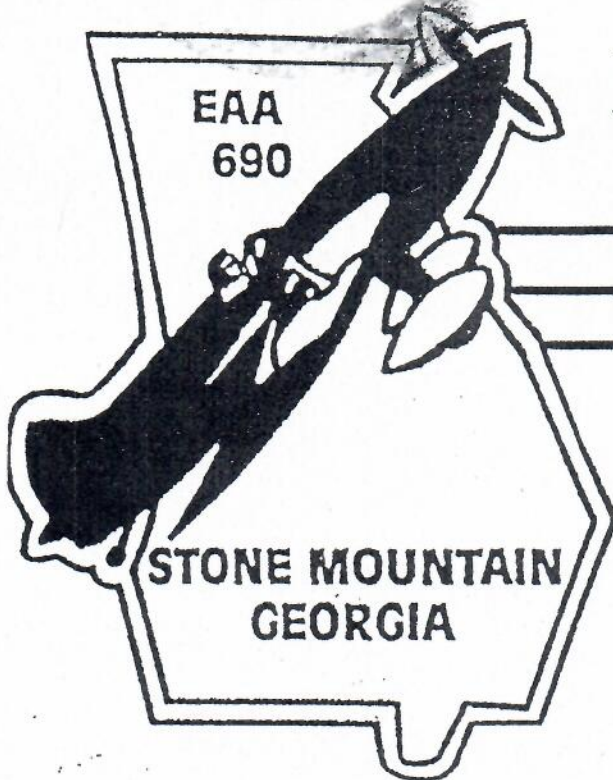


APRIL 1991

EAA CHAPTER-690 NAV-COM



MEETINGS 2ND FRIDAY EACH MONTH AT STONE MOUNTAIN AIRPORT - 8:00PM

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Decatur, GA 30030

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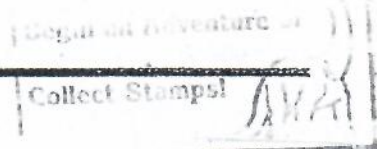
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EAA CHAPTER-690 NAV-COM

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NEW INFO ON MARCH 30TH FLY-OUT!!
ORDER FORMS FOR CHAPTER SHIRTS!!

Duane K. Huff
383 Behtesda Church Road
Lawrenceville GA 30244

President's Message

It is with sadness that we must report the death of one of Chapter 690's long-time members. Frank Johnson passed away March 12, 1991 at the age of 79. Newer members of the chapter will not know Frank since poor health in recent years prevented his attendance at our monthly meetings. Leah and Frank did try to attend our Christmas dinner meetings in December. They were unable to do this in 1990. Henry Warner represented Chapter 690 at the March 14 funeral and has prepared a summary of Frank's life and interests for the NAV-COM. A true pioneer aeronautical design engineer, Frank loved to recall his associations with Ed Porterfield, Don Luscombe, Taylor, Piper, and later, his work with Consolidated (B-24; B-36), Vultee (Stinson L-5), and Lockheed (P2V, SKI 130, Jetstar, C5A, Polaris) aircraft corporations. We will miss Frank but will long remember his enthusiasm for our chapter and the experimental aircraft movement. I have written a letter of condolence to Mrs. Johnson.

The "meeting facility" committee is off and running. For those unable to attend the March monthly meeting, you should know that this committee was authorized to investigate the feasibility of constructing a hanger-type building at the Stone Mountain Airport. The chapter has the opportunity to purchase, at reasonable cost, a "Quonset" type 40'x40' prefabricated building. A building this size, if located at the airport, could not only serve as an enlarged meeting facility, but also could be used for central storage of chapter-owned tables, chairs, tools, supplies, library materials, etc.; as a base from which to conduct other chapter programs such as pancake breakfasts, the annual airfair, Youth Air Adventure Day, workshops, and seminars; and as a facility for members to do limited repair, maintenance, assembly, etc. of their aircraft. The proposed location of this facility is in the concrete-surfaced area near the Stn. Mtn. Airport maintenance hanger and adjacent to the fuel ramp and auto parking area. Additional information can be found elsewhere in this issue of the NAV-COM.

