EAA MILE HIGH CHAPTER

PRESIDENT KIRBY WHITE 423-5134

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NEWSLETTER KIRBY WHITE 423-5134



VOLUME 8, ISSUE 3, MARCH, 1985

LAST MONTH: With 56 members and guests braving the snow and icy streets to attend, the meeting of February 9, 1985 was called to order at 7:50 P.M. by President Kirby White at the Rocky Mountain Energy Center. The minutes of the January meeting were approved as published in the Newsletter.

Guests: Guests present were Glen Larson of Golden -- a Lifetime EAA Member -- and his daughter Erica, Dean Smith of Arvada -- who is helping Gene Horsman with his BD-5, Sheldon Chrysler of Aurora -- the speaker for the evening who is building a Pietenpol, Gene Jagman -- who didn't sign the guest book, and Tony Lee Dimmick -- the newest Honorary Member of Chapter 43 who was born on February 1, 1985. He was 7 lbs. 3 1/2 ozs. and was 20" long. Congratulations to Lee and Carolyn Dimmick!

Treasurer's Report: Ending 1984

Income: Dues \$930.00
Shoulder patch \$5.20
Calendars \$219.50
Advertising \$10.42

Expenses: Newsletter \$330.22
Coffee \$16.94
Treasurer \$53.29
Books
Transfer to Memorial Fund \$130.00
Rocky Mt. Fly-In Committee \$206.25
EAA Aviation Foundation \$100.00

EAA Aviation Foundation \$100.00 Checking Account Balance: \$679.72 Interest: \$40.87 Savings Account Balance: \$566.27 Interest: \$35.33 Steve Ansley Memorial Fund Balance: \$425.73

Davis was collecting the 1985 dues.

New Business: Kirby presented the awards from Headquarters to the Chapter Officers of 1984.... Brad Davenport for Designee, Bill Davis for Treasurer, Fred Seal for Vice President, and Kirby White for President. The Newsletter Editor and Secretary -- Gaylon Overton -- was not at the meeting to receive his award. Marilyn Schneider introduced Erica Larson, a sixteen year old who is very interested in attending the LAA Air Academy at Oshkosh this summer. She has saved the money for the trip, but needs the endorsement of some EAA Chapters in order to be chosen as one of the participants. Marilyn said that Chapter 660 will stand behind her, and asked that Chapter 43 consider doing the same. Erica stood up and told us a little bit about her aviation background and expressed why she has the desire to participate in the Academy.

New Business con't: Kirby read a letter from member Willie Byrd about a Parade that the City of Louisville is planning for Memorial Day. They would like to have a fly-by of some homebuilt airplanes, and felt that Chapter 43 members could put on a very nice presentation. Roy Maneely thought it would be a worthwhile undertaking, so he was volunteered to head up arranging the flyby. Bill Schneider said he would see about getting some Eze drivers to join in. Lee Dimmick suggested that possibly we could join in the Parade with a display of an airplane or two under construction maybe sitting on a flatbed trailer. ders brought in a couple of magazines for us to look at. The first was a new publication from EAA called "Light Plane World." The other was "Sport Flyer," which contained an in-depth article about Quickie Aircraft possibly filing for protection under the Chapter 11 bankruptcy law. Bill and Marilyn Schneider announced that Chris Heinz of Zenair was in town. His company markets the Zenith, Tri Z, Cricket (Cri-Cri), and several other airplanes. Chris regrettably wasn't able to attend the Chapter 43 meeting, but he sent some information sheets on each of Zenair's designs along with Bill. Later on in the year, Chris may very well be back in town, and we will try to get him to one of our meetings A potentially serious problem at Jeffco Airport was brought to our attention. It seems that some time ago Centennial (Arapahoe) Airport banned all maintenance by anyone other than an FBO. The same restriction is now being considered by Jeffco. It was suggested that we as a Chapter pay very close attention. to this situation and work to defeat it before it is implemented. Then maybe we can work to revoke Centennial's ban. eely announced that the Annual Cactus Fly-In would be held in Casa Grande, Arizona March 1-3. Kirby said that he had received a letter from a man in Colorado Springs who was interested in building a Fly Baby. Kirby asked if anyone in the Chapter knew of someone either building or flying a completed Fly Baby for the man in Colorado Springs to contact. Two names were brought up.

Gene's Corner: Gene Horsman reported that Univair bought all leftover parts from Piper for the J-3 through the Tri Pacer. They also wanted to purchase the rights to build the parts, but liability considerations prevented the sale. Machen, Inc. wanted to purchase the rights to build the Aerostar from Piper, but Piper was going to require Machen to buy liability insurance that would cost \$4,000,000 per year in premiums. Machen decided against the purchase. Gene informed us that not as many Flight Service Stations will be closed as was originally planned. He didn't give any exact figures or locations. Gene made available a Letter To The Editor that he got from The Denver Post for those who were interested in reading it during break. Gene read an article about the dangers of using Methyl Ethyl Ketone Peroxide, the catalyst used in fiberglass resin (the article is printed in its entirety elsewhere in this Newsletter). This prompted some discussion about what can happen in high temperatures. A couple of members have had problems with spontaneous combustion and warned us to be very careful. MEKP is listed as a Class A explosive, so it should be stored in the same manner as gunpowder.

