

EAA Chapter 81 Meeting Minutes
Saturday, August 20, 2011

Meeting was called to order at the Ryan Field meeting room at 1000 by Secretary Bob Miller, who was asked to oversee this meeting in the absence of Chapter President Duane Boyd. Bob, who tried in vain to run the show and take the Minutes at the same time, admits to having failed miserably at this multi-tasking, not surprising when one takes into account that Bob is challenged by simultaneously walking and chewing gum. Further complicating Bob's life, he also attempted to bring the doughnuts (on his motorcycle), as the ever-generous Phil Peery (AKA The Doughnut Guy) was also unable to attend. In consequence, the meeting kind of ran itself, and it did a pretty good job of it too.

Treasurer's Report: Treasurer Mick Myal was another no-show, so we have no idea of our finances at this time. Mick is pathologically honest, however, so we aren't worried.

Secretary's Report: The Minutes of the July 9 meeting were posted in Sky Writer and the website and Bob was so busy blathering about his experiences at Airventure that he forgot to bring them up. Small blessings.

Old Business: Oops. Forgot to bring that up too.

New Business: Ditto.

Now, for the fun stuff:

Dave Schiffman set up a display about the Boeing 307 Stratoliner, the first production airliner with a pressurized cabin. Buck Clippard, sharing his vast experience with commercial aviation, was able to fill in many details about this breakthrough in technology. Not all was new, however, as the wings, engines, nacelles, and tail surfaces all were derived from the B-17 bomber! A luxurious transcontinental machine that could fly over most weather, one was converted into a flying penthouse by Howard Hughes and that very plane has ended up as a houseboat!

Next was a presentation by Eric Witherspoon. Eric, having already plans-built his sheet-aluminum Sonex, introduced us to his new project, the plans-built (but kit available) British Sherwood Ranger biplane. This is an aluminum-tube and fabric tandem 2-seater with aluminum wing spars and wood ribs. Carrying 10 gallons of gas, it is intended to fly behind 65-80 HP. It was originally designed in the 1980s, but in the early 1990s, a California builder made two major modifications: a longer fuselage to increase the size of the pilot's cockpit, and shorter wings. There has been an upsurge in interest in this design, with 12 plans sets sold in the past year, and Eric has magazine articles on the Ranger from 1996, 1997, and 2001. As the construction of the Ranger is of a completely different type from that of the Sonex, Eric has had to learn some new skills, which he shared with us. Plans-building has evolved from the days when blueprints were sent in a mailing tube. Eric's Ranger plans (set #40) arrived in the form of a CD, which included all required documents: a builders' manual, maintenance manual, a 100-page Pilot's Operating Manual, and even AutoCAD files. Transferring from plans view to flat metal parts is accomplished by drawing the outline onto

thin cardboard and cutting out the cardboard part. Next, trace the outline onto the metal and cut out with a band saw, leaving a margin for edge finishing. A comment from the Peanut Gallery clarified that, if your band saw won't cut a straight line, it probably needs a new blade. The edge is then finished by bringing it down to correct dimension with a belt sander and then smoothing with a Scotchbrite wheel. Holes are marked by taping the cardboard to the part and automatic center-punching through the cardboard into the part. Drill through the part; then duplicate parts are made by holding stacked parts together with Cleco clamps and through-drilling, using the first part as a drill guide. Tubes are another Ranger element foreign to the Sonex builder, and the Ranger has 250 of them! Eric showed us how to use a stack of straight-edged rules clamped to the table to make a guide for drawing a line along a tube or marking the same place at either end of the tube. He also demonstrated a clever tool for making marks exactly 90 degrees around the tube: a square cut from an inexpensive plastic cutting-board is marked with a cross, the center of which becomes the center of a hole only slightly larger than the tube. The tube is then slid through this hole and the 4 lines of the 90 degree cross are the reference marks. Eric also had to learn how to locate tubes or rods on the drill-press in order to drill at the center of the tube. He has found some very helpful tools to accomplish this: Grizzly Industrial makes a Center Finder which does this very simply for \$3.50, a V-shaped piece of metal that is chucked into the drill press and has a pointer to indicate when the tube is centered under the chuck. Grizzly also sells a Center Drill, which is a tiny drill bit (5/64", just under a #40 bit) with a large shank, which makes it more rigid than a normal bit.

Next, the door prize raffle was held for 4 illustrated warbird books: F4U Corsair, F-104 Starfighter, A6M Zero, and Mitchell B-25.

Dave Schiffman informed us that the Grand Canyon Valle Airport would be sponsoring "Thunder over Coconino VII" on Saturday 8/27. This high-altitude airport (6000 ft.) has an unpaved 3500 ft. runway and a paved 4250 foot runway, and is located between Williams, AZ and the Grand Canyon. Aside from the usual amazing display of flying warbirds, there will be an antique car show and vintage tractors as well. An ex-American Airlines DC-3 Detrouiter will hop rides and the featured guest will be Eric Lindbergh, grandson of Charles Lindbergh of Spirit of St. Louis fame.

Buck Clippard reminded us that the next meeting would be at La Cholla Airpark on Saturday 9/17 at 1000. Featured is the hangar of one of the residents who has made a guest house out of the fuselage of a Boeing 707, has an engine nacelle sticking out one end of the hangar and an empennage out of the other, and a flight-simulator, among other aviation amazements. This is a drive-in event only, unless previous flying arrangements have been made, and maps will be found in Sky Writer and on the website.

Meeting was adjourned at 1115.

Respectfully Submitted by
Secretary Bob Miller