

# WINTERMAIL

EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

JULY 2009

## *Aluminum Overcast* by Jon Cumpton



One thing on my list of flying “to do’s” has been a B-17 ride. When EAA’s B-17 “Aluminum Overcast” came to Eau Claire last week, I decided to check it off my list!

If you remember what the weather was like at the beginning of July, you

*(Continued on page 4)*

## *What is Bert up to now?* by Bill Brown

A few days ago I got a call from Bert Sisler. He was working on his full scale, non-flying, proof of concept six passenger aircraft, and needed a couple of extra hands . Could I come over? Timing was perfect and I hopped in my car and was at his shop in 15 min-

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# Koser's Comments



Although I missed the June chapter meeting because I was out of town, I hear the Alpha/AOA presentation was of interest to several. Apparently, there wasn't time for a lot of questions, and there may have been more emphasis on selling the product than I'd hoped. Having some version of an AOA indicator within line of sight on the panel is certainly worth consideration. I've heard from several members that they like the idea, but are looking at: a) cost of the Alpha/AOA

version, location on the panel, and other versions. As I mentioned last month, I do have an older version of this instrument, and once calibrated, it's quite functional.

Here it is, July, and Air Venture is just around the corner. Highlights of the July meeting will include Scott Johnson, chief pilot at LSA North presenting a FAAsTEAM Wings seminar on flying to KOSH. We'll also have an update on MAC from Greg Fries. Please plan to attend.

Bill Brown and I have had the fun of leak-down testing the cylinders of our Jabiru engines, thanks to Jim Ladwig's assistance. While the "standard" compression tests have yielded good results on my annual inspections, there's a lot to be learned specifically about performance of intake and exhaust valves as well as rings from the leak-down test. Our diagnoses (plus a call to Pete Krotje at US Jabiru) taught us that the test results are meaningless unless the engine has been run and is warm.

The August chapter meeting will feature Jim Hartman's flight testing report on his Pitts Model 12. With good weather, he'll fly the Pitts over that night for us to check out. Plan to be there.

For members who haven't read their Sport Aviation magazine (July issue), check the letters column for a note from one of our own.

-John

P.S. Try this website for some very nice promotional videos of the Twin Cities "Reliever" Airports—especially our own Airlake!

Go to: [http://www.youtube.com/user/MetAirCommission#play/all/uploads-all/1/g5\\_BReYqCMM](http://www.youtube.com/user/MetAirCommission#play/all/uploads-all/1/g5_BReYqCMM)



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# ON FINAL



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# ***This Month: Wed July 15th—Chap. Hangar—6 pm***

**Grill on at 6, Meeting starts at 7. Please bring something to share.**

**Program:** Scott Johnson, chief pilot at LSA North will present a FAAsTEAM Wings seminar on flying to KOSH. We'll also have an update on MAC from Greg Fries.

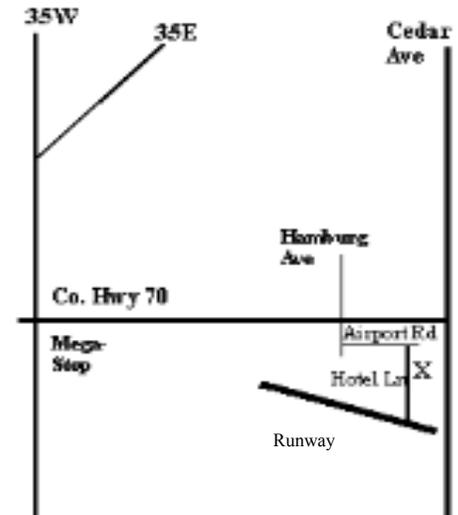
**Sat July 18th—Young Eagles at 9am, chapter hangar at Airlake.**

Young Eagle volunteers, please contact Bill Brown for more information.

**Sun Oct 4 —Annual Awards Banquet at Eagan Community Center**

Mark your calendars!

**Directions to Chapter Hangar at Airlake:** South on I-35 to Hwy 70 (Megastop), then East to Hamburg Ave (3rd stop sign.) Right turn and South to airport perimeter road. Left on airport perimeter road then right on Hotel or India Lane. If the surface is dry, please park on grass between hangars.



