



# THREE ZERO NINER

March 2006

Meets every 3rd Monday in Charlotte, NC

EAA Chapter 309 was founded in 1973 by a small group of aviation enthusiasts. Since that time, the membership has grown in size and experience. Members come with a variety of skill and experiences. Current members have aviation backgrounds ranging from student pilot all the way to Airline Transport Pilot. Several are A&Ps and all share a love of aviation. Membership is open to anyone interested in aviation and learning about the construction of Experimental Aircraft.

Chapter 309 is planning to build a home at Gastonia Municipal Airport. Chapter activities include visiting member projects, seminars, fly-ins, Young Eagle Flights, and a good dose of Hangar Flying!



## President's Corner

by John Wigney

This is the time I do my Annual Inspection. It is often not the best weather for flying and it good to get the plane fully checked out for the coming season. Although I have the use of a very nice hangar at Lake Norman Airpark, I bring my plane home so that I can work on it in my garage and this ability is one of the reasons I chose the Europa design. It is quite a lot quicker with 2 people but if necessary, I can remove the wings and load the plane onto the road trailer by myself in about 1½ hours.

The annual is always a good opportunity to make changes and upgrades. This year, I have sent my Dynon D10 EFIS back to the factory to get the latest upgrade standards and also to obtain a remote magnetometer since the internal magnetometer will not calibrate in my panel due to stray interference. I am also reworking the supply to my overhead air vents to get an improved flow. These little jobs are almost as much fun as the flying.

Coming EAA 309 events are the March dinner meeting on 3.20.06 which will be held in Mooresville to visit the John Schroeder/Ron Szot Lancair project. This project is one of the most ambitious of our members and is a credit to John and Ron's careful hard work. A few days later on 3.25.06, we will also be holding the Chapter Spring Fly in at Lake Norman Airpark. Ron and Kandy Murray are the coordinators and are doing a splendid job of pulling the various details together.

Regarding the hangar project, we have now obtained 501(c)(3) tax free charity status from the IRS. Since the effective date is 5.18.05, this means that all donations from last year can be deducted. If you feel able, Sam Stewart would be very grateful to accept further donations to the hangar project.

The electrical drawing has been basically completed thanks to Charlie Hall's help and the final details of the package are being completed with Wally Overton's invaluable assistance. Next job is to get the contractor bids. Your president has been reminded that his original timetable for this job was very optimistic, but we are making good progress.

## BUILDER'S SEMINAR

Bob Thayer and Bill Repucci are busy putting together a seminar that will be held on Saturday, April 22 at David Border's shop.

The primary focus will be building an Aluminum Tool box featuring most of the tools needed to build a Vans RV. Presentations will also include information on how to get started and how to license your Home Built aircraft.

Contact Bob or Bill for more information



309'ers WEB SITE [www.eaa309.org](http://www.eaa309.org)

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**2006**

Here's the **schedule of upcoming Dinner Meetings planned for EAA 309**. Go ahead and mark your calendars so **YOU can BE THERE - EVERY THIRD MONDAY OF THE MONTH beginning at 7:00 pm**

- Monday, March 20 - Tour of Ron Szot and John Schroeder's Lancair ES at Lake Norman Airpark. Pizza and beverages. RSVP to John at 662-9367.
- Monday, April 17 - Quaker Steak and Lube Restaurant, 1601 E. Woodlawn Rd. Charlotte, NC. Presentation by Bob Thayer and Andy Moscarelli. Building and starting a One Half VW engine. EAA 309 Workshop at David Border's shop, 11840 Moores Chapel Rd in nw Charlotte.
- Monday, May 15. Captain's Galley restaurant. 11032 E Independence Blvd , Matthews. John Meslonka - B1 navigator.
- Monday, June 19 - Little Kitchen, 1318 W Morehead St, Charlotte followed by tour of Randy Utsey RV project.
- Monday, July 17. (Location Later) Bill Hartin with Wing Sport Aviation Presentation on Light Sport Aviation. He sells ready to fly LSA aircraft, Sting Sport and Star Sport.
- Monday, August 21, Thane States has invited us to tour his RV10 Project

**If you have a suggestion for an upcoming speaker or tour, please let us know!**

**Beautiful Pix** I put some of the pictures from Tad Sargent's first flight on [www.eaa309.org/Projects/TadSargent/Tad\\_Sargent.htm](http://www.eaa309.org/Projects/TadSargent/Tad_Sargent.htm)

**Check it out!**

To EAA 309 members

Howard Cochran has asked for some help with his move, see his email below. If you are able to volunteer, please give Howard a call at 704-662-2036 to let him know you will be there.