- Progress Reports: Ron Denight has his Special at home. He is installing new radios and is making some new wing tips which will contain the VOR antennas. He will let us know how they work after he has a chance to test them.
- <u>A&P</u>: The business portion of the meeting adjourned for coffee at 8:30 P.M. After the break, Sheldon Chrysler (who runs an avionics repair shop by the name of Columbine Communications and also works for United Airlines) gave us a slide presentation on antennas and their proper installation. He also allowed time for questions and answers.
- THIS MONTH: This month's meeting will be held on Saturday, March 9, 1985 at the Rocky Mountain Energy Center at 7:30 P.M. The guest speaker will be Jim Thurman, who took a trip to Alaska in his Taylorcraft and will share his slides and experiences with us.
- DUES: As everyone should know, this is the last month to pay the 1985 dues. At the end of March, we will begin assembling the Roster and we will have to have your dues by then to include your name. Also, we will be forced to take you off the Newsletter mailing list if you haven't renewed. All I can say is we need all of you. There were quite a few membership renewal forms returned (which we appreciate), but there were precious few comments at the bottom about what kind of programs you would like to see. We hope we can arrange programs that will be of interest to you. Also, please don't forget to let us know if you need a name badge.
- BOULDER AIRPORT: Mr. Earl Bolton of the Boulder Aeronautics Association says that the Boulder City Council wants to reinstate the Boulder Airport Noise Committee after the new Airport Manager is named in February. It was suggested that persons interested in serving on the committee should try to do so. Mr. Jaebler may have something to say about this in his talk.
- LIBRARY LIST: Chapter 43's Librarian -- Cathy Sheeon -- has typed up a complete Library Book List which is printed in this Newsletter. Take some time and go through it and you'll see that we have a lot to be proud of. The reason we have the Library and continue to add more books to it is for the education and entertainment of the Chapter members. It's a real shame, however, that very few of these books are ever checked out. If you see a book title arrange to get the book(s) to you. Don't let this valuable benefit of your membership go to waste.
- by the Rocky Mountain Regional Fly-In Committee. Fhere were a number of people who didn't get one, so we came up with some more that other Chapters hadn't sold. We will have them at the March meeting.
- CLUBS: The Directory of Clubs in this Newsletter was provided by Bill Landers. He found it in the recent issue of "Sport Flyer." The type is pretty small, so if the club that you're interested in is illegible, call Bill at 429-2284 and he will give you the particulars from the original. In my opinion, this list isn't very complete. No mention is made anywhere of the EAA!

- DECALS: At some point in time, Chapter 43 had some decals made of its logo, similar to the right hand portion of the masthead on this Newsletter. We have sold all of these, and Treasurer Bill Davis has been trying to find out where they were made so he could contact them for a quote. If anyone in the Chapter knows anything about this, please get in touch with Bill. The die is the expensive part to have made, so if we can find it we will save a lot of money. Once Bill has gotten a couple of quotes, he will present them to the membership to decide if we want to order more.
- UNITED TOUR: Our guest speaker for February -- Sheldon Chrysler -works for United Airlines. He asked if the membership would be interested in taking a tour through the Training Center for one of our meetings. He said he might be able to arrange some simulator time for us. The response was very positive, so we will set it up a little later in the year. There will be as much advance notice in the Newsletter and at the meetings as possible.
- NUWACO: There is a kit being advertised by a man in Littleton to build a "Taperwing Nuwaco." He doesn't give any more information on it. Does anyone know anything about it? Maybe we could get him to come to one of our meetings sometime and talk about it.
- GLOSSARY: From "I'd Rather Be Flying" by Donna Vasco C-A-T: air like swiss cheese. Known to be a major impetus to invention of new words.

Carburetor Ice: phrase used when reporting a forced landing caused by running out of fuel.

Cardinal Altitudes: those flight levels maintained while transporting certain baseball clubs...

Ceiling: that part of a residence usually hit by pilot spouces on Saturday A.M.

Checklist: an annual accounting of city, county, state, and federal aircraft tax payments made.

Clear: warning shouted by the pilot one second after hitting the starter.

Cockpit: after-hours amusement center for WWII pilots.

Compass: round instrument with numbers around its periphery with which one proves the sun sets in the west.

Contact: friend who can get your airplane parts at wholesale. Control Area: air space in which only one Center has the authority to disrupt the flow of traffic.

Control Tower: a small shack on stilts inhabited by government pensioners who can't hear. When they become blind they are sent to Centers.

Critical Engine: that part of aircraft which used to be under the cowl, but is now in intensive care at the maintenance shop.

