



Annual Christmas Dinner

January 13, Lower Level of the Elks Club

Social Hour: 6:00 (cash bar)

Dinner: 7:00

Menu:

Roast Beef & Roast Chicken
Mash Potatoes, Gravy
Corn, Roll
Garden Salad Bar
Cheese Cake Bites for Dessert
Coffee & Ice Tea Beverage

\$31.00 adults

\$11.00 for children

Program:

John is going to present my experiences I had when I was flight crew and a field engineer on the Joint STARS project.

Reservations needed no later the Jan. 5

Email Molly at teachmolly@gmail.com by New Year's Eve
or Call Scott at 786-6198



Starting with the February issue of Flyboy News, Julie Glasford will be our new editor. Please give her your support by emailing her with your articles, pictures, etc. Her email is glasford@midco.net. I will continue with the communication requiring emailing (the easy part). We'll see that anything you send to either of us gets to the right person. If you have had any changes in phone, address, email, etc., let me know, so I can keep the roster updated.



John's Jabberings...

By John Glasford

A new year has arrived! I am excited to see what we can accomplish this year as a growing EAA chapter. I did say **growing** because that is our goal, mission and my drive. We have so many opportunities to participate in aviation and bring our love of aviation to those outside of the chapter. Our chapter is rich in aircraft skills, resources and knowledge! Let's put all of that to use before we forget why we are part of this chapter. I mentioned at the last meeting we have a project that we can participate in as well. I bought a Citabria 7ECA that needs recovered and some other repairs. I hope we can generate some interest from others outside while using the chapter talents to restore this bird!

I am starting off the year with a visit to Oshkosh for a leader's conference. I want to be sure I know all the available resources we can use locally to grow our chapter. While at the leader's conference I am checking in with the Tri-Motor folks to see what we can arrange for the Tri-Motor to visit Rapid City. This will, once again, take a lot of hard work and effort from the chapter; we've done it once before, so I am confident we can do it again!

The chapter annual banquet is coming up on the 13th of January so make sure to get your reservations in. The speaker for the event will be me! I am going to present my experiences I had when I was flight crew and a field engineer on the Joint STARS project. We were tasked to take two developmental aircraft and ready them for combat and deployment to Saudi Arabia during Desert Storm in the first Gulf War.

Once again, I want to hear from everyone and get ideas on things we can do that will make this chapter fun and growing.

See you all at the banquet!!



[Valdez 2017 STOL Winner](#)

Submitted by Dan



Don't forget to pay your \$20 2018 chapter dues. Dues may be paid at the December 19 meeting, at the Christmas dinner, or mailed to Scott at 13091 Mission Hill Loop, 57702



No January Meeting

EAA Chapter 39 Christmas Dinner

January 13
Lower Level of Elks Club

Get your reservations in!



The year is 2124 and the United States has just elected the first woman president. A few days after the election the president-elect, whose name is Debra, calls her father and says, "So, Dad, I assume you will be coming to my inauguration?"
"I don't think so. It's a 10 hour drive."
"Don't worry about it Dad, I'll send Air Force One, and a limousine will pick you up at your door."

"I don't know. Everybody will be so fancy. What would your mother wear?" "Oh Dad," replies Debra, "I'll make sure she has a wonderful gown custom-made by the best designer in Washington."

"Honey," Dad complains, "you know I can't eat those rich foods you eat." The President-to-be responds, "Don't worry Dad. The entire affair will be handled by the best caterer in Washington; I'll ensure your meals are salt free. You and mom just have to be there."

So Dad reluctantly agrees, and on January 20, 2125, Debra is being sworn in as President of the United States. In the front row sits the new president's dad and mom. Dad, noticing the senator sitting next to him, leans over and whispers, "You see that woman over there with her hand on the Bible, becoming President of the United States?" The Senator whispers back, "You bet I do."

Dad says proudly, "Her brother is a pilot."

Submitted by Dan

Chapter 39

Officers

President	John Glasford
Vice President	Harold Samdal
Secretary	Gary Schroeder
Treasurer	Scott Christiansen

Volunteers

Newsletter	Julie Glasford
Web Manager	Molly Benkert
Young Eagles	Brenda Nolan
Safety Officer	Jerry Densmore

Tech Advisor

Jerry Densmore

TREASURER'S REPORT

Milo filling in for Scott

Balance brought forward.....	\$8957.04
 Income:	
Dues X 10.....	200.00
 Expenses:	
EAA Chapter renewal & Insurance.....	350.00
Milo (ink for printer).....	100.00
 Balance on hand.....	\$8717.02

December Minutes

By Gary Schroeder

John started the meeting at 6:57.