Thanks, John  
President, EAA 309



**Chapter 309  
Charlotte, NC**

**YOUR NAME**

Contact Earl Fortner for your Name Tag!  
Phone or e-mail Earl at 704-455-5326 or  
efortner@vnet.net



### Loop in the Aerobat / Short lesson

The method I teach is not for competition, but a method used to safely learn Basic Recreational Aerobatics in the Cessna Aerobat keeping the workload as reasonable as possible for the student.

Lets discuss the difference between elevator "deflection" and "pressure". During the loop we will experience airspeeds from 65 MPH (top of loop) to 130 MPH (bottom of loop) and G forces from +.5 Gs (top of loop) to +3.5 Gs during the initial pitch up at 130 MPH. We make an elevator "deflection" to achieve the +3.5 G pitch up. As the loop progresses the airspeed, elevator "pressure", and G forces decrease until completely inverted at 65 MPH and +.5 G. When we start down on the backside of the loop, airspeed, elevator "pressure", and G forces increase to +3 Gs during the pullout to level flight at 130 MPH. The elevator up "deflection" required to achieve the

*(Continued on page 4)*

#### **Chapter Officers**

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Forrest, Bill Repucci,  
John Schroeder & Bob  
Thayer

**Young Eagles  
Coordinator: Ken  
Poindexter**

**Technical Counselors:**  
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## THREE ZERO NINER

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**Monday, March 20 - EAA 309 Dinner Meeting at John Schroeder's home, Lake Norman Airpark. Tour of Ron Szot and John's Lancair ES. See map on page 8. Pizza and refreshments.**

### North Carolina:

**3/25/2006 Mooresville, North Carolina -- Spring Fling Fly-In, Lake Norman Airpark (14A).** 10am-3 pm. Young Eagles, Hamburgers, Hot Dogs, Raffle, more. Email: ro-mott@adelphia.net Web: <http://www.eaa309.org/>

**Saturday, April 22 - EAA 309 Workshop at David Border's shop, 11840 Moores Chapel Rd in nw Charlotte.**

**4/29/2006 Farmville, North Carolina --EAA Chapter 960 Spring Fly-In at N08.** Come see us for lunch, 10:00 until. (No fuel on field). Email: webmaster@eaa960.org Web: [www.eaa960.org](http://www.eaa960.org)

**5/5/2006 - 5/7/2006 Burlington, North Carolina -- VAA Chapter 3, Spring Fly In 5-7 May 2006.** Alamance Cnty Airport (BUY). All classes welcome. Email: eiwilson@homexpressway.net

**Saturday, May 13 - EAA 309 Poker Run - Pick up your cards at Statesville, Rowan County, Concord, and Rock Hill Airports. Play your hand at Lincoln County for the Cash Grand Prize and other prizes. Lunch served.**

**5/18/2006 - 5/21/2006 Lumberton, North Carolina -- Mid Atlantic Fly-In & Sport Aviation Convention.** Grass roots fly-in. Forums, seminars, exhibits, 2 day airshow. Email: parkersc@nc.rr.com Web: [mafsac.com](http://mafsac.com)

**6/10/2006 Gastonia, North Carolina -- EAA Chapter 309 Breakfast Fly In and Young Eagles. Starts at 8 am.** Email: [romott@adelphia.net](mailto:romott@adelphia.net) Web: <http://www.eaa309.org>

**6/3/2006 Williamston, North Carolina -- Martin County Airport Open House & Fly In.** Food, Fun, Music, Aircraft of all types. Email: [msowl@earthlink.net](mailto:msowl@earthlink.net)

