



EAA Chapter 100

February 2014 Newsletter

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Chapter Website / Forum:

<http://www.100.eaachapter.org>
<http://groups.yahoo.com/group/eaa100/>

EAA Chapter 100 is a nonprofit association involved in the promotion of aviation through adult and youth education, hands-on training, building and maintenance of experimental aircraft, and through community awareness programs.

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Reader submissions and comments are strongly encouraged.

February Hangar Flying Event

This month's meeting will be hosted by Gordy Westphal and Stan Blankenship

The meeting will be held in Gordy's hangar at the Dodge Center airport this Friday, February 14th, at 7:30 PM.

We will plan to collect member profile forms this month since the January meeting was cancelled due to weather. So go to the following link to download a Chapter Member profile form, fill it out, and bring it along. We are trying to get member's views about the direction the chapter should go in 2014. We tried a number of new things in 2013 and would like your feedback. Let us know what you thought and bring your ideas for 2014.

<http://www.eaa100.44rf.com/membership/forms/membership%20profile%20form.pdf>

2014 Chapter Dues

2014 chapter dues (\$10.00) are now being collected.

2014 Meeting Locations Needed

2014 is here and we are in need of meeting locations and hosts. Please sign up. If you don't have a location to host the meeting, the terminal building at Dodge Center is always available.

2014 Chapter Banquet

We will once again be teaming up with the SE MN Flying Club for this year's banquet. The date will be Saturday, March 8th and it will be held at Willow Creek Golf Course Club House.

Agenda:

5:30 PM – Social Hour
6:30 PM – Dinner
7:30 PM – Speaker
8:30 – 10:00 PM – Socializing (Cash Bar)

Menu:

Slow-roasted top sirloin of beef, chicken marsala, Caesar salad, broccoli with lemon butter, herb roasted potatoes, dinner rolls and coffee. Daube's cake.

Presentation:

- Speaker is Rodney Botts. His experience over the years has contributed to the current flight training capabilities of American Airlines, Federal Express, Northwest Airlines, the USAF and others. His specialized skill is simulator support management, including device acceptance, installation, certification, operational integration and design.
- Presentation – "Sailor Girl Shir!" Summer of 1944. This presentation was especially chosen to appeal to all banquet attendees, including the "significant others" who attend and are not particularly interested in the techy/nerdy side of aviation. Per Rodney: "Join me in a World War II adventure

into the life and times of Bill "Cookie" Cook, P-51 pilot during the summer of 1944. We will explore , my search for my Uncles life in England, understand the people and environment there during the summer of 1944. Join me on a journey of discovery and explore the coming of the age of airpower and the decisive role it played in ending the war to end all Wars!!"

Cost: \$25 per person

RSVP: Please let us know if you are interested in attending, along with the number of attendees.

EAA Chapter members, respond to Tom Hall (Secretary@EAA100.org).

Last day to RSVP is Saturday, March 1 .

FAA streamlines AOA approval

Policy designed to make life-saving instrument more affordable

February 6, 2014 – AOPA Online

By Jim Moore

The FAA announced on Feb. 5 a [new policy](#) that could significantly reduce the cost of installing an angle of attack indicator in certificated aircraft. These devices have been identified by the General Aviation Joint Steering Committee (on which the AOPA Foundation's Air Safety Institute serves as co-chair) as the [most effective system available](#) for reducing loss-of-control accidents, and low-cost models have been installed by experimental aircraft operators for many years. The cost of obtaining required approvals to certify the devices for certificated aircraft has remained a barrier to widespread use, and the new policy will allow manufacturers to secure FAA approval through a letter of authorization, rather than the more complicated (and expensive) process of obtaining a technical standard order (TSO) or parts manufacturer authorization (PMA). Manufacturers will now be allowed to submit documentation that a given device complies with an [ASTM International](#) standard that was developed by industry.

In the absence of an angle of attack indicator, pilots are taught to avoid stalls primarily by maintaining sufficient airspeed, though airspeed and angle of attack are not actually related: an airplane can stall at any airspeed, any attitude, and any power setting. An analysis of accident data from 2001 to 2010 by a steering

committee working group (also led by AOPA) found 40 percent of fatal accidents during that period had loss of control as a cause.

