



Experimental Aircraft Association Chapter 27 News



Next meeting Sunday, November 17, 2002, 10 a.m., Meriden-Markham Airport

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November.
2002

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October Meeting Minutes

Fred Caputo, who arrived on a new Harley Davidson, opened the meeting at 10:00 sharp. All Officers, except Steve were present.

Visitors: None

Treasurer's Report: \$2836.63 start, \$2721.31 ending

Tech Counselor's Report: Bob Burk and Mike Okrent discussed a visit to NH where they viewed a Subaru engine, in a firewall forward package for use in a RV-7. Dave Pepe reviewed the installation of the wings on the RV-6 he is building. On another note Dave mentioned how the XP-360 engine that he bought for \$21,500, is now selling for \$19,999 (good timing, huh?)

Young Eagles: Fran Uliano noted that the October 12 rally (rained out) would be rescheduled on Oct 26 or 27 (rained out again).

Christmas Party: Signups are good so far, please pay for your tickets as soon as possible. This is for the December 1 date.

New Business: Joe Gauthier is now on the EAA Homebuilder's counsel. Joe is the personification of the EAA spirit, and Jim Simmons will nominate Joe for the Tony Bingellis Award. Please send your comments on Joe to Jim for inclusion in his nomination of Joe. (I have flown with, and have had my project inspected by Joe twice, he is a good resource and guy)

50/50 raffle: won by Stan Solecki \$16/\$16

Seminar: A discussion of PROJECTS, Fred discussed his Aircraft annual inspection....

—Dave Pepe

It's time to pay your dues for next year!

Is FADEC in your future?

The seminar for the November 17 meeting, will be given by Steve Smith, president of Aerosance, which produces the FADEC electronic fuel control system for GA, piston-powered aircraft. Steve will present some slides followed by Q&As.

Full Authority Digital Engine Control, or FADEC, allows single lever, electronic fuel injection for piston powered general aviation aircraft. The system provides individual cylinder control, peak torque ignition timing, sequential fuel injection, cylinder temperature control, automatic self-calibration,

annunciation of health status and serial engine performance data. What that means is that you get easier starting, reduced workload (no mixture to adjust), reduced fuel burn (mixture and timing are adjusted optimally), and better engine health. Each cylinder can be controlled individually and the mixture modified to limit cylinder temperature, detonation or T.I.T. Come to the meeting to hear more about this exciting technology. For more information you can check out Aerosance's web site at <http://www.fadec.com>.

FAA Approves Internet as Official Source for Weather and NOTAMs

The FAA is finally catching up to the rest of us by officially accepting the Internet as a valid source of information for pilots to obtain weather information and NOTAMs. Internet Communication Advisory Circular (00-62) released on November 1 details the steps that vendors must follow to become a Qualified Internet Communications Provider or QICP. These steps are to ensure the reliability and accessibility of weather and NOTAMS over the Internet. Information from non-QICP vendors is not considered an official source.

To help pilots, the FAA has set up a new web site which can be used as a launching point for getting to qualified vendors. In true FAA-speak, the name of the site is the National Airspace System (NAS) Aeronautical Information Management Enterprise System (NAIMES) and it's at <http://naimes.nas.faa.gov/>. Currently there's not much there but the intention is to include Department of Defense and international NOTAMs and the ability to conduct a NOTAM search on a radius or flight path; ATCSCC weather links to the Collaborative Convective Forecast Product (CCFP), PIREPS, METARs, TAFs and NOAA Composite Radar Summary; and other aeronautical information, including Atlantic/Pacific Tracks, RVSM information, and ATC System Command Center real-time NAS information.

Designated Airworthiness Representative (DAR) Course Materials Ready For New FAA Program

The effort to boost the number of inspectors for the growing number of homebuilt aircraft has advanced another step, as EAA representatives have joined the Federal Aviation Administration and Transportation Safety Institute to develop materials for training new Designated Airworthiness Representatives under a new FAA program taking effect on January 1, 2003. This program was mentioned in last month's newsletter.

The initial training sessions, which will provide the education and resources for DARs to make final inspections of amateur-built aircraft, will take place in March 2003 at the FAA's training center in Oklahoma City, Okla. Exact dates and registration fees will be announced when finalized.