In the "here we go again" items, please read and react to the item on page 13 of the March 1991 Sport Aviation entitled "Petition Asks for Elimination of Night VFR". As pointed out,

this research paper, prepared by a University of Idaho student, has been accepted by the FAA as a petition for eliminating this activity in the name of SAFETY. The conclusion is obvious: accidents and deaths that occur during night VFR flight operations could be significantly reduced if pilots were required to be IFR-rated to fly at night. This, of course, would reduce the number of "night flights", biasing the statistic in favor of "IFR only" night flying. Could it be found then that IFR night flying is resulting in accidents and deaths? Maybe ALL night flying should be eliminated...

A bright spot, however, reported in the same issue of Sport aviation on page 10, is the establishment of an Aviation Rule-Making Advisory Committee. Fifty-five aviation and consumer organizations, including EAA, have seats on this committee whose purpose is to consider aviation issues before a decision is made by the FAA to set the rule-making process in motion.

Many thanks to Harold Stalcup and his landscaping crew "extraordinaire" for the fine job they did at the entrance road to Stone Mountain Airport. The sign is much more visible and when the planters are filled with attractive plants and scrubs, this beautification project will certainly be appreciated by all. A V_{toss} to you, Harold.

A V_{toss} also to Ken Sharp who, at our March meeting, taught us what a V_{toss} is as well as 26 other "V" speed designations for fixed and rotor wing aircraft. Ken led an interesting discussion of various flight subjects needed for compliance with the one hour of ground instruction required for the pilot Annual/Biannual FLight Review. Thanks Ken, you did your usual fine job.

Note: V_{toss} - Take-Off Safety Speed for Category A Rotorcraft.

Frank

Calendar of Events

March 30 - Chapter 690 Fly-Out to Perry/Ft. Valley Airport & tour of Warner-Robins AFB Museum. SEE NOTICE ELSEWHERE FOR INTERESTING CHANGES!!

Dof Porter *HP 333-8271*
244-1868 *To come see the chief*

April 5-6 - EAA Chapter 524 Annual RV (the homebuilt) forum. Frederick, MD. See chapter bulletin board.

April 12 - Chapter Meeting. Bring your favorite hanger flying tale; we're a gullible bunch! See "Plane Facts".

Apr. 7-13 - 17th Annual Sun'n'Fun, Lakeland FL.

April 20 - Chapter 690 pancake breakfast

April 27 - EAA Chapter 268 Pancake Breakfast and Fly-In. Cobb Co. / McCollum Airport, South Ramp, 7 a.m. - 1 p.m. No mode C required below 1500' AGL. Come on out and eat pancakes before the chili cook-off!

April 27 - HOT!HOT!HOT! Annual Chapter 690 Chili Cook-Off, Wilcox Aerodrome (Lenora Airstrip), 3-6pm, eat @ 4:30-5.

May 4-5 - Winchester Regional EAA Spring Fly-In, Winchester Regional Airport. Info: Geo. Lutz (703) 256-7838.

May 4 - Chapter 690 Fly-Out to Jekyll Island!!

May 11 - Chapter 690 pancake breakfast!

May 11 - Chapter 468 Breakfast, Ennis Barlow's hanger, 9-11 a.m., Berry Hill Airport.

May 24-26 - Memorial Day Fly-In, Columbia-Owens Downtown Airport (CUB), Columbia, S.C. See chapter bulletin board.

May 25-26 - 3rd annual EAA Chapter 941 & Decatur-Athens Aero Fly-in & Southern Aviation Reunion, see chapter bulletin board.

June 8 - BIG TIME - Chapter 690 Air Fair, Fly-In, and Fly Mart.

June 10 - July 5 - 12th Annual Composite Construction workshop at Indian Hills Community College, Ottumwa, IA. See chapter bulletin board.

September 14 - Family BBQ at the Sego's.

December 13 - Christmas Party at the Decatur Elks.

New Meeting Facility Committee

The initial meeting of the new meeting facility committee, established by action at the March chapter meeting, was held on March 14, 1991. Members of this committee are: Frank Wilcox (chairman pro tem), past presidents Harold Stalcup and John Popps, John Connely, Duane Huff, Bernie Jager, Ben Jeffrey, Ed Pancake, and John Ritchie. This committee was directed to investigate the feasibility of constructing a hanger-type building for chapter use at the Stone Mountain Airport.