## **EAA Chapter 25 Meeting Minutes**

**June 17, 2009**

**Presiding Officer: Andy Hutchinson**

**Location: Bert Sisler Aviation Education Center (BSAEC) at Airlake**

### **Business meeting discussions**

The following guest was introduced:  
Eric Olson

We are now set up with Mike Johnson at Dakota Awards in Rosemount to create new nametags. Members can call or email (preferred) their requests for nametags. They cost \$7.50 plus postage if you have your tag mailed to you. Members will pay Dakota Awards directly.

14525 S. Robert Trail  
Rosemount, MN 55068  
(651) 322-1000  
[mike@dakotaawards.com](mailto:mike@dakotaawards.com)

Norm Tesmar has volunteered to lead an effort to document the early history of Chapter 25. He will recruit others to assist with this project. Thanks Norm!

We are expecting about 40 kids for the next Young Eagles rally on Saturday. We are hoping to fly 100 kids in cooperation with the Big Brothers/Sisters program on July 18. Volunteers for ground support are needed. Contact Bill Brown if you can help.

We will hold our annual Chapter 25 picnic on Saturday after the YE Rally. Grill is on at noon. Bring something to share.

A treasurer's report was circulated. At meeting time our cash balance is \$6920.

Lou Martin discussed the current situation in Iran in relation to his experiences flying in that country, which he documents in his book, Wings Over Persia.

Our chapter fund raising raffle will kick off at the annual picnic. Members are asked to sell one book of ten tickets at \$5 each. Prizes include a flat screen TV, auto GPS system, and a ride in a Clay Adam's 1929 Travel Air. Andy Hutchinson is running the event again this year.

### **Program**

Mark Korin with Alpha Systems discussed the merits of Angle of Attack systems.

Submitted by Craig Nelson

### ***Did You Know ...***

During the Second World War shark oil was used as a lubricant in Japanese combat aircraft and there was a substantial increase in demand. Japan used to be one of the world's major producers and exporters of shark liver oil. Between 1926 and 1940 Japan produced more than 3,800 tons annually on average.

# Aluminum Overcast

(continued from cover)

won't be surprised to hear that the overcast on July 1<sup>st</sup> was not metallic, but solid cloud and damp that day. I had planned to fly over from New Richmond, but the ceilings were low enough that morning that I was worried about having to scud run on the way or file IFR. So I sucked it in and hit the road in my pick-up on I-94, finding flyable weather for B-17's at KEAU. I arrived plenty early to find the beautiful bird sitting on the tarmac with its cowl covers on and no one around except the president of the local EAA Chapter, Jim Gundry, who graciously let me through the locked door out on the ramp before the crew showed up.

Eventually the crew showed up and we waited while the airplane went through an extensive pre-flight inspection. Those of you who know radial engines know that the props need to be turned through several times by hand in order to be sure there is no oil blocking the lower cylinders. The crew let us help! I found out how much effort it takes to move the rotating assembly on a 9 cylinder Wright engine – it's definitely muscle building even without blockage.

We received a nice briefing from the crew chief – Paul Workman. The most important thing I heard was that we could move around the airplane as soon as wheels were up! Very shortly seven of us were strapped in the rear compartment – with me strapped in just in front of the tail wheel structure. I found myself contrasting the experience of riding in the CAF's B-25 a while back. The B-25 is compact and basically an encyclopedia of noise. Standing behind the pilots in that airplane you are standing between two big radial engines that are not very far away from you, and when they are revved up it's one of the loudest noises I've ever heard. No – make that **the** loudest noise I've ever heard!

Sitting in the rear of the B-17 is pretty quiet (certainly no ear protection required). The engines create a relatively distant symphony of noise, and while taxiing you are more aware of the squeaking and creaking of the tail wheel. It allows you to



hear the other noises that get transmitted through all metal uninsulated military airframe.

