

# EAA CHAPTER - 690

## gwinnett county, georgia

### NEWS - COMM

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MEETINGS 2ND FRIDAY EACH MONTH AT STONE MOUNTAIN AIRPORT-8:00 P.M.

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MARCH 1983

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#### YOU ASKED FOR IT, AGAIN

The original "YOU ASKED FOR IT" program was scheduled for last month's Chapter meeting but got rescheduled because of the HAPI - ENGINE program arriving last month.

Well, we are going to try it again this month at the Chapter meeting, to have the "YOU ASKED FOR IT" program. This will be on "How-To-Do" aircraft construction items. There will be separate demonstration areas and the membership will be divided into small groups so it won't be too crowded at any one station. The groups will rotate from one station to another.

The Chapter meeting will be Friday March 11, 1983, at the Stone Mountain Airport starting at 8:00 p.m.

There will be demonstrations on Safety Wiring, Composite Construction, Repairing an Alternator, Forming Aluminum, Fitting Steel Tubing for Welding, and Etc.

#### WE NOW HAVE CHAIRS

The Chapter now has chairs. This item was discussed at the February Chapter meeting and will be discussed again at the March meeting as to how to pay for the chairs.

#### ON THE HORIZON

MARCH 13 - 19, Lakeland, Florida Sun 'N Fun  
EAA Fly-In.

April 8, Chapter meeting - program will be  
on Ultralights.

April 9 & 10, Rome, Georgia - EAA Chapters  
709 and 150 Fly-In and Air-  
show. Informal fly-in 4/9/83.  
Airshow 4/10/83.

May 14, Our own EAA Chapter 690 Fly-In and  
Pancake Breakfast at Stone Mountain  
Airport, Georgia.

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#### THE COUNT IS 41

Chapter membership for 1983 is now up to 41. Additional new members who have joined the ranks of Chapter 690 for the first time are: George Bell, Paul Atkins, Jack Calk, and Robert Ray. We welcome you to the Chapter.

Additional members renewing their membership are: John Adams, Ken Sharp, Stephan De Blasio, Bill Denis, Dennis Balsam, Johnny Taylor, John Henderson, Frank Wilcox, Frank Johnson, Jim Crunkleton and Joel Levine.



**SIMPLIFIED TYPE CERTIFICATION** — Earlier this week after leaving Lakeland, Paul personally hand carried the EAA draft proposal for simplified type certification to the FAA in Washington, DC. Washington Representatives, Charlie Schuck and Dave Scott, joined Paul in discussions with Craig Beard, Director of Airworthiness for the FAA; Ed Stimpson, President of the General Aviation Manufacturers' Association (GAMA); Larry Burian, President of the National Air Transportation Association (NATA); and John Winant, President of the National Business Aircraft Association (NBAA). Paul informs us that the meetings were both lengthy and productive and everyone involved seemed to be very supportive of the EAA draft proposal.

**PROJECT SCHOOLFLIGHT** — While Paul was in Washington, he also had the opportunity to meet with Don Clausen, ex-Congressman now with the FAA's Public Affairs Office. Don is a strong supporter of EAA, and he and Paul talked at great length about FAA's part in aviation education. The FAA is very interested in working with EAA in promoting this facet of aviation, and our successful Project Schoolflight program will be the basis for expanded involvement in this area.

**CONSTRUCTION UPDATE** — Construction of the new EAA Aviation Center is moving ahead rapidly and the project is "on schedule". Paul said he and Tom have been keeping a close eye on the project and are happy to announce that the overall quality of the work completed to date is extremely good. If construction continues at the present rate, we expect the building to be ready for interior work by May.

**EAA MAILINGS TO CHAPTERS** — A number of Chapters have established Post Office Boxes to consolidate mail coming to the Chapter. Regular mail from EAA to Chapters such as the CHAPTER BULLETIN, DESIGNEE NEWSLETTER, and President's letters can only be made to Chapter Officers at the address on their membership record.

EAA membership and Chapter information is maintained on a computer to provide the most accurate mailing service possible. At present this system holds the data and generates mailing labels for the 80,000 members of EAA and its subgroups, the 650 active Chapter groups, including over 2,000 Chapter officers. The Chapter computer program provides a highly flexible reference and data system to assist Chapters through effective administration.

