



UPDRAFT

Newsletter of EAA106
Greater Boston Chapter

We Build Airplanes!

November 2005
Volume 33 Issue 11

Your Newsletter Editor:
Jeremiah Brazeau

Have something of interest for
the newsletter? Please send it
to: jdb1090@cs.rit.edu

AIRCRAFT FOR SALE !

Want your own
aircraft? Now may be
the right time!

Check Page 6
for details!



PROGRAM INFORMATION →

Nov. Dawn Patrol

STOW Airport
Nancy's Air Field Cafe

Sunday, Nov 5th - 10am

See page 8 & 9 for details
& all Upcoming Events
Know of an interesting
event? – Contact Penny

Saturday November 5th, 9:45 AM -- EAA106 Hangar

(EAA106 member? Please wear your airport badge ...)

Don't have one? – call: 978-794-5880 for appointment to get badge)

Be our guest? - Contact: EAA106.Penny@gmail.com or 508-284-5592 (cell)
to have someone meet you at the locked gate and escort you in.

AGENDA:

09:45-10:00 Coffee, Donuts, & "Hangar Flying"

10:00-10:30 Meeting/Elections/Announcements

break

10:45-12:00 PROGRAM – CORROSION

Back to Basics: Corrosion I Seminar

PRESENTATION BY: JOHN McCARTHY

Mr. John McCarthy is a highly knowledgeable presenter, an aviation maintenance professional and former aviation mechanic school instructor. Bring your questions!

(See page 2 for more info)

NOON COOKOUT

– Last cookout of the season !

We have: Burgers & Hotdogs, Chips, Soda/Water
With all the condiments of

Cheese, Lettuce, Tomato, Onions, Relish, Ketchup, etc.

November Meeting Giveaway → BOOK:

A Century of Manned, Powered Flight

This is a great way to share aviation items (books, models, etc) you no longer need with others who will appreciate and enjoy them. **Have a book or other aviation item for a mtg giveaway? Contact Penny. Thanks!**

A memo from your President - WELCOME to our newest member, Egbert Woelk --- we now have 108 members! Your board is always working to provide the best aviation programs possible, but we could always use some additional ideas. If you know of either a great aviation speaker, a topic for which you'd like to find us a speaker, or if you would be willing to present to the chapter, please contact me. - Penny

News from your executive board – hard at work to make EAA106 even better:

We've been doing a through review of the chapter by-laws after finding sections which are ambiguous. We are working on improved language and addressing omissions. With two reviews so far and a few more planned, we expect to have proposed revisions to review with you within the next few months. We are also reviewing tenant leases and rates. If there are any other issues or suggestions for the board to consider, please send them to me for our agenda. Thanks! - Penny

CORROSION: NOV.5 @ EAA106 Hangar

Thanks to Mary Gabriel, Safety Program Mgr, Airworthiness, BOS-FSDO, for helping arrange for this great program!

John McCarthy will be presenting: **Back to Basics: Corrosion I Seminar**

Here are a few notes on the content of the video he will use as the foundation of his presentation and discussion:

This seminar is based on a video presentation prepared for amateur aircraft builders, aviation maintenance technicians and students, and for all who enjoy learning about the technical aspects of maintaining their aircraft.

Especially important in light of the average age of today's General Aviation fleet, safety education on corrosion can help you to extend the life of your aircraft, as well as reduce maintenance costs over the long term.

Mr. John McCarthy is a highly knowledgeable presenter, a maintenance professional and former mechanic school instructor. Bring your questions!

Among the topics to be discussed are :

Identification of common types of corrosion encountered on aircraft,
the causes of each,
and acceptable methods of removing and repairing corrosion damage in aircraft structures.

WEBSITE of the Month --

Aircraft Wiring for Smart People ~ A Bare-Knuckles How-To Guide ~

Greg Richter of Blue Mountain Avionics has written a 40 page book on how to wire your airplane. You can download it for free at the site below. It is a work in progress, so a few sections are not complete at this time (like wiring of EFIS, autopilots, and engine monitors). He has a certain point of view, and preferences he follows, and some may have other preferences. Still there is a lot of good information in there and you will learn a few things. It is worth reading. -Joel

http://www.bluemountainavionics.com/pdf/aircraft_wiring_04december2004.pdf

Have a story or information that you would like to see in the newsletter?

Please send it to Jeremiah at jdb1090@cs.rit.edu for possible inclusion

Thinking of building a plane? Don't have a lot of money?

Build a plane as a joint project with others!