Once airborne, as advertised – we all started moving around. As far as interior space is concerned, the B-17 struck me as a collection of extremes. The main fuselage where the waist gunners worked is pretty roomy. However, if you look at the trip to the tail gunner's position, you had better be small and slim (they don't let you try). Now if you plan to be a ball turret gunner, I suggest you be pint-sized. Having seen the ball turret they have on display in the museum at Oshkosh, it looks positively large and roomy by comparison to the view you get of it standing inside the airplane.

The radio room is one flight up and then you are faced with the challenge of the getting to the cockpit. The next extremely tight area is the catwalk across the bomb bay. There is a vertical V structure that is very narrow, and it helps to be wedged tight going through it when you look down to the bomb bay doors just below. The apparent smallness of the bomb bay is striking, and it reminds you that the airplane only held 8,000 pounds of bombs internally. I immediately thought of the contrast in the design of the Lancaster, which looks more like a fuselage that is entirely bomb storage, with a cockpit attached. Lancasters also carried normally a 14,000 pound bomb load.

Moving to the cockpit area in Aluminum Overcast is aided by the fact that the guts of the upper turret has been removed. The actual cockpit is cozy for the two pilots with two jump seats behind. After pausing to say hello to our pilot and co-pilot, we drop down a small flight of stairs between them to crawl through to and up into the nose, which is always the most fun. Here you get an up close look at four Wright Cyclone R1820-97s in full song. I think if you can't fly this thing, watching those props spin is the next best thing. Even up front, the airplane is pretty quiet, and very stable feeling – reminding me of an old DC-7 minus all the insulation!

(Continued on page 5)



# Aluminum Overcast

(continued from page 4)



The bombardier's platform is also unique, in that it seems suspended in air, with the Norden bomb sight absolutely as far forward as possible. It's very roomy up front, even with two people up there.

By the way, be sure to go to the airplane's website [www.b17.org](http://www.b17.org) and check out the 360 degree panoramic photos of the interior of Aluminum Overcast, along with other information about B-17s.

All too soon we get the signal to return to our seats. All seven passengers have even bigger smiles on their faces now. You pause for a minute to think of operating in that environment for several hours at freezing high altitude with people shooting things through that spare aluminum tube, and you think how glad they must have been to get back on the ground. And then doing it 10, 20, 30 times.

As usual, several of the passengers are descended from B-17 flight crew members. One woman's father was a radioman. She shows us a copy of his flight log, and a picture of him that shows many missions and two trips to Schweinfurt painted on his flight jacket. It was a great experience – do it if you get the chance.



# Do-it-yourself LRI

by Pat Hoyt

I enjoyed the AOA presentation at the June meeting. For those of you who are more of the "do it yourself" type, here's pictures of the LRI that I made for my airplane: <http://picasaweb.google.com/Patrick.Hoyt/LRI#>

You can buy the Dwyer gauge from <https://www.surpluscenter.com/> Search for part number 2-5002. Costs \$11.95, plus shipping.

Get the instrument faces that you can print out on your ink jet printer here: <http://www.ch601.org/resources/aoa/lift%20reserve%20gauge%20faces.pdf>

A good write up is here: <http://www.ch601.org/resources/aoa/aoa.htm>

You're on your own for the probe. I bought mine off a guy who had several made.

- Pat



*Rather poor picture of what it looks like. I actually took it apart again and painted the white screws and the white "bumpers" black. Looks nice now.*

## Klapmeier and Vision SF 50 Jet Project

Cirrus Design co-founder and former CEO Alan Klapmeier dropped a bombshell on the annual Cirrus Migration in Duluth by announcing he wants to take over the SF 50 jet program through a separate company. But current CEO **Brent Wouters** says the company remains committed to seeing the project through, although it's willing to listen to Klapmeier's ideas.

# Bert's Six-Pack

(Continued from page 1)

utes. When I walked in, I was blown away at how much he had accomplished since I had been there. My previous visit had revealed a set of sticks held together with clamps to get some front seat dimensions. Now, before me was a full scale fuselage with wing stubs, 6 upholstered seats surrounded by a welded tube frame, and even a mock propellor that Bert had carved in his spare time! Bert said "Hop in and turn the crank". The crank handle turned the prop and I heard airplane noises. (I think I embarrassed myself)



Bert's design is amazing. It is a roomy six passenger airplane designed for 3 engines. That's right, three engines. The idea is, if an engine fails, the pilot does not have to contend with a large asymmetrical thrust component. Bert has worked out many of the details, such as weight, COG, airfoil, wing span, cruise and stall speeds, etc, etc. He has even worked most of the details of the 2 passenger doors, a baggage door, and even a cardboard mock-up of the windscreen. Some of the details can be seen in the pictures. The original idea revolves around homebuilding but Bert says he probably will not offer plans. Someone should build a flying version of this design.



