



February 2005



George & Barbara Leider flying their Thorp T18

REC'D NV 800
FBI
JUL 24 1964



Address Correction Requested

Chris & Merry Romine
P.O. Box 533
Genoa, NV 89411-0533

Figure 1. The structure of the proposed fuzzy expert system for the diagnosis of the type of the fault in the power transformer.



EAA SIERRA CHAPTER 403 OFFICERS FOR 2005

President	Mike Jimenez	246-4025
Vice President	John Grub	885-1945
Secretary	Patty Knight	560-5958
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	Chris Romine	783-9506
	Ron Sutton	882-1662
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Committees:

Reno Air Races	Steve & Donna Silva	887-0532
Breakfast Coordinator	Tommy Dee Lindsey	887-1216
Flight Advisor	Warren Fields	358-6904
Technical Advisor	Ron Sutton	882-1662
Technical Advisor	Mack Murphree	246-9364
Raffle	Barbara Leider	849-9547
Membership	Judy Berg	267-5431
Website Editor	Wayne Berg	267-5431
Young Eagles Coordinator	Merry Romine	783-9506
Young Eagles Coordinator	Mike Agnello	267-6921
Newsletter Editors	Judy Berg	267-5431
	Sandra Erb	883-6494

Chapter 403 Schedule

Chapter Meeting	First Wednesday	Potluck 6:00 p.m.	Meeting 7:00 p.m.
Business Meeting	Second Saturday	9:30 a.m.	
Builders Meeting	Third Wednesday	6:30 p.m.	
Pancake Breakfast	Third Saturday	9:00 to 11:00 a.m.	
Coffee & Donuts	Saturday	9:00 to 11:00 a.m.	
	(When we don't have pancakes)		

*Unless noted, all meetings are at the chapter building

Website: <http://eaa403.org>

MEMBER SPOTLIGHT



BY JB

George and Barbara Leider joined EAA Sierra Chapter 403 in 1993, and they are always willing to help out with events and participate in the chapter.

Barbara was born in Kearney, Nebraska and George was born in Wellfleet, Nebraska. George joined the Marines in 1949 and they got married in 1950 and moved to California in 1951. George worked for Douglas Aircraft as a machinist for 10 years and then worked for Hughes Aircraft as a machinist until he retired in 1989 and they moved to Carson City.

George learned to fly in 1969 in a Citabria in Torrance, California. In 1970 he started building two Thorp T18's which took about two years and he got his Pilot's Certificate at that time. Barbara learned to fly in the Thorp in 1980 and got her Pilot's Certificate that same year and their son Jim learned to fly in the Thorp at age 16. Jim still owns one of the T18's and keeps it at the Carson City Airport although he lives in Hawaii.

In 1980 George built a single place Pitts, and over the years has made numerous parts for all of his airplanes, has helped on other projects, and made parts for many people. George has flown to Oshkosh four times in his first T18, and Barbara has flown with him to Oshkosh once. They have flown to all the Fly-in's in southern California and to Watsonville eight times for their Fly-In.

You can usually find George and Barbara at their hangar at the Carson City Airport getting ready for an early morning flight.

They have three children; Ronda and George Jr., who live in the Seattle area, and Jim. They also have four grandchildren and five great-grandchildren.



President's Corner...

Hi folks, just wanted to thank all of the members for their help at our pancake breakfast. We had a great turnout. I don't know if everyone was aware, but Sam Jacobsen showed up with his beautiful RV-8. He flew it over from Truckee and joined us for breakfast. For all of you who had a chance to go out in the cold to look it over, I have to say that the craftsmanship he and his son put into that project is remarkable.

I want to thank George and Lorrell Byard for letting the chapter put on our recent FAA program in their hangar. FAA Inspector Adrian Grieve put on a very interesting and helpful program for the members. Thanks to all. If you members have any programs you would like to sponsor or present, please let me know so we can put them on the calendar. Just want to mention that our Fly-In committee is going to need help so please volunteer and be a part of our Second Annual Silver State RV Fly-In.

Mikey J.

