



Mile High Flyer

The Official Newsletter of
The Experimental Aircraft Association Chapter 43

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On the web @ www.eaa43.org

January, 2015

Next Meeting

Saturday, January 10, 2015

6 PM cocktails & 6:30 PM Dinner
at Colorado National Golf
Clubhouse Restaurant

2700 Vista Parkway
Erie, Colorado

***This is our annual banquet meeting
and chance to honor and recognize
the volunteers who help to make
Chapter 43 work for all of us.***

***(Note: advance reservation is
required. Please see last month's
newsletter.)***



Editor's Corner

There was a very nice article on Chapter 43 member **Jeff Cain** in the December issue of AOPA Pilot magazine. With AOPA's permission, I've published it in part in this issue on page 6.



Our yearly banquet meeting is coming up, and I hope everyone has made their reservation. If not, there MAY still be time if you hurry... payment can be made on the website via PayPal (you don't have to have an account).

I sure would like to receive some more "Member Profiles" for publication!

Happy New Year!

John 

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Upcoming Events Calendar

Submitted by *Don Smith*

2015 EVENTS

JANUARY

- Sat 10* CPA Fly-in planning meeting, Mt. Evans Room, KBJC, 1:00 p.m. (T)
- Sat 10* ***EAA Chapter 43 Holiday Dinner, Master's Restaurant, Colorado National Golf Club, Erie. Cocktails at 6:00 p.m., Dinner at 6:30 p.m***
- 14-17* Sebring FL U.S. Sport Aviation Expo <http://www.sport-aviation-expo.com/>
- Fri 16* EAA Chapter 301 Membership meeting, 7:00 p.m.
- Sat 24* EAA Chapter 301 Young Eagles Rally, FTG 7:45 a.m.

FEBRUARY

- Mon 2* AOPA/ASI Safety Seminar, Ramada Plaza & Conv. Center, 10 East 120th Ave., Northglenn, 7-9:00 p.m.
- Sat 7* EAA Ski plane Fly-in, Pioneer Airport, Oshkosh WI, 10 a.m. to 1:30 p.m. CST
- Sat 7* AAHS Annual Gathering, 9am-5pm, EAA Hangar 1 at Historic Flabob Airport, Rubideaux, CA www.aahs-online.org
- Sat 14* ***EAA Chapter 43 Membership meeting, BJC, 7:00 p.m.***
- Fri 20* EAA Chapter 301 Membership meeting, 7:00 p.m.
- Sat 28* EAA Chapter 301 Young Eagles Rally, FTG 7:45 a.m.

(T) - Tentative

CHICKEN WINGS

BY MICHAEL AND STEFAN STRASSER



Editor's note: The following was taken from the "AeroElectric-List" internet forum on 8/24/15. It is a post by Robert Nuckolls, III, concerning the cost/benefit ratio for automation, and in response to a question from another writer about a potential system to switch on an auxiliary fuel pump automatically during an in-flight fuel starvation event. I found it particularly insightful and wanted to share it with our readership (used by permission of the author).

Airplanes, the individuals who ride in them and the circumstances of environment through which the flight system moves offers infinite combinations of variables.

Some combinations add up in ways that increase risk, others will stack up in ways that reduce risk. The core process for risk reduction is the *failure modes effects analysis*. The oft repeated litany of questions to be asked/answered are:

In what ways can this component fail?

How will that failure manifest?

Does failure create a condition from which recovery is difficult/impossible?

Can the failure "hide"? In other words, can the failure exist behind an inability or unwillingness to pre-flight test for integrity?

If this failure has a high order of criticality, what steps can be taken to reduce criticality and/or back it up?

Since the dawn of aviation, designers, builders and operators of airplanes have wrestled with these questions. In some venues, individuals who *know-more-about-airplanes-than-anybody* have decreed certain behaviors under force and penalty of law. In every case, the justification for a proactive activity has been to "Make airplanes SAFE for children and all living things."

Something we need to accept from square-one is that there is no such thing as a SAFE airplane. Like chain saws, automobiles, ladders, lawn mowers, ladles full of molten steel . . . they are simply tools. Used within the boundaries of acceptable risk, they can add a great deal to the quality of life . . . bump those boundaries and life can become less than ideal . . . or get terminated.

It is an inarguable fact that the pilot is a core component of the flight system. Pilots are human . . . subject by some degree to all of human-kind's weaknesses including ignorance and ease of distraction. As complexity of the mission grows, weak links in pilots inexorably drive up risk.

