



EAA Chapter 478
COCKPIT CHATTER
Lexington Park, MD **October 2002**

FROM THE EDITOR

Next Chapter Meeting:
15 October 2002, 7:00 PM
Air Terminal Building
St. Mary's Airport (2W6)

In this issue of *Cockpit Chatter*:

From the Top, Bernie reviews fly-ins, the annual KR gathering at Red Oak Iowa, and this month's chapter meeting.

Chapter Meeting Minutes, one way to increase communication in the chapter is to pass on the minutes from meetings using this newsletter.

Governing Board Meeting Minutes, routine business is handled at the once-a-month governing board. Meetings are usually held at the NAS Patuxent River Test and Evaluation Museum conference room.

Treasure's Report, Lois lists the current balance.

Curtis A1 Triad, Dave Z. provides a monthly progress report.

Member's Forum, thanks from a friend, honorary membership, KR Gathering, KR-2b progress report, and a heads up on the local SFTE.

EAA Network, describes events sponsored by the EAA and its chapters: Exxon Flying Tiger record attempts, Aviation

World's Fair, and P-38 recovery.

From the Web, Kitty Hawk pilot facility, turbine Lancair, IFR adventure web site, and National Aerobatics champion..

In the Chocks, Not a whole lot of flyin' going on..

Flying Destinations has been included to help us plan flying opportunities.

Calendar of Events has been included to help us all plan and support chapter activities. Initial draft.

Membership Roster has been included to help us communicate with chapter members.

- Paul Gambacorta, Editor

FROM THE TOP

Bernie Wunder, Chapter 478 President

September was an action packed month for me. On the 7th of September I drove over to the Virginia Fly-in at DinWittie Airport near Petersburg. It was a pretty day, got to look at several airplanes, hear Bill O'Brien talk about the new Sport Pilot NPRM, and meet some of the KR builders/pilots that I read about on the KRNet.

On the 14th, we had our fly-in. The weather did not hold up that well, but we had a good time, promoted aviation in Southern Maryland and flew 43 Young Eagles. This was my first time I have coordinated a Young Eagles event and of course I lost control within the first 5 minutes. I have much more admiration for what Greg Stevens and others have done in the past to conduct a Young Eagles rally. Luckily I had a couple of experienced Civil Air Patrol folks bail me out. Our chapter meeting on the following Tuesday consisted of a "lessons learned" session plus looking at some photos from the fly-in. We had some Young Eagles "older" than 17 and a Pulsar with external "wing tanks" - the first major mod to the Pulsar! We had great pancakes and hot dogs. Eric Chase did a great job as fly-in chairman but unfortunately won't be with us next year to do it again. I would like to extend a big "**thank you**" to all of you who volunteered and helped make this a successful fly-in.

Then on the 19th I flew out to Omaha and drove to Red Oak, Iowa for the annual KR Gathering. It was great to see and touch a bunch of KR's and for two days talk about the building of one neat airplane. I wrote up a trip report that maybe our newsletter editor will publish.

Cockpit Chatter is published monthly by EAA Chapter 478 solely for the dissemination of information and ideas to the membership. Any opinions expressed herein are strictly those of the author and do not necessarily reflect the opinions of the chapter or the Experimental Aircraft Association.

Chapter Officers
President: *Bernie Wunder*
Vice President: *Tom Weiss*
Secretary: *Bernie Wilder*
Treasurer: *Lois Rose*

Committee Chairs and Chapter Advisors
Social Chairman: *Open*
Program Coordinators: *Open*
Librarian: *Paul Gambacorta*
Flight Advisor: *Vacant*
Technical Counselors: *Ed Stewart, Nate Frank, Bob Andrews, and Rich Gill*
Newsletter Editor: *Paul Gambacorta*

Internet Address
<http://eaa478.tripod.com/>

At the meeting last month we talked about a lot of things, including the passing of a resolution to pursue a chapter home at the airport. The board of directors will put this on the agenda and report back to the membership. Everyone should read the minutes from last month's meeting.

Our program this month will consist of a presentation on aviation weather and the Aviation Digital Data Service by a National Weather Service Representative. It would be great to have a good turn out for a speaker that is coming all the way down from Washington. Please join us in the fun we expect to have our monthly meeting at 7 pm on the 15th of October. Fly and build'em safely!!

