VELOCITY VIEWS

Volume 39

Class Afloat

by Duane Swing

CAN YOU IMAGINE spending your junior, senior or first college year aboard a three-masted, 413 ton, 188 foot long tall ship and sailing completely around the world with 40 other students? That is exactly what Velocity builder Terry Davies, president and founder of Class Afloat, offers. This beautiful sailing ship is home and classroom to young men and women from one semester, up to a full year and will travel to every corner of the globe.

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Terry Davies and his other ship, a Velocity XL RG-5

In this issue

Class Afloat

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Ports of call include such places as Canada, Honolulu, Marshall Islands, Solomon Islands, Australia, Zanzibar, Indonesia, Tanzania, Madagascar, South Africa, U.K., Brazil, French Guyana, Trinidad, Guadeloupe, the Bahamas and hundreds more.

Courses offered on ship include Journalism, English Literature, Anthropology, Philosophy, Economics, Psychology, Mathematics, Calculus, Marine Biology, Chemistry Physics, Biology, History and Geography to name a few. Credits are honored worldwide. Added to the classroom education is the exposure these young men and women get by scuba diving on the Great Barrier Reef in Australia, scaling volcanoes in Hawaii, visiting with the descendants of the H.M.S. Bounty on Pitcairn Island, sleeping in caves beneath the Moai on Easter Island, camping on the Serengetti and exploring the ruins of Mount Olympus... the list goes on.

Terry started this educational and adventure program twenty years ago and, although he doesn't sail with the ship on a regular basis, he still coordinates the activities and recruits students and teachers from around the globe. To qualify, a student must have a strong academic profile, strength of character, physical health and swimming ability. Prices start at $16,600 for one semester plus about $3500 for airfare, clothing, spending money etc. If you want to know more, check out their web site at www.classafloat.com.

Terry is also a Velocity XL RG dash 5 builder. He started his building program in the Service Center in November 2003 and made his first flight in May 2004. Terry built his airplane to plans, using the Continental IO 550, 310 horsepower engine. His restriction fly-off wasn't without problems as he struggled mightily with the JPI 900 engine display unit. Terry will use his Velocity to fly around the country on business and pleasure and to the Bahamas for vacations. Terry, his wife Laura, and two of his four children will soon be re-locating to North Carolina.

Concordia, Terry Davies' floating classroom, under sail

Terry has his single, multi-engine, instrument rating and has accumulated over 2000 hours of flight time to date. His flying activities started in his native Canada in 1981 and he has been an active pilot every since. Terry and his family have spend several years living in the Bahamas where Laura worked as a math and physics teacher and they used their Aztec to commute back and forth to the states and Canada.

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Velocity Views has moved! Note our new address

The Lavoie's have moved from St Augustine, Florida, to the mountains of East Tennessee. Please take note of the following information:

New mailing address for *Velcoity Views* Newsletter:

Rick Lavoie, Editor
P.O. Box 669
Tellico Plains TN 37385

by Duane Swing

Check List for FAA Inspection

Several of you have asked just what does the FAA or the DAR look for when inspecting the airplane. This is the final inspection (in many cases the only inspection) prior to first flight. I have taken the time to identify the various items our inspector looks for when making this final check. Keep in mind that this list has nothing to do with the airworthiness part of his inspection. He will look for:

1. Instrument panel markings including "N" number, all switches and circuit breakers properly marked, throttle/mixture/propeller controls marked, passenger warning placard and compass card properly marked with corrected heading numbers.
2. Fuselage marking including "N" number properly displayed on winglets (no adhesive tape or duct tape), metal data plate properly filled out and attached to the fuselage, and the "experimental" placard displayed above the doors.
3. Aircraft will need to be weighed and the weight and balance information be copied and given to the inspector. This includes a most forward CG and a most rearward CG computed and available for the inspector to check. This document will also show the date, "N" number of the aircraft, most forward CG allowed and most rearward CG allowed, based on the owners manual information.
4. Airframe logbook entry to show that the builder has pressure tested his pitot and static system for leaks. (Note, this is not an official IFR certification test, only a check to be sure your airspeed and altimeter is working on that first flight and there are no obvious leaks)
5. The inspector will expect that the airplane has been taxi tested; engine run to full power, brakes tested and the airplane is ready for first flight. Airplane to be presented to the inspector with cowling and any inspection plates removed, canard cover removed and the "airframe" logbook ready for the inspector's stamp and signature.
6. AROW. The inspector will complete the "Airworthiness" certificate. The white copy of the "Registration" should already be in the hands of the builder and presented to the inspector. The inspector will also complete the "Operating Limitations" and this will be presented as Phase I and Phase II. Phase I is the 40 hour restriction period and Phase II are the rules an experimental aircraft is subject to the rest of its life and also contains the wording necessary for future log book entries. The "Weight and Balance" to be provided by the builder.

Although not part of the inspection, it is important that you make a note of the date in which this inspection takes place, as this is the trigger for the next required Conditional Inspection (Annual). Also, at some time in the near future, the airplane will need an altimeter/ transponder/encoder certification check done by a radio shop. This is required if you have a transponder with an encoder to insure your transmitting the proper altitude, even if you don't intend to operate IFR, and must be repeated every two years.

Customer Profile

I have always wanted to profile some of our customers as their personal stories make unusual and sometimes fascinating reading. On the front page of this newsletter you will read about Terry Davies. Terry built his XL RG dash 5 in the Service Center and just completed flying off his restrictions. I had an opportunity to set down and chat about what Terry does for a living. I trust you will enjoy reading the article as much as I had in putting it together. I hope to continue with this profile in future issues and will be contacting some of you who I already know have an interesting background. If you think your story would make good reading send me a note and I will be in contact with you.

Oshkosh 2004 July 27 through August 2nd

Preparations are in the works for the 2004 Oshkosh fly-in. If you attend this year you are going to see some major changes to the Velocity involvement. In the past, the final bill for Velocity for this event has been in excess of $35,000. We just don't sell that many airplanes at these events to justify that kind of expense. My personal feeling is that Oshkosh has become far too commercial and the major push is to sell, sell, sell. My first exposure to the EAA was when I attended a convention at Rockford Ill in the early 70's. It was all about experimental airplanes. No one sold anything except hot dogs and hamburgers. One afternoon was all it took to inspect all the homebuilt airplanes on display. Look at it now with acres of certified airplanes and thousands of places to spend your money. Want to buy a Vegematic to chop up your onions, Oshkosh is the place. How about the latest in motorcycles or garden tractors, Oshkosh has it also. Looking for the latest in gold or diamonds, (for the ladies of course) you will have several vendors to choose from.

I attended the FMCA (Family Motor Coach Association) convention a couple months ago and found some interesting parallels and some startling differences. The parallels are that just about every motorhome manufacturer was out there to sell

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Factory News

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their latest and greatest offering. All the smaller peddlers, however, were selling items related to the motorhome user and nothing else. The forums were also a major departure from Oshkosh. Not one forum was presented by a motorhome manufacturer. If you wanted to know something about a Winnebago, go to their display tent. The forums were conducted by people who were not there to sell a product but to explain how their product works or how to fix it. Many were safety related for the motorhome traveler, like escape procedures in the event of a fire, or how to protect yourself from theft and exposure to liability. We listened to experts on the different state-by-state rules and regulations that could affect the motorhome traveler. Health care while traveling away from home was one topic. How to manage and diagnose problems on your Allison 6 speed automatic transmission was another. Eight forum tents running six hours a day for three days.

