



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

June 2018

Monthly Meeting
June 16, 10:00 am
At Redbird Skyport Conference
Room
San Marcos Regional Airport

VMC Culb @ 9:00 am RedBird Conference Room Moderated by: Terry Ross

Program:
"Oxy-Acetylene Welding
Chrome Moly steel"

Presented by: Stan Timmerman

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Hangar Talk

Hi Chapter 958,

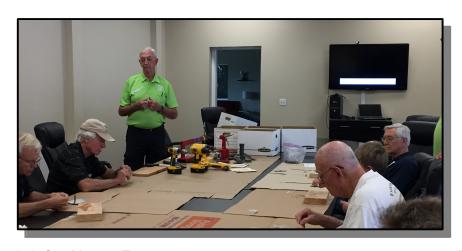
Hope everyone has had a good month for building and flying. May was another busy one for the Chapter, with a Young Eagles program following the regular meeting that went on through most of the afternoon. Many thanks to our pilots, Bill Davoust, Clell Bond and Greg Hughes for their time and talents in working with these youngsters.

I understand that the ROTC instructors from Byron Steel and San Marcos High schools are quite impressed with the folks from the chapter and plan to continue bringing their ROTC students in the upcoming school year. And Many thanks to John Brecher for working hard to continuously promote the program.

Steve Sewell gave a superb presentation on the various aspects of riveting and set up a practice work session so members could practice setting different types of rivets in sheet metal. We appreciate Steve's work in coordinating the session.

Below, Steve keeps eveybody busy squeezing and popping rivets in sheet metal samples





Randy Vanstory in Kobalt Tool Video

You may recall that several months ago we had a request by a California video maker for builders interested in showing off their work in a video sponsored by Kobalt Tools. Randy Vanstory andswered the call and the finished video is really fine. Check it out at:

https://www.facebook.com/KobaltToolsOfficial/posts/1880229272276461/

Fly-In Drive-In At CAF

The CAF Hosted the Fly-in Drive-in event June 2nd with a super turnout of aircraft, hot rods, classic and antique cars. Several chapter members brought their aircraft to show, and of course "Thats all Brother" the CentralTexas wings' newly acquired C-47 was showing off its fresh paint job in Normandy invasion colors. The cars on display were all great examples of automotive history and several were very nostalgic for some of us.



Dick Cole, the last surviving member of "Doolittles Raiders" was there signing his book



John Brecher promoted the Chapter and the Young Eagles program



Bill Davoust flew in his fantastic RotorWay



Sean James Brought his beautiful Long EZ



Greg Hughes' L'il Angel is looking good with a coat of paint



Tri-City Aeromodelers brought some magnificent scale R/C models



A replica of the venerable 1956 Corvette



And who can forget the Delorean

Name Tags for New Members

We have name tags waiting for new members Anum Aslam, Mark Pierce and Jered Kenna. They will be available at Saturday's meeting. Thanks.

REMINDER: New meeting day set for the July EAA Chapter 958 meeting
Because a number of our members will be on their way to Oshkosh 7/21, for Airventure, the July
chapter meeting has been moved to the Second Saturday of the month (7/14/18).

Oxy-Acetylene Tips and Tricks

By Stan Timmerman

I am supposed to give a presentation Saturday 6/16 on Chrome-Moly and Oxy-Acetylene. I did not think the stuff in this article fit in that presentation, so I put it here.

http://www.eaavideo.org/detail/video/5246564484001/tube-marking-tool?autoStart=true&q=tube

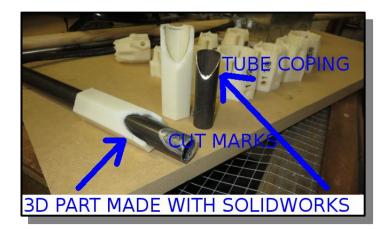
%20marking

On the EAA.org website there are videos called hints for home builders.

Brian Carpenter put up a video on these 3d printed parts that are used for marking chrome-moly tubes. The video is at the website above picture. He was nice enough to place the 3d files online. If you have a 3d printer, you can make your own.

