Summer 2013 Issue 3-13

EAA 983

We're back!

It's been a couple of months since the last EAA 983 newsletter, In fact, two (maybe three/four?) meeting have passed without finding the time to report on them. I'd like to mention them here but I am a terrible note taker and I think I missed one or two. Meeting were hosted by experts on Click-Bond and Aviation safety and if you were there you probably learned a lot. If you weren't, then I'd like to fill you in but as I said I take terrible notes.

A studious group of knowledge hungry aviators

Our next meeting is August 10th

Our representative intern going to Oshkosh this year is Patrick Sauer. Congratulations to Patrick.

Note: OSH is over and we hope to hear a report from Patrick in the future. Look for my story about Airventure Academy in this issue!

Program Reminder

August 10
EAA Meeting
Topic: TBD

Sept 21
EAA983 Fly-In

October 4,5,6
Ranger Fly-in
Ranger Airfield (F23)

October 10-12
AOPA Summit
Ft. Worth (finally in our back yard)

Dec Christmas Party TBA
Pecan Plantation Clubhouse

For provocative thought and debate.

The following question was submitted by Mike Busch. Mike writes for several Aviation magazines and run a consulting service for maintaining airplane. I've read a lot of his material and I find him to be one of the brightest and most practical IA in the business. When you get finished reading let me know if the subject is any clearer to you. And the FAA wonders why logbooks aren't perfect?

Hi, Bill:
I have a question that sounds like it might be right up your alley.
It is frequently taught to and widely believed by mechanics and IA's That installation of any STC'd modification part on a certificated Aircraft constitutes a major alteration and requires a Form 337. I was taught this myself, and firmly believed it to be true until it was recently questioned during an online discussion involving a number of experienced IAs.

After a diligent search, I've been quite unsuccessful in my efforts To find anything in writing, either in 14 CFR or FAA orders or Advisory circulars, stating explicitly that installation of an STC'd alteration always requires a Form 337. Everything I've found in writing seems to say that the decision whether to classify an alteration as major or minor rests solely with the installing mechanic, and that the mechanic's sole guidance in this regard is provided by
Part 43 Appendix A. That Appendix nowhere talks about STCs.

Case in point: Installation of Rosen sun visors to replace the OEM visors. Rosen visors are STC'd for installation in a wide variety of aircraft. In some aircraft, the installation is the very epitome of a minor alteration: remove two or three screws holding the OEM visor on, and use those same screws to attach the Rosen sun visors using the identical hole pattern. In other aircraft, the process is a bit more involved, and requires drilling some holes and installing rivnuts in the structure.

Certainly in the former case (and possibly in the latter case), the alteration does not rise to the level of "major alteration" as set forth in Part 43 Appendix A. Certainly if the visors were simply PMA or TSO rather than STC, nobody would consider filing a Form 337 for most of these installations.

Yet many (perhaps most) IA's were taught and believe that a Form 337 Is automatically required because the installation is done pursuant to an STC. The logic is that the STC is an alteration to the original type design, so therefore it MUST be a major alteration.
On the surface this sounds like a persuasive argument, but so far I've not been able to find anything in writing from the FAA that states this as a matter of regulation or policy.

A few longtime IA's insist that the existence of an STC has no bearing on the determination of whether the alteration is major or minor or whether a Form 337 is required or not. I'm starting to think they might just be correct.

How about you IA's out there. What's your opinion?

WHO 'DAT?

In other words, who's that guy/gal you're sitting next to at the EAA meeting?

We sit next to them, laugh with/at them and share stories. Ever wonder what their background is?

I've started a new section of the newsletter called "Who's 'Dat". I am writing bio's of our members and wonder if some of you, who haven't already, could write a little about how you got into aviation?

Here are some questions you might answer. Feel free to add additional information.

1) What age did you get started flying?

2) What was the impetus that got you started?

3)What ratings do you have?

4)What projects have you started, finished/ never finished, purchased?

5)What airplanes have you owned?

Funny stories are appreciated as are pictures. Tell me what you can and I'll make up the rest. Hey, if Time magazine and CNN can do it, it's good enough for me!

Standby to be a STAR!

Tom Woodward
Submit to:
Buhwana@charter.net

This Month we highlight
Toni Anderson.

