

The TAILSPIN



April 2010



Orlando Youth Aviation Center

FROM THE PRESIDENT

Spring Break for Pilots!

That's how Sun 'n Fun was billed this year. Did you go? Did you have a great time? Did you volunteer? There wouldn't be a Sun 'n Fun without the hundreds of volunteers, most of whom return year after year. Many of our members stepped up to the plate again this year, giving a bit of their time to make this year's event one of the world's finest once again. Among the many benefits of helping out at the show is free admission, but beyond that is the opportunity to work with people who have similar interests. That's the case with all the organizations to which I belong. We're not only giving back to the community, we're meeting new people with whom lifelong friendships can be forged and we're renewing old friendships that add so much to the quality of our lives.

At the great risk of embarrassing myself by forgetting to mention someone, I'd like to recognize our members who chair or co chair Sun 'n Fun committees. In no particular order:

Pat Phillips – chairs the Airshow Committee.

Barbara Walters-Phillips – chairs the Teacher's Workshop.

Don McLendon – co-chairs the Aircraft Parking Committee.

David Berelsman – co-chairs the Young Eagles Raffle.

Bob and Beverly Hayden – Chair the evening entertainment programs.

As you can see, we have a lot of leadership involvement in the show and I'd like each of our chairpersons to talk briefly about their committees during our introduction period at Tuesday's meeting and if you volunteered, please tell us what you did, when you did it and how much time you spent.

You've read about it in these pages for months and heard about it at all the meetings since late last year. Now comes the time we actually pick up stakes and make the move to to our new clubhouse. It's a long way from being finished, but it's habitable and we want you to come see the work a handful of dedicated volunteers have done.

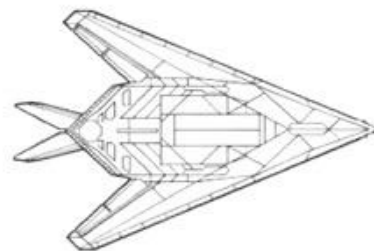
President (cont)

I'm fairly sure Tim Sweeney will make sure there's coffee available! We also want you to see what is left to be done. Maybe you'll have some suggestions, some connections or perhaps a little time or expertise to contribute. If we run out of time when the meeting starts, we can pick up where we left off after the program.

CHAPTER MEETING 4/20/10

The regular Chapter meeting will be held on April 20, 2010 in the **CHAPTER CLUB-HOUSE on Amelia Street, west of Herndon Avenue. Look for cars and lights!**

Our own Jerry Lutz will present the program: **Lockheed Skunkworks - Legend and Reality** Overview of the heritage of Kelly Johnson and the Skunk Works; spy plane overviews; mission needs and records established; facing a national crisis - the need for and the development of the F-117 Stealth Fighter; design considerations of the F-22 Raptor; and what it was really like to be a "Skunker."



There is no Tarmac Time scheduled, however tours of the clubhouse will be available beginning at around 6:30PM.

Young Eagles Fly at Sanford

Our Young Eagles Rally last month at Orlando-Sanford was another of those times when you're proud to be in EAA. Before noon, 53 kids got their free airplane ride on one of the nicest flying days so far this year.

EAA Young Eagles Report

Coordinator Tom Carveth



Yes, we've had days where we've flown double that number. But it's really about the quality of the experience, not the quantity of registration forms. If we inspire just one youngster, all our efforts are a success.



3 Young Eagles pose with pilot Chris Fenger. (Photo—Tom Carveth)

A special salute to **Krysty Carr** at SouthEast Ramp for being her typical, incredible hostess and arranging the use of their magnificent hangar. It's a great portal for the public to enter the world of aviation. She also mustered her folks to set up and help out on the ramp, marshaled airplanes, supplied cold water for everyone and even bought lunch for the pilots. (If she ever decides to adopt, I'm first in line.)

Things ran incredibly smoothly – thanks to a ground crew that made everything look easy. Thanks to **Cindy Huff** and **Linda Jordan** who aren't chapter members, but volunteered for registration and ran it like a clock; **Matt Vogelpohl**, who did his usual great job at dispatch; and **Andy Singh**, for making up the certificates (even when the computer broke down). Working the ramp were Krysty and her crew **Sharon Radley**, **Jim Tashkin**, **George Wheeler**. Other new friends who came and just pitched in where needed were **Steve** and **Letitia Purello**, **Alan Hoff-**

berg and **Gene Gunther** and his family. Thanks as well to Rally regulars **Tim Sweeney**, **Jim Thomas**, and **Bob Kosar**. **Tim Carr** set up his ice cream machine to make sure everyone had a sweet treat. And last, but not least by any means, the kind folks from **Falcon Aviation** who jumped in at the last minute to cook up their great pancake breakfast.

