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### **Meeting Announcement**

Date: Saturday, August 9

Time: 6:00pm

Program: Chapter 569 picnic

Place: Denton Airfield (NE40) Don Shoemaker's hanger 11115 W Yankee Hill Rd Denton, NE

This is a "pot luck" affair so bring a covered dish. The club will furnish the meat, buns and soft drinks.

#### ONE MORE SUCCESSFUL MISSION

by Roger Aspegren

I turned into the driveway to Silverhawk and there it was shining in the early morning sunshine. The "Aluminum Overcast" was back for another visit. Just walking around this historic plane brings back all the stories I have heard from the veterans and their families in prior B-17 events. I am looking forward to more, however I know there will be fewer stories this year.

The next two days went fast. The airplane showed off for the public and gave a few lucky people a ride they will not soon forget. Many people came out to see it after hearing it rumble over the city. Thanks to the hard work of Dennis Crispin, Cristi Higgins, Andy Lahr, Don Shoemaker and their crews it was another huge success for our Chapter. WE ARE GOOD !

At our meeting Tuesday night the worker's names were put into a hat and 8 names were drawn. These fortunate folks would ride on the B-17 to its next stop, Lee's Summit. I was one of the lucky ones. The other seven were John C. Cox, Larry Geiger, Chris Bruner, Kermit Wenger, Rich Boelts, Cristi Higgins and Ryan Seaman.

The original plan was to give rides Wednesday morning, then have tours through the plane until about 5:00 pm, however, as all pilots know the weather dictates our timetable so we shut down the tours at 2:00 pm, fueled the plane and left Lincoln at 3:00 pm. The 1 1/2 hour flight was smooth and awesome. Everybody was able to move about the plane so we took turns manning the guns, shooting down at least 20 boogies. We also dropped our load of bombs on a suspicious looking plant sitting on the Missouri river. It was a direct hit. All of us had the opportunity to actually fly the "17" from the right seat for 10 to 15 minutes. Looking out the window at those huge 1200 hp engines fixed an image in my head that will be with me forever. All too soon we arrived at Lee's Summit and made our approach and a smooth landing. We were greeted at the airport with a hero's welcome by dignitaries and grateful citizens.

Since this was a one-way trip, we were now looking for a way home. Andy Lahr and Charlotte Aspegren were good enough to make the 200 + mile trip to take us home. The trip home was not nearly as pleasant. We drove through terrible wind, hail, lightning and rain most of the way. It did little to dampen our "high" from the recent experience however.

I have tremendous admiration for the young men that crewed this warbird during the war and for the volunteer pilots and crew that are giving us the chance to relive our proud and patriotic heritage. THANK YOU.

(There will be more on the B-17 visit to Lincoln in the September issue.)

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### EAA 569



THE EAA BREAKFAST

Our breakfast on the third Saturday of every month is going strong. The word is getting out and our reputation for an outstanding breakfast is spreading. The committee works hard (but has fun) at these breakfasts and we appreciate all of you who attend and help us be good hosts. As you know all costs are increasing so we are now asking a donation of \$4 for the breakfast. This is a great price for what we provide.

Check out our ad on the new EAA Calendar at <u>www.eaa.org</u>. This is a great tool and helps us bring in more fly-ins. Mark Aug. 16 on your calendar for the next breakfast and bring a friend.

Roger Aspegren

From left to right Ryan Seaman, Larry Geiger, Roger Aspegren, John C. Cox, Kermit Wenger, Cristi Higgins, Chris Bruner and Rich Boelts.

## Building the RV fuel tanks

#### by Doug Volkmer

As some of you already know, I'm in the process of building an RV-7. The RV-7 is equipped with one 21 gallon fuel tank in each wing. The tank is riveted together like any other exception. structure with one Sealant is applied between parts where fuel could conceivably leak. The sealant can be very messy to work with. Definitely wear clothes that you don't really care about! Some builders dread building the tanks. I'll try to spell out what I learned to hopefully help other builders make this task not so painful.

The first thing you have to do is straighten the ribs. The process to manufacture the ribs leaves them with a slight bow. To remove the bow, fluting pliers are used to insert small creases or "flutes" between the pre-punched holes.

Ok. now that vou have straightened your rib it is time to drill, debur and dimple your rib to the tank skin. I won't go into each of these steps. It is pretty straight forward and you have already done this numerous times to other parts. One thing about dimpling, I used a special tank die on the rib and skin from Cleaveland Aircraft Tools. It makes a deeper dimple to allow for the sealant between the rivet and skin.

