

ON THE FINAL



EAA CHAPTER 25

MINNEAPOLIS / ST PAUL, MN

NOVEMBER 2002

First Flights

by Jeff Coffey, John Koser,

& Gary Rosch See page 4



**John Koser's
SONEX N167JK**



Bert Sisler & Jeff Coffey following the 1st flight of N921JC



**Jeff Coffey's
SONEX N921JC**

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November Meeting—Washburn H.S. p3



Cleared for the Approach

by Frank Hanish

ON FINAL



Minneapolis/St. Paul

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It's been an exciting fall season for Chapter 25. Since Bert & Eric Sisler completed their restoration and engine change on the Cygnet this summer, a few others seemingly got motivated. As of this date, Chapter 25 members have completed four other aircraft projects. This has definitely been a banner year! You can read about just a few of these projects in this issue. It goes without saying that there is an invitation to the others for a few paragraphs and photos on their projects in the coming months. I do not remember any single year where five separate aircraft projects have been completed and flown.

Just a few days ago we held our annual awards banquet. As seen on page 7, all had a very good time. Pete Gavin brought the AirVenture Newsletter Editor plaque presented to him this summer. He arranged for a similar design for this year's list of ON FINAL recipients. That included a model airplane propeller mounted to light colored plaque. Some would say that he really handed out the wood!

I must mention that the banquet would not have been the total success that it was without first, those of you in attendance. I really appreciated your participation. However, not everyone receiving recognition could attend, so we will have some presentations to make during the next few chapter gatherings. Ron Oehler as usual did an exemplary job as chairman. I thank Dan Carroll and Pete Gavin for serving on the Awards Committee. Peter Denny gave a status report, and then his plans for the Washburn High School aviation magnet. Chuck Doyle, Sr. talked about his experiences flying many different aircraft designs, and of some interesting and famous aviators he has met throughout his flying career. We closed the Royal Cliff with our customary secret Santa door prize drawings.

It's been arranged...we will meet these winter months at the aviation classrooms within the Washburn High School. This will be our second consecutive winter at this location. This winter the Gusty restoration being done by the aviation students is in full swing. Remember that you are welcome to stop and visit the project any time during the school day. Contact the instructor Peter Denny, who is a chapter member. Peter has been willing to speak about this and his future project to any interested group. He has written a number of articles that will appear in the IAC magazine. Both your financial support and your interest shown to his students will be greatly appreciated. It will be exciting to watch their progress.

Watch for us in a number of EAA periodicals. In case you did not know this, Ed Hansen is a master salesman. He has successfully bartered with Bob Mackey of the EAA Chapters Office in obtaining those "Hangar Hawks" shirts presented at the banquet. All it cost us was an article and photos about the chapter's new hangar project. Look for Ed's article in an upcoming edition of Sport Aviation.

As this year is coming to an end, and as Thanksgiving is soon upon us, it's a time for family. Take the time to personally reflect on your life, and the people that mean so much to each of us. Spend some quality time with your loved ones. Be appreciative and enjoy! "Don't sweat the small stuff..."

Happy Thanksgiving,

-- Frank



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2002 Fundraiser Recap

by Ed Hansen

This year's fundraiser took on added emphasis with our purchase of a hangar at Airlake Airport. To generate the added emphasis, chapter member Mark Gulbrandson (who financed the hangar purchase) provided a Ford 150 4x4 pickup truck as the prize for the ticket raffle. With the incentive of winning a pickup truck, we were able to generate more interest in this year's fundraiser. A special thank you to Mark for his generous support.

This year's fundraiser generated approximately \$11,000.00 in ticket sales. Although many members had hoped that the fundraiser would generate greater ticket sales, the committee is pleased with the results. The \$11,000.00 level was reached utilizing two approaches.