Items discussed at length were the need for such a facility, the chapter programs it could support and enhance, the location, and the cost and financing of the project. This was primarily an exploratory meeting. It was agreed that an immediate step to be taken is the concurrence by the airport authorities that a building of this type and for this use can be placed in a desirable location on the airport property.

John Popps and John Ritchie were assigned the preparation of a visual presentation for this purpose. Indications are that a favorable response will result, but this presentation will permit both groups to express and resolve concerns. Ben Jeffrey was assigned the preparation of an overall cost estimate based upon the 40'x40' quonset type hanger that we currently have the opportunity to purchase. Further consideration of the financing methods was requested of the committee members prior to the next committee meeting, which is scheduled for 3 April.

The committee requests any thoughts or comments by chapter members at any time. An interim report will be made at the April chapter meeting and final report with recommendations will be made at the May chapter meeting.

Fly Out to Warner-Robins AFB Museum (A new spin on the V_{toss})

By the time this reaches you, the fly-out will be only days away. Nothing has changed in essence (see item in "Plane Facts"). We still will fly to Perry/Ft. Valley Airport. Andy Anderson and Dick Strand are driving down in their vans and will give lifts to those who ask.

At about 10 a.m., they will begin transporting flyers from Perry/Ft. Valley to the AFB museum.

An additional option is now available! EAA Chapter 38 (Warner Robins Airpark) has rescheduled their Spring Fly-In Brunch to accommodate us. They have invited us to their pancake brunch, so if you like, instead of flying or driving to Perry/Ft. Valley Airport, you can go to Warner-Robins Airpark. It is a private strip, it's turf, located approximately between Perry/Ft. Valley and Warner Robins AFB (see map - it's of course the "circle R"; ATL sectional, MCN 190 9 DME, 2800' sod east-west, UNICOM 122.8). The pancake brunch starts at 9 a.m., so you'll have to get there pretty soon to that if you're flying because, you guessed it, Andy and Dick are going to drive right by the airpark on their way from Perry/Ft. Valley to the museum (this will be a little after 10 a.m.), and they'll pick up anyone who's just stuffed themselves on flapjacks. Also, I think some of the Chapter 38 folks are going to the museum and will provide additional rides. Thanks to Chapter 38 for the hospitality!

Chili Cook-Off

Put on your chef's hat and cook up your hottest, most unusual, old style, Cincinnati, classic, antique, aerobatic, or homebuilt chili and bring it to the Annual Chapter 690 Chili Cook-Off. If you can't bring chili, bring cornbread, salads, crackers, desserts, etc. Judges will award Certificates of Merit for best chilies. When: Saturday, April 27, 3-6 p.m.; eat @ 4:30 or 5:00. Where: Wilcox aero factory and singing hall. Don't forget the Maalox!

Harold Stalcup

Wright Brother's Award

Chapter 690 is one of 100 EAA chapters selected to vote on the Wright Brothers Award that will be presented at the 1991 Dayton Air and Trade Show, July 20-21, 1991. We will help in selecting the homebuilt aircraft to be honored during this event.