The DAR program is designed to ease the backlog of airworthiness inspection requests for amateur-built aircraft. The number of inspection requests to FAA has grown while the agency's resources have stagnated. Increasing the number of DARs will shorten the time needed for inspection, enabling builders to fly their aircraft sooner and encourage the continued growth of homebuilding.

"Our members who are building aircraft made it known that this was a great need for them," EAA President Tom Poberezny said. "The inadequate number of inspectors added frustrations for builders who have completed aircraft and are ready for test flights. EAA saw this as a hurdle to future growth in aircraft homebuilding, and the industry that supports it, and worked with FAA and TSI to create a solution. Developing comprehensive training material now will help get the first DARs into the field sooner."

Over the last several years, it has not been uncommon for builders to wait three to six months after completing their aircraft before an initial inspection. The new program, a product of three years of collaboration between EAA and FAA, creates a new DAR designation and enable homebuilders, EAA and FAA to more easily identify DARs certified to inspect amateur-built aircraft.

The training courses developed by FAA, TSI and EAA include FAA certification paper-

work requirements, amateur-built construction methods and engines, common construction and flight safety issues, liability matters, FAA programs and hands-on certification inspection of an amateur-built aircraft. Graduates of the training courses will receive a Letter of Authorization allowing them to make airworthiness inspections of amateur-built aircraft.

To assist FAA and TSI in initial course development, EAA will be locating amateur-built aircraft utilizing various construction methods (tube-and-fabric, composite and wood) for use in the hands-on inspection portion of the course.

Amateur-built DAR candidates must possess current knowledge relating to the fabrication, assembly and operating characteristics of amateur-built aircraft; speak and write English; have three technical and three character references including one from the sponsoring organization when applicable. In addition, the DAR candidate must also hold a FAA A&P (airframe and powerplant) certificate; have built and received certification for an amateur-built airplane that has flown a minimum of 100 hours; and performed at least three condition inspections on such aircraft. DAR candidates who do not possess an A&P certificate must have a minimum of five years experience as a field

technical representative or as an FAA inspector. Other than minimal travel related expenses, EAA sponsored amateur-built DARs will provide certification inspections at no charge.

Current DARs wishing to maintain amateur-built authority should contact their managing offices in writing to have their certificates revised. DARs can also have their authority expanded to include amateur-built aircraft by completing the corresponding TSI training.

The program also modifies geographical restrictions for DARs to increase their availability. They may work outside of their assigned geographic area after contacting their local FAA Manufacturing Inspection District Office (MIDO) and receiving an endorsement. If two geographic offices have an ongoing need for an individual DAR, the offices can establish a written agreement for the DAR to work in both areas without receiving permission for each case. The agreement will be evaluated annually and extended or terminated based on the offices' needs and certification activity.

More information is available through the EAA Government Programs Office at 800-EAA-INFO (800-322-4636) or via e-mail at govt@eaa.org. Individuals interested in obtaining amateur-built DAR certification should contact a MIDO or MIDO satellite office (MISO).

Christmas 2002

Yankee Silversmith Inn

Wallingford, Connecticut
Sunday, December 1 at 5:30 pm

Vegetable Soup, Silversmith Salad

Baked Cod Heritage

Roast Native Turkey

Roast Pork Normandy

Chef's choice of vegetable and potato

Silversmith Bakery Basket

Deep Dish Apple Crisp ala mode, Coffee, Tea, Decaf

\$25 per person with a cash bar.

Please bring cash or check to the next meeting.

Gary Newsted—Not your regular Van’s Builder!

On an overcast Saturday afternoon Bob Burk and I drove to Southern New Hampshire to visit Gary Newsted. He is building a Van’s RV9A with an Eggenfeller Subaru Engine. The primary purpose of the visit was to evaluate the engine for use in the RV7A that Bob is building. After a little navigation error we arrived about 11am. Gary is building his RV9A on one side of a two car garage with a small additional workroom for electronics and tools. We were welcomed in and introduced to another builder who came to view the progress of Gary’s project.