First, the chapter sold tickets at 15 regional fly-ins. These fly-ins involved displaying the truck at each event and selling tickets. A special thank you to the 13 chapter members for giving up their weekends to help the Chapter in the fundraising effort. Ticket sales totaling \$2,000.00 was realized from their efforts. The two top producing fly-ins were Stanton at \$348.00 and Flying Cloud (Shriners Breakfast) at \$322.00.

Chapter members generated total tickets sales of \$9,000.00. A total of 25 members sold \$200.00 or more. This group had total ticket sales of \$5,666.00. Those members in the 200 plus club are: Ken Beene, Chris Bobka, Gary Bradford, Cliff Carpenter, Dan Carroll, Stan Chrobak, Jeff Coffey, Jon Campton, Mike Dolan, Phil Funk, Pete Gavin, Ed Hansen, Lee Hurry, Mark Kolesar, Elwood Kruger, Roy Landela, Jim Mayer, Craig Nelson, Ron Oehler, Dick Reinke, Gary Rene, Don Sletten, Eric Strandjord, John Sullivan and Tom Weir.

The top two ticket sellers were:

Dan Carroll \$450.00

Mike Dolan \$394.00

To put all of this together takes a team. I would like to thank the following committee members and those selling tickets at the various fly-ins: Steve Adkins (fly-in), Chris Bobka (committee & fly-in), Greg Cardinal (fly-in), Dan Carroll (fly-in), Jeff Cof-



Raffle winner Yvonne Kunzer & family with their new pickup

fey (committee & fly-in), Mike Dolan (committee & fly-in), Pat Halligan (committee), Frank Hanish (committee), Lee Hurry (committee & fly-in), Dale Johnson (fly-in), John Koser (committee), Craig Nelson (committee & fly-in), Ron Oehler (fly-in), Phil Schaffer (fly-in), and Paul Wilcox (fly-in).

Bob Mackey, EAA VP of Chapter Relations, provided each of the fundraiser team members a beautiful shirt. Each shirt was embroidered with the member's name, Chapter 25, and the slogan "Hangar Hawks", a suggestion from Laurie Lee. The team members were delighted with the shirts. This is another example of the support EAA Oshkosh continues to provide us.

The winner of the Ford Pick-up was Yvonne Kunzer of Shakopee. Yvonne purchased 5 tickets at the Young Eagle Rally conducted at the Chapter hangar on June 8th, International Young Eagle Day. Yvonne, her husband and two children are delighted with their new pickup.

A big Thank You to all members who contributed their efforts to this year's fundraiser.



This Month—Nov 20th—Washburn HS 6:30pm

Will review Gusty restoration
and elect officers for 2003

From the South: Stay in the left lane of 35W and take exit 108 at the Crosstown. Continue north on Lyndale Ave to 50th Street. Right turn and proceed 3 blocks. Turn left into the parking lot and park anywhere space is available. Door #9 facing the south parking lot should be used to enter.

From the North: Take 35W south to the 46th street exit and turn right. Proceed west on 46th street to Nicollet Ave. Turn

left. Proceed south on Nicollet to 50th. Turn right. Continue west on 50th past the Junior High School (at 50th and Nicollet) to the Senior High School 2 blocks west of Nicollet. Turn right into the south parking lot and park anywhere space is available. Use Door #9 to enter.

If the south parking lot off 50th is full, drive around to the parking lot off 49th Street on the north side of the school. Enter the school from the south using Door #9.

The meeting will be held in Room 119.



First Flights

Jeff Coffey, Sonex N921JC

Sonex N921JC had its first flight on Saturday, October 26th! Since I am a low-time private with very limited experience in taildraggers, I was very lucky to have Bert Sisler offer to do the first flight. He did an absolutely fantastic job which is no surprise considering his incredible amount of experience.

A little background: 921JC is a taildragger, powered by a Jabiru 2200, with optional dual sticks and fiberglass tail tips. It is currently running a Sensenich 54" diameter x 44" pitch wood prop. My panel consists of a Grand Rapids EIS (engine information system), 2 1/4" analog airspeed indicator, altimeter, VSI, Microair Comm, and Microair Transponder. The empty weight is 611 pounds. With the exception of the fiberglass parts, formed aluminum, and welded kits, it was scratch-built. The fiberglass parts are painted and the aluminum will eventually be polished.

