

Hangar Talk

The "Lightning" Newsletter

August 2010 - Volume 3, Issue 8



Dave Jalanti's Lightning of the Month

Please submit a photo of your Lightning for future "Lightning of the Month" consideration.

The newsletter goal is **to get the word out** on anything having to do with the Arion Lightning aircraft, and **to give a voice to Lightning builders, flyers, and anyone interested in this amazing airplane**. It is not only a way for the factory to provide Lightning news, but it is your newsletter as well. Its success will depend on you getting involved to spread the word and to help others that are considering a Lightning, plus building, flying, and maintenance tips. So think of this newsletter as an "exchange of information publication". Send your inputs directly to me at: **N1BZRICH@AOL.COM.**

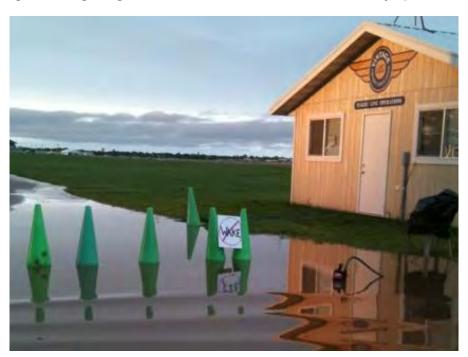
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And now, the rest of the news.

August 2010 – This is the annual Oshkosh issue of the newsletter with lots of Lightning photo coverage, but it also contains part two of Dave Jalanti's article on his ELSA Lightning. I think you will enjoy reading more about Dave's work and seeing photos of his home airport in Kline Kill, New York. Also in this issue are some great messages in the Builders and Flyers section. For example, we have new builders, Paul and Natalie, from Australia, and they sent some great photos of their trip bringing their kit home from Dennis Borchardt's place. And don't think that Philip's Lightning Squadron in Florida hasn't been busy. They now make weekly flights to interesting airports around their state. I suggest that some of you in other states take Philip's lead and form a Lightning Squadron and start getting together to share info and flights around your local area. Great fun! You will enjoy the opportunity and get a chance to show off your beautiful Lightning at other airports in your state.

Oshkosh - July 2010 turned out to be the wettest month in Wisconsin history, but that didn't quell the spirit and enthusiasm of the AquaVenture attendees (see photo below). Actually, once the show started, the weather was pretty nice for the week of AirVenture. But the rain totals leading up to the show start caused major problems for those flying in or driving in to Oshkosh for opening day. The grass parking areas on the airport were unusable for the first days of the show and that caused the airport to be closed to inbound aircraft once the paved parking areas were full. Surrounding airports were full as well so many aircraft inbound to OSH had to divert for a place to park. Campers with motor homes or large trailers had similar problems, with many of them getting stuck up to their axles as they tried to park in the normal camping areas. EAA rented many off-site areas for the heavier campers to use, but overall, the total numbers of campers attending seemed to be almost as many as in past years. As things dried out on the field, show planes (experimentals, vintage, and warbirds) were allowed to come in, but the general aviation aircraft that park in the north 40 were held out a little longer. By day three of the show, things had dried out enough for things to get back to normal, and the field was finally opened to all aircraft.



NO WAKE Zone in Vintage Area at SPLOSHKOSH 2010.

Overall attendance was a little hard to estimate (EAA will have official numbers later) but I do know that the total numbers of showplanes were down somewhat. Perhaps some people chose not to fly in based on the weather reports and field condition. However, the total number of people attending seemed almost as many as recent past years, and the crowds on the flight line, around the vendor booths and display buildings were always there and the vendors all seemed to be doing a brisk business all week long. Every time I had a chance for a quick visit to the Lightning booth and their area in the Light Sport Mall, there always seemed to be a good crowd of people checking out the Lightnings on display, asking questions, and talking airplanes with the Lightning dealers represented. If you missed Oshkosh this year, start planning now for this premier event in 2011. Note: My thanks to Clive for some of the photos below.

AirVenture 2010 Photo Coverage

These first three photos show the Lightning booth and Light Sport Mall area on opening day. Great locations.









Nick (Mr. Lightning),
Al (the big game
hunter), Denis (who
produces the index for
our newsletter), and
Steve (his Lightning
was Australia's sport
aviation top award
winner for 2010) talk
about flying, the
weather, and perhaps
Lightnings.



Greg (Lightning builder and award winner from RI), Clive (our British newsletter correspondent with the fastest Esqual LS – Lightning Stuff – in the UK), and Doug (aka the Hangar Rat), talk about the same things as mentioned above.







From left to right – Pat and Carl (Mrs. & Mr. New Hampshire), Nick, Carl again, Bill (once again the only non display Lightning to fly to Oshkosh), Mark (Mr. Centerfold), Dick (Mr. High Altitude), and Steve (Mr. Minnesota) all enjoying the spirit of Oshkosh.



As mentioned above, once again this year Bill Hubbard was the only non-display Lightning builder to fly his Lightning to Oshkosh. This photo shows Bill's Lightning and camp in the homebuilt camping area. Will someone please join him next year?

On the right is Sandy and Rick of Trick Air, the company that makes all the Lightning fiberglass parts as well as snow skis and other major parts for many general aviation aircraft. Their booth was just behind the Jabiru and Lightning booths. Rick's Lightning had just been inspected and awarded its airworthiness certificate immediately prior to AirVenture. By the time you read this, it may have flown. Congratulations to Rick and Sandy.





Pete, Barb, Nick and Dana – all happy to be back in Wisconsin for Oshkosh 2010.





Dave and Kate, and their ELSA Lightning, were stationed in the Light Sport Mall. Their jet is one of the best flying Lightnings that I have had the privilege of flying. Read more about their NY state dealership below in the next section.







More Light Sport Mall photos.

Yes, Moostang and Dean were awake.









