




The Flightline

EAA Chapter 958 San Marcos, TX
Where every day is a good flying day!
September 2014 Issue

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September Chapter Meeting at Redbird Skyport in San Marcos

PANCAKE BREAKFAST Saturday 9/20 starting at 9:00 am followed by the Chapter meeting at 10:00 a.m. in the conference room at Redbird Skyport. Please come and join in!

Program: Civil Air Patrol

NEW CHAPTER WEBSITE: www.958.eaachapter.org

Prez Sez

Greetings 958

Last month in my Prez Sez and at the meeting I enlightened the chapter on my journey toward getting airborne. I my have been a little over zealous in the presentation. Having been a member with this chapter for a few years and in getting to know many of the other members. My thoughts and ideas about what I needed and wanted in a aircraft changed. This in part due to the interactions and knowledge of members within the chapter. While there are still a few items that will need to be addressed. For the most part I feel now I can move forward knowing that I have made the right decission for myself. The membership of this chapter has been a great help with the decissions I have made. When one starts to spend the amount of money and invest the time to build, buy, or refurbish many issues present themselves. Like where to construct the aircraft garage, hanger, or the backyard. The distance from the build site from home (ever present out of site out of mind) and so on. Taking a jab at humor I have likened this to dating or marriage, do I really want to invest the time, effort, expence, and the change in my life style untill I can enjoy the furits of ones labor. There are a number of our members building and some are near completion all have worked thru these and other problems in there own way. I do hope that members know that the chapter is here to help with all issues concerning aircraft ownership or constrution. Over the last year there has been some question per the FAA on what can be done in a hanger at airports that receive federal grant (cont. pg 2)

(Prez Sez cont.)

assurances. This issue presents some questions on where one can build and complete aviation projects. I am sure for some of our members this issue has caused some anguish with there projects. This issue has compounded problems with many groups and individuals. Causing some animosity between general aviation and airport management. The EAA, CAF, and the AOPA have been working to enlighten The FAA on what constitutes aviation activity at said airports. I would encourage all members to voice your opinion with the FAA on this subject. The FAA has granted an extension on comments about this issue thru October second 2014. links for your comments can be found on web sites with EAA and FAA, take a few minutes and please do so.

There has been some discussion within the chapter about starting a flying club to help members and others with learning to fly and to stay current in their flying activities. I feel this would be a great asset for our chapter and would help with recruiting new members. Also retaining some who wish to partake in flight activities with building or owning. The EAA has announced the publication of a guide to forming non-profit flying clubs now available for EAA chapters. I hope that as a chapter we can incorporate this type of activity in the future. The Civil Air Patrol will be giving a brief on there organization at the meeting on the 20th. Some come on out have some breakfast and enjoy the meeting. Hope to see you all there.

Phill Steele Sr.

Subaru Engines for Sale

It was good to meet everyone at the last meeting and I hope to be able to attend more meetings in the future. As mentioned, I have two Subaru EA81 cores with many of the parts that came with the project but don't need. I plan to use a Rotax 582 instead. I'm not sure what they are worth but would like to get them out of my garage. I will also throw in the engine stand. I am located in Kyle, not far from the airport. I can be reached at (512) 644-7493 anytime.

Let me know what you think and I hope to see you again soon.

David Nesmith,

Vice-president, PRA chapter 65

Thatcher Unveils its New 2 Place CX5



Building on the simplicity of the CX4 design, the CX5 has a

recommended horsepower increase to 85 using a Revemaster R2300. Performance stats are very similar with a slight decrease in cruise. Both the CX4 and CX5 will be available with the tri-gear option. Estimates are the little 2 place can be built for under \$25,000

From the Editor

The August meeting began with a great pancake breakfast thanks to the efforts of Guy Bowen. During the meeting Guy also did a presentation on the aero conversion of the Corvair engine and updates on his progress. Phillip is continuing to confer with the EAA regarding a stop for the EAA Trimotor at San Marcos and evaluating the possibility EAA Chapter sponsored Flying clubs.

Visitors included David Nesmith from Chapter 65 of the Popular Rotorcraft Association (see his add previous page) and John Brecher, an instructor for the EAA Sportaire workshops. John provided information about the workshops and how individual chapters can sponsor their own workshops.



Nothing like Pancakes and Aviation talk

Guy describes the building processes involved in converting the Corvair engine to an aircraft engine.



This month's issue is dedicated to aviation safety, and hopefully we can have a column related to Safety every month. The safety issue was brought home when I attended an FAA seminar at Airventure regarding runway safety and the potential hazards of ground operations especially at busier airports. After many years of not flying, I was amazed at what I had forgotten about runway marking and protocol. Check your knowledge on the separate FAA file on runway markings I have included with the newsletter.