We watched 2 videos: Molly brought in "How to get to Mars" and Jerry brought the "Legions of Flight".

Treasures report - \$8587.94 plus 3 renewal dues paid. \$530.00 was paid to EAA for our Chapter renewal and insurance.

Minutes were read and approve.

- The Christmas Party is scheduled for January 13th at the Elks, 6:00 PM will be the social hour and the meal will start at 7:00PM.
- IMC club, please contact Rick if you are interested.
- There will be an Airport User meeting February 24th, 9:00 AM at the RCRA fire station.
- John found a possible chapter project: A 1973 Citabria to restore.
- Julie will take over the newsletter starting in February.
- John briefed us about the planning meeting discussion.
 - Open House is going to happen this year.
 - The War Birds are not an option as a draw for the Open House.
 - Tri-motor- John has contacted the EAA and we are on the list to get the Tri-motor for the Open house and their schedule will determine when we can have the Open House.
 - EAA leadership training in Oshkosh, January 18th thru 21st.
 - We will try to schedule 4 Young Eagle events this year.
 - Projects for kids at the schools or young eagles events.

○

Meeting adjourned.

Ed. Not: See planning meeting minutes on next page.

Chapter 39 Planning Minutes

by Gary Schroeder

John started the meeting at 9:05

Discussion topics:

- Open House is going to happen this year. We need people to help.
- The War Birds could be an option as a draw for the Open House.
- Tri-motor- John has contacted the EAA and we are on the list to get the Tri-motor for the Open house and their schedule will determine when we can have the Open House. We should find out sometime in January.
- EAA leadership training in Oshkosh, January 18th thru 21st.
- We will try to schedule 4 Young Eagle events this year. We need to contact Brenda to see if she is still willing to head up the Young Eagles.
- Projects for kids at the schools or Young Eagles events, like metal 3 ring note books the kids can rivet and assemble.
- We still need a speaker for the Christmas Party.
- The December meeting will be changed to December 19th.
- Fly-in event ideas like a possible pancake breakfast, possibly with an ACE inspection or FAA safety meeting.

PC It has finally come to the flying world



Due to the increased focus on sexual misconduct issues, the reference to "Touch & Go" landings has been deleted from the ATC Approved Phraseology Handbook.

Submitted by Darrel

Member Profile

by Dale Freeman

Dale Freeman moved to Hermosa two years ago from Colorado Springs, CO. An EAA member since 1990, he is currently building a Zenith 750 kit. An Air Force veteran, he was Targets Intelligence Officer, with three years of his 27-year career spent at Ellsworth AFB on the Looking Glass, SAC Airborne Command Post. A highlight of his career was being assigned to the team that researched and wrote two books on the Roswell UFO incident: "The Roswell Report"; and "Roswell: Case Closed." After his retirement in 2001, he spent 18 months in Afghanistan and 6 months in Baghdad as a government civilian. Dale is a licensed patent attorney and is currently working on project researching and cataloging German WWII aviation and technology patents. He is married to Shelley, another USAF veteran. They have a son Daniel, a Metallurgical Eng. Major at SD School of Mines, who is completing his requirements for a commercial pilot rating.



Soviet aircraft provided to the Afghans bulldozed to the side of the runway at Bagram AB. Let's hope our support for them goes better.



Looking Glass EC-135's mothballed at Davis Monthan AFB. Although the tail says they are Offutt aircraft, I believe 048 was at Ellsworth sometime. Anyway, you know your old when a visit to the Boneyard includes aircraft you've spent many "happy" hours in.

OUT WITH THE OLD, IN WITH THE NEW.

By Scott Christiansen

After 37 years and 2300+ hours in the Piel Beryl, new electronic equipment has replaced the vacuum gauges and the fuel flow gauge and totalizer.

There was a time after Oshkosh, that on the return flight the artificial horizon was completely inverted for the first two hours of flight. Never had seen that happen before! I guessed that sitting in the humid Oshkosh air for a week may have caused some corrosion, but I would never see that occur again so who knows the cause.