Of course, it's all about the flying, and chief pilot **Mike Sills** coordinated eight who really put smiles on the kids' faces. **Carlos Barrios** flew 7 kids; **Bob Caime** 3, **Chris Fenger** 9, **CarolAnn Garratt** 9 (always nice to see CarolAnn again), **Ken Jordan** 14 (who came down from Leesburg to fly with us), **Don McLendon** 4 (including his 400th Young Eagle!!), **Greg Vogelpohl** 6, and **Debey Von** 3.

Great job, everyone!!

Our next rally is set for May 15 back home on the Showalter ramp at ORL as part of International Learn To Fly Day activities. Flight Training Professionals is going to put some airplanes on display, offer Discovery Flights and cook hot dogs. It should be a great day.



APRIL 13 thru 18, 2010

The annual "Spring Break for Pilots" event has arrived. Many of our members are actively involved in the preparation for the show and many more involved in the actual event. Most of them are happy to take on volunteers who are rewarded with special admission arrangements. Check out the volunteer opportunities:

General Aviation Parking - contact Don McLendon Cell: 407-923-9492

EAA Sweepstakes Booth - contact David Berelsman Cell: 407-973-9301

OYAC



Barbara Walters-
Phillips

INTRODUCTION to AVIATION

The spring class session of "Introduction to Aviation" is well underway. 18 students and quite a few parents have participated in 4 class sessions so far. Classes will resume on April 24 (after Sun-n-Fun) with a visit to the control tower at Orlando. These classes are sponsored by the Orlando Youth Aviation Center and taught by members of Chapter 74. Most class sessions are 'hands on' or involve lots of participation, so volunteers are always welcome. You can check the schedule posted at <http://www.eaa74.org> or call Barbara Phillips at 407-497-1236. Who knows, you might discover a secret yearning to teach. You will definitely learn something new!

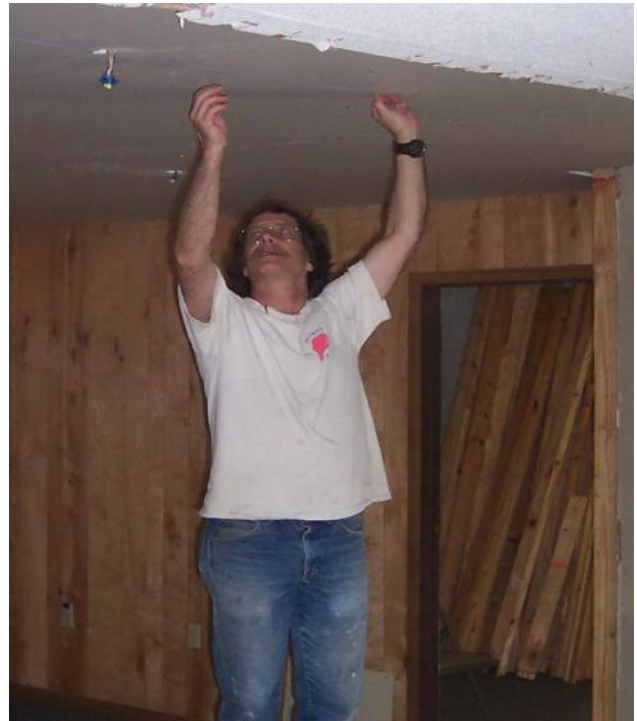
Don Flies #400!!!!!!

During the Sanford rally last month, long time Young Eagle pilot **Don McLendon** flew his 400th Young Eagle. Many of those Young Eagles were flown 1 at a time — in Don's RV7. Don is pictured here with Ashlee Youngblood—YE 400! Congratulations Don and Ashlee!

(Photo: Tom Carveth)



CLUBHOUSE UPDATE



The Chapter Clubhouse is coming along nicely, thanks primarily to the efforts of Bruce Hotz and a core group of volunteer workers. The facility WILL be ready for the April 20 meeting—not yet elegant, but certainly functional. Best of all, it is still under budget!!! The clubhouse is located on Amelia Street, west of Herndon Avenue in the old Flight Express hangar.

Around the Patch.....

Know anybody interested in a **SUBARU** powered RV7A? Call Tim Sweeney at 407-376-6245 or sweenet1953@yahoo.com

Elevons and airfoils.....(part 2)

" The military, with huge amounts of cash, materials, and engineering resources, has successfully broken through the "Delta Wall". They have designed, tested, revised, and wind-tunneled untold numbers of designs, and come up with a startling conclusion. There ain't no such thing as "control reversal" - it's still just plain, ordinary aerodynamics at work. The problem is not with the physics involved, it's with getting the brains of us humans to get a grip on why things are happening that SEEM to be backwards. What we have got to do is the best thing to do with any complicated process - break it into separate, simple, easy to understand parts, and then mentally re-assemble them into a complete whole that we can get our minds around.

