

EAA Chapter 838 *Contact*

Volume XX, Number 10



October 2009

Greetings From Finland



By **Seppo Koivisto**, **Carl Bumpurs**, and **Scribo**. Photograph by **Seppo Koivisto**

A couple of days after Oshkosh ended this year, Carl Bumpurs and your reporter were hanging out at our chapter, when a man arrived sporting a large camera and a keen interest in aviation. He was Seppo Koivisto, and he was on his way home to Finland after spending the week at AirVenture. He heard about our museum, and, having an extra couple of hours on his way to O'Hare, he stopped to visit us. Carl, a former docent, gave Seppo a tour and exchanged contact information. Carl and Seppo have exchanged email, and I have sent him *Electro Contact*.

In his email accompanying this picture, Seppo says, "We have enjoyed exceptionally warm September and fine flying weather in Finland, I hope the same is true in WI. When I visited you after Oshkosh, I think Carl mentioned, that you might be interested to publish a photo from us in your club magazine. Well, here is one photo that was taken last Saturday. We were training formation flying over the archipelago of Turku, instructed by a former air force fighter pilot. I was flying our club Fournier RF-5 motor glider from the front seat, our club motor glider instructor Antti Makela occupied the rear seat and the photo was taken by Heikki Salo from the leading Cherokee."

Truly the aviation fraternity is international. More information and comment are on page three of this issue.



The President's Corner...

By: **Bob Helland**

Elections

The results of this year's election are listed below. The only change from past custom is that Eric Wolf will be the new president next.

President	Eric Wolf
Vice Pres	Scott Sellers
Directors	Steve Rehwinkle
	Carl Bumpurs
	Ken Sack

Winter Motorcycle Storage

The Board has approved and obtained all the necessary permissions to store motorcycles for the upcoming winter season. They will be kept in the museum, and the cost will be \$200.00 each for the season. Multiple bike discounts will be available. We will be accepting bikes from Nov 8 thru Nov 15. Retrieval will be the end of March beginning of April. For more information call 262-886-1327. If this is as successful as we think it will be, most of the Chapter operating expenses will be covered.

Bob

Who was born in 1935 and claims 750 million admirers?

Answer: Rich Uncle Pennybags

See page five for his local manifestation.

Building Calendar

By **Jerry Baker** and Scribo

During October, we have:

5 October 2009 - Northside Business Association
They will use the classroom and lounge from 5:00 until 8:30

And Here Are The Ground Rules

To reserve the building, please call or E-mail me, Jerry, with your request. Any use of any part of the building will be put on the calendar. My cell phone is 262.939.0091. My E mail is mgb13@earthlink.net.

Please note: Because some of the scheduled functions overlap normal Museum time, and some events require extensive setup and tear down, we may have to be flexible with Museum open time. Remember, building use functions bring in revenue to the Chapter.

Please remember that I am currently the schedule coordinator, and as such, I need to be involved on **all** scheduling of the Building. We have already had some **conflicts** arise, and we don't want to be responsible for messing up a major event. (e.g. wedding, etc.).

Electrical Grounding

By **Tony Bingelis** This is part of an article in Sport Aviation 5/94

The biggest fault I find with some electrical diagrams is that all essential ground connections are not always depicted. For example:

1. The voltage regulator and overvoltage relay must be grounded but the schematics often fail to show the ground. Without a good ground neither the voltage regulator nor the relay can work.
 2. The alternator and starter are assumed to be grounded by their installation to the engine, yet the schematic may not show them to be grounded.
 3. As previously mentioned, electrical sender units for instruments are often grounded by their installation to metal structure. Nevertheless, it is important that the grounding notation is illustrated.
 4. Magneto wires often don't show that they are to be shielded type cables with the shield terminating to ground at both ends.
 5. The alternator to/from wires should show them as being shielded and grounded.
 6. Strobe wiring is seldom shown in most wiring diagrams, and yet, at least one manufacturer (Whelen) emphasizes the importance of grounding the conductor's shielding at one end only.
- The foregoing review should serve to stress the importance of a good electrical ground for every device and every circuit. In some instances a unit simply will not work without being grounded . . . even though there is no terminal for a ground wire connection. Keep that in mind when you are trouble shooting an electrical problem . . . and check the simple and obvious things first.

Just One More Thing . . .

Always disconnect the battery ground cable first and replace it last. to avoid causing accidental short circuits and a startling pyrotechnics display

Finland

The photograph on page one is a French-built motor-glider that has a wingspan of 45 feet and a max gross weight of 1433 pounds. It is constructed with all wood wings and fuselage and is covered with wood and fabric. It has an 80 hp Limbach four cylinder, horizontally opposed, air cooled engine. Learn more at:

http://en.wikipedia.org/wiki/Archipelago_Sea

<http://www.sailplannedirectory.com/PlaneDetails.cfm?planeID=457>

<http://www.cfiamerica.com/id5world.html>

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Seppo and Car's emails:

Sent: Monday, August 10, 2009 3:53 PM

Dear Carl,

I flew safely back home, but it was an A340! Thank you again for showing me the museum and your premises, I was very much impressed. Here is some information on our flying club in Turku Finland.