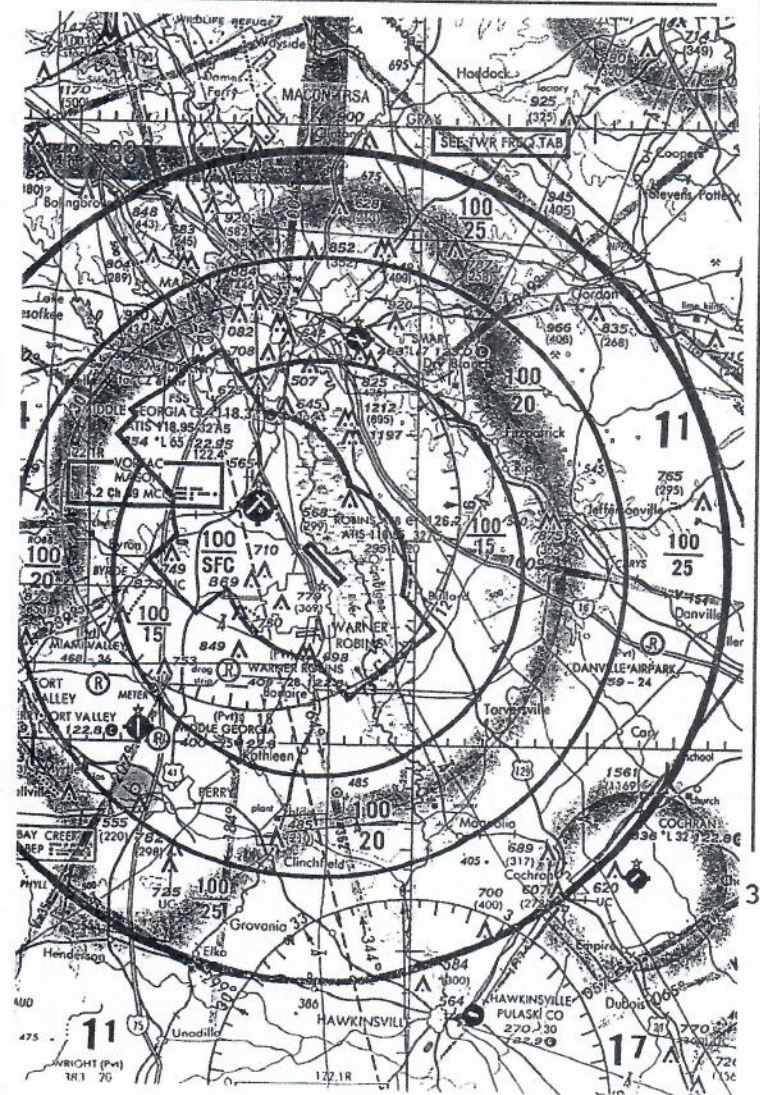
Each year since 1980, the ten aircraft designs that best exemplify the sport aviation movement are selected by ballot. Each designer then recommends a specific aircraft builder to receive the coveted Wright Brothers Award. Chapter 690 member Clyde Schnars received this award for his outstanding Sonerai II a few years back and was pictured in a Sport Aviation feature article.

At the April monthly meeting, each member present will cast three votes, one each for three favorite homebuilt designs. A listing will be provided with spaces for write-ins. These votes will be summarized and mailed in. Remember, these ballots are the only criteria for the selection of aircraft, so please, be prepared to vote.

Plane Facts

"All The News That Fits"

Aviation Pioneer Dies - Frank B. Johnson, an aircraft designer and a member of EAA Chapter 690 died suddenly, March 12, 1991. Frank was involved in the design of Taylorcraft, Porterfield, and Stinson aircraft. He worked for Lockheed Aircraft for 30 years as a design engineer. Frank was a program speaker at our Chapter meetings and active in the EAA. We will miss his knowledge of



general aviation aircraft design and his warm personality. Our sincere condolences go to his wife and family during this time of grief. - Henry Warner

Addendum - Mrs. Johnson, Leah, is in poor health, suffering from cancer and a brain tumor. She is an aeronautical pioneer in her own right - the first licensed female pilot in South Carolina. She has always shared her husband's interest in aviation. - Margaret Wilcox.

Fly-Out!!! - March 30, Chapter 690 is journeying to Perry/Fort Valley Airport. Once we've gathered at the airport, we'll bus over to Warner-Robins AFB and tour their most excellent museum. They continually improve on this facility - it's becoming quite a show-piece, I'm told. There's talk of a picnic after the tour. Dick Strand and Andy Anderson plan to drive down and provide transport between the airport and museum. Other rides/flights can be worked out at the Mar. 8 meeting, or call Mac Forbes (993-3411) or Bob Barton (938-7271) by March 20. **SEE NEW OPTION ABOVE!!**

April's Meeting - This meeting follows closely on the heels of Sun 'n' Fun '91, so our program this year will be an open hanger flying session. All members are invited to tell us their favorite / interesting / instructional / funny experiences from this year's Lakeland Fly-In or any time. If you miraculously get slides made before the meeting, please inform Duane Huff so equipment can be arranged. Ditto for videos. Also at the meeting, we will vote for Wright Brothers Award designs (see above).

Chapter 690 Member in the news! - The April issue of Kitplanes features an article on Chapter 690 member Reinhart Kuntz and his "Der Cricket", there's even a color photo! Congratulations, Reinhart!