Forums day. Both the Jabiru and Lightning forums were well attended. Below is a photo of the Lightning builders and flyers that attended the Lightning forum.





Nick, Al, Ryan, and Greg, on the left, and Bob and Ryan below, discuss the finer qualities of Wisconsin brats and beer.











Guess which two of the Florida Lightning dealers (Moonshine Aviation) celebrated a birthday while at Oshkosh? Yep, both Olena and Max had birthdays while at AirVenture. On the right, Max gets one of his gifts. They both were smiling all week long.



Katie and Maverick having fun at Oshkosh. Note the experimental label. Phase one testing completed? Also notice the big smiles on both of their faces.

Aaron models his "utility" kilt for Katie. I can't tell if Katie is liking it or totally embarrassed to be seen with a guy wearing a skirt. Did Aaron previously work at a downtown bar called the Tilted Kilt? Someone call the fashion police.



Would you buy a Lightning from this lady? I'm betting you would buy absolutely anything from her.





Walter and Bill selling their I fly 700 GPS. Just like at Sun-N-Fun, every time I walked by their booth they had a big crowd of interested buyers.

Dave Jalanti is showing a potential customer his newly developed pitch trim spring. Dave sells this Lightning mod that helps to trim off the nose-down pitch feel when the flaps are down and your aircraft is at a light weight.





Nick, Tom, Mike, Aaron, and Mark. Kind of looks like Moostang Mike has been at Oshkosh too long. Don't ask, don't tell.

Chris, Mark (Possum), and Dana are looking over the new Rans S-19 that the SYI crew just completed a firewall forward kit for. Possum was heard to say, "Damn, I know I put that Jabiru 3300 in here somewhere."





The Lightning Choir performing at the booth during the builder's get together on Friday. The song they were singing was "Pants on the ground". That's why the bottom of this photo was cut off.

Why is the Buzman smiling? Don't you just love flight suits with those zippers all over the place. In my previous job I wore those "quick release" flight suits, but darn, they never looked like that on me.

I always know it is time to head home when I quit looking at airplanes and start looking at women. Must be time to go home.





Could this photo be a future centerfold picture? And where are the fashion police when you really need them? Finally, why would Gregie, and Maxie wear those silly hats? Don't ask – Don't tell?

To close the Oshkosh photo coverage, here are the display Lightnings.









Part two of Dave Jalanti's article on the first ELSA Lightning LS-1



Buz, you have offered the use of the newsletter as a forum to inform others of our Lightning connection and to promote our business. So here is a little about me and my Lightning connection with a short synopsis of the events leading to the first flight. For those interested in the Experimental Light Sport Aircraft (ELSA) category, I'm including some information on required documents and procedures needed for ELSA. I hope it will help others avoid some of the frustrations endured by me and the ever patient Pete Krotje.



N81DJ, First Lightning ELSA, Ready for Airworthiness Inspection

My connection with Arion evolved from my connection with Jabiru. That connection goes back to 1998 when I started the process of installing a Jabiru 2200 in a Kitfox IV. Pete had already been installing Jabiru engines in Titan Tornadoes and I tapped into his knowledge to answer many questions regarding

the installation of the Jabiru engine in the Kitfox. In September of 2000 my Kitfox was licensed and flying. Not too long after that Pete became the US dealer for Jabiru engines and aircraft. Pete continued to support my project as I learned the proper methods for cooling the Jabiru engine and made upgrades to the engine. After a while, when other



Kitfox builders who planned to use Jabiru engines contacted Pete or his staff, the call would be redirected to me. To this day, he and his staff at Jabiru USA still direct those calls my way. I decided to turn this fun into a small business. Jabiru Power Solutions, LLC was born in 2006. Pete expressed an

interest in my becoming a regional dealer and since the fall of 2007 I have been a Jabiru Dealer covering the New England states, NY, NJ and PA.

Just to show you how serious Dave is about his Jabiru business, I saw the sculpture, photo on the right, near his home in the Hudson valley of New York. Yep, looks like a Jabiru to me.

For quite a while I had considered if I should get involved in Lightning sales, have a sporty product to complement the most practical Jabiru line. When the Light Sport Rule became real, a lot of folks were



asking when the Lightning would become available as a turnkey Light Sport Aircraft. When I learned Pete and Nick were planning on going through the process of making the Lightning LSA compliant and would be offering a turnkey product, I decided to ask Pete if I could join the excitement and be a Lightning dealer for the northeast.

I wanted to learn more about the particulars of the aircraft and eventually be able to offer a "Builder Assist Program", and since I am as my wife Kate would say, a "serial builder", I decided I would like to build my first Lightning but do it as a clone of the SLSA and have the first Lightning certificated as an ELSA ("Experimental Light Sport Aircraft"). The ELSA part of the LSA rule was largely driven by the need to create a category for heavy Ultralights that did not comply with Part 103 and two seat Ultralights touted as Ultralight trainers but not being used as trainers. But, this rule also provides a path for a Light Sport Aircraft that can be built from any ASTM compliant kit to Light Sport rules. It needs to be built as a clone of the factory built SLSA but it does not need to meet the 51% rule that Experimental Amateur Built aircraft are required to meet. After the aircraft is inspected by an FAA Airworthiness Examiner or a DAR and given the pink Special Airworthiness Certificate, much like an EAB aircraft, modifications can be made. Also, the owner can take an FAA approved 16 hour maintenance class that allows him or her the ability to do their own condition inspections. My thought here is that if someone wants to build a Lightning but seeks assistance to a degree that would prevent them from meeting the 51% rule; they can choose to build the ELSA. Then the factory and / or builder assist facility can do as much of the work as the kit owner would like or need as long as the plane at the time of the airworthiness inspection is a clone of the factory SLSA. The rule does allow for some variations such as avionics and other equipment as long as they are offered as factory options for the SLSA. Paint schemes and interior colors may also differ from the factory built SLSA.

