

EAA 301 - Rocky Mountain Chapter

September Meeting:

Scott says,

"This month we'll have John Rezler of Lockheed Martin Flight Service. He will be presenting about the new flight service system, latest updates and future enhancements."

- **Date:** Fri., Sept. 19th
- **Time:** 7:00 p.m.
- **Location:** Adam Aircraft
12876 E. Adam Aircraft
Way, Centennial Airport,
Englewood, CO 80112



President's Page

September, 15th 2008

Inspections are a necessary item for any machine and the airplane requires an extensive regimented set of them. For those of you that enjoy building your own aircraft, there comes the time that you will have to go back to the basics of what you built and review the condition the craft is in. For the first few years after you have completed your masterpiece, you will probably find that everything is just as it was when you put it there.

Don't be lulled into the belief that it will always be that way. As in everything, the aircraft experiences aging just like all other things. There is a life cycle to all things. With technologies over the last 20 or 30 years the life-cycle of items has been at the forefront of the wave of change. We all have been the benefactors of a very fluid move-

ment in the upgrading of technologies which has constantly replaced last year's technologies with this years. Thus the aging of technologies has not occurred. Instead, the fairly new technologies have simply become old by new replacement.

However, the aircraft structure and attachments are not replaced like technologies are replaced. They are fixed in place and age through time and use. The first aging you might notice is the paint. New paints seem to keep their luster for a substantial time, but you can still see the fading occur – especially where the sun beams brightly on it. As you detail your aircraft, the next layer of aging you might notice will be in items that have exposure to high vibration. In those areas, you will see cracks develop. You will normally address any crack as soon as you find it. Each technology that a crack oc-

Jim Elliott

curs in, will require its own style of repair or replacement.

In fiberglass, the repair of a crack is often to sand the area and re-glass. For fabric aircraft, the process is somewhat similar and a patch is created to repair the area. With aluminum aircraft, a crack is "stop drilled" and monitored. If the crack continues to grow, the area where the crack exists can be patched. If the crack is aggressive enough, the entire sheet of aluminum may have to be replaced.

I'm sure you have seen these conditions and most likely have been part of the repair process, so you have a very good idea of what I'm mentioning. For the

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EAA Chapter 301 Meeting Minutes

August 15, 2008

Called to order at 19:00 hours: Pres. **Jim Elliott**

Introduction of Guests:

Allen Bilbro

Scott Brierley

Meeting Minutes July 18, 2008 approved by voice vote with the following correction:

Albert Thomas gave the briefing about the ELT.

Treasurer's Report: **Russ Grell**

Verbal report: the Chapter remains solvent with no problems.

Technical Advisor's Report:
None

Flight Advisor's Report:
None

Progress Reports:

Chuck Spaur: He is fitting the door on his RV-10. A lot of time has been spent getting a good fit.

Jim Elliott: He reports his Centennial engine is signed off and ready to go.

Ted Lemen: His 0-200 is making metal it is now apart and new rings are on order.

Steve Wyman: The wing kit arrived for his RV-12. He has both wing sides framed and in process of fitting the skin. He is very pleased with the kit.

Allan Lockwood: The Pitts is being readied for the Reno

Air Races. The IO-360 is putting out 220 HP turning a Prince Prop @ 3100-3200 RPM. All engine instruments are OK. FAST!

Jeff Budny has an RV-7 with the vertical, horizontal stabilizer, and rudder complete. Elevators in work.

Young Eagles Report: **Rudy Kniese**

Recognition for the Young Eagles Program follows:

<u>Pilots</u>	<u>Events</u>
Bob Brannan	2
Dave Oscai	2
Alan Rossi	3
Bill Totten	5
Stan Specht	6
Greg Anderson	7
Mark Brown	7
Ed Cutler	8
Jim Gwin	10
Adam Charles	11
Charlie Phillips	11
Gary Zilik	11
Lothar Klingmuller	15
Bill Meine	16
Denis Walsh	16
Jerry Knievel	16
Chuck Spaur	18
Bill Hammond	23

Ground Crew

Russ Grell

Chuck Sneed

John Schnieder

Randall Eaker

Doug Hindman

Don Shipman

Bob Spry

A special thanks to all who participated in the Young Eagles Program from **Rudy Kniese** Program Manager and all the members of EAA Chapter 301.

Old Business: The Banner System

New Business:

The Summer BBQ is set for 12:00 PM at Ted's Hanger at Front Range Airport August 23, 2008.

Chapter 43 is hosting a Workshop October, 18, 2008. Contact **Chuck Spaur** for details.

It was moved and seconded for the Board to consider donating \$1000.00 to the EAA Museum.

Safety Report: **Jerry Knievel**

The subject of landings with a tail wind was discussed.

15-minute break

Program: Patti Arthur

Liability Issues for Experimental Aircraft Builders, Buyers and Sellers

Meeting Adjourned.