Major Achievement Award - The EAA Major Achievement Award is presented each year to individuals whose contributions are felt to have produced outstanding benefits to sport aviation and to EAA. The nominations for this award are submitted by the nominee's peers. Over the years, the participation in this recognition program by various chapters throughout the world has steadily increased. Submittal of nominations must be made by 4 June, the award recipients notified by 15 July,

and the awards presented on stage at the convention at Oshkosh on Friday, 26 July. A copy of the EAA Major Achievement Award nomination form is available from Frank Wilcox.

Airport Sign - As you all have seen, the airport sign crew did their thing and we now have a more "professional" entrance to the airport. Saturday, March 2, we had good weather, all the equipment needed, supplies delivered on time, and a great work crew: Frank Wilcox, Joel Levine, Frank Flessel, Mike Brown, Ed Booth, Barney Barnes, Jeff Boatright, Richard Robison, Duane Huff, Mike North, and Frick & Frack. Thanks to Margaret Wilcox for lunch. Roger Kluge took pictures so you can see the Chapter 690 construction crew in action! - Harold Stalcup

New chapter videos - #52-"AOPA weather flight planning and the pilot" with pamphlet; #53-"AOPA go/no go weather decision"; #54-"AOPA evaluating in-flight weather"; #55 "POSA carburetor by Rex Taylor" (donated by Reinhart Kuntz); #56-"EAA Oshkosh 1990". **NOTE:** Barney Barnes will be away intermittently during April and May. Ed Pancake (469-3338) will take over while he's gone. Thanks, Ed.

May's Meeting - We've tentatively scheduled Pat Epps to give a presentation on the Greenland expedition aimed at recovering a B-17 Flying Fortress and a gaggle of P-38 Lightnings. Should be interesting.

June's Meeting - Reinhart Kuntz will tell us about building "Der Cricket", a VW-powered single-seat biplane. He also will regale us with his exciting tales of aero journeys he's made with the Cricket, including trips to Oshkosh and Lakeland.

Ultralight Wars! - Not that I'm advertising for them, but an interesting exchange is occurring between the editorial staff of Hot Kits and Homebuilts and many ultralight-ers.

You Can Set A Speed Record - The National Aeronautic Association (NAA) is the nation's record keeper for all aviation and space records. In an effort to get more pilots involved in setting records, they suggest that members of EAA chapters set records from their hometowns to Sun'n'Fun or Oshkosh.

This is a fun way to get publicity for both the pilots and general aviation. It also provides a challenge to the pilots to plan and execute flights for maximum speed. Do you have a chance? You sure do. As of December 31, 1989, no records from Atlanta to SNF or OSH are recorded. For more information, call Frank Wilcox, 978-2403. **Sun'n'Fun is coming up soon, think about it!**

Aviation Computer Bulletin Board - It's called "Aviation On-Line", is devoted exclusively to aviation, and can be accessed with any communications program. It looks for 8 data bits, one stop bit, no parity. Has a national info board, various av. forms, safety seminars that can be down-loaded, etc. 740-9336.

Meeting Minutes - Just a reminder - The chapter meeting minutes prepared by the Secretary are posted on the EAA Bulletin Board in the airport office.

Mode C - Another reminder - "Effective Dec. 30, 1990, Mode C transponders will be required for operation within and above the airspace of an ARSA..." See Sport Aviation Dec. issue for more.

Plane Sense

"Since 1990, A burr in your side..."

It's finally happened! Someone sent in an editorial and you guys don't have to read my drivell!

5 March 1991

Dear Jeff:

You said you wanted to hear from the EAA 690 constituency on items of current aviation interest, so here is something that set me off this morning.

In the February 22, 1991 issue of Aviation Daily (page 353) there is an article titled "Human Factors Contribute Greatly to Runway Incursions, NTSB Says." The article mentions three accidents which involve runway incursions in the past 13 months, which claimed 43 lives. In the article is the following statement:

"...New York Kennedy Airport, for example,

is evaluating a stop bar lighting system that is used in combination with controller verbal instructions to confirm the accuracy of an instruction to a pilot who is about to cross an active runway."

I have never been able to understand why the towers do not use traffic signals to control traffic on the ground, or, in fact, use red/green lights to designate active runways for inbound traffic, too. It has been proven that even the lowest form of human life is able to understand and follow instructions given by these traffic signals.