### South Carolina:

**3/26/2006 Georgetown, South Carolina -- South Carolina Breakfast Club, Georgetown (GGE).** Remember Our Motto: "Safety First." Email: [jack@fly4fun.org](mailto:jack@fly4fun.org)

## Mark your Calendar

See [www.eaa309.org/309mm.htm](http://www.eaa309.org/309mm.htm)  
for 2006 Schedule

**5/13/2006 Winnsboro, South Carolina -- 3rd Annual Wings & Wheels Festival 10-4pm.** No admission fee. Email: [mmaviation@chestertel.com](mailto:mmaviation@chestertel.com)

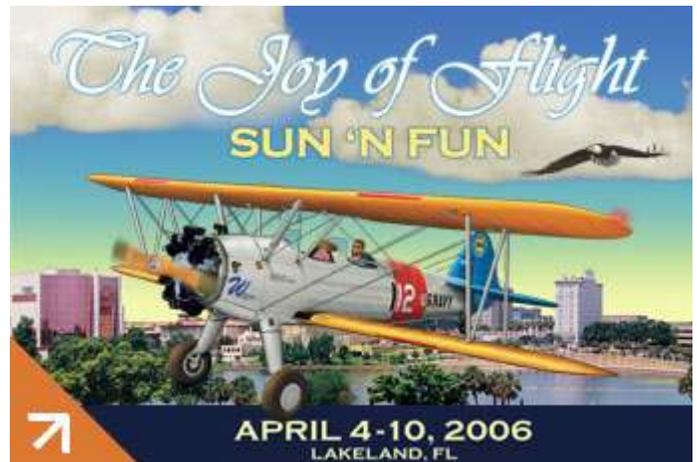
**5/21/2006 White Plains Planta., South Carolina -- South Carolina Breakfast Club, White Plains Planta (SC99).** Remember Our Motto: "Safety First."

**5/26/2006 - 5/28/2006 Holly Hill, South Carolina -- Food, drinks, seminars and demo flights.** Come fly with us and make new friends. You will be glad you did. Email: [legallyhigh@bellsouth.net](mailto:legallyhigh@bellsouth.net) Email: [jack@fly4fun.org](mailto:jack@fly4fun.org)

These Events were downloaded from



### National:



July 24 - 30, 2006

## THREE ZERO NINER

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Bob Allen reports that the Charlotte Aero Club will be managing the FBO at Gastonia beginning March 15.

More pictures and progress on Bill Repucci's RV9A can be found at [www.repucci.com/bill/baf.html](http://www.repucci.com/bill/baf.html)



**Honest, Nora, I was not taking a nap!**

*(Continued from page 2)*

initial +3.5 G pitch up can be maintained until we approach 30 degrees nose up inverted attitude on the front side of the loop, when we make a slight reduction of "deflection" of elevator across the top of the loop to 30 degrees nose down inverted attitude. If we maintained the elevator "pressure" required for the pitch up across the top of the loop, we would stall. This is why we need to understand that as the airspeed decreases, elevator "pressure" decreases when maintaining the same "deflection" and as airspeed increases, pressure increases while maintaining the same "deflection"! Since we understand the difference in elevator deflection and pressure we can move on to the loop.

The Loop in the Aerobat is not a rolling maneuver, so normal coordinated rudders will be used to keep the workload reasonable for the student. Our entry speed is 130 MPH, so do not exceed engine RPM redline during the slight dive to entry speed. We initiate a +3.5 G pitch up with out fixating on the G meter. When you have reached a 30 degree pitch up, look at the left wing tip for reference with the horizon. When flying from the left seat the first tendency during the pitch up is to also apply left aileron because the left hand is being used when pitching up, we also pull down on the left side of the yoke, making the left wing low during the pitch up. You want to center the wing

