



# R.U.F.F. Times

The Official Newsletter of the  
Rochester Ultralight Fun Flyers  
EAA UL Chapter 95  
*March 2011*



## March Member's Meeting

**When:** 26 March, Saturday, at 10:00 am

**Where:** Spencerport Air Park (D91)

**What:** "Air Traffic Control and the Sport Pilot", by Jeff Getgen, Controller at Wheeler-Sack air base at Ft. Drum.

## *Spring Flying!! A RUFF Proposal for 15 May Jon and Dan*

Jon often says that "anything worth doing is worth doing to excess". So, how about a major RUFF flying day on **15 May** to TWO fly-ins.

**9:00-10:00** at Willimston-Sodus (SDC) for the pancake breakfast & Apple Blossom Festival.  
followed by

**11:00-12:00** at Dansville (DSV) for their fly-in breakfast with Real Maple Syrup!

Eat one or two breakfasts, but fly to both! All available RUFF aircraft are invited to participate!

## *Aviation History of the Rochester Area*

from Bill Sauers, Greece Historical Society



The first time the people of Rochester saw a flying machine above Rochester was July 5, 1909. Although not an airplane, it was a type of **dirigible** balloon. The Strobel airship built by Charles J. Strobel and similar in design to airships by Santo

Dumont in France, had traveled the country for two years and was now in Rochester. **Aeronaut**, Captain Jack Dallas was at the helm at the Midsummer festival at Crittenden Park, (*now the site of Strong Memorial Hospital*). After a preliminary circle of the grounds, Cpt. Dallas pointed the ship's nose into the wind and flew

over the City of Rochester. (*D&C 7-6-1909*) He flew several more times during the festival, and then he moved to Ontario Beach Park in August for more demonstrations of his flying machine. (*D&C 8-16 & 19-1909*)



### *A couple of notes on aviation vocabulary:*

**aer•o•naut** (âr -nôt) *n.* A pilot or navigator of a

lighter-than-air craft, such as a balloon.

**dir-i-gi-ble** (dir-i-juh-buhl) *adj.* Designed for or capable of being directed, controlled, or steered, as "a dirigible balloon". By the mid 20th century the *adj.* became the noun.

### ***VFR Corner (Very Fine Reading )***

Dan Burrell



I hope you don't think I'm on a bad weather flying kick but I thought I would review a book I read last year. The title is **Dust-off: the memoir of an Army Aviator** by Michael Novosel. It is expensive on Amazon, but the Greece Library has a copy as does the Rochester Central Library. This is a pilot's story from beginning to end. Anyone who has taken flight lessons will find themselves nodding their heads as Novosel describes his training and service. He flew B 24s and B 29s during World War 2. This was a pilot who could do things with a B 29 that I did not think possible. He loved flying and saw the military as a way to do it every day. After being mustered out (Reduction in Force) in 1950, Novosel opened a restaurant and flew for an airline. He missed active service in Korea. As a Lt Colonel in the Air Force Reserves, he was denied active flight service when Viet Nam came around due to his age. He decided to join the Army Green Berets as a helicopter pilot at 41 years of age, but had to give up his commission and drop down to chief warrant officer.

Novosel flew in the Dust-off program rescuing wounded soldiers in the field and returning them to medical units. In all, he rescued 5,589 people. Dust-off pilots flew unarmed everyday in all kinds of weather when most aircraft were grounded. There were no navigational aids so it was all pilotage and dead reckoning. Often they flew at night using lighting from thunderstorms to help them find their landing zones. They landed and took off under fire. The missions demanded courage and the best flying one could do. Novosel received the Purple Heart and the Medal of Honor. He finally retired in 1984 in his 60's. This is a book for the young and old among us who fly or want to.

### ***The Brave March Pilot!***



### ***Understanding Maneuvering Speed***

George Charnitski

The following article was copied from the "EAA Safety Wire" newsletter:

On November 12, 2001, American Airlines Flight 587, crashed shortly after takeoff from John F. Kennedy Airport. The NTSB determined "the probable cause of this accident was the in-flight separation of the vertical stabilizer as a result of the loads beyond ultimate design loads that were created by the first officer's unnecessary and excessive rudder pedal inputs." As a result of this

accident and subsequent investigation, it was revealed that many pilots have a misunderstanding of what the design maneuvering speed,  $V_a$ , represents. Many pilots believe that as long as the airplane is at or below this maneuvering speed, they can make any control inputs they desire without any risk of harm to the airplane. This is not true.