To this effect I have included information about the FAA Wings program. This is a program that provides continuing education (often free) for the pilot through seminars frequently at local facilities; webinars, and through 3rd party resources such as EAA, AOPA, Sporty's and Gleim Publications and others. Benefits of the program is a safer you as a pilot, and with completion of certain phases of the program the fulfillment of Flight Review requirements as well.

Welcome to the WINGS – Pilot Proficiency Program!

The objective of the WINGS Program is to address the primary accident causal factors that continue to plague the general aviation community. By focusing on this objective, we hope to reduce the number of accidents we see each year for the same causes. As you will see, it is not a simple “Award” program but is instead a true proficiency program, designed to help improve our skills and knowledge as pilots.

The WINGS - Pilot Proficiency Program is based on the premise that pilots who maintain currency and proficiency in the basics of flight will enjoy a safer and more stress-free flying experience.

You select (in your Airman Profile) the category and class of aircraft in which you wish to receive training and in which you wish to demonstrate your flight proficiency. Requirements for each aircraft category and class include specific subjects and flight maneuvers. To ensure you receive a well-rounded learning experience, only certain flight activities fulfill specific credit requirements. More information about how these subject areas are selected is available on your MY WINGS page.

The program encourages an on-going training program that provides you an opportunity to fly on a regular basis with an authorized flight instructor. The program is most effective if the training is accomplished regularly throughout the year, thus affording you the opportunity to fly in different seasons and in different flight conditions.

Reviewing and refreshing your knowledge is just as important as actual flying. To meet this goal, we provide you many opportunities to complete online courses, attend seminars and other events, and participate in webinars. Many 3rd party activities, such as those offered by AOPA, ASA, Sporty’s, Gleim Publications, and others, qualify for WINGS credit and will indicate such credit on their web site.

In almost all cases, arrangements have been made with the FAAS Team to automatically provide WINGS credit after the activity. However, please allow at least 24 hours before inquiring about WINGS credits. Remember, if you have questions about a course or activity, check with the provider. If you have a question about the WINGS Program, contact faasafety@faa.gov

Note that completion of any Phase of WINGS satisfies the requirement for a flight review. So not only will you complete a review of the most common weak areas that have led others to the accident site, but you end up with a flight review, as well!

In addition, we have two excellent resources to help you navigate the WINGS Program: the FAA Advisory Circular on the WINGS – Pilot Proficiency Program, AC61-91J, and a WINGS User’s Guide.

Current programs:

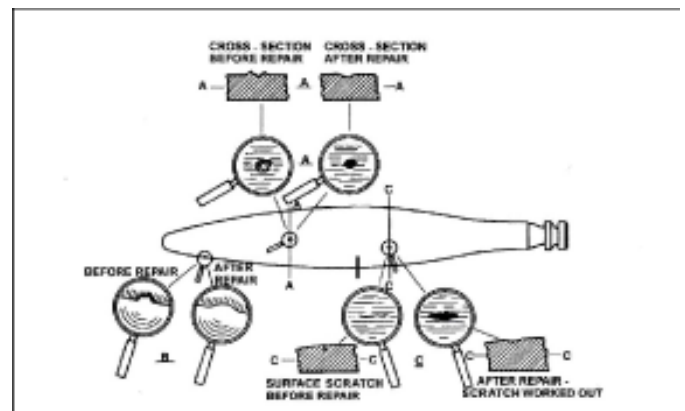
Metal Propeller Repair

BY RICHARD KOEHLER, EAA 161427

THE OTHER DAY I received a phone call from a friend with a dinged propeller on his Cessna 182. This article details the process in repairing such a propeller. Repairs of this type on certified aircraft require the supervision of a mechanic with at least a powerplant rating. However, on experimental amateur-built (E-AB) planes, anyone can do the work and log it.

The propeller in question had been overhauled not too long ago, and its leading edge was protected with Prop Guard polyurethane tape. Prop Guard went out of production a few years ago but has been brought back by another company. It has an STC; but the FAA has declared that it is a minor alteration since it is not much different than a couple of coats of paint. For the industrious, you can buy the components of Prop Guard from 3M and create your own "kit."

The tape is used primarily as an anti-erosion coating. Sand and even rain can chew up the leading edge of your prop at a surprisingly rapid rate. The tape is sacrificial, eroding in place of the paint or metal. This erosion occurs most at the tip of a blade, so I have found myself replacing the last 4 to 5 inches on my prop on a regular basis. For this reason, I now splice on a 4- to 5-inch piece on the tip end of the prop for easy replacement. Although anti-erosion tape will mitigate the effects of a stone hit, it will not eliminate damage to the prop. Such had happened on my friend's C-182. The damage was in the tip section, and it looked like a 3/16-inch bolt had slammed sideways into the leading edge of the prop. The tape was massively torn and required replacement as well. See Figure 1. (cont. pg. 6)



(cont. from pg 5)

Before beginning a propeller repair, consult the propeller manufacturer's maintenance manual for your propeller for acceptable repairs. Also check the type certificate data sheet for allowable dimensions, particularly if any shortening of the diameter is involved. If you cannot find manufacturer's data, then consult Advisory Circular (AC) 43.13-1B, Chapter 8, Section 4, which provides acceptable data for metal propeller repair. Figure 8-24 is perhaps the most useful, particularly for the repair I needed to do, with Repair Example B a near perfect match. See Figure 2. The other critical factor you need to look at is the allowable repair depth limits per Figure 8-27 of the AC.