Our club website <http://www.turunlentokerho.fi/> is a little old fashioned and in Finnish, but if you click the right words on this webpage <http://www.turunlentokerho.fi/html/koneet/koneet.php> you can see photos of our aircraft. Our 2003 C172 is the newest club owned C172 in Finland. We are also famous for owning three motor gliders, which many clubs don't anymore have. Our motorized planes operate mainly from the Turku airport <https://ais.fi/ais/eaip/html/efu.htm> Our club also operates the Oripää airfield as a base for gliders [http://www.turunlentokerho.fi/html/oripaa/efop\\_en.php](http://www.turunlentokerho.fi/html/oripaa/efop_en.php)

The latest issue of our club magazine can be downloaded here <http://www.turunlentokerho.fi/Leivo/Leivo109.pdf> It's also all in Finnish, but I hope the photos tell something of the activities of our club. This is in fact the first issue I have edited, we do it biannually.

You mentioned, that you might like to publish a photo from our side in your magazine. I will look if I could find one, that you might find interesting.

Best Wishes  
Seppo Koivisto

~~~~~  
Seppo,

Thank you for forwarding the links to your club's website and your newsletter. You are correct to assume my Finnish is rather lacking, but the photos show an active organization doing a lot of winter flying. There were 2 photos that caught my attention - the aerial photos of the Zeppelin Airship (I am longtime student of Lighter Than Air vehicles) and I was amused by the gentleman in the motor glider with what appeared to be a broken leg - I hope he was able to close the canopy. I have taken the liberty of forwarding your message to [Scribo], our newsletter editor. We enjoyed your visit and hope you will let us know when you next come to the states for a visit in our area.

Best Regards,
Carl Bumpurs

Racine County Airport Offers Pit Stop For Props - JSOnline

By Scribo with thanks to **Pat Matthews**

On 4 October 09 the Journal Times did a nice article about Cindy Guntly Airport (formerly known as Hunt field). I don't have permission to republish it here, but you can read it by copying

<http://www.jsonline.com/news/wisconsin/60469937.htm>
into your browser.

If that link doesn't work properly, copy the headline of this article and do a search on it.

VFR ON TOP

By **Tom Schuyler**
EAA Chapter 838 Young Eagles Coordinator

We did not fly many Young Eagles on September 12th. This is the story of my attempt to reach RAC for the rally.

I had been following the weather for several days before the rally. With the area's extended dry spell, it had finally been looking like we were going to have good weather conditions. However, on early Saturday morning, the METARS and TAFS were not looking acceptable. There was scattered fog and low clouds. RAC was reporting BR (mist?!) and half mile visibility. Gradually, the visibility numbers increased to 2-1/2 miles, so I went to East Troy Municipal, where conditions were fine, pre-flighted and departed for RAC. There were scattered clouds at about 4000 feet. As I passed Waterford a low cloud layer appeared under me, getting heavier to the east. There was an occasional hole below to see the ground, but as I was crossing I-94, it appeared the lower cloud deck was not going to disappear in time for the rally. It did not seem to be a smart move to try to find a hole over RAC and land, so I made the classic 180 turn and returned to East Troy. While flying between the cloud layers was really quite beautiful, it could be risky. In the event of an engine failure, I would have had to penetrate the lower cloud layer and wouldn't know how much altitude was below the bottom deck to pick a landing site.

Of course, about the time the rally was scheduled to end, the weather cleared up and was beautiful the rest of the day.

My thanks to the volunteers who put on the ground school and issued the rain checks. I'm hoping we can redeem them next month.

COMPUTER CORNER

Part 2: Density Altitude vs. Take-Off Roll

By **Seán G. Dwyer**

Part 1's program calculated density altitude and included down to Cells A7 and B7.