The design maneuvering speed ( $V_a$ ) is the speed below which you can move a single flight control, one time, to its full deflection, for one axis of airplane rotation only (pitch, roll, or yaw), in smooth air, without risk of damage to the airplane.

Even though the [aircraft involved in the] accident discussed above is a Part 25 airplane,  $V_a$  is applicable to Part 23 and LSA airplanes. Also, even though experimental airplanes may not have a published  $V_a$ , they will still have some maximum maneuvering speed associated with the maximum structural design loads. Therefore, the pilot should be aware of what speed this is, and adhere to the guidance herein. The regulations governing the design strength requirements for airplane structure require adequate strength for full control deflection (below  $V_a$ ). However, they do not require the manufacturer to make the airplane strong enough to withstand full control input followed by a full control input in the opposite direction, even below  $V_a$ . Neither do they require the manufacturer to design the airplane for more than one simultaneous full control input such as full ailerons with full elevator and/or rudder.

$V_a$ , as published in the airplane flight manual or pilot's operating handbook, is valid for operation at the gross weight stated, which is typically at mass gross weight. It is especially important to note that  $V_a$  decreases as the airplane weight decreases. At first, this may seem counter intuitive. All pilots understand that when the airplane is subjected to an external force, such as the aerodynamic force from a control surface, the airplane responds by accelerating (rotational acceleration) about one of the airplane's axes. This was stated many years ago in Newton's Second Law of Motion. The law states that when an object of mass,  $m$ , is acted upon by a force,  $F$ , it will undergo acceleration,  $a$ , in the same direction as the force. More simply stated in the widely known equation,  $F = m \cdot a$ , which can be rewritten as  $a = F/m$ . Rewritten this way, it is clear for a given control force,  $F$ , as the airplane weight,  $m$ , decreases then the acceleration,  $a$ , will increase. This higher acceleration gives rise to higher loads on the airplane structure. Therefore, as the airplane weight decreases, the allowable maneuvering speed must also decrease, to ensure that the airframe is not damaged.

**Recommendations:** The FAA wants to clarify that operators should know what the maneuvering speed is and to caution pilots on what to avoid by adhering to the information described above and contained in the regulations. We recommend the following for maneuvering at, or even below,  $V_a$ :

DO NOT apply a full deflection of a control, followed immediately by a full deflection in the opposite direction.

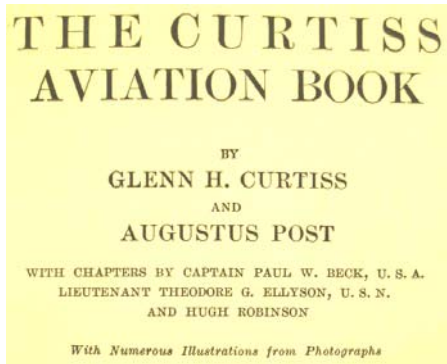
DO NOT apply full multiple control inputs simultaneously; i.e., pitch, roll and yaw simultaneously, or in any combination thereof, even if you are below  $V_a$ .

Reduce  $V_a$  when operating below gross weight, using the following formula.

$$V_{anew} = V_a \sqrt{\frac{W_{new}}{W_{max\ gross}}}$$

## *Glenn H. Curtiss on Aviation and Aeroplanes, 1912*

Jon Arney



Laura and I spent some time visiting Penn Yan this past February, and while there we explored the local library. I discovered an old book about flying written in **1912** by THE MAN himself!! It was stamped "not for circulation", so I had to read it on the spot and take pictures as I went. Mr. Curtiss certainly had interesting views about flying and the future of the aeroplane. Here are samples transcribed verbatim from his book.



**On Aerobatic Flying:** "At the same time, I want to make it plain that, personally, I do not now, nor ever have encouraged so-called "fancy" flying. I regard some of the spectacular gyrations performed by any of half a dozen flyers I know as foolhardy and as taking unnecessary chances."