on the horizon during the 90 degree pitch up. To correct for a low left wing in relation to the horizon, lift the wing with right aileron. To correct for a high left wing, lower the wing with left aileron. The corrections mentioned will help with a level wing attitude across the top of the loop. Once the Aerobatics at a 90 degree pitched up attitude, apply full power. As we approach 30 degree nose up inverted attitude start looking over the nose again and "slightly" reduce elevator deflection across the top of the loop. When we approach the 30 degree nose down inverted attitude, elevator pressure will very "lightly" start to be increased on the back side of the loop. Once we are pitched down 90 degrees decrease power preventing engine over speed. At 90 degree nose down attitude elevator pressure is increasing. Be careful not to pull to hard or you can stall with a 90 degree pitched down nose attitude! As we are pulling out of the loop, we should see +3 Gs, 130 MPH, and cross our wake turbulence creating a solid bump when going back to straight and level flight!

Always obtain instruction from a qualified flight instructor for the aircraft you are flying.

Bill Wilson  
Safe Pilot, L.L.C  
[www.safepilot.net](http://www.safepilot.net)

### WANT ADS

Wanted a **Sensenich fixed prop** 72X (82-85pitch) for a Lycoming O-360 with prop extension and hardware if available. Tad 591-2035

**Hanger spaces** for rent @ Lake Norman Airpark (14A), \$220, call Conni at 875-1200.

Wanted - **Invisible Fence Dog Collar** - 7 volt - call Sara 704-607-1597 or 365-6820.

# THREE ZERO NINER



## UNDER CONSTRUCTION



### Jim Hurd -

A bit of history of N625J: It is an "Express 2000" built at the factory in Wash. State in 2003 and the hours flown off there. It was constructed under the fast build program, where the owner/builder made 3 two-week trips to the factory and was given credit for 51%. The owner was not a licensed pilot and one year later a factory-supplied pilot stalled and crashed the aircraft at the air show in Oshawa Canada. There were no serious injuries, but the aircraft was considered totaled. I purchased the unit from AIG insurance company and picked up in March 2005.

The unit has about 60 hrs total time and is equipped as follows: I/O 550N with 310 HP, and Hartzell 3 blade Prop., dual alternators and no vacuum system, and JPI engine monitor w/fuel flow.

The avionics package consist of: UPSAT MX20, GX65, SL30 w/indicator, 500Stormscope, Stec 62-2 a/p with pre-select, SL15 Audio Panel, CD -DVD player, Electronic H.I.S system w/ remote compass, and Ryan active traffic unit.

Other: The unit has all leather interior with power seats, dual sticks, electric trim, and speed brakes. The speed is better than 200 MPH and 90 gallon fuel supply. Gross weight is 3400 lbs. with a little less than 2000 lb. empty weight.

I hope to fly in early summer. The date has been set back a couple of times and will probable be set back again.

As you can see from the following, the Chapter's RV-6 project spawned numerous projects. If you have a project underway, or are planning to get started let us know.



**Looking much better than the pile of mangled parts Jim started off with!!!**

**Ron Miller** reports: "I still am making progress (slowly) on the **RV-7A**. I have secured hanger space at the Lake Norman airport starting in May. Hopefully I will have an airplane to put in the hanger."

### Project Update: **Zenith 801**

Things have been progressing if but only slowly. An \$880 purchase to Summit Racing satiated some needs for the FWF. This order included many plumbing pieces, oil and water radiators, and fuel filter. Most of the items have been mounted, though I am still working through my thoughts on the best routing for plumbing and cooling ducts.

While those thoughts are still rattling around in my head I moved on to getting the intercom system working. While I have a 6 place intercom, I had planned on installing 5 stations, but at this point I am happy with just 4 stations. I had purchased the stereo add-on thinking it would be something I "needed". Well, now that everyone has their own mp3 players and the fact my girls love Hillary Duff and Valeree likes Sugarland, and I'm happy with Apotheosis it was pure folly to think that everyone would want to listen to the same music. When I actually/finally get around to finishing I will buy another set of lightspeed headsets for the front and use the aux. music inputs on those.

Alas, we now have too many members to fit on this one page. You can go to the EAA 309 member list at <http://www.eaa309.org/> We encourage everyone to invite a friend to be a guest at any of our upcoming monthly meetings or fly-ins. EAA and Sport Aviation is beginning a new, exciting era that makes it much easier to fly and own an airplane.