Instead, the controllers rely on a most archaic system of radio communications which allows only one-way, one-at-a-time communications where everyone hears everything and must figure out whether or not they are the ones being instructed.

At one of our past Chapter 690 meetings, we had Aircraft Controllers from the PDK tower talk to us about their experiences. I had just paid a visit to the PDK tower, and noted that the ground control function requires the full-time attention of a controller (along with a trainer looking over his shoulder, if he is in training). In addition, there must be a floating relief crew to sit in when the controllers need a break. All in all, it was a pretty labor-intensive operation, and not cheap.

So, I asked our speakers why they didn't use traffic signals at PDK to at least aid in communicating with pilots of taxiing aircraft.

His response was that they didn't have enough money for the lights!

Well, now they've killed 43 people, so maybe they'll get the lights. Of course, you can expect the FAA to spend billions of dollars on the lights, and to require all pilots to take a 20 hour ground school, at their own expense, to learn how to respond to the new "Remotely Energized Digital Low Intensity Ground Hazard Traffic System" (RED LIGHTS).

Keep 'em flying,
Bob Barton

Editor's note: Interestingly, as a result of the L.A. ground tragedy, effective 16 Feb. 1991,

FAA eliminated the "taxi into position and hold" command between sunrise and sunset or any time an intersection is not visible from the tower. Unfortunately, instead of developing an immediately useful and common sense alternative as suggested by Bob, they are instead, as predicted by Bob, preparing "a new \$50 million dollar national plan for better runway markings and the use of the latest in high technology guidance for flight crews."

Helpful Hints

The SMARTI project (Cessna 140 restoration) has sure been an education. We recently experienced a problem / solution scenario using a device called a "hole finder". Often in working with metal planes, a new piece of aluminum must be fitted to an old piece that already has rivet holes. Sometimes the work is such that the old holes are hidden by the new piece. How can the new holes be drilled to exactly match the old ones? Enter the hole finder, a device that holds a drilling guide onto the new piece directly above the hole in the old piece. The finder is simply two strips of steel held together in parallel. At the end of one strip is an alignment pin that fits precisely in the old rivet hole. Just across from the pin on the other strip is a drill guide or bushing. When the pin is placed in the hole in the old piece, this guide is centered on the new piece just above the hole on the old piece, or is it?

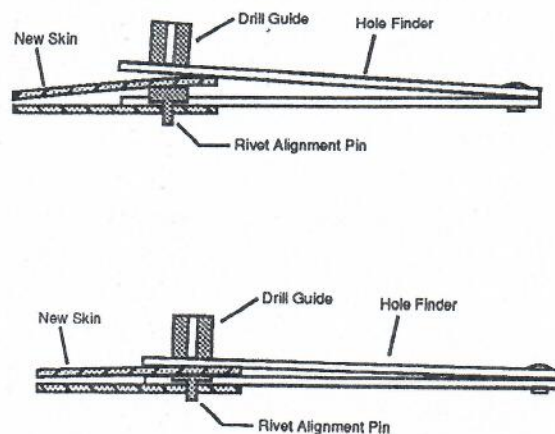
As you can see from the diagram, the two skins must be held as close together and parallel as possible or the newly drilled and old holes will not match when the two skins are placed against each other. Since the strip holding the alignment pin must fit between the two skins, already the skins are separated by the thickness of the strip. This usually isn't too bad, though, as it is still fairly easy to hold the skins parallel. Unfortunately, many hole finders have a drill plate or collar on the back side of the pin that is of considerable thickness. Now this moves the skins an appreciable distance apart, and since the collar diameter is small, it is very difficult to hold the skins parallel, and obviously impossible to hold them close. The result is that once the new hole is drilled, the finder removed, and the skins placed together, the new hole is slightly off, usually just enough to warrant

drilling out both holes to the next larger rivet size. Since our 140 is already going to be the heaviest and ugliest to ever depart terra firma, we don't like this solution.

Now sitting in your arm chair reading this (almost) cohesive presentation of the problem, you've probably already arrived at the solution, but it took us 30 minutes of head scratching to figure out that all we needed to do was file off the collar! Without the collar, only the thickness of the strip holding the pin separates the two skins, and the resulting holes are placed just right every time. An important point, though, is that with the collar gone, care must be taken not to drill into the back of the pin or it will fall out of the strip!