Now back to Oshkosh 2004. Velocity will have three airplanes on display at the same location as before. We will send three of our people from here flying the three airplanes and I will provide the motorhome where we can eat and sleep. No selling of T shirts. No big dinner party. No forums. No ladies to feed and provide shelter. Just a real experimental airplane display with qualified people who can answer your questions. (We will take some order forms just in case).

Firefly & Gus McLeod

In the last issue of the *Views* I commented on all the work done to provide Gus McLeod what he needed to fly around the world pole to pole. If you remember, Gus was forced to return to the United States due to the heavy icing he encountered and is now in the process of gathering sponsorship for his next attempt. As I understand it, Gus has received some help from Shell Oil Co. and the Firefly will be on display at their tent at Oshkosh. He has also received some help from Kelly Aerospace who is designing a turbo normalized system for the 260 horse Lycoming. Gus feels that in an attempt to climb to 15,000 + feet, with the load of fuel he needs, makes it extremely difficult without a turbo. The ice cap at the South Pole in Antarctica is 10,000 feet thick and there are mountains in the area he must climb over. I'll report more on his attempt in the next *Views*.

What Should I Do

A couple times this past week I was asked questions about where do we go for insurance on our Velocity. Another question was who is authorized to do the Velocity inspections, and yet another was in regard to calibration of the static/pitot system. It seems his indicated altitude was always 200 feet higher than his encoder. Then another was regarding the proper procedure for leaning his 260 horse Lycoming engine. He told me his fuel flow runs about 18 gallons per hour in cruise, which he thought was high.

When I remind these gentlemen that this has all been covered in the *Velocity Views* their response is always the same, "I don't get the *Views*." Sooooo what should I do? I can't afford to send the *Views* to everyone free, as we have discussed here many times, nor do I want to spend the next 30 minutes in a discussion about leaning procedures. In the past, when someone ask about who to contact for insurance, I have had to drop whatever I am doing at the time and go get my copy of the *Views* to give them the names and phone numbers they are looking for. Should I, or anyone here, be doing this? To be quite honest with you, I am getting too old to put up with this kind of nonsense. I am, therefore, asking you to do something for me. Whenever you have a chance meeting with another Velocity builder/pilot, ask him if he is reading the *Velocity Views*. If his response is no, I see no value to it, or the cost is just too high, remember my comments and do what you can to talk these builders/pilots into subscribing. We will all benefit.

Car Rental

In the past, Velocity has been able to provide a loaner car for your use while here in the Service Center. We no longer have this car and ask that you contact Enterprise Auto Rental if you're going to need transportation while here. Their number is 772-589-0058. Prices start at $33.50 per day. Enterprise is located here in Sebastian and they will bring a car to the Service Center to meet with you or will leave one here if your flying in after working hours.

Kit Aircraft Loans

For those of you who have been putting off the purchase of a Velocity due to the funds not being available, wait no longer. There are two loan institutes who are presently loaning up to 90% of the purchase price. Here is how it works: You pay us the 10% for the kit purchase, including any options you may want. The loan institute will pay us the balance. When you're ready for the engine, propeller, avionics, etc. the loan institute will re-finance your airplane at the new higher balance. If interested contact: NAFCO at www.airshow.net/nafco, or American Aircraft Funding Co. at www.airfunding.com to get all the details.

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Kit Plans Changes "KPCs"

Note: Check the date at the bottom of your page. If it matches the "Date of Change" shown in the KPC, your manual has already been corrected.

KPC 167
Affects: All Aircraft with the new rudder pedal / brake system
Manual Section: 6A-3.1
Date of Change: 6-01-04

Figure 6A-8
Rod end to belcrank location some hardware was left out. Each rod end is attached to the belcrank with
(1) AN970-3(drilled out to 5/16")
(2) AN960-5 washers
(1) MS20142-5 nut
Also, the big aluminum angle that bolts to the canard bulkhead does not have the two attach bolt holes predrilled in it. You must drill those two 1/4" holes. The centers of the holes are located 1 1/8" from the bottom of the angle and 3/8" from the edge.

KPC 168
Affects: All RG aircraft (new plans on line)
Manual Section: 6.7.4 - Triax Reinforcement
Date of Change: 6-01-04

Next to last paragraph says, "cut 8 plies, 4 for each side, of 9"x 22" Triax and apply over the gear bolt hole ..... See figure 6-28." This lay-up is for the fixed gear version and takes the place of the transverse bulkhead so it is not used. Delete this paragraph.

KPC 169
Affects: All RG aircraft (new plans on line)
Manual Section: 7.4.3
Date of Change: 6-01-04

Add the word Temporarily put the 1 1/4" knurled bushings.....
Do not glue these in now, as it is much easier to remove them and glass the transverse bulkhead in before you glue those bushing in permanently.

KPC 170
Affects: All RG aircraft (new plans on line)
Manual Section: 7.2.3
Date of Change: 6-01-04

The new Matco sequence valve has a different plunger arrangement, which makes it a little longer. On line there will be some new drawing showing the new cut out and position of the sequence valve. Also, we should be able to get the drawing put in this newsletter. Basically, it is just higher, but I made the cut out a little small to eliminate some of the airflow through the hole. Also, the bracket that you make is really longer than the drawing shows.

KPC 171
Affects: All aircraft
Manual Section: 1.3.7
Date of Change: 6-01-04

Change the word Micro-Balloon to Microglass (two places) where it shows a drawing of capping off and edge of foam where you will not be wrapping it around the edges. I use Flox for this but you can also use Microglass.

KPC 172
Affects: All aircraft with Yoke control systems
Manual Section: 10.1.1
Date of Addition: 6-01-04

Make this the first paragraph in the section.
Take the yoke mechanism with the slider tube and belcrank to the vise as well as the control yoke. You will slide the yoke onto the assemble with the yoke up and belcrank down, perpendicular to each other. You should first drill an undersized hole (under 3/16") through the aluminum yoke and on through the stainless steel tubing and then on through the other side. We have drilled both vertical and horizontal. There is more room to drill horizontal but it shows more than the vertical drilling. Also, on the vertical drilling, you may have to use a special facing tool to make the top and bottom surface around the head and nut flat. Make sure the center of the hole is at least 9/32" from the edge of the aluminum. Another way to drill it is to only drill through 1/2 at a time then, when you ream to the final hole size, you go all the way through. Later, when you are assembling the system, you will install the yoke to the shaft with an AN3-15A bolt with washers and an MS21042-1032 nut.

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by Scott Swing

Nose gear and doors

The two bulkhead hydraulic fittings that go through the canard bulkhead should be no more than 3" apart. Any further apart could interfere with the pushrods to the gear doors.