First, lets look at airfoils - why do we even need them? Well, we all know that without the effect of Bernouli's Law, none of us would be flying today. Standard airfoils depend on the pressure differentials between areas of varying speed of liquids and gasses to provide the lift which hoists our aircraft and ourselves free of the earth. Low speed airfoils have the greatest degrees of curvature to increase the velocity of the low speed airstream and provide lift. High speed airfoils, particularly on aircraft with high engine power available, need very little camber, and in fact some of them are actually flat.

How does this affect us homebuilders? Well, believe it or not some homebuilders have designed full delta winged aircraft that have worked out pretty well. The Dyke Delta is one, and has the additional oddity of being a tractor engined aircraft. No, it don't have an engine from a John Deere, it just has it in front, pulling, instead of being a pusher. Commonly accepted wisdom on this says that a tractor will not work on a delta, but this one does. Engines aside, delta wings do have some really nasty surprises for low speed, low powered aircraft. If any of my friends out there are considering drawing up a delta aircraft and giving it a go, my recommendation is - don't.

Look at a wing from the tip to the root. Conventional wings have varying amounts of curve, or camber, to generate lift. Aerobatic aircraft commonly have symmetrically cambered wings, top and bottom equally cambered, to make inverted flight and aerobatics easier. High speed wings nowadays are usually cambered somewhat differently, with the thickest part of the wing somewhere around the 48 to 62 percent range. These were first employed on fighters like the P-51, F8 Bearcat, etc., for improved high speed performance with lower drag. When jets came along, delta wings first became realistically practical.

Now, let's talk about the "Control Reversal". Look at a delta from wingtip in. Now, imagine the elevons (combined elevator/aileron) moving up. You have created an INVERTED airfoil, with the lift coefficient of the wing pulling DOWN. So, accelerate a plane to rotation speed, pull the stick back, and the plane does not lift, it sticks firmly to the runway! At this juncture, a startled pilot will probably chop power and push the stick forward. Whoopee! Look at the wing cross section now, with the elevons DOWN - you have just created a standard lifting airfoil, and the plane will leap into the air, just as the power comes off! This immediately leads to a savage departure stall, except the nose is going UP, not DOWN, while the aircraft itself literally falls out of the air and usually blows up when the gear legs are rammed through the fuel tanks. Control reversal? By no means, just plain, everyday aerodynamics - the problem is with our brains, which cannot get a grip on the real reversal which is the reversal of lift on the wing.

So, let's play nice, folks - build planes to your heart's content, just.. don't give them delta wings. I've already lost more friends than I ever wanted to

Be Careful out there - Bob

This article is available in it's entirety on the Chapter 74 Yahoo web page. Look for it in the 'Files' section along with some relevant photos in the 'Photo' section. Not a Yahoo user? Join now at:

<http://groups.yahoo.com/search?query=EAA74> It's painless and it's **FREE!**



An example of a “Delta” wing, shown here on the US Navy Sea Dart at the Florida Air Museum on the grounds at Sun-n-Fun. Photo: Debey Von

DUES are way OVERDUE!!!

Membership dues were due at the January meeting and may be paid by check or cash. See our Treasurer, Bob Kosar with your \$25.00 annual commitment. Or Mail: EAA Chapter 74
 PO Box 140571
 Orlando, FL 32814

Upcoming Events

OYAC Introduction to Aviation Class	Began March 20, 2010 Class 9 am—12 Noon, 8 weeks Showalter at Orlando Exec
Chapter Meeting	April 20, 2010 Tuesday Meeting 7:30 p.m., Tarmac Time 6:30 p.m. CHAPTER CLUBHOUSE—Amelia Street
Young Eagles Rally	May 15, 2010

EAA Chapter 74—Officers and Directors

Pres Jim Thomas	Dir10 Greg Vogelpohl
VP Barbara Phillips	Dir10 Matt Vogelpohl
Sec/News Tim Sweeney	Dir11 Bruce Hotz
Treas Bob Kosar	Dir11 Carolyn Biter
VP(NV) Kim Showalter	Dir12 Tom Carveth
Air Boss Mike Sills	Dir12 Chuck Bull

The TAILSPIN Newsletter is published once a month by EAA Chapter 74, Orlando, FL. All photos are property of the editor unless otherwise noted. Member submissions are welcome and should be sent to:

newsletter@eaa74.org