As it turned out, Arion Aircraft had a partly built airframe that was supposed to be shipped to a dealer outside the USA. The dealer was not able to complete the deal and this plane had been taking up valuable space in the Arion hanger for the better part of a year. Arion Aircraft could not sell it as a kit in the EAB ("Experimental Amateur Built") category since some of the work had already been completed by the factory but it was a perfect candidate for an ELSA. Changes that had been made to the original Lightning design to meet the Light Sport category were easy to retrofit and the fact that some of the work

had been done was OK since I planned to build an ELSA and it did not need to meet the 51% rule. So, I had a head start on my project and it helped Arion Aircraft to find a home for this aircraft.

The down side of this is that I wanted to build one of these to gain experience; the head start was not helping in that sense. What I ended up doing was spending 5 weeks at Arion Aircraft. In addition to working on my project, I assisted the factory guys in the build of the first LS1 demo plane. It needed to be ready in time for Sun-N-Fun. Overlapping this effort was the beautiful Lightning that Pat and Carl Beatrice were building. They were utilizing the Builder Assist program and I was able to lend a hand here and there and gain additional experience that way. It was a great learning experience working with Nick, Mark, Moostang Mike, Pat and Carl. And, it was during this time I met and got to know Buz. By the end of those weeks, my plane had been painted and the interior components completed but not installed. The last couple of days I was in Shelbyville, my friend Dave Burgess joined me. We loaded the entire plane onto a modified boat trailer and brought it back to my facility at Kline Kill airport (NY1) in Ghent, NY.



N81DJ loaded and ready for the journey to Kline Kill, NY (NY1)



The blue fluffy stuff is cotton insulation made from recycled blue jeans... great padding!

Between other activities like going to Sun-N-Fun and AirVenture, I worked toward the completion of my Lightning project. In November 09, N81DJ was close to completion and I felt it was time to start the registration and certification process. That was when I made a mistake that cost me a lot of time and aggravation. If you are building an ELSA don't assume anything. There have not been many ELSA aircraft built as clones of SLSA and registered. There is still a lot of confusion about the correct paperwork and process. Having gone through this does not make me an expert but I have learned enough to perhaps help others avoid some of the potential issues. I don't want to scare anyone out of going the ELSA route. It's really no more difficult then registering an EAB once you know what forms need to be filled out and by whom. I will list some of the things I learned below followed by a chart of required forms and documents.

Keep this in mind; when the FAA registry office sees an aircraft, they don't see something with wings and an engine that flies. They just see it as documents, primarily as an "N" number, a registration and an airworthiness certificate. Also keep in mind that when an aircraft is being registered and certified as an ELSA, as far as the FAA is concerned, the kit manufacturer is the manufacturer of the completed aircraft,



even if you build it yourself from that kit. Remember this is the FAA; it doesn't need to make sense, just follow the procedures they put in place.

If any of the forms are submitted in error, you will receive a rejection letter with instructions. You can count on at least a 3 week delay from the date they receive the corrected data for each rejection letter you respond to. Because of their internal processes, it is unlikely the document specialist that sent the rejection letter with instructions will look at your re-submitted paperwork. As a result, there is little continuity in the process and it is likely you will get another rejection letter with more instructions.... and it goes on. Don't ask me how I know this.

Fill out forms in black but sign them with blue ink. That is the registries office way of knowing that the signature is the original signature and not a copy. (Color copiers anyone?)

Have the kit manufacturer reserve the "N" number for your aircraft. If you want to choose a number you like, work with the kit manufacturer to get a number you like. If you reserve the number yourself, it is likely you will end up having to write a letter to the FAA registry office relinquishing that number to the kit manufacturer or giving up that "N" number and starting over.

Do not fill out form 8050-88 Affidavit of ownership. For an ELSA, form <u>8050-88A</u> must be used and must be complete by the kit manufacturer.

The kit manufacturer fills out 8130-15 Statement of Compliance. However, in the paragraph pertaining to Certification, the word "aircraft" needs to be struck in two places and the word "kit" put in its place. Also the verbiage "was ground and flight tested successfully, and is in a condition for safe operation." needs to

be struck out since in the case of an ELSA, the manufacturer of the kit is not responsible for testing the finished aircraft.

When the kit manufacturer fills out form 8050-2 Aircraft Bill of Sale, it is considered a complete airplane, not a kit.

When filling out the 8050-1 application for registration, do not register the aircraft as you would experimental amateur built with you as the manufacturer. The manufacturer will be the kit manufacturer, In this example; <u>Arion Aircraft, LLC.</u> The model would be, <u>Lightning - LS1.</u>

After you receive the registration, form 8050-3 from the FAA you can begin the certification process.

You will need to submit a form 8130-6 Application for Airworthiness Certificate. This form can be tricky to fill out. Don't be afraid to contact your airworthiness rep to get assistance.

There are a number of additional forms and documents needed before you can receive an 8130-7, the cherished pink "Special Airworthiness Certificate" and the "Operating Limitations" in accordance with FAR 21-190. Rather than spell out each item, below is a very basic chart that I hope can help be a guide. It's only a general guide and probably does not address everything you would need. As I said much earlier, I have learned a lot but I'm not an expert. Now I'm looking forward to showing off N81DJ at regional events and the first builder assist project from my facility.



Dave and N81DJ, the very first Lightning certified as an ELSA, parked in front of his office and hangar at Kline Kill Airport (NY1) in Ghent, NY. A beautiful

grass strip in the Hudson Valley.