To give the sealant something to grip to, you need to roughen all mating surfaces (skin and rib). I used a scotchbrite pad and scored the surfaces real good.

After you have roughened the surfaces it is now time to clean them. You need to clean every surface the sealant will be applied to. I used naptha (from Menards). The rivets need to be cleaned as well. This can be accomplished by sloshing them in a jar of naptha and drying them on a clean rag. It is now time to mix up the sealant. I used the sealant recommended by Van's (MC-236-B2). The sealant has around 45 – 90 minutes of working time (less in warmer temperatures). With that working time, it is essential to have your tools, rags, etc. all laid out and ready to go. I also had acetone (also from Menards) on hand for frequent cleaning of the bucking bar.



I masked off the area next to the rib with electrical tape. It made cleanup a little easier.

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# For each session, I mixed up about 4 oz. of sealant. This was enough to install one rib with a little left over for touch up.



I had problems with popsicle sticks breaking when mixing up the sealant. I now use 7" craft paddles. They work great.

After you have mixed up your sealant, use a popsicle stick to apply a smooth 1/16" thick layer of sealant on the flange.



A nice smooth layer, approximately 1/16" thick on the flange. You can also see the flutes between the prepunched holes.

It is now time to put the rib in place. Install the rib to the tank by placing a cleco in every other hole. Armed with your rivet gun and bucking bar, it is now time to rivet the rib in place. I like to use an air pressure of 34 psi for my 3x rivet gun.

Rivet every other hole on both sides. After that, remove the clecos one by one and rivet the remaining holes.



The sealant isn't toxic however I wear a respirator as a precaution.

After the rib is riveted in place, take the round edge of your popsicle stick and make a nice fillet along the rib and skin seam.

Lastly, swirl some sealant on each of the rivet shop heads.



After much cleaning with acetone, this is how it looks.

Sticky fingers. Sometimes it's a trick picking up just one rivet.

## Read about one man's experience on the B-17

A gentleman in a wheelchair came to the B-17 event and passed out cards offering his self published book about his experience as a B-17 ball turret gunner and prisoner of war. From the excerpts published on his website it sounds like he had quite an experience.

#### OUT OF THE TURRET AND INTO HELL WW2 BALL TURRET GUNNER'S TRUE STORY

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## EAA 569

## **Minutes of the Club Meeting**

Meeting called to order on July 1, 2008 by Don Shoemaker at 7:31pm.

The meeting began with our guest speaker. Sam Bass, B-17 pilot and in town for the B-17 tour spoke to our Chapter and answered several questions.

Treasury report was given by Tom Henry.

Tom Trumble gave a Young Eagles report. He said they had a great day in Beatrice on June 14. A total of 133 kids were flown with an additional 16 given a raincheck.

Tom Winter asked for some pilots to help him fly some math students on July 22.

The meeting concluded with the drawing for the B-17 rides. The B-17 is leaving Lincoln on July 2 for its next stop at Lee's Summit, MO. The names of Chapter 569 members who helped with the B-17 tour were put into a hat and 8 lucky people will get to ride the B-17 to KLXT. Andy Lahr and Charlotte Aspegren will bring the members back to Lincoln.

Dean Hoy, Secretary

#### **Minutes of the Executive Meeting**

The July 9, 2008 meeting was attended by: Don Shoemaker, Erick Corbridge, Tom Henry and Doug Volkmer.

Thank you notes need to be sent to various people for their help with the B-17 tour.

The annual Chapter 569 picnic will again be held at the Denton Airport (NE40) on Saturday, August 9. The program will be reports from members who made the trip to Oshkosh.

Doug will check to to see if the radio controlled airplane club would like to perform at the picnic again this year.

Dean Hoy, Secretary

## Where to build an airplane? Almost anywhere

(This article originally appeared in the April, 2000 issue of EAA Sport Aviation.)

#### By LAURAN PAINE, JR

WHERE TO BUILD AN AIRPLANE? WHY, obviously, the garage. Or the basement. Or the barn. Or, for the lucky ones, in a hangar. But, truth be known, there are a lot of other places to build an airplane. Like *everywhere*.

The skin stiffeners for the rudder on my RV-8? I made those in Room 2019 at a Sacramento, California, motel. The stiffeners for the elevator? Smoothed and deburred them in Kalispell, Montana. The doublers for the rear wing spar? Worked on 'em in Calgary, Canada. Wing tie-down brackets? Measured and clamped those in Boise, Idaho.