**On Learning to Fly:** "The machine should be thoroughly mastered and every part understood. Training a man to fly does not, as I regard it, consist in putting him in an aeroplane and letting him go up before he knows how to get down again. Any body may be able to go up in an aeroplane, but it requires skill and practice to come down without damage to the man or machine."

**On Uses for the Aeroplane:** " On my practice flights in a hydroaeroplane over San Diego Bay, I noticed on several occasions that pelicans and sea gulls and even wild ducks got in my path, and I was sometimes obliged to change my course in order to avoid the slow-flying fowl. It occurred to me that with a net affixed to the forward part of the planes it would have been an easy matter to run down and bag a pelican, and possible a sea gull. The ducks are too quick to be caught by an aeroplane, as yet. Chasing ducks in an aeroplane and catching them in a net would be about as thrilling a sport as one can imagine. Perhaps when the killing of wild fowl with guns shall have palled on sportsmen, we shall see the method of "netting" them with an aeroplane come into use."

**On Aviation Regulations:** "The making of good laws is not to be overlooked when considering the future development of the aeroplane, for aviators must be protected from themselves, and the public must be protected from the rashness or inexperience of airmen."

**On The Development of "Landing Places":** The most serious problem of flying to-day is to find a good course to fly over and suitable landing places. The day will soon come when every city and town will have public landing and starting grounds."

**On Communicating with Aeroplanes:** "The telegraph seems to be the companion of the locomotive, the telephone of the automobile, and now wireless has its side-partner in the aeroplane!"

**On The Condition of the Wind:** "We used to wait for a calm almost absolute before going up -- it used to be a regular thing to see aviators wetting their fingers and holding them up to see from which direction the faint breezes were coming -- or dropping bits of paper to see if the air was in that complete stillness we used to thing necessary for successful flight. When I was waiting for just the right moment in Albany to begin the Hudson Flight -- which, because of the unusual and

absolutely unknown atmospheric conditions over a river flowing between precipitous and irregular hills, had to be timed with unusual care - the Poughkeepsie paper in an editorial said that 'Curtiss gives us a pain in the neck.' "

### *EAA 44 Newsletter "The Flyer"*

Paul Pakusch, Editor

To see the latest issue of the EAA 44 Newsletter, go to the following web address:

<http://www.eaa44.org/ea44-2009-08a.pdf>

### *Spring Flying Events*

<u>Date</u>	<u>Airport</u>	<u>Event / contact person</u>	<u>Comments</u>
Mar 29- Apr 3	Lakeland, Fla.	Sun n' Fun	
May 15	Oswego Co. (FZY)	Fly-in Breakfast	sponsor by EAA Chapter 486
May 15	Williamson(SDC)	W-S pancake breakfast	with Apple Blossom Festival
May 15	Dansville (DSV)	Fly-in Breakfast	with real maple syrup
May ?	Redun	Fly-in Breakfast	Redun Flying Club
May 29	Whitford	Fly-in Breakfast Every Other Weekend	7:30 am -12:00 noon June 12, 26, July 10, 24, Aug 7, 21, Sep 4, 18



### ● *Trade Winds* ●

### **The "Engine Information System"**

If any of you aircraft builders are considering using the EIS system from Grand Rapids Technologies in your plane, contact me as I can get a better price since I am a dealer. This way you can save a few bucks. The EIS is a valuable instrument to have because it measures the battery voltage, engine rpm, exhaust gas temp., cylinder head temp., water temp, outside air temp., engine hours (Hobbs meter), flight time, and also has extra inputs that you can use to your liking. All of these measurements have upper and lower limits that you set and if any of these limits are exceeded, a warning light flashes and the screen indicates the problem area. This is probably the most valuable function of the unit. Basic units for most aircraft run about \$500. George Charnitski.

### **Buccaneer for sale: Asking \$ 4000**

Located at Lakeville Airport, Livonia.

Owner would consider all reasonable offers. With covering, the BRS chute, on-board battery electrical system, 12 gal. fuel tank, and outer covering, it weighs in as 300 lbs. It is probable that it can be lightened to meet FAR Part 103. The owner reports that it flies well and has always been hangared. He doesn't know what the "011CS" on the side means, but it is not a registered aircraft in the US. For additional information, contact William G Irwin, [wirwin7@tampabay.rr.com](mailto:wirwin7@tampabay.rr.com).