He placed the files on the website below: https://drive.google.com/drive/folders/0B6fcluqN5u3 oR0pSUWY5RGdNbzQ





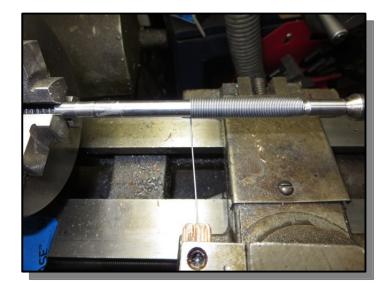
My son is the 3D printer expert in the family. He downloaded the Solidworks program that is available to EAA members. Using Solidworks he has started making 3d parts that I believe will be helpful.

Here is an example of a marking tool. Tubing must be coped – often called fish mouth cuts. The shape of the cut is determined by the intersection of metal tubes. Solidworks can be used to intersect tubing at arbitrary angles. Then the parts can be printed.



I saw a tool flying around the table at Steve's rivet presentation. I thought I would take a shot at making my own. Music wire can be purchased on Amazon at a reasonable cost. With it you can make your own springs.

You do not need a lathe to make a spring but it does make it go faster. The tool had an interesting way of anchoring the spring to the punch. I tried – unsuccessfully to duplicate the feature in my own mandrel. It sort of worked. Getting the spring to taper down is a challenge.



I used a lathe to make the center punch. I am fond of using O1 drill rod. Drill rod is not that expensive – O1 is oil quenched. The important thing about the drill rod is that it can be made into a hardened tool.

The procedure is to heat it up – using my torch. I usually use a drill to spin the part while heating. Then I dip the part in oil when it reaches temp. Lots of smoke and a little fire but nothing that I cannot put out.



The next step is to polish the hardened rod. I need it to be shiny for the next step. The next step is tempering. When quenched in oil it is glass hard. A file could not scratch it. In general that is too hard for a tool.

The tempering process looks similar to the picture above. It is done with the naked eye. It is important to catch the tool changing colors. It is quenched again at the correct color.





Timing is everything for tempering. I use the torch and the shiny metal to watch the color bars progress down the tool. The bronze color approaches the tip. I try to catch it before the blue color gets there. The blue color is the color used to make a spring. Bronze is harder. I then dip the part in oil again locking the colors in place.





Special offer for EAA Chapter 958 members from Avidyne

See also: https://www.avidyne.com/landing/free-wifi-bt-eaa.asp





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With WiFi & Bluetooth enabled, you can take advantage of the Avidyne <u>IFD100 iPad app</u>, where you have an additional means to control the IFD Series units. We'll also include our own MK10 Bluetooth keyboard to give you even more control.



Offer valid for new IFD440 orders received between **May 16 and July 15, 2018**.

Offer does not include cost of installation or other dealer charges.

Offer only available to members of **EAA Chapter #958** that have completed the form at

Please reach out to Spencer Wells or Dale Ferrer for more information. You must fill out the form below to qualify for FREE Bluetooth / Wifi.

http://www.avidyne.com/landing/free-wifi-bt-eaa.asp

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Dale Ferrer

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Safety Corner

EAA Webinars

Date	Time	Presentation	Presenter
6/13/18	7 p.m. CDT	Developing a Pilot's Operating Handbook for E-AB Aircraft Qualifies for FAA Wings credit.	Dick Socash
6/20/18	7 p.m. CDT	Tips for Flying into EAA AirVenture Oshkosh 2018 Qualifies for FAA Wings credit.	Fred Stadler
6/27/18	7 p.m. CDT	Keeping the Peace In Partnerships: A Guide to Aircraft Co-Ownership	Bruce Luedeman
7/10/18	8 p.m. CDT	Don't Shoot Yourself in the Foot Qualifies for FAA Wings and AMT credit.	Mike Busch
7/11/18	7 p.m. CDT	Flying Club Scheduling: Challenge or Strategic Advantage?	Josh Bowser
7/17/18	7 p.m. CDT	Get Out Of Dodge! Preparing for Cross-Country Flight Qualifies for FAA Wings credit.	Prof. H. Paul Shuch
8/8/18	8 p.m. CDT	What's Changed, What Hasn't Qualifies for FAA Wings and AMT credit.	Mike Busch