I attended a beginner's builder workshop put on by Sonex in February of 1999. I began working on the plane in April 1999. It is built to plans with no modifications. It is the first plane I've built and also the first time I've worked with sheet metal. I am not a particularly "handy" guy but I absolutely loved building my Sonex (except for maybe the cowling). My Sonex is serial #108 and was the 38th Sonex to be completed and fly.

Bert began with a medium-speed taxi test down the runway. I would guess 25-30 mph. The plane tracked straight and felt stable and very controllable. He reported a bit of chatter when using the brakes at higher speeds. The Sonex uses very basic mechanical brakes so I'm hoping they just need to wear in a little.

Next Bert took to the skies. The plane seemed to jump off the runway and climbed at 1000 fpm (It was ~40 degrees with a 8 knot wind pretty much right down the runway). Bert flew for about 30 minutes. In level flight Bert pushed the throttle in to 3500 rpm and said it still had a bit more to go. Redline for the Jabiru is 3300rpm. Bert thought the prop is under-pitched. The 54/44 prop was recommended by Sonex. After speaking with them, they now realize that the newer Jabiru engines have had some design changes and are now putting out a little more power. They agree with Bert that the prop is under pitched and should probably be a 54/46. At 3500rpm Bert was getting 160mph indicated. At 2900 rpm he was getting 120mph indicated. He slowed the plane down to 45mph clean and it still had not stalled. He never used flaps. The oil temps stayed right around 170 degrees.

Overall, he said the plane handled well and felt very stable. He said it was more sensitive in pitch than in roll. He approached a bit fast and used no flaps. He made a beautiful landing about 1/2 way down the runway at Airlake.



Bert's only negative comments were ergonomic in nature. He had a very hard time seeing out the front of the plane, even in level flight. I think this is partly due to the flat angle of the lexan windscreen. It causes a bit of distortion. He was also concerned about the workload for your left hand. With the throttle, flaps, trim, brakes, carb heat, etc... all crammed together, you sometimes feel like you need a third hand. I have found this to be true when holding the brake on during an engine run-ups. He also didn't like the canopy latch but that was probably due to my craftsmanship and not the Sonex design. I need to get it to work a little more smoothly.

It was a very successful first flight with no bugs to speak of. I hope to finish up my tailwheel endorsement in the next week or two and then I'll begin flying it. Thanks to all those in the Chapter that have provided encouragement and advice over the last few years. Especially John Koser (I wouldn't have finished the plane without his help), Bert Sisler (the best test pilot on earth), and Bill Faulstich (an excellent technical counselor with a hawk-like eye for fasteners). Without all of your help I'd still be trying to figure out how to use a pair of cleco pliers.

John Koser, Sonex N167JK

October 23

As of Thursday evening last week, both Jeff's and my Sonex were inspected by John Roscoe, DAR from Albert Lea, and certified.

The inspection was not as detailed as I had expected. He paid special attention to control surfaces, ("these can kill you if they're not correctly installed,") examined a number of fasteners, and had me fire up the Jabiru and run it up. Following his inspection he pronounced N167JK airworthy. Following my checkout, we drove to LVN so he could likewise check out Jeff Coffey's Sonex, which he conducted in a similar manner. The paperwork then took about 45 minutes. I haven't set a test flying schedule yet, but I'm working on getting organized for the first flight now.

November 2

This morning, 2 November, 2002 saw N167JK make a suc-

successful first flight. The takeoff was quick, using about 500 - 700 feet of turf runway with climb-out very decisive. The airplane responds extremely well to changes in throttle, and it is quite pitch sensitive. Stick forces were solid, and responded to airspeed well with stronger forces in evidence at higher speeds. This is one little fighter plane, and it's only the 2200A Jabiru, tail-wheel configuration.

