This works out to half a new cylinder per month – not counting the 50% import duty! A young professional pilot with 1,000 to 3,000 hours might earn \$15,000 to \$20,000 pesos a month. How can he be expected to put a decent airplane together? In 2000, we saw ±300 airplanes leave Argentina because of political banking regulations. Customers weren't allowed to withdraw their money from the banks, so many sold their airplanes abroad to obtain some much-needed cash. Laws like this keep changing in our country and in other South American nations as well.

A Resilient Community

Despite the cumbersome politics, these regulations don't keep our local aviation community from enjoying the grandeur of this country as viewed from the sky. Pilots and their families often fly from one place to another, including over the *Cordillera de los Andes* to our neighbors in Chile. Down here, we have four seasons going on at the same time – cold, mild, warm and hot weather – along the length of our nation. At the top of our country you'll

find humid, rainy conditions near *Misiones* or a hot, dry climate around *Salta*. Passing south through the well-known *Patagonia* region, you can expect beautiful white snow before encountering frigid polar air enroute to *Ushuaia* in the *Tierra del Fuego*, the so-called “End of the World”.

Every year, a growing number of pilots participate in the popular aerial adventure dubbed “*Navegueta*”. Pilots from all over South America are encouraged to partake in the fun, which involves flying from [Ángel S. Adami Airport \(SUAA\)](#) in Montevideo, Uruguay down to [Aeroclub de Ushuaia Airport \(SAWO\)](#) in Ushuaia, Argentina – largely considered the world's southernmost city – before turning back north and ending in Mendoza, Argentina. Last year, we had 130 single-engine airplanes take part in this 10-day event. *Navegueta* normally takes place in October, though I've heard the organizers are planning to move it up to May for 2014. As part of the event, participants receive 200 liters of 100LL per plane free of charge (available at select airports), as well as a 10% price reduction on avgas for the duration of the tour. Although the *Navegueteros* are free to follow the course of their choosing, an Atlantic route is very popular for the southbound portion. For the return north, most flying is done over the *Cordilleras* up to Mendoza, where entrants are able to taste the second best wines in the world (I've learned that the #1 spot frequently changes ☺).

VOBA FAQ

What's in it for me?

The Velocity Owners and Builders Association provides a number of resources for members at no additional charge. Contact us at Admin@VelocityOwners.com if you want your own:

- Builder blog
- Photo album
- Specialty Forum

Where do my dues go?

VOBA uses the funds it collects to help cover these expenses:

- Hosting the VOBA site
- Hosting the Wiki site
- Newsletter writing/editing
- The Velocity Virtual Hangar
- Liability insurance for our fly-ins and cookouts
- Taxes and government fees that apply to the organization.
- Mailings to non-members
- Support for the Oshkosh cookout
- Participation in EAA's Type Club Coalition

How can I help?

Write something! Send us photos. Tell us what you're working on. We'll use it in the newsletter, on the web site, or add it to the technical library. Email your submission to:

Editor@VelocityOwners.com

GA Flying in Argentina

Argentina has several airspace areas and navigational routes that we must strictly respect, as is the case in other countries. Sometimes we are allowed to cautiously operate in these areas, but if you deviate from an assigned altitude fail to maintain radio contact, ATC will promptly put you in your place. Air traffic

Some pilots don't respect takeoff queues, aircraft performance considerations, or the right-of-way of those already in the pattern. I remember hearing our instructor returning from a BBQ gathering in the Velocity and

proud to meet foreigners with whom they can exchange stories. If you're kind and friendly, you'll be treated the same way and will certainly be invited to an authentic Argentinean BBQ.

Locals also love to treat visitors to free

aircraft rides. Everybody will do their best to speak in broken English, but most things are accomplished with a big smile.

At IFR airports, English is required for the tower and radio employees, but can sometimes be difficult to understand. Civil aviation also requires pilots to meet mandatory international English standards, though the local Latin influence is easily recognizable. If you're planning to fly down here,

knowledge of Spanish

will be very helpful, since most locals will be communicating in our native tongue.

Aviation in Neighboring Nations

These days, Uruguay is much better off as far as import regulations are concerned. For starters, they don't have the 40% import tariff for aircraft. They also have some type of new regulation that allows them to keep flying with the US (November) registration until they opt to change to the Uruguayan registry. In terms of scenery, Uruguay has a fantastic coast line. *Punta del Este* is an internationally renowned summer resort town with one of the best beaches in the world. Visitors will also find a lively array of

facilities exist at larger

airports, but general aviation does a lot of VFR flying without ATC interaction. It's fairly simple; when departing a controlled airport, you will have to fill out a VFR or IFR flight plan, and the PSA (*Policía de Seguridad Aeroportuaria* [Airport Security Police]) will check your plane and belongings. Otherwise, at uncontrolled fields, you can just start up and depart without talking to anyone.

These uncontrolled airport practices, of course, also have their downsides.

announcing his position on long final. There

were three or four non-radio aircraft in the vicinity that just didn't pay attention to who was where or who had the right-of-way. He had to abort his approach three times before finally managing to land. Five minutes earlier, I'd been in a similar situation, but managed to squeeze in behind an old and slow biplane.

Foreign Pilot Visitors

Some aero clubs with landing strips charge a landing fee or overnight fee, but these won't be more than \$10 dollars. Members are very happy to receive newcomers and are especially



nightlife at their disposal (attendance is a must!).

Unfortunately, I



know very little about aviation in the Pacific

South American countries. I've heard that some countries prohibit the purchase of aircraft directly from the US (because of illegal use???), though lots of fast planes still fly there. In fact, Chileans are well known for fishing from seaplanes.

All things considered, I would say Brazil has South America's most developed aviation system. Notably, numerous airstrips are scattered across the country's vast terrain. Costs are (somehow) reasonably controlled and the flying community manages to enjoy their hobby. Van's RVs have become popular there and they even have an [importer/distributor based in São Paulo](#). As is common in many

places,

some customers prefer

to buy a completed airplane rather than going through the construction process themselves.

RVs in South America are very popular experimental airplanes because of their performance characteristics (fast, short takeoff distances, low wing configuration, etc.) and their ability to meet the unique demands of flying in South America. By this, I mean to say that all of South America is an enormous grass strip, provided the aircraft are robust enough to handle the environment.

Around Latin America

I have heard from other pilots that some authorities in Central America aren't very kind to US citizens. Sometimes, airport employees take advantage by charging "foreigner"

rates for fuel, landing fees, etc. Obtaining fuel usually isn't a problem at most airports; just contact them before takeoff to verify availability and the condition of the field. If you don't have an airfield's information, larger airports will give you general information about the weather and other info relevant to your route of flight.

Velocity Sudamérica

Since launching

Velocity Sudamérica

in 2011, we've probably had close to 100 inquiries regarding Velocities (approximately 90% for kits, 10% for completed aircraft). Our website displays some completed aircraft to show customers the various models and features, but when we get down to specifications (such as takeoff & landing distance requirements), many potential customers hesitate. When import costs come up, nearly all seem to vanish. Much of this can be attributed to financial considerations in the region. Whereas North Americans or Europeans may enjoy the building process as much as (perhaps more than) flying, I would guess that most builders here choose to build because they can't afford a production aircraft. To circumvent these economic limitations, they put together (with great pride) something that will fly, but usually not over the 70-knot mark.

When asked about the merits of Velocities, I emphasize their ideal cross-country attributes, reinforcing their long ranges, quick speeds, low fuel consumption, etc. I stress that they're the perfect platform to go from Mendoza to Mar del Plata, Buenos Aires to Ushuaia, Punta del Este to Bariloche (all sizable cities with hard surface runways), etc. Additionally, N222TZ (XL-RG) demonstrates that these aircraft are quite capable of "timidly" operating from GEZ-EAA's (an uncontrolled field) grass strip (a video is available on [VOBA's video page](#)). FYI: At present, legal papers to fly into controlled airports or out of the country still aren't complete.

Choosing a Base

I decided to hangar our Velocities at [GEZ-General Rodriguez/EAA Airport](#) because of: i) lack of all legal papers necessary to operate from controlled airports, and ii) its soft surface; to encourage and demonstrate to potential buyers that Velocities can also operate from unimproved strips.

Unfortunately, we learned the hard way that a wet grass/dirt strip is bad for pusher propellers. Small quantities of dirt – together with wet grass – produce small projectiles that adhere to the prop before being slung outwards and damaging the prop's metal edges. Mud can actually be worse than stones! Once airborne, I

can see only positives. Sightseeing through the very large, unobstructed windscreen and the comfort of its large cabin are incomparable to other airplanes. Every pilot I've spoken to has said Velocities are incredibly beautiful, fast, elegant, and a joy to watch in the sky.

Even with so many compliments, sales don't still occur. Velocity growth in this part of the world appears complicated, or at least for the moment—slow. Despite the rough start, I'm optimistic that things will soon turn around. At this point, we only have five Velocities in Argentina, three of which are in flying condition. I understand there are also a few in Brazil. As far as the rest of South America, to my knowledge there are none.

Taking Care of Business

Since 2008, we've purchased, handled paperwork on, shipped down, and sold four C-177 Cardinals, a C-172 Skyhawk, and a C-150. I flew my 1977 C-177B from CA to FL and loved the experience. I'm very enthusiastic about ferrying planes myself. In 2010, we bought the two SUVs and the KIT, with N27TR being ferried down. In 2011, we repeated the process when we purchased & ferried the XL-RG (N222TZ) from Florida to Buenos Aires. The second SUV was loaded up together with a kit and shipped to Argentina because neither was in flying condition. From what our ferry pilots have told me, they

immensely enjoyed the adventure of ferrying the Velocities.

At Velocity Sudamérica, we offer our clients full service, including handling all logistics. When selecting from what is available on the market, I make it a point to consult with Velocity Headquarters about the results of our research. We offer negotiating with the seller, preparing/handling export paperwork, and, depending on aircraft condition, ferrying the plane down or overseeing the shipping process. Once in Argentina, we take care of customs clearance and transport to the plane's final destination. Additionally, we currently provide service to some Uruguayan and Brazilian clients, utilizing employees and contacts with custom expertise of each country.

Please feel free to ask me any questions you have. I'll do my best to give you the most proper answer. I invite Velocity flyers to come down and participate in fly-ins and gatherings as we promote this beautiful bird and manage new Velocity sales!

And yes, 2014 will be different!

Cheers,

Alec Rhodius

Blrd. Mirador St. N°1 Suite #210

Bahia G. Nordelta,

Buenos Aires, ARGENTINA

CEL: +54911-5003-1106

www.velocitysudamerica.com



It's a pretty safe bet that anyone who decides to undertake an aircraft construction project needs vast reserves of patience, resolve, spare time, and willingness to endure setbacks and failures – repeatedly. Despite these somewhat overwhelming requirements, numerous individuals, with or without a mechanical background, opt to attempt the arduous journey of homebuilt aircraft construction.

While anyone who successfully completes an amateur aircraft-building project definitely has the right stuff, some hobbyists choose to

My SE-RG, Giddyup, is my first. The airframe is complete and awaiting a DeltaHawk diesel engine.

engage in the kitbuilt process more than once. What is it that drives these individuals to voluntarily (and eagerly) walk a long, difficult road over and over? To get an idea of the passion that makes such builders tick, VOBA decided to go straight to the source and question some repeat offenders of Velocity aircraft. This month, VOBA spoke with serial Velocity constructionist WJ Wilbeck for some insight on the process of handling multiple building projects – while also maintaining your sanity.

12 Questions with WJ Wilbeck

Repeat Offenders

by Stephen Lewis & WJ Wilbeck

VOBA: WJ, how many Velocity planes have you chosen to build so far? What models have your constructed/are you constructing?

WJ: I have three Velocities: an SE-RG, a 173-FG, and a TXL-5.

VOBA: What is the current status of each model (certified, under construction, Phase I, etc.)?

WJ: My SE-RG, *Giddyup*, is my first. The airframe is complete and awaiting a DeltaHawk diesel engine.

My 173-FG, *Bride of Frankenstein*, is one I purchased because I wanted to fly while awaiting the DeltaHawk for my SE-RG. The airplane appeared complete and ready to fly, but the engine had never been started. Silly me, it took 1½ years to make it flight ready. It now has 512 happy hours on the Hobbs meter.

The TXL-5, *Loco Motive*, had 92 hours when I made the purchase and flew it back from Florida. We flew it for about three hours once back in Kansas. It flew fine, but there were several issues

with the engine installation that concerned me; so I completely disassembled the airplane. To my knowledge, this is the first time this particular engine has been installed in a Velocity. It took two years to reconstruct the firewall rearward installation, rework the landing gear, brakes, and many other items. I also removed all paint and did the fit & finish. It has since flown twice. On the last flight, a Lycoming factory spec turbocharger mount bolt came loose and went through the MT four-blade propeller; which is now in Germany for repairs

VOBA: What engines and avionics have you paired with each aircraft?