**ALUMINUM OVERCAST TO ATTEND SUN 'N FUN EAA FLY-IN** — The EAA Aviation Foundation's Boeing B-17 bomber will be one of the featured attractions at the 1983 Sun 'N Fun EAA Fly-In in Lakeland, Florida, March 13-19. The rare World War II Flying Fortress is part of the EAA Aviation Foundation's Flying Museum.

Foundation President, Tom Poberezny, said, "We are proud and pleased to be part of the 9th Annual Sun 'N Fun EAA Fly-In. It is the first major EAA activity of the 1983 season and certainly one of the finest aviation events anywhere." Tom also announced that the general public will be afforded an opportunity to tour the B-17. This magnificent airplane is both an example of American "know-how" and an irreplaceable piece of this nation's history.

**AUTO FUEL** — Tony Goetz and Ted Mosman, of our aircraft maintenance staff, report that EAA Treasurer Art Kilps' Cessna 182 is nearly ready to begin its role in the Foundation's continuing research into the use of unleaded automobile fuel. As you know, Art has loaned this plane to the EAA Aviation Foundation for the Auto Fuel Research Program. We are all looking forward to the first flights which will be another step toward extending our auto fuel program to other aircraft.

#### **EAA TECHNICAL SAFETY STEERING COMMITTEE MEETING**

The EAA Technical Safety Steering Committee met at EAA Headquarters on Friday, December 17th. One of the main points of discussion was to establish Safety Officers within each Chapter of EAA. Their responsibilities are to include aircraft operation and other safety areas outside of what is normally addressed by Designees. Two possible formats for Chapter Safety Officers were developed.

1. Expand the concept, definition and responsibilities of Designees to include the activities of a Chapter Safety Officer.
2. Add the Chapter Safety Officer to the present Chapter Officers, giving the option of it being an "additional duty" assumed by one of the other Officers.

I would appreciate hearing your opinion of the concept of the Chapter Safety Officer, whether it is a duty that should be assumed by Designees or as a separate Officer and any suggestions you may have.

Chuck Larsen, Designee Director

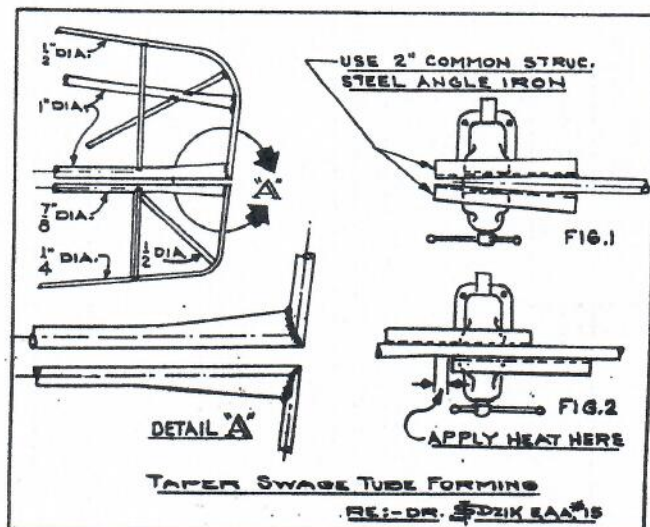
## **Uniform Swage on Spar Ends**

by Bob White  
609 N. Lindberg, Griffith, Ind.

To get a uniform swage on the spar ends of the Little Toot tail surfaces I used two pieces of 2 in. angle 12 in. long.

On the inner spar establish where the swage must start in order to clear the fabric as it tapers to the tip. Place the angles in the vise so they form the desired angle as in Fig. 1. Then heat the required distance from the end of the tube to be used. Place the heated tube between the angles and tighten the vise. The operation may have to be repeated depending on the length and the amount of the swage. Be careful to keep the tube hot. A cold tube will crack.

If the swage is to be used on a rear spar, one side may be kept straight by heating at a point where the swage begins and placing between the angles as in Fig. 2.





## MEMBER PROFILE

Harry Goetting - I started life about a hundred miles from here. I'm a product of Columbus Georgia, Columbus High School and Columbus College. After growing up, which took about 27 years, I decided to get away from the small town lies, gossip, snobs, etc, (no one knows me in Snellville). I went to work with Monroe Calculator in 1973 and jumped at the opportunity for a move to Knoxville, TN, with a promotion to Salesmanager in 1975. I went into business for myself in 1977 and went broke in 1979 before it became popular to do so. I'm happy to say I'm doing a lot better now. I make a living buying and selling commodity futures and rental property. Every once in a while, I make enough money to buy an airplane kit then oops, easy come, easy go.

