

CALENDAR OF EVENTS

Program Director: Krista Nelson

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FEBRUARY 21: CHAPTER 227 MONTHLY MEETING

Chapter Meeting Room - Waterloo Airport Terminal - 7:00 pm

MARCH 1-3: IOWA FLYING FARMERS CONVENTION

Ramada Inn - Mount Pleasant, IA

MARCH 1-3: EAA WORKSHOP – OSHKOSH, WI

Topic: RV Assembly

MARCH 2: SATURDAY MORNING BREAKFAST

Wader's Restaurant - Waterloo Airport - 8:00 am

MARCH 21: CHAPTER 227 MONTHLY MEETING

Chapter Meeting Room - Waterloo Airport Terminal - 7:00 pm

APRIL 6: SATURDAY MORNING BREAKFAST

Wader's Restaurant - Waterloo Airport - 8:00 am

APRIL 7-13: SUN 'N FUN EAA FLY-IN

Lakeland, Florida

For more information go to: <http://www.sun-n-fun.org>

APRIL 13: CHILI FLY-IN

Fort Dodge Airport: Fort Dodge, Iowa

10:00 am – 2:00 pm

*Rain Date: April 14

APRIL 19: CHAPTER 227 MONTHLY MEETING

Chapter Meeting Room - Waterloo Airport Terminal - 7:00 pm

MAY 4: SATURDAY MORNING BREAKFAST

Wader's Restaurant - Waterloo Airport - 8:00 am

MAY 16: CHAPTER 227 MONTHLY MEETING

Chapter Meeting Room - Waterloo Airport Terminal - 7:00 pm

JUNE 1-2: EAA FAMILY FLIGHT & BALLOON FESTIVAL

EAA AirVenture Museum - Oshkosh, Wisconsin

EAA SportAir Workshop (Electrical Systems & Avionics)

By Warren Brecheisen



Warren (in the middle) at a workshop session

I attended the EAA SportAir Workshop on Electrical Systems, Wiring and Avionics, which was held in Oshkosh January 19-20, 2002. The instructor was Dick Koehler, a former Navy pilot, who now teaches A & P classes at the University of District of Columbia. The workshop is normally limited to twelve people, however there were thirteen in my class.

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President's Notes

Randy Dunham (EAA Chapter 227 President)
eaachapter227@yahoo.com

Sure good to see the nice turnouts at our Saturday breakfasts at Wader's. Dave Hummel is now the official Headcounter and reported 50 at the January gathering.

I have been logging a lot of flight time this past month. I think I flew more in January than I did all last winter. And I haven't even had to shovel snow or chip ice to get out of the hanger. I know - it won't last, but it sure has been nice so far.

I was out flying around last Sunday and landed at Flyer's Field. Not much activity - just a couple of ultra-lites. I wandered inside the old office and it brought back a lot of memories. The pop cooler is still there - with the money cup sitting on top. No pop - just a stale empty cooler. A lot of Chapter 227 items are still hanging on the walls and lying around. We need to get out there and pick this stuff up. I almost gathered everything up, but was afraid of being apprehended for thievery. Someone had written a note on the chalkboard "Please - somebody call me about buying fuel here and basing my plane here". I forget the name and phone number.

It's just not the same anymore. I haven't been there in a long time, and don't even know which Chapter members have aircraft based there now. I hope that we can get together for a few potluck picnic gatherings this coming year at some of our local grass strips. They don't have to be extravagant affairs - if the weather looks good we can call and e-mail everybody, pick a place and fly or drive. Nothing better than a grass strip, airplanes, good people, food and the fellowship that comes from this type of gathering.

Update: Well like I said - it won't last. As we were getting ready to go to press with the newsletter, the snow finally hit. I headed to the hangar and shoveled things out good only to wake up this morning to discover I had to go do it again! ➔

NEWSLETTER INFORMATION:

EAA members who would like to be added to our mailing list, contribute items to the newsletter, or let us know of corrections to previous newsletters please contact the Newsletter Editor.