"We have eliminated major barriers so pilots can add another valuable cockpit aid for safety," said FAA Administrator Michael Huerta in a press release. "These indicators provide precise information to the pilot, and could help many avoid needless accidents."

A standards-based approval process could have a significant positive effect on safety, and may be applied to other add-on systems and technologies as well, the FAA noted. Maximizing installations and realizing the full potential of angle of attack indicators to save lives will depend on how the approval process is implemented, and the FAA noted in its press release that the Aircraft Certification Office in Chicago will process all applications to ensure a consistent interpretation of the new policy.

There remain some limits on retrofitting certificated aircraft with angle of attack indicator systems under the new policy: They must be installed as stand-alone systems, independent of other instruments and controls. While there is a provision for connecting to the aircraft's electrical power system, the FAA will require that the devices be placarded "not for use as a primary instrument for flight," and will not allow installations that allow the device to transmit data to, or receive it from, other aircraft instruments and controls. The new policy also prohibits installation of the angle of attack indicator in a place that will obstruct the pilot's view or cause distraction. In many installations, the instrument is positioned prominently on the glareshield, a position that calls attention to the critical information it delivers and maximizes its utility. It remains to be seen if the policy will be interpreted to allow such installations.

Angle of attack indicators offer benefits beyond stall avoidance: They can also help pilots fly more efficiently by clearly indicating that wings are operating at maximum efficiency during the various phases of a flight. Like stall speed, other key airspeeds can vary with changes in weight, air temperature, and air density, while the angle of attack associated with a given phase, such as V_X , V_Y , or V_A , is consistent. A direct indication of angle of attack can also increase cruise efficiency, indicating the aerodynamic performance of the wing and allowing pilots to adjust for minimum drag.

A Recent Trip

-Submitted by Dick Fechter

Thursday January 23rd Phil Conway called me and asked if I wanted to accompany him in his Glasair to Santa Barbara and Santa Maria and get out of the cold – stupid question. His Glasair has three G3X's, GX autopilot and XM weather; so very well equipped for such trips. Reference flightaware.com and N11HC. We left late the next day and landed in Salina, KS just at sunset after about 2.3 hours in the air. Saturday was 3 hours to Roswell, NM for lunch and then 2.6 for an evening in Tucson, AZ. Sunday was a two hop to Santa Barbara and Monday a quick flight to Santa Maria. Tuesday was a long non-stop flight (3.5 hours) back to Tucson where we spent another night. Wednesday was two legs to Ada, OK where we were to get a tour of Tornado Alley's factory (turbo-normalizes).

Thursday morning FSS said to expect ice throughout Iowa so we considered going to Florida or Texas instead – but it was bad that way too. About noon it looked like we could maybe make it as far as northern Kansas (Topeka) so we started in that direction. As we got closer it looked like we could get a little closer and changed our flight plan to St. Joe, MO. On the way to St. Joe it started to look like we could make it to Des Moines so we changed our flight plan again and landed in Des Moines. We had an early dinner there while the weather cleared for us all the way to Rochester. The only unknown was the runway condition at Rochester but by the time we got to RST, the runway was fine for the Glasair.

All flights were filed for IFR but we probably didn't have more than about 5 minutes in IMC the entire trip. Chart below shows some of the performance figures. All sorties were flown LOP.

| Sortie | Altitude (MSL) | % Power | Fuel Flow (GPH) | TAS (Knots) |
|---------|----------------|---------|-----------------|-------------|
| RST-SLN | 8000 | 68% | 8.3 | 145 |
| SLN-ROW | 8000 | 68% | 8.3 | 146 |
| ROW-TUS | 10000 to 11000 | 64% | 7.7 | 141 |
| TUS-APV | 8000 | 68% | 8.2 | 143 |
| APV-SBA | 10000 | 66% | 8.0 | 142 |
| SMX-TUS | 11000 | 63% | 7.5 | 137 |
| TUS-E11 | 11000 | 63% | 7.6 | 139 |
| E11-ADH | 7000 | 69% | 8.3 | 145 |
| DSM-RST | 7000 | 64% | 7.7 | 135 |

It turns out that Tornado Alley is the same company as GAMI and we mentioned that the #2 cylinder always went LOP 10-20 degrees before the others. They studied our data then changed out two injectors and rode with me to check out the new data. They also loaned us a pickup for overnight and gave us a great tour of their facilities.