Wait until you determine the position of the slide guides before you drill mounting holes in them. I found that the bottom hole is not critical but the top hole needs to be positioned so that it doesn't end up in the radius of the keel attachment. Also, the slots may not be long enough and may need to be extended slightly to allow full movement of the cylinder. Since you cannot make it longer at the bottom, you must at the top. Just check the cylinder movement and insure you are not limiting the movement with the slide guide slots. Once you have made sure of that, adjust the pushrods and/or the rod end so that

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Builder Hints & Information

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with the hydraulic cylinder completely closed, the gear doors are just closed. You do not want gear doors to jam up into position. Then, extend the cylinder to the full open position and mount the slide guides so that the cross bar just clears the bottom of the slot. This assumes that the gear doors are free to go out that far. If the gear doors will not go that far, then you have to reduce the amount of travel the cylinder has by using a limiting bushing similar to what we use on the other cylinders. You would then adjust the push rods so that when the cylinder is fully extended, the gear doors are as far open as they will go, and limit the closed position of the cylinder to where the gear doors are just shut. You would still position the slide guides with the cylinder completely extended. I see too many planes that use the slide guides as a stop and this could cause a major problem down the road. For instance, after a while, because of the load you are putting on those ball joints, one of them breaks off. If you do not see this on a preflight, you take off and retract the gear. Since one gear door closes from air loads before the gear comes up, the fork hits the one gear door and turns the fork sideways. An unsafe light comes on warning the pilot of a problem. The gear is put back down but is now off to the side. When the gear comes down to the runway and one of two things happen. It either shimmies or breaks the gear off because the side load that this puts on the nose gear. The nose gear was not designed for much side load since it does not normally get much. This actually happened to a customer, so make sure your system is not loading up those ball joints!

Remember to tighten all your jam nuts. If you don't, you will find that the adjustments will change over time or worse, the rod ends will fall off the end of the cylinder. If you tighten them, they should not ever come loose.

Information

We have had a rash of landing incidences lately. It is either a wind issue or control issue or "landing gear collapse" issue or etc.... We need to weed through these to find out if there is anything we need to do to minimize this sort of thing. Obviously, when you slam the plane on the runway with tremendous force something can break. This type of thing usually gets blamed on the airplane and not the pilot. We all know how strong the gear system is on the aircraft. Most of us have a bad landing from time to time and can attest to the strength. I have heard many comments about that. We also have proof with the Firefly (our gear system) landing on a 2900 FT gravel strip at 1000 lbs over gross etc.... So, what is going on? Are we expected to make the gear system strong enough to handle carrier type landings day in day out? I think not. If you are having trouble landing the aircraft, please come and get some more dual so that you will be a safer pilot. If you think it is the aircraft, let me know what you are finding and we can fix the problem and make the plane better. You can also practice cross winds or windy conditions before you head out and are pushed into landing in conditions that you are not comfortable with. We will try on our end to eliminate shimmy, and to make the nose gear into a more shock absorbing set up. Please do your part as well.

Here is what we have done in the past to strengthen things in the gear system. FIXED GEAR - thicker wall tubing and heat-treating. Lowering heat-treating to allow for a little more bend before breaking. Gussets off the bottom of the top attach tubing to strengthen the gear in case of a side load. Bigger tougher fork assembly. Different bushing material for better wear in the fork pivot. Much tougher installation into the fuselage with use of the keel. MAIN GEAR - Changed to S glass in the gear for 30 percent more strength and 15 percent more stiffness. Different brake system to move the disc further from the gear to lessen the effects of the temperature that the brake system gets to. New rudder pedal/ brake system to eliminate landing with the brakes on thus damaging the main and nose gears. Some have made suggestions as to shimmy dampener techniques and we appreciate those suggestions. It is really frustrating for us to see you guys damage your aircraft and also to find out that the report hardly ever suggests pilot error. Who would want to blame themselves to the FAA or NTSB investigator? We hear comments that the gear collapsed and find out that the gear was never down or that they broke it off by slamming the airplane to the runway. All you see is that it collapsed not why. Bottom line is that we want to improve the plane where it needs to be improved and, if you happen to have suggestions, please fire away. Sorry to carry on so long about this, but it is an important issue that we need to address.

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We need your input for this newsletter to be a success!

- Builder Forum Input
- First Flight Photos
- First Flight Stories
- Velocity Flying Adventures
- Velocity Fly-in Suggestions

PLEASE!
Send your photos / stories to Rick Lavoie for the next newsletter!

PO Box 669
Tellico Plains TN 37385

Safety Corner

Accident & Incident Reports, Maintenance & Service Difficulties

Service Caution Nose Gear Failure

We are still receiving reports of nose gear strut failure due to excessive shimmy. As I have said here many times, it is difficult for us to develop a cure for something that we have not experienced. We fly our airplanes a couple hundred hours a year and, to my knowledge, this has not happened, even though half our hours are in a training environment and we have been doing this for over 10 years. I will say, however, that we NEVER fly without checking the nose gear for proper dampening. We do this by picking up the nose by lifting on the canard and pushing the nose wheel to center with our foot. If the amount of pressure needed to do this is excessive light or heavy, it is time to adjust the shimmy dampener. We also check to insure that we have the proper +2 degrees of king pin alignment. We also must remove the fork about every 25 hours of flying and clean all the dirt and sand that accumulates in this area. We also grease the whole thing to eliminate rust.

We have looked at several designs that might make an improvement in the shimmy dampening system and are presently testing one that I am sure will go a long way toward eliminating shimmy. It consists of a stainless steel taper pin that drops into a slightly undersize hole (the taper stops the pin from going any further) The hole is in a plate attached to the rear side of the fork and the pin is mounted on a fixture that is welded to the aft side of the gear leg. In the picture, this fixture is clamped rather than welded for testing purposes. The pin is lowered into the hole by using a twist to lock push-pull cable. The procedure is to engage the pin

just prior to take-off while aligned with the runway. The pin stays engaged until after landing. Disengage the pin for taxi. In tests, there is plenty enough left in the normal rudder/brake application to keep the airplane aligned with the runway for both take-off and landing. We will continue to test the system and make any improvements needed prior to making it available to you.

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Safety Reminder MT-Propellers and Lycoming I(O)-360 Engines

This is an important safety reminder for operators of MTV12 and MTV18 model propellers in combination with Lycoming I(O)-360 (180-200hp) engines without a counterweighted crankshaft.

Reference Mt-Propeller Service Bulletin #16: (see http://www.mt-propeller.com/pdf/sbs/sb16i.pdf) The manufacturer cautions operators to avoid continuous operations between 2250-2550 rpm and above 2650 rpm. Operations above 2650 rpm are allowed during take off. Owners of Mt-Propeller products are urged to monitor the Mt-Propeller web site to access historical and ongoing information regarding Service Bulletins. The link is www.mt-propeller.com.
Velocity, Inc. is working with Mt-Propeller to help with customer service issues for those who are affected by SB16. Original purchasers of Mt-Propeller models MTV12-B/LD168-101 or MTV18-B/LD168-101 who are operating their propeller on Lycoming or Superior engines not having the sixth-order crankshaft dampers are requested to contact Scott Baker in writing. Please provide us with your name, address, Velocity N#, Mt-propeller model and serial number, engine model and serial number, and the date of your propeller purchase. Again – this request applies to original propeller buyers. If you are affected by SB16, we would like to hear from you. Please write or email Scott Baker at scottb@velocityaircraft.com without delay.