- *Bernie*

CHAPTER MEETING MINUTES

General meeting Minutes for 17 September 2002

Meeting opened by the president at 7:00.

Minutes of last meeting and the Treasurer's report were approved as submitted.

Committee Reports:

A-1 Construction - D. Zorychta reported on progress.

Young Eagles - Bernie Wunder reported on preparations for YE Day at Fly-in.

Library - P. Gambacorta reported that the book order is in.

Membership - D. Zorychta reported that the mailing campaign netted 6 to 8 new members. Concern expressed about keeping old members active.

Nomination Committee - chairman absent.

Calendars - Three kinds this year. No decision on numbers.

Old Business:

Income tax and 501c3 status - View expressed that we shouldn't have to submit a tax return. Being worked on anyway. 501c3 forms complete and can be submitted anytime we get a Million Dollar donation.

Chapter Home - Discussion led to the making of a motion that: "Chapter 478 membership officially adopts the policy of pursuing the goal of obtaining a permanent facility for a chapter home." Motion was made, seconded and adopted without opposition.

New Business:

Moved, seconded and adopted without opposition that the chapter grant Henry

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Bonner Life Time Chapter membership, EAA Honorary Membership and have a plaque prepared for presentation to him at the next meeting. Eric Chase volunteered to get the plaque and the President will prepare the letters for the Honorary and Life memberships. The Secretary proposed that the dues be increased to \$20.00 per year for a single membership and \$30.00 for a family membership. Discussion concerned what would be done with the money. A motion was made, seconded and passed to follow her suggestion.

Fly-in - A discussion of the recent fly-in was held to determine what went well and what needs improvement and what could be learned from the event. Most important was the need for more participation from the membership in the planning and preparation for the event. Advisability/possibility of charging admission was raised. See Fly-in Chairman's report.

October Program to be a presentation by a NOAA representative.

Program was a slide presentation by the President of Fly-in Pictures, etc.

- *B Wilder*

GOVERNING BOARD MEETING MINUTES

Board meeting was held Thursday, 10 October at the T&E Museum. The agenda included: Honorary Member Certificate, November Elections, Christmas Party, Calendars, and chapter home.

TREASURER'S REPORT

<u>ACCOUNT BALANCE (as of 6/6/02)</u>	
ASSETS	
Cash and Bank Accounts	
Checking	\$397.12
Savings	\$1013.08
Fly-Ins	\$0.00
Pancake Breakfasts	\$0.00
Petty Cash	<u>\$71.00</u>
TOTAL	\$1,481.20
TOTAL ASSETS	\$1,481.20
LIABILITIES	<u>\$0.00</u>
OVERALL TOTAL	\$1,481.20

Reminder - If your 2002 Chapter Dues are due, send a \$12 check payable to EAA Chapter 478 to Lois Rose.

- *Lois Rose, Treasurer*

CURTISS A1 TRIAD

Since my last report to you, Bill McMurry contacted me and provided the following status on the Main Float:

He has ordered all the wood he needs to build the main float; and should be able to pick it up soon. Bill is personally footing the bill for all of the main float.

1. **Status since last report:**

a. **Wing Struts.** This week, Kevin Riley (EAA Chapter 478) started cutting the first Curtiss A-1 interplane wing strut (1 of 12) with his bandsaw. He will then hand-carve the strut to the final dimensions.

b. **Rudder.** Paul Gambacorta (EAA Chapter 478) [dreamed that he - Ed.] finished the rudder—except for covering it; however, the covering of all applicable surfaces will be done with the aid of a Poly-fiber representative(s) and initiated when the wing panels are completed. Poly-fiber is donating all the materials to cover and rubberize-coat the surfaces.

c. **Main Float / Pontoon.** I have no report from Bill McMurry (EAA Chapter 478) for this month.

d. **Engine (Model "O" V-8; 75 HP).** Ray Stinchcomb (EAA Chapter 478) and I continue to work with our contact at the Smithsonian National Air and Space Museum (NASM) —Mr. Phil Edwards. Mr. Edwards is an archivist at the NASM, and below is an edited update on his efforts to find a specimen and/or drawings of the Curtiss Model "O" engine:

