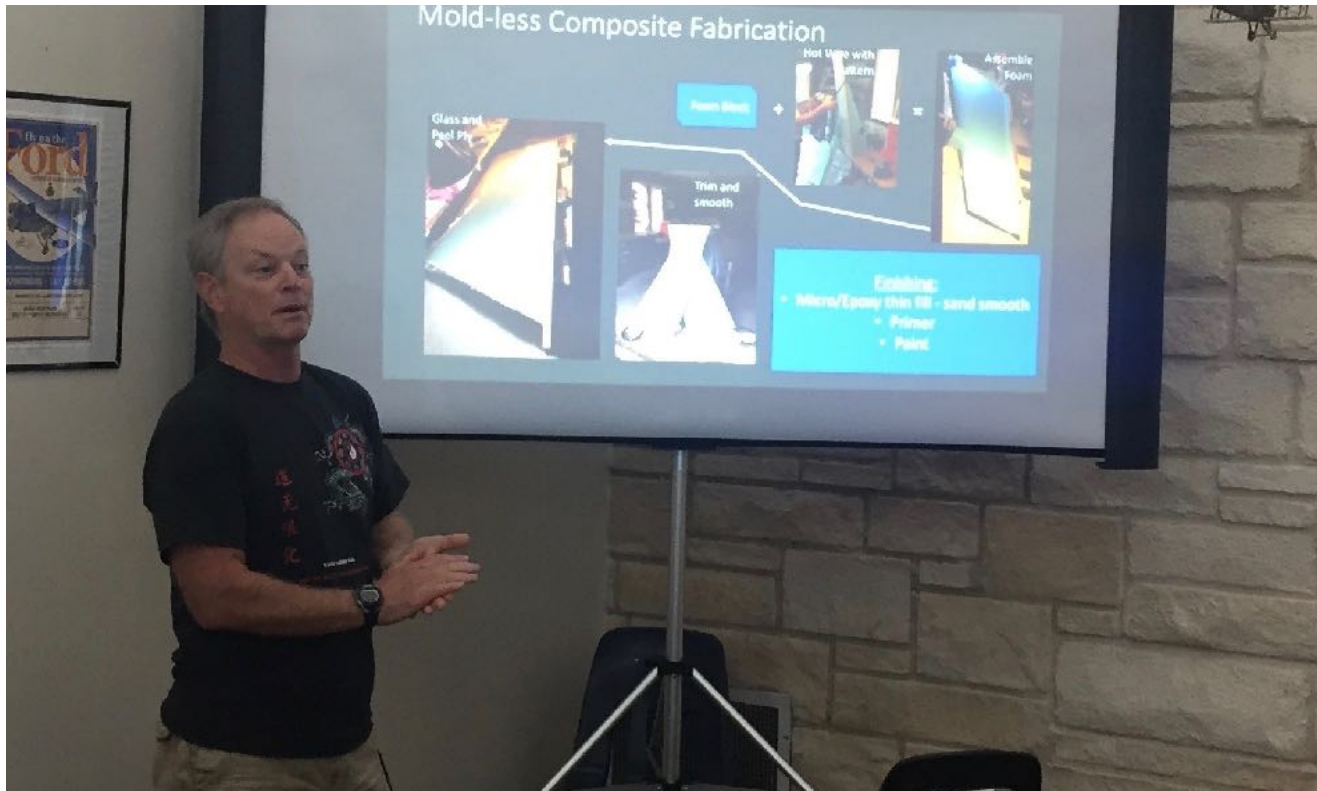


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# TAILWINDS

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## April Meeting Recap



Our April chapter meeting was held on April 8 where we enjoyed presentations from four chapter members about their projects.

**Scott Fish describing elements of composite fabrication**

First up was Mr. Scott Fish who described his Cozy Mark IV project. Scott began building the Cozy in February 2015. He purchased it as a partial project from a gentleman in Florida. At the time of purchase, the fuselage tub was complete. It took Scott about a year to craft the canopy and turtleback. Scott described some elements of the composite fabrication process which seems quite labor intensive.

Scott also described a his technique for using water levelers for the wing and spar alignment process. The process requires very precise alignment and the water levelers worked well. Scott had just completed priming of the canard the day before the meeting and will be proceeding to exterior

finish work, electrical system planning, and ordering the engine. Scott maintains a website tracking his project at <http://cozyfish.weebly.com>.

