



The CHAPTER 221 FLYER

Proudly Serving the Experimental Aircraft Association Chapter 221 in Kalamazoo, Michigan
www.EAA221.org

May 2016

President's Message



Hello Everyone.

Well our "I spy" flying days are disappearing with each day bringing more and more greenery to cover up all the stuff in peoples' yards. But this is a good thing because it means that it is warming up and becoming a little more like Florida each day. Florida last month was good. Arriving in Florida was good and departing Florida was good. Departing and arriving in Michigan was not so good but I'll say a few more things about that at our May meeting. At least I didn't encounter any icing or thunderstorms!

In addition to spring cleaning out in my yard I have been doing some cleaning inside too. During this process I came across some old VCRs of A-10 training (G awareness) and HUD bombing and gun missions. Before they become obsolete for good I decided to have them converted to DVDs. So, on the agenda for our meeting next week will be some interesting clips of what I went

through as an A-10 pilot 26 years ago. We will have time to share stories and pictures so if you have anything you would like me to project on the wall bring it along on a flash drive.

See you soon,

Bob Aardema, EAA Chapter 221
President

Bob Aardema
President, EAA Chapter 221
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IN THIS ISSUE:

At word from Charlie Becker

Charlie is the Director of Chapters at EAA HQ and reports on the new STC that EAA created with Dynon.

Trip Report

Owosso KRNP by Jim and Heather Butcher

Initial Impressions

A review of the homebrewed the Stratux ADS-B Receiver by Ron Ryan

Next Meeting

Wednesday, May 4, 2016

7:00 PM

AirZoo East Campus



MI ANG Battle Creek!

Young Eagles, Unique Aircraft and More.



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**3101 E. Milham
Portage, MI 49002**

Map at www.EAA221.org

Ron Ryan

EAA 221 Newsletter Editor & Webmaster
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Unless otherwise specified, our chapter meetings are the first Wednesday of the month at 7:00 p.m. at the Airzoo Flight Center Classroom on the west side of the Kalamazoo-Battle Creek International Airport.

A word from . . .

Charlie Becker.



EAA Partners with FAA, Dynon for STC Breakthrough to Upgrade Safety, Reduce Costs for Aircraft Owners

EAA, in partnership with Dynon Avionics and the FAA, has been awarded a Supplemental Type Certificate (STC) to install Dynon's EFIS-D10A in certain standard category aircraft. This breakthrough STC enables the inexpensive, but very capable, avionics that have served the experimental and light-sport worlds for decades to finally have a pathway into the type-certificated market. The Dynon system is a direct replacement for a vacuum-driven attitude indicator, and the STC currently applies to the Cessna 150, 152, and 172 series and the Piper PA-28 and PA-38 series. More aircraft are expected to be added soon.

EAA worked extensively with the FAA and Dynon to show compliance with regulations and develop a new certification pathway for safety-enhancing equipment. The long track record of the D10A product line and its conformity to a variety of industry standards helped it

become the first device accepted by the FAA in this pioneering effort. In addition to Dynon's proven reliability, the unit delivers a wealth of information to the pilot and even has an integrated angle of attack feature (with the installation of an optional probe). EAA installed the D10A in its 1976 Cessna 172M and submitted to a series of flight tests with an FAA test pilot, which went flawlessly.



EAA intends to begin selling the STC as soon as possible, hopefully later this spring, at a nominal price point in line with its existing autofuel STC. In addition to the D10A, more products are actively being explored as EAA is willing to work with other manufacturers to bring down costs and reduce barriers to recreational flying. Stay tuned for more details!



Charlie Becker, EAA Lifetime #515808
Director of Chapters, Communities & Homebuilt Community Manager
Sonex completed, Building a Super Cub clone
www.facebook.com/PirateCub
EAA Chapter 252 President www.eaa252.org
EAA—The Spirit of Aviation

See you at EAA AirVenture Oshkosh—July 25th-July 31st, 2016

[The Dynon EFIS D10A is priced at \$2,200.00.
www.dynonavionics.com. Ed.]

Trip Report



A few weeks ago Owosso (KRNP) was mentioned on another list as a possible fly out. We had a look at Air Nav and the Google map. The Shiawassee River runs along the south side of the airport and there is a walking path along the river from Owosso to Corunna.

Since we like to walk, we flew to RNP Sunday 4/17 bringing Jethro (our dog) with us. The airport is really nice with a paved runway and 2 grass strips. All three are in good shape. There is no fence along the south side of the airport, so we parked our Europa and walked along the side of runway 24 to the river trail.

The trail is just a dirt path but even and easy to walk. There are lots of trees and plants are just starting to bloom. Jim spotted a redwing blackbird, so Spring is certainly on the way! The trail going towards Corunna has a bridge over the river. That leads to a park with historic buildings. You can continue all the way into Corunna (about 2 miles from the airport) which has a couple of places to eat. It is the county seat and has a really neat courthouse. You can also walk west towards Owosso (also about 2 miles). The trail to the west takes you to the Steam Railroading Institute (<http://www.michigansteamtrain.com/>) which is open Friday and Saturday 10 am – 3 pm and features steam locomotives, a number of rail cars, a railroad workshop

complete with a turntable. We expect to go back later this summer when the trees have leafed out and should provide shade.

