MILE HIGH EXPERIMENTAL AIRCRAFT ASSOCIATION

CHAPTER 43 DENVER

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Treasurer: Bill Davis, 1-772-7993
Editor : Gaylon Overton,

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LAST MONTH: The meeting was held at the Rocky Mtn. Energy Center. It began at 7:40 with all officers present,51 members and 6 guests. Cathy Sheeon had a list of aviation books that she asked the members to look over, it was decided that we would wait until next month to pick the one's she would buy for the library. Many books were donated. A new order of badges were handed out. 83 paid members as of April 15,84.
Old newsletters dating back to 1962 were donated to Chapter 43.
Roy Maneely reports that his airplane was back at the airport and that he was going to start on the wings next. Gene Horsman showed Photos of the MMU used on the space shuttle. Dean Cochran gave away a box of tubing and O-rings, which I didn't get a chance to get. If there's any left Dean, Please bring some more. Next month's meeting will be nominations for Junior Acheivment, so be thinking of a young Person you would like to nominate. Cathy Sheeon volunteered to help on the Fly-in Trophy Committee. Congratuation to member Nancy Fritz, she got her A&P ticket last month. Coffee at 8:28, after break, Eldon Kern from Denver Flight Service Station answered about an hour and a half's worth of questions,Thanks Eldon.
The meeting adjorned at 9:54.

NEXT MONTH: The place will be the Rocky Mtn. Energy Center on May 12,84 which is the second Saturday of the month. Starting time is 7:30 P.M. come early.

MARKETPLACE: For Sale - Steen Skybolt,IO-540,Christen inverted equipped, Total time airframe/engine 94 hours,$41,000 Worth Stewart 473-4836 Colo Spgs

For Sale - Slick 4001 Magneto, rebuilt, $100 Dave Holt 634-4238 Colo Spgs

For Sale - Sensenich wood prop for 65hp 72x48, good used condition
Delco Remy starter and generator for Lyc O-290-D2 both 0hrs since overhaul
Pitts Special Plans, never used
EAA Biplane plans, Call Mark Yelich 469-0557, Broomfield

For Sale - Mustang II kit parts,little work done,Cost $4800,Sell $2500 Verne Foster 751-9421 (Denver)

50'x 60' Hanger at Van Aire,can be rented for final assembly & inspection. also wash your own plane,bring bucket and soap. Call Troy Anderson 659-8243

AVIATION HAPPENINGS:

May 26,84	Rocky Mtn. Aerobatic Championship	Longmont Airport
June 10,84	Loveland Spring Fly-in	Ft.Collins-Loveland
June 15-17	1984 EAA Ultralight Convention	Oshkosh, Wisconsin
July 7,84	Chapter 72 Annual Poker Rally	Meadow Lake Airport
July 28-Aug 4	Oshkosh "84" Annual Fly-in	Oshkosh, Wisconsin
Sept 29-30,84	Pueblo Air Show	Pueblo Airport

Treasurer Report: Bill Davis reports as of April 15,84

Checking account	$1123.29
Savings account	543.64
Memorial account	283.03
Paid Membership	83
Calendars left	10

FROM THE EDITORS DESK: I got thru my medical and bi-annual flight review this month, so watch out I'm flying again.

FAA FLIGHT SERVICE STATION - ARAPAHOE COUNTY AIRPORT

THE FOLLOWING NUMBERS MAY BE USED TO TOUCH TONE INFORMATION WITHIN THE SYSTEM

Pilot Briefers	2273
Information Directory	2436
Local Briefing	2336
Briefing to Billings	2245
Briefing to Kansas City	2652
Briefing to Amarillo	2262
Briefing to Grand Junction	2458
Briefing to Salt Lake City	2752

LOCAL TELEPHONES

Briefer	799-7000
Transcribed Broadcast	799-3412
Operations Supervisor	799-7016
Administrative Office	799-7003

TOLL-FREE BRIEFING SERVICE

DENVER	799-7000
COLORADO SPRINGS	634-1561
CHEYENNE	635-4187
ASPEN	925-7971
PUEBLO	948-3368
GREELEY	353-9495
FT. COLLINS	482-0505
COLORADO IN-WATTS	1-800-332-7943