Newsletter Editor: Penny Dunham
Address: 230 Gayle St, Waterloo, IA 50701-1812
Phone: 319-235-7438
Email: chapter227towertalk@yahoo.com

Secretary's Report

Keene Petersen (EAA Chapter 227 Secretary)
keeneflyer@yahoo.com

We had an excellent turnout of fifty people for the monthly Saturday breakfast January 5th at Wader's. Our regular business meeting was January 17th at our Chapter meeting room. We had 18 people present. Old business covered included the Proposed Budget vote February 2 and the EAA Scholarship deadline of March 30th. New business covered discussion on trying to fly more Young Eagles after our Saturday morning breakfasts and whether to have one big Young Eagles Rally or several smaller ones. We also discussed getting more involvement between area Chapters by flying out to more of their events and extending invitations to our gatherings. Fly-outs in general and picnics were also talked about. Several members gave project and activity updates. Following the business meeting Penny Dunham held an informal discussion on using your computer to submit items for the newsletter and website. ➔

Treasurer's Report

Matt Evers (EAA Chapter 227 Treasurer)
matthewevers@home.com

Matt Evers gave a report on our 2001 Balance Sheet. Our total income for the year was \$2,890.30, which exceeded our 2001 projected budget. Our expenses of \$1,998.81 were less than the projected amount for the year. This gave us a net income of \$891.49. Total funds at the end of the year were \$12,918.02. If you have any questions please contact Matt. ➔



What is it? Watch next month's newsletter to find out!

Our Program Director, Krista Nelson, would welcome any suggestions you may have regarding program ideas for upcoming meetings and events. Please contact her at:

Phone: 319-266-1929 **Email:** knelson22@hotmail.com

New Members

We would like to welcome two new members back to our Chapter.

Lee Dudley was a member in the 70's. He joined back up with us at our January breakfast. He and his wife Dorothy live in Raymond, Iowa. They have 2 sons and a daughter.



Lee Dudley's Jodel D-11

Lee purchased a 1970 Jodel D-11 this fall. It had been fully restored (and modified) in 1993 by a guy out in Salt Lake City. There is a nice website about Jodel's history complete with a lot of photos of the various models. Just go to: <http://www.jodel.com>.

Lee & Dorothy's address is:
PO Box 192, Raymond, IA, 50667.

Dennis Oelmann was a member back in the late 80's and early 90's. He also joined back up with us at the January breakfast. Fourteen years ago, the January Chapter meeting was held in his home to view the progress of the Cozy he was building. He finished it about a year and half later. The Cozy's of both Dennis and Rex Pershing received their Air Worthiness Certificates on the same day. Dennis' address is: 4735 Pizarro CT, Cedar Falls, IA, 50613. ➔



Mike Lewis departing from Livingston's on another Young Eagles mission

Kitplane sales rise sharply

A Kitplanes magazine survey indicates that more than 7,000 kits were sold in 1999, with 16,000 projected for 2002. More than 2,810 members of the GA fleet are now represented by the designs of one kitplane manufacturer alone -- Van's Aircraft. The company's production history averages out to 100 new flying aircraft each year for the past 28 years.

Aviation Links

Aviation Heritage eZine

<http://www.aviation-heritage.com/Cover.htm>

Flights of Fancy Paper Airplanes

<http://www.cbc4kids.ca/general/the-lab/flights-of-fancy/archive.html>

Flying Tigers Warbird Restoration Museum

<http://www.warbirdmuseum.com>

Golden Age of Aviation

<http://www.geocities.com/CapeCanaveral/Lab/4515/index.html>

BrainTeaser

You have just touched down on a 5,400-foot long runway. Forward visibility is not very good. During your rollout, you observe that the runway edge lights have changed from white to amber. This tells you that:

- a. You have 1,000 feet of runway left.
- b. You have 2,000 feet of runway left.
- c. You've passed the halfway point on the runway.
- d. You have just landed at Waterloo and a large migratory water fowl has just urinated on your windshield.

Answer on page 7

Pilot Error

Insurer: It was pilot error.

Pilot: It was design error.

Insurer: I disagree. The pilot is at fault for trusting the designer. ➔

This workshop was tailored to cover all the basic skills and knowledge that one needs to design and install an electrical system in a homebuilt type of airplane. The first topic was the steps involved in developing an electrical system and the system components.

The instructor talked about component options, for example fuses and circuit breakers, and covered their advantages and disadvantages. Guidelines for application of the system components were discussed, including battery and alternator capacities. Wire sizing is extremely important and this was covered in detail. Strategies for troubleshooting were also discussed.

Avionics was covered in enough detail that a builder should be able to look at most hookup diagrams and correctly wire the pins and cables. The instructor had done his Master's thesis on antenna theory, and did an excellent job of covering the how's and why's of antenna installation. There also was a section pertaining to wiring diagram symbols that was very informative.

There were several hands-on exercises. The first dealt with proper crimping of connectors. Each attendee crimped a ring connector, a splicing connector and a Molex pin. The second exercise involved wiring an intercom. Most of the wires were soldered in this exercise. There was an intercom available to test the wiring harness each student assembled. Mine was tested first and it worked beautifully. The second one, unfortunately, burned up the intercom unit, due to reversed polarity, so no one else got to test their work. The last hands-on exercise was to read a simple circuit diagram and hookup a two light system, using good aircraft wiring practice.

