



FT	3000	9000	12000	18000	24000	30000	34000
BRL	1937	2215+12	2617+07	9900-09	20734	283444	
DBQ	1922	2215+12	2617+07	9900-09	20734	283444	
DSM	1919	2215+12	2617+07	9900-09	20734	283444	
MCW	1709	2215+12	2617+07	9900-09	20734	283444	
JOT	2229	2215+18	2106+13	2706+06	3205-09	9900-19	191034
SPI	2028	1921+18	1911+12	9900+06	3611-10	3405-20	191034

Winds Aloft



EAA Chapter 790

Lake in the Hills, IL

790.eaachapter.org

July Chapter Meeting

Matt gave a very nice presentation on the features of the Foreflight App. He noted some of the weather information can only be obtained via the internet. Radar weather can also be obtained via a portable or in panel GPS ADS-B. See article in this newsletter

Tom Presented Mark and Eddie their EAA Ray Aviation Scholarship shirts. Mark and Eddie talked about their aviation flight experiences. Mark Luchsinger soloed on July 14th and will be taking his FAA Written exam in August. Eddie Ranieri is preparing for his cross country.

Paul cooked the brats and hamburgers and hosted Raffle items supplied by Rob Nelson.

In this Issue

- July Chapter Meeting
- Foreflight Presentation
- Electric Battery Updates
- August Fly Out
- Calendar of Events
- Volunteers Wanted Dead or Alive