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Franklin Engine Note

One of our builders had inquired about purchasing a new PZL Franklin engine, but found that PZL (Poland) was no longer manufacturing them.

I just spoke with Pete Askland of Franklin Engines USA, and here is what I learned about PZL & the Franklin engine.

United Technologies (Pratt Whitney) bought PZL (Polish manufacturer) a couple of years ago and has directed PZL to stop making new PZL Franklin engines.
However, ECI Engine Components (Texas) is still selling Franklin engine parts and is negotiating with United Technologies to purchase the manufacturing rights to make & sell new Franklin engines. Not sure where these negotiations are at present.

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CFI Notams

by Nathan Rigaud, CFII

Beyond the Preflight:

Last issue we discussed the preflight and what to look for. This issue we will be talking about the before starting, taxi, and before takeoff.

After the preflight, it is time to get in the airplane and get ready to start the engine. First, climb in and adjust the seat for proper spacing to the rudder pedals. Put your safety belts on and be sure the seat and belts are locked. At this point, you may refer to a checklist. Everyone has a different checklist with items they like to do. This will be an overview of the checklist. Be sure your passengers have their seat and seatbelts on and locked also.

Before turning on the Master, be sure the gear is in the down position. Even though you have an airspeed switch in the system, do not count on it working. With the master switch on, check and make sure you engine gauges are on and working. Set the mixture, set the throttle and prime the engine as needed. Turn on the mags, and, before starting the engine, be sure to look behind you for anyone and yell out "Clear Prop!!" When all clear, push the starter button. When the engine starts be sure to check oil pressure first, if no sign of this, shut down the engine and look into the problem. Let the engine warm up a little before taxing and go ahead and turn on the radio master to check all your radios while you're waiting.

Before taxing, check all around you for any obstructions and people. Be aware of the prop blast; I find with a pusher, most pilots forget about the prop blast and usually point it in the direction of a hangar or people. The Velocity takes very little power to get started down the taxiway so be gentle with the power setting. Come off the brakes and let the airplane roll slowly. Use your brakes only when needed. You do not want to ride the brakes; this will allow the axle to heat up and will melt into your gear leg. When I am training someone, I look out the window and if I see the rudders are out while we are taxing straight. If they are, then you will probably be on the brakes. When taxiing, use the brakes as needed to keep you near the centerline. When taxiing around or near other airplanes, keep your taxi speed to a medium walking speed. If you loose a brake, this is the only means of turning the airplane. Be sure to stop at the hold short line. Remember what a hold short line looks like; you may want to get the AIM out and look at one. Before you take off, get your checklist out and perform the items on it. Check your flight controls, elevator up and down, make sure the ailerons go up, you will not see the aileron go down, rudder go out and come back on their own. Trim your elevator down one-inch solo and two inches down for pilot

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Flight Check! Be Safe!

Velocity Service Center Inc. offers flight training for builders/pilots to safely learn how to transition into flying a Velocity. Get a **Flight Check Out** prior to your first flight!
Flight training is available from:
- Nathan Rigaud, CFII
- Brendan O'Riordan, Flight Advisor
- Scott Baker, CFII

The following Flight Instructors have also been approved by Avemco Insurance:
- Sam DaSilva - Seminole FL 727-595-6384
- Mike Gunvordahl - Burke SD 605-775-2952
- Mack Murphree - Dayton NV 775-246-9364
- Manny Lewis - Scotia NY 518-399-8614

Don't take a chance, get checked out prior to your first flight. Please note that you should be current in some other type of aircraft prior to your Velocity check out. The purpose of the "flight check" program is to transition you from flying other aircraft types (like a Cessna) to a canard pusher (Velocity).

Factory Authorized Insurance Inspectors
Please make note of these individuals:

Name - Location Home Phone / Work Phone

Brian Gallagher - Murrieta CA 909-461-9990 / 909-696-0160
Barry Gibbons - Rosamond CA 661-256-8272
Don Pearsall - Owasso OK 918-272-5551 / 918-474-2610
Mike Pollock - Sachse TX 972-530-8400 / 972-728-2725
Glenn Babcock - Tampa FL 813-569-0281 / 813-604-0149
Wes Rose - Grand Rapids MI 616-772-7235 / 616-530-0255
Jean Prudhomme - Boca Raton FL 954-559-4988
Mack Murphree - Dayton NV 775-246-9364
Gary Stull - Tampa FL 813-949-1297
(Gary is an airline employee and can travel inexpensively)
Mike Watson - Mt. Vernon NY, 914-699-3915 / 201-476-8231

A&P Talk

by Brendan O'Riordan, CFII, A&P

Well it seems as though it has been the time of the year for nose gear problems. There are many things that can lead to a nose gear shimmy. Let's go over each one and try and figure out how we, as owner/operators of Velocitys, can keep them from happening.

First we need to keep the nose gear clean and well lubricated. This allows the Bellville washers (conical shaped washers that maintain nose gear tension) to maintain consistent pressure on the nose gear as it is rotated. As the shimmy dampener gets dirty there will be a break out force that will be greater that the pressure the Bellville washers are putting on the nose gear. This gives the false impression that the nose gear is tighter than it is. It also makes it harder to taxi. If you airplane is kept outside or operated out of airports that have a lot of dust and sand blowing about (like Sebastian's) you will have to maintain the shimmy dampener more often.

Next issue is maintaining proper tension on the nose gear. In section 8.2 of the builder's manual, you are told to tighten the Nylock nut on the nose gear until it takes 15-20 lbs. of push on the rear of the tire to move it. It is very hard to tell what 15 - 20 lbs. feels like. What we do here at Velocity is we tighten the Nylock nut until it is as tight as we can get it and still taxi. The one way to figure this out is by trying it. Tighten the nut up and go and taxi your plane. If the tension is correct you will have to rock the airplane with the brake when moving slowly in order to get it to turn. Nose gear tension needs to be checked at every preflight. Get to know what the proper tension feels like. On my preflights I pick the nose tire off the ground by the canard and push the nose gear with my foot to check it. If your nose weight is too much to do this by yourself then you will need help. When checking the nose gear verify that the tension is consistent and that there isn't a breakout force from the shimmy dampener being dry or dirty.

The Nylock nut is something that will have to be checked to make sure it is still locking. Velocity originally used a castellated nut with a cotter pin to hold on the nose gear. The problem with this installation was that the Bellville washers would compress some over time and the shimmy dampener would be too loose. The Nylock nut allows you to keep constant pressure on the nose gear at all times and, since you check it before each flight, it should never be loose. Nylock nuts can wear out. The nylon will start to loose its gripping power after being taken on and off many times. When you are doing your routine maintenance on the nose wheel check this to make sure the nut is all right. I would suggest keeping one on hand so it will not keep you grounded.

Last but not least is flying technique. A properly flown approach will have the main gear touch softly, followed by the nose touching softly. I have had the opportunity to fly with a few builders and their idea of soft is totally different than mine. If your typical approach resembles a navy fighter coming back aboard a carrier rather than the description I gave above, then you may need recurrent training.