ELSA DOCUMENTATION REQUIRED

Document Source

Document # Document Title FAA Mfg Builder

	To register the aircraft the following is required:			
	Reserve "N" number		X	
8050-88A	Affidavit of Ownership		X	
8130-15	Statement of Compliance		Х	
8050-2	Aircraft Bill of Sale		X	
8050-1	Aircraft Registration Application			Х
	Unless you are a dealer using a dealer certificate, you will receive:			
8050-3	Aircraft Registration	Х		
	To obtain the Special Airworthiness Certificate the following is required:			
8130-6	Application for US Airworthiness Certificate			Х
F2245-09	ASTM Flight Acceptance Tests F2245-09			
	Construction Manual		Х	
	Service Manuals – Airframe & Engine		Х	
	Supplemental Flight Training Syllabus		Х	
	Supplemental Flight Training Record		Х	
	Pilot Operating Handbook		Х	
	100 hr and Condition Inspection Check List		Х	
	Weight & Balance Data and W & B Examples			Х
ASA-SA-1	Aircraft Log Book with a condition inspection entry			Х
ASA-SE-1	Engine Log Book with a condition inspection entry			Х

Optional - Build Log Notes & Pictures			Х
Aircraft Data Plate		Х	
Experimental Placard			Х
Light Sport Placard		Х	
Fuel Type and Qty Placard		Х	
Baggage Capacity Placard		Х	
Preflight Check List		Х	
Passenger Warning Placard (ELSA)			Х
N-Number on Aircraft			Х
Switches / Breakers and Indicators Labeled		Х	
(There may be other items not listed here)			
You will receive after inspection			
Special Airworthiness Certificate (Pink)	Х		
Operating Limitations – ELSA	Х		
	Aircraft Data Plate Experimental Placard Light Sport Placard Fuel Type and Qty Placard Baggage Capacity Placard Preflight Check List Passenger Warning Placard (ELSA) N-Number on Aircraft Switches / Breakers and Indicators Labeled (There may be other items not listed here) You will receive after inspection Special Airworthiness Certificate (Pink)	Aircraft Data Plate Experimental Placard Light Sport Placard Fuel Type and Qty Placard Baggage Capacity Placard Preflight Check List Passenger Warning Placard (ELSA) N-Number on Aircraft Switches / Breakers and Indicators Labeled (There may be other items not listed here) You will receive after inspection Special Airworthiness Certificate (Pink) X	Aircraft Data Plate Experimental Placard Light Sport Placard X Fuel Type and Qty Placard X Baggage Capacity Placard X Preflight Check List Y Passenger Warning Placard (ELSA) N-Number on Aircraft Switches / Breakers and Indicators Labeled X (There may be other items not listed here) You will receive after inspection Special Airworthiness Certificate (Pink) X

I had the pleasure of visiting Dave and Kate Jalanti just a week or so before Oshkosh to fly off the

production acceptance flight test for their ELSA Lightning. I thoroughly enjoyed their hospitality and being able to see their Jabiru and Lightning business. The turf airport that Dave flies out of is Kline Kill (NY1) in Ghent, NY (see photos to the left and below).



Looking north, down the runway.



Kill is a Dutch word meaning stream or creek. The photo on the right is the real Kline Kill that Dave's airport is named after. Below are photos of his hangar.









News from the Factory

Hi Buz,

Here are a couple of photos you can use for the next newsletter. We had a unique opportunity this past week with several Lightning owners in the hangar all at once.

From the left:

Bill Beasley is from Texas. He's our newest kit builder. He's in his first week of builder's assistance. He's scheduled to finish up in August.

George Cannon is from Oklahoma. He's one of our new LS-1 customers and was by the factory to see his LS-1 being built.

Earl Ferguson is from Georgia. Earl was our first commercial customer and first builder assistance client back in 2006.

Ken Wilson is from Alabama. Ken is our latest completed builder and most recent Lightning to fly (as of 29 June).

I thought it was a neat photo opportunity.

Mark



A certain young couple on the Lightning staff at SYI showed me this new baby wear at Oshkosh.

Any guesses as to who or why? Congratulations on your new project!



Current Lightning Dealers

- Arion Lightning, LLC, contact Nick Otterback, Shelbyville, TN, 931-680-1781, www.flylightning.net
- Lightning Southwest, Greg Hobbs, Marana, AZ, 520-405-6868,
- Green Landings Flight Center, Ryan Gross, WV, 304-754-6010, www.greenlandings.com
- Lightning North Central, Tom Hoffman, Neenah, WI, 920-836-2318
- Lightning Northeast Jabiru Power Solutions, LLC, Dave Jalanti, NY, dave@jabirups.com
- Lightning Australia, Dennis Borchardt, Kingston SE, South Australia, 08-8767-2145
- Lightning Brazil Cimaer Ltd, Claudio Nunes, Brazil 24 900-000, 21-2637-3605, 21-9451-9700
- Russia and CIS AVIA-NIANIA, Moscow, Russia, + 7495518-62-75, avianiania@mail.ru
- Lightning Florida, Max Voronin, DeLand Airport, FL, 386-873-9995, ww.moonshineaviation.com

News from the Dealers

From Lightning Northeast

Pat and Carl Beatrice sent these photos of the semi-annual pancake breakfast held on 12 June at Dave Jalanti's Lightning dealership at the Kline Kill Airport in NY. Despite the weather, they had a good turn out





News from Builders and Flyers

The first message in the builders and flyers section came in from Bob Haas who lives in Florida.

Good morning Buz,

I don't think we have met along the line. A pilot you know from Williamsburg, Virginia, inquired about my Lightning, N330BH. His question was to buy or build. I know if I had to do it over I would build. I explained if you had lots of time and an income, building was at least enlightening and kept one out of places one shouldn't be any way. I mentioned that I used to fly there with EAA Chapter 4. I also was assigned to The 509 Fighter Bomber squadron, flying F-84Fs at Langley and was known to fly to Hyde Field near Andrews from Ft. Eustis via a Luscome Silverair. But that was in the 50's

I really enjoy your articles and comments in the Lightning newsletter. As a matter of fact, this last issue was one of the better upbeat enthusiastic issues in recent times. I live on a WWII Gunnery Base, Buckingham Field, near Ft. Myers.

