



The Falcons

January 2008

Welcome back! Everyone at EAA Chapter 228 wishes that you had happy holidays and a happy new year. After all, it is 2008, so that means that newsletter was due for a freshening. Please let me know if you like this style, or if you would like to return back to the old format. - Scott Mulhollan

News

Please congratulate **Dave Searle** for stepping up to the plate and becoming Chapter 228's new President, and **John Swodeck** for Vice President. Also **Mike Cycon** and **Michael Bruce** for continuing to be Chapter 228's Treasurer and Secretary. In addition, **Dan Billingsley** and **Paul Donahue** have taken upon a directors role. And of course, a special thanks to **Larry Pritchard** and **Don McGettigan** for their fantastic work as former President and Vice President. Their work is much appreciated in continuing to foster aviation in Arizona.

From **Paul Poberezny**:
November 30, 2007

When I read through the history of your EAA, living every day for half a century plus, I truly know how time flies.

I want to share with you some of the thoughts of our members as they appeared in our *Sport Aviation* magazine back in

CHAPTER OFFICERS

All phone numbers listed below use area code 480.

President:	Dave Searle	981-6487
Vice President	John Swodeck	988-4626
Treasurer	Mike Cycon	838-6353
Secretary	Michael Bruce	219-9039
Newsletter Editor	Scott Mulhollan	990-7645
Webmaster	Dale Rodgers	464-0765
Membership	Mike Cycon	838-6353
YE Coordinator	Brad Carlson	688-8080
Tech Counselors:		
	Gary Hertzler	897-8167
	Bob Greco	838-2268
	Richard Jamsek	836-0929
Directors:		
	Dan Billingsley	
	Brian Briggerman	837-6510
	Dave McNeil	832-5295
	Paul Donahue	

Treasurer's Report

As of 10/31/07 the treasury balance is \$2064.02.

Future events:

January	2008
22 Tue. 1900 h	Chapter Meeting (Larry's Hanger)
February	
12 Tue. 1830 h	Officers Meeting (IHOP)
26 Tue. 1900 h	Chapter Meeting (CAF)

1963. The organization of dreamers, homebuilders and fellow aviation supporters building/designing their aircraft under the CAA/FAA 51% rule we worked so diligently for and earned is something to be treasured. One can build his or her airplane for educational and recreational purposes and friends can work with you for their own educational value. Really, we can build one half of it – the other half, such as engines, propellers, wheels, brakes, instruments, radios, items not normally within the capabilities of those who work with hand and mind can be purchased. Now we are faced with a situation of the FAA amateur building program being used for commercial purposes – from building complete aircraft or well over the half mark ... not within the intent of the program given to us by those CAA/FAA folks who believed in us. *Let's hope we don't lose this privilege.*

Sincerely,

EXPERIMENTAL AIRCRAFT ASSOCIATION

Paul H. Poberezny

Founder and Chairman of the Board

For the **January** Meeting
"The CAF facility will be closed for the next couple weeks while they prepare for and then clean up after some high end Super Bowl VIP gatherings. That means we will **not** be able to have our meeting there this month. Instead, the meeting will be held at **Larry Pritchard's hanger**, which is number X-10 at Falcon Field. The usual brats, chips, pop or beer will be served at 6:30 PM for a \$5 contribution. The meeting will start about 7:00 PM. After the business portion of the meeting, **John Swodeck** will be doing a short presentation on air space. Because we will be outside and probably a bit cool,

I'll hold off doing a presentation on instrument calibration I had planned and do it at a future date." - Dave Searle

EAA Chapter 228 Falcons Membership Meeting Minutes Summary

November 22, 2007

The November meeting of the Falcons was held at the Commemorative Air Force Museum hangar at Falcon Field, Mesa, Arizona. Grilled Brats, beer, soda, and chips were available for \$5.00 prior to the meeting. Thanks go to John Swodeck for bringing the Brats from the Pork Shop. Chapter President Larry Pritchard called the meeting to order at 7:02 pm.

2008 Elections

Larry Pritchard opened the floor for additional Officer/Director nominations and none were put forth. A motion was made to approve the slate of candidates as written and was accepted. Your 2008 officers are **Dave Searle** – President, **John Swodeck** – Vice President, **Mike Cycon** – Treasurer and **Michael Bruce**- Secretary.

Directors are **Brian Briggerman, Dave Mc Neil, Dan Billingsly and Paul Donahue.**

In the Pattern (misc. stuff)

- Treasurer Mike Cycon is collecting annual dues of \$20.00 for 2008.
- Don and Marie McGettigan will host the chapter Christmas Party

at their house on December 15.

- Mike Cycon has nominated Roger Ellis, Gary Hertzler and Rick Rueland as Honorary Chapter 228 Members for 2008.
- If you have questions about the Young Eagles program or would be interested in helping out at a future YE event, see Chapter 228 Young Eagles coordinator Brad Carlson.
- Have you flown Young Eagles and earned flight points? You can donate those points to the Arizona Council of EAA Chapters to help send a young aviation enthusiast to EAA Air Academy.
- Phillips Fuels is offering a \$1.00/gal rebate on fuel for pilots flying Young Eagles. For more information on this program visit <http://www.phillips66aviation.com/YEagle.htm>
- Visit the Arizona Pilots Association website at <http://www.azpilots.org/> to learn about issues concerning flying in Arizona.
- Chapter 228 Board meetings are held on the 2nd Tuesday of each month (except July and December) at IHOP on the SW corner of Higley and Brown Roads. Meetings commence at 6:30 PM and all members are welcome to attend.
- If you would like to receive your monthly newsletter via e-mail, send Newsletter Editor – Scott Mulhollan a message at cactushp@gmail.com.

November's Program

The speaker this evening was Ed Daror. Ed is an EAA Flight Advisor and Technical Counselor and holds an A&P certificate with IA. Mr. Daror spoke about preparing an

experimental aircraft for FAA airworthiness inspection including the presentation of the aircraft and required completed documentation. He also spoke about flight testing Phases, engine break-in, annual condition inspections and continued airworthiness.

Ed suggested reading the book 'Flight Testing Homebuilt Aircraft' by Vaughn Askue and FAA Advisory Circular AC90-89, Amateur- Built Aircraft and Ultralight Flight Testing Handbook. The meeting adjourned at 8:53 pm.

Respectfully submitted:
Michael Bruce
Secretary

Monthly Newsletter

By Mike Andresen

Oval Aircraft Pistons?

Would you believe that aircraft pistons are slightly oval? At room temperature they are. They measure roughly 10 thousandths of an inch larger in the direction perpendicular to the piston pin. This is because they expand more in the direction of the piston pin when heated. At operating temperature they are essentially round.

Cylinders are pretty round even at room temperature. If you measure their diameter in two perpendicular directions the difference would only be a couple of thousandths of an inch. But the cylinder also expands when heated. The top of the cylinder is hotter than the bottom and hence the barrel will expand more at the top. Continental adds a choke to their barrels for this reason.

The steel cylinder barrel will expand at a slower rate than the aluminum piston as the combination is heated. The piston skirt to cylinder wall gap will close at a rate of about .002 inches per 100 deg F. The room temperature gap is typically 0.010 inches and reduces to around 0.004 inches at operating temperature.

We tend to think of the engine clearances and dimensions we measure at room temperature as being static. The engineers who design these engines have to account for their operation and dimensional changes over a wide temperature range.

Mike Andresen

Christmas Party Pictures

Courtesy Mike Cycon



The cockpit of a Columbia 400 in Port Huron, MI

