



EAA602 Log Book

Adirondack Chapter Newsletter
February 2006



The following letter was sent to me last week by one of our charter members. Great to hear from you Gary!

If you'r ever in the area, get hold of one of our members. I know of many who would love to give you a ride around your old diggens. Doug

To Chapter 602:

Greetings! Received the January issue of the EAA602 logbook today and was suitable impressed. After my 20 year absence, 602 provides me with great memories of a wonderful bunch of folks. It truly warms my heart to read that 602 is still in capable and enthusiastic hands.

Although many of you are new to me, you've probably heard and saw my name in the early years of the Chapter newsletters. With the 602 old timers, we founded and help set course for Chapter 602, and were instrumental in helping form the Schenectady Chapter, promote construction of the new Fulton County Airport and formation of the Empire State Aero Science Museum. Now with the fresh blood, as

I've read in the logbook, taking charge, I see only a rosy future for sport aviation in the Adirondacks and Mohawk Valley.

I was also pleased to read Paul Steenburgh donated a kit project, as he was my first passenger I flew as a private pilot in 1969. We grew up together in Johnstown, a great guy. Say hello to him for me.

I am no longer a mechanic with US Airways. After 19 1/2 years, I took an early out and am now in product development as a technician with Bayer (yes, the aspirin people) Material Science in Pittsburgh. The airline industry is going through a cleansing of old airlines with the low-cost carriers being the survivors. General aviation looks like the only exciting field left. I'm helping a neighbor rebuild a 1962 Piper Colt, and he has a 1953 Tripacer, a future project.

Give my best regards to all and look forward to future logbooks. Clear skies,

Gary Lampman

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February 7, 2006

Mark McCumber
Air Traffic Manager
Albany Air Traffic Control Tower
128 Sicker Road
Latham, NY 12110

Dear Mr. McCumber,

Here's a copy of the letter Tim sent to the FAA regarding our Albany Tower Tour.

On behalf of our entire membership, I would like to express our thanks for the outstanding tour of the Albany Air Traffic Control Tower on January 30, 2006. As you could see from the number of people we had in attendance, there was tremendous interest, even from some of our veteran pilots! From the 9/11 presentation in the conference room, right to the end, the tour was a fascinating and informative look into how things operate behind the scenes when we fly. The courtesy and professionalism displayed by your staff, especially our tour guide John Gray, was incredible, and reflects favorably on your leadership and on the FAA. Please convey our deepest appreciation to every one of the controllers present. I don't think any got away without answering a few questions! Our members are still talking about what a great trip it was. Thanks again.

Sincerely,

Timothy J. Cowper
President
Adirondack Chapter EAA 602
Edinburg, NY
tcowper@nycap.rr.com

Your Newsletter

This month one of our new members Larry Saupe sent in a very informative article for all flyers, safety being of paramount concern for all of us. Thanks for your input. It's to all of our advantage that we receive this interest from our members.

Don't forget, this is **YOUR** paper. Please send me your aviation related articles. Try to make them fun & informative in their presentation. Also, let me know about any flying events happening in this area. Thanks! Doug

Up-Coming Events

April 4-10

EAA Sun-N-Fun

Lakeland, FL

May 31-June 4

2nd Annual Can-Am Fly-In Speculator, NY

June 21-24

Sentimental Journey

Lock Haven, PA

July 8-9

Geneseo Air Show

Geneseo, NY

July 24-30

AirVenture

Oshkosh, WI



From The Presidents Desk

If it weren't for my daughter's birthday, I would have no use for February. March isn't much better, but, let's face it, we live in the Northeast. We're the "Adirondack Chapter." There is no sense in complaining about cold weather. We have to embrace it. Now is the perfect time to work on our planes or plane projects so that they will be ready to fly when the warm weather comes. I know that winter can suck the ambition out of even the most disciplined person, leaving only the desire to lay on the couch twitching a finger on the remote so that colored lights on glass keep changing shape. But, that doesn't get your plane built. Come on people, April is roaring toward us like a freight train! You wanna get run over, or do you want to be soaring above it all! Please, get to work!