I've been trolling for an instructor who has the proper attitude for adventure with a touch of test pilot combination. Nick Otterback has been coaching me thru various modifications to my original construction. He has been a great help.

Perhaps we will meet at OSH.

Regards, Bob Haas



Below is Bob's jet. Some of you may have seen it at a past Sun-N-Fun.

Next is a message with some neat photos from a new Lightning builder in Australia.

Hi Buz

My wife Natalie and I are now part of the Lightning family! I brought our kit home early this month from Kingston in South Australia to bayside Melbourne Victoria, which was a 7 hour road trip, and thankfully, no problems. I spent a week over in Kingston in May and made a start on the kit with Dennis. This was invaluable and I highly recommend it as a way to get started (thanks again Dennis). I've got myself well set up now in my double garage and I am really enjoying building our new toy.

Nat and I are both commercial pilots and are looking forward to planning some big trips once our machine is finished.

Great job on the newsletter, Buz; I have downloaded the lot and read them all, very informative and also nice to be part of such a passionate group of people. I'll keep you informed of my progress.

Regards Paul and Nat

PS: Any tips for a new builder greatly appreciated



No, it's not a load to the rubbish tip, it's a Lightning!



Cozy work space!

The next several input come from the Florida Lightning Squadron. Philip has been organizing weekly fly-outs to various airports of interest in Florida. They have a great time, both flying their Lightnings and meeting other pilots and telling them about their aircraft. I think we have more states that have enough Lightnings in their area, and could follow Florida's lead. So how about it? Someone from the other states should step up, form your local Lightning Squadron, and start having lots of flying fun.

Good morning Florida Flyers,

Let me take this opportunity to thank the flyers who made it out to our first Florida get-together. It was a beautiful morning with smooth air at 2,500', a nice 75 degrees at altitude and clear visibility for our flight to Venice. I flew to 52FL to meet up with Lynn Nelsen so we could make the flight together. I found that telling other pilots you are circling over the lake in Florida really doesn't narrow down the search area much; I sure hope no one was listening on the radio.

Lynn: "Where are you at Philip?" Philip: "I am circling the lake"

Lynn: "Which lake?"
Philip: "The round lake"
Lynn: "They're all round"
Philip: "The small round lake"

Lynn: "There are 3 small round lakes here" Philip: "How about I pick another lake"

Well we did finally spot each other and get on our way to Venice; you just can't imagine how hard it is to spot a Lightning when you are circling two different lakes.

The flight from 52FL to Venice was smooth as glass and we chatted on 123.45. I am sure that is not a recognized FAA air-to-air channel but there was no traffic and Lynn and I could chat in peace. We were

flying a heading that would take us straight down the active runway. A quick flight over the airport, lose a little altitude, make the turn over the Gulf and a beautiful downwind for 22. If you have never heard you have to slow the Lightning down to land her, then let me be the first to tell you. This thing HATES to land, it wants to spread her wings and fly. Do you know what you get with only 25 degrees of flaps, a short final and a speed of 65 over the fence? Answer: A go around. Speed is everything when you fly a jet, just remember she likes to fly and anything above 50 or 55 knots crossing the fence is going to take you a while to settle in to the runway. Lynn made a picture perfect landing and I put her on the ground the second attempt to make our way to the restaurant.









Lynn, Philip, Max and Bob.

Lynn leads Max in formation.

Max Voronin made the flight from Deland and met up with us at the restaurant. I have to say Max, that is one SEXY panel you put in your jet. I am not sure who designed it, you or Olena, but man that sure was a thing of beauty. The rest of the plane looked great as well and was another wonderful example of why Lightnings are the premier plane of choice.

Bob Hass also joined up with the group in the restaurant but didn't fly his Lightning to the get-together. Don't worry Bob we won't hold that against you, we were just happy you joined us for breakfast. He flew a plane we will leave nameless for now, only because I can't remember what it was, that was parked beside the three jets.

We had a good breakfast on the field, great conversations and spent some time admiring each other's wonderful birds. When you look at a Lightning it is hard to imagine flying anything else, they are just a SLEEK SEXY MACHINE. Put a few of them together on the field and HOLY CRAP that is one AWESOME sight. After breakfast we headed out as a group and departed over the coastline, what a beautiful sight that was, and made the turn to come home. The weather was not quite as nice as the fight there so we cruised back at 1,800' to stay just under the new cloud cover. Since my friend Jim Newman accompanied me on the flight he was able to snap off some shots of the Lightnings in flight. If you have never seen a formation flight of Lightnings then you just don't know what you are missing. They are a thing a beauty and elegance on their own, but put them together and WOW. One would never know how I feel about my jet huh.

We flew together for a while as I did some in-flight testing for EGT, CHT and fuel flow readings at different RPM settings. I found out that Lynn has his jet dialed in and with his prop can turn about 400 RPMs less, run at the same speed as me and burn a lot less gas, thanks Lynn for pointing that out. Everything ran great and I saw about a 5 knot reduction in speed for every 100 RPM. You also see a significant change in fuel flow when running at a slightly lower RPM. Moral to the story, if you are just tooling around seeing the sights a slight drop in the RPMs can save you a buck in the wallet. I am still enjoying my new jet too much to slow her down but I am sure when the newness wears off I will come to my senses, NOT! Somewhere amongst my testing Max decided he had enough of my lolly gagging and dropped the hammer, talk about a show off, and headed for home. It didn't take long and Max was gone like a shot. He called me later to tell me Mother Nature was nice enough to was his plane for him, I am sure Olena appreciates that. With only a small light shower and some cloud cover Max made it home safely. Lynn and I continued our flight to 52FL at 1,800' and had a relatively smooth flight with the occasional bump here and there. Upon arriving at his home field Lynn and I departed ways and I headed for KGIF. The weather held out for me and I made it home safely a good hour before any rain hit. I would say that makes us even Mother Nature.