WJ: SE-RG – Awaiting DeltaHawk Diesel, avionics not yet chosen.

173-FG - New 205 HP PZL Franklin with MT Propeller, TruTrak EFIS Autopilot IV, panel-mounted Garmin 696, Garmin 430W, Vision Micro Systems Engine Monitor and Oxygen.

TXL-5 – Performance Engine Lycoming TIO540-AE2A (twin turbo from a Piper Malibu) set at 380 HP, Garmin G900X with TruTrak Sorcerer Autopilot and Oxygen.

VOBA: In terms of required construction hours, have you noticed a significant reduction in the required build time from your first

undertaking to your most recent project?

WJ: What I found with the fast-build SE-RG and the two Velocities that I purchased is that a "not completed or used" airplane takes almost as long to finish as a new kit because I had to take apart and redo or add to much of the previous builders' work. The overall workmanship varied from very good to OK to awful depending on which part of the planes we are talking about. Bottom line: if you know what to do and how to do it, the second plane goes much faster. My guess is 50% less time.

VOBA: Is there any part of the building process that you prefer to leave to the pros? How about anything you insist on doing yourself?

WJ: My strategy is simple. If I can perform a task as good as a professional, I will do it. If a professional can do it better, I go with the pro.

VOBA: Are there any unique components or designs that you built/designed yourself?

WJ: The SE-RG has an electric air conditioner and a unique rotary valve that shuts off the outside air from the top fresh air NACA when the AC is on. Otherwise, they are by-the-book designs.

VOBA: Since you're a veteran builder, what advice would you give to someone who's just starting his/her first Velocity build?



Velocity Owners and Builders Association ("VOBA") is strongly committed to the safe operation of Velocity aircraft. We present information via our website, newsletter and other media without representation or warranty as to the suitability or appropriateness of any opinion, recommendation, or suggestion contained therein. The opinions or advice contained within our website are not necessarily shared as correct by VOBA, and any articles, files, or data presented by members have not been reviewed by VOBA or any other authority for their accuracy or correctness. Reliance on any information in this newsletter or on the VOBA web site is done at the user's own risk. Information is offered solely to promote discussion among, and for the entertainment of our members.

All photos, videos, and text submitted to VOBA for display anywhere on our website or in any VOBA publications shall be deemed licensed to VOBA by the submitter and in so doing the submitter is giving all rights to VOBA to reprint as VOBA deems appropriate.

VOBA, VelocityOwners.com, and this newsletter are NOT formally associated with Velocity Aircraft Inc. Velocity airplanes are experimental in nature and are not inspected and/or regulated by the FAA or other equivalent governmental regulating bodies around the world in the same way as certified aircraft. As a subscriber to this newsletter you expressly acknowledge the above.

Disclaimer and Release: The authors, contributors, owners, editors, and content providers believe that the information presented here is generally accurate, but it is provided without any warranty. The information is presented for your consideration only, should not be relied upon, and should be used only to augment information obtained from other sources more official, reliable, or credible. If some of this information conflicts with that obtained from authoritative sources, ignore this information. Finally, you use this information solely at your risk and, by using it, you agree to release everyone involved from any liability.

VOBA ASSUMES NO LIABILITY FOR ANY INCIDENTAL, CONSEQUENTIAL, OR DIRECT DAMAGE OF ANY KIND, INCLUDING INJURY TO PERSONS OR DAMAGE TO PROPERTY. THE READER OF THIS NEWSLETTER AGREES TO INDEMNIFY, DEFEND AND HOLD HARMLESS VELOCITY OWNERS AND BUILDERS ASSOCIATION, ITS OFFICERS, DIRECTORS, ADVISORS, OWNERS, EMPLOYEES, AGENTS, LICENSORS, SUPPLIERS AND ANY THIRD PARTY INFORMATION PROVIDERS FROM AND AGAINST ALL LOSSES, EXPENSES, DAMAGES AND COSTS, INCLUDING REASONABLE ATTORNEYS' FEES, RESULTING FROM ANY USE OF THE INFORMATION PROVIDED BY VOBA TO YOU OR ANY OTHER PERSON YOU GRANT ACCESS TO THE NEWSLETTER.

WJ: The best advice I received (and most other folks have as well) is: *"Do not set out to build an airplane. Simply enjoy the building **and** finishing of each part. After a while, all the parts will be finished and you will have an airplane."* In a perfect world, an ideal scenario would be for two builders to get together and build two airplanes at the same time. My guess is that two planes can be built at the same time with only about 20% - 30% more total time than just building them one at a time.

VOBA: Has there been a particular milestone in your building history that you're most proud of?

WJ: For me, simply making the decision to start building a Velocity was the major milestone.

VOBA: We've all heard of problems, hang-ups, and Murphy's Law situations that spring up over the course of building a plane. Is there a particular complication that sticks

out during the course of your construction projects?

WJ: The build itself is more or less pretty straightforward. It just takes patience, time, and money. Like many other builders, I fought high CHT and oil temperatures; even well after the Phase I testing. The root cause of the high temperatures on both flying Velocities was the Light Speed ignition system – it had the timing set too far advanced.

VOBA: With all the homebuilt options on the market, you've repeatedly chosen to build Velocities. What is it about Velocity that has kept you coming back?

WJ: The Velocity is, in my judgment, the finest cross-country airplane on the market – bar none. They are very comfortable, a stable IFR platform, efficient, reasonably fast, and always a conversation piece on the ramp.

VOBA: Some say that choosing your favorite airplane is like choosing a

favorite child? Though this might be true, is there one plane in particular that you tend to lean toward as your preferred aircraft?

WJ: So far, the 173-FG is my favorite. It is simple, fuel efficient, and very dependable. The TXL-5 has yet to prove itself to me. Time will tell if the engine is a good choice for a Velocity. If DeltaHawk ever produces engines, I expect the SE-RG will be my favorite and the one that I will keep "forever."

VOBA: What new aircraft model, feature, or option would you like to see Velocity offer in the future?

WJ: That is a tough question. I must admit that the V-Twin has caught my eye. For a feature, it would be pressurization. It would take a totally new airplane, and I doubt that is going to happen any time soon. The Synergy Aircraft is also on my radar, but I have serious doubts about that project.



Velocity Views

Ten Years Ago

by Stephen Lewis

Here is what the Velocity community was talking about a decade ago.

Volume 37, 1st Quarter 2004

➤ **Copperstate Award Winner:** As a further testament to the building talent of the Canardian community, *Velocity Views* subscribers learned that Salt Lake City-based Bill and Whitney Hawley had garnered 1st prize in the composite category at the EAA's Copperstate Fly-In in Phoenix. The Hawleys, who did all the construction

save paint and upholstery, estimate they spent approximately 3,000 hours on the assembly of N561WH, their XL-RG. Among the aircraft's attributes include:

- 260-hp Lycoming IO-540
- A custom-designed interior
- All electric panel powered by dual alternators
- A custom-developed electrical system that automates many functions. 1WH's unique design saves the pilot from having to manually turn on/off lights and avionics during normal operations.

craftsmanship. For another example of a Velocity winning gold, see *Featured Aircraft: Richard Cano's Award-Winning TXL-5* in the 3rd Quarter 2013 edition of *Velocity News*.

➤ **Insurance Info:** A recurring Velocity theme, Duane discusses the near impossibility for low-time pilots (under 100 TT, no complex experience) to be able to secure coverage for an XL-RG. In terms of numbers, Duane mentions that one Falcon underwriter requires 500 TT, 100 complex, an instrument rating, and a 10-hour factory checkout before they'll consider providing coverage.

In another section of the issue, Duane announces that a major aviation insurance underwriter has agreed to a 3-month trial period during which it will evaluate Velocity models and decide, based on results, whether to approve Velocities as models it will cover.

➤ **Advanced Avionics and TAA Advice:** Throughout the issue, contributors mention the trickle down of airline-style avionics to the GA marketplace. As previously reported, the Factory claims to still be experiencing problems with the Blue Mountain EFIS/One, despite following the manufacturer's suggestions to a tee. Additionally, despite ongoing glitches with the FADEC system, Duane still assures us that automated engine operations are here to stay.

Under *How to Build a Safer Airplane*, we learn that an FAA study showed technically advanced aircraft (TAA) to have a higher accident rate than their traditional counterparts despite the increased capabilities of TAAs. The

In the decade since the Hawleys' victory, Velocity builders have continued to impress the homebuilt community with their creative designs and expert



report emphasizes the need for better pilot training and awareness on the advanced systems of these newer offerings.

In *Event and Production News*, Scott Baker makes the case for electronic, all-in-one instrument systems when operating in the IFR environment. Though he admits that a few features could stand to be tweaked, overall the 21st Century, electronic navigation option does wonders for a pilot's situational awareness while operating in the soup.

Finally, in *A&P Talk*, Brendan claims that (in terms of avionics and panel gadgetry) most Velocities are way overbuilt from what their owners actually need for their flying ops. The modern prevalence of advanced avionics has led to some nose-heavy Velocities, so builders should carefully consider the effects and importance of any equipment they're considering. Per Brendan, Velocity owners who fly professionally tend to have simpler IFR panels than purely recreational Canardian pilots.

➤ **M-T PROblems:** The *Factory News* section reports that RPM limitations on C1C engines have been onerous and led to short life cycles between overhauls. At the time of publication, M-T was reportedly working on new replacement blades that would not be subject to the corresponding RPM restrictions and would be available for only slightly more than the cost of the blades they replaced. Duane also points out that, as of publication, M-T had never

suffered a blade separation failure.

➤ **Advice from the Answer Man:** Scott Swing cautions builders that unlabeled nosegear door hydraulic cylinders are prone to deformation and subsequent leakage due to the fitting under the snap ring being made too thin. Scott states that the Factory will send out replacement parts, and he offers guidance on installing the new fitting.

ride for up to three passengers for a modest \$150. As an added incentive, those demoing hopefuls who purchased a kit within the next 12 months would receive a \$150 credit towards the purchase price.

➤ **Velocity Flying 101:** Anyone new to Velocity flying, those wishing to brush up on basic ops, or experienced flyers wanting a quick reference of operational procedures should check

Brendan O'Riordan, 2004:

Most Velocities are way overbuilt from what their owners actually need for their flying ops. The modern prevalence of advanced avionics has led to some nose-heavy Velocities

Also in this column, Scott clarifies the differences between shimmy, shakes, and vibrations to help community members know exactly when and under what conditions each is likely to occur.

➤ **Barnstorming Tour 2004:** A decade ago, Velocity Aircraft decided to embrace a practice of old-time aviators when it announced a 5-month national barnstorming tour to reach more potential Canardians-to-be. Interested parties could book a demo

out the *CFI NOTAMs* section of the 1st Quarter 2004 issue. In this column, Nathan discusses the basic operational settings for all phases of flight in a simple, step-by-step format. Among his advice: even experienced high-performance fliers tend to get behind the aircraft, so planning ahead is critical in order to keep up with your Velocity.



Want a more in-depth look at the Velocity newsletter of old? The complete archive of Velocity Views issues is available online at www.VelocityXL.com (Menu item: Downloads. Section: Articles.) and on Velocity Aircraft's website at www.velocityaircraft.com/velocity-online.html



Ferrells' Fox

Featured Aircraft

N44VF: A Man, a Woman, and a Velocity

by Stephen Lewis

It's been said that every aircraft tells a story. While there's certainly truth to that, few aircraft stories have probably been documented as thoroughly as that of N44VF, Brett & Elizabeth Ferrell's 2007 XL-FG. Anyone who's visited VelocityXL.com knows that the Ferrells have meticulously chronicled the history of *Victor Fox* since before the airplane was, well – an airplane. Besides the building process, the couple's massive collection of photos, videos, audio clips, and commentary details a wealth of news and information of interest to any canardian. It also shares the personal story of how two ordinary dreamers overcame a host of setbacks to accomplish a goal decades in the making.

Both Brett and Beth were bitten by the aviation bug at an early age. Brett had dreamed of owning an airplane since his college days, and at one point became enamored with the idea of building – and subsequently flying – a plans-built Cozy. Beth too yearned to have her own plane, but financial reality at the time inclined to focus on the much more

cost-effective ultralight route into the air.