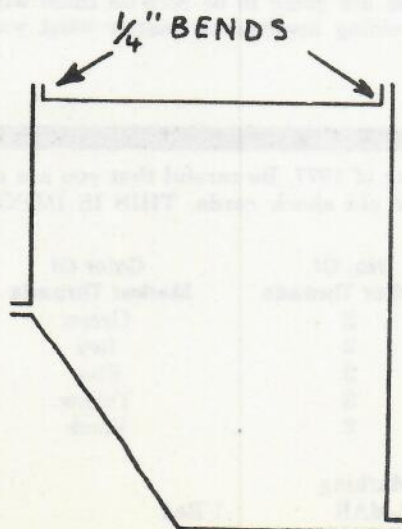
I started dating a lovely lady named Gretchen in 1965. We waited until after the war to get married in 1968. Since then we've had my three sons; Russ, 12, Cameron, 6, and Cary, 1.

I've always wanted to fly. As a small boy, I built my sidewalk racers equiped with wings in case at top speed a gust of wind might render a STOL. Needless to say, my daydreams were much more successful. At nineteen, I still had not flown. So I joined the Air Force to learn to fly not to mention, get out of the Draft. And they flew me. Straight to basic training. Of course, they gave me a ground job. I was an aerial camera repairman. I worked on mapping cameras for C-130 and C-135's, then aft-looking bomb drop cameras of F4's in Viet Nam, then radar cameras on F-104's in Minot, North Dakota (worse than Viet Nam!). During the course of my military career, I did get to fly in the 130's, 135's and a Caribou that liked to fly sideways.

My first ride in a small plane was a few years later in the early seventies. It was a Beech Baron. I've got to tell you, a ride in a Baron will really elevate your enthusiasm for owning a private plane to an all time high. In Knoxville I finally took a \$5.00 introductory flight lesson. That was when I found out that I could have bought a used Cessna for what I had just paid for a car. So after many years of dreaming, wanting and lusting after the call of soaring through smoooooth air, I became the proud owner of a 1969 Cessna 150. Now I take pride in passing the 18 wheelers going down the expressways (without a headwind of course). Now I feel a part of the elite club of hassel free motorized transportation barring bad weather, bad maintenance and bumpy hot hazy days.

One has to continually set new goals. Now I'm in search of less GPH, more speed and new creativity. That's why I'm a new EAA member. It's a unique group diversified in occupations, backgrounds and experience yet unified in a shared common purpose with everyone contributing talents to the good of the Chapter. I'd like to say even with just a few months association with 690, I've never been around a more grand and fun-loving group of people. Yea EAA!

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## Making Gasoline Tanks

When making up welded gasoline tanks, it is a good idea to put all seams on the outside as shown in the accompanying sketch. There are good reasons:

1. It helps the amateur to do a good job because tolerances are not critical.
2. The different sections are easy to clamp together for welding.
3. The lips act as stiffeners for the tank.
4. It keeps the heat of welding away from the main body of

the tank, thus minimizing warpage.

The bends are about one-fourth inch wide and are fusion-welded.

Another important thing to keep in mind when making gas tanks is to provide them with internal baffles. These not only keep gasoline from sloshing around, but strengthen the tank and help it withstand the weight of the fuel when flying through maneuvers, in rough air, etc. — Dick Blair, Vincentown, N. J. •



# TECHNICAL TOPICS



## ONE DESIGNEE'S OBSERVATIONS

From Thomas J. Ryan, EAA 47426, Designee 1238, 916 N. Kemper Street, Alexandria, CA 22304