If I remember this correctly I was 28 or 29.
The interest to fly was always there, because my Dad died flying right before I was born. But, Pete was the only one who ever took me flying. He took me on a discovery flight with an instructor at my local airport.
The instructor was letting me fly from the right seat and asked me what my biggest fear of flying was, to which I replied losing power to the engine.
So, he pulled the power back and told me to notice how the plane was still gliding through the air.
We both started lessons together after that. It was really fun learning at the same time.
A Private pilots license is all I hold.
No projects for me.
Cheroke 180, Tripacer 160.

FLY the BEST - F.8L Falco N89WH

Flying the P-51 "Crazy Horse" was a bucket list experience. Flying Roy LoPresti's SwiftFury was another such experience. Owning and flying Falco N89WH, aka "Madame H," equals either.
TTAF 346/SMOH 346.
Stunning Italian design – beautiful, fast, responsive, based at 0TX1 (Pecan Plantation, TX). Plans built by Willard Hofler with excellent quality construction. IO-320 B1A Lycoming, 8.5 g/hr cruise at 155 knts/hr, aerobatic design loads, GPS, NavCom, Com, autopilot, electric trim, leather interior. No damage history. **Henderson Roy** ifraviator@aol.com $84,000 US 206-399-6980

KIT FOR SALE

Plans # 21556 purchased 1989. Empennage and left wing have been completed, all parts for right wing present. Fuse frame for wing joint also present. Phlogiston wing spar option. Finishing kit and quick-build fuselage option are still available from Van's (according to Van's website). I bought a flying RV-6 after finishing the first wing, so it's time to let the project go. Good workmanship (modesty aside). Asking $3500, reasonable offers considered. Great inexpensive way to get into building.
Pics at https://picasaweb.google.com/N889RV/RV6KitForSale?authkey=Gv1sRgCNC93ezCj7TrkwE#
Located at Nassau Bay airport (0TX0).
jpsewell@windstream.net

Can't afford a whole airplane?

Cessna 172, 180HP
STC, 4600 TT, 100SMOH, 1/4 share $13,900. Call Larry @ 501 802-1876

Airplane Earl (youthe slippery stuff)

Exxon Elite Aircraft Oil.
0tx1 has our own distributor!
Top rated for both wear and corrosion protection. Profits donated to the Dennis N. Polen Educational Foundation
$77.14/case. Dick Keyt
817-279-7590

HOUSE for SALE

5b/5b 3 car garage. Formal dining, and living. Two family rooms and separate office. 3000sq/ft hangar with elect/air and full bath. Best view in PP Airpark. 817-579-1850 for pixs: buhwana@charter.net

RV8 for Sale

YellowBird I

1346TT 846 SMOH, Lyc IO-360, 200hp, Hartzell CS prop, VFR panel, BK Skymap III color GPS, Garmin 496, EI sixpax, Trutrak AP, AH, Apollo SL40 com, KT76A, Poplawski paint job
$82,900
Don 214-729-6187
214dc@charter.net

Oshkosh Is The Proving Ground For Many New Aviation Innovations

Some Survive, Some Die. What Will Become Of The Algie 1?

By Tom Woodward

Many of us trek to Oshkosh each year to investigate what new products and equipment we can throw endless amounts of money at to incorporate into our newest project. Some of us go for the friendship, air shows, camping and a plethora of other reasons often difficult to explain to non-aviators. But a select few come North to show their new product or even more rare, the airplane of their own design, of which they hope to produce for the market with the highly unlikely chance of, if not only recouping their investment but, striking it rich.

Several years ago I happened to walk into a booth, mainly because the banner flying outside had WOODWARD AEROSPACE on it, which was my namesake, but no relation. What I saw was a high performance, pressurized, retractable, carbon fiber airplane like a few others I have noticed over the 30 plus years that I have been attending Oshkosh. The exception is the power plant, which in this case was a Corvette LS1/1/7 lineage.

The fit and finish of this airplane was only surpassed by the anticipate performance numbers. I found out this was the Algie LP-1 (standing for Light Plane 1) and it was being marketed by Woodward Aerospace and being built and designed by David Algie a former 23 year Indy Car fabrication and design veteran. Two years later and still no airplane but the reason why may not be the normal lack of funding that we often see (OK funding probably does play a part in it). The Woodward Aerospace web page claims an empty weight of 1080 lbs with a useful load of 822 lbs. and a max speed of 385 Mph on 14.5 gallons per hour while maintaining sea level pressure at FL290! These are truly lofty goals, but have we not learned anything from Bede about such claims?