Sept 20, 2002:

"I will look into the model "O" engine specimen the Smithsonian is supposed to have. Apparently, we even have a specimen of the model "L" as well but, I too was thinking while I was away, that perhaps you should just install an "OX" in the interim, to meet your schedule and then spend whatever time it takes later on, without all the pressure to seek out and acquire (the dimensions of) one of the more scarce model "O" engines. Because they were made in at least limited production, that suggests to me some chance that you could eventually acquire one. That is not to say what sort of condition it might be in but, you do not necessarily need one that is capable of running. However, all you truly need is a specimen that could be restored to static condition to more authentically finish off the replica aircraft. That seems possible enough to accomplish for it to be something to really shoot for in the long run but, give the use of an "OX" for now full consideration, because it seems like the most practical step to take in keeping things going."

"There is at least some possibility that the Curtiss model "O" installed in NASM's former A-1 "Triad" replica (which I only recently found out was de-accessioned and transferred to the NMNA in 1991) is the same Curtiss model "O" engine I am currently attempting to identify among our dedicated engine collection. I only suggest this may be the case because of the scarcity of such engines and the fact that the more authentically crafted static or non-flyer A-1 replica that was made in

commemoration of the 50th Anniversary of Naval Aviation was actually produced for the old National Air Museum, (i.e. —for preservation in the United States National Collections of the Smithsonian Institution) and was never intended to be flown (as was the second replica with its strengthened airframe and more powerful "OX" engine). We'll see if that's the case as I proceed on this research."

e. **Propeller.** Bernie Wunder (EAA Chapter 478) is half-completed in making an *engineering manufacturing development* half-scale model of the Curtiss A-1 propeller. We are pleased with the results of his technique / process and he will now complete this half-scale model first, and then go on to the full-scale replica.

f. **Wing Panels.**

i. **Diagonals & Intercostals.** Since last report, I laminated all the wing-panel diagonals (56) and intercostals (28) for the remaining wing panels (7). Last night at the NAS Patuxent woodshop, with Mr. K. "Pinky" Nagel's (Wood Shop Manager) assistance, I planed all the diagonals and intercostals down to their final thickness of ½ inch.

ii. I will now continue to construct wing panels using all the wing panel components (spars, diagonals, intercostals, and ribs) fabricated over the last four months. There are seven (of ten) wing panels remaining to be constructed; and they will be constructed in the same wing jig where all their respective components were fabricated.

g. **Glenn Curtiss Museum.** I contacted the Director of Restoration at the Glenn Curtiss Museum (Hammondsport, NY), Mr. Art Wilder, and we compared notes. In about six weeks, I plan to make a trip to see their flying version of the Curtiss A-1. Their wing panels are completed and they are moving all the parts into their restoration facility for final assembly. They currently have five full-time restorers working on the Curtiss A-1 Triad and plan to have it completed by July 2003; however, they do not plan to test fly it until cooler conditions —so he says they will not get to fly it until December 2003. They have a working Curtiss OX-5 motor running on their engine test stand; and plan to use this same engine in their flying replica.

h. **Beginnings of the Bowheader Plane.**

i. After analyzing the rib lofting data for the bowhead plane and comparing it to the wing rib lofting data, I theorized that instead of requiring the construction of a dedicated jig for the bowheader, the bowheader ribs could be fabricated in the existing wing jig. To quickly validate my theory, I took the full-scale plan of the bowheader rib, held it up to the profile of a completed the wing panel (bright light positioned behind wing panel), essentially curve fitting it, determined (and marked) which segment of the wing jig related to the "fit" on the wing panel rib.

ii. I made one successful bowhead rib in the wing jig and plan to make the remaining twelve ribs in the same fashion. The bowheader ribs will probably have to wait until all the wing panels are all constructed. However, I may be able to fit the lamination of one bowheader rib—in between steps— during construction of each wing panel.

2. **Total Expenditure of NAVAIRSYSCOM funds To DATE for this project:** \$1,174.18

3. **Total Expenditure of NAVAIRSYSCOM funds since 28 March 2002:** \$1,174.18

-Dave Zorychta

MEMBER's FORUM

Friends, I would like to thank all the members of Chapter 478 for the Get Well card and your kind thoughts. It made my stay in the hospital and convalescing at home more pleasant. I am back to about 90% now and am flying again. See you all at the next Chapter meeting.

