

# MILE HIGH FLYER



**SEPTEMBER 2000**

**VOLUME 24 ISSUE 9**

## **100LL FUEL DEMISE**

EXCERPTED FROM THE CHAPTER 301 NEWSLETTER

### **EAA, COALITION LEAD DEVELOPMENT TO REPLACE LEADED AVIATION FUEL**

**T**HE writing is on the wall: we are facing a worldwide phase-out of lead additives in fuel that could lead to the end of leaded aviation fuels. Some predict that 100LL could become difficult or prohibitively expensive to obtain in as few as six years. Others predict this could happen within 10 years.

The laws of supply and demand, not environmental pressures, have more to do with leaded fuel's decreasing availability and increasing cost. General Aviation is the only current user of leaded aviation gasoline. Business and cargo aircraft, users of the vast majority of 100LL today, continue to transition to jet aircraft. In 1995, only 250 million gallons of 100LL were produced, a mere .2 percent of all jet and motor gasoline produced. As demand for this specialized aviation fuel decreases, the price will increase.

EAA is hard at work to ensure that the 100LL phase-out does not lead to a limited and expensive fuel supply for its current users. These users are generally certified to use only the old 91/96 or 100LL fuel. Most of the active single-engine fleet, approximately 68 percent, is able to use 82UL, which is currently about 40 percent cheaper than 100LL.

As a member of the General Aviation Environmental Coalition, EAA has joined forces with HAI, GAMA, AOPA, NATA, and NBAA to foster development and implementation of a high-octane, unleaded aviation fuel replacement for 100LL AVGAS that is ...

- Environmentally friendly to the maximum extent.
- Compatible with existing fuel distribution infrastructure.
- Not requiring significant redesign of the present fleet.
- Available within 5 to 10 years.
- Reasonably cost-beneficial.

The coalition is also working to prevent the EPA from enacting a prohibition against all ether additives in fuel, specifically ETBE. This additive has shown the most promise to date in providing a possible replacement for leaded avgas. It's clear: 100LL's days are numbered. By working with the GAEC, EAA is confident a solution will be found for a compatible, cost effective and environmentally friendly fuel alternative.

### **SEPTEMBER MEETING:**

This month's meeting will be **Saturday, September 9th, 7:00 PM** at **Tri-County Airport, Erie CO**, at Blue Grassfield's Mad Eagle Aeronautical Hangar. Take CO Hwy 7 to Road 1 on the west side of the airport. Go north about 1/2 mile, bear right onto the gravel road that leads to the big dark green hangar. Turn right at the gate.

The program will be the "Engine Turning" metal finishing demonstration by George Hayes previously scheduled for last month.



## August Meeting Minutes

August 12, 2000

The meeting was called to order at 7:05 PM by President **Roger Standard**, at the Mad Eagle Aero Hangar at Tri-County.

VISITORS: **John Tedder**, member of Chapter 301; **William (Bill) Elder**, building a Kolb Mark III; **Bruce and Charlene Knoll**, from Greeley, who have built a Van's RV-6A; **Walter Breakell** of Boulder, who wants to buy a flying Long EZ. Welcome!

JULY MEETING MINUTES: M-S-P'd (Moved, Seconded, and Passed by vote) as published.

TREASURER'S REPORT: **Bob Wilson** noted that we have a balance of \$2200.72 in the chapter account.

PROGRESS REPORTS: **Marvin Wahl** has made excellent progress since his recent health problem and was in attendance! **George Meshko** reported that the NSI engine in his Zenair 701 threw a rod and trashed the engine on take-off. The engine has been sent to NSI for investigation. **Michael Maya Charles** reported that he has his Cessna 182 back in the air. **Cliff Begnaud** gave a status report on the Glasair company. He said that he and **Patti** have given up on the Glastar and have decided to buy an RV-9 kit. **George Hayes** took the cooling fan off the Ultra Piet and it now gets more RPM and cools better, with improved T.O. and climb.

TRIP REPORTS: **Ruby Lanich** flew in the Explorer from Kearney NE to Oshkosh, and even got some stick time. **Steve Beach's** return trip from Oshkosh ended in a farm field after the C-170 he was a passenger in threw a rod (Something going around or what?). Fortunately, there was no damage to either aircraft or occupants in the off-airport landing. **Ted Lemen** got to go fishing with **Tom Young** in Alaska. **Michael Maya Charles** flew the Standard five place bi-plane to Sturgis SD to give rides to the motorcyclists gathered there. **Cliff and Patti Begnaud** flew to Yellowstone and Arlington WA and also to Oshkosh and back in their well-traveled Kitfox. **Dave Bieseimeier** flew to Kitty Hawk NC for the AirVenture Cup Race. (Did I mention that I beat two RV-6's?)

(The secretary/editor needs help with names on the progress reports - please state your name along with your report.)