Submitted by:

Jack Bongberg, Secretary

Announcements:

Editor's Notes:

- ▶ The membership is encouraged share articles, personal experiences, pictures, etc., related to aviation - to be used in the newsletter. Ed.
- ▶ If anyone is having a problem accessing the web site, contact Treasurer and computer guru **Russ Grell** (303-791-3528) and he will change your password to whatever you need. Right now, for the new folks, the *User ID* is: **firstname.lastname** and the *Password* (that should be changed at the first sign-in), is in the e-mail you get automatically from the web site.

President's Page Continued

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experimental aircraft builder who has built your aircraft within the last 10 to 15 years, you are seeing an aging aircraft, but are not yet seeing the kind of aging that some of the certified aircraft have been exposed to. For example, my aircraft built in 1963 is now 45 years old. There are several aging aspects to it that I'm getting acquainted with. A few years ago I had to tackle the aged fuel tanks and worn out sealant. At that time, I was getting very intimate with the innards of my wings and noticing the condition of the aluminum.

Now I'm working on a concept to examine aluminum structures and have found out the inspection pitfalls of visually inspecting aluminum – you miss more than half of the cracks that can be present in aluminum with visual inspections! There are several technical inspection techniques that can work well to find some more of the cracks that may be occurring, but there is still

a void in the ability to locate all cracks and find them economically. AC 43.13-1B Chapter 5, gives a complete Non-Destructive Inspection (NDI) list of technologies that aid in examining aircraft. The better of these is X-Ray and Acoustics. X-Ray is fairly expensive and requires a controlled environment. Acoustics is reasonable, but if you are going after the cracks that can take you out of the sky in a way in which you might not prefer; this technology can still miss the mark.

I'm working on a concept that will use a technology that is now being applied to bridges to capture cracks as small as 20 microns. The neatest thing about this technology is that it not only sees extremely small cracks, but it can tell if the crack is benign or malignant! Stay tuned, this is looking like lots of fun and might be extremely useful in keeping our older aircraft fleet flying with surety in safety!

The possibilities are great. The time is

great. The group is great. Happy Building and Flying!

Jim Elliott

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The picture below just might represent the mind's image of a low-hour pilot's first landing at AirVenture - minus a few turbines.



Chapter Tools

Mel Kuethe is our tool custodian. Give him a call at 303-794-3930 for your tool needs.

Scales

- Aircraft Spruce type
- Electronic/strain gauge type
- (7) - 50 LB cast iron slugs for calibration

Fire Wall Forward

- Oil filter cutter
- Tubing beadings: 3/8" & 1/2"
- Tubing bender
- Continental engine valve lifter tool
- Magneto timer
- Top dead center finder
- Tube flaring tool
- 1/2" cylinder wrench. 9/16" cylinder wrench
- Compression tester
- Bore scope
- Pliers, hose spring clamp
- Temperature measuring device (wide range)

Airframe

- Nicopress sleeve tool 53XPJ with gauge
- Nicopress sleeve tool 64CGMP without gauge
- De-burring tool
- Hole flanger - sheet metal
- Electrical connector squeezers
- Panel knock-out punches
- Rivet squeezer - w/two new die sets
- Torque wrenches (2), (large and small)
- Hose clamp pliers
- Tubular rivet set for 1/8" rivets
- Drill guide for drilling cotter pin holes through bolts

Events for 2008:

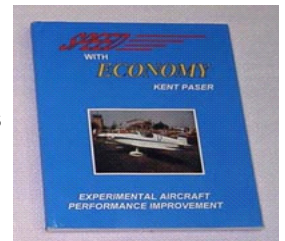
- AirVenture Oshkosh 2008, July 28-August 3
- To view all EAA events go to:

<http://www.eaa.org:80/calendar/>

(Additional events to be announced. Have a favorite? Let me know. Ed.)

For Sale:

Speed with Economy – Kent Paser's book on speed mods. Covers 20 years of modifications to his Mustang II resulting in a 64 MPH speed increase while reducing fuel consumption by 50% at cruise. This book has won acclaim from EAA's Jack Cox and Ben Owen, Tony Bingelis, author of several aviation how-to-do-it books, and Bob Bushby, designer of the Mustang II. Price is \$24.95 plus tax and shipping. Available at Chapter 301 meetings or call 303-904-3417 or e-mail paserpubs@mindspring.com to place your order.



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(This advertisement made possible by a donation to EAA 301.)

EAA Chapter 301 Meeting Minutes – cont'd as needed.