Cruising Altitude: any altitude other than that requested or maintained by the pilot and other than that last approved by ATC.

RADIOS: The page in this Newsletter about DC power supply filtering was written up by member Sheldon Chrysler. Talk to him if you'd like to find out more on the subject.

- FROM THE PRESIDENT: As many of you know, I am a student at Colorado Aero Tech. In the block of instruction that I took most recently, welding was covered more in depth than any other subject. We had to do two puddling projects -- the first without a filler rod and the other one with. Next, we had to make up a patch plate. Then we got into some tubing projects. I realize that these were all very basic. But for someone such as myself who had never welded before, proficiency didn't come quickly or easily. Some of the other students got discouraged with their projects (to put it nicely), but I kept plugging away and eventually got the hang of it. My joints weren't all that pretty, but they were airworthy and I got some decent grades. The reason that I'm writing this is to tell all of you excellent welders in the Chapter that I developed an immediate respect for your ability. I have watched you weld in the past, and you make it look so easy! It was an enjoyable experience for me, all things considered. I plan to continue practicing at home and try to gain some proficiency. Now if I could just remember not to try to pick up the hot end of the welding rod!
- FROM THE EDITOR: How many times did you pick up the hot end, Mr. Prez?

 From your column, I gather more than once. You sure don't learn too fast, do you? If it had been me, I would have quenched the rod in a container of water each time before I laid it down. Or did you even have any water handy? I just don't know about you, sometimes.

At the February meeting, I was surprised to hear about the ban of aircraft maintenance at Centennial Airport by anyone other than an FBO. Many of you may have known about it previously, but this was the first that I had heard of it. I went to the Chapter 301 after-meeting meeting and asked a few people about it. I heard some real horror stories. It seems that the ban has been in effect for quite some time. Someone will literally come out and tell you to cease working if you are doing something to your airplane. Even pilots that do too extensive a pre-flight inspection will be spoken to. This ban also includes homebuilts. Is this what we want at Jeffco? Is the above a true picture of what is going on at Centennial? Or is it not as bad as the people that I talked to made it sound? I can only go by what they said, at this point in time. I plan to do some more investigating, and would appreciate hearing from those of you who have more knowledge on the subject than I. I will try to keep everyone updated in this Newsletter.

MARKETPLACE: For Sale: Q2 project. Paul Rupp 425-4540

For Sale: BT-13. Fred Norby c/o NWAAC, 13800 E. Mill Flain Blvd. Vancouver, WA 98684

For Sale: KX-170B, \$1,750 consider trade-in; also KX-145, \$475 Sheldon Chrysler 361-6871

Trade: 66x68 Hendrickson propeller for 66x72 Hendrickson or Pacesetter prop. for 150 HP 0-320. Dave Biesemeier 922-2480

COLUMBINE COMMUNICATIONS —& AIRCRAFT BROKERS—

@STANLEY AVIATION CORPORATION, 2503 DALLAS STREET
STAPLETON INTERNATIONAL AIRPORT
AURORA, COLOR: DO 80010 € (303) 344-2449
€ SALES & SERVICE € AVIONICS € AIRCRAFT
FM LAND-MOBILE/PUBLIC SAFETY/MARINE 2-WAY RADIOS
—FAA CERTIFIED REPAIR STATION SØ3-71—

4. Filtering DC power Supply in your Aircraft

A. Totlays technology of solid State circuitry lends itself well, to radio design, in terms of power Consumption, cost, weight, space, reliability. Unlike the older weight, space, reliability. Unlike the older technology of tubes transistors and integrated circuits are more susepticle integrated circuits are more susepticle to voltage variations then their tube counter part. For this reason, Small voltage Variation (resulting from generator, alternator) must be recluced. Most Fitter devices can be purchased at an aircraft parts facility. A typical Filter is discribed and installed

as Follows: Coil

Pos "X" ON o Voltage (Filtered Out)

Generator

"Y" = Capacitor

The above cliagram discribes what is known as a Low Pass, L-Type Filter and is Commercially available. The coil is commercially available. The coil is designed such that at high Frequency voltage transients, it exibits a high voltage transients, it exibits a high (reactance) resistance to these transients, (reactance) resistance to these transients of will be shunted to ground. (The value of the capacitor is chosen such that at the capacitor is chosen such that at the Frequency the voltage transients occur the frequency the voltage transients occur the capacitor will appear as a clear!

Short to them or in other words, a very

Iow resistance.