SAFETY: **Ron Denight**, Chapter 43 Tech Counselor and Safety Rep., reported that accidents have been happening due to oversight of problems that should have been caught during preflight. In short, ensure that your aircraft is in a condition for safe flight.

GENE'S CORNER: **Gene Horsman** indicated that the Aeroshell Flying Cow has been given a name via a contest: She is hereafter to be known as "Amoolia Earhart". Also, a crazed group of rocket scientists have decided to build a working replica of the German W.W.II ME263 rocket powered fighter - attack dart.

BILL MITCHELL: **Bill** brought an information pamphlet from the ultralight group which details basic information about their group for visitors and folks interested in joining their group. He felt that it might be a good idea for our chapter to look into doing something similar for our members to hand out when someone inquires about our chapter. It seems to have been left for later discussion.

PROGRAM: The evening program was as enjoyable slide presentation by **Gerd Bode** on the construction of his Swearingen SX 300 two place retractable kit. It took 15 years to build. A very difficult project indeed!

If you have a problem with your address label please let me know. My e-mail address is: [ehorsman@juno.com](mailto:ehorsman@juno.com) and my mailing address is 210 Lookout View Ct., Golden CO 80401-2518. Phone 303/279-5782. Thanks. **Gene Horsman, Database Editor**



## Steve's Corner

By Steve Beach

### 4TH ANNUAL FULL MOON HANGAR PARTY:

Will and Sarah Barclay asked me to extend an invitation to all Chp 43 members to attend their annual Hanger Party. This year's event will be on Saturday, September 16<sup>th</sup>, starting at 7:00 pm. The party is held at the Boulder Airport in their main hanger at Business Aircraft Sales. The hanger is the last structure to the East on the South side of the runway.

There is free food and drinks and you can swing to the tunes of the 40's with the Dean Bushnell Orchestra. They always have great-catered food, but you might want to plan on being there early before it runs out. They also have awards for the best 40's dress, furthest traveled, best swing dancer and more. I have seen a few 43er's there in past years, so ask around, some of our other members can also attest to the good time you can have by attending.

As a side note, Will and Sarah have just purchased the Flat Irons FBO at Boulder. Stop in and say hi.

### N-NUMBER & LANDINGS .COM

Most of you already have an N-Number for your project or aircraft. However, if you are still at that point where you need to get one, or at least reserve one, a good web site to get acquainted with is: [www.landings.com](http://www.landings.com)

They have the most recent list of N-Numbers and whom they belong to. 'Most Recent' is a relative term because the FAA no longer publishes a listing of current N-Numbers or even available N-number. Landings tries to keep a current list through information that is available from the general flying public and what information is available through Oklahoma. This site at least gives you some idea if the number that you have been thinking about already has an owner or is reserved. (Be sure to check both the active and reserved listings.)

### AIRSHOW!

One last big airshow is coming up on September 9 & 10 in Grand Junction. The Blue Angels and Northern Lights are the main performers with many others on the schedule. Other than the Thunderbirds at the Air Force Academy graduation this is only time that Colorado has seen a major team this year.

### AIRVENTURE 2001:

For anyone that may not have seen the announcement, AirVenture is moving by one day. It will now run from Tuesday July 24<sup>th</sup> through Monday July 30<sup>th</sup>. They think that will help spread the crowds more evenly through the and, as long as the last day is usually a bust anyway, it might just as well be on a Monday.

### ROCKY MOUNTAIN REGIONAL 2001:

The early planning stages of RMRFI 2001 have begun and the committee is in need of some key people. For instance, if anyone would like to take a shot at heading up the Saturday night banquet, or try to sell some advertising for the program, or assist with the insurance, permits etc. with the city of Longmont, or head up getting the seminars arranged and scheduled. . . . . OK you get the idea. Please talk to any of the committee members from the chapter for more information: Gene Horsman, Steve Beach or Roger Standard.

George Hayes has tentatively accepted the head judge position for next year. If you would like to be a judge again or have an interest in becoming one please contact George at one of the next meetings. Many thanks to Dave Bieseimer for a great job as head judge RMRFI 2000. Lyne also deserves a round of applause for all of the help that she gave Dave and the committee.

By October we should have a complete list of positions that will need to be filled in order to have a successful fly-in. If you have any suggestions please let one of the committee members know what it is. Thanks again to everyone that helped out in 2000 (the most successful fly-in ever).

### WANTED

I am looking to rent some hangar space for an extra wing crate I am coming into possession of. The create is 24 feet long, 53 inches tall, and 22 inches wide, and weighs 700 lbs. I would like to rent the space for approximately one year. The crate is wood and could have other material stacked on top of it.