Keeping both your airplane and your pilot skills properly maintained will keep you out of trouble. If the nose gear is properly maintained and the airplane is properly flown you will not get a shimmy. Among all the pilots we have working at Velocity we have a combined total of more than 4000 hours Velocity time. Collectively, we have had no more than a half dozen or so shimmies. This is also spread out over many different Velocitys, not just our company airplanes.

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CFI Notams

Continued from previous page

and copilot in the plane. Check and make sure your oil temperature is up before your run up. Check to see where the prop blast will be pointing before any run up. Perform your run up, mags, prop, engine gauges, and suction. Set your flight instruments as needed. Mixture rich, prop in, you are just about ready to take flight. Be sure to close and lock each door. Perform one at a time so you can see the door being closed and locked. Even if you see the door pin engaged, the handle may not be all the way up and locked. You may even want to give it a check to be sure the secondary lock is working. Once the doors are locked, check the pattern for any aircraft in the pattern and check final for anyone landing before taxiing onto the active runway. Make your radio call when all clear and taxi into position for takeoff.

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Event & Production News

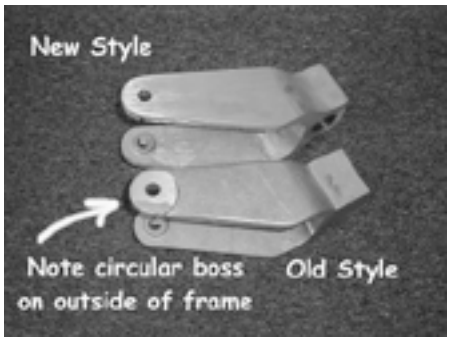
by Scott Baker

Nose Gear Castings

During the 2nd quarter of 2000, Velocity, Inc., announced to builders it was upgrading the nose gear fork – making the new part thicker than the original fork. The nose gear is subject to punishing stresses during landing. Hard landings or landings involving nose wheel shimmy led to cracks developing in the nose wheel casting. If the casting were severely damaged, portions of the assembly would break away and sometimes enter the spinning propeller. Not good.

The original announcement did not stress the importance of discarding the old fork in favor of the "heftier" nose wheel casting. Velocity, Inc., recommends that everyone with a nose wheel casting that supports the 500x5 size tire to inspect their casting to verify it is the "new style". The new style casting, which was introduced in kits that shipped in June, 2000, sells for $200. For a limited time, Velocity, Inc., is offering to supply this part to original buyers at the reduced price of $100, plus shipping and handling. Owners have until September 30, 2004, to order the new style fork at the special price. It is not necessary to return the old style fork to Velocity, Inc.

Some customers expect this part to be of finished-grade quality. This is not the case. Nose gear castings are considered production-grade parts. If you have any questions about this subject, please feel free to telephone



Scott Baker or Scott Swing at the Velocity factory.

Oshkosh AirVenture 2004

Last year Velocity, Inc., hosted its largest display presence ever at Oshkosh 2003. Unfortunately, the same could not be said for the number of visitors to the Velocity display area. I don't know what it is about the flying public and major air shows – but we have noticed a downward trend in the number of visitors that has repeated itself year, after year, after year.

We wouldn't miss "Oshkosh" for the world, but this year we will be making a much smaller presence than in years past. Instead of 4-spaces, we will have 2. And instead of a large tent with merchandise – this year we will have 2-aircraft surrounded by 4-pilots, who will be talking and "educating" folks about the great flying qualities of Velocity aircraft.

Don't miss the Velocity Reception (no dinner) on the Kitty Hawk deck of the Oshkosh Hilton Garden Inn (located adjacent to the airport – and the same facility that last year's dinner was hosted) on Friday evening, July 30th from 6:00 PM to 8:00 PM. Reservations are not necessary – come as you are! Scott Swing, Brendan O'Riordan, and Duane and Bonnie Swing plan to be on hand to say "Hello" to friends, old and new. Velocity, Inc., will be serving appetizers. There will be a cash bar set up during the reception.

Barnstorming Season Begins!

Nathan Rigaud and Brendan O'Riordan began this year's Barnstorming schedule by flying N271TC, the Velocity XL-RG-5 demonstrator to rain drenched Houston, Texas – which was followed by the Southwest Regional EAA Fly-In in New Braunfels, Texas. Congratulations Bill Hawley on earning the Reserve Grand Champion (kit-built) Award at the SWRFI with his beautiful Velocity XL-RG. Bill flew in from Salt Lake City to attend the program in central Texas. "Thank You, Bill" for showing Velocity in such a favorable light!

Nathan and Brendan then moved on to demonstrate the aircraft to interested customers in the Dallas, Texas, region – where (thankfully) the rain had stopped and the weather was picture perfect!

Westward Bound!

Scott Baker and Paul Baribault will continue this year's Barnstorming Tour by flying to Springfield, Missouri on June 15; Colorado Springs, CO on June 16; Marysville, CA from June 18 through 20; and Santa Barbara on June 21 and 22.

EAA Golden West Program

We look forward to seeing Velocity friends who live in northern California at this year's EAA Golden West event in Marysville, California. Join Scott Baker and Paul Baribault for a Velocity owner gathering and pizza dinner (location to be

Continued on next page

Maintenance Notes

by Michael J. Snyder
Private Pilot, A&P, IA

We have been busy in the Service Center with completing new airplanes and maintenance. Along with general work and inspections it seems this has been the year for broken nose gears. I know it is not a design problem, but a maintenance issue.

My recommendation would be to keep proper tension on the nose fork and remove excess slop from the nose strut installation. I would strongly recommend each of you carry a wrench in your flight kit for keeping tension on the fork nut. The fork nut should be checked before the first flight of each day. You should also keep the pivot axis clean and lubricated, depending on your environment. This should be done every six months. Another contributing factor would be pilot technique. You should maintain directional control and airspeeds of your ship. You should be determined to land your airplane where you want, which should be on the arrival end of the runway on the centerline. So go out and practice and keep current in your airplane.

The photo below is an example of the proper way to install an engine, which, by the way, was installed by one of our customer-builders who had no prior aviation experience. This is the way an engine should be installed, with special attention paid to chaffing, proper use of hardware, fire protection and general neatness. Proper engine installation will aid in continuous airworthiness of the airplane.

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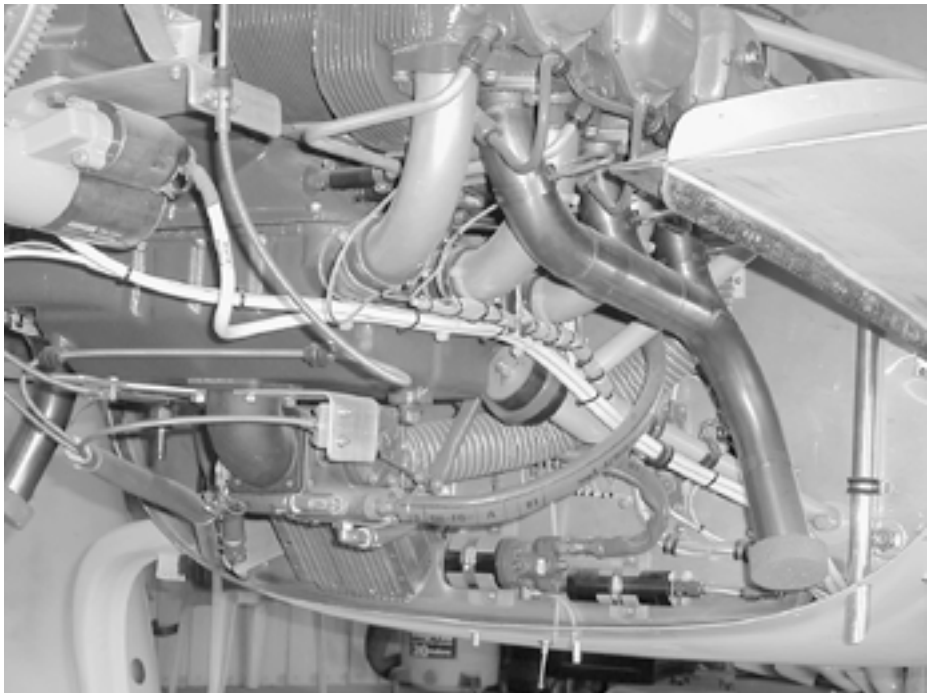