The bonus was discovering a restaurant on the field!! Adjacent to the terminal building is Crosswinds Café which has been open a couple of weeks. It is open Saturday and Sunday only from 8 am to 2 pm. We had lunch and it was really good. Their breakfast menu looks even better! Ron Jones is the contact person at 586-212-5875 in case you're bringing a large group. There are a couple of picnic tables outside & maybe 8 tables inside so it is not a huge place.

Jim & Heather Butcher

Europa XS N241BW



Initial Impressions

The Homebrewed Stratux ADS-B Receiver

By Ron Ryan

Andy Cotyk built this particular Stratux and has willingly let me use it in order to write this report.



Actually I am really impressed with the unit, and I do recommend it to our membership. I will say that it increases situational awareness and has been a neat toy to play with. Has it saved my life? No. Has it showed me airplane that I was not aware of? No. But someday it might do both of those things, so

it's worth what little extra weight it brings to the cockpit.

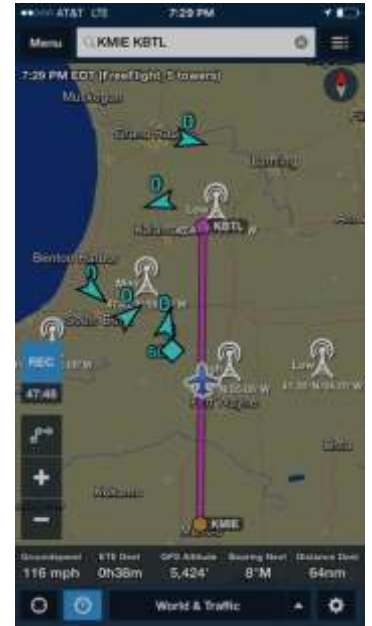
I did not build it, so I cannot comment on the construction, but Andy tells me it was relatively easy to put together.

In flight the unit performs well and does not take up too much space in the cockpit. The higher to go, the more towers you reach and the more information you receive. If you are on the ground and not near a tower, you will not receive any data. I was able to display the data on my iPhone 6 using Foreflight, however I thought it was too difficult to read the data displayed over the Sectional. See the image on the right. I therefore used the world map view and was able to read the information much easier.

The unit consists of a battery pack; a Raspberry Pi computer; a Software Defined Receiver (SDR) and antenna; a wifi transceiver and an optional GPS receiver.



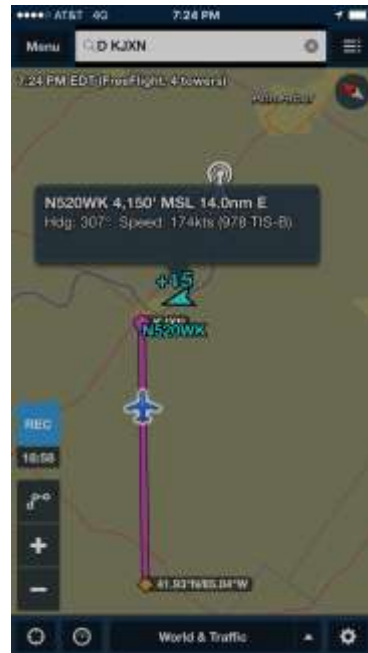
In the screen shot on the right, you can see that the Stratux is connected to 5 towers. We were at 5500 MSL. You can see that most of the planes in the sky were displaying "0". I did not understand the significance of the "0", but if you clicked on the triangle you received more information. (Note the groundspeed of 116 mph, not bad for a C150, eh?).



Information about the Stratux can be found at www.stratux.me. The device is a do it yourself version of the Stratus 1S receiver sold by Sporty's Pilot Shop for \$549.00. Andy tells me that he acquired all of the parts to put this version together for just over \$100 from Amazon.com. Sporty's sells a version that has an AHRs called the Stratus 2S which retails for \$899.00. AHRs takes advantage of the synthetic vision capabilities of Foreflight and provides an artificial horizon. The tech fellows that made this device are working on creating a newer version that has AHRs capability, but it is not available yet.

In the image on the below, we were southwest of Jackson. Clicking on the target showed that he was 14 nm east of us, and 1500 feet above us. His heading was 307 degrees and his speed was 174 kts. We were receiving his flight information via TIS-B retransmission.

The interesting thing about this image is that despite our knowledge of the presence of this aircraft, we never saw it. We did get closer than 14 miles, but the significance is that we probably all pass numerous fellow aviators without ever knowing they were there. Additionally it points out to me that you have to be awfully close to other airplanes before they become a factor.



I think I'll build one once techs have finished the AHRs.

Chapter 221
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Supporting the recreational builder/flyer with technical, social, and political news to promote flying safety and enjoyment:

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