

Website: http://eaa170.blogspot.com , Email: eaa170@yahoo.com Volume 46, Issue 11 November 19, 2009



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Young Eagle Coordinator	Liz Dinan

All area codes 805

Upcoming Events

Oct. 15: Chapter Meeting at 7:00 PM at Zion Lutheran Church on the corner of Foothill and Santa Rosa in SLO. Gary Corippo from the Estrella Warbirds Museum will discuss restoring and flying their C-47 (DC-3).

Nov.-Dec.: Time to renew your EAA Chapter membership for 2010

Jan. 23, 2010: San Luis Obispo Chapter 170 Annual
Dinner Meeting in San Luis Avionics hanger
at the San Luis Obispo airport.
Catered BBQ dinner with Peter Garrison,
writer for "Flying" magazine as speaker.

President's Report

Ernie Billing – President eaa170@yahoo.com

Happy November: The Holidays surely sneak up upon us very fast. Regrettably we has a light turnout for our last month's meeting, and regrettably for those who were not there, you missed a great one.

Mark Wentzel gave us a great tour of this Stewart S-51 project. It certainly looks super and it will be awesome when it's flying.

Our Young Eagles from Airport Day should have taken their rides on 11/14. Many thanks are due to the pilots flying and also to Liz and Dave for organizing the event. I'll be out of town for the next meeting, but I leave you in Kurt's very capable hands. I do want to thank Kurt for pretty much single handedly setting up our January dinner with Peter Garrison.

Please notice and respond to the attached sign up form for the Chapter's annual dinner meeting.



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Membership meeting

The Chapter meeting began with dinner at the Spirit of San Luis restaurant and the meal was accompanied with some hanger talk and several stories, and airport day impressions. Following some old and new business items the meeting continued with attending members driving over to Mark Wenzel's hanger at the west side of the airport. At this meeting no drawing was held, and so if you did not wear your badge, you did not have to feel bad.

Old Business

Kurt Colvin indicated that Cal Poly airplane program was advancing with the completed wings in the hanger. He also indicated that the fuselage would be put together in about a week, and since much of the paper work and discussion with CP has been cleared up, it appears (cross your fingers) likely that the airplane may be flying this Spring.

Kurt also mentioned an event to celebrate the 20th anniversary of the DeVinci-3 project for a human powered helicopter that actually lifted on the ground. The aircraft had a 50-foot rotor blade (limited because of the gym size). The Cal Poly students are working on another experimental version of the helicopter Da Vinci – 4 in order to compete for the Sikorsky prize of \$250,000. The stipulations are that the aircraft be airborne a minimum of 60 seconds, reach a height of 3 meters and remain within the confines of a 15 meter circle. See Kurt for more info.

Treasures' report:

Chapter 170 was the banker for supporting Airport Day. The budget submitted by John Eichler was within \$12 of actual expenses. Should John work for Wall Street or the Governmen.? Kurt reported that the Winnie Wagon sales earned a profit of \$712 and the current chapter's treasury's holdings are \$1871.

New Business

The initially determined Young Eagles fly off for October 24 is put off because more time is needed in order to obtain the proper insurance. The new date for the fly off is November 14.

Kurt presented plans for the January dinner meeting. He remains in contact with Peter Garrison and the meeting date will be Saturday January 23. The meeting will be held in the Avionics hanger. Peter Garrison is a writer for FLYING magazine and has written the "Technicalities" articles for many years. Additionally he is well known for his experimental aircraft

Program

After the dinner portion of the meeting a group of the members gathered together in Mark's brightly lit, clean, neat and orderly hanger to view his S-51 project. One distraction that was hard to ignore was the beautifully maintained 1964 Cessna 185 that sat proud as a peacock and occupying a good share of the hanger space. Nevertheless, for the moment the disassembled parts of Mark's S-51 project captured our attention.

This project has been in progress for some time. Mark indicated that he is now reassembling the already finished pieces. The fuselage, currently upside down would soon be mated with the wings, empennage, tail, and the big Chevy V-8 engine.

Mark knows everything fits, since he has already had all the pieces including the sliding canopy and the windows fitted together. The parts were disassemble to facilitate painting and for any needed checkups. He has polished aluminum covering on most of the upper surface of the wings, but since Mark said he doesn't want to have to clean and polish the undersurface, those are painted black. Everything about the plane is neat and precise.

Mark obtained his kit near the time that the manufacturer (Stewart) went bankrupt. Unfortunately not all of the kit's components were included in the shipment Mark received. Therefore he had to machine many missing parts. Being a self-taught engineer and mechanic (with talent we wish we had) he actually improved upon the engineering and quality of those missing parts. From a friend in Georgia he was able to obtain a copy of some of the engineering plans that his kit did not supply. Mark often manufactures some components, i.e., landing gear that he provides to other builders. He is in contact with a community of S-51 builders and they often share information and parts.

Mark has arranged for the manufacture of a teardrop tank appendage that attaches to the hard points on the S-51's wing that will carry baggage. He expects to offer several size versions, and some builders have indicated interest in using it for fuel.