- Jim McCarthy

Honorary Membership Application

Mr. Bonner has significantly supported EAA Chapter 478 over the past 10 years. As the Navy Museum Director at Patuxent River, MD, he has allowed the chapter to use all of the museum facilities to conduct board and general chapter meetings. Many times he has allowed the chapter to use the museum on short notice when other facilities were not available. He has made presentations to the chapter covering the building of new museum facilities and indicated that the chapter would be welcome to use restoration facilities, workshops, etc. when the new museum is completed. The chapter now has a joint venture with the museum to build a non-flyable, exact replica of the Navy's first airplane, the A-1 Triad. Mr. Bonner has been instrumental in helping the chapter obtain drawings, funds and materials for construction of this airplane. Mr. Bonner is retiring from the museum at the end of September 2002. The chapter would like to thank Mr. Bonner for his support, and the best way we could do that would be to give him a life-time chapter membership and honorary EAA membership for a year.

KR Gathering 2002

In August I went on Hotwire and got a round trip ticket to Omaha, NE for less than \$200 to get to Red Oak, Iowa, home of this year's annual KR Gathering on 20-21 September. I also got a \$19.95 rental car from Hertz (which turned out to be a full size car). Hotwire is something if you have not used it for getting cheap but good travel accommodations. Red Oak was about 70 miles from Omaha, in the heart of corn country. When I got there, there wasn't much doing! I also did not have a motel reservation (even though I had made one), so the lady asked me if I was an AARP member (which I am) and proceeded to get me a very nice room for \$40/nite!

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I drove out to the airport on Friday morning and it was fairly quiet. There were probably 5-6 KR's that flew in that day. One in particular was a KR on steroids. The guy was from Conn and had a full IFR plane with a 360 engine. He had only spent about \$85,000 and you could sort of see the lines of a KR plane, but his modifications were significant and interesting. One of the pilots gave rides all day (I almost got one on this trip, but didn't) in his O-200 powered KR2. He continually made 200 MPH passes over the airport all day long. He said he did not feel well at the end of the day because every time he let his passenger fly, they pushed the stick forward and since the KR is a fairly sensitive plane, he would be on a roller coaster ride!

Saturday saw several more KR's fly in, including 2 from Canada. There were others from California and New Mexico. A slow moving, massive cold front through the center of the country prevented many of the East Coast KR's from getting to Iowa. On Saturday there were 3 forums on weight and balance, engines and composites. I also got to meet Jeanette Rand, wife of Ken Rand who designed the KR but died in an aircraft accident several years ago. Steve Bennett from Great Plains was a co-host and he was there along with Dan Diehl, both fairly well known in the KR community for engines and landing gear respectively. There was an airplane-judging contest followed by a nice banquet/award ceremony. Several of the wives were there and had a great time, including the awarding of the first (Burger King)triple crown to the one who had flown to Sun'nFun, Oshkosh and KR Gathering. It was great to meet so many of the folks who are regular contributors on the KR Net. On Sunday I flew back to BWI and was more than motivated to get to work on my KR 2S. I have a bunch of pictures and videos to show at some future chapter meeting. We need to have a KR meeting night soon!

- Bernie

Sawing and Planing and Sanding furiously!!

KR-2 PROGRESS REPORT

October 7, 2002

My KR-2 is showing some progress now that I am back to doing something on it every day.

The wings are assembled and now removed from the fuselage. Preliminary testing shows both wing tanks have a leak at the outboard rib. The only way to access the rib is to cut a hole in the wing skin outboard of the rib. This is a good excuse to make the hole an inspection port. There is a vent tube passing through this area with a compression nut at the same rib that forms the wall of the tank. So, I should look at it during condition inspections.

The canopy is hinged to swing forward (like the RV-6). The stock plans call for a piano hinge on the right side. My two hinges are attached to the fuselage and are completely hidden when closed. The canopy is in place with glass lay-up complete on the outside. I am concentrating on getting the gas springs set

up now. It took me several months searching to find the right size and force. The KR Net came through on that one.