2005 MEMBERSHIP DUES

Thanks to all of you who have renewed, as this helps keep Sierra Chapter 403 a success and allows us to plan and participate in many events each year. If we have not received your membership dues by February, this will be your last newsletter and you will be removed from the active member roster. Your newsletter will continue upon receipt of your dues.

RAFFLE

We need items for our monthly raffle. If you can donate a gift, a white elephant that you no longer want but could be a treasure to someone else, or if you can bake cookies or other goodies, it would be appreciated. Please contact Barbara Leider at (775)849-9547.

NEWSLETTER ARTICLES

If you have an article, an idea or want to contribute something for the newsletter, it would be appreciated. The deadline to get something included will be the 15th of each month, and if we don't have room or it is received too late we will try for the next issue. We want you to enjoy your monthly newsletter and input is always welcome. Contact Judy Berg at (775)267-5431 or e-mail your information to jfberg@msn.com.

NAME BADGES

For those of you new members that requested name badges, please pick them up at the chapter. They are located on top of the bookcase as you come in the door.

YOUNG EAGLES FLIGHTS

Following are some of the Young Eagles flights the Chapter had in 2004. Merry Romine has taken over this great program for young people with Mike Agnello assisting with the coordination of flights and pilots. We appreciate their efforts in getting this program going again, and thanks to Jacki Montgomery, Mike Jimenez, George Leider and Samantha Moore for piloting some of these flights. Volunteer pilots are needed to make this program a success so contact Merry if you can help in 2005.



8/21/2004 - Logan Rees & Christian Rees
with Merry Romine & Mike Agnello
Pilot - Mike Jimenez



8/28/2004 - Alex Nemirow with Mike Agnello
Pilot - Jacki Montgomery



12/11/2004 Caitlin Van Voorst
with grandparents Barbara & Barry Sklar
Pilot - Samantha Moore

NUTS AND BOLTS

Aircraft have some of the best fasteners in the hardware industry. They are stronger and lighter than automotive hardware due to the metallurgical properties of the fastener. Therefore, it takes less bolt diameter size to do the same job as a common bolt or any fastener you would buy at the local hardware store.

Grip length is critical when joining two or multiple structure members. The grip length should be the solid bolt shank inside the hole from the head of the bolt to the beginning of the threads only. If the bolt is too short you have what is referred to as "threads in bearing", this is when the bolt threads are inside the drilled hole, the bolt shank isn't flush with the nut fastener side of the structure. When the nut is torqued to specs, the bolt will not have the required number of threads showing, about one to three threads above the nut.

The bolt that is too long will need more washers than called for in the print or specs. This can lead to a bolt that is torqued to limits and will not have the compression tension that the torque calls for, a tight nut and bolt, but a loose fit through the structure it is holding. Spar bolts, wing bolts, and engine mount bolts and landing gear bolts are critical components and need exact fitting and torque.

Using fiber lock nuts is common on all aircraft, aft of the firewall only. Steel self-locking nuts are used firewall forward. Castle nuts are used on any structure where the bolt is allowed to rotate, such as flight controls, cable ends, rod ends, bell cranks, wing flaps, aileron, elevator and rudder attach points. All bolts must be facing head forward, if at all possible. Any bolt that is rotating with a component must have the head of the bolt inside nearest the center of rotation with the nut on the outside.

Sometimes when we paint a part we tend to get a little too much paint and/or primer on the part. When we bolt or rivet that part to a mating structure, the part will distort where the fastener is attaching the part to because the excess paint or primer will squish out away from the fastener. Over time, the fastener will loosen and show a black ring around the head of the bolt or rivet showing a loose joint. Ease up on the paint gun when priming a part, and just barely cover the surface. You should be able to see the bare metal through the primer when you are finished priming.

The FAA 4313-1 and -2b has the entire bolt torque limits for both course and fine thread fasteners. This manual will give you everything you will need to know about how an aircraft is supposed to be put together. It is a good reference guide for riveting, welding, sheet metal repair, fabric and dope repair, wood structure repair, weight and balance, prop balancing, radio and instrument wiring, and ground layout. This even has a section on how to install floats and skis. The Chapter library has a copy.

Ron Sutton
Tech Counselor