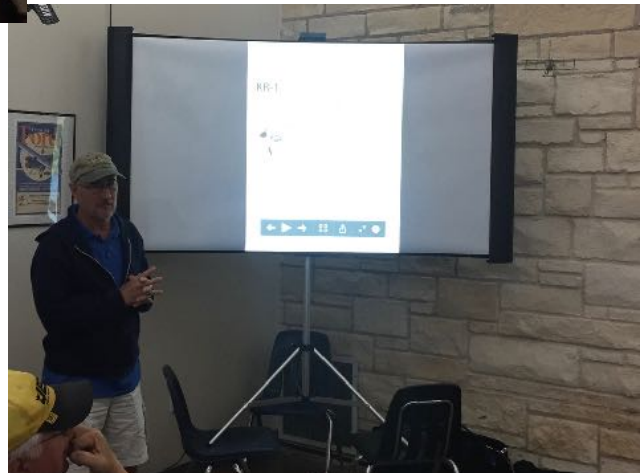
Next up was Tom Vaughan who described his Hummel Ultracruiser project. The Ultracruiser comes in many kit configurations and uses a half Volkswagen engine. Tom is a former aviation sheet metal mechanic from the Air Force and it sounds like he enjoys metal fabrication. The Ultracruiser is a great fit for him because it is crafted from sheet aluminum. (Apologizes to Tom, all of my pictures of his presentation are blurry.)



The third presentation was from Dick Gossen about his remote oil tank for his RV-12. Dick already has about 200 hours on his RV-12 after spending 4000-5000 hours building the plane. Dick modified the traditional oil tank to be hard mounted to the firewall to avoid vibration and allow for a greater oil capacity. It sounds like his passengers will definitely appreciate that! Dick also provided a tip about using Oetiker claims for certain functions when clamping

hoses.

Last but certainly not least was Gary Hamilton's presentation about his project. I'm not sure what to call it since he assembled the airplane from contributions from friends or clever finds. The plane has a KR-2 structure crafted from Douglas Fir and mahogany plywood. The windshield and canopy are from an RV-7/8, the seat from a Zenith 601, and the cowling from a Lancer 235. Even the wheelpants were found in a dumpster. I'll admit that as Gary was describing his project, what I envisioned in my mind was not necessarily pretty. I was pleasantly surprised at what a lovely plane he has when he got to the picture of the final product.



Thank you to all of the members who presented. I know everyone enjoyed the presentations.

## May Chapter Meeting

The May meeting will begin at 10 AM on May 13. It's our biannual hangar hop at Georgetown Municipal Airport. First, we'll look at Osprey GP-4 by Dennis Gerow at hangar J-1. Then, Pipistrel Virus Motor Glider by Shane Mitchell at hangar J-14. And finally, we'll check up on John 'Beej' Nunn's Skybolt at hangar I-5.

After the hangar hopping, we will meet for lunch at the main terminal. On the menu is Rob's Famous Pulled Pork. Please bring a side or dessert.

## Young Eagles Rally

We are hosting a big Young Eagles Rally on May 20 at Rockdale. We expect to have a lot of kids come out for the event. We need pilots and ground volunteers. Please contact Jimmy Cox if you can help. (512-429-0230 or [jcox@extremecomposites.com](mailto:jcox@extremecomposites.com))

## Upcoming Events

### Rockdale Tiger Flight: Help us Build an RV-6!

Rockdale Tiger Flight is a group organized by several EAA 187 members in Rockdale, TX. The group is focused on teaching mid- and high-schoolers airplane building skills. Our current projects are an RV-6 and a Zenith CH-601. We get together **every Saturday at 10 AM**, and focus on building those airplanes. We also offer **weekly Young Eagles rides** to kids, subject to weather and aircraft availability.

This weekly event is free to participants, and we are looking for help! Both kids and adults are welcome! For more information, log on to [rockdaletigerflight.org](http://rockdaletigerflight.org).



### Old Time Aviation Flying Museum Fly-In

May 13, 2017 - Hallettsville, Texas

Pig Roast at noon with lots of airplanes and contests. More information available at: <http://whereolddogsfly.org/events.html>.