AIR GROUND FREQUENCIES

You Call		We Reply
122.1	GLL VOR	112.8
122.1	CYS VOR	113.1
122.1	PUB VOR	116.7
122.1	COS VOR	112.5
122.1	CHE VOR	115.4
122.05	IOC VOR	117.5
122.05	TXC VOR	112.9
122.1	HGO VOR	108.4
122.1	RLG VOR	113.8
122.2	DEN FSS	122.2
122.6	DEN FSS	122.6
122.35	DEN FSS	122.35
123.65	DEN FSS	123.65
122.2	BADGER MTN	122.2
122.2	PUB	122.2
122.4	FNL	122.4
122.0	DEN EFAS	122.0

WHEN CALLING DENVER RADIO, STATE THE FREQUENCY YOU ARE RECEIVING

Chapter 43 Newsletter
c/o Gaylon Overton, Editor
2525 E.98th Way
Thornton, Colo. 80229

DENVER, CO 1984 PM MAY 8

USA 20c

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

EAA ISSUES MORE AUTO GAS STCs

Oshkosh, Wisconsin, March 20, 1984--The non-profit EAA Aviation Foundation has received FAA approval to issue additional auto fuel STCs for a wide range of aircraft including many Continental powered Aeronca types (Bellanca, Champion, Trytek, Wagner and B & B Aviation); many Continental powered Piper aircraft (including most of J and L series); and the 8 series of Luscombe aircraft, EAA President Paul H. Poberezny announced today. A total of 101 separate aircraft models are now eligible for the EAA auto fuel STCs.

"These STCs, which permit the use of unleaded automobile fuel in aircraft, are available to aircraft owners, through EAA, immediately. The latest auto fuel approvals are based on the Foundation's highly successful testing program with the Cessna 150 and 182 high winged aircraft," Poberezny said. Forty-four Cessna models are already eligible for the Foundation's auto fuel STCs.

In the eighteen months since the EAA Aviation Foundation began making the unleaded auto fuel STCs available, nearly 5,000 aircraft owners have switched to auto fuel. Poberezny noted, "They are taking advantage of a direct reduction in operating and maintenance costs over 100 LL fuel. As a result, they are flying more often, more economically and with increasing proficiency. Each month, EAA's SPORT AVIATION Magazine lists more FBOs that have begun to make aviation-grade auto gas available to their customers. We have heard from nearly 30 FBOs who have told us that they are successfully marketing auto fuel at their operations."

Harry Zeisloft, the Foundation's Technical Director at the Kermit Weeks Flight Research Center, estimates that 2,563,905 gallons of unleaded auto fuel have been used in aircraft since EAA began offering the STC.

Zeisloft says that the Foundation is in the midst of its 500 hour testing of the Cessna 172 with the Lycoming engine. Low-wing aircraft are also playing a role in the Foundation's auto fuel test program. The Kermit Weeks Flight Research Center engineering staff plans extensive tests on both high and low-wing aircraft at a desert proving-ground early this Spring. Among the aircraft which will be subjects of the research program will be a Piper Cherokee, PA-28-140, a Beechcraft Bonanza and an Ercoupe. Current plans call for vapor-lock testing using high volatility fuels at termperatures of 100° Farenheit.

The EAA Aviation Foundation makes auto fuel STCs available to aircraft owners at 50¢ per installed engine horsepower. In addition to the 101 aircraft models eligible for EAA auto fuel STCs, the Foundation holds auto fuel STCs for Continental engines of 40 through 100hp. and 230 hp. However, since the STCs are usable only in airframe-engine combinations it is EAA policy not to offer the engine STCs separately.

There is a surcharge of $15.00 added to the price of auto fuel STCs for non-EAA members. More information on auto fuel STCs may be obtained from the EAA Auto Fuel Research Department, Wittman Airfield, Oshkosh, Wisconsin 54903-3065, phone 414/426-4800.

APPROVED AUTO GAS STCs

Aeronca

50-TC
65-TC(L-3J)
65-TAC (Army L-3E)
YO-58
O-58B WITH SKIS
50-58B
0-58-A(Army L-3A)
7AC
7BCM (Army L-16A)
7CCM (Army L-16B)
7DC
7EC
7FC
7JC
7ECA
S7AC
S7DC
S7CCM
S7EC
11AC
11BC
11CC
S11AC
S11BC
S11CC
KCA
50-C
65-C
65-CA
S-50-C
S-65-C
S-65-CA

Cessna

120/140
140A
150
150A thru 150H
150J thru 150M
A150K thru A150M
180
180A
180B
180C,D,E,F,G,H,J
182, 182A,B,C,D,E,F,G,H,J,K,L,M,N,P

Artic Aircraft Company, Inc.