Everything related to the vacuum system and fuel flow was removed from the aircraft. I'm guessing the total weight was about 10 pounds. The replacement AvMap Ultra EFIS and JPI fuel flow system is less than a pound. The AvMap Ultra was displayed at Oshkosh several years ago and eventually one was purchased during a yearend Christmas special for the Ellipse aircraft and installed in that aircraft also replacing all the vacuum instruments. Recently the AvMap Ultra was advertised in Trade-A-Plane at a discounted price, and I called Aircraft Spruce to purchase one. They didn't want to honor the advertised price, but after asking to talk to a supervisor, they called me back and said OK to the sale price. I ordered some additional hardware and some Molex plugs/pins for the subsequent installation.

The AvMap Ultra unit can replace nine instruments and has a GPS receiver for navigation on the HSI display. It uses the Jeppesen Data Base for airport/VOR/NDB navigation. The GPS antenna is remote mounted on the glare shield and plugs into the back of the AvMap Ultra. The GPS signal can also be shared with other electronics via two RS232 outputs. I use mine to feed the TruTrak autopilot and the fuel flow instrument.

The original Flowscan sensor came from 1970's technology for cars, boats, and RV industry. The fuel sensor required one flashlight bulb to shine a light through a spinning rotor (from fuel flowing thru it) to a light sensor that counted the pulses and converted the pulses to gallons-per-hour fuel flow. This was shown on a 2 3/8 inch instrument on the panel. A 12 volt resettable counter was an add-on if you wanted a running total of fuel used during flight. The system was first described in a Sport Aviation article in the 70's for an installation in a Mooney via the FAA field approval process. Fuel exhaustion has always been a big issue, and I was determined that this would not happen to me. Combined with calibrated fuel gauges and the fuel totalizer, I have stayed safe during the many cross country flights during the last 37 years. I really didn't want to replace this system, but I had a spare JPI 450 for years, and it was time to install it along with the other modifications.

The JPI 450 fuel flow instrument fit nicely into the panel next to the MicroAir radio where the vacuum gauge was. A second fuel gauge was mounted where the fuel flow meter was installed. The original fuel gauge now only indicates the fuel level in the main fuselage tank and the new gauge indicates the fuel level in the wing tanks with a L/R switch. A sheet metal plate was fabricated to cover the totalizer hole and the 3 1/8 inch hole for the vacuum directional gyro.

After inspecting the area for the yearly condition inspection, the front end of the aircraft was reassembled and taken out of the hanger to run the engine and check for proper operation. The GPS signal was good and no fuel leaks were noted and the vacuum pump pad was dry. Now back to the rest of the aircraft to finish the condition inspection for another year of uneventful (knock on the wood spar) flying.



PFD and HSI screen

The PFD screen provides ADWHS data, while the HSI screen displays: current position, heading, distance, directions, radials relative to reference navigation points and approximate wind data.



Technical specifications

Hardware:

- Dimensions: 95 x 95 x 49.5 mm (3.74" x 3.74" x 1.95")
- Diameter: 82 mm (3.23"), installing diameter: 84 mm (3.3")
- Weight: 145 g (5.1 oz)
- Display: 3.5", 320 x 240 pixels, brightness 500 cd/m²
- Operational temperature: -20 °C to +70 °C / -4 °F to +158 °F
- 3-axis gyros, accelerometers and magnetometers
- Acceleration range (3 axis): +/- 8 g
- Rotation Range: +/- 1600 deg/s
- Air data sensors: range 10 to 215 kts, -1000 to 40000 ft
- UAV Navigation Motion processor
- Micro SD slot
- 1.5 m (59") free wire power supply cable (10/35 VDC)
- 3 serial ports RS-232
- Consumption @ 12 V DC: 100 mA nominal

Included accessories:

- GPS receiver U-Blox NEO 6M with 1.5 m (59") cable

Software:

- Advanced data fusion capability
- Airspeed and Altitude from pitot-static system
- Altitude (roll, pitch and heading) and side slip
- Wind indicator
- Clear HSI with Course Deviation Indicator (CDI)
- Altimeter reference, Heading reference, Aircraft specific V-speed reference values
- Preloaded with Jeppesen Database (APF, VOR, NDB) for navigation back-up (4 coverages available: North America, South America, Europe-Africa, Asia-Australia)
- Exceptional navigation capability in case of loss of GPS signal
- Compass
- G-meter

UAV Navigation

AvMap devices are not ETS certified and are intended for EASA navigation only. Please see our website for more details. Model may vary without notice.

AvMap avionic products

AvMap products are 100% Made in Italy since 1994 and used by private pilots as well as by Armed forces, Governmental agencies, rescue teams, Civil Defense. Find out AvMap's complete range of avionic products including portable GPS. Concept integrated solutions and instruments for ultra light and experimental aircraft.

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