Okay, I'm an airline pilot and travel a lot, and when I know I'll have a long layover, I take airplane parts with me. Angle. Snips. Deburring tool. Marking pens. Rulers. Clamps. Stuff like that. (Don't ask how I get the stuff through security.) You see, when I'm in a motel room I refuse to watch daytime TV, and my airplane parts allow me to take a little bit of home—my shop—with me when I travel. They put me in my happy place, just like being in my shop does at home.

I'm not alone in this. I read a story about a Navy pilot who took a bunch of RV parts on a cruise with him. Six months later, he got off the boat (sorry...ship) with some ailerons, elevators, flaps, and a rudder. Completed. At sea. Good for him. I don't know what kind of daytime TV the Navy has, but I'm sure building parts for your own airplane beats it. And it's probably great stress relief from pounding a jet on a pitching, wet carrier deck at night.

Construction plans are something else I take with me. I read them during deadhead flights and while waiting for flights. That way, when I get ready to work on a part, I've thought it through before I lay hands on it. That helps me a lot. Those dreaded fuel tanks with that icky Pro-Seal? I've already built them 27 times in my mind. I ain't afraid of no Pro-Seal and no fuel tanks. (In my mind, anyway—I'll let you know how the real thing turns out.)

I take my Orndorff construction videos with me, too, and watch them in motel rooms that have VCRs. It's great to have the visuals to go along with the plans. When I want to watch a tape just for pleasure, I watch Van's "The RV Story." It's delightful and inspiring.

Back to building. The wing ribs? Here's what you do: bring a bunch of them in the family room. Pull out the breadboard and put it on the floor in front of the couch, over by the fireplace. Then sit on the floor by the breadboard, resting your back on the front of the couch. Take your fluting pliers and flute the ribs straight, using the flat breadboard to check

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them—while watching the football game. During a time-out or commercial you can do at least a couple of ribs. Halftime is worth about five, depending on the length of your nacho and cola break. Overtime and you can finish the whole wing (just kidding).

Some places don't lend themselves to building. The stiffeners for the ailerons are already formed and pre-punched, but you still have to smooth their edges. Taking them and some sandpaper out of your carry-on bag while in seat 14B (the middle seat) on an airliner...well, you can feel 14A and 14C looking at you from the corners of their eves. I put the stiffeners back in the bag and read my plans instead. It was a real conversation stopper. I'm not sure how it happens-it's symbiotic or something-but you can feel what 14A and 14C are thinking—" Weird!"

You can get away with the above in airline crew ready-rooms, however. The EAA sticker on your flight bag gives you license to pull out just about any airplane tool or part from of your bag. The response in the ready-room is usually, "Cool!" "Cool" is a lot better than "weird."

Okay, some of you might think I'm obsessing, but I beg to differ. I'm just doing what I like to do. I like to build airplane parts. Emphasis on the word "parts." I have no timeline for completing my airplane; I know that when I get all the parts together, it will be an airplane. Meanwhile, I enjoy making the parts and completing one motivates me to start the next one.

If I'm working in the garage at 5:30 p.m. and my wife opens the garage door, home from work, I stop—90 percent of the time. The remaining 10 percent of the time I'm up to my elbows in something and can't turn loose for another 10 or 15 minutes. Then I rush inside and tell my bride of 32 years about all the great and wonderful places we're going to fly to in the RV-8. (How is it that wives can roll their eyes so effectively?)

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And there are a whole list of places where I *haven't* taken airplane parts with me. I haven't taken them when we go out to dinner. Our oldest son is getting married in July, and I'm not planning on taking any parts to the wedding. There, that's two places right off the top of my head! I'd give you more, but you know how magazine editors are; they're always waiting for that next article and I have to get this one in the mail. (Hey, Scott, notice how cleverly I got out of that? Or tried to?)

I'll admit to one fantasy time line. After I set brakes on the airliner for the last time (due to the FAA's dumb age-60 rule—not to get political or anything), I'll walk down the jetway stairs and hop in my RV-8 parked nearby, and my wife and I will fly into our retirement sunset. Not a bad thought, huh? That time is some five years away, however. That's still quite a few layovers. I figure the airline ought to get to see my airplane. By the time I finish it I will have built about half of it on its time.

Come to think of it, I'm pretty sure I could mount an engine in a motel room. I just haven't figured how to get it through airport security . . .

Last but not least, I really am going to fly my wife to some neat places. (Like Oshkosh, where she'll meet other goof-balls like me.) We'll go out to dinner and, you watch, there will be some guy there working on an airplane part and I'll say, "Look at that! What a jerk!" And then I'll say, "You're so cute when you roll your eyes."