There is much happening this winter with 602. If you missed the Albany Tower trip you missed a fun and interesting adventure. I have always been apprehensive and nervous about talking on the radio for fear of being yelled at for saying the wrong thing or something. The controllers we met in Albany totally dispelled the myth that they are nasty, unforgiving types, ready to verbally berate you at a moments notice. During the tour, we found out that they are really nice guys who were very pleasant to be around, and they treated us just like regular humans.

Our Sport Pilot ground school is up and running but it's never too late to join us for a fun and informal class. Even if you already have your license, any license, don't hesitate to stop by and sit in with the group. Nothing is better at reinforcing good book learning than listening to experienced pilots give actual accounts of situations they have encountered in the real world. Much thanks goes out to Chris Brown for allowing us to meet in his beautiful new workshop, which is well lighted, warmly heated, and stocked with delicious cookies thanks to his wife Katie. And don't miss the tour of the 195 Factory on February 27th. That should be very interesting. Thanks to Ken Sherwood for providing us the opportunity to see his facility. Also, as a special treat, Ken has agreed to give interested members an informative lesson in welding, coming up in the first week of March.

When you think about it, participation in 602 events is the perfect way to kill the winter doldrums & spark your aviation ambitions for 2006. This is why we have a club.

I have a few requests, well, lots of requests, really, but I'll outline three of them this month. First of all, I would like to have a "Members" page on the website where members can go and "virtually" meet other members of the club, see what projects they're working on,

and what planes they're flying, etc. I'm requesting that each member send me a current picture of themselves, their project(s), aircraft(s), etc., as well as a brief history and Bio. If you only have a picture and a Bio, that's ok too. For those without computers, I would like to revive the old "Know your Fellow Member" part of the newsletter. Second, I'm looking for information, memorabilia, photographs, news articles, drawings, pretty much anything related to the history of 602. On our updated website I'd like to have an historical archives link. I'm hoping to create a sort of digital 602 history museum of past members and their accomplishments. So please, scan whatever you have, or photograph it, and send it to me. I'm not asking you to give me anything that you don't want to part with. The best thing you could provide me would be information/stories from past 602 people/adventures/outings/events/etc. You can email me or snail mail it. And, I'm looking for a volunteer to be club Historian: computer skills and Internet access is a plus, but not required. The last thing is this: We have some really smart, talented, knowledgeable, builders and pilots in our club who have much skill and experience and I'd like to see if we can extract some of it for the benefit of the members. Please, everybody, think about what you know, about any aviation topic, including history, and consider writing an article for the newsletter. It doesn't have to be long, or comprehensive, and there are no commitments to do it again once you've written something. Pick an aviation topic you're interested in and I guarantee others in the club will be interested too. If you have any questions about anything please contact me.

Remember, the welding class, like the ground school, is extra, so the regular monthly meeting will be held as usual, on Monday, March 27, location to be announced. This will be an important meeting, as we will have a full agenda regarding the current status of the club and its members, as well as a full Treasurer's report, and a discussion of activities for 2006. Please, this is your club. If at all possible, be there, so you can have a say as to where we're headed. Tim

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New Members:

The last 2 months we have had quite a few new members. I would like to welcome them to our Club.

Julius Enekes	Arthur Goodemote
A.J. Hart	Edmond Quillinan
Larry Saupe	Peter Szczebak
Harry Wirtz	



A Few Notes on Carburetor Icing by Larry Saupe

Last weekend (February 4th) a fellow powered parachute pilot down in Sharon Springs narrowly averted an engine out situation due to severe carburetor icing. His craft uses a Rotax 447 2-stroke power plant. In general, 2 strokes have been regarded as less prone to carburetor icing than their 4 stroke counterparts. This assumption sometimes ends in complacency for the pilot using 2 stroke power.

Charts are available to be able to determine carburetor icing will be most probable for typical aircraft (see Figure 1). This chart indicates icing probability based upon engine loading, ambient temperature, relative humidity and specific humidity. Though not typically shown on the chart, engine design, carburetor design, fuel composition (volatility) and atmospheric pressure are also major players in this equation and should not be neglected. Ice is formed in the carburetor when the air cools to a temperature below 32 oF. In a venturi style carburetor the sources of cooling are of two primary categories:

Aerodynamic

Air being pulled into the carburetor is accelerated to a low pressure in the venturi/throttle section. This high speed flow results in low pressures with corresponding low temperatures. The key variable here is the amount of pressure drop experienced in the venturi for a given flow rate. At low power settings with relatively high RPM (as would be experienced during cruise or decent), the pressure reduction is the carburetor can be very high resulting in very low temperatures. Icing would be most pronounced during low throttle setting operations, and less pronounced during (wide open) full power settings.