Have you seen the ad on page 6 for a couple of "SHARES" available for the Glastar project and wonder what that means?

EAA 106 GLASTAR BUILDER'S GROUP

There are two shares out of a total of 13 that are up for sale as a result of the relocation of the partners. Their cost was \$2000 up front with an additional \$200 assessed on two occasions for instruments, upholstery, and avionics. They have also accumulated additional equity as a result of their time spent on building the ship. Their selling price is probably negotiable but this is an assessment of their total equity.

As constituted in the articles of agreement of the builder's group, the completed project will be sold to a flyer's group which will be composed of those members of the original group wishing to fly the ship. They will transfer their equity to the flyer's group. Those not wishing to fly the ship will simply "cash out".

The completed ship will be sold to the flyer's group for approximately \$40,000. The difference between the selling price and the original investment plus assessments will be credited to the individual builders in proportion to the number of hours entered in the builder work session log.

The progress so far is completed tail feathers, wings 90% completed, full gyro panel, NavCom with VOR, localizer and glideslope, transponder, David Clark intercom, Lycoming O-320H engine with all accessories, and fully illuminated instrument panel.

This will be a great ship for cross country use and instrument training.

Contact Ed Dokus Project Manager. **781-365-1279**

SHARE the cost. SHARE the effort. SHARE the FUN.

The continuation of an article submitted by Joel – See last month's newsletter for Part 1:

Stopped Prop Gliding, Part 2

Last month I talked about my motivation for learning the relative glide ratios of my C150 with the prop stopped versus with the prop wind milling. Before I could do the tests with the prop stopped, I had to have a backup plan in case I could not restart the engine with the electric starter. After a brief, unsuccessful, and scary foray into the realm of air restarts, I decided that my backup plan would be to end my test at the approach end of runway 21 at Tewmac with enough altitude to land if I could not restart the engine.

So with my backup plan in place, I setup up a course along Rt 93 heading north towards Tewmac airport about 1/3rd of a mile west of that road. I set up the course along Rt 93 because I knew I was going to be busy, and I did not want to take a chance on getting lost on my way back to Tewmac with the engine off. I knew even I could maintain contact with that landmark. I picked other landmarks to serve as my initial approach fix (IAF) and my final approach fix (FAP). The plan was to pass the IAF at 2500 feet and begin to reduce power to cool down the engine. By the time I reached the FAP, I was at idle power, 1500', and 65 MPH. If it was a stopped prop trial, I turned off the ignition at that point. If it was a wind milling trial, I simply continued the glide. At 1500' I started a stop watch, and recorded the time as I passed through 1000'

and 500'. It was a little tricky because I also had to keep track of my position on the way to Tewmac, look out for traffic, especially in the pattern for Tewmac, and keep the airspeed nailed at 65.

On one trial, I passed an experimental biplane about 200 yards to my right heading in the opposite direction. I wondered if he saw that my prop was stopped, and if he did, what he thought about that. But I guess he never noticed that the prop was stopped, because he never turned around to see the impending crash.

Once I reached the 500' altitude and stopped the watch, I entered a close in left base for runway 21 and started the engine if it was a stopped prop trial. I applied minimal power as the engine warmed up, and continued down to about 200' AGL. By that time I applied enough power to maintain level flight, and when all looked good, I flew through the final approach course to 21, and gradually increased power into a gentle climbing turn to my right to return to the IAF for the next test. Since I now had no fear of using the primer, the engine started immediately every time.

I told you last month that I would give you the results of these tests this time, but I lied. I could not find the data. But I remember the main result. There was no clear winner. Sometimes the stopped prop trial produced a better glide ratio and sometimes the wind milling trial was better. Apparently the two conditions are so close that variations in the thermal activity and in my piloting skills were enough to mask any systematic difference. I had done these tests between 10 and noon in the fall, and had planned to do them again at dawn or dusk when the thermal activity would not be a factor, but I never got around to doing it.

However, I did have an answer to my initial question. And the answer is that, yes, the engine out practice I was doing with an idling engine is an excellent simulation of how MY AIRPLANE would handle if I had a real engine failure. The two glide ratios are so close to each other that I could not tell them apart. However, I am sure this is not true for some other aircraft I will talk about in a minute. But before I get into that, I want to say why I think these gliding tests were not really necessary to answer my initial question.