Event & Production News

Continued from previous page

announced) on Friday evening after the air show.

Private Pilot and *Custom Planes* Articles

The Velocity XL-5 is the subject of two excellent articles in the July editions of *Private Pilot* and *Custom Planes* magazines. Marcia "Sparky" Barnes, staff writer and photographer for both magazines, did an outstanding job of aerial photography. The photographs of N271TC in the Marathon Key region of Florida turned out fantastic! Velocity, Inc., extends a big "Thank you" to Sparky and to LeRoy Cook for the marvelous jobs they did on the articles.

Look for an upcoming article on the Velocity XL-5 in *Kit Planes* magazine later this year.

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Electric Buzz...

by Wayne Lanza

Panel Designs...

It has been a while since my last contribution to the views… so OK, where was I? There are a few new ideas and procedures to share that will make things a little easier and help to avoid some problems.

We see a lot of unique issues especially with the changing of many panel designs to include sophisticated engine monitors and EFIS systems. The use of these systems tends to influence much of the wiring in the aircraft and can cause some unexpected problems that will manifest when you think that you are finished with the AC systems. Case in point, an EFIS has been installed to handle PFD, MAP and engine displays. This stuff works really nice but there's something that you don't have a problem with in the hangar or when they sell it to you. Typical engine cranking will easily pull the battery voltage down below 10 volts – at which point the EFIS will loose it marbles and reboot. Meanwhile you are sitting there for the next 30 seconds wondering if you have oil pressure… Not all systems take 30 seconds but this is a consideration, none-the-less. One fix for this problem is to add a secondary battery and some sort of management system for charging and emergency power. You DO NOT need to have a full sized secondary battery! A small 7-10 Amp Gel cell will suffice for most aircraft and will only add about 7 pounds of weight. I manufacture a device called the Power Guard that takes care of battery management and secondary power. With it installed in my airplane I figure that it will run a Com, Xponder, 2 of my 3 EFIS systems and the electronic ignition for about 2 hours – that's with only a 7 Amp Gel Cel!! Here I have fixed the starting problem and also have a backup in the event of a complete airborne power failure. Please consider some sort of secondary power if you use an EFIS or full electronic engine monitor.

A quick note regarding engine monitors. When installing systems like the JPI EDM700/800, EDM900/950 or the Electronics International Engine analyzer, remember that they supply pre-built instrumentation wiring that is cut to length for a conventional aircraft. You are in for a shock if you don't tell them that you are installing the equipment in a canard/pusher. Velocity has a great deal with JPI, you will get the proper cables for your airplane for about the same money as the standard kit. An extended thermocouple bundle can run $20+ per foot!!

Regarding wiring, it has been strongly recommended by the radio shops that we stop mounting the transponder antennas out in the strake tips and that the cable length be kept to 10 feet or less. They also want RG400 to be used with the transponders in lieu of RG58. This is especially true for the AT SL70 and the Garmin 330. We suggest that you run the transponder cable down the center keel and mount the antenna in the floor between the keel and gear bulkheads, 10 feet will just make it.

RG400 might require some special tools to work with, consider having this cable pre built for you by a local avionics shop especially if the terminators are TNC and/or have 90 degree ends (expensive). Some of the GPS antennas can be a bit critical, you might want to have them made up too. Remember that you've got a bunch of expensive stuff in your panel, that little piece of wire ain't pretty but it's still very important.

EFIS systems – what to say? Around here we still aren't 100% sure. After all of the claims, promises, and flight testing, all of them still have some issues. Don't buy anything until you are ready to start on the panel and don't start on the panel until you are ready for it. It can easily be the most expensive part of the AC and, all too often, is loaded full of a bunch of flashy stuff that is not needed or properly utilized. At the rate things are going, expect to see a complete generation change in equipment in the next 18-24 months. It will be better, cheaper and matured.

Regarding conventional instruments keep this in mind – you only get what you pay for! There is one rule of thumb, if it's imported don't buy it! You will save a good bit of money buying this junk and will be stuck with it. I am being kind with my comments – we have a box of junk INOP's from customer's airplanes…

If you are building a fairly basic airplane, want to save money and install new avionics, then I suggest that you consider the MicroAir Com and Transponder. Call or email me for information.

When you go to order your autopilot, consider the TruTrak systems. Always try to match the autopilot to your navigation systems (Nav/GPS/Moving Map). There are typically some signal interface issues that need to be mentioned.

See you in Oshkosh at the Velocity booth with my airplane N81VA. Fly Safe.
WLanza@BellSouth.net

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My Story, Continued...

by Scott Swing

Within 5 minutes off the airport, I cut cross-country dipping down at times for what seemed like forever to stay under the overcast. I monitored the Unicom frequency for traffic but did not call since I thought no one would be dumb enough to fly in this weather. As soon as I saw the runway, I lined up and landed right away. I got out of the plane and went into the FBO and the guy at the counter asked where I came from. I told him that I just landed and he said, "How did you do that, it took that King Air out there 4 tries to get in here." I told him that I was below it and did not have to shoot an approach. Needless to say he gave me a dirty look. Obviously, I should not have attempted such a thing and it was one of those get home ASAP things that drove me to bad judgment. At this point in my flying, I had less than 200 hours flying time. I flew my Q2 and later Q200 for over 700 hours before selling it to finance my share in the Velocity. During that time, I test flew many Q2 and Q200s over the years and, fortunately, had only one that was worth mentioning. "Professional builders" built the plane, but I told the owner that if you want me too test fly it, you have to come to Dayton. They brought the plane to Dayton on a trailer and put it together at my hangar. This was my first and last Q2 tested that had a turbo charged Revmaster with a Maloof constant speed propeller. I knew very little about this combination, but how hard could it be? On the first take off, at about 300 ft, the engine was overreving so bad; I had to pull the power way back to keep from blowing the engine up. With this amount of power I was just barely able to keep the airplane in the air. I made an uneventful landing and taxied in to access the situation. Turns out the owners forgot to adjust the minimum pitch stop, which had allowed the engine to rev right on up past red line. So, they adjusted the stop and ask me if I would fly it again. Being the young invincible test pilot I said "sure". This time the acceleration was tremendous and I thought to my self, what an improvement, until the engine quit at about 300 ft with not nearly enough runway to land on in front of me. I pulled the power back and the engine came to life again. I tried to increase power again and the engine quit. At this point, I was no better off than I was on the first flight and could just barely keep the plane flying. I mention my situation to the tower and they gave me any runway I needed. I ended up on the same runway but again I wondered what the problem was. Turns out the builder had used a series of check valves in the fuel system and they were either not working properly or plumbed incorrectly. We removed the fuel line from the rev flow carburetor and got no fuel to flow out of it. It had to suck the fuel into the carb to get the engine to run. I told the owners that it flew fine and that they needed to fix the airplane's fuel system and fly it themselves the next time.