I stayed in the Air Academy Lodge, which is a beautiful and well-kept facility. The price was reasonable at \$30 per night for shared baths. I had a small bunkroom with a capacity of four all to myself. Towels, soap, shampoo, sheets and blankets were all furnished.



EAA Air Academy

The main criticism I would have for the workshop was that lunch was not included in the fee. Lunches were \$7.50 each day, which was not out of line considering that the food was very good and it was catered.

Much of the information in the workshop verified knowledge that I had gained through reading and talking with people. This was worthwhile in itself, but additionally the new knowledge I gained was very timely and helpful. The emphasis on the practical side was the reason I attended the workshop and it did a splendid job in this area. I would highly recommend this workshop. You can get more information on EAA SportAir workshops and schedules by calling 1-800-967-5746 or visiting the website at <http://www.sportair.com/>. ➔

Where's The Wings?



John Peacock's Mustang II

This Peacock isn't quite ready to fly yet but John has been busy working on its wings. As you can see, his Mustang II is progressing along nicely. Watch for a more in-depth article in next month's newsletter. ➔

Young Eagles Report

Our Chapter received a letter from the Young Eagles Program and EAA Aviation Foundation congratulating us on reaching our 2001 Young Eagles goal. Enclosed with the letter was a nice calendar sent as a token of appreciation. It has found a home already above the computer in our meeting room.

The following pilots met the challenge of General Chuck Yeager to fly at least ten Young Eagles in 2001:

Lee Bowden
Anne Marie Campbell
Carl Campbell
Randy Dunham
Dave Hummel
Mel Kubicek
Mike Lewis
John Musgrave
Don Walker

A heartfelt thanks to all of you and to all the other pilots and volunteers who participated in 2001!

Our Cherokee 140

By Carl & Ann Campbell



Campbell's 1972 Piper Cherokee 140

Carl and I flew Young Eagles this fall, and I did some training with Mel Hemann. Thanksgiving was approaching, so we decided to go visit Carl's sister in Florida. This seemed like a perfect time for an annual. We took it in, and they checked the compression before we left the shop. All was good, so we went a way thinking it would be a nice cheap annual for a change. **NOT SO!**

When we got back home, we had a message to call the FBO. They said we had better come look at the engine. They had drained the oil, cut open the filter and guess what...we had metal shavings! They had taken off two of the cylinders and found cracks in the exhaust ports. The camshaft was worn, and they weren't certain about the accessory case.

Now what to do – do we do a complete top overhaul and still have an old engine or get a new engine? We chose a new engine and are finally up and running again. With the cold weather and new engine, we feel like we are flying a jet!

Our point to this is the importance of a good annual and how lucky we were not to park it in a tree if our engine had failed. There is a reason the FAA is so particular about these things. After seeing what was going wrong with now signs, it's well worth the time and cost to get this important job done every year. Trying to cut corners could cut off your life! ➔

On Vacation

The Campbells - our Young Eagles Coordinator Ann & Membership Chairman Carl, will be away in February and March. If you need any information about Young Eagles or Chapter membership please contact any of the following people:

Randy or Penny Dunham:

Phone: 319-235-7438

Email: eaachapter227@yahoo.com

Krista Nelson:

Phone: 319-266-1929

Email: knelson22@hotmail.com

Forced landing near airfield...

The student in his primary trainer was flying a solo cross-country. He lost his way and before he finally ran out of fuel he decided to put it down on a road.

With hardly any cars on the road he managed to coast his aircraft into a gas station and said to the attendant, "Fill 'er up!"

The attendant just looked at the pilot.

"I bet you don't get too many airplanes asking for a refuel," said the pilot.

The attendant replied: "True, most pilots use that airport over there." ➔

Fly-out Report

Chili Fly-in at Greenfield on January 26th, 2002

Flight Service was forecasting winds from the southwest 20-30 kts and gusty. Winds aloft at 3000 and 6000 feet were forecast at 260 from 35-40 kts. Moderate turbulence was forecast below 5000 feet.

At 10 a.m. there was a serious question as to the wisdom of flying, but it turned out to be a beautiful flight. The chili was good, the corn chips and dip were good as well as the cookies and brownies. The turnout was excellent. As the flying members of Chapter 227 landed, seven planes were counted on the taxiway preparing to depart. Another thirty-two planes were counted on the ground. The Iowa Aviation museum is a nice place to visit and has a lot of interesting aircraft and memorabilia on display including Bite Livingston's Taylorcraft.