Thermodynamic

Fuel being vaporized in the venturi cools the incoming air as it necessarily robs heat from the air to complete the vaporization process. This is the very same process used to cool air in the summer using an evaporative cooler etc. The key variable here is fuel volatility (its ability to vaporize). The higher the volatility of the fuel, the higher the rate of cooling in the carburetor. It should be

noted that automotive gas is typically more volatile than AVGAS, and as such contributes more to the icing problem. Also, for automotive grades, higher volatility blends are produced during the winter months. This helps to start your engine in very cold weather, but ultimately creates a higher propensity for carburetor icing. Something to keep in mind when running automotive fuel on those warm winter days.

So... what were the conditions that let to the near engine out in the first paragraph and what were the indications to the pilot?

Ambient T: 35° F
Relative Humidity: 85%
Power: Cruise @ 4,200 RPM
Fuel: Automotive pump gas (assumed to be winter blend)

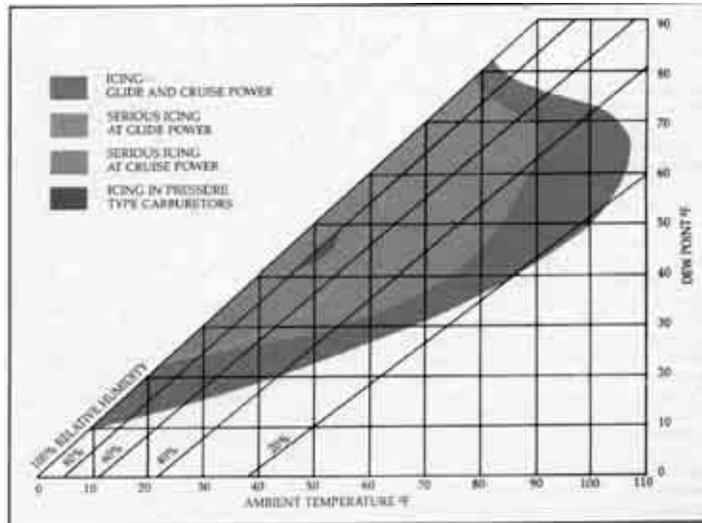
The pilot took off at 8:00 AM into calm skies with scattered ground fog. Spectacular scenic sunrise conditions. About 20 minutes into the flight the engine began to gradually lose power. This was accompanied by lowering EGT's and rough running. Backing off on the throttle resulted in almost losing the engine. Marginal response

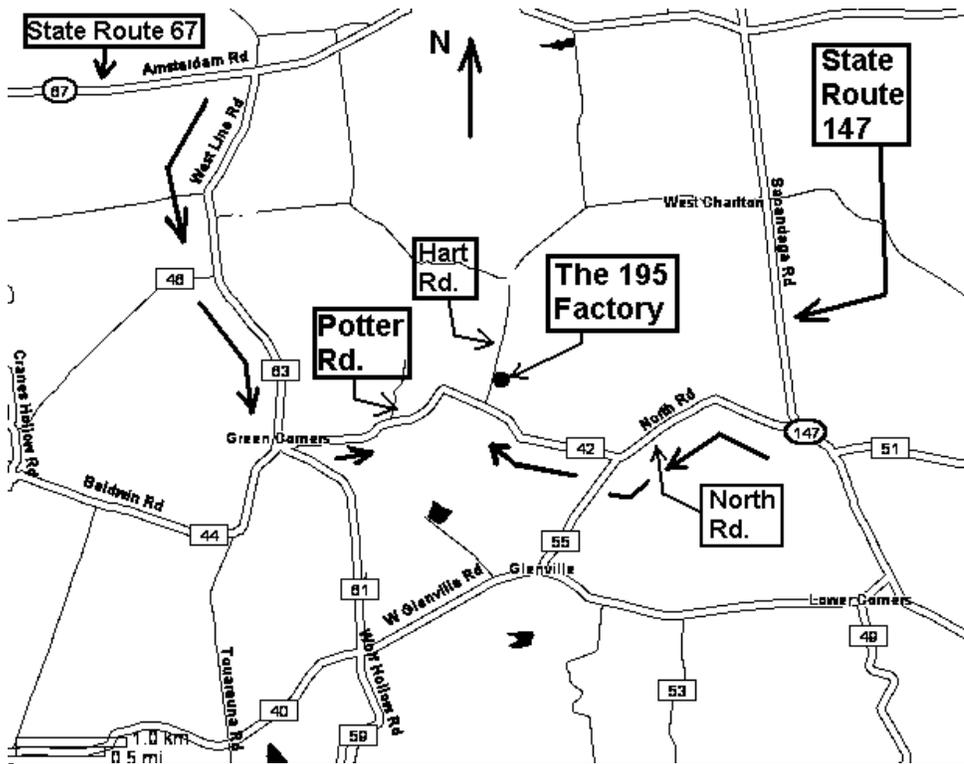
was had by placing the engine at full throttle. With the engine running at a full throttle setting, engine power slowly started to recover. During this process, the EGT was fluctuating wildly (from normal operating temps to very low temps). At this point the pilot noticed severe frost occurring on the outside of the carburetor (so you can imagine what the inside looked like). The pilot was