Well, we may never find out, because at this time Woodward Aerospace and David Algie, like many designer/marketers have parted ways, mainly because of the lawsuit Woodward has filed to recoup what he claims is money owed to him. Not all agree that what Woodward wants is money, but rather to take over the project as it nears its first flight. Backer and **Yahoo! group members** are coming to David's defense with hopes that the legal system and the associated cost won't sink him before he completes his project and makes the first flight.

Electroair Announces New Electronic Ignition Systems And Developments

Six-Cylinder Electronic Ignition System Is Moving Rapidly Towards STC Approval

By Tom Woodward

Electroair produces a certified electronic ignition system for 4 cylinder engines and now is close to STC approval for 6 cylinder engines. Differing from other electronic ignitions systems which produce a very high voltage spark over a short time span, Electroair produces a spark of 70,000 volts thru 20 degrees of crankshaft rotation providing a more even, thorough burning of the fuel. One benefit of a longer fuel burn is the temperatures are retained longer to assist in the cleaning and extended life of the valves.

"We received approval for our electronic ignition system to be installed on the Aviat Husky" says Michael Kobylik, President of Electroair. In addition a single STC covers many aircraft equipped with certain engine configurations. Check with Electroair to see if your airplane qualifies.

Electroair claims that their ignition system will give pilots:

- More horse power
- smoother operation
- improved high altitude performance
- reduced maintenance
- longer spark plug life and less fouling
- 10-15% gain in fuel efficiency

Electroair started business in 1992 and currently has over 3000 systems installed. A typical installation is to replace one magneto with an Electroair Electronic unit. 85% of the benefits are achieved with one unit. Those who fly at high altitudes, above 17,000 feet utilizing pressurized magnetos, could gain an additional 15% with the installation of the second unit.

Electroair is also sponsoring Spencer Suderman and his world record attempt at the greatest number of inverted flat spins utilizing his Pitts Special. The Electroair ignition will help him achieve the necessary altitude to achieve this record.

STC approval of the electronic ignition for the 6 cylinder engine is moving along at a brisk pace. Testing is now complete on the O/IO-470 and the IO-520. The testing shows a typical fuel savings of between 1.5 to 2.0 gph.

SMA Offers An Already Proven Diesel Producing 230 HP

Introduces A 6 Cylinder 330-400 HP Project In The Test Stage

By Tom Woodward

SMA, a French company and subsidiary of Snecma, part of the Safran group, is teaming with Cessna for the launch of the Cessna 182 JT-A. The SF305-230E is an engine designed for the aviation industry and not a rehashed engine designed from the auto industry. Weighing in at 455, SMA claims that the net difference in weight with the Lycoming is only an additional 15 pounds. The SF305-230E produces 230 HP with a TBO of 2400 hours which will help to offset the $70,000 cost. Of course this price will be absorbed into the initial price of the of the C182 as well as OAP, the Ukrainian aircraft manufacturer. Since SMA is marketing, at least initially to the OEM market, you can't buy one to put into your experimental. Unlike many diesel that are water-cooled, the SMA is air and oil cooled and turbocharged which allows it to maintain takeoff power up to 10,000 feet with a certified ceiling of 20,000. In fact in test the engine has been run at 115% of power with no ill effects.

The electronic control unit (ECU) optimizes engine start, maintains idle speeds, controls all power settings and automatically provides maximum power according to ambient conditions (pressure, temperatures).

SMA's latest project, in the testing phase is the six cylinder, SR-460 which will provide between 330-400 HP, utilizing two turbo charger. The length of the engine is reduced by moving the fuel pumps from the rear of the engine to the upper part of the engine above the camshaft. Though the engine displayed at AirVenture was a working prototype, weight is expected to be in the high 500-low 600 lbs.

To service and support, SMA in an agreement with Lycoming, have set up training centers in both France and Grand Prairie, Texas. Through a cooperative effort with Tarrant Community College in Texas, both hands on training and online training are provided to certify the A&P to work on Diesels engines. Publications are supported by ATP.

SMA moves slowly and with caution in the evolution of their engines. They seem uninterested in covering the mass market, if there is one that exists, by taking on only a few new projects and customers each year and even though many think that Diesel engines are the way of the future, the cost difference is a big stumbling block that SMA chooses to overcome slowly.

AirVenture Academy: Learning At The Highest Level

Old Pilots Need Not Apply

By Tom Woodward

Going unnoticed by the majority of AirVenture visitors is the AirVenture Air Academy. The Air Academy lodge is located on the North side of the Pioneer runway, just North of the Pioneer hangars. The lodge houses campers from age 12 through 19 during the weeks between June 1 through August 18th, ho have an interest in the aviation sciences and come to Oshkosh for one week to learn.