Last month I described my tests to see how much altitude it would take to restart a stopped engine by diving the airplane. I started out by reducing power to idle, and then trimming for best glide speed which is 65 MPH in the C150. Then when all was stable, I turned off the engine and NOTHING CHANGED (except for noise and vibration of course). The point is if there was much of a glide ratio difference in my airplane between a stopped prop and a wind milling prop, then when I shut down the engine I should have seen a change in the airspeed, and I never did in any of the stopped prop gliding tests I did. So if I had been awake I would have known the gliding tests were not necessary and I could have stayed home and watched more TV.

Even if the glide ratios were different, it still would not have made much of a difference in the effectiveness of the practice. Recall that last month I said before I did the gliding tests I wanted to make sure I could make the landing at Tewmac if I could not restart the engine. I therefore approached Tewmac at several different altitudes and at several different FLAP SETTINGS. Those flap settings greatly affect the glide ratio of the airplane, but this did not affect my ability to make good "dead stick" landings. Apparently we automatically adjust for this. The wind will also change the effective glide ratio of the airplane so we have to be able to make these adjustments all the time. A big clue is the stationary point in the visual flow field. When we look out the windshield as we are gliding in for a landing, all the objects on the ground appear to flow outward from a central point in the visual field. That stationary point is where we will touch the ground if we maintain the present glide angle. I am sure we consciously or subconsciously use this cue to adjust our glide path to our destination on the ground.

All of this started because of an apparent conflict I found between two articles I had read. In the first, a T-18 was on an idling approach to Martha's Vineyard airport and his glide ratio drastically decreased when his engine seized and his prop stopped. The second article was on the AOPA stopped prop gliding tests with a 172. They found a 10% better glide ratio with the prop stopped compared to it wind milling. I now think I understand how to resolve this apparent conflict. The T-18 is a high performance airplane, and it probably had a constant speed prop. The props used on single engine aircraft are usually configured so that if oil pressure to the prop is lost, it goes to flat pitch. At flat pitch the prop had a much higher profile drag, and that brought the T-18 down well short of the runway. The 172 used in the AOPA tests used a fixed pitch prop, so stopping that engine would not dramatically increase the prop's profile drag.

I think the purpose of going to flat pitch in single engine aircraft is that, if you have a prop malfunction on takeoff, flat pitch will allow the engine to rev high enough to produce enough power to clear the trees at the end of the runway. An exception to this rule is the props used in aerobatic aircraft. Those props are set up to go to maximum pitch if there is a malfunction. The idea there is that if the prop loses oil pressure during the aircraft's maneuvering, it is better to go to high pitch rather than risk over revving the engine and/or propeller if it were set to go to low pitch. If oil pressure is lost, the props used in twin engine aircraft are also set up to go to high pitch (or even feather if possible) to reduce the drag on that side, and make the airplane more controllable on one engine. I bring all this up because though idling engine practice is a realistic simulation of engine out glide performance in my airplane, this would not be the case for aircraft with controllable pitch propellers.

My tests were aimed at determining if the idling engine practice I was doing was an accurate prediction of how the airplane would glide in a true engine failure. These tests did not really address the question of whether the glide ratio with the prop stopped would be better than that with the prop wind milling, because in my wind milling condition, I had left the ignition on and therefore more energy was being added than would have been the case in a true engine failure. Of course, I could not do that test in my airplane at 65 MPH because the prop would not continue to windmill at that speed with the ignition off, but it could be done at 75 MPH.

Note that in the event of an engine failure, these results show that there is more to consider when picking a gliding speed than the best glide ratio. If you have hopes of restarting the engine, then you may want to pick a speed at which the prop will continue to turn, even if it produces a poorer glide ratio. Knowing what is the minimum speed at which the engine will continue to windmill could be very useful information. (Obviously you have to be careful on how you obtain that information, because it will not be very useful to you if you kill yourself while obtaining it.) There will also be a very large difference in speeds between when the prop will stop wind milling and when you can get it to start wind milling again without help from the engine. In my airplane, the prop continues to wind mill down to around 70 mph, but once stopped, it will not start to continuously wind mill again until over 150 MPH. Because of this, I would never try to restart a stopped engine by diving the airplane unless I had at least 10,000' of obstacle clear air below me.