How do you tell a guy his pride and joy isn't everything he thinks it is? Most of the time, you don't. And, unfortunately, sometimes you should and you still don't tell him. I'm not thinking about times when safety of flight is involved. Rather, I'm thinking of times when the work was good enough but it could have been done better by the same person if a little more time and care had been taken. When working on my own homebuilt, I ran across this same situation many times and after long delays waiting for parts or material found myself moving ahead because my partner and I had to "hurry up and get this thing flying". Now, I'm well aware that most of us are not experts on everything so we tend to do some things better than others. In my case, I favor the metal work and welding and as a Designee, am more critical in my observations of these areas. Our Chapter is fortunate in having a couple of other Designees. Fred Wimberly, a Vari-Eze owner/builder covers composites and Jim Propps, a Fly Baby and Wittman Tailwind builder covers wood structures. Each of us has occasion to offer words of wisdom as we see it and at this time I will pass on some of mine about welding. I was welding fuselage frames, landing gears, engine mounts, fuel tanks, exhaust systems and the like when oxyacetylene welding was all that was available. That technique has changed very little over the years but the use of it has been surpassed by better ways of doing some of the work that used to be done that way. Heli-arc or Gas Tungsten Arc Welding (GTAW) as it is more correctly called, is certainly easier and better for many applications but the average homebuilder is not apt to have such a welder and would find it expensive, to have the work done. So, I'd like to concentrate on my observations about the use of the old standby oxyacetylene.

First, I don't deny "that it's easy" as you have frequently read in various articles about doing your own welding on the fuselage frame. However, I'd like to change that statement to "It's easy for some".

As a welding instructor, I have run across a few students who really don't like to weld and are actually afraid of it but feel they have to do it. Some of them never get good enough to weld their aircraft parts but they do it anyway later with no one looking over the shoulder and it's generally pretty bad and often times safety of flight is involved. In those cases, there is no question about your decision if you have a chance to see the work.

In other cases, and in some instances where A&P's have done the work or passed judgment, the work is marginal and frequently incomplete particularly in clusters and other hard-to-reach places. Believe it or not, I have looked at work that had so much primer dumped on it you couldn't tell if parts were welded or not while the proud builder stood by and said "How do you like it?" Well, as you can imagine, here is where diplomacy enters into the picture if you have to tell him "Strip it so I can see it". Fortunately, this doesn't happen often but what does happen is that the builder thinks that because he's running great beads on practice tubes and plate on the welding table he can do the same thing from various positions on the fuselage frame even with a roll-over fixture. The fixture helps but you really have to let your conscience be your guide in those multi-cluster tube places where tacking was easy but the complete welding required a variety of heat and greater skill. I've seen so much welding rod melted and piled into these places with no penetration you'd think the guy was trying to solder rather than weld it. So, a word of caution — if you think you can do it, go ahead until you feel like it's getting out of hand and STOP right there. You haven't done irreparable damage at this point and to continue invites temptation to fill holes and cover up as best you can. If you don't stop you are heading for a mess that any self-respecting welder would be reluctant to patch up. The best thing you can do is get away from the frame and practice on typical weldments and, in any event, get a hold of someone who can do the job and have him give you some help. There are plenty of builders who were good welders by the time their project was finished and it can be done with a little help from your friends. All welders are not necessarily good aircraft welders. Plenty of guys are good on pipes and railroad tracks but you wouldn't want them welding your engine mount and vice versa. So, hang in there, proceed with caution, and try to recognize that you can't weld everything with one small aircraft torch or one small tip. Also, welding 3/16" 4130 plate to a .049" wall tube may take two torches and a little know-how on the part of your helper. A final note — like the TV ads, "Only your hairdresser knows for sure" about the gal who dyes her hair — Only the welder knows for sure that he has done a good job and sometimes he's reluctant to admit it when he hasn't. So, the more you know about it, the better off you are going to be because there will always be some welding involved no matter what you are going to build.

## COLOR MARKING CODE FOR MANUFACTURING DATE OF ELASTIC CORD AND RINGS

From Richard Benedict, Designer #

SPEC. MIL — 5651B — Cord: Elastic Exerciser and shock absorber for Aeronautical use, Dec. 1961.

Type 1 — Straight cord with double braided cover (shock absorbing) Sizes 1/4", 3/8", 5/8", 3/4"

Type 2 — Endless ring (Bungee) with double braided cover (shock absorbing). Sizes, 1/4", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16"

This system repeats itself every five years. Cords on the market at present (1982) should be three reds manufactured in the first quarter of 1982; however they could also be five years old having been manufactured

in the first quarter of 1977. Be careful that you are not getting five year old shock cords. THIS IS IMPORTANT.

Year Mfg'd.	No. Of Marker Threads	Color Of Marker Threads
1981	2	Green
1982	2	Red
1983	2	Blue
1984	2	Yellow
1985	2	Black

### Quarter Marking

JAN-FEB-MAR	1 Red
APR-MAY-JUN	1 Blue
JUL-AUG-SEP	1 Green
OCT-NOV-DEC	1 Yellow