Boy Meets Girl

In the fall of 2000, Beth and Brett's paths crossed when they met on a blind date. As they got to know each other, their mutual interest in aviation came to light. At one point, Brett pulled out a dog-eared copy of *Kitplanes* and shared his plans to build his own Cozy. He also pointed



out the issue's featured aircraft, which happened to be a Velocity. At that time, he lauded the sleek, four-place pusher canard as an unobtainable dream airplane. However, the burning desire to someday build and fly a Velocity lingered with both of them as a distant possibility.

And Airplane Makes Three

In July 2001, the couple traveled to EAA AirVenture in Oshkosh, WI, where they met Velocity Aircraft president Duane Swing. After expressing their desire to someday own a Velocity, Duane's flexible nature –



combined with Beth's bold sense of adventure – resulted in them buying an XL-FG kit then and there. Beth & Brett now owned their dream aircraft, though the purchase was not without sacrifices. Funding the Velocity project required Brett to part with his other well-known toy, a yellow Porsche Boxster.

The Couple that Builds Together...

After numerous setbacks, the couple began the building process in earnest in May 2002. The following month,

they spent a rigorous week at The Factory's Head Start program in Sebastian, FL. Construction was now firmly underway, and they were inching ever closer to the realization of a longtime goal.

Divide and Conquer

Though Brett had originally intended to earn his private pilot certificate while simultaneously undertaking the aircraft assembly, time and resource limitations forced him to focus on the build while Beth concentrated on learning to fly. Fast forward five years and the fruits of their labor were realized when the now airworthy

N44VF

made its [inaugural flight](#) on September 7, 2007. After additional tinkering, tweaking, and transition training, Beth soloed *Victor Fox* the following June. Seven years after acquiring a collection of parts, Brett & Beth (now husband & wife) had successfully built and flown the airplane they'd always wanted.

Testing their Mettle

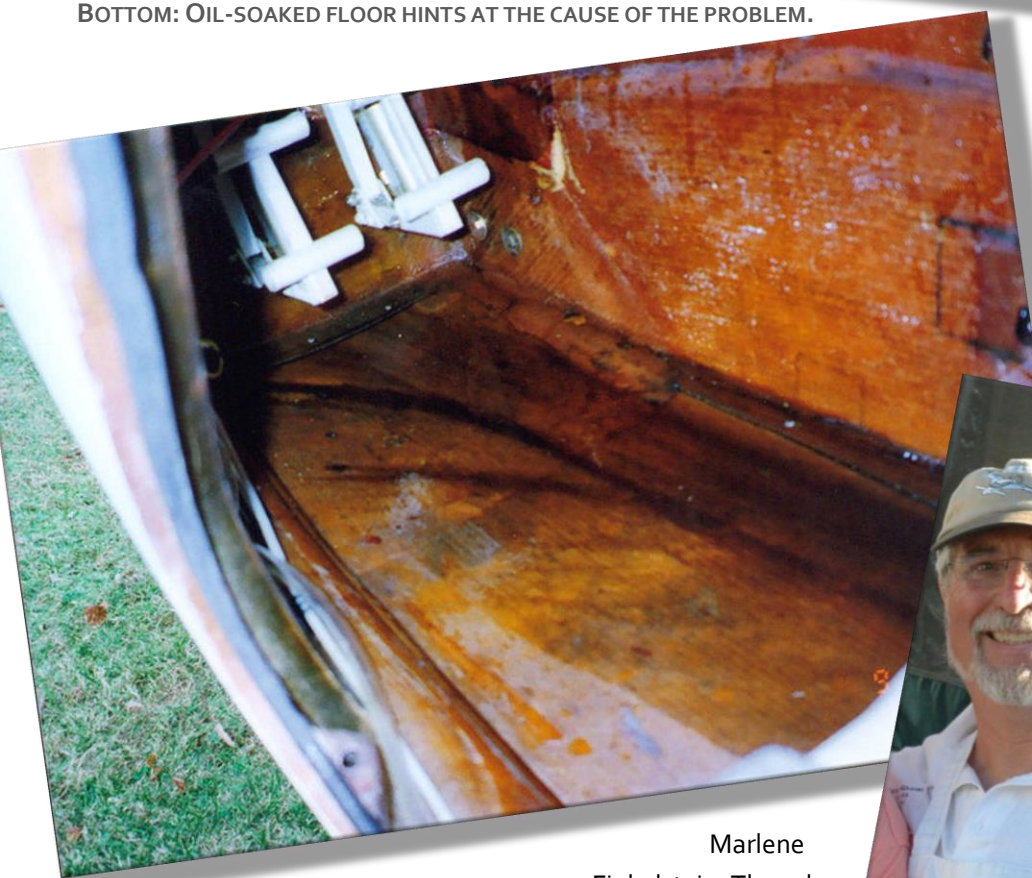
In September 2008, on what was supposed to be a fun weekend away, Beth & Brett were put to the test when an oil line burst while enroute to the [CSA \(Central States Association\) Canard Fly-In](#) at [Rough River State Park \(213\)](#) in Kentucky. *Victor Fox's* first flight out of Ohio had quickly become a pilot's worst nightmare, as the Ferrells were now forced to set down in the unfamiliar terrain of Southern Indiana.

Rising to the occasion, Beth directed their oil-soaked aircraft to the nearest suitable landing site: a two-lane



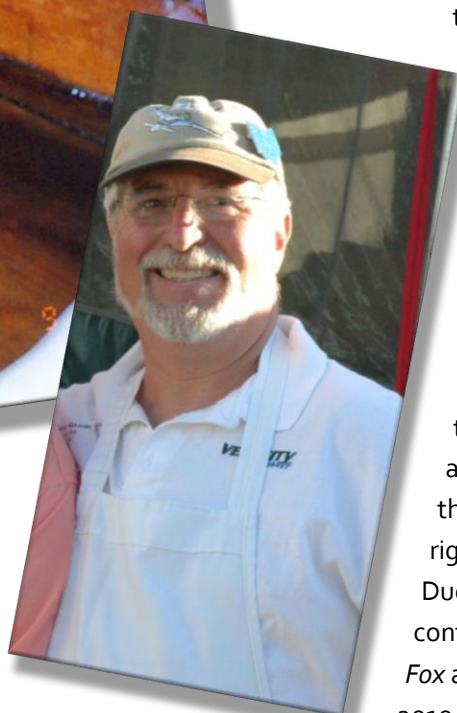
TOP: DAMAGED WING, BUT EVERYONE IS OK.

BOTTOM: OIL-SOAKED FLOOR HINTS AT THE CAUSE OF THE PROBLEM.



country road. Following a challenging approach – one that involved gliding over one set of power lines and under another while simultaneously dodging traffic and maneuvering clear of trees – N44VF came to rest in the driveway of Joel &

Marlene Finkelstein. Though shaken up, the Ferrells emerged from the ordeal uninjured.



FELLOW BUILDER JERRY BRAINARD HELPED N44VF TO FLY AGAIN

Bouncing Back...With a Little Help from their Friends

Following the incident flight, 20 months would pass before *Victor Fox* returned to the air. During the course of the emergency landing, N44VF took out a roadside reflector pole, which did quite a number to its right wing. Undeterred, the Ferrells soldiered on repairing and enhancing the XL-FG.

Throughout this recovery period, Beth & Brett were blessed with the help of friends and family members genuinely interested in seeing them succeed. Especially valuable was the tireless assistance they received from fellow Velocity builder Jerry Brainard. Jerry had long been a key figure in the development of N44VF, playing an instrumental role in the preparation for *Victor Fox's* maiden flight. After the mishap in Otisco, Brainard's involvement became more valuable

than ever. He provided

the Ferrells with the use of his shop in which to carry out repairs on the damaged wing. When Brett & Beth decided to undertake the painstakingly detailed task of painting the aircraft (in its entirety) themselves, Jerry was right there with them. Due in large part to Jerry's contributions, when *Victor Fox* again took wing in May 2010, it emerged more robust than ever.

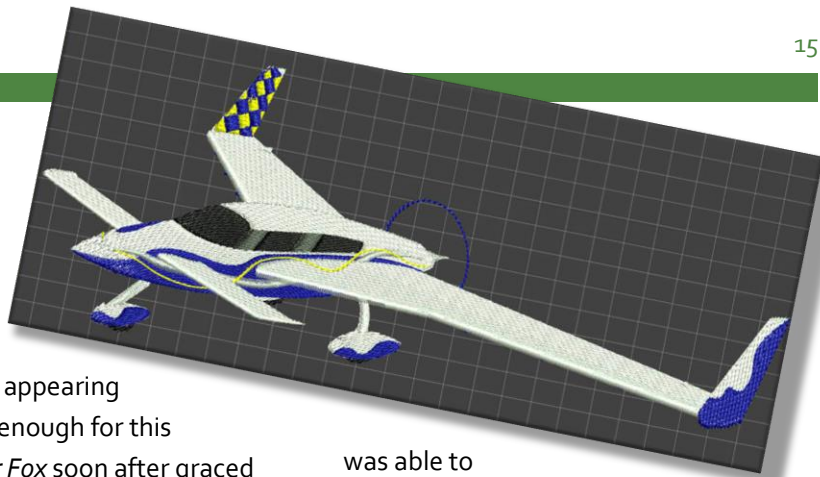
Extreme Makeover: Velocity Edition

Not content to rest on their laurels, Beth & Brett chose to spend more than a year making further refinements to their bird. Among their renovations, the couple installed vortex generators, upgraded the panel and glareshield, refurbished the interior, mounted an MT propeller, and even helped design and apply eye-catching vinyl decals to the airframe. In addition to these enhancements, Brett has installed an APRS radio tracking unit in

Kitplanes (an especially proud

achievement for Brett). As if appearing in print wasn't enough for this Velocity, *Victor Fox* soon after graced the big screen when it appeared in the David Garrison Productions feature film *The Last Race*. After a decade characterized by delays and frequent turbulence, N44VF had finally come

into its own.



Victor Fox (which, ironically, first became operational on the day of their incident flight). Anyone curious as to where N44VF has been need only visit [the Ferrells' website](#) for a visual presentation (courtesy of [Google Maps](#)) of the airplane's whereabouts.

Some Much-Deserved Attention

While any plane that makes an emergency landing on a highway is bound to attract attention, N44VF has become a bit of a celebrity in its own right. The plane first graced the pages of *Sport Aviation* in June 2011 before being featured two months later in the *Completions* section of

Taking the Reins

With the building delays, incident flight repairs, multiple upgrade projects, and engine oil temp difficulties finally behind him, Brett

was able to resume his private pilot training in September 2011. Following some surprises during the flight-training process (including a flight school closure, a necessary change in training airports, and an unwanted switch in training aircraft – among others), he soloed in October 2012 and passed the FAA written exam later that month. After a pair of checkride postponements (once for Wx, the other for an unresponsive left brake), Brett earned his private certificate on January 27, 2013.

Wasting no time, Brett immediately set about acquiring a high performance signoff, which he completed in March of last year. The following month, he added a complex endorsement. Next on his list, Brett is planning to undertake his Velocity transition training sometime this spring. With that item crossed off his to-do list, he'll finally be able to



Timeline: A Brief History of N44VF

- 2001** July During EAA AirVenture, Brett & Beth purchase an XL-FG kit from Duane Swing.
- 2002** May After numerous setbacks, the couple begins the building process in earnest.
June Brett & Beth spend June 10-18 at The Factory's Head Start program in Sebastian, FL under the supervision of Frank Ware.
July On the 16th, the aircraft arrives at its new home (Brett & Beth's 3-car garage) in Ohio. The kit is delivered via Ryder truck with Beth behind the wheel.
- 2003** Sept Registration number (N44VF) is reserved on 9-15.
- 2006** June *Victor Fox's* wings are attached on 6-21.
Oct First taxi test occurs on 10-18.
Dec First weight & balance taken on 12-13.
- 2007** June FAA paperwork submitted on 6-24.
July FAA airworthiness inspection takes place on Friday the 13th! Despite the ominous date, Stan Faske of the Cincinnati FSDO determines the craft is airworthy. N44VF is now an airplane!
Sept [First flight of N44VF](#) on 9-7. Maiden flight takes place at Warren County Airport/John Lane Field (I68) in Lebanon, OH with test pilot Dave Bertram at the controls. Flight terminates after approximately 30 minutes due to high oil temps and engine roughness.
- 2008** Feb Beth completes transition training at The Factory during the week of 2-4.
Mar [Second flight of N44VF](#) on 3-13, again piloted by Dave Bertram.
June Beth flies *Victor Fox* for the first time on 6-4 while accompanied by Dave Bertram. Beth solos in *Victor Fox* on 6-6! Brett gets his first ride in the plane he's worked so hard to build.
July Brake system malfunctions on 7-6; Beth and Jerry Brainard overrun the runway following touchdown. Thankfully, the mishap results in no injuries and no bent metal.
Aug On 8-22, Beth completes 40 hours on N44VF. Phase I is now complete.
Sept On its first flight out of Ohio (9-27), an oil line bursts in flight. Beth & Brett make an off-airport landing in Otisco, IN.
- 2009** Dec Fuselage painting is completed on 12-3.
- 2010** Jan *Victor Fox* relocates to its new hangar on 1-24.
Apr First engine run since the incident flight occurs on 4-28.
May [First flight since incident flight](#) (5-24); again piloted by Dave Bertram. *Victor Fox* is still experiencing high oil temps.
Sept N44VF is outfitted with vinyl decals on 9-25.
Nov Aircraft equipped with vortex generators on 11-20.
- 2011** June The Ferrells and N44VF appear in the June 2011 edition of [Sport Aviation](#).
Aug *Victor Fox* and the Ferrells are featured in the [Completions](#) section of the August 2011 issue of *Kitplanes*.
 On 8-15, following 9½ months of upgrades (including the panel, interior, and glareshield – among others), Brett signs off N44VF to return to the sky.
Dec Catto propeller is replaced with an [MT prop](#) on 12-26.
- 2012** Aug *Victor Fox* appears in the David Garrison Productions feature film *The Last Race*.

serve as PIC in the plane he's devoted years of his life bringing to fruition.