Thank you Max, Bob and Lynn for a wonderful day of flying. You just can't ask for much more that a good day of flying with a great group of guys. I also wanted to wish Paul "Bear" Bryant a speedy recovery from

his illness. He sent out an e-mail saying he wanted to make it but couldn't make any promises. GET WELL SOON Bear, sorry we missed you.

When I started this I talked about having a monthly get-together for the Florida flyers, but to be honest this is just too much fun for only once a month. Lynn and I have agreed we plan on making this a weekly thing, for us at least, and hope you will join us every Sunday as we pick a new spot and raid the ramp with our jets. With that said I propose next Sunday's flight for the Pyper Kub Cafe in Williston (X60). If anyone has any objections or suggestions please let me know, if not let's plan on meeting on the field at 9:00 a.m. The other option is to meet me over Winter Haven and we can fly in formation to our destination, I will be circling over the lake waiting for you.

Philip N897PR

Great get-together indeed!

More photos from Max - made during one of the Florida Lightning Squadron's weekly flights.





Venice coastline.

On final for runway 22.





More formation, with Philip leading Lynn (photo made from Max's jet). The photo on the right is Kermit Weeks' Fantasy of Flight Museum and airfield. Well worth your time to visit.





Good morning Florida Flyers,

Well Mother Nature was kind enough to bless us with another wonderful day and we took advantage of it. I can sum up the morning weather by saying that when I called for my morning weather briefing and the briefer pulled up the information he responded with the following, "I sure wish I was in Florida today". It was a beautiful sunny Sunday morning just begging for us to take to the skies. Lynn arrived at my field by 7:30 and we were on our way by 7:40. We climbed to 2,500' and enjoyed a beautiful, calm and

sunny morning flight with virtually no clouds in sight. About 10 minutes into our flight I hear a familiar voice on the radio looking for our group. It was my good friend Jim Newman wanting to join up with Lynn and me. Since Jim flies an RV it didn't take him long to catch up. I think he secretly loves the Lightning, shhh, don't tell the RV guys, and he is always welcome to fly with us. We made the trip to Williston (X60) as a flight of three and executed 3 nice landings. I even nailed it on the first try this time, getting a little more comfortable with the slower landing speeds definitely helps.



Williston, Florida

Max and Olena showed up about 9:40, better late than never, Max. They slipped in without anyone seeing or hearing them on approach, they may have some kind of Klingon Cloaking device so be aware. They made their way to the restaurant and met up with us there. The service at the Pyper Kub was very

good and we sat outside on the picnic tables to enjoy the weather. The food was good and the prices were very fair. Since this was my first trip to Williston, and I believe Lynn's too, I was pleased with our visit there and look forward to future visits. As usual we spent a little time on the tarmac admiring the birds and I finally snapped a picture of that fancy new fangled panel Max put in his plane. I think I should actually say Olena since she did



most of the work, although I hear Max is really good at surfing the net.



More Florida fun.



The time had come to head back home and in typical Florida fashion the clouds had started to build. We departed X60 and immediately climbed to 5,500' to get above the clouds. Well 5,500' didn't put us above all of them but it definitely put us above most. We enjoyed a beautiful flight home with breathtaking views until that unfortunate time came to descend for our arrival. Don't you just hate it when you are flying along with smooth air, beautiful views and a cool 75 degrees right up until you descent into that wonderful 95 degrees Florida heat and humidity? Hey Nick, can you install an air conditioner in my Lightning? JK, he will tell me to suck it up and go fly somewhere cool. Jim and I descended down for our arrival into KGIF and Lynn stayed up top for a little longer for his flight back home. Lucky devil got to enjoy the cool weather just a little longer.

With Oshkosh next weekend I am sure some of you will be heading to Wisconsin. I know Max and Olena are headed that way but Lynn and I will be right here headed for another Jet Set destination. I have been trying to switch the flights up with going to the south one week and the north the next. This gives everyone an opportunity for a longer flight every other week. Next Sunday's flight is up for grabs, just shoot me an e-mail with your suggestion and we will book the calendar for those wishing to join. For those headed to Oshkosh, have a safe trip and think of me while you are having all that fun.

Have a great week and I hope to hear from you soon.

Philip N897PR



This last input from Philip and the Florida Lightning Squadron came in on 2 August.

Greetings fellow flyers,

I hope everyone had a wonderful weekend and for those that attended Oshkosh, or should I say

Sloshkosh. I hope you enjoyed a week of aviation fun. From what I heard a submarine booth would have been in better order than an airplane display. I will make it there one day but in the mean time I will continue to terrorize the Florida skies.

This weekend was no exception and Sunday was another perfect opportunity to get aloft. Over the past 6 weeks I have learned you don't have to twist Lynn's arm very far to get him to fly somewhere. In fact, he doesn't even care where you fly, he just wants to



spread his wing and get his jet in the air. This Sunday we chose to go south and re-visit a popular destination, KOBE. With great weather, broken clouds and only the usual afternoon showers to worry about I departed KGIF about 7:45 a.m. and headed for 52FL. We were joined this week by a good friend of ours named Brad Petty. Brad flies a 1966 Aircoupe A2 Alon and departed about 15 minutes ahead of me. Now coming from a 1946 Ercoupe 415C I am used to being the first to leave, this time I was actually the one passing the other aircraft as opposed to being passed. Lynn and I joined up over his field and made our way to KOBE. Our timing was perfect for our arrivals; we passed the Aircoupe just a few miles outside of KOBE so as Lynn and I were taxiing to the restaurant Brad was calling for final. The food was good as usual and we had a few looky loos checking out the birds. I love it when the table beside you calls out to you "Hey, you are the Lightning guys right?", and starts to inquire about the jets. It still amazes me how much attention the birds get sitting on the ramp.