#### **Classifieds**

**FOR SALE –** BUSHBY MUSTING II KITPLANE Folding wings, completely unassembled, 25 gallon fuel tank, can accommodate an engine up to 210 hp. \$7700 (new price!) Aviation tools pertinent to this kit are available and can be purchased separately. Contact Bev Streba at 493-2198.

**Want to learn to fly?** Time for a BFR? Or want to just polish up your skills? John C. Cox of rural DeWitt recently became a Certified Flight Instructor and would be glad to help you out. John can be reached at 239-3953.

## Interested in becoming an EAA 569 member?

If you are interested in becoming an EAA 569 member or simply want to attend a meeting, please contact President Don Shoemaker at 402-797-7200 (home) or 402-475-4800 (work).



#### **Events**

**York Airport (JYR),** EAA Chapter 1055 Fly-in breakfast on the 1<sup>st</sup> Saturday of every month. 0800-1000. Free to PIC.

**Crete Airport (CEK),** EAA Chapter 569 Fly-in breakfast on the 3<sup>rd</sup> Saturday of every month. 0800-1000.

**Aug 2 Norfolk (OFK)** – EAA 918 Fly-in breakfast, 7:30 – 12:00, PIC eats free. Going on at the same time is the Hot Summer Nites Car Show, also located at OFK. Pancakes, sausage and scrambled eggs. More info: Bruce 402-675-7765.

**Aug 3 Genoa (97Y)** – Airport Breakfast & Fly-in, 7 to 11am, fly-ins free. In conjunction with Heritage Power Antique Farm & Equipment Show, free transportation to the show. More info: Don Pearson 402-993-6000.

#### KANSAS CITY AVIATION EXPO AND AIRSHOW FLIGHT SCHEDULE KANSAS CITY DOWNTOWN AIRPORT SATURDAY AND SUNDAY AUG 23-24, 2008

www.kcairshow.com

9:00 GATES OPEN

**10:00** US ARMY GOLDEN KNIGHTS PARACHUTE DEMONSTRATION TEAM **10:15** OPENING CEREMONIES – NATIONAL ANTHEM 10:30 JACQUIE WARDA PERFORMS HIGH PERFORMANCE AEROBATICS IN THE HIGHLY MODIFIED PITTS SPECIAL 10:45 PETE JACOBS' "ANGEL 7" HIGH SPEED JET DEMONSTRATION IN THE L-39 PAINTED IN HONOR OF THE US BLUE ANGELS 11:00 BOB CARLTON'S JET POWERED GLIDER - "SILENT WINGS" 11:15 THE WORLD'S ONLY JET POWERED "OUTHOUSE" 11:30 US AIR FORCE F-15 STRIKE EAGLE HIGH PERFORMANCE TACTICAL DEMONSTRATION AND HERITAGE FLIGHT WITH THE FAMED P-51 MUSTANG 11:45 P-51 MUSTANG FLIGHT DEMONSTRATION 12:00 US AIRFORCE THUNDERBIRD ENGINE RUN UP AND TEST 12:15 "RED STAR" THE CZECH BUILT SOVIET L-29 DELPHIN 12:30 TIM WEBER FLYING THE EXTRA-300S SPONSORED BY "GEICO" 12:45 THE WORLD'S ONLY JET POWERED SCHOOL BUS 1:00 SEAN TUCKER AND SON ERIC TUCKER - THE ONLY FATHER & SON AEROBATIC SHOW PERFORMING IN THE PITTS SPECIAL AND THE EXTRA-300 1:20 "DRAGON" THE BRITISH STRIKEMASTER ATTACK JET FIGHTER 1:45 US ARMY GOLDEN KNIGHTS PARACHUTE DEMONSTRATION TEAM 2:20 US AIR FORCE B-2 STEALTH BOMBER FLIGHT PROFILE AND DEMONSTRATION (SATURDAY ONLY) 2:30 SEAN TUCKER - PITTS SPECIAL 2:45 US NAVY F/A-18 SUPER HORNET - HIGH PERFORMANCE TACTICAL DEMONSTRATION AND "LEGACY FLIGHT" WITH THE FAMED F-4U CORSAIR 3:00 F-4U CORSAIR FLIGHT DEMONSTRATION 3:30 UNITED STATES AIR FORCE THUNDERBIRDS FLIGHT DEMONSTRATION TEAM 5:00 GATES CLOSED

John Cox 2279 County Road 2425 Dewitt, Nebraska 68541-2518