A data sheet was set up for the ground crew to record numbers periodically read off by the pilot/owner, John Koser. Some numbers recorded at OAT of approximately 40° F are as follows:

Initial climb-out @ 100 mi/hr: Oil Pressure = 74, Oil Temp = 156, Cylinder Head Temps + 298, 293.

First pass over the field @ 2200 RPM: 125 mi/hr.

Slow climb @ 2000 RPM: 400 ft/m at 90 mi/hr.

Level Flight: O.P.= 76, O.T. = 165, CHTs + 248, 233

Level Flight @ 2600 RPM: 135 mi/hr.

Climbing turn @ 2900 RPM: 800 ft/min, 140 mi/hr.

On the last climbing turn, the engine missed a beat, so the pilot headed around the pattern. On base leg, the engine stopped and was easily restarted with a little additional throttle. (A dead stick landing would have been quite easy from this position, but it was still disconcerting.)

On final, the engine again stopped just a few hundred feet short of the threshold, so a dead stick landing was completed with no difficulty at all. No flaps were used, and a nice three point landing was accomplished.

After restarting on the ground and rolling back to the hangar, the cowling was removed, and fuel system inspected. A fuel test showed fine black residue. Removal of the gascolator bowl showed a quantity of the same residue in the bowl. Removal of the screen from the top of the gascolator showed no residue, so we opened the fuel line and let a few cupfuls flow into a light colored tray where we could again see some black specs of residue.

The entire fuel system will now have to be checked out before the airplane flies again. The Aero-Carb has been removed for inspection. Next the fuel flow sender will be removed and cleaned out, and the fuel lines will be blown out with compressed air.

The tank is believed to be the culprit. This tank was sloshed out with gasoline after having its fittings cleaned out prior to installation, but the residue is black, and therefore believed to originate from the tank. (The tank had been filled previously with only a few gallons - 4.0 maximum—before being filled on 1 November during the fuel gauge calibration process. Probably the residue came from the upper walls of the tank.)

I'll report more on the progress with the fuel system problem. The ground crew for today's flight included:

Jeff Coffey, data dude, whose plane flew last Saturday,
Wayne Flury, communicator, whose fuselage is looking good,
Michael Carland, videotape person, who's about to really accelerate his Sonex building,
Bev Koser, patient and supportive spouse, who provided a lot of support and help, as well as doughnuts,
Fran Coffey, Jeff's Dad, who has supported both Jeff's and my plane building process,
Bill Faulstich, Jeff's and my EAA Tech Counselor, who made numerous visits and had lots of good advice,
Eric Koser, my son, who keeps his Dad on the straight and narrow, and puts up with a lot of advice,
Eric's family, wife Erica and sons Josh, and Zach, who are great cheerleaders and support personnel.

If I left anyone off, I apologize, but it's been a busy morning and I need a nap. :)

JFK

November 2

I think I may have found the source of the engine out this AM. When I removed the experimental Aero-Carb from the engine and brought it home, the answer jumped at me, and I am a bit embarrassed.

In the carb supplies is a little plastic zip loc with the other needles for the Aero-Carb. In that bag is a threaded lock screw which secures the needle position in its mounting. Somehow, I apparently overlooked that lock screw. My theory is that the needle adjustment screw (which turns quite easily) just vibrated downward, turning a bit at a time until it starved the carb of fuel. That explains why I could re-start with the throttle pushed in quite a ways, but not at idle. I'll be testing this theory within the next few days.

It is a wonderful little airplane, and handles like it should - very responsively.