Advertisements

For Sale: Kitfox Series 5 Firewall Back Kit. Could be licensed as either gross weight of 1550 lbs. or as Light Sport at 1320 lbs. Uses the Rotax 912 100 hp engine, a traditional aircraft engine, or similar power plant. Includes many features, such as tube and fabric construction, adjustable rudder pedals, powder coated airframe, conventional spring gear, speed mods and wheel pants, folding wings, short field performance, and a decent cruise speed. Very little work completed so you can finish it your way. Only \$12,500 (compared to over \$22,00 for a new kit). Call me at (303) 807-4699 for further information. Stan Specht, Kitfox Model IV builder and driver.

Hangar space: John Barrett would like to find someone to share his hangar space with his J-3 at Tri-County for approximately \$110.00/month. Smaller low-wings work the best, but he will consider others. Contact John at: 303-934-1332 (Ext. 31); Fax: 303-934-5756; Email: john.barrett@lwbarrett.com

Looking for partner: ½ share in almost complete Mustang 2 project. Mazda 13b Rotary engine, 2.85:1 redrive, redundant ECU, electronic engine monitor, 250XL GPS/comm, etc. Project at 'finishing' stage – hope to be flying by fall. Based at 00V (Meadow Lake – north east of COS. Could relocate to APA or Front Range). Contact: Mark Supinski (mark@supinski.net).

Experimental Aircraft Parts for Sale:

The following inventory of parts comes from the estate of Steve Wheelahan, EAA member recently deceased. I have agreed to help Dorothy (his mother) dispose of these materials in the best manner possible. All offers will be considered, and provided to offset funeral costs. All materials are in my possession, to minimize interruptions and disturbances for Dorothy.

Based on the plans and a limited review of the notes, it appears that most parts were for the building of a set of wings consistent with a Cub or the Kodiak 44, as designed by D&E Aircraft.

To examine the inventory, purchase or speculate on the purpose of some parts, please contact:

Allen Cook, EAA 790374, chapter 301

O: 720-963-6931

C: 720-272-5563

H: 303-841-2994

Email: allen.cook@ngc.com

Item list continued in next column ►

Item #	Count	Description	new/used
1	1	2" VDO Oil Pressure Gauge 0-80psi	used
2	1	3" G-Meter, certified w/docs	new
3	1	2" Stewart-Warner Fuel Level Gauge	new
4	2	Stewart-Warner Thin-film fuel level sensor (L&R)	new
5	1	2" E.T. quartz clock (analog dial) (Mid-Continent)	new?
6	1	2" Oil Pressure gauge (new) VDO	new
7	1	2" electronic tach (analog) Westach	
8	1	3" Altimeter (glass cracked)	used
9	1	Vertical Card Compass (Hamilton)	new
10	25?	Bag, assorted clecos and clamps	used
11	1	3" Airspeed indicator	
12	1	Eyeball air vent, black plastic	new
13	2	Fuel filler caps, w/O-ring seal	new
14	1	2" Oil temperature gauge	
15	1	Coil, Al tubing, approx. 15' X ¼"	new
16	4	Strut-end fittings	new
17	4	Flap bell crank, Al cast	new
18	4	aileron bell crank, Al cast	new
19	2	Al flap mount?	new
20	17	Al spacers or brackets	used
21	19	As above	new
22	Asst.	Several different brackets, Al	new
23	Set?	Wing ribs, Al, Riblett airfoil (Cub)	Shop made
24	Set?	Flap ribs	Shop made
25	Set?	Aileron ribs	Shop made
26	set	Wing rib forms, wood	Shop made
27	2	Forming blocks (plastic) for rib lightening holes	
28	4	8' sections, extruded wing leading edge	new
29	Asst.	Various extruded Al angles, in lengths	new
30	2	Main Spar, extruded 6061T6 Al, 17" X 5 11/16"	new
31	2	False Spar, extruded 6061T6 Al, 16" X 4.5"	new
32	1	Set of Plans, Bearhawk 2-place (Patrol?) R&B Aircraft	
33	1	Set of Wing plans – 66" Riblett airfoil, D&E Aircraft	



EAA 301 - Rocky Mountain Chapter
www.eaa301.org

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First Class

Chapter Mission:

To Promote and Encourage the Restoration, Construction, and Safe Operation of Sport Aircraft.

This newsletter is published by Chapter 301 of the Experimental Aircraft Association for the use, education, and enjoyment of the members and others to whom it is provided. No claim is made for technical accuracy of material presented. Editorial content is the opinion of the contributor and does not reflect the position of Chapter 301 or the Experimental Aircraft Association.

Submission of articles for publication in the newsletter, comments, or inquiries are encouraged.

Meetings are normally held on the third Friday of each month at 7:00 PM. Current location is at Adam Aircraft, 12876 E. Jamison Circle, Centennial Airport, Englewood, CO 80112.

Current Officers:

President: Jim Elliott (303-840-2199)
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Refreshment Chairman: John Tedder (303-663-7851)

Flight Advisor

Ted Lemen (303-985-3684)

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Mark Supinski (719-651-3236)

Young Eagles Leader

Rudy Kniese (303-841-7180)