## Stuff for Sale/Wanted

PROJECT FOR SALE: 2001 KITFOX LITE SQUARED (Kitfox Model IV Tri-Gear) - Factory-rigged wings, Airfoiled tail, Conventional cowling, Electric elevator trim, Strut fairings. No engine. Asking \$10,000.

Ben Adamowski - badamowski@comcast.net - 952 949-2186.

For Sale: POWER TOW 12v aircraft tug, rated to 4700 lbs. Rigged for Cherokee/Archer, cost \$1395 new, asking \$700.

952-929-8725, hhavir@nbs-inc.com - [www.powertow.com](http://www.powertow.com)

For Rent: Hangar space at Airlake. Lot 38G, sharing space with a Sonex and Stinson. \$200/mo. Call 651 423 4273 or email lisamadams@frontiernet.net

For Sale: 1948 Beech Bonanza 35. T.T.A.C. 2980, Engine 22 SMOH. Prop & all Accessories 22 since overhaul. New paint & leather interior. Tip tanks, dual controls, all new windows, cleveland brakes. Many mods. VFR radios. At KLVN. Asking \$48,000. Al Morphew 952-985-5910 612-961-1546

For Sale: 1973 Cessna 150L TTAF 3300, 700 SMOH. White w/blue stripe. Exterior 8/10, interior 8/10. Michael single Nav/Com radio, ModeC Xpndr. Fresh annual. Portable GPS included. \$18,000 firm, similar in trade-a-plane for 23-24. Gerald Mercier, gjmerci@aol.com 612/861-6921.

For Sale: 40' x44' hangar 32G at Airlake Airport. A/C building tools, many misc. parts. A/C oil & filter, welder/tanks, 1968 Cardinal wings & tail feathers. Call Phil & Betty Funk at 612-578-3017 for viewing.

For Sale: Hangar #30, 48'x50'—Winsted Municipal Airport 10D-40' Electric Bi-Fold door; Concrete floor; Mercury Vapor lighting; 11' x 13' Garage door. 320/834-2824 be35\_33\_captn@hotmail.com

For Rent: Heated hangar space at KMIC. Space has good lighting and use of microwave, refrigerator, bathroom, lounge, and hot/cold running water. Rent dependent on type of A/C or use. Space comes with resident AP, IA, EAA technical counselor, and A/C welder. Call 763-494-6993 evenings.

## Update from Dan Jackson

Hey Jon,

I'm sorry but I was unable to make the June chapter meeting as I had to work, but I'll try my hardest to make it to the July meeting. I can't recall if I've updated you and the chapter on my progress with school and flying. On the last Wednesday of the school year I passed my 221 (basic attitude instrument flying) final stage check being told that I was one of the strongest students he had seen in a long time. I was able to complete the course even though I started about a month late. In the 221 course I basically learned how to FLY the airplane under IFR conditions, the regulations and procedures of IFR come next semester in 222, and I completed many of the commercial cross countries one of which took me home to Airlake. I had a blast this last year in school and my love for aviation has grown even bigger.

On a separate note, I think I'd be interested in both becoming an EAA member as well as participating in the young eagles program.

I once again would like to apologize for not attending the June meeting.