Bite Livingston's 1946 Taylorcraft on display at the Iowa Aviation Museum

An after action report from Cessna 7673X showed a total flight time from Waterloo to Greenfield of 99 minutes. The return trip took 56 minutes. The winds aloft forecast was accurate. Experimental 118ML reported outside air temperature of 62 degrees at 5500 feet. Experimental 73ES reported ground speeds nearing 200 knots on the way home.

After landing at Waterloo and sipping a cold soda Mike Lewis was last seen departing on runway 24 on another Young Eagles mission. The Campbell's Cherokee was spotted in the air southwest of Waterloo with Dave Hummel giving some dual to an aspiring young aviator. ➔

ONE IN EVERY GARAGE?



Julie Jacobson / AP

Millennium Jet's President, Michael Moshier, mans the controls of the SoloTrek Exo-Skeletor Flying Vehicle.

Millennium Jet's 8 foot tall SoloTrek Exo-Skeletor Flying Vehicle has a gasoline engine that drives two large fans. The pilot flies it in a standing position and controls its movement with two joysticks.

The machine is designed to go 80 mph and fly 150 miles on one tank of gas. Moshier plans to add a GPS for navigation and a parachute-equipped ejector seat.

While there are no immediate plans to market the SoloTrek Exo-Skeletor Flying Vehicle (XFV), Millennium Jet says that applications do exist for commercial, consumer, military and paramilitary use.

For more information visit their website at:
<http://www.solotrek.com/mjet/index1.html> →

Sport Pilot Update

The sport pilot notice of proposed rulemaking (NPRM), has been posted on the FAA's rulemaking website. On February 5th, it will be published in the *Federal Register*. EAA staff members are currently reading the entire document and will compile a summary highlighting the most important parts of the proposed rule and their application to our membership. They will prepare a comprehensive analysis of EAA's view of the rule's effectiveness and initial response to the NPRM.

Comments to the (NPRM) will be accepted from February 5 to May 6, 2002. EAA is strongly encouraging us read the NPRM carefully, review EAA's Executive Summary, EAA's Comprehensive Analysis, and their FAQ's page, and also discuss it at our Chapter meetings prior to submitting comments. You can find more information at the following:

EAA Sport Pilot and Light Sport Aircraft
<http://www.sportpilot.org>

FAA sport pilot notice of proposed rulemaking
<http://www.faa.gov/avr/arm/sports013001.htm>

If you have any questions - contact Randy Dunham at:
319-235-7438 or eaachapter227@yahoo.com

EZ-Rocket Testing Continues

Randy and Penny Dunham were visiting the Vision of Eagles Pavilion at AirVenture 2001, and ran into Dick Rutan. He had a VCR tape with footage of his latest adventure. A half dozen of us watched in amazement as he piloted a rocket-powered Long-EZ. This first flight of the EZ-Rocket was made as darkness set in on July 21st at Mojave, California. He rewound the tape several times for us to see and then once more when the XCOR president Jeff Greason walked into the tent. Dick and Jeff were grinning ear to ear.



Randy Dunham with Chief Test Pilot Dick Rutan

"I always had a little pet peeve about people who bring their airplanes to AirVenture on a trailer that have never been flown," Rutan said. "So at the last minute, with only a handful of hours before we left to come here, I flew it."

The plane arrived at Oshkosh later in the week on a trailer. Seven flights have been made since then. The EZ-Rocket's two 400-pound thrust engines expend \$800 worth of fuel in 2-1/2 minutes, lifting the aircraft to around 10,000 feet, followed by a powerless glide back to earth and a dead-stick landing. It's all over in less than 10 minutes.

"This is the first baby step of civilian access to space. The EZ-Rocket's only function is to serve as a test bed for XCOR rocket engines. Every time we fly we learn something new." said Rutan at a recent Oshkosh appearance. The engines are fueled by a liquid oxygen-isopropyl alcohol mixture, which Rutan notes, is not the most efficient fuel, but it is safe and environmentally friendly. Gross weight of the aircraft is 1,800 lbs, as compared to 1,200 for a normally powered Long-EZ.

XCOR is one of about 20 different organizations attempting to capture the "X-Prize" of \$10 million for the first aircraft to take three passengers to 100 kilometers of altitude without the aid of military hardware, and then repeat the feat within two weeks.

For more information visit XCOR at:
<http://www.xcor.com> →

Aviation Days Gone By

January Aviation Firsts:

First Transcontinental airmail service – (February 22, 1921) from Mineola, NY to San Francisco, CA in a De Havilland DH-4M, taking one and one-half days.