In typical KOBE fashion there were pilots using 3 different runways when we departed. We picked a runway, checked the skies and got the hell out of dodge. The flight back home was just as good as the flight coming down, just had to add a little altitude to keep the cockpit cool. Once we got close to 52FL Lynn peeled off and headed home as I continued on to KGIF.

I sure am looking forward to cooler weather but still can't complain too much about what we have had so far. We have been lucky enough for the rains to hold off and with the climb rate of our jets gaining a little altitude to keep cool really isn't a bad thing. I hope everyone has a wonderful week and with Osh out of the way I hope more will join us for next Sunday's flying adventure.

Philip N897PR

Reader Feedback or Q & A

Once again this month, Paul Catterson writes about his interest in the Lightning and his recent flight with Dick Cleavinger in Colorado. Paul provides some good and interesting insights after his flight that will be helpful for other potential Lightning customers. All of us that have flown the Lightning in the past are convinced that it is one of the best sport aircraft on the market. When you consider the overall performance, economical operation, outstanding looks, design strength, and quick build possibilities, you have a real winner. Try it! I think you will agree with my assessment – the Lightning is a proven winner.

Buz,

I saw our email exchange published in the July issue of the Lightning Newsletter. Figured I would follow-up with the post-flight summary I put on the AOPA forums. Here's the link to the original post (http://forums.aopa.org/showthread.php?t=66044) and what follows is the last entry by me post-flight with Dick.

"After a few email chains with other Lightning Builders, I managed to get in touch with a Boulder builder named Dick Cleavinger. He's got a VFR equipped Lightning EAB with a Dynon FD180, small Garmin radio stack and a Lowrance GPS. A simple, light, but elegant build.

I flew in to meet him in our club Diamond Katana to get a fresh comparison between a certified composite 2-place running 125hp with an IO-240 and the Lightning. The first thing that hit me was how much better the plane looked in person that the photos I'd seen. Clean, smooth lines. It looks fast sitting on the ramp. The next thing that hit me was how much smaller it is than I expected. (Dick calls it a 3/4 scale Lancair - and he's probably right). Surprisingly, though, a guick test fit in the left seat and my 220lb/6'2" frame felt

comfortable. Not sure about a 4 hour flight with a passenger other than the tiny Mrs., but everything was "in its place". Very well laid out and great visibility with the bubble canopy.

Then we went for a ride! The 120hp Jabiru 3300 started right up and was impressive for its HP and weight (under 200lbs) and the six cylinder really seems much smoother than the Lycoming in the Katana. Climb was sprite and we settled into a 2900 RPM cruise at approx 155+mph. (Dick's got a ground adjustable prop set up for cruise). The plane felt small and light (almost LSA-like) but once I took the controls, it felt a bit more substantial. Docile but with control forces that made it feel larger and heavier than it is...which for this low time pilot, seemed like a good thing. The pitch forces were far lighter than the roll forces, but I was expecting that having read some write-ups. Pattern and landing was slow at 65mph and the gear did well under a close to full load and a not-so-perfect landing.

Useful load seems reasonable at (estimated) 585lbs. Subtract some weight for 22 gals of fuel and me, my wife, pup and a 35 lb bag should still be within max gross and CG. The only thing Arion stresses is the baggage limit of 50lbs due to aft CG management. Compared to the RV-9/9A, I would certainly need to be cautious of what I carry.

So, aside from a generally impressive performance, look, fit and cost, the Lightning sort of wins in the Quick build department too. With their Build Assist options, Dick had his plane ready to fly in well under 2 months! And I spoke to another builder who did it all at home in under a year, working "steadily but not where it interrupted his regular life".

So the short list may be getting shorter, and changing order. AirVenture will certainly be interesting. Hoping to slap down a deposit on something before I leave there!"

Feel free to publish as you see fit. I'll look for you at OSH!

-Paul



Dick's jet with the Colorado Rocky mountains in the background.



Lightning Skunk Works

Just in case you think the US military, and more specifically the USAF, does not closely watch all the happenings in general and sport aviation, I offer the following photos. Yes, the USAF, having seen the popularity and economical operation that is available when flying light sport aircraft, now has light sport versions of their front line fighters. Below you can see top secret photos of the latest light sport versions of the newest F-22 Raptor and the F-16 Fighting Falcon, more affectingly known as the Viper.





Upcoming Events

4th Annual Lightning Homecoming and Fly-In, Shelbyville, 2 October 2010.

Most people will arrive on Friday the 1st and plan to depart on Sunday the 3rd.

If you haven't been to one of the previous Lightning homecomings, start planning now to attend this one. You will have an absolutely great time. All of last year's creeper race winners will be back to defend their titles and we will once again plan to have several Lightning competitions that you will want to compete in.

Flight Safety Tips

As can be expected, when a group of pilots get together, the conversation will eventually turn to airplanes and flying. On a recent evening at Oshkosh, a group of us were sitting under the wing of a Cessna 170 that had been flown in by a father and daughter team. The father was a very experienced pilot but the daughter, who had her private pilot ticket and tail wheel endorsement, was rather inexperienced. Basically she wanted to know how to make consistently good landings. It was a long conversation that went well past dark, but to keep this short, let me summarize the things we came up with for her to consider – things her instructor (which was not her Dad) should have instilled early in the training process. So there are things here for instructors as well as student or low experience pilots. We have covered them before, but they are worth covering again.

<u>Proper airspeed control is vital</u> to a smooth touchdown and thus good landing. Hard landings, dropped in, result from too little airspeed, while bounced landings and pilot-induced oscillations are symptoms of too great a landing speed. Being on speed on short final is your best predictor of a smooth, safe touchdown. If you are not on the proper airspeed when over the threshold, go around and try again.