I also started on the passenger door and have most of it cleco'd together. Mostly trimming the skin to size is what remains.

Now, you may be asking yourself why did I do just one door and the intercom system. Well, my little one has taken a liking to keeping me company in the garage and she often flies to far off destinations. Of course when flying to these far off destinations one does need an intercom and it would be quite breezy without a door. So, bending to the will of the little one the door and the intercom bubble to the top of the must get done list. :-)

Right now I am on to the elevator horn behind the rear seat. Everything was done according to instructions instead of relative to the installation. So, of course the rudder cable guides are too low. Which of course means plating over the holes drilled for the guides and re-drilling. Not rocket science, but an annoyance none the less.

I hope to get the elevator horn, rudder cable guides, and cabin aileron torque tubes drilled by the end of the



Terry Davie's Velocity XL

**CHECK OUT THE NEW TECHNICAL COUNSELOR AND FLIGHT ADVISOR PAGE AT [WWW.EAA309.ORG](http://WWW.EAA309.ORG)**



**Painter was supposed to be here this morning to finish. Aaaaargh. Worked till late yesterday evening to get the shop floor cleaned up (dust free) to be ready for this morning. Could have done it this morning!**

I received my fuselage kit in February, (RV-10) and have been hard at work on the spar bulkheads. I have been making good progress and really enjoy the variety of different parts, as opposed to the same parts in the wings. February marks the one year anniversary since I started the project. To date, the tail cone is done, as well as all vertical, horizontal, and control surfaces. And the wings were just finished in late February.

I hope to have the fuselage complete in 5 months more or less. I also would like to host a get together soon and also get my project inspected. Let my know when would be a good time. Thane States



Insert Airplane Noises here!

Membership

We Need You!

Drive 2006

As always Chapter 309 is looking for new members. This page should be removed and given to a potential member.

The form can be used to pass along enrollment information about the EAA and this chapter.

## About the EAA

The EAA is for both pilots and non-pilots who are interested in the dynamic world of flight. The organization, founded in 1953, offers activities for the entire family on the local, regional and national levels. EAA also offers support programs for those who are building and restoring aircraft.

The EAA is dedicated to serving all of aviation by fostering and encouraging individual participation, high standards and access to the world of flight in an environment that promotes freedom, safety, family and personal fulfillment.

If YOU like airplanes and the people who fly them, **EAA** is for you! For only \$40 you can be a member of EAA (\$58 outside the U.S. and Canada). EAA offers something for enthusiasts of every age and interest - pilots, designers, builders, dreamers and doers - anyone who enjoys the unique freedom made possible by flight. All are welcomed into EAA's growing family.

Call the EAA Membership Department at 1.800.Join EAA (1.800.564.6322) or visit [www.eaa.org](http://www.eaa.org)



### EAA Chapter 309 Enrollment Form

Name: \_\_\_\_\_ Spouse \_\_\_\_\_  
Family

Address: \_\_\_\_\_ Membership? (Y) or (N)

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_(H) \_\_\_\_\_(W)

E-mail Address: \_\_\_\_\_

Pilot Rating: \_\_\_\_\_ EAA Member Number: \_\_\_\_\_

Aircraft Owned(?): \_\_\_\_\_

Current Project(?): \_\_\_\_\_

Membership is open to anyone interested in aviation. Dues are \$25 per year. Mail Enrollment Form with Check payable to EAA Chapter 309 to:

Sam Stewart  
13916 Sledge Road  
Charlotte, NC 28278  
704-588-0776

Pass it On!

EAA Chapter 309  
c/o Ronnie Brown  
18816-6 Nautical Drive  
Cornelius, NC 28031

# THREE ZERO NINER

**NOTICE: The EAA 309 Monthly DINNER MEETING will be held at 7:00 PM, Monday March 20 at John Schroeder's home, 108 Doolittle Lane at Lake Norman Airpark. Pizza and Refreshments.**

**Call John Wigney at 704-664-4167 for more information.**