EAA Chapter 43 Library Book List

Modern Aviation Library

- V1 Instrument Flying Guide Robert T. Smith Lightplane Owners Maintenance Guide - Cliff Dossey Passing Your BFR - Albert J. Taylor Pilots Weather Guide - Lindy Boyes
- V2 Cockpit Navigation Guide Don & Ruth Downie
 Your FAA Flight Exam Private & Commercial Robert T. Smith
 Modern Aerobatics & Precision Flying Harold Krier
 The 25 Most Practical Homebuilt Aircraft Peter M. Bowers
- Lightplane Construction & Repair Al Snyder & William A. Welch Practical Guide to Aviation Weather - John L. Nelson Your Pilots License - Joe Christy & Clay Johnson The Learjet - Joe Christy
- V4 Passing Your Instrument Pilots Written Exam Jeff Griffin
 How to Install & Finish Synthetic Aircraft Fabrics Joe Christy
 Aircraft Pilot Fight Training Guide, Inc. FAR part 137 David Frazier
 How to Take Great Photos From Airplanes Frank K. Smith
- V5 The Complete Guide to Single-engine Cessnas (3rd ed) Joe Christy How to Fly Helicopters Larry Collier
- Man Powered Aircraft Don Dwiggins
 The Complete Guide to Single-engine Beechcraft (2nd ed) Joe Christy
 Learning How to Fly an Airplane Jerry McGuire & Emily H. Warner
 How the Air Traffic Control System Works Paul Control
- How the Air Traffic Control System Works Paul Garrison Pilots Digest of FAA Regulations John L. Nelson How to Buy a Used Airplane Joe Christy Moving up to a Twin-engine Airplane Jeffrey L. Ethell Night Flying in Single-engine Airplanes Paul Garrison
- V8 How to Fly Lightplanes Robert T. Smith
 Complete Guide to Radio Navigation for Private & Commercial Pilots
 John L. Nelson
 Modern Soaring Guide Pete Bowers
- Private Pilots Survival Manual Frank K. Smith
 Lightplane Propeller Design, Selection, Maintenance, & Repair W. A. Welch
 Study Guide for the A.T.P. Exam Jeff W. Griffin
 How to Draw Airplanes Jim Dunavent
- V10 The Illustrated Encyclopedia of General Aviation Paul Garrison Low Horsepower Fun Aircraft You Can Build - Don Dwiggins
- V11 Cold Weather Flying Jeff W. Griffin
 Maintenance Overhaul Guide to Lycominy Aircraft Engines Joe Christy
 A Complete Guide to Aviation Photography Peter M. Bowers
- V12 Wind on my Wings Percy Knauth
 Advanced Flight Manuvers & Aerobatics Robert T. Smith
 Cross Country Flying Paul Garrison
- Practical Area Navigation Paul Garrison
 Flying VFR in Marginal Weather Paul Garrison
 Mountain Flying Tom W. Mayer
 EAA How To Series
 - Metal Aircraft Building Techniques
 Wood Aircraft Building Techniques
 Building Custom Aircraft with Sheet Metal
 Tips on Aircraft Fatigue
 Basic Hand Tools Vol's 1 & 2
 Custom Aircraft Building Tips Vol's 1,3,& 4

Custom Aircraft Engines Vol. 1
EAA Aircraft Pilot Reports & Flight Testing Vol. 1
Aircraft Design Vol. 3
Building the Custom Aircraft with Wood Vol's 1 & 2
Custom Aircraft Design Vol. 2
Engineering for the Custom Aircraft Builder

Technical Books

The Identified Sources of Supply for National Aerospace Standards Theory of Wing Sections - Ira H. Abbott & Albert E. VonDoenhoff Handbook of Airfoil Sections for Light Aircraft - M.S. Rice Helicopter Design & Data Manual - S.J. Dzik Aircraft Detail Design Manual - 3rd ed

Aircraft Hardware Standards Manual & Engineering Reference - S.J. Dzik
U.S. D.O.C. Natioal Technical Information Service Report -- " A Design
Approach and Selected Wind Tunnel Results at High Subsonic Speeds for
Wing Tipmounted Winglets" - Richard D. Whittcomb, Langly Research
Center-Hampton, Virginia July 1976

NASA Contractor Report - Flight Test Data for a Cessna Cardinal - David L. Kohlman Prepared by the University of Kansas

U.S. D.O.C. "Low Speed Aerodynamic Characteristics of a 13.1% Thick High Lift Airfoil

Piper Aircraft - "White Paper" - Your Turbocharger

U.S. D.O.C. - Aerodynamic characteristics of Wing Body Configuration with Two Advanced General Aviation Airfoil Sections & Simple Flap Systems NASA Contractor Report: "Effectiveness of Spoilers on the GA(w)-1 Airfowith a High Performance Fowler Flap"

Society of Automotive Engineers: "Applications of Advanced Aerodynamic Technology to Light Aircraft"