The Young Eagle camp, for ages 12-13, is designed as an introduction to the wonderful world of aviation. This program uses small group activities and close counselor relationships to present the basics of flight in a "science camp" format that is a unique combination of fun and discovery.

Eaa Basic Air Academy, for ages 14-15, is the next exciting step through the world of aviation. "Hands on" activities are introduced through classroom and media presentations, specializing in laboratory activities and aviation related demonstrations.

Advanced Air Academy, for ages 16-18 totally immerses the student in the world of flight. "In-the-air and "on-the-ground" hands-on activities are empathized but the highlight is the ground instruction and introductory recreation flight in both a fixed wing and a helicopter.

The Advanced Air Academy/Sportair is targeted towards mature students with a main emphasis on aircraft construction, using composite, wood, metal and fabric techniques. In addition ground instruction and a introductory flight are highlighted as well as a day spend on the AirVenture grounds.

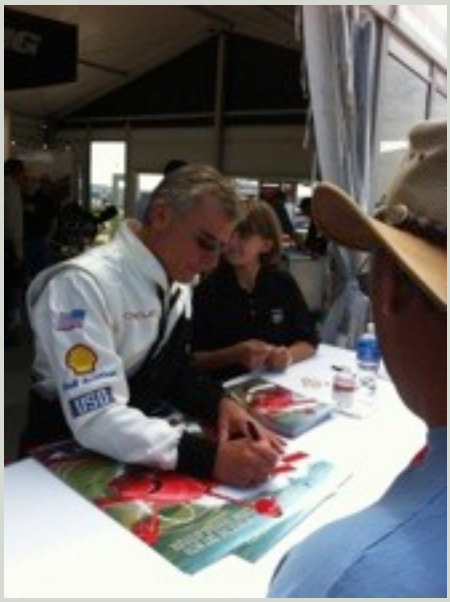
Our tour was conducted by Daniel Atkins, a 19 year old from Greensboro, NC who, without a doubt, knows his direction in life. Mature beyond his years, Daniel was a former student and now is a paid intern counseling other campers. He hopes to someday fly for a corporation and is builds well on his way, having achieved his PPL and currently working on his IFR and Commercial licenses. Our tour guide walked us through the Lodge, of rough beamed construction, where students sleep, eat and play, though that time is limited. Inside the Lodge is a Distance Learning center, allowing distinguished guest lecturers to talk with students over a Skype-like experience. Most hands-on activities are done in the EAA Museum.

In addition and just as important are the Team building activities like the High Rope Challenge which camaraderie and bonding.

Many have contributed to the Center with Mr. James Ray being the major benefactor. Scott Cameron is the Camp Director and keeps the place humming. Costs for one week can exceed $1000 but scholarships are available through EAA and several benefactors such as Cliff Robertson, Harrison Ford and Clay Lacy just to name a few of the heavy hitters.

GUESS WHO?
(SUBMITTER NOT ELIGIBLE)

Random Pictures from Airventure



Cumulus Aviation

817-579-1850 h 817-279-3080 c
http://cumulusaviation.wix.com/cumulus-aviation

Cumulus Aviation began business to fill a void in both competent and efficient Tailwheel flight training and Bi-annual flight reviews. Operating out of Pecan Plantation Airpark we can do training in your airplane at your airport or here at 0TX1.

TAILWHEEL TRAINING IS GIVEN IN OUR CITABRIA 7ECA

We Offer:

*Tailwheel transitions
In accordance with FAR 61.31(i)

Consisting of a minimum of 2 hours ground and 5 hours flight, although 20-60 landings is a more accurate gauge of competence.

*Bi-Annual Flight reviews

In your airplane or ours.
Bi-annuals are geared to flight review and learning, NOT TESTING.

We can combine the bi-annual and the TW course.

Tom Woodward, CEO of Cumulus Aviation and Primary flight Instructor is closing in on 18000 hours of flight time in aircraft from Gliders to B777s. He has flown over 150 different GA airplanes, gliders, seaplanes and helicopters and has owned numerous tailwheel aircraft, both certified and experimental including a Stinson 108-2, Soneri, and several Decathlons, including one which still holds the world record for consecutive inside loops at 2368.

RATES:	Citabria rental	Dual Only	$145/hour wet
	Instruction	Your airplane	$50/hour
	Bi-annual Flight review	Flat fee	$200