Now we will add rows 8, 9 and 10 to calculate the take-off roll for a Cherokee at various density altitudes.

	A	B	C
1		Input	
2	Field elevation in feet msl?	674	
3	Airport altimeter setting?	29.92	
4	Temperature in degrees F?	78	
5			
6		Output	
7	Density altitude =	2036	
8	Climb rate in feet/min =	531	(Default if Zero)
9	Take-off roll @ 2150 lbs =	1059	1059
10	(Default used if DA<0' or DA>7,000')		

Open Excel and enter all the information as shown except for Cells B7, B8, B9 and C9. The equations for these are as follows:

$$B7 = 145457 * (1 - (1.95467 / (B4 + 459.7))^{0.23494}) * (0.01 + (B3^{0.19025} - .000013125 * B2)^{5.2564})^{0.23494}$$

$$B8 = \text{IF}(B7 < 0, 630, 630 - 0.04846 * B7)$$

$$B9 = \text{IF}(B7 > 0, C9, 800)$$

$$C9 = \text{IF}(B7 < 7001, 800 + 0.127 * B7, 0)$$

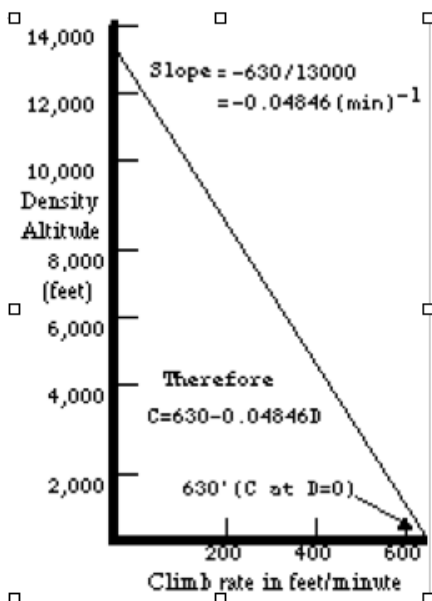
You will have to trust me on B7, it calculates density altitude. Translations of the other three cells are as follows:

B8 means "If Cell B7 (i.e. Density Altitude) is less than zero then B8 equals 630; Otherwise it equals (630 - 0.04846 times B7)."

B9 means "If Cell B7 is greater than zero, then Cell B9= Cell C9, otherwise Cell B9 = 800."

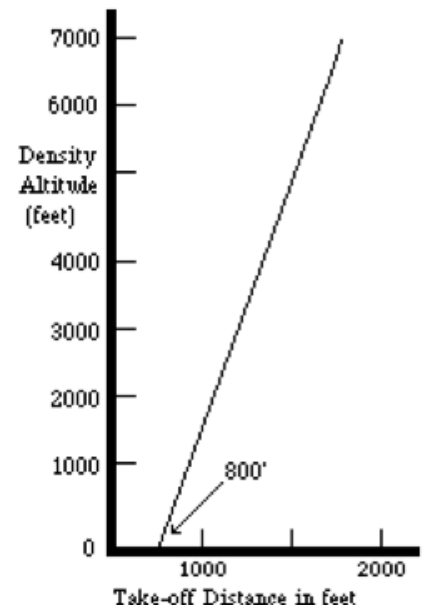
C9 means "If Cell B7 is less than 7001 feet, then C9 equals (800 + 0.127 times B7); Otherwise C9 equals zero."

These "If...then..." statements provide default values when density altitude is either less than zero or outside a Cherokee's performance charts. Otherwise the equations would predict that you should take-off backwards at really cold temperatures (an unlikely event), or predict take-off rolls that are not based on the performance charts at density altitudes >7000 feet msl. Refer to the performance charts to understand the basis for the numbers in the equations. Replace these with corresponding information for the aircraft you fly.



Save the program as Takeoff.xls. We're done!

The effect of humidity will be added in Part 3.





EAA Chapter 838
25th Silver Anniversary Celebration

Saturday, October 10, 2009, 6:30 p.m. - 9:30 p.m.
Batten International Airport
3333 N. Green Bay Rd., Racine Wisconsin 53404
Celebrating 25 years of Aviation in Racine

Don't miss this casual evening of fabulous auction items, good food and fun competition.

A 90-minute game will be played on standard edition boards. Prizes will be awarded.

To learn more and review the rules visit www.eaa838.org

Contact Carolyn Heifner (262) 637-4680 or Ken Sack (262) 554-9714

October 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
	Monday Night Builders 7 pm			Post 218 Meeting 7 p.m.		
4	5	6	7	8	9	10
	Monday Night Builders 7 pm		Museum Board			9 a.m. Young Eagles. 6:30 p.m. Monopoly Night
11	12	13	14	15	16	17
	Marvels of Mechanical Mysteries 7 p.m.		7 p.m. Chapter meeting	Post 218 Meeting 7 p.m.		
18	19	20	21	22	23	24
	Aeronautical Apparatus Aficionados 7 p.m.		7 p.m. Chapter Board			
25	26	27	28	29	30	31
	Monday Night Builders 7 pm					

EAA Chapter 838 of Racine, Inc.
 3333 North Green Bay Road
 Racine, WI 53402

EAA Chapter 838 Board of Directors

President	Bob Helland	886-8577
Vice Pres.	Scott Sellers	639-6451
Secretary	Tracy Miller	(847) 420-5098
Treasurer	Carol Voss	262-902-4709

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	Steve Rehwinkel	886-6382
	Ken Sack	554-9714
	Carl Bumpurs	634-0534
	Roy Stuart	884-0371
	Phil Fountain	639-9892
	Jim Hantschel	637-3376

Committee Chairpersons & Trustees:

Programs	Daryl & Kim Lueck	681-2370
Hangar	Jerry Bovitz	639-8583
Librarian	Eddy Huffman	639-8301
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Young Eagles	Tom Schuyler	414-828-6779
Museum Trust	Tim Bass	497-9768
Chapter Foundation	Steve Myers	681-2528
CHAPTER BUILDING		634-7575

Chapter Meeting

14 October 2009

William Law from the Dupage FAA
 The new FAA Safety Program.

Chapter 838 Events:

Saturday	9 a.m.	10 October	Young Eagles
Saturday	6:30 p.m.	10 October	Monopoly Night
Wednesday	7 p.m.	14 October	Chapter Meeting
Wednesday	7 p.m.	21 October	Board Meeting
Mondays	7 p.m.		Hangar Builders

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