Were in Phase IV

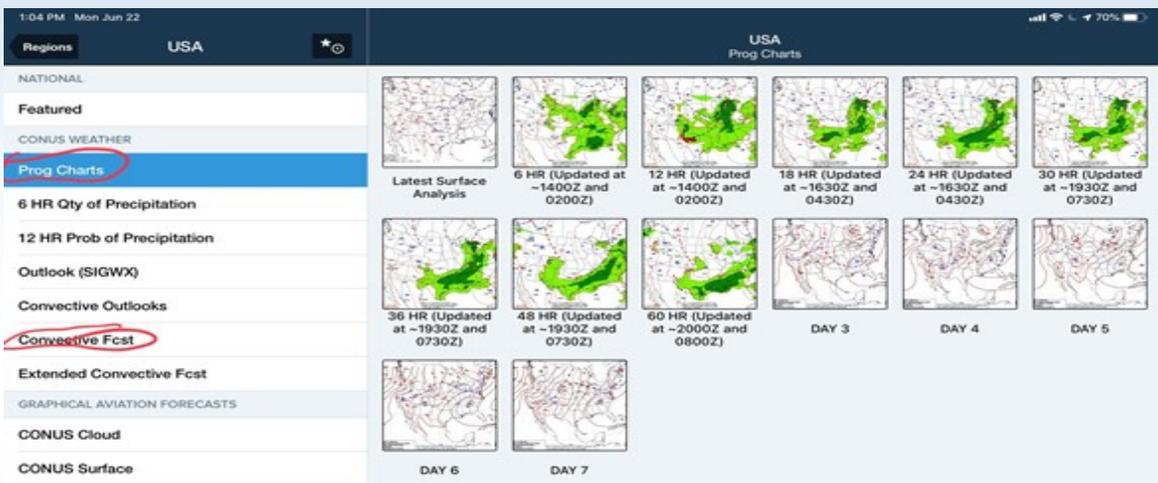
Clouds provided by Bud Herod



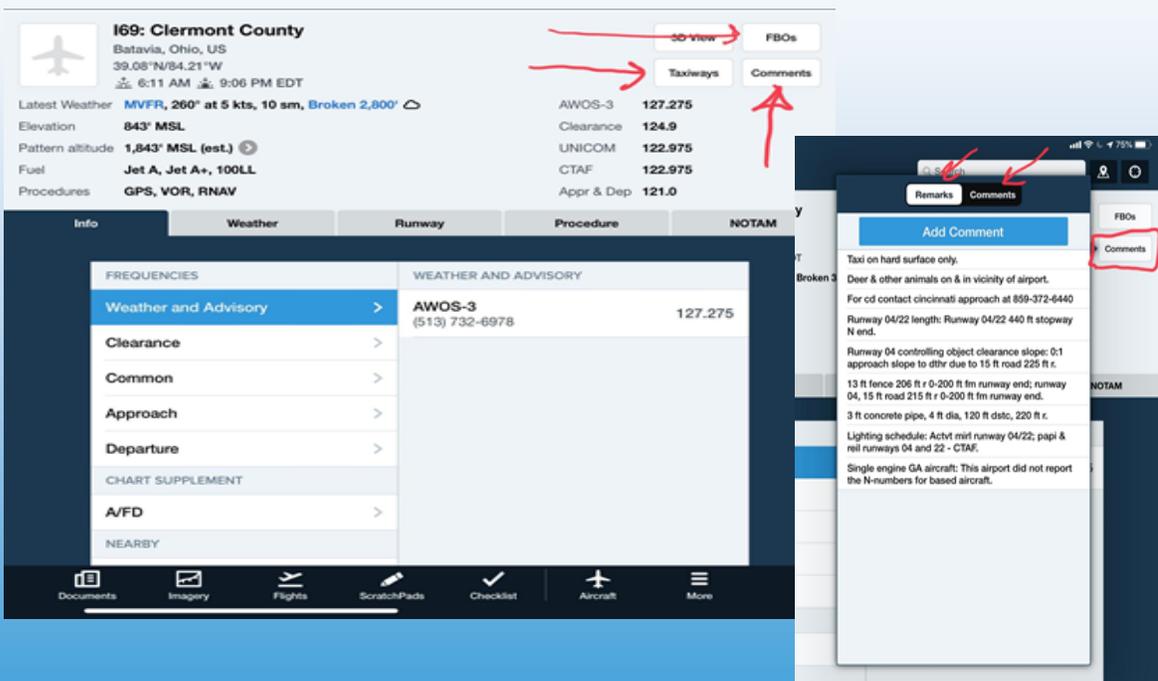
Matt Van Bergen did a presentation on using **Foreflight for pre-flight**, in flight and post flight support. Foreflight is a mobile application that only supports Apple iOS devices. Matt spent much of the time talking about using Foreflight to prepare for a cross country flight (VFR or IFR). Foreflight is powerful as it brings together many of the resources into a single resource. For example you can get a full weather briefing in a human readable format much like you would get by calling a weather briefer. Even better, it also logs the fact that you got a weather briefing which is always a good thing if you should run into an issue in flight with weather, NOTAMs, etc.

Here are some highlights from the presentation:

1. Weather charts: Foreflight brings in many of the charts that you might otherwise get from aviationweather.gov.



2. Airport Information: Foreflight offers everything you would ever need to know for an airport including access to the AF/D directly within the app.



Foreflight Presentation (continued)

3. Route Profile View: You can see at a glance at the profile view of your route for any terrain and airspace that you will travel through/over during your flight.

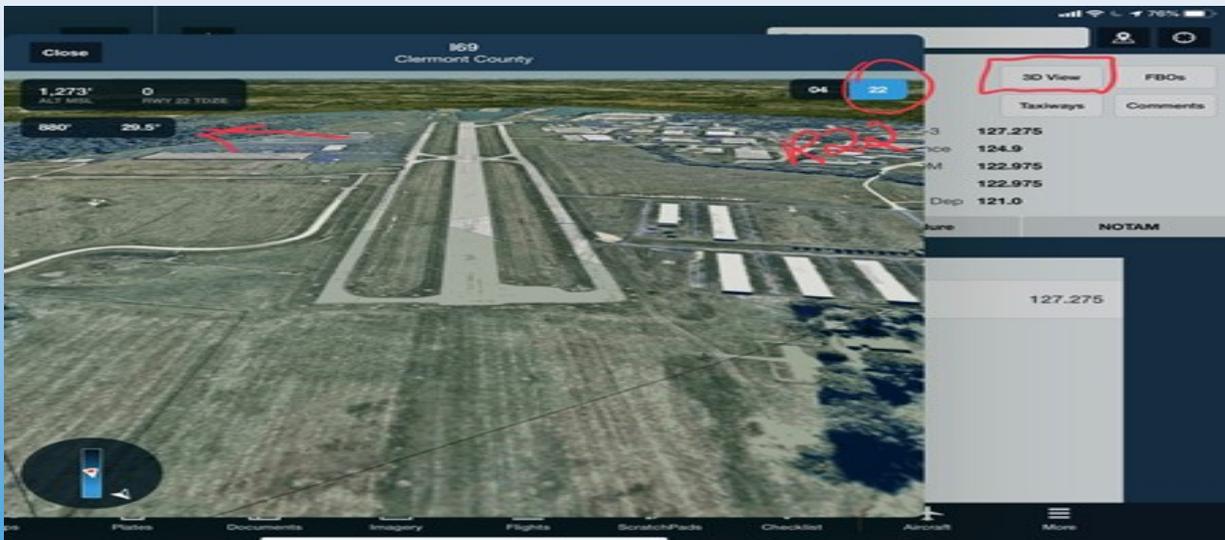


4. IFR Approach and Plates: You can select your expected approach and add the plate to the chart (moving map) and it even adheres to the scale. This way you can visually see



the routing of the approach in real-time.