Finally, if the pin does get drilled out, a new hole finder can be made, and this time made correctly. Cut the two strips of the hole finder apart, and discard the one that held the pin. Make a substitute strip of steel or aluminum and temporarily attach it to the guide strip (a cleco should do it, or even a C-clamp). Now simply use the guide to drill a hole into the new, substitute strip. This hole, naturally, will be the same size as the rivets the finder was originally designed for. Take the two strips apart, and countersink the hole. Then, put a countersunk, flat-head rivet into the hole and hold it in place with masking tape. Finally, bind the two strips together permanently (rivet). Voila! A hole finder of minimum thickness with a nub that is easily replaced any time it gets drilled out (and it will).

-The SMARTI Group
(Illustration by Richard Robison)



Chapter Tools

John Popp has recently passed the tool crib on to John Henderson. Thanks for handling the job, John, and welcome aboard, John. This seemed like a good time to inventory the crib, so John (Henderson) has kindly provided us with a new list. The use of the tools is free, but please return them in a timely fashion. (John says that it's going to get painful "sittin' on them tools" in the future).

Rivet squeezer
Nicopress tool
Spark plug cleaner and capping tool
Piston ring compressor pliers and ring bands
Set cylinder base wrenches
Timing indicator
Torque wrench
Instrument hole cutter, metal, 2-1/2 & 3-1/8
Tube bending tool, set plier type
Cable Tension Tester
Tachometer checker
Compression tester
Spark plug lead tester
Magnet timing light & Mag lock tool, Bendix

Fly Buys

For Sale: OHC Lycoming starter, fits up to O-320, \$150. OHC 20 amp generator, make offer. Dave DeWinter, 471-4598.

Wanted: Helicopter airspeed indicator, 0-170 mph; rate of climb indicator, 2000 fpm; hand-held transceiver; portable loran. Call Greg Jannakos, 296-0937.

Tri-Q project for sale. All major structures completed. Carbon spar/LS airfoil canard, all parts/plans to complete project including instruments, prop, Revmaster 2100-D engine. Frank Wilcox, 978-2403.

Evans VP-II project for sale. Fuselage and tail group 80%. Lndg gear, instr. panel., 1500cc engine, more. \$1500 OBO. Steve Ashby, 469-0786.

Wanted: Used Kolb Firestar or gyro-copter with free-spinning rotor. Roger Beyer, 6627-0579.

Wanted: Good used transponder with or without mode C. Also, 720 channel nav/com

with glide scope. Call Jim Estes, 855-8625 (W); 938-3515 (H).

Long Eze project. Fuselage on gear, speed brake, center spar, and Roncze canard complete. Materials and hardware to finish, including canopy. Contact: Jim Sower, 564-0412.

Focke-Wolfe FW 190. 1/2 Scale. Foam and glass, single seat homebuilt. 75% complete, all cowlings, canopy, and C-95 engine. Wood frame on gear. No logs. War replica plans. \$2000 OBO. Contact: Paul Atkins 973-7928 or 977-4663.

Vari-Viggen project for sale. 30-35% complete. Almost all parts needed to finish except engine, canopy, and outboard wing. Over 6000 invested. Make offer. Don Alspaugh, 981-1281.

RV-3 kit (less engine) wings 50% complete, \$3000 Jonesboro, GA. Contact: 478-3321.

SHIRTS SHIRTS SHIRTS

The membership has elected to order open collar, short sleeve shirts with the chapter logo screen printed on them. They will be a light color to go with our four color logo. The cost will be \$15.00 each and must be received prior to the May meeting. Please fill out the attached order blank and send it with your check to Mike North, Treasurer. Mike will take checks at the April and May meetings as well.

Mike North
5252 Audubon Place
Norcross, Ga 30093

NAME _____

PHONE NO. _____

I WOULD LIKE _____ SHIRT(S) AT \$15.00 EACH IN THE FOLLOWING SIZES:

☐ SMALL ☐ MEDIUM ☐ LARGE ☐ EXTRA LARGE

MY CHECK FOR \$ _____ IS ENCLOSED.