Finally, I end with a brief story of how these tests helped me in an unexpected way. Several years after I had done these tests, I was flying back from Washington DC to Tewmac airport after a Thanksgiving vacation. I stopped for fuel along the way, sumped the tanks, and then climbed to 7,500' to fly over the NY TCA (now Class B). Suddenly the engine ran rough for 2 or 3 seconds, and then just quit. The O-200 installation in the C150 is very susceptible to carburetor icing and I have experienced that many times. But this was very different from the way my engine reacts to carburetor ice, and since I had just filled up with fuel, it had all the symptoms of fuel line freezing. I was just about within gliding distance of Kennedy Airport, and was thinking about declaring an emergency and joining the SSTs in my approach to Kennedy. But when I looked down, I saw a small airport directly below me. It was the most beautiful airport I have ever seen. I began a spiral glide down to that airport. I was hoping that when I got down into warmer air, the fuel line would thaw and the engine would restart. Because of my previous tests, I trimmed the airplane for 75 MPH instead of best glide speed so the prop would continue to wind mill. At about 2500' the engine suddenly restarted as if someone had just turned on the ignition switch. I took the VFR corridor through NY's airspace, and never climbed into freezing temperatures again on my way home.

Ice in the fuel system has killed many people. Water is not very soluble in gasoline, only a few hundredths of a percent, but it is enough to kill you. The problem is fuel comes out of nice warm underground tanks saturated with water. The airplane then climbs into much colder air, and the water comes out of solution and freezes in the fuel line or it forms a mist of ice needles that block the fuel screens. An even more deadly scenario can occur after a very cold night. The fuel becomes super saturated with water, then the pilot disturbs this unstable situation by moving the airplane. Instantly the water comes out of solution as tiny ice crystals. These begin to block the filters. The engine then fails shortly after take off, a very nasty situation. Because of this, I vigorously rock the wings of my airplane on winter mornings and then sample the sumps. If the fuel is at all milky, I come back to fly another day. I have seen this several times, but not recently, because I never fly in below freezing temperatures anymore unless I put Prist or aviation isopropyl alcohol in my fuel.

--- Article submitted by Joel – See last month's issue for Part 1 if you missed it.

Have a story or information that you would like to see in the newsletter?

Please send it to Jeremiah at jdb1090@cs.rit.edu for possible inclusion

Members can access the gate unescorted – just get your AIRPORT BADGE !

Call Christine at: 978-794-5880 to make an appointment for your badge.
(Spouses of members can now get a badge, too, if they will be regulars)

FOR SALE ...

Thinking of building a plane? Do it with others!

The Glastar group has **two shares** for sale due to relocation of the members.

Contact the project manager at: dokus@att.net



Want to own an experimental aircraft without the building?

UNIQUE !! Only 6 exist !! And this one "kneels" for you ...

Variviggen N106VV is for sale.

Contact dokus@att.net for particulars.



Phil Moscatiello is selling his Long-EZ

All who know Phil and his airplane know that the workmanship is outstanding. Phil is asking \$35,000 for it. **Tom Marcella is looking for four or five persons interested in buying this airplane with him.** Please contact Tom at 508 829-9018 or thomas_marcella@uml.edu



WE NOW HAVE OUR OWN EAA106 T-SHIRTS !! GET YOURS !!

At the meetings or contact Penny



Scan of actual T-shirt front

Get your T-shirt at the next meeting...
\$15 for EAA106 members
\$20 for non-members
(If you want a T-shirt and can't make it to a meeting, shipping costs about \$4)



Layout... Actual shirt is all yellow background

EAA106 - 12 Missions for 2005

- **Increase quantity of *flyable* homebuilts**
- **Share aircraft building techniques**
- **Recreation**
- **Education**
- **Youth involvement**
- **Aviation Safety**
- **Recruitment**
- **Facilities improvements**
- **Fundraising & Financial Resource Improvement**
- **Communication**
- **Flying**
- **Social**

THANK YOU for making this a GREAT CHAPTER !!!

Please review the discussions (in the newsletters) of all twelve of our EAA Chapter 106 Missions for 2005 and email your suggestions to our President Penny Bowman for what you (each) think should be our twelve missions for 2006. For each of your Missions, please include the Objectives and the numerical Goals you want our Chapter to attain. It is important that she receives your inputs in Nov'05 so that they can be compiled and organized into the Chapter's Missions for 2006 and presented at the business meeting in early January 2006.

***Get inspired ! Implement !
Action is rewarding !***

Note that with the following five Missions, we will have discussed all twelve of our EAA Chapter 106 Missions for 2005.

These five inter-related Missions are Recreation, Education, Communication, Flying, and Social:

Recreation Mission:

Objectives: Aviation for the fun of it! Show & Tell speakers (other than Chapter members) including speakers that are other than those with projects (eg. Survival, manufacturers, authors, etc.). Review EAA106 members' projects.