There have been countless experiences shared over suds and burgers (or Internet forums) that cite close calls. I have skated onto thin ice more times than I would like to recall . . . EACH instance involved a distraction from my training and an abrogation of duty to first be a pilot . . . insofar as possible, be one with my machine.

(Continued on page 4...)

(Continued from page 3...)

The benefits to be gained from automation are inarguable. Mooney proved this many years ago with their Positive Control feature that was, for a time, standard in all production airplanes. This was a vacuum servoed wing leveler that was ON at all times. The device could be momentarily shut off by depressing a button on the control yoke. Alternatively, control forces exerted by the pressure limited servos were so light that the pilot could maneuver the airplane at will whereupon automatic wing leveling would resume as soon as he turned loose of the wheel.

What an elegant concept.

How many lives and airframes might have been saved if the Mooney PC concept was standard equipment? At the same time, how would skills of the family of pilots be diluted by the existence of such systems in ALL production aircraft?

I would not advise anyone to eschew some move to 'upgrade' the level of technology in their airplane. At the same time, be cognizant of your first duty as builder, system integrator and ultimately operator of the machine to consider both the GAINS to be realized from the upgrade as well as consider the potential for LOSSES that may add more risk than you gained with the transistors.

Some innocuous thing like automatic pump control does not occur in a vacuum. The little splash of technology on the panel has ripples that radiate outward . . . the effects of such ripples may be small but are never zero.

Technology places a pilot in a kind of soft 'vise' being squeezed from one side by a willingness to abrogate risk reduction to some piece of technology while being squashed from the other side by a little chip of silicon. Any failure in an array of 10,000 transistors reduces the chip's value to less than that of pebble on the beach. Without a doubt, technology has offered quantum jumps in risk reduction for operations while adding new risks in terms of both physical failure of hardware and psychological failure of gray matter.

That vise squeezes oxygen from the brain's situational awareness and common sense centers. Allow it to progress without restraint and we witness events like a cockpit full of pilots flying a 777 full of people into the seawall on a CAVU approach . . . or another cockpit full of pilots flying an L-1011 into the swamp while chasing a light bulb failure.

Can anyone say "driverless cars"? I will suggest that the infinite combinations of variables I cited at the opening of this missive is best managed by educated and attentive gray matter . . . aided by things like check-lists.

Bob . . .



Membership Enrollment Information

(Needed for Current Roster & Chapter Correspondence)



MANDATORY INFORMATION: *If nothing has changed from last year, this is all the information required. We need EAA Membership # and EAA Renewal date to comply with EAA Charter and Chapter 43 by-laws.*

Date: _____ Annual Dues \$20.00
 Name: _____ Scholarship Donation (Optional) .00
 National EAA Membership #: _____ Total .00
 EAA Membership Renewal Date: _____

Scholarship donations are tax deductible.

Are you a:

Technical Counselor Yes ___ No ___
 Flight Advisor Yes ___ No ___
 CFI Yes ___ No ___

*Please make check(s) payable to:
 EAA Chapter 43
 P.O. Box 1725
 Broomfield, Co. 80038-1725*

NEW MEMBERS PLEASE COMPLETE - RETURNING MEMBERS OPTIONAL INFORMATION: *Supply any information that may have changed from previous year (if you want a field deleted from your record, please tag it).*

E-Mail Address: _____ Home Phone: _____ - _____ - _____
 Spouse: _____ Cell Phone: _____ - _____ - _____
 Street: _____
 City, State, and Zip: _____

HOW WOULD YOU LIKE TO BE INVOLVED IN THE CHAPTER?

Participate in Young Eagles functions, either as pilot or volunteer? Pilot Yes ___ No ___
 Ground Crew Yes ___ No ___
 Arrange, Or Be, The Program For One Of Our Meetings? ----- Yes ___ No ___
 Host A Chapter Meeting At Your Project? ----- Yes ___ No ___
 Run for a Chapter Officer Post? ----- Yes ___ No ___
 Interested in attending hands-on workshops (under consideration) Yes ___ No ___

AIRCRAFT INFORMATION:

Note: Status: ---Built, Building, Restoring, Considering, etc.

<u>Make, Model</u>	<u>Status</u>	<u>Based At</u>
_____	_____	_____
_____	_____	_____

To keep costs down the monthly newsletter is delivered via E-Mail (unless otherwise requested). We also send out periodic news items by e-mail.