From Fantasy to Reality

While anyone who's succeeded in flight training or kitplane construction has learned to endure delays, disappointment, displeasure, and occasional depression, the Ferrells' story is nothing short of remarkable. Their resilience throughout the numerous ordeals they faced demonstrates a level of dedication and determination far beyond what many

aviation enthusiasts would have been willing (or able) to withstand. It goes to show that despite seemingly insurmountable odds, nothing is impossible if you refuse to accept defeat. May they serve as an inspiration to us all.

The next time you spot N44VF at Oshkosh, Sun-N-Fun, Rough River, or any other GA gathering, remember that she's much more than just a sleek, speedy specimen from Sebastian.

Years of toil and heartache went into

transforming her from a pile of parts into the sexy *Fox* she is today. Whether you're a current builder, a seasoned Velo flyer, or just dream of one day calling a Velocity your own, remember the Ferrells' story the next time you hit a rough patch. They've gone through a lot to get where they are – and have plenty of evidence to prove it.



Canard Comics



The Best of Our Builders

An Engine from Scratch: Part V

by Andy Millin

Very early in the research process I had come across the concept of "testing the engine while testing the airframe." Several people and some well-written articles suggested that this situation is best avoided, if possible. I understand complex systems well enough to know that limiting the number of variables can really help keep things under control.

At the time, my impression of a Dyno run was something that hot rod builders do. After tweaking their engines, they want to know if the change had the desired result. I also have friends that want the dyno run for bragging rights.

"We can get 10

gazillion HP at an insane RPM. We expect to get 10% more when we install the chrome muffler bearings..." I had never thought of it as a simple verification tool; i.e., "is it working correctly?"

When I asked Terry what he thought, he immediately said, "It's a good idea." G&N is located about two hours from us, and they have an aircraft engine dyno. Actually, they have two.

I spoke with G&N at Oshkosh about the dyno run, and they said they dyno every engine they build. Their experience has led them to believe there are just too many benefits to not do it. The ground run allows them to verify the engine was assembled

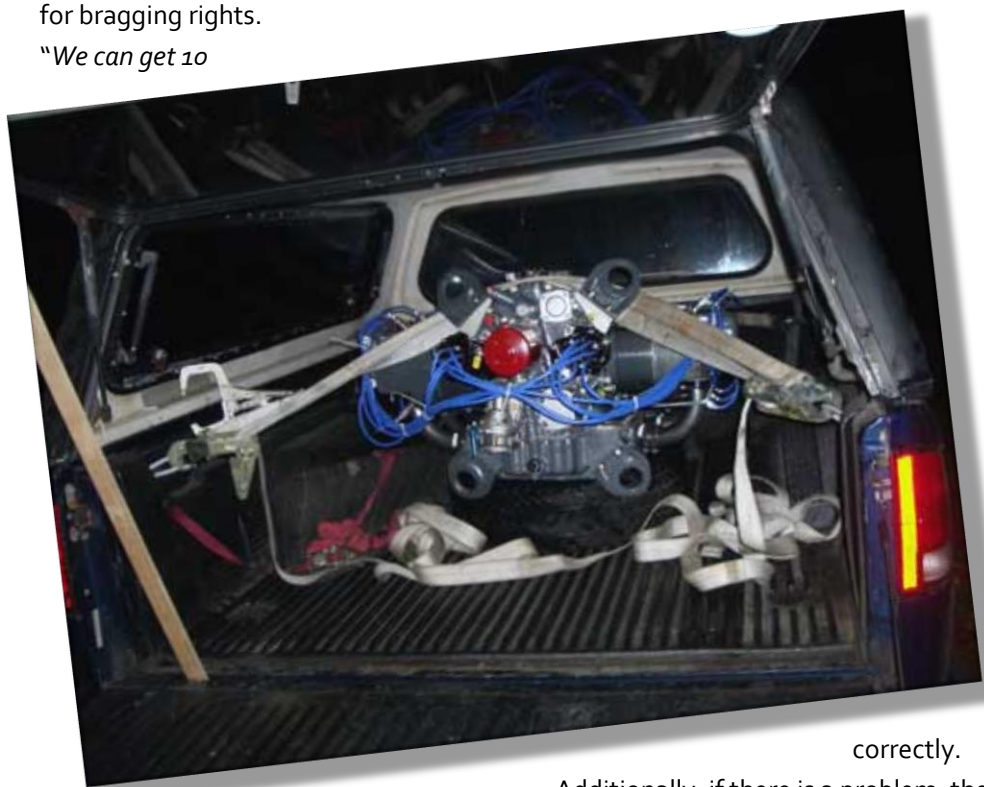


will find it on the ground rather than in the air. Besides, if they discover a problem, the engine is already in the shop. Dyno running also enables them to control the break-in process. The first start is critical, so they want to ensure it's done correctly.

When the engine was ready, I called G&N to schedule an appointment. A dyno run takes the better part of a day, and they prefer to have the engine in their shop at least a day in advance. Such allows them to get it hooked up in the test cell in advance of the run. Naturally, Terry and I wanted to be there when the run began. The problem was their dyno schedule depends on several variables, and they could only give me a possible timeframe. The best we could hope for was a phone call in the afternoon saying the engine would run the following morning.

Engine loaded in Terry's Truck

We next loaded our dyno-ready powerplant into the back of Terry's pickup. After we had it all strapped in, he looked at me and said, "That engine is worth more than I paid for this truck when it was new." We both smiled.



correctly.

Additionally, if there is a problem, they

We drove the engine down to G&N on a Tuesday. On Wednesday, I received *the call*. We arrived right on time for the Thursday morning start. As we walked in, we were told Carl, our dyno tech, had a bit of a family emergency and needed to leave early. For that reason, he had already started the engine and was an hour into the run. Naturally, I was a bit disappointed as we walked over. I'd really wanted to be there for the first start. Fortunately, my disappointment lasted only until I saw and heard my engine running. I just don't have the words to describe how thrilled I was to see my creation powering away like a true engine.

I wanted to have the engine run for a lot of reasons. Mostly, I wanted to KNOW this was a good engine. There it was, running right in front of me. It was smooth, loud – and wonderful.

G&N no longer hooks up a computer monitor to the engine. Though they had in the past, they found it added more time to the process and didn't really give them any more useful information. Besides, they don't build high-performance, custom engines. If all goes according to plan, they get a very stock engine; exactly what I was trying to do.

To our delight (perhaps *relief* is a better word), the engine ran well – very well. On the final run, G&N took a horsepower reading. According to Carl, my engine preformed exactly as he had hoped and expected it would. Our power was right in the range they expect from their own engines. He looked me in the eye and said I should be very happy. *"You have a good engine there."*

Final Thoughts

Would you do it again?

Yep, I would. I made mistakes. Sometimes it was frustrating. It took longer than I had anticipated. The upside is that I ended up with a great engine. I got it for a good price – not a *great* price, but a good one. Most importantly, I learned a lot. I know my engine, and I think that's awesome.

What would you do differently?

I bought the engine from a guy that was putting together an engine "kit." I don't recommend doing this unless you are working with a very professional business that has a sterling reputation. My engine wasn't an engine until I put it together. Before completion, it was just a collection of parts that didn't know each other.

If I had purchased an engine to overhaul, at a minimum I would have known I had all the right parts – worn out, but there. An example of the problem was the tach shaft. I received a tach shaft with the engine that looked like the picture in the Lycoming parts manual. We didn't learn it was the wrong tach shaft until we tried installing it. We spent a great deal of time tracking down the correct parts. If I had taken the engine apart, I would have the old part to send in. If it didn't meet spec, I could simply say *"get me a new one,"* and they would have the old one in hand for comparison.

To anyone wanting to build his/her own engine, I would recommend buying a core from a reputable place and overhauling it.

What did it cost you?

The engine kit was \$12,500. I put another \$4,000 into new parts and at least another \$1000 into machining, shipping, and fees. The dyno run added another \$600. All in, I have around \$18,000 invested.

The \$75 in hardware Gary had estimated when I bought the engine turned out to be closer to \$1000. Gary didn't tell me that cylinder base nuts for a narrow deck IO-540 are VERY expensive. There are 24, 1/2" nuts and 24, 3/8" nuts. The 1/2" nuts cost \$23 apiece, and the 3/8" nuts are \$19 each. I just didn't know what I didn't know.

I must say the cost went far beyond just the monetary expenditures. It took two years to get "most" of the parts. I never did receive everything I was due. What I might have saved in dollars, I paid for with headache and heartache. To a large extent, this was my own doing. I decided to take this path. I was the one who bought this engine.

What did you learn?

- I wanted to learn how my engine worked and how it was put together. Mission accomplished.
- I wanted to know what I had when I was done. Mission accomplished.
- I found great resources that will be invaluable as I maintain my engine.
- I wanted the experience of putting together my own engine. I wanted to be able to look at the finished product and say to myself, "I did that." There is no dollar value for this.



The Man: Terry Brokaw. I can't thank him enough

use it. It is the responsibility of each builder and owner to know (s)he is using good parts, tools, and information. Putting an engine together will present you with many choices, so choose wisely.

Since I had never put an engine like this together, I was apprehensive. I wanted to "Do it Right."

Doing it right can and does mean lots of things:

- Use good parts that meet or exceed specifications
- Use the manufacturer's documentation and make sure all ADs are complied with

- Even more than usual, you don't know what you don't know! The process does not tolerate ignorance well. Do your homework. Patience and attention to detail will be greatly rewarded.

Working with Terry has taught me so many things. Without a doubt, he has forgotten more than I will ever know. He is a very practical man. He has been in the industry long enough to know how everything works.

An engine from Lycoming does not know it is certified. My engine does not know it is not certified. A bolt that Lycoming buys from a supplier does not instantly become stronger when they resell it to me with their part number. Just because a hardware store grade three bolt meets a superficial spec. doesn't mean I should

- Don't fudge when it comes to tolerances
- If it doesn't look good, it probably isn't
- If you don't know, you gotta find out!

"Doing it right" is as much about conscience as tolerances. If there is any doubt, the simple act of asking the question gives you the answer. I can't afford to doubt my engine.

Mostly, I learned that doing it right is a state of mind; a method that is only born out in the results. In my way of thinking, this means "Done right, runs right." This will be proven throughout the engine's service and maintenance life.

One last thing

As Terry and I unloaded the engine for its dyno run, the G&N employee helping us looked it over and said, *"This is going to run nicely."* I smiled, said "thanks," and thought to myself, "How can he know?" He's just trying to be nice. The dyno run is the only way we'll find out.

During the run, I chatted with Carl. I mentioned the comment and said I thought the guy was just trying to be nice. Carl responded, *"No, he knew."* Carl went on to say he also knew.

How could they possibly know? Over the years, they have seen a lot of engines; good *and* bad. If you know what you're looking for, quality is as plain as day. He listed several items he saw on my engine: the stubs of the silk thread sticking out the end of the case, a little extra #3 Permatex on the seams, the cylinder base lock plates had been primed, but had a very thin coat, etc. To someone who "knows," it was obvious that this engine had been assembled by someone "who knows how." Done right, runs right ... and it did.

This comment says a great deal about Terry Brokaw. I take no credit other than being smart enough and lucky enough to have him as a friend and mentor. Thanks Terry!