It has always bothered me that the plans do not call for balancing the elevator. Surfing the KR Net, I found several schemes that other builders have used, some with pictures and one with drawings. These were for the KR-2S and don't exactly fit my KR-2 fuselage. However, I am adapting three different designs to my situation. At the same time I will do away with the elevator control cables for a full push rod system. The cockpit section already has the push rod setup. These are all bolt-on parts and should go together with minimum effort.

The plan is to have the airframe construction done by end of December 2002, (Notice that I am putting in hard dates now!) then work on firewall forward and systems. This is where the big bucks get spent for engine, prop, electronics, etc.

- Sid Wood

Winchester Fly-In

I went to the Winchester Fly-in, via my big red dodge truck. (I "flew" at 85 mph). Saw lots of homebuilts. Saw our own Ed Stewart there selling "stuff" at the "fly market".

The main reason I went was to talk to a few of the Chapter members up there to see what the difference in the chapters is and why they are able to host two "not the sorriest fly-ins ever" per year. Turns out that they have the same problem we have, getting volunteers. The only difference is they are a very large chapter. They have over 300 members on the roles. I believe (judging from their website) they have more active builders than we have paid members. But, they still only have an "active" membership of 50 or so, and of that only about 20 actively volunteer. So like us, the same handful of people are the ones who make things happen. They just have bigger hands, so to speak.

I also spent a good bit of time looking at a Steen Skybolt and talking to the owner. Nice plane, beautiful paint scheme. Offered me a ride next time I am in Centerville, or where ever he was based. I also spoke to a guy building a Loehle P40. He had an album of photos, so there was lots to talk about. Construction is all wood, so I was 'conversant'. That being said, I returned home, looked at the @#&*%! wing on my table and decided to build the elevator. I am tired of wings. Elevator is half done. If I am lucky I'll have the wings done before I go to Okinawa for a year, but I ain't holding my breath. See you at the meeting.

-Eric

Local SFTE Chapter Meeting

The October Chapter meeting will involve an interesting presentation on helicopter/ship interface testing by Dynamic Interface engineer Mr. Andy Baker. Check out the attached powerpoint flyer for a picture of the unique high-speed vessel.

We will meet in the conference room at the Naval air museum just outside the Pax north gate. 1700 on Thursday 17

October. FREE food and drink. Please pass this e-mail on to AHS and SETP members.

- Ed.

EAA NETWORK

EAA e-HOT LINE-Text Vol. 2, No. 22

EXXON FLYIN' TIGER RACE READY FOR WORLD RECORD ATTEMPT --- The Exxon Flyin' Tiger will again attempt to establish the time-to-climb record by reaching 40,000 feet, or 12,000 meters, on Tuesday, October 22, 2002, at the Million Air La Quinta, Desert Resorts Regional Airport in Palm Springs, California. Pilot Bruce Bohannon attempted the record-breaking flight at this year's EAA AirVenture Oshkosh, but because of mechanical problems, had to cancel the flight. If the flight is successful this time, both the Altitude in Horizontal Flight and Absolute Altitude (Class-1B-1,100-2,200 pounds) world records will be broken as well.

EAA e-HOT LINE-Text Vol. 2, No. 23

STATE OF VIRGINIA STOPS FUNDING AVIATION WORLD'S FAIR --- Whitt Clement, Virginia's Secretary of Transportation, announced on Tuesday, October 1, that the state will no longer financially support the 2003 Aviation World's Fair scheduled for April 2003 in Newport News, Virginia. Newport News city officials agreed with the decision, which was based on the lack of advanced ticket sales, major sponsorship, and exhibitor revenues.