Suggestions: Please provide any suggestion on things you would like to see the chapter improve on or provide in the future on to any of the chapter officers. The board will review suggestions.

BLADE FLIER

Jeffery Cain

No limitations

By **Dave Hirschman**

Complete article originally published
in the December 2014 issue of
AOPA PILOT magazine

www.aopa.org/pilot



Flying vintage biplanes requires pilots to develop an intuitive feel for their aircraft and keen rudder acuity. But can a double-leg amputee develop such sensitivity?

Jeffrey Cain, 54, has logged about two-thirds of his 1,482 total flight hours since 1996, when he was critically injured in an aircraft accident that wrecked his legs below the knees. He resumed flying a few years later and currently owns and flies a Hatz biplane and a Piper J-4 Cub near his home in Denver.

“Douglas Bader had lost two legs, one of them above the knee, yet he flew Spitfires in World War II,” Cain said of the legendary British pilot. “I drew inspiration from Bader because he had already showed how much was possible.

“We all have limitations,” Cain said. “It’s up to us to discover them.”

Cain, a medical doctor, recently finished a term as president of the American Academy of Family Physicians. He lost one leg at the time of the accident and had the other voluntarily amputated six years later. He walks without a limp on two high-tech prosthetics, and most of the people he meets (and some coworkers) have no idea that he was ever injured.

Cain skis, snowboards, and teaches swimming, and his prosthetics are obvious when he participates in those activities. “If I feel people are staring, I just take off my glasses,” he jokes.

In flying, Cain said he has the same innate feeling for his aircraft that some able-bodied pilots acquire.

“Prosthetic legs are just tools,” he says. “If you use them enough, you can learn to control them with the same sort of dexterity as other tools you use regularly. A person with prosthetics has sensations and feels subtle pressures, but not in the same places as people with feet and toes.”

Cain drives an unmodified car with a stick shift and flies tailwheel aircraft. But he gets a thorough checkout with a CFI before adding to the 50 types of aircraft he’s flown to date.

“Some work for me and some don’t,” he said. “If they’re not a good fit, I’ll get right out.”

Cain flies for the pure joy and freedom he gets from it, and he’s taken more than 500 children on introductory flights. He also teaches skiing to disabled veterans and encourages amputees to attempt things they aren’t sure are possible. “There are real limitations out there,” he said. “But they are ours to find.”

2015 Chapter Officers

President	John Reuterskiold	303-881-3517
Vice President	Ken Scott	303-674-7846
Vice President	Greg Hall	303-424-4216
Secretary	Roxie Juul	303-466-2600
Treasurer	Myles Lee	303-277-1775

Board of Directors

John Reuterskiold (Chairman)
 Cliff Hasenbalg*
 Don Smith*
 Lynn Miller**
 John Juul**

(Note: *- 2 year terms expire end of 2016, ** - 2 year terms expire end of 2015)

Volunteer Officers

Technical Counselor	Art Schwarz	303-905-2125
Technical Counselor	Jim Sutton	303-598-4205
Technical Counselor	Bill Truax	303-249-2578
Technical Counselor	Peter Will	303-656-0678
Flight Advisor	Bill Mitchell	303-427-4025
Flight Advisor	Dennis Moss	970-330-4509
Newsletter Editor	John Evens	303-420-2724
Young Eagles Coordinator	Terri Bazacos	559-618-0159
Young Aviators Advisor	Pat Miller	303-666-8233
Young Aviators Advisor	Scott Serani	303-358-2858
Data Base Editor	John Reuterskiold	303-881-3517
Web Master	Brian Cabebe	303-748-5570
Safety Officer	Stephanie Wells	303-503-0147
Refreshments	John & Roxie Juul	303-466-2600
Audio/Visual	Herrill Davenport	303-460-7789
Scholarship Chairman	Lynn Miller	303-666-8233
Scholarship Fundraising	Stan Specht	303-232-8474

CFI's in Chapter 43

Cleon Biter	303-678-7524
Richard Brown	303-558-0793
Mark Davis	303-425-4080
Bill Mitchell	303-427-4025
Tom Shaw	303-275-0904
Stephanie Wells	303-503-0147

Mile High EAA Chapter 43

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First Class



Meetings are normally held on the second Saturday of each month at 7:00 P.M.—Location determined monthly. See Page 1 for details of the upcoming meeting.