How To Books

Aircraft Powerplant Handbook - EAA Tips on Engine Care - Continental Engines U.S. D.O.T. Aircraft Inspection for the General Aviation Aircraft Owner Aircraft - How to Build & Fly your Own Standard of Quality & Approved List of Homebuilt Aircraft (NASAD) Aircraft Woodwork - Ruth Spencer All About Homebuilt Aircraft - Editors of Plane & Pilot Gliders - How to Build & Fly Them- Paul Garrison Ovehaul Manual Avco Lycoming Engines Aircraft Weight & Balance - Aviation Technician Series Aircraft Sheet Metal Construction & Repair - Aviation Technician Series The Sportplane Builder - Tony Bingelis Firewall Forward - Tony Bingelis Aircraft Dope & Fabric - Ruth & Warren Spencer Aircraft Dope & Fabric 2nd ed - Spencer Refinishing Metal Aircraft Airframe & Powerplant Mechanics Airframe Handbook - FAA Airframe & Powerplant Mechanics Airframe Study Guide - FAA Airframe & Powerplant Mechanics Powerplant Handbook - FAA Airframe & powerplant Mechanics General Handbook - FAA

Instructional

The Complete Soaring Pilots Handbook - Ann & Lorne Welch & Frank Irving Flying Know-How - Robert N. Buck FAR's 1976 Cherokee Cruiser Manual Aviation Weather Services FAA & NOAA - 1975 Flight Training Handbook - 1965 Instrument Flying FAA - Rev 1971 Acme School of Aeronautis - Explanations & Exams (1975 ed) Cherokee 140 Owners Handbook - Training Info Only Aviation Fundamentals - Jeppeson & Sanderson 1978 Pilots Weather - A Flying Manual - Ann Welch Practical Air Navigation - Thoburn C. Lyon Instrument Flyibg - Richard L. Taylor Basic Guide to Flying - Paul Fillingham Flying Light Aircraft - David Ogilvy Visual Aeronautical Cahrt Symbols July 1974 Lycoming Operators Manual - Model o-320 Private Pilot Study Guide - Leroy Simonson The Instrument Flying Manual - 2nd ed William Kershner

Misc

Flying Manual - 1929, 1932 & 1933 Sport Flying - Editors of Flying Magazine Pilot Error - Editors of Flying Magazine Aviation Buyers Directory - March 1978 25 Most Practical Airplanes to Build Enroute Weather Over the United Air Lines System
As the Pro Flies - John B. Hout As the Pro Flies - John R. Hoyt Inside Private Aviation - Paul Garrison Cleared for the Approach - F. Lee Baily Flying Off the Pavement - Grindle Encyclopedia of Homebuilt Aircraft- Markowski Short Wing Piper News Here is Lazair Aircraft in Profile Vol. 5 - Martin C. Windrow Supermarine Spitfire MK1-XVT - Ted Hooton & Richard Ward Famous Fighters of the Second World War - William Green The Planes the Allies Flew in WW11 - David C. Cooke Americas Flying Book - The Editors of Flying Magazine Fighters - Keneth Munson Aircraft of WW1 - Keneth Munson The Red Baron - Manfred VonRichthonfeh Wright Brothers - Omega G. East

BE AWARE

ORGANIC PEROXIDE - A CATALYST HAZARD

Several carriers and fixed base operators have recently reminded their maintenance personnel of potentially serious hazards in the use of certain catalysts used to "lay up" fiberglass or as hole fillers.

Methyl ethyl ketone peroxide (MEKP) is in the family of organic peroxides that are intrinsically unstable and, in large quantities, potentially destructive. In using them, mechanics must observe definite safety precautions and have a knowledge of their potential.

At a safety conference, an eye specialist urged caution in the use of a catalyst or hardener that is added to the fiberglass resin before the resin is applied. The specialist said a drop of this catalyst in the eye will progressively destroy the tissue and result in blindness. This will occur in some instances even when an attempt has been made to wash the catalyst from the eye.

Furthermore, once the chemical has begun to destroy the eye, there is no known way of stopping the destruction or repairing the damage.

The specific toxic agent involved is MEKP. In tests using laboratory animals, MEKP in solutions of varying concentrations was found to cause eye problems ranging from "irritation" to "severe damage." The maximum concentration producing no appreciable irritation was a solution containing 9.6 percent MEKP.

Material published on the subject indicates that washing an effected eye within four seconds after contamination prevented injuries in all cases, but no known chemical neutralizer has been reported.

Suggested protection for catalyst users is protective glasses and the immediate availability of a bland fluid such as water for a thorough washing of the ocular tissues.

Reports of one experience described disastrous results. The victim had both eyes contaminated while fiberglassing a chair at home. Although he made an effort to wash out his eyes, several minutes apparently elapsed before he found water. The use of one eye was lost immediately, the other gradually deteriorated over a period of about 8 years. Its deterioration was described as resembling that resulting from World War I mustard gas burns.

The hazard associated with fiberglass resins was previously unknown to those attending the safety conference, although many had used fiberglass resin at home or at work. This hazard also may be unknown to you and to your family members who may have occasion to use a similar type of resin and catalyst when working with fiberglass or hardeners used in liquid casting plastic.

PRECAUTIONS

Before using any of these catalysts, check their chemical composition and then take the appropriate precautions. The cost of a pair of safety goggles is a small price to pay for the protection of your eyesight.