### Armed Forces Weekend Celebration and Fly-in

May 19-20, 2017 - Brady, Texas

The Morgan Military Aviation Museum is hosting a weekend celebration and fly-in including a dinner and World War II themed hangar dance. Advanced tickets are available now at: <http://www.morganmilitaryaviationmuseum.com/services>

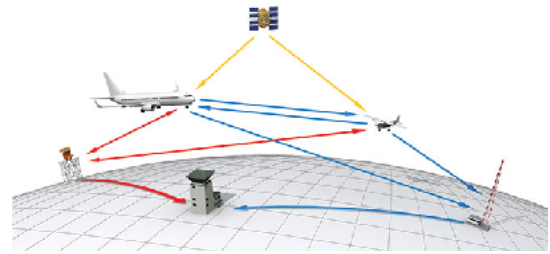
## The Agony and Ecstasy of ADS-B

*Courtesy of Pete Christensen, we are featuring an article from ATC controller, Rose Marie Kern. Republished with permission.*

I've heard a lot of complaints about the fact that the FAA is requiring anyone who flies in controlled airspace to purchase ADS-B by 2020. I feel your pain.

The FAA is trying to make it more affordable by offering rebates, but it is still one more piece of equipment most GA pilots feel is unnecessary. There are actually two very good reasons however to get ADS-B on board your aircraft.

Right now all air traffic control uses radar to separate aircraft. The FAA is in the process of upgrading all its equipment so that in the future ATC will primarily use satellites to determine an aircraft's location. Ground based radars send/receive signals that slant from the base location upwards and outwards. That slant angle means there is an error factor depending on the distance



of the aircraft from the ground based unit. It is for that reason the center controllers must ensure the computer readouts are at least five miles between targets (aircraft) at the same altitude.

Satellite readouts are much more precise and unlike ground based RADAR's they can read aircraft locations across oceans and in mountainous terrain.

Obviously trying to mix the radar returns and the satellite returns is problematic. In order to have the most precise display of aircraft location, ALL the aircraft must be monitored using the same system. That is why ATC wants everyone on ADS-B.

Now, there is another compelling reason why every VFR pilot should also want ADS-B in his aircraft...search and rescue.

Right now if a pilot files a VFR flight plan and something goes wrong which forces him to land here is what happens. Half an hour after the ETA on the flight plan, Flight Service contacts the aircraft's destination airport to inquire if the aircraft landed. Then they call the number on the flight plan. If they get no response then they start the communications search and alert RCC that there is a potential for an overdue/missing aircraft. The com search includes querying all the air traffic facilities on the aircraft's route and calling every airport on the route to see if the aircraft landed short.

Two hours after the aircraft's ETA, RCC takes over and sends aircraft out to begin searching the route for the missing aircraft. They start by flying a search pattern along and 50 miles either side of the whole route.

So essentially, if you were on a four hour flight and something caused you to land unexpectedly just an hour into the trip, the physical search for your aircraft would not begin for five hours after your accident. Assuming you lived through the landing but injured, that's a long time!

If you are on that same flight plan and your ADS-B is registered and operational, the satellite pings every couple minutes. If your aircraft stops moving before it is supposed to and the flight plan is active an alarm tells flight service that something is wrong. They can then open a screen that shows the track your aircraft took and the precise location where of the last satellite hit.

The physical search is begun immediately and the rescue crews know exactly where to go to find you!

So when you go to get your ADS-B, don't think of it as something forced on you by the Feds, think of it as your personal safety net.

Rose Marie Kern has worked in ATC since 1983. Questions or comments may be sent to [author@rosemariekern.com](mailto:author@rosemariekern.com). Her book "Air to Ground" is a compilation of the articles she's written for pilots over the past decade and can be found on her website [www.rosemariekern.com](http://www.rosemariekern.com).

#### **Chapter Officers**

President - Haruko Reese  
Vice President - Pete Christensen  
Secretary - Valerie Barker  
Treasurer - Rob Reese

#### **Young Eagles Coordinators**

Jimmy Cox  
Fi Dot Fomichev

#### **Chapter Flight Advisor**

Deene Ogden

#### **Chapter Technology Counselors**

Seth Hancock  
William Bennett  
Deene Ogden

#### **Webmaster**

Fedor "Fidot" Fomichev

#### **Newsletter**

Valerie Barker

Send submissions to:  
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#### **Tool Chest**

John Nunn  
[beej@65degrees.net](mailto:beej@65degrees.net)

#### **Chapter Board Members**

John Nunn (2015-2016)  
Deene Ogden (2016-2017)

#### **Meetings**

Georgetown Municipal Airport (KGTU)  
Terminal  
2nd Saturday each mont at 10 AM

[eaa187.org](http://eaa187.org)