Please contact Mark Madden

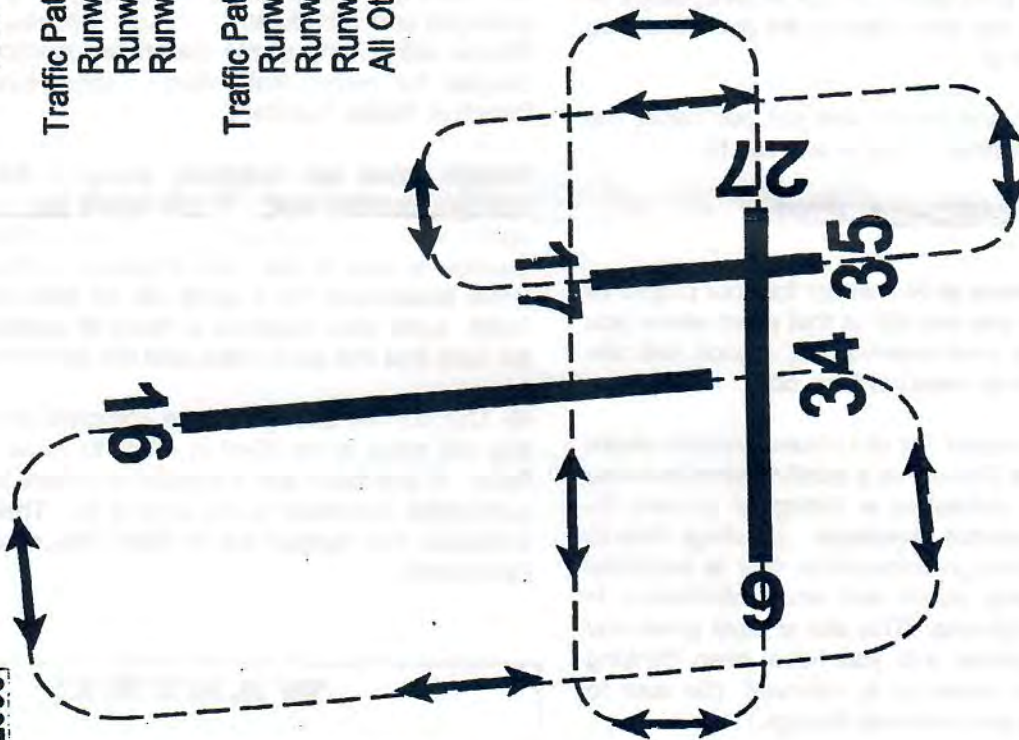
Phone: 303/465-0948, email: [markmadden@earthlink.net](mailto:markmadden@earthlink.net).



## NEW RUNWAY AT GREELEY

The following diagram shows the new runway and traffic patterns at Greeley-Weld County Airport. Be aware that there are now right hand patterns for 16, 27, and 35. You might want to keep this diagram in your plane for reference for awhile until your get used to the new situation.

- Preferred Use Runway  
Takeoffs & Full Stops  
Touch & Go
- Runway 34  
Runway 35
- Traffic Pattern Altitudes  
Runway 16/34  
Runway 17/35  
Runway 9/27
- 5,500'  
5,500'  
5,500'
- Traffic Patterns  
Runway 16  
Runway 27  
Runway 35  
All Other Runways
- Right Traffic  
Right Traffic  
Right Traffic  
Left Traffic



**Greeley-Weld County Airport  
Traffic Patterns & Procedures  
Effective August 11th, 2000**

### Departing Touch and Go Aircraft

Takeoff on Runway 34 or 16 as appropriate, depart traffic pattern on 45 degrees from crosswind leg. Circle north or south as appropriate, and re-enter downwind leg for Runway 35 or 17 on 45 degree entry.

**Note:** No VFR operations on Runway 9/27 when ILS to Runway 34 is in use unless the appropriate Denver Tracon Approach frequency is being monitored by the VFR aircraft.

**Note:** Runway 9/27 will close on August 14th for approximately six weeks, during which time it will be re-configured to 5,800'. Runway 17/35 will be closed during a portion of this period as well. Also, the east end of Taxiway A will be re-aligned.



## SUGGESTIONS ON ENGINE STARTS

REPRINTED FROM THE TEXTRON LYCOMING "FLYER" NEWSLETTER.

An important part of the engine starting procedure is the priming technique involved. Of course, the pilot's operating handbook will specify the steps in starting a specific model engine. However, some of the pilot handbooks may not explain why certain procedures are used in the starting process.

Priming can best be accomplished with an engine priming system, as opposed to the use of the throttle. The primer pumps extra fuel directly into the cylinder intake port or induction system. Some float-type and pressure carburetors also provide a supplemental source of priming. Lycoming engines of more than 118 HP have a throttle pump which can be used for priming under moderate ambient temperature conditions while turning the engine with the starter.