No epoxies use MEKP as a catalyst. MEKP is used to catalyze polyester resins, which are used for fiberglass resins, certain casting resins and in some paints and hole fillers. The mere mention of polyester resin makes it almost certain that MEKP is the catalyst.

While epoxys do not appear to be as potentially damaging to tissue, all are accompanied by precautions regarding toxicity. Handle them exactly as directed in the printed instructions. Any other procedure may cause unstable peroxide to react violently. The American Insurance Association has a relatively long list of manufacturing and storage fires and explosions where peroxides (including MEKP) were involved.

When using catalysts in this family of chemicals, adhere strictly to mixing, application and storage instruction provided with each compound.

Flight Safety Foundation Inc.

Directory of Clubs SPORT FLYER wants to know about your aviation child or owner's group. Send us the name of the president of other contact, any special requirements for membership, dues or fees and the dates of regular meetings. Send the information to SPORT FLYER; PO Box 98786; Tacoma, WA 98498-0786. No phone calls, please.

AERONCA
The Aeronca Club
Auge of Feg Wegner
1472 28th Courn
Remothe Wt 53140
Aircraft Aeronca anti Champio
Fee: 43-yr.
Aeronna Aviatora Club
Jower Julie Ibrkey
511 Terrace Lake Ruad
Columbias 15 47201

Columbus IN 47201 Aircraft Aeronca Champ and Bellanca (mode is of

and Bellana (models of Actioned design) For 412 21 Actions Lover's Club Buze Wagner 401 154 St. East Clark, SD. 51275 Aicrait, 4B Actions, Champion and Hellanca production arreralt Fee: \$15 ye.

ALON France Owners Club 3557 Rosburo Road PO Box 15058 Durham NC 27704 Aiccraft: Ercoupe Al and Minney M10 Fee: 115-yr.

AMERICAN EAGLE Posterfield Airplane Club Posteerfield Airplane Club Chuck Lebrecht 3121 E. Lahr Shore Drive Wonder Lake H. 60097 Aircraft: American Eugle and Porterfield Fee. 15 yr

Fee. 15 st BATP LAKES Barney Oldfield Aircraft Co. Harvey R. Swack 62 Grant St. Newtham, AIA 02192 Aircraft: Bally Lakes only See, Link

Fee 110 yr

BD-5 Builders/Pilots Asso

BID'S Builders/Pilots Assn.
Keith Hinshae
45a, A Wilhus St
San Jose CA 95110
Aircarfa: BID 5 only, propeller
and Jet
Eee: Nine
BEFCH
American Bonanza Society
Cliff R Sones
Mai Conlinent Airport
Box 1288
Wichita, KS 67277
Aircarfa: Bonanza Aircraft, Bonanza Fee: 120 yr Staggerwing Club James C. Gorman James C. Gorman 1885 Millsburg Road

Mansfield OH 44906 Arcraft Beech Model 17 Staggerwing Fee. \$15 yr

Bird Airplane Club Jeannie and Dick Hill PO Box 89 Harvard 11, MXIX Aircraft Bird airplanes Fee Dopation

BUCKER

American Tiger Club Frank Pitte 7600 Tallahassee Waco, TX, 76710 Arresalt Bucker arresalt Fre \$25.51

Hucker Club John Bergeson 64 18 W. Millio Benus MI 4934t Arreadt Bucker Jos Jungmetster Fee 310 yr CASSITT Cassutt Sport Racer

Stan Whiting 17221 E 41st St. Independence MO 64055 Aircraft Cassutt sport and racing sucraft Fee Unknown

CESSNA Cessna Airmaster Club Gar Williams 9 So. 135 Acro Drive Naperville 11, 605n5
Aircraft Cossna C-14 C 17 C-38
C-115 and C-165

Cessua 150/132 Club Arresalt: Cossna 150 and 152 Fee \$15-yr International Cessna 195 Club Dwight Ewing

PO Box 737 Merced: CA 95341 Aircraft: Cessna 195 Fee: 117 50-yr. Eastern Cessna 190/195 Assn. Eastern Cesana 190/195 As Cliff Crabs 25575 Butternut Ridge Road North Olmeted, OH 44070 Aircraft, Cesana 190 and 195 Fee: \$10-yr

The International Cessus 170 Assn Velvet Facksky
PO Bas 186
Harvolle MO 55667
Arteralt Cessna 170
Fee 315 yr.
International Cessna 120/140 Assn.
Bock BORNZ
By Santon TX 7508 10007

Fee \$10-yr International ISW185 Club

4539 N 49th Ave. Phoenix, AZ 85031 Aircraft: Cesana 180 and 185

West Coast Cesana 120/140 Club Doug Williams PO Box 891 Menlo Park, CA 94026 Aircraft: Cessna 12tt 140 140A Fer \$10.yr.