-Dan Jackson



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# Chapter Events and Fly-Ins

**July 15th Chapter Meeting at Airlake**  
Grill on at 6, meeting starts at 7pm  
(see page 3 for directions)

**July 18th Young Eagle Rally (Airlake)**  
Contact Bill Brown for current info.

**Oct 4th Annual Awards Banquet**

**Future meetings** 8/19, 9/16, 10/21, 11/18,  
12/16, 1/20, 2/17, 3/17, 4/21, 5/19, 6/16, 7/21

**July 10-12 St Cloud Mn (STC)**  
Flying fortress tour, book a flight  
At b17.org 320/229-8563

**July 12 Winona Mn (ONA)**  
7:30-11:30am Fly-in bkfst,  
Airshow at 10:30a 507/452-2220

**July 12 Grantsburg Wi (GTG)**  
7a-noon Fly-in Bkfst

**July 12 Two Harbors Mn (TWM)**  
7a-1p Fly-in bkfst 218) 834-4784

**July 12 Hinckley Mn (04W)**  
Field of Dreams Fly-in  
bkfst/airshow

**July 17-20 Anoka Mn (ANE)**  
Return of the Big Bombers  
Golden Wings Museum  
763/786-5004

**July 18-19 Eden Prairie Mn(FCM)**  
MN Air Expo, www.wotn.org

**July 18 Hallock Mn (HCO)**  
7-11:30a Fly-in bkfst 218/843-1059

**July 19 Preston Mn (FKA) 7-12:30**  
Fillmore Co. Fly-in Breakfast  
Kent Dornink 507/765-2582

**July 19 Sleepy Eye Mn (Y58)**  
6:30a-12:30p Fly-in bkfst

**July 19 Benson Mn (KBB) 7a-1p**  
Fly-in bkfst 320/226-3237

**July 27-Aug 2 2009 Oshkosh Wi**  
**Airventure 2009**

**Aug 2 Red Wing Mn (RGK) 7-12p**  
Fly-in bkfst

**Aug 2 Longville Mn (XVG) 8-12p**  
Fly-in bkfst

**Aug 8 Elbow Lk Mn (Y63) 9a-1p**  
**Flekkefest** Ribeye sandwiches

**Aug 8 Laporte Mn (pvt) 7-11a**  
Fly-in bkfst 218/224-2585

**Aug 8-9 Milaca Mn (18Y)**  
Camping/balloon rides/pig roast  
Saturday, pancakes Sunday  
320/983-6547

**Aug 9 Walker Mn (Y49) 730-1230**  
CAP pancake bkfst 218/652-2700

**Aug 9 Chetek Wi (Y23) 10:30-3p**  
Charity BBQ Fly-in 715/456-8415

**Aug 15 Forest Lk MN (25D) 10-4p**  
Brats/burgers/ice cream Fly-in  
651/776-1717

**Aug 16 Mankato Mn (MKT)**  
7:30-1p Fly-in bkfst 507/345-3767

**Aug 16 St Paul Mn (21D) 7a-12p**  
Lk Elmo Aviation Day, pancakes  
651/439-5040

**Aug 22 Glencoe Mn (GYL) 10a-2p**  
Sweetcorn/brat Fly-in 320/238-2376

**Aug 23 Boyceville Mn (3T3) 7-1130**  
Fly-in bkfst 715/643-6100

**Aug 23 Pipestone Mn (PQN)8-1230**  
507/562-2473

**Aug 30 Grygla Mn (3G2) 7a-12p**  
Fly-in bkfst, fall festival  
218/459-3436

**Sep 12 Osceola Wi (OEO) 8a-4p**  
Wings & wheels Fly-in bkfst  
meyerjk@centurytel.net

**Sep 12 Superior Wi (SUV) 730-11**  
Fly-in bkfst

**Sep 13 Maple Lk Mn (MGG)**  
1130-2p Pork Chop fly-in  
763/670-6021

**Sep 18-19 Faribault Mn (FBL)**  
Airfest & balloon rally  
Pancakes Sat 612/618-5883

**Sep 19 Hutchinson Mn (HCD)**  
MN 99's fly-out 952/955-2802

**Sep 19 Grand Rapids Mn (GPZ)**  
8a-noon Fly-in bkfst  
218/328-5852

**Oct 17 Le Sueur Mn (12Y)**  
MN 99's fly-out 952/955-2802

**Nov 21 Litchfield Mn (KUF)**  
MN 99's fly-out 952/955-2802

**Dec 12 Anoka Mn (ANE)**  
MN 99's fly-out 952/955-2802

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