Yesterday Phil and I flew the Glasair to Hibbing, MN to talk to Midwest Aircraft Refinishing about painting the Glasair. We were sold on the people, their work and facilities (and distance from RST). They keep about 5 airplanes going through different stages all the time and the Glasair will have to wait until about April before it can get on the schedule. I think that speaks highly of them too.

Right after we got back from Ada, OK, AvWeb had the below article about GAMI injectors.

<http://www.avweb.com/news/features/GAMIinjectors-18-Years-of-Precision-Fuel-Injection221365-1.html>

406 ELT's Mandatory By 2022?

By [Russ Niles](#) | February 9, 2014



The White House, with the apparent blessing of the FAA, is urging the FCC to make 406 ELT equipage in aircraft mandatory by 2022. In comments filed with the FCC on Feb. 5 ([PDF](#)), the National Telecommunications and Information Administration (NTIA) recommended the FCC get moving on its plan to eliminate 121.5 MHz-only ELTs but to give aircraft owners up to eight years to make the transition. The NTIA, which represents the executive branch's view on telecommunications policy, said it consulted with the FAA and the Search and Rescue Satellite Aided Tracking program (SARSAT) in

making the recommendation. The filing of the document may mean the FCC is getting ready to implement a final rule on the disposition of 121.5 MHz ELTs, a process it started in 2010 with a Notice of Proposed Rulemaking that caught most aviation organizations, including the FAA, by surprise.

That NPRM called for the immediate outlawing of 121.5-only ELTs and would have grounded tens of thousands of aircraft. The FAA recommended the FCC take a breath and aviation organizations added their concerns. The FCC eventually stayed the rule but kept it on the table. At the time, AOPA asked that the NPRM be scrapped because of the cost to aircraft owners (estimated then at \$300 million) but NTIA says the benefit to safety and more efficient searches afforded by the use of 406 MHz ELTs outweighs those costs and the costs are more likely in the \$150 million range, or less than \$1,000 per airplane. The FCC's third attempt at the NPRM was issued a year ago and comments closed last March. Among the other recommendations is that the FCC stop certifying new 121.5-only ELTs (something the FAA has already done), that the sale of 121.5 ELTs be stopped within a year of the rule being enacted and that the import of 121.5-only ELTs be stopped immediately.

Good Links

Want to go for a ride in a British Typhoon?

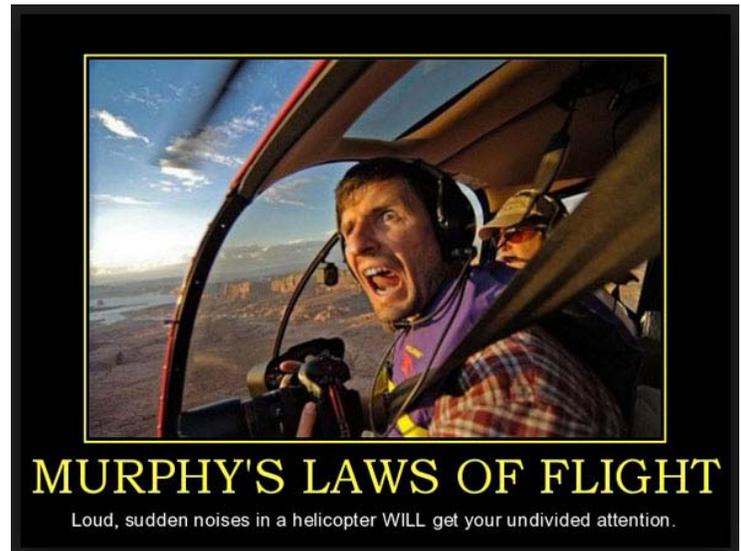
<http://youtu.be/sjvgC1cKQGA>

No question - these firebomber pilots are a skilled bunch.

http://www.liveleak.com/view?i=ccc_1389168072#qBMmu2TZU2xmOgCA.01

<http://www.wimp.com/firefightingplanes/>

**If you have problems with the links, just copy/paste the address into your web browser.



Arguing with a pilot is like wrestling with a pig in the mud; after a while you begin to think the pig likes it.

-Seen on a General Dynamics' bulletin board.