S-1A Interstate

Luscombe

8, 8A, C,D,E,F, T-8F

Piper

J-3C-40
J3C-50
J3C-50S
J3C-65 (Army L-4)
J3C-65S
J4
J4A
J4A-S
J4E (Army L-4E)
J5A (Army L-4F)
J5A-80
L-4A
L-4B (Navy NE-1)
L-4H
L-4J (Navy NE-2)
PA-11
PA-11S

TCM Engine Models

STC SE 634GL covers:

A-50-1-2-3-4-5-6-7-8-9
A-65-1-3-6-7-8 (0-170-3-7)-9 (0-170-5)-12-14
A-75-3-6-8-9
C-75-8-12-15
C-85-8-12-14-15
C-90-8-12-14-16
0-200-A-B-C
A-40-2-3-4
A-40-5

STC SE 693GL covers:

0-470-AEJKLRS

Portable Spot Welder

Editor's Note: We receive numerous requests for spot welding information. As a service to our younger readers we are reprinting this article which appeared in Vol. 38, No. 2 (1969) of the Stabilizer.

I made this spot welder years ago. It is the nicest little "gizmo" a shop can have and will prove its worth many times a year. I never use anything else when fastening sheet metal — no holes to drill, no rivets to buy, no soldering iron to heat.

The construction is detailed in the sketches.

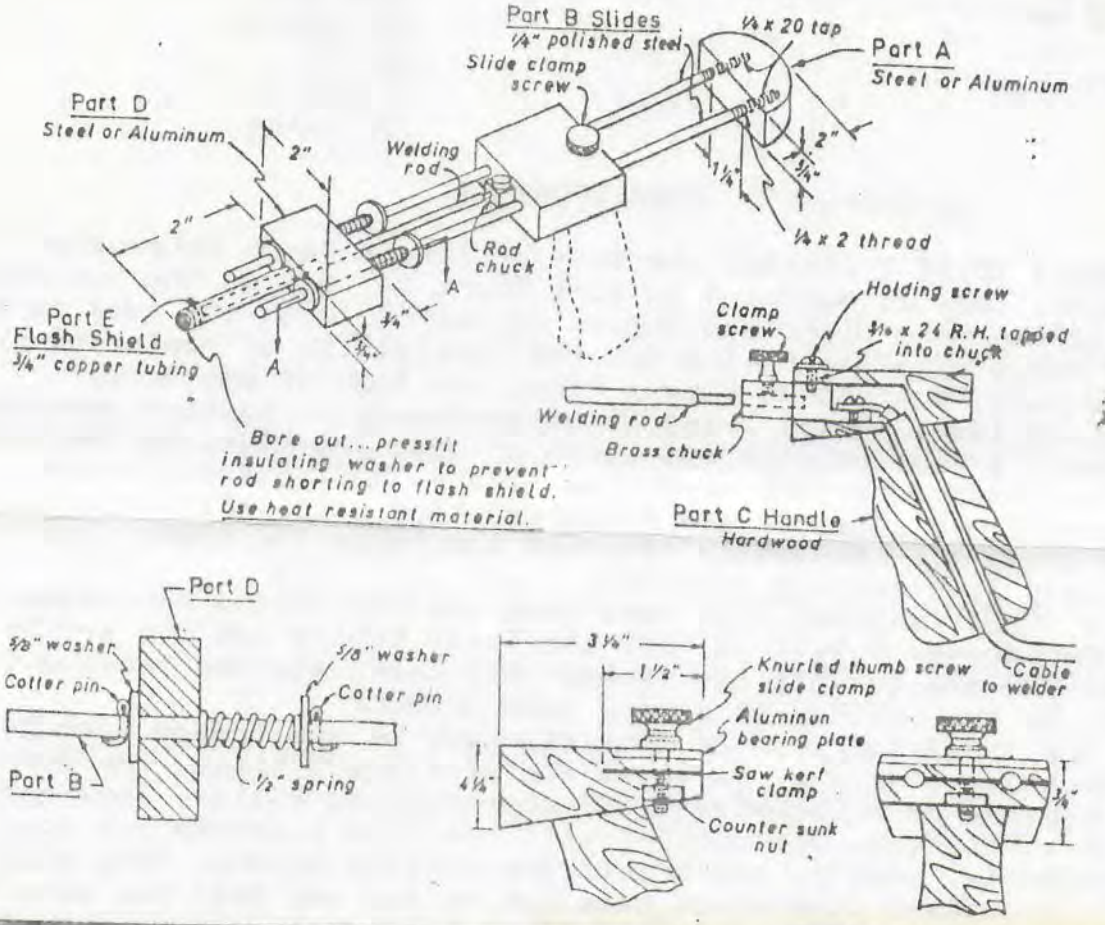
To operate, insert an electrode into the chuck and tighten the clamping screw. Slide the handle forward until the end of the electrode is just short of the end of the flash shield. Lock the handle in place by tightening the slide clamp screw.