Pilots should, however, be advised that excessive throttle priming can cause flooding of the carburetor and airbox, and result in a fire in the induction system or on the outside where the fuel drains overboard. If the operator floods the engine by pumping the throttle and has a fire, it is possible to handle such a fire in the early stages by continuing to turn the engine with the starter, thereby sucking the fire back into the engine. Furthermore, if there is any fire on the outside of the engine, if the engine starts there is a good chance it will blow out the external fire.

Flooding of the engine without a fire, the operator should open the throttle full and close the mixture; (see Operator's Handbook on mixture) and turn the engine over several times with the starter to clear it; then begin again with a normal start routine.

Most Lycoming fuel injected engines are simply primed by turning the fuel boost pump on, opening the mixture briefly to full rich, and cracking the throttle. Any pumping of the throttle is ineffective until the engine begins to fire.

### Additional notes on starting:

After the engine starts, monitor the engine oil pressure gage to ensure that oil pressure is building to normal levels. If no oil pressure is indicated after thirty seconds (60 seconds in cold weather), shut down the engine and determine the problem before further operation. Operate the engine at 900 - 1000 RPM for the first several minutes to allow the engine to warm up and smooth out before taxi.

Always preheat a cold engine in below freezing temperatures to ease starting, reduce wear and to ensure good oil flow at start up.

## ENGINE Q. AND A.

ALSO FROM THE TEXTRON LYCOMING "FLYER".

**QUESTION:** Do your new, remanufactured, or overhauled engines require a break-in period that consists of cruise at low power settings?

**ANSWER:** Definitely not. Fly them as you would a high time engine. In fact, so-called "slow" flying may have harmful effects. The rings may not seat properly resulting in higher than normal oil consumption.

**QUESTION:** At what rate of oil consumption does continued operation of the engine become a hazard?

**ANSWER:** Generally speaking, when the oil consumption reaches one quart per hour, corrective action should be taken. However, maximum permissible for each particular engine is listed in the engine operator's manual.

**QUESTION:** What are the dangers of operating an engine with high oil consumption?

**ANSWER:** When excessive amounts of oil get past the rings, there is danger of the ring sticking or breaking with a dramatic rise in oil consumption. Then oil soaked carbon forms at a fast rate. At the same time, the presence of oil in the combustion chamber has the effect of lowering the octane rating of the fuel. Operating temperatures go up. We have now set up conditions inviting detonation and/or preignition.

**QUESTION:** I fly an aircraft equipped with a fixed pitch propeller. During cruise I'm told to keep increasing the RPM as my cruising altitude is increased. Since I fly pretty high, in order to hold 65% power, I find the RPM is mostly 2550 to 2600. Won't this high RPM reduce the engine life?

**ANSWER:** No. The higher RPM won't harm the engine or reduce service life. Remember, you are increasing RPM only to hold the same power you had at a lower altitude at say, 2350 RPM.

## CHANGES...

I have decided that it's time to take a break from being the newsletter editor for the Chapter. Elections are coming up in a couple of months, so now would be a good time for all you potential editors to start thinking about volunteering when the time comes. I have found that it works pretty well to combine the job of Chapter secretary with the editors post, so you might consider that as well. It has been a fun and rewarding job, but I think it's a good idea to refresh these positions once in a while to keep things lively and interesting. Please give it your consideration. Thanks.

Dave Bieseimer - Chapter Secretary and Newsletter editor.



# EAA MILE HIGH CHAPTER 43

## CHAPTER OFFICERS:

President - Roger Standard.....303-857-4821  
Vice President - George Hayes.....303-772-7040  
Vice President - Bill Mitchell.....303-427-4025  
Secretary - Dave Bieseimeier.....303-384-3760  
Treasurer - Bob Wilson.....303-682-1857

## VOLUNTEER OFFICERS:

Technical Counselor - Ron Denight.....303-452-0458  
Technical Counselor - Marvin Wahl.....303-935-9934  
Technical Counselor - Art Schwarz.....303-412-6913  
Flight Advisor - Bill Mitchell.....303-427-4025  
Newsletter Editor - Dave Bieseimeier.....303-384-3760  
Young Eagles Coordinator - Bob Lee.....303-456-1268  
Membership Data Base Editor - Gene Horsman...303-279-5782

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Submission of articles, comments, or inquiries for publication in the newsletter are encouraged.

Meetings are normally held on the second Saturday of each month at 7:00 P.M. The place is determined each month.

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## MILE HIGH FLYER

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Gene Horsman  
Data Base Editor  
210 Lookout View Ct  
Golden CO 80401



## FIRST CLASS

EUGENE HORSMAN 00  
210 LOOKOUT VIEW COURT  
GOLDEN, CO 80401-2518



## THIS MONTH'S MEETING:

**SATURDAY, SEPTEMBER 9TH, 2000 at 7:00 PM** . See inside for details.