able to make a safe landing, however the engine almost stalled once the throttle was again retarded. Heavy frost was still on the outside of the carburetor when he landed. Engine ran fine once all the ice had been melted and a cautionary inspection of the float bowl was conducted (to ensure no ice melted down the needle and into the bowl).

I have heard of other 2 stroke pilots running into very similar circumstances during conditions such as this. One well known PPC pilot (known simply as "Q" to the PPC world) was fast enough to pull off his air filter after an icing problem and snap a picture. This image is provided in Figure 2.

Further research into the matter brought forth a Rotax Service Bulletin (UL_004_94) which outlines conditions for icing and carb heat mechanisms for prevention. This document will soon be available on the new EAA 602 website (along with other relevant articles on the topic). This bulletin states that icing will be most prominent with ambient temperatures between 36 oF and 46 oF with high relative humidities.





February Meeting

The February 27th club meeting will be a tour of the 195 Factory located at 164 Hart Road, West Glensville, NY.

We will start at 7pm. Check out the map.

From the North/West: Take ST-67 from Amsterdam to West Line Rd. Right onto Touareuna Rd. & go south to Gerrns Corners. Go left onto Potter Rd. & go east until you see Hart Rd. Turn left on Hart Rd. & its first house on right.

From North or South East: Take 147 North or South to North Rd. Go West on North Rd. & when you come to Hart rd. Turn right on Hart Rd. & its first house on right.

We would like to update your information. Please send in the form below.

(You Can Also Send In Your Dues With This Form)

Name _____ EAA Number _____ Exp Date _____

Address _____ City _____ State _____ Zip _____

Home Phone _____ Cell Phone _____ Work Phone _____

E-Mail _____ Ratings _____

Experience Years _____ Hours _____ Aircraft Owned _____

Mail To: Douglas Sterling ~ 819 North Shore Road ~ Hadley, NY 12835



EAA602

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Hadley, NY 12835**

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EAA Chapter 602 Non-Profit Declaration and Legal Disclaimer

EAA Chapter 602 exists as a non-profit organization whose sole purpose is to promote the interests of its members. EAA 602 Chapter Officers, Directors & Leaders serve without compensation & have sworn to carry out the will of the membership by means of Democratic processes and rules of order set forth in the chapter's by-laws. No claim is made and no liability is assumed, expressed or implied as to the accuracy or safety of material presented in this publication. Viewpoints of those who contribute to this newsletter are not necessarily those of EAA Chapter 602, the EAA, or their board or members. You must be of good character, adhere to the chapter's by-laws, and respect the chapter's Mission & Value Statement to become a member of the chapter. Dues are \$12.00 per year payable to Chapter Treasurer. Chapter dues are payable in June. New members joining before or after the month of June are prorated at \$1.00 per month of the calendar year. Member correspondence & newsletter contributions are encouraged which can be submitted by mail to the address appearing on this page or e-mail to newsletter editor.