Besides test flying these Q2 and Q200s, I also used to pick up and deliver airplanes for a dealer friend of ours. I got to fly several different aircraft including a Piper Archer, 180, Clipper, Bonanza, Cessna 150 tail dragger, 152, 182, 172, Mooney 231, 201, Citabria, Tri gear Waco, Monocoupe, Eurcoupe, etc. I also was able test fly some other homebuilts and or fly them, Velocity (all models), Lancair 290, Fastglas (one of a kind), Quickie, Q2, Q200, TriQ, Dragonfly, Glasair II and III, Skybolt, etc. If I had to pick a favorite one for playing around it would have to be the Q2. It is so well balanced that it was a joy to fly, but not all that stable. For cross-country it would have to be the Velocity because of its looks, visibility, stability and comfort. The easiest to land would have to be the Bonanza. Hardest to land would have to be the Q2. It is a tail dragger and it lands fairly fast.

Of all the Velocitys that I have flown, I can honestly say that I have had more problems flying airplanes that have flown into our shop than those that I have test flown. It seems that some of you guys will fly your aircraft even though something is wrong with it. One that I flew had the elevators almost lock up after take off under load because of a paint job and lack of clearance. The builder had no clue something was wrong with the airplane. It also was flying with the ball out of the center. After

Continued on next page

My Story

Continued from previous page

we fixed those things, he couldn't believe it. Another never adjusted his trim spring position and had to hold a lot of backpressure on landing when he was carrying a passenger, making landings difficult. Another had high pitch buck speeds but didn't think anything about it or he assumed that our published minimum speeds were optimistic. Well, his canard chord was too long and had never been trimmed to the correct chord length. The trailing edge of the canard should line up with the center of the torque tube when the elevator is neutral. He cut it off to the correct size and went from 78 to 62. I could go on and on and maybe I will in another newsletter. We can all learn from others' mistakes, but, in any case, if it doesn't feel right, let us know and we can help you fix it. I have seen a lot of things over the years and your situation has most likely been dealt with before. I have flown some that I couldn't believe had flown in. Some were very difficult to control normally from lack of control movement and or lack of correct rigging. I guess I should get back to the story....

Just before our purchase of the company, my father and I were flying the Velocity down to show Danny the gear system to get his approval. On the way down we were flying on an IFR flight plan at 9,000 ft over the mountains. We were in the clouds on instruments when I noticed a slight fog on the windshield. It was in a "V" shape on the bottom. I looked out on the wing and was surprised by what I saw. We had quite a bit of rime ice on the wings. We called to get higher and climbed up to 11,000 ft. We were in the clear and it was neat to see 3/8" of ice on the wings glistening in the sunlight. It shed nicely off the wings, winglets, and strakes but when it departed the canard it shook the whole plane.

More flying next time.

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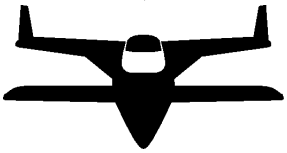
Richard Gwinn's First Flight

Richard Gwinn and his partner Phillip after their Velocity's first flight!

Nov 6, 2004



Factory Open House Workshop Schedule

Saturday November 6, 2004 - Factory's quarterly open house in Sebastian Florida (X26)

9:00am	Coffee and donuts
10:00am	Workshop: TBA
Noon	Lunch
1:00pm	Workshop: Building Q&A
3:00pm	Demo rides in the XL

Please be sure to call the factory and RSVP! Friday arrivals can book a room at the Key West Inn at Captain Hiram's here in Sebastian. Call 800-833-0555 and mention Velocity to get a corporate rate. When you call the factory to RSVP, let us know when you plan on arriving so we can make arrangements for transportation, etc.

Check velocityaircraft.com for up-to-date details

Mel Bina's First Flight

My Standard RG Velocity was test flown on 22 May by Steve Murphree, and I am now enjoying flying the test phase. The "experimental" NACA ducts, located in the top of the engine cowl, are working well here in Tucson. The standard single oil cooler is also cooling well. The engine is an IO360 C1C, rebuilt by Don George.

Thanks to the Velocity team for their support over these many years (11).

Velocity N202VA

A little over a year ago, Velocity decided we needed an additional training/cross country airplane that incorporated all the present SE FG features, including the toe brake option, control yokes and cut down keel. The result is the airplane featured in the photos to the right. I should point out here that when we build an airplane for ourselves, we use up all the rejected parts that either have been returned to us or held in our "don't ship" inventory. This includes radios and other things that were either ordered in error or the customer changed his mind and wanted something different. It was decided from the beginning that we would set this airplane up for IFR and add a few additional features like a moving map/GPS/engine monitor combined into a single unit. For this we used the Digifly system that sells for under $6,000. By using the Apollo com/GPS and an Apollo com/nav, we ended up with two coms, two GPS's and one nav with glide slope in addition to the Apollo transponder and a PS switch panel/stereo intercom. We also installed a TruTrak autopilot, which

Continued on next page

N202VA

Continued from previous page

is a GPS based system that will hold a heading or track a GPS signal from either GPS. For those long cross-country flights, we added a Sony FM/AM/CD player with four stereo jacks.

A Lycoming IO360 200 horse engine was our choice for power and features the ElectroAir electronic ignition in place of one of the mags. We also installed the M-T constant speed propeller. The interior is our standard cloth/vinyl kit package. VG's were installed to decrease the landing speed.

Other than chasing a faulty CHT probe and an inoperative manifold pressure gauge, the flight-testing went without a hitch. For those of you who are building a yoke-based Velocity, we now have an airplane where flight training will be compatible with your airplane.

It would be time wasted to go through the building program as you have heard it all before. Scott Baker, Scott Swing and myself were responsible for most of the building with the rest of the crew here lending a professional hand when needed.

When you're in the area, stop in and take a look at the SE FG, N202VA.

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Air Show and Open House Schedule for 2004

July 27-Aug. 2	EAA Oshkosh	Oshkosh, Wisconsin
Sept. 18-19	EAA Virginia State Fly-In (tentative)	Dinwiddie, Virginia
Oct. 7-10	EAA Copperstate (tentative)	Casa Grande, Arizona
Oct. 21-23	AOPA Expo 2004	Long Beach, California
Oct. 28-31	Light-Sport Aircraft Expo	Sebring, Florida
Nov. 6	Velocity Open House	Sebastian, Florida

The Restoration of N81VA

by Wayne Lanza

To many of you who remember Velocity wa-a-ay back, the airplane that comes to mind is N81VA, aka "Big Orange" or the "Pink Panther" or old "Multi Color". It is probable that thousands of prospective builders had their first demo ride and/or had training in this airplane.