Goals: Enlist military pilots. Mass Historical Association Society. Check with Nashua Chapter and EAA196. Get Air Traffic Controller speakers.

Education Mission:

Objectives: Promote aviation safety & skills maintenance. Have Technical Advisors and Flight Advisors provide a mini-segment each meeting and in our newsletter.

Goals: Include EAA Technical Advisor and EAA Flight Advisor to report at each chapter meeting. Get a designated Flight Advisor within EAA106 for advising during first-flight preparations.

Communications Mission:

Objectives: Spread the spirit by including the general population into conscious public relations activities. Develop a dramatic web-site.

Goals: Distribute flyers to promote events. Create promotional DVD/Video invitation to Canard Fly-in. implement enhancements to the EAA106.org website.

Flying Mission:

Objectives: Dawn Patrol Activities. Flying competitions. Adult Flying Start (Be a pilot) Program.

Goals: Create a schedule of Dawn Patrols and post on the EAA106.org website. Hold a poker-run competition. Hold a Flying-Start event.

Social Mission:

Objectives: Summer BBQ and Ice-cream social. Winter holiday party. Create committees to involve more members in the actual running of this chapter to develop more camaraderie, relevant vibrancy, and purposeful synergy.

Goals: Schedule each social event and post on the EAA106.org website. Use sign-up lists to increase members' creative inputs and involvement.

Our dynamic EAA Chapter 106 expects all members to be involved in the life-breath of our Chapter, and Help all members achieve the Missions/Objectives/Goals of our Chapter. We sincerely encourage each member to volunteer to join a committee to take charge of a Chapter Mission that you would especially like to see fulfilled.

We look forward to your contacting me, Alan Cate, about joining a committee to energize the Mission of your choice.

Get inspired ! Implement ! Action is rewarding ! Contact Alan Cate, VP EAA106

Come to the meeting on SATURDAY, NOV. 5 to learn about

the possible tour stop of the EAA FORD TRI-MOTOR...



We'll be looking for some input as to whether the chapter would like to host this beautiful plane next year – an event similar to the B17 but with somewhat less manpower since there are no “ground-tours” – only passenger flights (as well as merchandise sales and sharing about EAA). This is not only a fun event, but usually raises about \$2-3,000 for a chapter AFTER expenses – so like the B17, if we want to do this, we will need to create a budget for some signs, flyers, and such which will be presented in January. For now, we need some initial feedback on the desire of the membership to host this plane for a New England stop since our paperwork must be submitted by Nov.15. btw – EAA said they will definitely consider us as a stop even though we are beyond the usual 700-mile tour radius from Oshkosh – the reason: “EAA106 did a STELLAR job hosting the B-17” – quote by Sean Elliott, Director of Flight Operations at EAA HQ. What a wonderful quote and it's all due to you, the membership who did a fantastic job at the B17. The Ford Tri-Motor will be easier. Want to do it? -- Penny

OUR NOVEMBER DAWN PATROL (Fly/Drive destination) -- SUNDAY, Nov 6 10am

❖ SUN, NOV. 6 --- STOW, MA 6B6 Nancy's Airfield Café <http://www.nancysairfieldcafe.com/>

DIRECTIONS at: <http://www.minutemanairfield.com/directions.htm>



Not Just Your Average Hundred-Dollar Hamburger

MENU at: <http://www.nancysairfieldcafe.com/MenuPage.htm> Then click on: BRUNCH

DAWN PATROL - (come join us!!)

For our new members who might not know what is a "Dawn Patrol"... Just like in WWII when a group of planes would go out on a Dawn Patrol to a selected destination, we select an aviation destination each month for an excuse to fly (or drive if wingless) and meet up for some chow (breakfast or lunch) and "hangar flying"... We usually pick an aviation destination where some event will be happening, such as a fly-in if there is one. If there is no specific aviation event, then we pick an airport restaurant. It's lots of fun...

NEXT DAWN PATROL: SUNDAY, NOV-6 MINUTEMAN (STOW,MA) AIRPORT ---- Meet at 10am

Upcoming Aviation Events:

OUR NOVEMBER DAWN PATROL (Fly/Drive destination) -- SUNDAY, Nov 6

❖ **SUN, NOV. 6 --- STOW, MA** **6B6 Nancy's Airfield Café** <http://www.nancysairfieldcafe.com/>
 DIRECTIONS at: <http://www.minutemanairfield.com/directions.htm>

Next possible DAWN PATROLS ...