It is the instructor's responsibility is to anticipate the hard landing. It's somewhat natural for student or low experience pilots to make "bounced" or "hard" landings as they learn or gain experience. So the instructor must be ready for that. Keep coaching the student as long as the touchdown is salvageable, tell the student what to do to correct any problem, BUT be ready to

take over the controls if the student is not able to correct the condition in time. That is the hard part – knowing when to take the controls and when to just talk to the student. As the instructor gains experience (instructing experience and experience in a specific airplane) that job becomes easier, but don't let a student bend an airplane.

Glide path control is also vital to a successful landing. If glide path (or airspeed, or both) is not managed so the airplane will land at the desired point where sufficient runway remains to stop, and at a speed where the airplane will not float excessively or have excess energy that cannot be dissipated in time, then a go-around is mandatory. My rule of thumb is if you are not firmly on the ground by the first 1/3 of the runway, go around.

Runway alignment is another crucial part of landing. All airplanes are susceptible to loss of directional control on landing. If you're not aligned with the centerline when you begin to flare, you probably will not be in alignment before you touch down, and that is when the alignment is critical. If you crab into the wind on final approach you need to have the correct crab angle set before you flare, so you can judge when to "kick it out" and then touchdown aligned with the runway (unless you're flying an Ercoupe or an airplane with a crosswind landing gear like the B-52 or some Cessna 195s).

Fly the airplane all the way to the hangar. All too often pilots "give up" once the airplane is on the ground, forgetting the need to continue with positive control inputs. This can be a really big problem in a tail wheel aircraft, but it is good advice and technique for every type of airplane.

<u>Airspeed, glide path, and alignment</u> - that should be what you are concentrating on when on final approach. If all three are not under control by the time you begin your flare, it's time to go around.

Other Items

FAA Finalizes Recurrent Aircraft Registration Rule

In an effort to create a more accurate aircraft registration database, the Federal Aviation Administration (FAA) is requiring re-registration of all civil aircraft over the next three years and renewal every three years after that.

The rule establishes specific expiration dates over a three-year period for all aircraft registered before Oct. 1, 2010, and requires re-registration of those aircraft according to a specific schedule. All aircraft registration certificates issued on or after Oct. 1, 2010 will be good for three years with the expiration date clearly shown.

"These improvements will give us more up-to-date registration data and better information about the state of the aviation industry," said FAA Administrator Randy Babbitt.

Current regulations require owners to report the sale of an aircraft, the scrapping or destruction of an aircraft, or a change in mailing address, but many owners have not complied with those requirements.

Re-registration of all U.S. civil aircraft by Dec. 31, 2013 will enhance the database with current data derived from recent contact with aircraft owners. The new regulations also will ensure that aircraft owners

give the FAA fresh information at least once every three years when they renew their registration. The FAA will cancel the N-numbers of aircraft that are not re-registered or renewed.

The schedule for re-registration and registration expiration is:

Certificate issued (Any year)	Certificate expires	Re-registration required
March	March 31, 2011	Nov. 1, 2010-Jan. 31, 2011
April	June 30, 2011	Feb. 1 - April 30, 2011
May	Sept. 30, 2011	May 1- July 31, 2011
June	Dec. 31, 2011	Aug. 1- Oct. 31, 2011
July	March 31, 2012	Nov. 1, 2011-Jan. 31, 2012
August	June 30, 2012	Feb. 1- April 30, 2012
September	Sept. 30, 2012	May 1- July 31, 2012
October	Dec. 31, 2012	Aug. 1- Oct. 31, 2012
November	March 31, 2013	Nov. 1, 2012-Jan. 31, 2013
December	June 30, 2013	Feb. 1- April 30, 2013
January	Sept. 30, 2013	May 1- July 31, 2013
February	Dec. 31, 2013	Aug. 1- Oct. 31, 2013

Final Thoughts

In closing, let me offer a few wrap-up thoughts and my perspective on this year's AirVenture. As always, any week being around airplanes and airplane people is great. I am always amazed at the overall enthusiasm of all EAA members, but I think that overall, our Lightning group is right near the top as to the spirit of sport aviation and sharing it with others. So the words enthusiasm and aviation spirit are key words that come to mind when remembering Oshkosh 2010. And for me to finally get a chance to meet many of you in person was obviously one of the highlights of the show.

But what about a vendor's perspective on the show? Mark Stauffer, Arion's production manager, and I had a discussion about that very subject and his summary word for the show this year was "hesitant". His point was that even though the Lightning booth had a large and steady stream of people looking, they were hesitant to get out the check book to put down a deposit. Yes, they sold some kits while there, but the economic situation has certainly caused many potential buyers to "wait and see". But by being there, all vendor's get a chance to talk to potential customers and

over the next six months or so, some of them will made the decision to buy. And that is how our Lightning group will continue to grow.

Another word that kind of summarizes the results of the very wet weather leading up to Oshkosh 2010 is ingenuity. (Note – July 2010 was the wettest month ever in Wisconsin history.) The ingenuity that I am talking about is the many ways that EAA and airplane people came up with to cope with the wet conditions and muddy parking and camping areas. One example of this is the unique solution that the Tennessee group came up with to cope with their really wet and messy camping area. Aaron Hoffman was able to "supply" plenty of shipping pallets that were used to provide a floor for their camping area. See photos below.







Mark also mentioned that their flight back to Tennessee was excellent with relatively good weather. I'll close this issue with some beautiful in-flight photos that Mark sent.





Blue Skies,

Buz Rich

<u>N1BZRICH@AOL.COM</u> (Contact me directly for newsletter inputs – I need your help to keep this newsletter both interesting and informative.)