Rising from the Ashes (Jerry & Linda Brainard, N5165U, Short Wing RG)

With the right combination of teamwork, desire, perseverance, time on task, and (of course) money; it appears that nothing can keep a good airplane on the ground. Following 14 years collecting cobwebs and dust as a hangar queen, N5165U once again took to the air on Saturday, November 16, 2013 from Clermont County Airport (I69) in Batavia, OH.

According to proud parents Jerry and Linda Brainard – and godfather/original builder Hugh Dunn – Velocity test pilot extraordinaire John Abraham launched at approximately 4:00 pm to give -65U some long overdue aerial

First Flights

Flying News

by Stephen Lewis

Per Jerry, -65U's short wings make for some impressive handling. He claims the aircraft is very responsive at landing speeds, has nice aileron authority, and requires less rudder input than its longer wing brethren. Despite these positive attributes, the always-gracious Jerry claims that -65U's cruise prop doesn't permit the plane to spring from the pavement as sprightly as fellow canadians Brett & Elizabeth Ferrell's N44VF. Oh well, it leaves something to strive for.

the wording on his "kit's" (a very important word) bill of sale, Dick *finally* received an airworthiness certificate for N585V on December 27th. The following day, the now legal-to-fly XL-FG made its long-awaited inaugural flight. Congratulations to Dick on this memorable milestone and the patience he showed throughout his dealings with the FAA.

Maintaining Tradition (Riley Swing, N94VA, 173-FG)

While every airplane must have its first flight, so too must every pilot. Last fall, Riley Swing completed his first solo while piloting N94VA, The Factory's 173-FG trainer, from X26 in Sebastian, FL. According to proud papa Scott Swing, Riley soloed after only about six hours of instruction from Velocity chief pilot John Abraham. Could it be that Riley has aviation in his blood? At present, Riley is continuing to work on his certificate and will undoubtedly continue the Swing family legacy as a Velocity aficionado.

Video of Riley's memorable first solo is available with both in-cockpit footage (<http://www.youtube.com/watch?v=DoweORf3bkU>) and external video (<http://www.youtube.com/watch?v=TOBj7Sq6YWY>). Congratulations to Riley on his admirable accomplishment!

Congratulations to Linda, Jerry, and the long list of friends and fellow fliers who helped make the big day a reality. It really does take a village. For

more on this special

milestone, check out Brett Ferrell's video of the big event.

https://www.youtube.com/watch?v=ouqK_MClv3Y

The Perfect Christmas Gift (Dick Harpster, N585V, XL-FG)

Builder Dick Harpster had a very memorable Christmas 2013. Following a weeks-long paperwork delay due to

exercise.

Following a spectacular landing, Jerry joined John for a quick jaunt over to I68 (Warren County Airport/John Lane Field in Lebanon, OH), which -65U will call home. Brainard reported logging two landings – one outstanding and one so-so – before calling it a successful day.



Department

CHRONICLES OF MY FIRST FLIGHT IN DR. TUKY: Part II

by Jorge Bujanda

When Craig's airplane flew past me on downwind, I realized that the time to take off and start enjoying all those experiences, as well as the fruits of my efforts, had finally come. I gave thanks to God for everything, asked Him to be my pilot, and started pushing the throttle – slowly at first, and then faster to full power. That's when I first experienced the true power of the engine – as I felt myself pinned to my seatback. I noticed the engine speed showed 2670 RPM; so the governor would need some adjustment.

Directional control on the runway (thankfully) proved to be effective. Initially, one uses the brakes for directional control. At around 35 knots, the rudders become effective and, therefore, the preferred method for ground-based steering. The airspeed came alive and climbed to 30,



At 65 knots, I pulled back on the control stick. The aircraft leapt off the runway.

40, 50 knots... I had to progressively decrease my control inputs as the rudders became increasingly responsive to the mounting roll speed. At 65 knots, I slowly but firmly pulled back on the control stick. After a very short

lag, the aircraft leapt off the runway as anticipated – though not as briskly as I was expecting. As Dr. Tuky began his climb, I watched for any abnormal attitude or tendency to roll due to a heavy wing or control surface effect. That close to the runway, any such movement would need immediate correction. Thankfully, the plane continued to ascend cleanly and controllably.

Since altitude is vital in case of engine problems, I let N478B clamber at 90 knots. Being a new engine and

climbing at that angle, the Lycoming 540 was on its way to overheating; with the oil temperature at 218° F and rising at one point in the climb. To counter, I trimmed for a shallower angle at 105-110 knots for better engine cooling. This stopped the

temperature at 220° F and started gradually bringing it down as the climb progressed. The engine sounded smooth and steady, and all the controls for the engine, propeller, and control surfaces were functioning as expected. The oil temperature, oil pressure, fuel pressure, fuel flow, cylinder head temperatures and exhaust gas temperatures were all within normal range.



Leveling Off

We continued in a climbing left turn around the airport until we cleared the airport's airspace and leveled at about 6,000 feet. I reduced engine speed, leaned the mixture, and trimmed for level flight at around 140 knots. As soon as I leveled, oil temperature started coming down fairly fast before stabilizing at around 195° F; so oil temperature no longer appeared to be a factor. The temperature inside the cowl was 90° F.

I had not felt any vibrations or heard any abnormal sounds, so I continued testing the ailerons in both cruise and slow flight. The ailerons were a bit sensitive, and there was no lag in the airplane's response. I tested banking to about 15 degrees on both sides. I also experimented with the rudders at those speeds. As expected, the ailerons began losing effectiveness between 85 and 90 knots, and the plane was much more responsive to rudder input below those speeds. In contrast to conventional designs, the Factory recommends that this airplane be controlled with rudders at slow speeds; especially in the pattern and during landing. At slow speeds, the ailerons become heavy and sluggish and exhibit a marked adverse yaw effect. This destabilizes the airplane; particularly at low speeds and close to the ground – where such undesirable tendencies could be very problematic.

I confirmed the canard stalls at around 65 or 67 knots, which coincides with



the manufacturer's specifications. The engine, flight controls, and instruments were all working fine, and the airplane's response was appropriate both in shallow and moderate banks at different speeds.

Since there was no wind whatsoever, I decided to test the stability of the airplane by adjusting the speed and trimming for straight & level flight at 138 knots. I let go of the controls, and it flew for about 20 seconds without varying in speed, altitude, or heading. Control felt very stable in all axes, and I did not detect any tendency to diverge from the current state. I repeatedly

relayed my status to Craig and dictated performance numbers to him. He watched for possible leaks, abnormalities, and traffic while I was focused on the flight testing. Everything performed as expected, and after completing the flight tests at altitude, it was time to start the landing portion of the testing process.

Back to Terra Firma

I informed Craig of my plans and began descending. I slowly reduced speed, and 78B started losing altitude. I extended my upwind leg for a shallower descent and started going over my descent and pre-landing checklists. I contacted the control tower to let them know I was going to

I was surprised at how relaxed and comfortable I felt at the controls.



enter their airspace and that I wanted to make a left downwind practice approach to Runway 24 prior to landing. My intent was to test my ability to coordinate speed, descent rate, and directional control on approach before committing to a landing. As I neared the airport, I further slowed Dr. Tuky and turned on the auxiliary fuel pump.

I was surprised at how relaxed and comfortable I felt at the controls and with the airplane's responses. There was no other traffic in the area except for the two of us. The speed, descent rate, and distance all looked good. The wind was calm, and the aircraft felt very stable. I decided to contact the tower abeam the numbers on Runway 6 and inform them that I would prefer to skip the practice approach and instead perform a full-stop landing. If things didn't look right, I could always go around. Why risk an engine failure on a low pass if I was having no difficulty whatsoever controlling the airplane with precision? The tower

cleared me to land, and I entered the pattern, at altitude, on a left downwind to Runway 24.

Airspeed abeam the tower was 95 knots; 5 knots higher than the recommended speed. I reasoned that this airplane needed to be flown all the way to the ground – plus I had a long runway (7,000 ft), so I felt it was a good idea to be a little fast on the first landing.

Now cleared and committed to land, I entered the base leg at 90 knots; maintaining my airspeed 5 knots fast, always controlling with rudders. I

parameters still looking good. Airspeed continued to be slightly fast at 85 knots. I opted not to use the speed brake on the first flight, so it was never a factor on approach. I maintained runway alignment with the rudders and minor aileron input.

On short final, my subconscious, ingrained habits prevailed – I corrected with left aileron by mistake. This got me off center, but I had enough altitude and speed to correct. I leveled up left of the center line. Stabilized once again, I continued descending until it was time to pull slightly aft on the control stick to arrest the descent rate for touchdown. This slowed the descent over the runway until the main wheels kissed the pavement. I felt the airplane bounce what I think may have been several inches off the ground before settling gently onto the runway. Practice makes perfect – especially with regard to landings. My touchdowns will improve with time, but I considered this to be a very good landing for the first one. Although not ideal, I'll be happy if all my future landings are at least as good as this one.

I felt the airplane bounce what may have been several inches off the ground

continued my stabilized descent and turned final with all landing

Mission Accomplished

I let 78B roll without brakes until the rudders were no longer effective for ground control. I wanted to avoid using the brakes so as to not overheat them. Craig's voice then came over the radio: "*Congratulations Dr. Tuky, you are now an airplane!*" I cleared the runway and concentrated on watching the engine temperatures and avoiding overheating the brakes.

As I taxied back to the transient parking area, I reflected on what had just happened. Until that moment, the day's flight had been all business. Now, the emotional part was hitting me. I shut down the engine and saw Melissa running toward the airplane. Before I could finish my checklist and unbuckle, she had hugged me and said: "*I love you Daddy!*" After I exited the plane, Ygebor and I kissed, and she told me that she loved me and was very proud. She also told me that Daniel, Frank, and Javier had been listening to the radio communications and had sent me their congratulations.

By then, Alan and Craig had arrived. Craig hugged me and said: "*Congratulations buddy, you now have an airplane.*" Alan just gave me a hug and remained quiet; I am sure he was absorbing the whole event. At that moment, I thanked God again for such wonderful family and friends, for the airplane, and for the incredible experience of Dr. Tuky's first flight. Now it was time to start enjoying my 40 hours of Phase I flight testing as I relaxed and looked forward to working on the cosmetics: wheel pants, upholstery, and paint. Now that I would be flying, I wouldn't be in a rush

to accomplish the superficial aspects of Dr. Tuky's construction.

Based on my experiences, there are always people who deserve credit for their contributions to our successes. Many had contributed in different ways to our accomplishing that first flight. In my case, my greatest appreciation goes out to those whose extraordinary assistance over the years helped me turn my dream into reality:



I reflected on what had just happened. Until that moment, the day's flight had been all business. Now, the emotional part was hitting me.

- GOD: for giving me the opportunity; for His blessing and direction throughout the project.
- My wife and children: YGEBOR, DANIEL, FRANK, MELISSA and ALAN: for their support, patience, and continued sacrifice.
- CRAIG WOOLSTON and JOHN SCHOORL (friends/Velocity XL-5): for their unselfish willingness to help me with anything and everything.
- SCOTT SWING (friend/Velocity Aircraft Inc.): for his patience and willingness to share his building experience and knowledge of the Velocity design over the years.
- ROBERT "Panel Man" SUMOSKI (RIP) (friend): for his patience, dedication, and excellent work at wiring my panel.

- BARRY GIBBONS (friend/Velocity XL): for his help, detailed inspections of my systems, and safety recommendations for my project.

- KEVIN STEINER (friend/Velocity SE 173): for his recommendations, interest, and our discussions about building and systems' possibilities. Also, for being brave enough to test our nosewheel bumper modification.

So far, in addition to my own maiden flight, I have been present during the

first flight of two of my friends. For those of you still building, there is nothing like experiencing the first flight of an airplane you've constructed. As far as those who are already flying the airplanes they have built, I am sure they will agree with me. Keep building!

For additional details on Jorge's construction process, please visit his website at www.jbujanda.com.



Builder Updates

Progress Reports

by Stephen Lewis

Below is a brief look at what Velocity builders have been working on recently. We're always interested to hear how the building process is going, as well as Phase I and Phase II flight progress. If you'd like to share your progress with VOBA, send a few photos and a brief description to Editor@VelocityOwners.com for inclusion in an upcoming issue of Velocity News.



Additionally, Tvedte has applied touch-up priming to help prepare the plane for its eventual first flight. He admits that -2JT still needs a lot of work before it'll be paint ready, but feels good about having the sealant in place. John is also in the process of installing AeroLED

nav/position lighting on the XL-5.