The goal for the 2003 Aviation World's Fair, initiated in 1999, was to bring together the world's aviation and aerospace community in conjunction with the celebration of the first 100 years of manned flight. The Commonwealth of Virginia (through the Cabinet offices for Transportation and Commerce and Trade) and a private sector promoter were the major planners of the event. The City of Newport News agreed to host the event in its community. http://www.eaa.org/communications/eaanews/021002_fair.html

AFTER 60 YEARS, 'GLACIER GIRL' SET TO FLY AGAIN --- Glacier Girl, the P-38 recovered from under the ice in Greenland in 1992, is scheduled to make its first post-renovation test flight on October 26, at 2 p.m. EST, at the Middlesboro (Kentucky) Airport (1A6). The flight, (weather permitting) will cap a 10-year reconstruction project at the Lost Squadron Museum. Glacier Girl was part of Operation Bolero, a massive buildup of U.S. warplanes in Great Britain, in which U.S. aircraft were forced to emergency land in Greenland. The public is welcome to attend the test flight, but those planning to do so should call 800-988-1075. The airport will close at 1 p.m. and will not re-open until at least 3 p.m., but increased traffic may force 1A6 to close before 1 p.m. and require incoming craft to land elsewhere. Please plan your fuel carefully: The closest landing and fuel stop is London, Kentucky (LOZ). To learn more, visit <http://thelostsquadron.com/>

FROM THE WEB

AVflash 8.38b

PILOT FACILITY COMING TO KITTY HAWK: Pilots visiting the historic site of the Wright Brothers' first powered flight will soon have a new pilot facility to make their trip a little more convenient. AOPA, the National Park Service and the First Flight Centennial Foundation broke ground this week at the Wright Brothers National Memorial at Kill Devil Hills, N.C. The facility is expected to be completed in time for the centennial year kickoff on December 17, 2002.

AVflash 8.40a

LANCAIR'S NEW TURBINE: From the 600-plus horsepower two-seat Lancair Tigress to the Lancair turbine-powered IV-P, Lancair has taken another step with the new Lancair Sentry. Powered by a Walther engine, the Sentry is a military-style tandem-seat aircraft with left-side throttle controls and a rear hinge canopy. Only the top segment of the existing Lancair IV fuselage and portions of the vertical tail were modified for the new design. Ready to buy one? The kit is priced at \$119,900, and will include the converted fuselage top half, the modified turbine firewall, turbine engine mount, fuel tank extension, and carbon fiber cowling. Tally-ho.

AOPA ePilot -- Vol. 4, Issue 37

TAKE AN IFR ADVENTURE ON ASF'S WEB SITE A new online refresher course for instrument-rated pilots is debuting on the AOPA Air Safety Foundation's Web site. The free interactive online course, titled "IFR Adventure: Rules To Live By," uses Flash technology to take pilots through a realistic IFR cross-country flight, exploring how specific IFR regulations apply to various real-life instrument-flying scenarios. Among the challenges of the flight: diverting to an alternate airport, suffering communications failure, and evaluating the weather. Completion of the course with a score of at least 80 percent allows the pilot to print out a handsome completion certificate that may be used to satisfy the ground instruction requirement for the FAA Wings pilot proficiency program. The new course was developed with a generous grant from the William H. Donner Foundation. See (<http://www.aopa.org/asfifradventure/>).

AVflash 8.41b (Avweb Newswire 10-10-02)

Kirby Chambliss was named U.S. National aerobatic Champion at the U.S. National Aerobatic championships in Denison, Texas. Chambliss won the same title back in 1998 but was seriously injured in an accident last year in China, during an aerobatic exhibition, where a mechanical failure caused him to crash...

IN THE CHECKS

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Well October has come and fall has official arrived/ It's the time of year to renew my RV-4's insurance and time to sum up the years flying. Let's see in the past 12 month's I've flown, what? ONLY 24 HOURS. And if that's not bad enough, only 4 hours in the last 3 months. I got a lot of excuses, but when you have an airplane and it sits around your cost per flight hour goes way up. No more excuses! I've got to fly a lot more. How about you? Hey, it's my turn for refreshments at the chapter meeting - I better make a note of that.

-Paul Gambacorta, Editor

FLYING DESTINATIONS

Event	Date	Location
Aerobatic competition	26-27 October	Farmville, VA

CALENDAR OF EVENTS

Event	Date	Location
Chapter Meeting	15 Oct	St Mary's Air Terminal Refreshments - P. Gambacorta
Board Meeting	8 Nov	T&E Museum
Chapter Mtg/Election	19 Nov	St Mary's Air Terminal Refreshments - B. Wilder
Board Meeting	6 Dec	T&E Museum
Chapter Meeting & Christmas Party	17 Dec	St Mary's Air Terminal