❖ **SUN, DEC. 4 --- NORWOOD, MA** **OWD The Runway Café** **781-769-3550 (no website)**
 DIRECTIONS at: <http://www.ci.norwood.ma.us/Airport/Default.htm>

❖ **SUN, JAN. 8 --- BEVERLY, MA** **BVY Something Different Café** <http://www.airportcafe.com/>
 DIRECTIONS: <http://www.beverlyairport.com/html/directions.html>

❖ **SUN, FEB. 5 --- NASHUA, NH** **ASH Midfield Cafe** **603/594-0930 (no website)**
 DIRECTIONS at: <http://www.nashuaairport.com/>

❖ **SUN, MAR. 5 --- LAWRENCE? FITCHBURG? -- TBD**

❖ **SUN, APR. 2 --- TBD**

Do you know of any interesting UPCOMING EVENTS or suggestions for DAWN PATROLS? Contact Penny.

Our NEWEST MEMBER !

Please welcome the following new member – Egbert Woelk

Egbert is a pilot with an aircraft based at LWM. **Welcome to EAA106!**

**We now have 108 members ! Know someone who has an interest in aviation?
 Bring them along to a chapter meeting as a guest and send them our latest newsletter!**

NOT YET A MEMBER?

JOIN EAA106!

END OF YEAR NEW MEMBER SPECIAL

- **JOIN now through December 2005**
 at the regular price (\$20 for e-mail or \$24 for snail-mail) and your membership is good for balance of 2005 as well as entire year of 2006. See www.EAA106.org for form

If you are new to EAA106, or a guest ? – NEED DIRECTIONS?

Go to our June Fly-In section of our website www.EAA106.org for maps and text directions.

We'll staff the gate for a while, but if you arrive late and find the gate locked, someone will come escort you in if you call: **508-284-0045 (1st) or 508-284-5592 (2nd) or 978-683-8751 (3rd)**

Questions? Please contact Penny Bowman at EAA106.Penny@gmail.com or 978-887-3242 4-8pm (cell 508-284-5592)

Not a member? – Come as our guest -- Contact EAA106.Penny@gmail.com for escort to hangar (cell # below)

CORROSION ... -

A presentation prepared for amateur aircraft builders, aviation maintenance technicians and students. Among the topics to be discussed are identification of common types of corrosion encountered on aircraft, the causes of each, and acceptable methods of removing and repairing corrosion damage in aircraft structures.

Program/Meeting at EAA106 Hangar

Contact EAA106 President for map and directions: EAA106.Penny@gmail.com
 or 978-887-3242 (4-8pm weekdays; all weekend)
 At gate, call: 508-284-0045 or 508-284-5592

End-of-Mtg Drawing (book):

A Century of Manned, Powered Flight

(September's book winner: Joel Ventura)

SATURDAY November 5th, 9:45am

At our own EAA106 hangar

(Pls wear your Airport Badge if you have one)

AGENDA:

09:45-10:00

Coffee & Chat

10:00-10:30

Meeting - Elections &

BREAK

Announcements

10:45-12:00

PROGRAM -

Back to Basics: Corrosion I Seminar

Mr. John McCarthy is a highly knowledgeable presenter, a maintenance professional and former mechanic school instructor. Bring your questions!

NOON

COOKOUT

PRESIDENT	Penny Bowman	PO Box 420	Topsfield MA	01983	(978) 887-3242
VICE PRESIDENT	Alan Cate	352 Mountain Road	Concord NH	03301	(603) 224-2398
TREASURER	Ed Dokus	13 Taylor St	Burlington MA	01803	(781) 365-1279
SECRETARY	Mac Knapp	145 Forest Hill Ave	Lynnfield MA	01940	(781) 334-4985
Hangar Manager	Steve Sides	160 Frost Rd	Tyngsboro MA	01879	(978) 649-9286
Hangar Comptroller	Joel Ventura	11 Yardley Road	Andover MA	01810	(978) 475-6875
Newsletter Editor	Jeremiah Brazeau	3224 Avalon Dr	Wilmington MA	01887	(978) 988-1090
Newsletter Publisher	Joe Ryan	193 High St.	Reading MA	01867	(781) 942-5844
Webmaster	Rebecca Harvey	7 Duston Lane	Acton, MA	01720	(978) 287-5457
Young Eagles Coord.	Mark Saklad	4 Hilda Rd	Bedford, MA	01730	(781) 275-3458

EAA 106 Website: www.eaa106.org

EAA 106 Hangar (978) 683-8751

This Newsletter is for communication and enlightenment, but should **not** be relied upon as absolutely correct in content.