JFK

Gary Rosch, Pacer N7027K

Finally after a long sabbatical N7027K is once again in the air! The first test flight was on Friday, September 13th! A fellow Northwest pilot, Clay Adams took the pacer up for the first test flight. Clay and his Dad had a Pacer when he was in college and he would fly it between the Twin Cities and college, up in Grand Forks, ND. Clay and his Dad have rebuilt many aircraft and Clay is probably the best tail-dragger pilot in the Twin Cities. Clay thoroughly looked over the Pacer and then said he wanted to do the first test flight by himself. I got

(Continued on page 6)

First Flights

(Continued from page 5)

really nervous especially after climbing in, he asked me where a particular control was, I'm thinking maybe I should go along just in case I could help him find something else. The thought also crossed my mind what if he crashes, he has four kids. I just had to trust that he knew more about Pacers and how to test fly them than me.

After telling Eric, my mechanic and me what he would be doing in the air he started up the engine and taxied for the runway. Eric, his youngest son, Cole and I watched from the edge off the runway. I was praying that we had the aircraft rigged properly and no big pieces would fall off. I could hardly believe that after 5 1/2 years the day had finally come that I was going to see the Pacer take off. Clay did a beautiful takeoff and then headed out of the traffic pattern. As Clay flew away from the traffic pattern we could see him turn the aircraft left and then right. Then we lost sight of the aircraft while he checked out the stall characteristics. After what seemed like an eternity, he finally returned to the traffic pattern to make a landing. As he started the flare something did not look right and Clay did a go around. He came around for another landing which looked much better.

Clay's post test flight report was that overall it flew like a Pacer. He felt it needed a little more elevator on landing and that's why he went around on the first landing. We then checked for oil leaks and found a few which is quite normal after an initial flight test. I tightened up the oil lines that were leaking and we put some weight in the baggage area and filled up the fuel tanks. It was my turn to go up with Clay. As Clay made the takeoff again I could not believe we were actually flying. Again it felt surreal, like it was not really happening. Then Clay let me fly the aircraft, it flew great! The wings stayed fairly level which meant they were rigged properly.

The last two weeks of September I was busy researching the elevator problem and solving that problem. I also had a flight instructor check me out on 3-point landings, wheel landings and forced landings. He said I was good to go solo but I could use some more work on basic flying skills especially using the rudders, quite normal for an Airbus airline pilot who does not have to use rudders. I have a computer that does that.

Finally I took my first passenger, Pam up on Friday, September 27. We flew to Wisconsin, actually the Red Wing, MN airport which is on the Wisconsin side of the Mississippi River. She loved it and can't wait to go again. We have not been able to go again because of bad weather.

Hoping to visit many of you in the Pacer. It is snowing again as I write this, looks like we will not be flying again today so I might as well work on my new airline announcement. Happy landings,

—Gary



Chapter 25 2002 Awards List

Special Recognition

- Frank Hanish**—Outstanding Service as Chapter President 1995—2002
Mark Gulbrandson—Service Award for generous support of chapter hangar project
Ed Hansen— Outstanding Service for Leadership in Fundraising
Pete Gavin— Annual Traveling Trophy

First Flights

- John Koser**— Sonex N167JK, November 2
Jeff Coffey— Sonex N921JC, October 26
Bert Sisler— Sonex N921JC, Test Pilot
Ron Hoyt— Kolb Mark III
Larry Daudt— Team Rocket F-1

Officers for 2002

- Frank Hanish**—President
Ed Hansen— Vice President
Greg Cardinal—Secretary
Chris Bobka— Treasurer
Ron Oehler— Membership Coordinator
Mike Dolan— Young Eagle Coordinator
Pete Gavin— Newsletter Editor

Young Eagle

- Pete Gavin**— Top Gun 2002
Earl Adams— Over 20 Flight Missions
Stan Chrobak— Over 20 Flight Missions
Don Eide— Over 20 Flight Missions
Frank Hanish—Over 20 Flight Missions
Ron Oehler— Ramp Champ 2002