Bob Burk and Gary Newsted

the design of Eggenfeller’s redundant electrical and fuel systems for the RV9A. The Subaru 2.5L produces 165HP at approximately 4800 RPM (crankshaft, before prop speed reduction). Eggenfeller offers an optional “Soobercharger” to provide full HP up to 12,000+ feet. The net result is more HP than the 200HP Lycoming for less than \$20K brand new and firewall forward, including engine mount, ready to install, which takes about two hours. In addition there is the equivalent of FADEC and the engine is fuel injected. With the recommended Quinti electrically control-

Some background on Gary, He works on his project from 9pm to 2am most evenings. The rest of the time he is a husband and father to a young daughter, and an operating system programmer for Hewlett-Packard’s recently acquired DEC Alpha/VMS systems. Gary earned his A&P license “in a previous life” working in Detroit for a company doing cargo conversions of commercial jets. Gary has also constructed a realistic X-Plane simulation model to analyze the Subaru and RV9A performance and flight characteristics.



The Eggenfeller Subaru engine nestled into place

lable pitch prop the only engine control is the throttle.

Gary has completed his empennage, wings, and fuselage; mounted the engine and done most of the finishing kit. The centerpiece of his instrument panel is a Blue Mountain EFIS/One. Gary demonstrated the EFIS in his backroom electronics “shack”. We were able to view on the 10.25” screen the local terrain and projected area that would be above our flight path in the surrounding New Hampshire mountains. The built-in GPS and mapping were really amazing on that large display.

Bob’s evaluation of the project was interesting. He described it as an “Electronics platform built on a well built RV9A”. Of course I don’t think with Gary’s background and interest in programming and electronics it could have been any other way. Gary intends to fly the plane to Oshkosh this summer to showcase his engine for Eggenfeller’s first Oshkosh “homecoming”. Currently fourteen RV’s and Glastars equipped with “e-motors” are expected to participate. 116 RV’s (6, 7, 8, 9 and soon 10) are currently building with this motor!

You can see Gary’s Web site at http://www.jlc.net/~fcs/Builders_Journal.htm and the Installation manual at the Eggenfeller Subaru website: www.subaruaircraft.com and the Blue Mountain EFIS at <http://www.bluemountainavionics.com/>

—Mike Okrent, RV7A Wings

So why did we pick Gary to visit? He is writing the installation manual for the Eggenfeller Subaru. He also played a major part in



Engine Control Unit (FADEC)



Fuel injection system



Panel Cutout for EFIS/One

Joe Gauthier joins Homebuilt Aircraft Council

October 17, 2002 - Joe Gauthier, Cromwell, Connecticut, is EAA's newest member of the Homebuilt Aircraft Council (HAC). The HAC is a group of dedicated volunteers that provides guidance and helps set policy regarding homebuilt issues and activities for EAA.

Joe, an EAA member and Hartford EAA Chapter 166 officer since 1967, brings a wealth of knowledge and experience to the Council. He has built four airplanes himself, advised builders on numerous other projects as an EAA

Technical Counselor, and is currently building a GlaStar. Joe is also a veteran presenter who has done considerable training and lecturing on homebuilding, including at AirVenture Oshkosh for several years.

Joe is an A&P mechanic, providing maintenance and annual inspections on Mooney and Piper fabric aircraft. A CFII and NAFI Master Flight Instructor, Joe specializes in homebuilt transition, instrument, and spin training. He has completed maiden flights



on 28 new amateur-built aircraft.

Accolades include EAA's Major Achievement Award in 1987 and the Presidents Award at Oshkosh in 1991 for contributions to sport aviation and EAA. He is a past recipient of the FAA Region CFI of the Year and Safety Counselor of the Year awards.

—EAA News

From AvWeb
(www.avweb.com)

Overheard following a Lear's very steep climb out of Teterboro:

Controller: "Lear 12345, after retrieving your passengers from the tail section, contact departure..."

The deadline for submission of materials for the January newsletter is January 5, 2003.

2003 EAA CHAPTER 27 MEMBERSHIP FORM

Please fill in the following information and mail with your dues to:

Fred Dube, 663N Elm St., Wallingford, CT 06492

(Dues are \$15.00 per year, make checks payable to: EAA Chapter 27)

Name: _____ Phone: _____

Street: _____

City _____ State _____ Zip _____

Email address: _____

EAA Membership No: _____ Pilot rating held: _____

Do you own an aircraft?: _____ Make & Model: _____ Registration No: _____

Are you building an aircraft?: _____ Make & Model: _____ % completed? _____



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Meetings held on the third Sunday of the month at Meriden-Markham Airport, Meriden, CT at 10am unless otherwise noted.

www.eaa27.org