John Tvedte (XL-5 FG, N812JT)

Builder John Tvedte has kept busy recently with a number of activities on his XL-5 in progress. John opted to install a traditional rudder pulley bracket configuration as characteristic on the Cozy Mk IV. With this setup, if a return spring becomes necessary, John's decision to mount both pulleys on the firewall should help the spring to keep the cable in both of the pulley

grooves rather than tending to pull it out – as has been



known to happen with a wing root mounted pulley.

On top of his already admirable progress, John announced he's recently received his custom-made dichromate/zinc-plated aileron bell cranks. When incorporated into his "old school" design – featuring u-joints at the aileron proper and spherical bearings at the wing root – Tvedte's aileron rigging is zero slope and beats Factory specs both up and down. Understandably, John reports that the enviable results invoke "a good feeling."

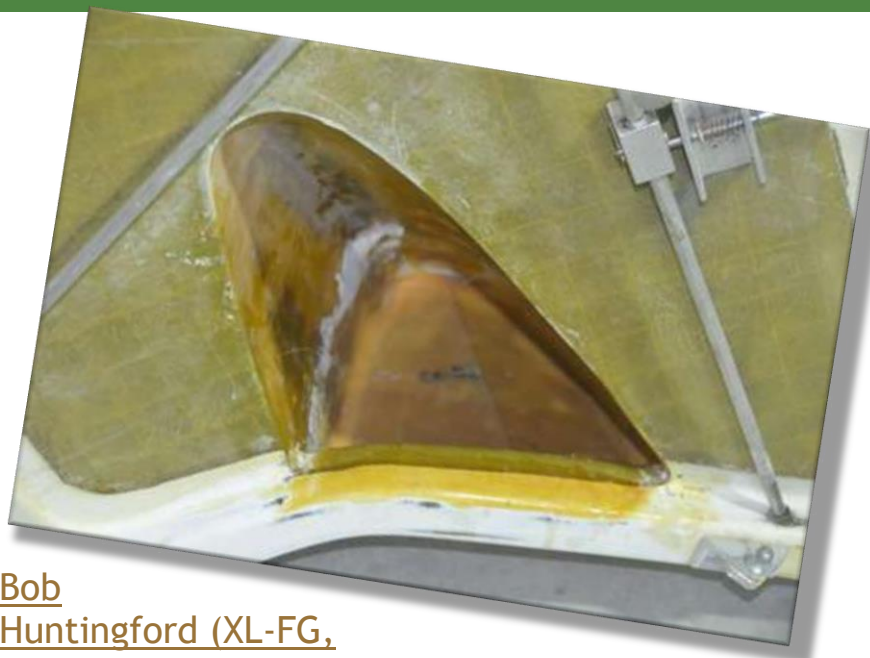
What's next for the busy builder? Along with his nav/position lighting project, John plans to add wing root Fiberfrax along with titanium wing root fire materials. He also plans to add the nut plates for the oil cooler cover. Upon completing the left side rudder pulley installation, John foresees being able to remount the engine before too long.

James Traynor (XL-RG)

Canadian canardian James Traynor has kicked off 2014 with a flurry of building activity. Among his numerous accomplishments, so far this year JT has:

- Worked on his fuel line plumbing, including installation of the fuel vent hard point
- Done BID and flange work on the fuel bulkheads
- Installed fuel screens, gear leg baffles, flanges on gear leg baffles, and one wheel well
- Bonded strake baffles into place and subsequently applied BID
- Sanded & cleaned the gear leg socket and mouse holes

According to his build

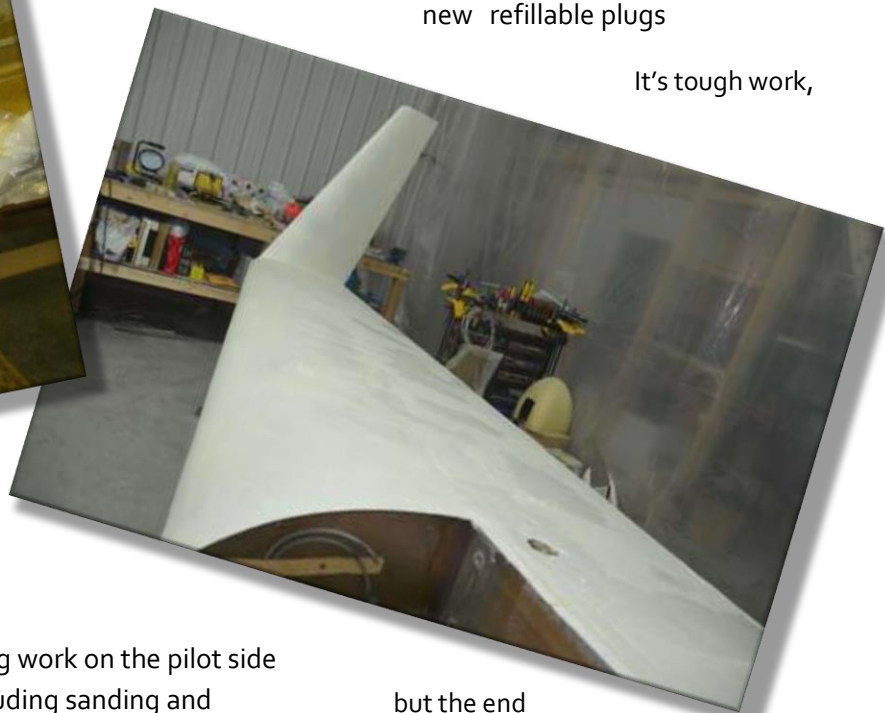
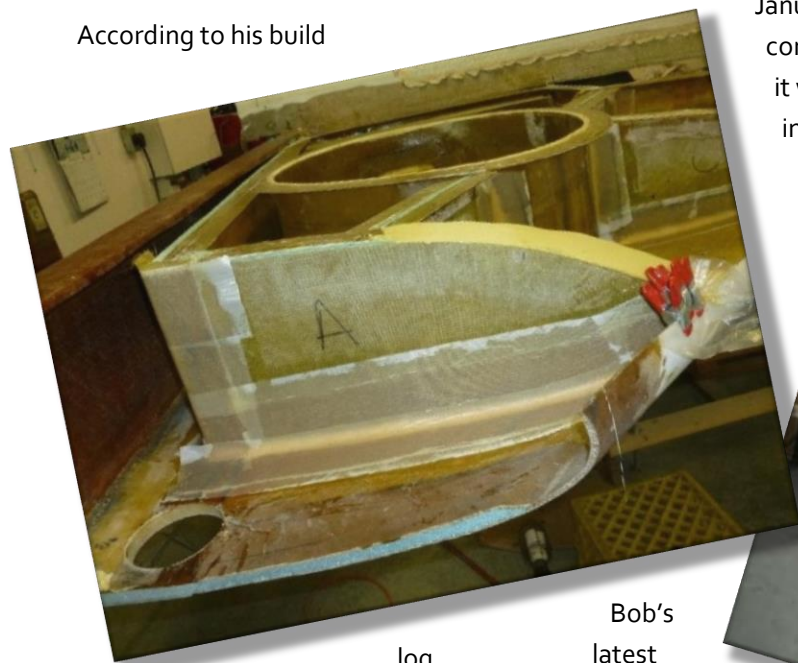


Bob Huntingford (XL-FG, C-GAIT)

Edmonton, AB-based XL-FG builder Bob Huntingford spent some quality time in his hangar during the month of January – and his construction log shows it was productive time indeed. Some of

- Applying Velocipoxy to the tops of both wings (and the winglets)
- Applying Micro Slurry to the wings, canard, and winglets
- Sanding the wings, winglets, and canard
- Replacing his desiccant plugs with new refillable plugs

It's tough work,



log,

Traynor has spent approximately 550 hours working on his XL-RG. If he manages to continue at his recent feverish pace, don't be surprised to see this Velocity flying sooner rather than later.

For more on JT's construction activity, check out

<http://www.mykitlog.com/VE7JTE>.

Bob's latest tasks include:

- Finishing work on the pilot side door, including sanding and installation
- Glassing the inside of the door armrest

but the end result definitely justifies the sore muscles and hours of labor. To keep up with Bob's progress, visit his building blog at <http://huntingford.kal-soft.com/>.

More info

A note to new builders and those becoming interested in Velocity Aircraft. There are many resources available to help you research, get started, and stay motivated throughout the construction process.

The primary venue for Velocity builders to interact is the **Velocity Reflector**:

<http://www.tvbf.org/>

This is an email-based group of Velocity enthusiasts run by builder Brian Michalk. It requires an administrator's permission to join, but it's free.

There is an **archive** of the Reflector messages in the form of a web-forum mirror at builder Brett Ferrell's site:

<http://www.velocityxl.com/forum>

Old Reflector posts appear here and are sorted by topic after the conversation has concluded.

There is also a search feature.

Membership is required, but free.

There is a **wiki** of Velocity-related information (also run by Brett Ferrell) at:

<http://wiki.velocityoba.com>

It has the most information of any single website. Again, membership is required for some sections, but it's free.

We also have a **Facebook group** started and administrated by builder Larry Epstein. To join, search Facebook for: *Velocity Builders and Pilots*.

Matt Bucko (XL-FG)

While much of the building process is tedious, with little visible evidence to show for hours spent toiling in the shop, builder Matt "Bonsai" Bucko

Additionally, he spent time meticulously measuring the angle of incidence to ensure it's well within



recently

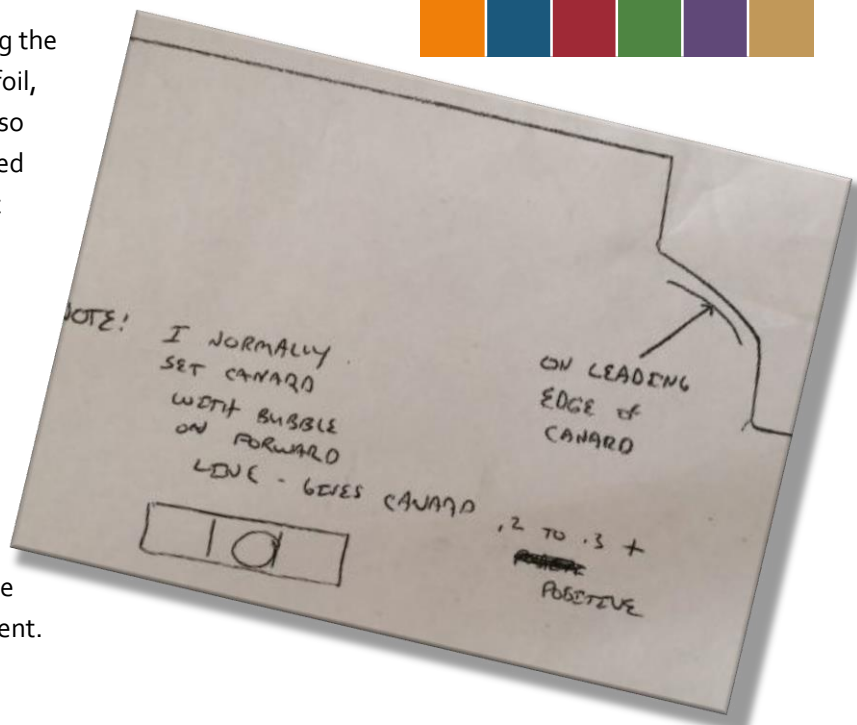
acceptable limits.

completed one of those satisfying, milestone projects that's immediately obvious to even the untrained eye. This fall, Matt completed installation of his XL-FG's canard.

Now with a major visual sign of progress front and center, Bonsai is well on his way to seeing the rest of his plane take shape.

For the latest on Bucko's Velo build (dubbed *Project Galileo*), go to <http://websites.expercrafter.com/mbuc310/>

Besides mounting the front airfoil, Bucko also completed the front and rear torque tabs, as well as the



doghouse attachment.

Jorge Bujanda - A Method to Pour Liquids from One-Quart Cans without Waste

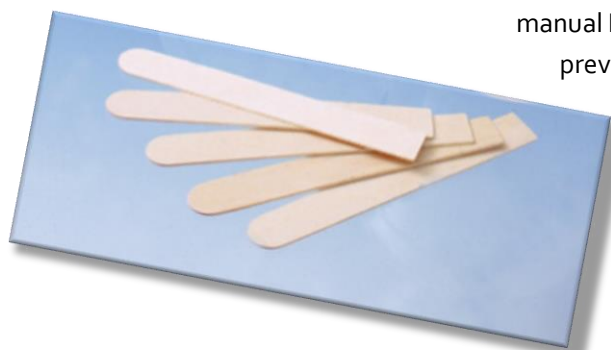
I got tired of pouring liquids from one-quart cans and always wasting some. I also didn't like the difficulty in properly sealing the cans when liquids get in the



edges.