“On Final” Newsletter

- Mike Dolan**— Best Flying Story
Lee Hurry— Best Airplane Story
Noel Allard— Best Historical Article
Eric Strandjord—Best Technical Article
Craig & Sally Nelson—Best Homebuilt Article
Eric Sisler— Best Homebuilt Article
Fred Nauer— Best Flight Safety Article
John Koser— Best Flight Safety Article
Bob Stone— Traveling Reporter
Rob Johnston— Traveling Reporter
Dave Kujawa— Photographer's Award
Ed Hansen— Newsletter Sponsorship Award
Ron Oehler— “On Final” Printshop Award

Contributing Author Certificates

- Peter Denny** **Donna Burns**
Dan Carroll **Dale Johnson**

Tech Counselors

- Earl Adams** **Chris Bobka** **Dick Burns**
William Faulstich **Bill Witt**

Chapter 25 Annual Awards Banquet

Nov 7, 2002



Ed Hansen and Frank Hanish with their special recognition awards (see list on p 6)



Peter Denny describes the enthusiasm his students have for building aeroplanes, and his need for corporate sponsors for the Sonex project



Our three "first flight" award recipients describe the first flights of their aircraft. John Koser for Sonex N167JK, Jeff Coffey for Sonex N921JC, and Ron Hoyt for his Kolb Mark III



Guest speaker Chuck Doyle with Noel Allard



"On Final" Newsletter 2002 Award winners



Chapter Events and Fly-Ins

Nov 20 Chapter 25 Meeting,
WASHBURN Sr. H.S.
Meeting at 6:30pm!
 We will review student progress on the Gusty project, then elect Chapter officers for 2003 (see p3)

Future meetings Dec 19 Jan 15
Feb 19 Mar 19 Apr 16 May 21

Nov 16 Tea, SD (Y14) 7-11a
 Ch 289 Fly-In Bkfst

Dec 8 Cottage Grove WI (87Y)
 Ch 93 Chili Feed Fly-in,
 Blackhawk Field, 608/273-2586

Dec 21 Glencoe MN (GYL) 10am
 Ultralight Ch 92 December Meeting

Dec 21 Tea, SD (Y14) 7-11a
 Ch 289 Fly-In Bkfst

Jan 18 Marshfield WI (MFI)
10a-3p
 Ski-Plane/Wheel Plane Fly-in and Chili Feed. Packed snow runways. Contact Dave LeVoy, 715/687-4120

Feb 1 Brodhead WI (C37)
 Ch 641 Groundhog Chili Fly-in
 BillWeber, 262/374-0465
 airknocker7AC@aol.com

Feb ? Eden Prairie MN (FCM)
 Pancakes at Marv Getten's hangar

Apr 2-8 Lakeland FL (LAL)
 EAA Sun 'n Fun

May 16-18 Kewanee IL (EZI)
 Midwest Aeronca Festival,
 Jody Wittmeyer 309/852-2594
 jodydeb@inw.net

Stuff for Sale/Wanted

For Sale: Large 2-stage air compressor from old service station, \$250. Spare rebuilt motor for it, Huge 2 hp (requires two men to lift it) 1" shaft, 5" pulley on it, \$50. Smith "Airline" welding outfit, totally complete with many extras including tank cart, \$175. These are in use in my shop. Lee Hurry Hopkins, Mn 952-938-7856 til Thanksgiving, then its Phoenix til May.

For Sale: One Share in J-3 Cub Club, currently \$110 per quarter plus \$22 per hour wet. Hangared at Crystal, priority to Chapter 25 members. Dan Carroll 952-593-5785

For Sale: Lycoming O-235C, 0 SMO, no accessories, all logs. \$4900. John Curry 952/983-0742

For Sale: one yellow tagged engine mount for a 1977 Decathlon. Mark Kolesar H 763-544-6766, W 612-371-5171.

For Sale: Hartzell propeller from Piper Cherokee 180
 Ronn Winkler 952-829-5654

For Sale: 1/2 interest in RV-6A, completed and flying. George Jevnager's partners are selling their half. George 952-933-2485

For Sale: 62-29 VW prop, beautiful for plane or den, \$300, plus numerous new/used gages. Bert Sisler 952-8848920



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