Mark indicated that he expects to have the airplane on its wheels in a couple of weeks and that it should be ready for taxi testing this Spring. We are looking towards a return visit SOON to see this Mustang perform. Dave Chivens provided much more information, and specifications about this airplane in the Chapters' March 2008 newsletter.



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Member Comments

From Liz Dinan

I would like to thank John Eichler, EAA, SLO 99s and Maya, for making San Luis Airport Day such a wonderful day for me. It was a great honor for me to represent our airport, and a day I shall never forget and will treasure forever.

Airport Day, I believe a great success. The many organizations represented and all the aircraft from SLO and other areas were wonderful to see, and I think it gave our non-flying citizens an appreciation of how important San Luis Obispo Airport is to our community. Also, everyone seemed to have a good time, especially our EAA guys working the Winnie Wagon. Thanks so much, for the delicious hot dog and coke.

I am looking forward to next years Airport Day.

YOUNG EAGLES CEREMONY

On Sept. 29th all Young Eagles Coordinators were invited to attend a Young Eagles Ceremony at Santa Monica Airport to recognize Harrison Ford for his five years of leadership and vision during which 500,000 youth became Young Eagles, and also to introduce the next Chairmen.

Maya and I were fortunate to be able to attend. It was very exciting. The hangar looked like a Hollywood premiere. Lights were all around, there was valet parking, and as you approached the hangar, you could see beautifully set tables with your name place. We felt like little stars among the big stars.

EAA President and Chairman Tom Poberezny spoke and introduced the guests. Harrison Ford talked about his love of flying and his interest in Young Eagles, several of which attended the dinner, and some are now in the aviation profession. He then introduced Capt. Chesley "Sully" Sullenberger and First Officer Jeff Skiles who will take over the Young Eagles for the next year. What great speakers Sullenberger and Skiles are; no wonder they were able to talk that big plane down to a safe landing on the Hudson. Before dinner was over, our Gov. Arnold Schwarzeneger also stopped by to say a few words.

After the ceremony, we talked with Harrison Ford, Capt. Sully and First Officer Skiles, Clay Lacy, and Bob Hoover. It was a very exciting evening.

Submitted by Liz Dinan



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Miscellaneous

Federal revision of certification policy

Amateur builders should be happy with the <u>FAA's revisions to the amateur-built aircraft certification policy</u>, or 51-percent rule. One of the controversial proposed changes that would have required builders to perform "20 percent of the assembly and 20 percent of the fabrication of the aircraft, with the remaining 11 percent falling into either category at the builder's discretion," was excluded from the final order. Currently, builders must complete the majority (51 percent) of the total work. For more detailed information see the recent November EAA EXPERIMENTER article.

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RV-12



As all of you know, most aircraft use elevators to control pitch. The RV-12 uses a stabilator. This control surface combines the functions of an elevator and a horizontal stabilizer. According to the Wikipedia encyclopedia the stabilator pivots around it's aerodynamic center. At this point the pitching moment is constant regardless of the angle of attach, and thus any movement is made with no increase effort by the pilot removing tactile feedback, and offending the FAA. The remedy is an anti-servo tab, attached to the trailing edge of the stabilator in the RV-12, and moving in the same direction of the stabilator to apply the needed increased air resistance. In the RV the AST also serves as a trim tab. Stabilators are used in the Cessna 177, the Piper Cherokee, the F-16 Falcon, and the F-22 Raptor.

The RV-12 stabilator just fits on an 8-foot table. The Anti-Servo Tab will be mounted in the gap of the trailing edge.

Image 2.

You are looking aft at the center of the stabilator. The six sided white bracket mounted in the center of the fore spar will hold the counterbalance arm. The counterbalance arm is 32 and 1/2 inches long, and holds lead weights generating about 20 foot lbs. The counterbalance arm would projects toward us. Slightly to the left are two other bolted structures, the horns will turn the stabilator. If you look closely, you can see two flanges held by 4 bolts at either end of the opening next

to the fore spar. Each will hold #4 bolt that will pass through a washer, a hinge, another washer, a bearing, another washer, another hinge, and end up locked at nutplate with the bolt tightened to 60 foot lbs. These will hold the stabilator to a metal bulkhead riveted to the tail cone.

Image 3.

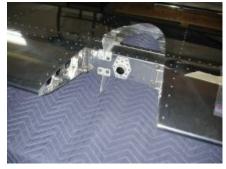
You are looking forward toward the same opening into the stabilator. You can see the six sided counterbalance bracket mounted on the aft stabilator spar. Slightly to the right are the upper and lower horns from the rear. Near the bottom of the picture you can see the lower halves of the "piano" hinges that will attach the anti-servo tab to the stabilator.



San Luis Obispo Airport Day

Star of the Winnie-Wagon – Neal Koellish and several of the support crew







Liz Dinan - Airport honoree with recognition plague







Many aircraft attended, from the small such as Cliff Clarks' Cub



And the large such as the 1937 Lockheed Electra 12A, "The Spirit of TWA" with Ruth Richter Holden offering a welcome.