Place the copper flash guard over the point where you want the spot weld, then bear down on the handle. When the electrode makes contact with the work the arc strikes but shorts out almost immediately making a small spot weld. Use small diameter electrodes with good restriking ability, such as Jetweld* 1 or 3 or maybe Fleetweld* 47. Select the current setting for the electrode diameter and thickness of work.

Construction Procedure

1. Make parts A, B, C, D, and E as shown. Material and shape can be varied for personal preference. Be sure the holes for the slides (part B) in part A and through parts C and D are absolutely parallel.
2. Screw the slides (part B) tightly into part A.
3. Connect the welding cable to the rod chuck as follows:
   a. Remove the rod chuck from the handle (part C).
   b. Pass the welding cable up through the handle.
   c. Connect the cable to the chuck.
   d. Reinstall the chuck.
4. Put the handle on the slides.
5. Install part E on the slide as shown in section AA.
6. Install the flash shield into part D.
7. Insert a welding rod into the chuck and you are ready to weld.

Ray E. Starnes
1100 — 9th Avenue, N.
St. Cloud, Minnesota 56301



We are indebted to Bob Nelson for supplying plans for the Portable Spot Welder on the above p4 and p5. Several people have requested them from him, and they very well may serve someone else. Thanx, Bob.

From EAA Chap 106
Boston, Mass
Mar 84

PROJECT REPORT: The EAA Acro Sport is a single seat biplane designed for fun and aerobatic flying. This single engine, fixed gear airplane is constructed from a welded steel tubing fuselage, wooden wing spars and fabric covering. Powered from engine sizes ranging 100 to 200 hp. Acro Sport plans are first class, well prepared and organized. It should be noted that this aircraft is relatively complex and high performance.

SPECIFICATIONS

Upper Wing Span	19 ft - 7 in
Lower Wing Span	19 ft - 1 in
Lenght	17 ft - 6 in
Height	6 ft - 0 in
Gross Weight	1200 lbs
Empty Weight	733 lbs
Fuel	20 gal
Baggage	25 lbs
Time to build	2500 man-hrs

FLIGHT PERFORMANCE

Top Speed	152 mph
Cruise	130 mph
Stall Speed	50 mph
Rate of Climb	3500 fpm
Take-off run	150-200 ft
Landing roll	800 ft
Ceiling	20,000 ft
Range	350 miles

HOHENWALDE'S ACRO SPORT II

Sunday April 15,84 I visited the home of Tony & Sandy Hohenwalde, located in Thornton. Tony is building an Acro Sport II, his is the two seat version of the Acro discribed above. He started with the idea of building the Acro Sport II after ruling out the possibility of restoring an older aircraft, besides he always liked the look of the Acro. On August 30,1980, while living in an apartment in eastern Nebraska he started his project with $50 worth of wood and glue. As the months passed, he constructed the wing ribs, spars, and attach fittings. Then assembled all the pieces* finishing them with Defthane Polyurethane. When the wings are completely finished and ready for cover, they will be done in Polyfibre covering.

July 1983, fusalage jigs were made and the tubing purchased from Penrose Aerodrome. August 18,1983 the first tubing was cut and by September 83 Tony and his new Partner Ray Lentz started tacking it together, by the way Ray is a very good welder.

In the 3 1/2 years since Tony started, he has logged over 2470 hrs. in construction time and has moved the airplane 3 times. The Acro Sport will be powered by a Lycoming O-320 non-inverted engine, Tony doesn't go in for acrobatics. The cockpit will not have a canopy but most of the instruments, wheels, and brakes are already bought. Tony didn't give me a projected completion date but he did say that his wife Sandy has been behind him 150% and her support has meant very much to the success of his project. Before I close, I would like to say how much I enjoyed visiting with Tony, and to thank him for his hospitality.

Gaylon