5. 3D View of Airport Runway System: If you are flying into a new airport, it is nice to view what you might see while you are on final or departure. Foreflight offers an interac-



Foreflight Presentation (*continued*)

Foreflight has a ton of features. This is only a quick summary of what was covered at our chapter meeting. If anyone has any direct questions about Foreflight, please feel free to give Matt Van Bergen a shout at mvanbergen@Gmail.com. If there is interest, he would be happy to do a follow-up session at a future meeting that is in more of a Q&A format if that would be helpful. Let Matt know if this would be of interest.

Matt Van Bergen

August Fly Out

Fly Out to Baraboo Wisc. Dells DLL Airport On Saturday August 22nd is pending Restaurant location. Casino Restaurant is closed. Will keep you posted via email and website. Paul Ranieri will be point of contact for those flying and seats available.



Electric Battery Updates

Maxwell Batteries Ultracapacitor storage was purchased by Tesla in 2019. Termed the Roadrunner Battery. Supposition they will be built at their new under construction Tesla facility near Austin Tx. Tera Factory will be considerably larger than their existing Giga factory. Existing work is being performed by Tesla near its Fremont, Ca. facility. Advantages, lower cost, longer life, greater capacity and quicker charge time. Possible Maxwell batteries may be K2 series 2.7V, 2.85V or 3V Ultra capacitor for hybrid vehicles or buses.

Sept 22nd battery Day for Tesla's Official announcement and video. Challenge to solid state batteries, Anode free. The Elon Musk ideal breakthrough for aviation is 400Kwh/kg.

Uber per AOPA has been the great motivator and cash cow for electric air mobility and is shooting for 900Kwh/kg. Refer to August AOPA article.

Korean Institute of technology researched the Lithium Sulfur LIS or LSB designated battery which approaches 2,600 Kwh/Kg or 10 X existing technologies with 2000 cycles.

Graphene Batteries are under license, development and prototype introduction.



Calendar of Events

- August 4th Board Meeting
- No Young Eagles events through September
- Annual Pancake Breakfast Cancelled due to COVID concerns
- August 22nd Fly Out Baraboo Wis. Or TBD Restaurant pending
- August 25th Chapter Meeting –Aircraft Air Conditioning
- Sept– 22nd Chapter Meeting IMC
- October 27th Chapter Meeting -Nazis in Denmark
- November 24th Board Elections for 2021 and New MS Sim information
- December 22nd Christmas Party at Paul's house Pick up your new Directory
- Check the Chapter Website “<http://www.790.eaachapter.org/>”
for any additional details and a list of local chapter events in the area

“I fly because it releases my mind from the tyranny of petty things”. Antoine de Saint-Exupery

EAA Chapter 790 Staff

OFFICERS

President

Paul Ranieri

847/997-0135

P.ranieri@comcast.net

Vice President

Matt Van Bergen

847/561-0520

mvanbergen@gmail.com

Treasurer

Mike Petrie

847/987-2708

m_petrie@live.com

Secretary

Brad DeLisle & Tom Solar

847/276-5026

delisle.nx@gmail.com

Flight Advisor

Glen Brisson

847/438-7786

Young Eagles

Matt Van Bergen

847/561-0520

mvanbergen@gmail.com

Newsletter Editor

Tom Solar

847/468-9437

tomsolar@sbcglobal.net

Website

Tom LeGates

847/462-1791

trlegates@comcast.net

Flight Advisor/Tech Counselor

Ron Liebmann

847/352-8282

Mike Perkins

217/725-0628

Ole Sindberg

847/826-1935

DIRECTORS

Paul Ranieri

847/997-0135

P.ranieri@comcast.net

Matt Van Bergen

847/561-0520

mvanbergen@gmail.com

Brad DeLisle

847/276-5026

delisle.nx@gmail.com

Mike Petrie

847/987-2708

m_petrie@live.com

Tom Solar

847/468-9437

tomsolar@sbcglobal.net

Lon Danek

847/381-4286

LDanek417@aol.com

Ole Sindberg

847/826-1935

oleeva@sbcglobal.net

WINDS ALOFT, the six time EAA international Newsletter award winner, is published Periodically by EAA Chapter 790 for the use and enjoyment of its membership and others to whom it is provided. No claim is made to the accuracy or validity of the content presented in this publication. Editorial content is the opinion of the contributor and does not necessarily reflect the position of Chapter 790 or of the Experimental Aircraft Association (EAA). Permission is granted to others to use any non-copyrighted material appearing in this publication so long as credit is acknowledged.