So, I discovered a way to avoid this, which is especially helpful when the contents are expensive.

Punch some small holes in the bottom of a 9-oz plastic mixing cup and secure it to the top of the one-quart can with strips of duct tape. Then, pour the required contents out through the holes in the cup. After pouring, let the setup sit for a while and the resin or paint will return from the cups to the can while keeping everything clean and minimizing waste. Afterwards, just discard the dirty cup and replace

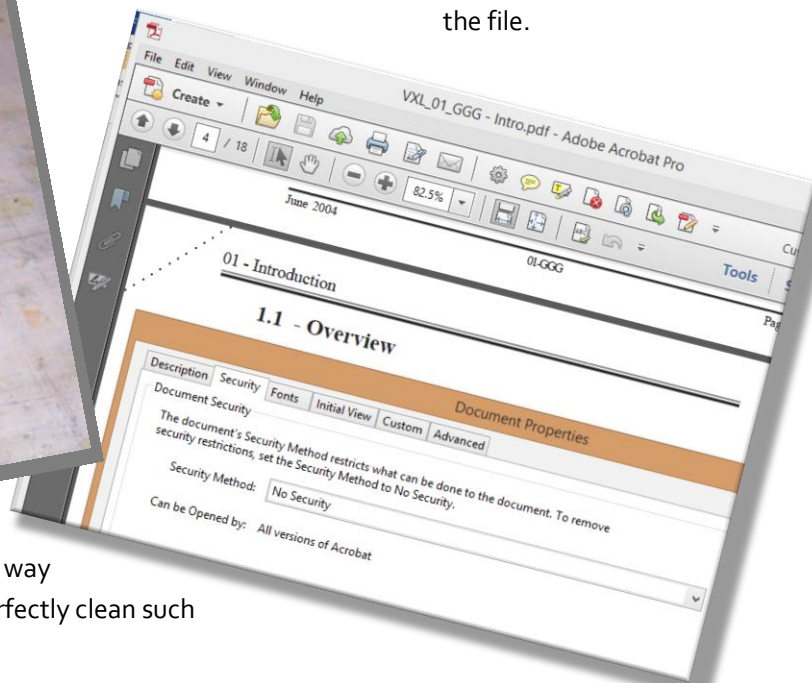


Builders' Tips

Workshop

the lid. The can on the right has been used

unlock the manuals. Open each file, go to File=>Properties, and change the security method to "No security." Save the file.



multiple times this way and shows how perfectly clean such cans remain.

Reiff Lorenz

DIY Tools: Take a big stack of tongue depressors and cut the curved end off one side with a band saw, table saw, or miter saw. You'll end up with sticks that are flat on one end and rounded on the other. The flat end is great for scraping the bottom of paper cups while mixing epoxy. The curved end is good at creating radiuses in the corners of layouts.

Document Access: The construction manual PDFs are locked, which prevents builders from being able to digitally search the documents. If you have the full version of Adobe Acrobat (not just the free Acrobat Reader) you can

These are some strategies, tips, and techniques that Velocity builders have developed to make the construction process a bit quicker, easier, and more affordable. Have you discovered a method that takes the headache out of a particular aspect of the building process? To share your tips with the VOBA community, send a brief description of your technique (along with any photos) to Editor@VelocityOwners.com for inclusion in an upcoming edition of Velocity News.

From the Editor's Desk

The Ties that Bind Us

by Stephen Lewis

In the 15+ years I've been involved in aviation, I've always appreciated the strong camaraderie that exists among GA pilots. Within minutes of arriving at a new airport, it seems I've always been able to strike up an interesting, flying-based conversation with fellow pilots. Besides these always-enjoyable hangar flying sessions, I've frequently come away with new contacts, valuable advice/information, and new friends willing to bend over backwards to help me in my aviation pursuits. While I long ago picked up on the tight-knit atmosphere characteristic of

canadians and VOPA members, a recent experience helped reinforce my perception that GA pilots (in general) and Velocity owners (in particular) are extremely accommodating to their fellow flyers.

Coming Clean

I'd like to take a moment for a bit of a confession: since being hired as VOPA's *Velocity News* editor last May, I've helped crank out a full three issues of the *News* without having ever seen a Velocity up close. Sacrilege? Perhaps to some, but I've long held the desire to remedy this malady by getting to view some of Sebastian's finest models firsthand.

The main problem with my months-long delay was one of geography. My rural Southern Illinois

location is somewhat removed from the nearest Velocity that I'm aware of (*Note: At the time of this story, Reiff had yet to unveil his mega-awesome Velocity community maps now available on the [VOBA website](#)*), thus necessitating a bit of planning and travel in order to lay eyes on one. Fortunately, a personal trip to the Raleigh, NC area in December brought me conveniently close to a few Velocities, allowing me to *finally* get to see one of the models I've written so much about.

Friends in High Places

Even before embarking on my trip southeast, I scanned the VOPA membership directory for canadians in the Raleigh area. Within a few minutes, I discovered that member Grover McNair owns a 173-FG based at [RDU](#), just a few short miles from where I'd be staying. Following a brief email in which I explained my desire to glimpse a Velocity up close, Grover immediately rolled out the red carpet. Not only did he promptly offer to show me his plane, he even volunteered to adjust his schedule to best accommodate mine.

At Long Last

Following a series of short emails, I met Grover at his office on the afternoon of December 12th. After a few minutes of introduction and an impromptu (but brief) hangar flying session, we departed for the airport. Over the next hour, we talked GA flying, discussed his history with N832AB, pushed the plane out of the hangar, snapped photos, reminisced about past cross-countries we'd flown, and dreamed of the future flights each



of us hope to make. It felt good to run my hands along the smooth wings and fuselage, peak into the cowlings at the 235-hp Franklin 6A-350, and climb into the cockpit of that fine aircraft. Grover apologized that the plane wasn't currently flyable, but it didn't bother me at all. I finally knew what it was like to sit behind the controls of a Velocity.

Icing on the Cake

While I was thrilled that Grover had taken a chunk out of his workday to satisfy my Velocity curiosity, his hospitality didn't end with the airport visit. Since -2AB wasn't available to fly, he offered to take me up in one of the [Wings of Carolina Flying Club's](#) aircraft. On top of that, he invited me to be the guest speaker at [EAA Chapter 1114's](#) upcoming pancake breakfast the following Saturday.

Velocity Aircraft 101

If you've ever imagined how foreign dignitaries and A-list celebs are probably treated, I'd wager the guest speaker pampering I received from EAA Chapter 1114 hits pretty close to the mark. Though I'd met Grover only once before and knew no other club members, the whole crew treated me like royalty. Following a fantastic breakfast and a bit of club business, I gave a 30-minute talk on Velocity models, VOBA, and The Factory. After my speech, several members approached to ask questions, exchange business cards, offer me any assistance they could provide, and chitchat about aviation. VOBA member and XL-FG builder Dick

Harpster (see the *First Flights* article in this issue)

had made the trip up from Pinehurst (approximately 50 nm SW) and invited me to drop by if I'm ever in the area. When I departed the airport that morning, I felt as if I'd known some of those guys for years.

Pleasant Surprises

Just a few days after my speech, I received a phone call and subsequent emails from chapter member Mike Franklin. During our discussions, I'd casually remarked that I'd love to visit Kitty Hawk and the historic Wright Brothers National Monument while I'm in North Carolina. On December 26th, Mike contacted me again, stating that Chapter 1114 president Sledd Thomas had offered to put in a request for a member to fly me from [Cox Field](#) (NC81) to [First Flight Airport](#) (KFFA) and back – all because of one casual comment I'd made! Though I've always thought highly of GA pilots, these guys took my appreciation of my



fellow flyers to a whole new flight level.

Steve's Barnstorming Tour 2014

While I was amazed by and appreciative of the hospitality demonstrated by my new acquaintances, I know such warmth and generosity isn't an isolated case in the aviation world. Whenever possible, I'm going to try to meet up with other VOBA members and canadians as my future travels take me to new places. Until then, I'd like to thank Grover, Mike, Sledd, Dick, Claude, and all the other NC-based pilots who helped make my visit to North Carolina a positive and memorable experience.

Wishing everyone a 2014 with clear skies and strong tailwinds,

- Steve



N832AB - Grover McNair's 173-FG

While Grover McNair has been a GA pilot for about 18 years, he's relatively new to the Velocity scene. His current aircraft, N832AB – a 2000 173-FG, began life as a kit belonging to builder Allan Lundeen. Upon completing – 2AB, Lundeen flew the plane for about 120 hours before selling it to Grover nearly three years ago. Since acquiring his Velocity, McNair has kept busy making continual improvements to the aircraft.

When asked how much longer until the plane will be flyable, Grover offered an optimistic yet realistic response: Soon. Before – 2AB reacquires airworthy status, McNair stated that he needs to continue tweaking the fuel injection system to get it

consistently metering the correct quantity of gas. Once that's done, he anticipates the aircraft being ready to fly.

McNair enjoyed a true "cross-country" last summer when he piloted a Diamond DA-40 from RDU to EAA AirVenture at Oshkosh (OSH) before continuing on to Alaska – and back. At present, he's amassed roughly 16 hours of Velocity time and describes the aircraft as "*the dream airplane.*"

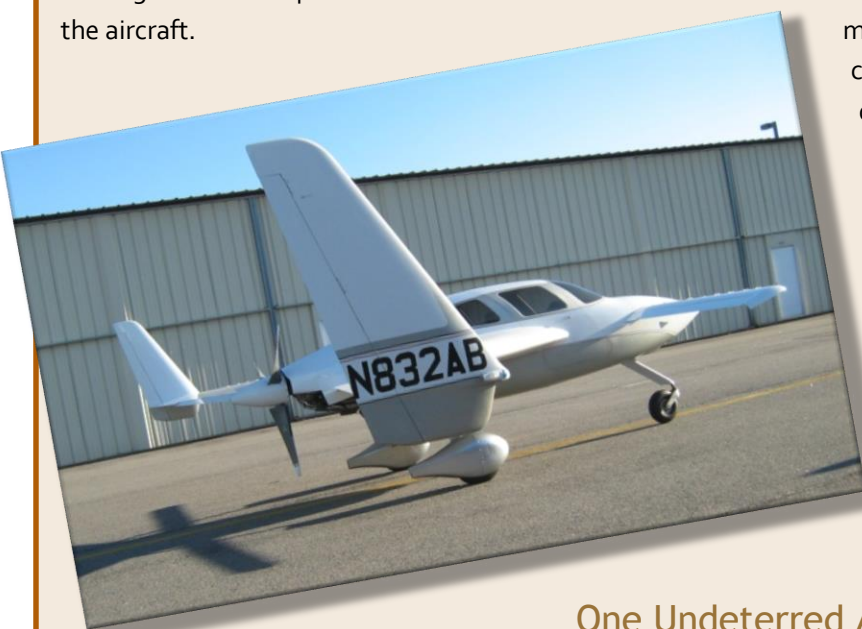
With the bulk of his repair work behind him, Grover looks forward to many memorable Velocity flights in 2014 and beyond. Congratulations, Grover! Here's hoping you and –2AB have several unforgettable adventures ahead.

A Test of Patience

Although he's not technically the manufacturer of –2AB, Grover has gotten plenty of experience in the Velocity construction process. A landing mishap by a previous pilot did quite a number to the aircraft's landing gear, requiring extensive TLC to rehabilitate the wounded bird. Among his numerous tasks, Grover has recently finished adding wheelpants to the main gear legs. Next up, he'll be upgrading the existing brakes to more robust Cleveland offerings.

One Undeterred Aviator

Despite –2AB's more than two years as a work in progress, Grover hasn't let his Velocity's maintenance status keep him grounded. He admits to getting plenty of flying in through his membership in the [Wings of Carolina Flying Club](#). An 850-hour, IFR-rated private pilot,



Air Tales

Pilot Bloopers

by Stephen Lewis

As with our previous installment, the intent of this column is to share embarrassing, hilarious, and/or potentially helpful aeronautical insight obtained through less-than-graceful airborne ops. Hey, nobody ever said learning experiences had to be refined – or serious. Take a gander at the gaffe below and remember: the best way to learn from a mistake is to learn from a mistake committed by someone else.

Ready and Willing... but Where's Able?

This issue's goof dates back to 2001 when one of my student pilots was returning from a solo flight in the local practice area. It amusingly demonstrates the difference a single word can make, and why we should *always* question ATC instructions we don't fully understand.