CHIPMUNK [de Havilland] The de Havilland Math Club

Gerry Schwam 1021 Serpentine Lane Wynente PA 19015 Aircraft: All early DH Moth types up to and meluding the Chipa Fee: \$7 yr. CULVER

Culver Club Larry Line
60 Skywened Way
Wondade CA 94062
Autralft Culver LCA LFA, Culver V
Fee: None

CURTISS ROBIN

W. Lane Tufts 4138 Santa Rosa Drive Moorpark, CA 93021 Aircraft Curuss Robins only DART

Dert Club Lloyd Washburn 3958 Washburn Drise Pt Clinton, Otl. 43452 Aircraft Dart models G. GK. GW. GC. Fox Name

Dragonfly Club Dr. Richard Goldman 55 E. Washington, Sinte 2905 Chicago H. 60662 Aircraft Dragontly ERCOUPE

Ercoupe Owners Club Skip Carden 3557 Boxboro Road PO Box 15058 Durham NC 27704 Aircraft Frecupe Aion Forney Monney M 10 Fee SISyr FAIRCHILD

Fairchild Club Pairchild Club Bob Taylor Amupuc Articld Rt. 2 Box 172 Ottumwa. IA. 5250† Aucraft, Ad Fairchilds Fee. 47-50 yr. HNEY FORNEY

Ercoupe Owners Club Ship Carden 3557 Roxboro Road 3557 Roxboro Road PO Box 15055 Dutham, NC 27704 Aircraft: Ercoupe, Alon, Forney, Mouney M-10 Fee, \$15-ye. GOLDWING

Goldwing Flyers Club Robert Baird Robert Bard
489 Joanwood Drive
Niles, MI 49120
Aircraft: Goldwing ARV, Goldwing
Ultralight
Fee: 115-yr.
Goldwing Flyers Club
Lise Rwas
629 Walnut Ave.
Santa Cruz. CA. 95060
Aircraft: Goldwing ARV, Goldwing
Ultralight
Fee: Unknown

American Yankee Assn. Dale W. Gavey PO Box 515 Coloma CA 94014 Aircraft Grunnnan Americans, all two-place and four place Fee \$25-yr. LUSCOMBE

Continental Luse Luren Bump 5736 Esmai Road Cents CA 95307 Aircraft, Luscombes and Monoc Fee, \$10-yr Luscombe Asan. John Bergeson 64.38 W Millbro Renaus MI 49340 Aircraft All Luccombe Fee, \$10 yr.

Meyers Aircraft Owners Assn. David Helistron Hox 4280 Scottsdale AZ 85260 Aircraft Meyers OFW 145, 200A 200B, 200C, 200D

Fee, None
MOONFY
Erroupe Owners Club
Skip Carden
3557 Roabent Road
HO Box 15058
Durium NC 17704 Amount Erroupe Alon Forney Mosney M 10 Fre \$10 st

MOTH (de Havilland)

The de Havilland Moth Club Grey Schwam 1021 Serpentine Lane Wyneste, PA, 19015 Aucraft, Allearly Moth types up to and including the Chipmonk Fee, 37 yr.

The de Havilland Moth Club of Canada R. de Havilland Ted Leon 805 Oki Humestead Road Keswick, Ontario Auctait. All de Havilland type aircraft, our chiefly Moths Fee: \$15-yr

Moth Club Reigh Wefel 114 Fontane Drive Oznard, CA 93030 Aircraft: de Havilland Moth Fee Unknown MUSTANG

P-51 Mustang Pilots Assn. Dr. Herbert Fisher 628 Mountain Road, Snicke Rise Kinnelon, NJ u7405

NAVION

A. R. Cardone PO Box 1175 Municipal Airport Banning, CA 92220 Aircraft: Canopy single and twin-engi Navious and Rangemasters Fee: \$25 vt. PIETENPOL

Buckeye Pietenpol Assn. Frank S. Pacinga 2003 S. Turner Road Canfield, OH 14408 Aus rain: Pietenpol or somdar aircealt Fee: Unknown

International Plotenpol Assa.
Robert L. Taylor
PO Box 127
Blakesburg, 1A 52501
Arreatt, Petempol Air Campers, Sky
Scott, Creen Aircampers Fee: \$7.50 vt PIPER

Cherokee Pilots Assn.

PO Box 763h
Tampa FL 33673
Aircraft Piper PA 28 and PA 32
Fee: \$18-yr.