As you go nearer the tip of the prop, you can remove more material. In this case the damage was about 2 inches from the



tip of an 82-inch-diameter propeller, or at the 95-percent-span radius. Going to 8-27 shows that up to 12.5 percent of the blade chord could be removed, or at a blade width of about 4 inches, could remove up to a half inch of the leading edge! This repair was going to be well below this limit. The ding was about 3/32-inch deep. See Figure 3. The tools you will need for propeller repair include a set of fine flat and round files, spoon files, and fine (600 grit) wet/dry sandpaper or crocus cloth. See Figure 4. Start with a wide, fine, flat file, using it to smooth out the bulge in the outer airfoil shape of the propeller caused by the impact of the stone or whatever. Next, blend the dent into the edge of the airfoil with about a 6-to-1 slope. In other words, for a dent depth of 3/32 inch, times 6 gives an 18/32- or 9/16-inch taper. The bottom of the dent must also be cleaned out to ensure there is no crack. After getting the slope contour and bottom of the dent cleaned out, examine the area with a magnifying glass to make sure no crack remains. The surface should be etched with something like Zep, Alumiprep, or Alodine to expose any residual cracking. Once satisfied that the area is completely cleaned of damaged material, round the edge to match the airfoil profile and blend the repair into the surrounding area. Polish with crocus cloth or 600 grit wet sandpaper to remove all traces of file marks. See Figure 5.



Finish the prop with primer and colored paint, in this case, flat black. See Figure 6. We added white to the tip and allowed it to cure a few days prior to replacing the leading edge tape.

To clean up any edge on the paint or other imperfections, we wet-sanded the paint with 1200 grit sandpaper prior to applying the tape. It is now almost impossible to see the repaired damage. Due to the relatively small volume of aluminum removed, the prop did not have to be balanced again prior to use.

Aviation Safety Programs in Central Texas and on the Web

Real World Weather (AOPA)

Date: Tuesday September 16, 2014 | 07:00 PM - 09:00 PM
Contact Person: Air Safety Institute
Contact Phone Number: 800-638-3101
Location: Doubletree by Hilton San Antonio Airport, 37 N.E. Loop 410, San Antonio,
Cost: FREE, no reservation needed

Date Wednesday September 17, 2014
07:00 PM - 09:00 PM
Contact Person: Air Safety Institute
Contact Phone Number: 800-638-3101
Location: Omni Austin Hotel @ Southpark, 4140 Governor's Row, Austin, Texas, 78744
Cost: FREE, no reservation needed

"The Glass Panel Cockpit: Taking Your Airplane From Steam to Modern Avionics" (FAA)

On Thursday September 25, 2014 at 19:00 Central Daylight Time

Select Number: SW0957685

Location:

Redbird Skyport FBO
2080 Airport Drive
San Marcos, TX 78666

upcoming webinar - (AOPA)

How healthy do you have to be to fly? Sept 17 @ 7:00 pm central

Most of us want to be healthy and know that eating right and staying active help keep us that way. However, life has its inevitable ups and downs and we deal with the resulting stresses. Our blood pressure rises; difficulties may bring anxiety and depression. And our eyes! Some of us go from nearsightedness to cataracts; others deal with glaucoma.

How healthy do we have to be to obtain and keep a regular issuance airman medical certificate? Join Gary Crump, Director, AOPA Medical Certification Services for insights and answers to these questions and more. Seats are limited, register now. Go To: <https://goto.webcasts.com/starthere.jsp?ei=1042326>

Other Events

33rd Annual Breakaway Air Park Picnic

Saturday, September 27, 2014 11:00am – 2:00pm
(Rain date: Sun., Sept. 28)

Hangar at north end of east taxi-way

Flying Information—Use runway at your own risk.
Airpark, owners not responsible for any damage/injuries.

•Location: Northwest of Austin in Cedar Park, TX; 11 miles SW of GTU; Labeled as Breakaway Airpark on the San Antonio sectional; ID—40XS; Lat: N 30-31.1 Long: W 097-46.8

- Runway: 2900ft x 35ft paved, oriented 15/33 with surrounding trees and houses. Taxiway: West-side, caliche; East-side, paved
 - Traffic Pattern: East of the field; LP 15, RP 33
 - Radio Frequency: 122.90. Parking instruction will be provided on arrival.
- Sorry, no fuel, tiedowns, or services available.

If by car:
2901 Juneau, Cedar Park