Ever since I began working at the FBO in question, we'd always had an aviation radio scanner in the reception area. This radio receiver was great in that it allowed our line service employees to prepare for arriving aircraft while also enabling staff CFIs to monitor student progress. On the afternoon in question, my soloing student had been up for about an hour, so I expected him to return to the airport area at any time. Sure

enough, just a few minutes after I'd begun monitoring the scanner, I heard his transmission to tower of his intent to return for a full-stop landing.

Nothing about his return, approach, and landing seemed out of the ordinary – until he was safely back on the runway. Once down and slowed to an appropriate taxi speed, however, things took a turn for the strange and hilarious.



My student was passing up every available taxi turnoff to proceed further down the 6,500-ft primary airstrip

Houston, we have a Problem

At first, everything was so routine that I didn't even notice anything was amiss. In fact, I expected to see him come taxiing by at any moment.

However, the scanner activity revealed that he was still on the active runway – where he would remain for about the next six minutes.

From what I could gather through the tower's transmissions, my fledgling flier was passing up every available taxi turnoff to proceed further down the 6,500-ft primary airstrip. Upon reaching the very end of the runway, he then executed a 180° turn and continued ALL the way back down the

surface to the opposite threshold. Once reaching that limit of the runway, he proceeded to perform another 180 before FINALLY exiting the surface at the next turnoff.

Throughout his lengthy stay on the active runway, the tower controller (Thankfully, the most laid back of the facility's employees. I shudder to imagine what would have transpired if this had happened with another controller on duty.) continually offered my student the option to exit on whatever taxiway he pleased – an offer he updated every time my trainee approached a new turnoff. While my student's continued refusal

to exit the surface concerned me, I was more perturbed by his (for the most part) radio silence. I began to think that something was truly wrong and that my student had a real problem on his hands that was more than he could handle.

Fortunately, the field was quiet throughout this ordeal with no other aircraft in need of the primary runway. I can't describe the relief I felt when my student finally taxied by the FBO on his way to our parking area. From what I could gather, the plane looked just fine and my student was having no trouble with its operation. Within just a few minutes, he shut down the

engine, gathered his belongings, and was on his way back into the building.

A Breakdown in Communication

Before I could open my mouth to ask about his flight, he spat out the question that brought everything to light: "Hey, where is Taxiway Able? He told me to turn left on Able, but I didn't know where it was. I taxied the entire length of the runway and still never saw it."

alphabet (not to mention the airport layout).

Once I'd explained the source of the mishap, I questioned why he didn't just ask the controller for clarification. I also queried his decision to ignore tower's subsequent offers to use the next available exit. His response: "I just got so wrapped up in complying with his initial instruction and finding that taxiway that I didn't want to appear stupid or incompetent. I thought it

hilarity this mishap caused, it illustrated the point that no amount of training on procedures or familiarity with the airport environment can eliminate the possibility of confusion and potential blunders. It also showed that there's no such thing as too much training in aeronautical decision making, there's no such thing as a stupid question (only stupid actions as a result of not asking questions), and, most importantly, ANY TIME we don't understand ATC instructions, our priority should be to clarify the issue ASAP.

While our story thankfully had a happy ending, such won't always be the case with aviation slip-ups. It's much better to risk sounding a little ignorant than to ignore a potential resource in order to figure it out ourselves. Going forward, let's all make it a point to use this story as an example of what not to do when faced with a situation we don't fully comprehend.

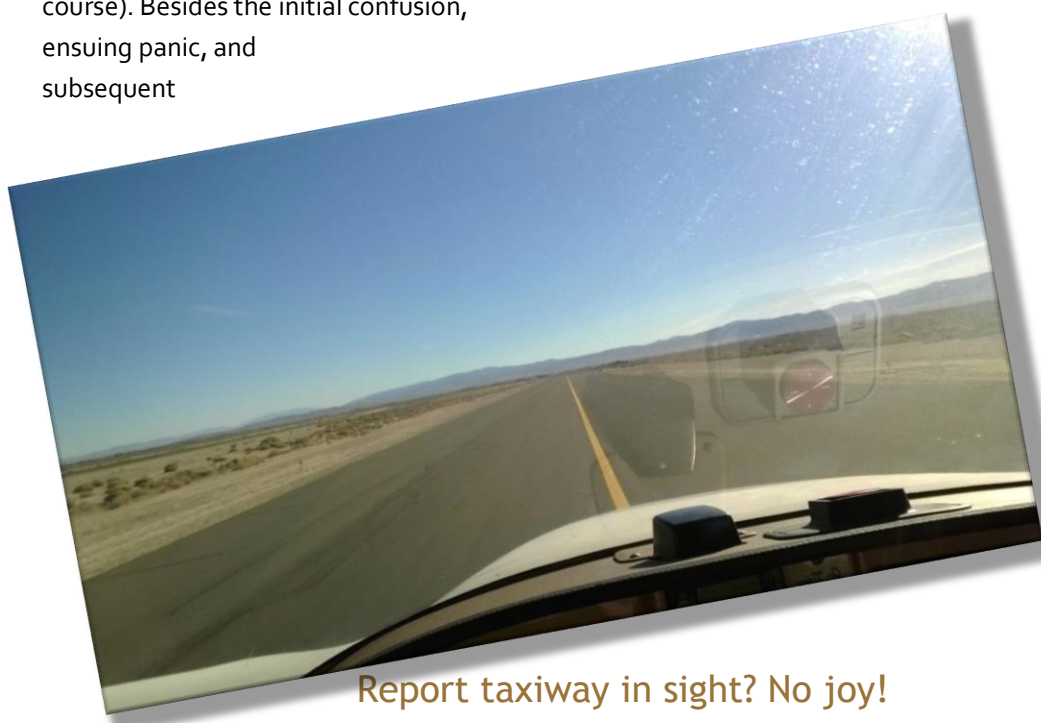
"Where is Taxiway Able? I taxied the entire length of the runway and still never saw it!"

At that moment, I realized that the controller's initial post-landing instruction is what had thrown my student for a loop. Tower had instructed him to "turn left WHEN able," which he'd misunderstood as "turn left ON Able." Because of that one little misheard word, he'd set out on a one-man crusade to locate an elusive, nonexistent taxiway designated "Able."

would be better to stick to the original plan." Ah...the best-laid plans of mice and men...

Needless to say, my coworkers and I all enjoyed a good laugh over this (after the student had departed, of course). Besides the initial confusion, ensuing panic, and subsequent

Side note: I'm well aware that the early U.S. phonetic alphabet was notably different from what it is today, and that "Able" was the designated word for "A" before "Alpha" was adopted. However, my student didn't begin flight training until decades after "Alpha" had become the ICAO standard. Besides, he was nearing the end of his private pilot training and had already soloed extensively, so he was well aware of the current phonetic



Report taxiway in sight? No joy!

Where does this report come from?

Every month the FAA releases an updated database on aircraft registrations. An automated process is run that uses the FAA info plus some public listings on aircraft classified ad sites in order to:

- Find any new Velocities in the FAA registry.
- Flag any changes in airworthiness, registration, ownership, or location.
- Match the registration number against 5,000+ photos in the Velocity Wiki and Voba archives and select a high-res image of the plane.
- Compile the changes and photos into this report.

The information represented here has not been checked for accuracy. The images may not faithfully depict the aircraft mentioned. The FAA data is in ALL CAPS. This was all compiled by a robot. You may be the first human that has read it. If you find an error please email it to us at:

Editor@VelocityOwners.com

FAA Data

Aircraft Updates

by Otto Mattic

First Flights



N585V 12/28/2013 (XL) Owned by Harpster, Richard of Pinehurst, NC. Built by Hallsten Keith.



N722XL 11/2/2013 (XL) Owned by Irion, Tom of Livermore, CA. Built by Irion, Tom

Listed for sale on Trade-A-Plane



N136LC 12/16/2013 (SE) Owned by COEN LAURENCE W of OVERLAND PARK, KS. Built by COEN LAURENCE W.

Kit listed for sale

3RX042 12/24/2013 (XL) Owned by of, . Built by .

Listed for sale on Reflector

Yandell 11/21/2013 (Standard) Owned by Yandell, Buddy of, . Built by Yandell, Buddy.

Registration Cancelled - Registration Expired - Pending Cancellation

N995EV 11/7/2013 (173) Owned by COLLEGE OF AERONAUTICS of EAST ELMHURST, NY. Built by COLLEGE OF AERONAUTICS.

N969KS 11/12/2013 (Standard) Owned by SCHNEIDER KEITH L of MARS, PA. Built by SCHNEIDER KEITH.

N696ML 11/7/2013 (XL) Owned by BUSH LEROY J of SAINT JOSEPH, MI. Built by BUSH LEROY J.

N241JW 11/4/2013 (Standard) Owned by YTICO-LEV LLC of HAMPTON, VA. Built by WHITE JAMES D.

Registration Cancelled - Reported Purchased



N34XL 12/1/2013 (173 Elite) Owned by SMUCKER AVIATION LLC of SAN ANGELO, TX. (Previously Smucker Donald W of San Angelo, TX.) Built by GILBERTIE JAMES L.



Sale reported. Exported to: ARGENTINA.

N222TZ 11/18/2013 (XL) Owned by SALE REPORTED of BUENOS AIRES, . (Previously Velocity Sudamerica of BUENOS AIRES, .) Built by GWINN RICHARD.



Our membership is growing! Thanks in part to a recent mailing, the number of VOBA members increased 25% in the last 2 months. We now have more than 150 people registered (plus a handful of spouses and industry VIPs.)

The Velocity Owners and Builders Association (VOBA) was established about a year ago. Membership numbers quickly grew to 100 just on word of mouth. This fantastic reception convinced us to reintroduce a quarterly magazine.

After the first few months, the new membership rate dropped to 2 or 3 per month. Clearly people were finding us, but we had not made any effort to proactively reach those builders and owners who were not active on the Reflector. Aside from some banners and business cards at AirVenture Oshkosh, we had done no advertising.

In January, that changed. Using data from the FAA and the Velocity community, we compiled a list of all Velocity owners who were not already members of VOBA. We eliminated any planes that the FAA marked as de-registered, expired, or sale pending. We also deleted anyone with an invalid address or who had registered their plane using a shell company in Wilmington, Delaware. There were 236 prospective owners on the final list.

VOBA mailed these folks a simple postcard (at right) inviting them to join our community. It highlighted the

Membership mailing

The VOBA Page

by Reiff Lorenz

benefits of membership and encouraged them to visit our website to sign up. (Special thanks to Andy Millin for building our poster child and to Nancy Riley for the amazing photograph!)

Within 6 weeks of the card mailing VOBA had 30 new members! You can see who they are on the VOBA web site. Go to the Membership Directory and use the search feature (magnifying glass icon) to find "recent memberships."

We welcome all these new folks into our community and encourage them to get further involved. There are lots of free resources for Velocity

enthusiasts. See the sidebar on page 28 for suggestions.

Speaking of ways to connect with the community, AirVenture Oshkosh will be here before you know it. See next month's issue (plus posts on the Reflector and VOBA forum) for more info on what the Velocity community has planned!



Publication Notes

About Velocity News

VOBA's Velocity News is a publication of the Velocity Owners and Builders Association (VOBA). It is published quarterly and distributed to VOBA members as part of their membership.

Currently, Velocity News is only available in digital form. If you would be interested in receiving a full-color, printed, physical copy in the mail, and would be willing to pay \$20 per year to cover printing and postage costs, please email VOBA. If there is enough interest, we'll find a way to make it happen. Admin@VelocityOwners.com

This issue

Publisher: VOBA
 Editor: Stephen Lewis
 Contributors: Stephen Lewis
 Alec Rhodius
 Jorge Bujanda
 Brett and Elizabeth Ferrell
 Andy Millin
 Reiff Lorenz
 WJ Wilbeck

Cartoons: Concepts by Reiff Lorenz
 Art by DesignoDream Studio

A special thank you to Brett Ferrell for providing a database of aircraft and a wiki full of well-labeled, indexable images.

Colophon

VOBA's Velocity News is written and edited in Microsoft Word on Windows PCs. Photos edited in Paint.net. Personnel management by Elance. File management by Dropbox. Typesetting and layout in Microsoft Word. Body text is Corbel 10.5 point. Final distribution in Adobe Acrobat Portable Document Format through a ClubExpress-hosted forum and web site.

Report any distribution, display, or other usability problems to:

Admin@VelocityOwners.com



On the cover

Richard Gwinn's XL, N222TZ exported to Buenos Aires, by Velocity Sudamérica.



Coming Next Month

Oshkosh plans

Builders updates

Featured aircraft

VOBA's Velocity News



N62J, an XL RG built by Spurgeon Duncan

Velocity Owners and Builders Association
6510 Halberd Court
Dayton, OH 45459

www.VelocityOwners.com

Admin@VelocityOwners.com