Altitude record – (February 27, 1920) – of 33,113 feet was attained by Army Major Rudolph W Schroeder in a turbo-supercharged Liberty-powered Packard-LePere, over McCook Field, Dayton OH. It also should qualify as **World's first vapor trail**, as viewers on the ground reported everything from a passing comet to "a visitor from Mars," unaware of its real source.

Diesel altitude record - (February 14, 1932) was set by Ruth Nichols in *Miss Teaneck*, a Lockheed Vega 1. The altitude of 19,928 feet still stands as having never been surpassed to date.

Aviation History in Iowa

In 1928 the Des Moines Register and Tribune purchased a five-person Fairchild cabin monoplane. This was the first privately owned plane of its class in the country, and the first airplane owned and operated by any newspaper in the United States with a pilot on full-time pay.

The plane's name "Good News," was selected through a statewide contest in which thousands of people participated. In addition to serving as a means at getting photographs and stories to readers as quickly as possible, the plane promoted better aviation and airports in Iowa. ➔

Kicking the Mule - When Sherman Fairchild began operations with his Fairchild Aerial Camera Corporation; his first camera ship was a Fokker "Express." That was a rebuilt Fokker DVII two-seater, one of the airplanes Anthony Fokker smuggled out of Germany in the famous freight trains. The ship was surely built to WWI standards. One of the peculiarities was that there was no firewall between the BMW engine and the pilot, who flew from the front seat. This was quite comfortable on high altitude photo missions, since the engine kept the pilot's feet warm, but there was another evident advantage. It was possible for the pilot to reach the engine with his feet. So, when the asthmatic BMW began to sputter, he had the option to give it a good kick. As pilot Dick Depew said at an interview in his later days, "And don't think that we didn't." (Paul Matt: *Historical Aviation Album Vol XVII*) ➔

February Monthly Meeting Program

Our monthly Chapter meeting will be held January 21st at 7:00 pm in our meeting room at the Waterloo airport terminal. Following the business part of our meeting, Mike Lewis will do a program on Aluminum Construction. He will talk about different alloys, forming methods, joining (riveting) and finishing. ➔



Talking computers and planes at the January meeting

Website Update

Our website now has its own domain name. The new address is <http://www.eaa227.org>. This address is tied to our free website through Tripod.com so, without getting technical, the old address will work as well. I would encourage you to update your address though, as this one is easier to remember and seems to bypass the popup advertising window coming up on top!

Service glitches in my Internet service and the site have slowed my progress a bit but I've added a few more photos and calendar updates. If you know of any events that should be added to the calendar, please let me know. You should also make note of updated phone & email addresses for our Chapter Leaders on the back of the newsletter or by going to the website.

Thanks to everyone who is helping out (on both the newsletter and the website) with articles, photos, and information. We all lead busy lives so I really appreciate the time you've taken to get these things to me to share with the rest of our Chapter. Keep up the good work!

Penny Dunham – Newsletter Editor & Webmaster ➔

Brainteaser Answer (from page 3):

b. You have 2,000 feet of runway left.

On instrument runways, amber lights are used to indicate the last 2,000 feet of runway or half the runway length, whichever is less.

[Reference: AIM 2-1-4 (b)] ➔

CHAPTER 227 OFFICERS, DIRECTORS AND COMMITTEE MEMBERS FOR 2001

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Experimental Aircraft Association Chapter 227 publishes TowerTalk for the use, education and enjoyment of chapter members and others to whom it is provided. Chapter and national events, new of members, member project activities and general aviation items of interest to the membership are included. Editorial content is the opinion of the contributor and does not necessarily reflect the position of Chapter 227 or the EAA and no claim is made for technical accuracy of material presented. Submissions for publication in the TowerTalk are encouraged and should be sent Newsletter Editor, Penny Dunham at 230 Gayle St, Waterloo, IA 50701-1812 (or send by email to chapter227towertalk@yahoo.com). Meetings are normally held on the third Thursday of each month; meeting places vary and are announced in this publication. Please contact any officer for information about Chapter activities. Annual membership dues are \$15 for individuals and \$20 for family. Chapter members must be members of the Experimental Aircraft Association. For more information contact Membership Chairman, Carl Campbell at 234-2294. ➔

We encourage everyone to attend our breakfasts, meetings or other events. Whether you are a member of our Chapter, member of another Chapter or someone interested in aviation, come join the fun!

Chapter 227 TowerTalk

Penny Dunham (Newsletter Editor)
230 Gayle St
Waterloo, IA 50701-1812