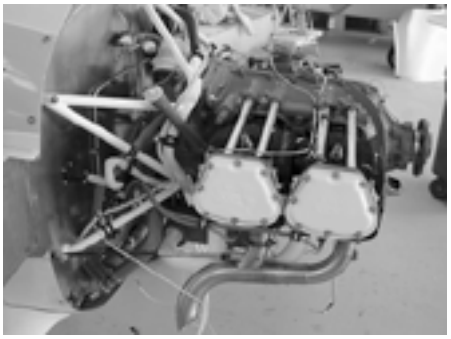
I live about 3.5 miles from the field and had to check out the cool plane that had been buzzing the house, so one day with my 7 year old son and visiting Dad paid and anxious visit. The first time that I saw 81VA was during the Christmas holiday in 1987, my first visit to the factory when I met Dan Maher. It was just a bath tub on wheels then, with the bulkheads and firewall in place and on its gear. We left with a great sense of enthusiasm, but, as non-pilots, it was just one of those guy things to get excited about. Then about a year later I decided to earn my ticket and ended up training at Sebastian Aero - right next door to Velocity. Every once in a while Dan would show up and – in typical Danny style - crack every one up with one of his antics. But one day he asked me if I wanted to go for a ride, what could I say! I got my first ride in the bright orange airplane and haven't come down since...

Over the past 15 years this airplane has been flown by many people and has left a lasting impression. Alas, the factory decided to sell it after so many years of faithful service. My last ride in it was in 1989, until last week. I bought 81VA from Velocity in November 2002 and have finally finished a complete restoration. When I started, the only thing left was the hull and exterior paint. The engine was in great shape but AD notes on the oil pump and wrist pins forced us to do a partial disassembly. The cylinders had under 200 hours since factory new but during the wrist pin replacement we put in new rings. It didn't take long for them to seize while the engine sat for

Instrument Panel

9 months. Other than that I replaced every wire, hydraulic line, oil line, nut, bolt and fitting that I could. All metal parts were powder coated or painted as was the engine prior to reassembly. The landing gear is all new as are the wheels, brake and tires. I made changes in the nose bowl with the new oil cooler arrangement, landing light, secondary electrical system and blower for forced cooling air. The interior is also new, another great job by Jeff Driscoll! I got a little carried away with the instrument panel and am happy with the results. The panel sports three Digifly EFIS displays to include PFD. MAP and engine data. My stack is comprised of all round holes to include two coms and transponder from MicroAir, TruTrak A/P, Davtron chronometer and a stereo audio/intercom system. Besides the above there are controls for the A/P and secondary electrical system, Hobbs, remote ELT display, lighting dimmer, fuel gauge, idiot lights and CD player. All that remains is complete refurbishment and repainting of the exterior but that will have to wait - a new paint job will take two months and about $5,000+ !!!! The 18 months of effort finally paid off on 2-June-04 when I flew it solo for the first time, what a great feeling to fly your own aircraft. I'm sure that this is even more so when you have built the aircraft from the get go! I still need to finesse the landings a little but find it a joy to fly, especially with the fond memories of when I first flew in my bird with Danny back in the late 80's. I

Behind the panel



Engine detail

Front seat

Rear Seat

would like to thank Duane and Scott for their generous assistance as well as Mike Snyder for his mechanical expertise plus Nathan and Brendan for their help and training efforts.

These guys are the best!

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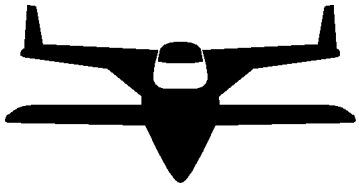

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For Sale

New never used MT Prop. # MTV - 18, 70 " Dia. w/ electric Control unit.

One Set of MATCO "323" Compound Wheel and Brake set for velocity Used 1 time for Taxi on X L. For more info. or Make Offer. Call: Fred Rice (805) 688-9463 X 225 Or fredrice@sunstonewinery.com

For Sale
173 LW Velocity FG

TT A&E 48 hours, MT constant speed electric prop (3 blade), One collins Nav-com, transponder, apollo GPS. Standard panel and engine gauges. Engine is a IO-360 Lycoming, new barrels and all accessories have been overhauled and certified. Also all gyros have been certified. Also panel mounted intercom installed. Aircraft flies great and averages 172 mph cruise at 10,000 ft. Built by an A&P and certified hardware used thru-out. Aircraft at Medford OR in Medford Air's hangar. Delivery available. All factory updates are c/w and fresh condition report will be done at time of sale.
Price $89,500.

Reason for selling - Lost medical.

Call Gerald Robertson
541-618-9393

For Sale:
Standard Velocity RG

Spoiled, pampered and hangared since birth! 565 hours on Hobbs - all "tweaked out" with no problems. Interior, engine, avionics, and airframe are all "10's". IFR certified, new PZL Franklin engine with IVO Inflight electric adjustable pitch prop, HSI, Strikefinder, S-tech auto pilot, PS engineering stereo audio panel, Stereo CD player/radio, Terra radios (2 com, 1 nav, 1 transponder), GPS moving map, JPI engine instrument plus EDM 700 engine monitor, and much more.
Sales Price is US $115,000.
For complete details and lots of photos:
lavoiegraphics.com/velocityrg
e-mail:
Velocity@lavoiegraphics.com
Rick Lavoie 423-253-3728

Factory Information

Velocity Inc.
Factory & Home Office:

200 W Airport Rd
Sebastian FL 32958 USA
Ph: 772-589-1860
Builders Hot Line: 772-589-0309
Fax: 772-589-1893

Builders HOT LINE

Please remember that on weekends and after hours, we do not answer the 772-589-1860 phone number. Our unlisted builders hot line is 772-589-0309 and, if we are here, this is the only number we will answer.

Internet web site:
http://velocityaircraft.com

e-mail addresses:
DuaneS@velocityaircraft.com
ScottS@velocityaircraft.com
BonnieS@velocityaircraft.com
ScottB@velocityaircraft.com
BrendanO@velocityaircraft.com

Builder assistance:
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kitsales@velocityaircraft.com
accounting@velocityaircraft.com
parts@velocityaircraft.com

Velocity Service Center Inc.:
flighttraining@velocityaircraft.com
demos@velocityaircraft.com
maintenance@velocityaircraft.com

Delivery Dates	
Quarter:	**Mailed by:**
1st	January 15th
2nd	April 15th
3rd	July 15th
4th	October 15th

Submission Deadlines	
Quarter:	**Mail Date:**
1st	December 1st
2nd	March 1st
3rd	June 1st
4th	September 1st

Listed below are **options** for submitting your text. Do not type your text in all caps. Please send us **photos** and drawings too!

1) Send it on a 3-1/2" disk, a CD, or a Zip 100. This saves us from re-typing all that text. Don't format your text, just give us raw text, with no underlining, bold, or any other type of formats.

2) **E-Mail** your text file to me: richard@lavoiegraphics.com and please don't type in all caps.

3) If you don't have access to a computer, then we can scan in your **typed** page.

Note: If you need your photos & materials returned, please include a self addressed envelope.

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