Cuh Club John Bergesen PO Box 2402 Mt. Pleasant ML 48836 Aircraft E2 J-3 4.5 PA-11 12.14 18 For 410 yr

Flying Apache Asan Roy Harper PO Box 58 Blue Grass IA 52726 Aircraft: Piper Apache: 150-160 180-245 Fee \$15 yr

International Commenche Society, Inc. Eck of Elaine Ecans Rec 488 (1990), 86: 67-554 Agrical PA 1 1 190: 250-260, 200 PA 59: and PA 19 Fee, 529

Short Wing Piper Club Edwin F. Wach 1412 10th St. Aurora NE 68818 Aircraft Vagabonds Clip Tri-Piscer Colt. Fec. 425-yr

Super Cuh Pilot's Assn. Jun Richmond
PO Box 9823
Yakıma, WA 98909
Aucraft, PA 18 FA 19 and L-21
Fee \$25-yr PORTERFIELD

> Porterfield Airplane Club Chuck Lebrechi 1121 E. Lake Shore Drive Wonder Lake, IL. 60097 Aircraft, Porterfield and Ame ican

REARWIN

Rearwin and Communic Gary Van Fatting 1460 Ottawa Brach Road Holland, MI 49423 Fee: Unknown

RYAN

National Ryan Club Bell I Hodge #11 Lydia Stephenville TX 76401 Stephenville 15 Aircraft All Ryans mann shrough World War II SEABLE

Seabee Club Internation Capt Richard W Sander 4744 NW 49th Court Ft Landendale FL 11819 Aircraft Republic RC 356 Fee 330-yr.

STEARMAN

Stearman Restorers Associations E. Lowe R23 Kingston Lane Crystal Lake 11, 68814 'Aircraft Stearman mussly Mearman Boxing Model 75 Fee: \$10 yr

STINSON

Spartanising SC 29301 Aircraft All Stinsons Fee: \$7.50-ye

National Stinson Club 1 | Paul 144# Skinner Boad Cyptess TX 27429 Air, raft All most Soil Stinson except the 108 series fee: 17 50 yr

Northwest Stinson Club W. S. Wellin 29804 179th Place SE Kent WA 98032 Auctalf All models of Missons

Southwest Stinson Club Gar. Morbak 121501: Harmy Land Jank CA 45240 Airyraft. Stussons tes. \$10 yr

International Swift Assn., Inc. Charlie Nettors PELBOA 2012 Athens IN 17303 Aircraft South Fee 125 yr

T-14

T 18 Builders and Owners Asso. Dick Casin 10529 Sometron Dallas YX 75229 Annali T is

PAYLORCHAFT

Int'l Taylorcraft Owners Club Bruss Brater 12809 Greenhower Road Alliance OH Jahrel Arrean Deployment 12 BC12D F 19 Model 15 Model 3 F 21 Fee 340pp

DIUNDERBOLT

P-47 Thunderholt Pilots Assn. Dr. Herbert O. Fasher 628 Mountain Road, Smoke Rise Kinnelon NJ 07405 Ameralt P 47 Thunderleib

American Tiger Club 7000 Tallatiassee Wasse 13, 78710 Australi Allacobatic types includes Hacker Club ournbers Fee: \$ 25.41

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Lat I Varifier Hospitality Club Int I Variese Hospitality Club Don or Bernalette Shop 2831 College Lane La Verne CA 94730 Atterati Variese Lone, Et and any inher composits amplant 55, 5834

VULLE

Vultee Owners and Pilots Asset Ru hard Sambor 8928 Laught Dallas IX 75211 Aircraft All acrecast to by Vulter Attaraft Co. For \$25 vr.

WACO

National Water Club Ray Brandh For efull Acc Hammon OH 45015 Ancral: Water hiplanes Lee 37 50 ye

WARIINGE

P 40 Warhawk Pilots Ason. Dr. 11 Sert O. Fisher 125 Mountain Road Smoke Rise Konselon M 07405 American P. 40 Warlings k 7ENAIR

> Southwest Cricket Squadron Cal Wally Doctor. 1889 No. Mod! Road Escandido CA 90128 Aircialt Zenar Cru ket



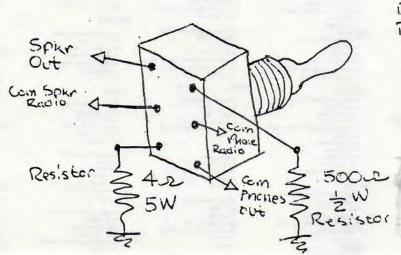
MARKETPLACE cont: Wanted: Space to rent to finish my Pietenpol in East Denver area. Sheldon Chrysler 361-6871 leave message

Wanted or Trade: Need 6.00x6 wheels and tires, will trade 5.00x5 wheels and tires. Jim Loyd 543-1145, Pueblo

For Sale: 150 Franklin engine parts -- everything except carburetor and accessories, disassembled and cleaned. Jack Clifton 384-6578 days or 384-4350 evenings, La Junta

1. Speaker Termination:

It is a general practice to load an amplifier (terminate with a resistive load) to avoid excessive signal being obsorbed by the amplifier itself, resulting in damage to the amplifier; as an example:



Double Pole Switch



Chapter 43 Newsletter c/o Kirby White 8780 West 90th Place Westminster, CO 80020





EUGENE A. HORSMAN 210 LOOKOUT VIEW CT. GOLDEN, CO. 80401