



The Bend High Desert Flyer of Chapter 1345

WEBSITE: <http://1345.eaachapter.org/>

KBDN AWOS 134.425

July 2017, Vol. 16, #7

PREZ SEZ:

Out with the old, in with the new! The RV-12 is flying off to its new home! A flying club in Omaha NE is the new owner and one of the gentlemen, Walt is flying into Redmond on July 6th. If all is good, together he and I will be pointing the nose East that same day.

In with the new! Well, maybe not so “new” as it’s been sitting in a garage for a long time. The chapter is going to (finally) finish building Mike Bond’s “Glaster” project. We’ll plan on picking the project up after Oshkosh and with some rearranging of the hangers, start the build process. The work schedule will be determined and volunteers of all ages will be welcome to assist in the building process.

After I deliver the RV-12, I’ll be heading further East, back to Ohio. Rick Stacy’s RV-7A is getting a new carb and he wants help getting his baby flying again. The “Rotec Throttle Body” turned into a huge disappointment. It kept jamming on him whenever it warmed up, even after sending it back to Australia to get rebuilt. Not a good thing when it’s working environment is a hot area! I’ll be spending a few days with Rick getting it sorted out. So, that means I may still be in Ohio during our next meeting.

VP Mike Robertson will be sitting in the hot seat this month (along with KP duties).

Oshkosh is just around the corner! Anyone else going? My plan is to fly with Layne in his RV-10. He needs to leave on Thursday during the show so, I may stay and hitch a ride back to Oregon.

Our next meeting is Wednesday, July 12th, starting with Dale Anderson and the Young Eagles portion @ 4 – 6. Food will be ready at 6pm with Mike starting the meeting around 6:30.

Meeting place is 63030 Powell Butte @ the Bend Builders Assist hangers.

Have a Great 4th of July and keep flying!

Thomas Phy,
President

Treasurer's Report

Financial For period: 01/01/17 to 06/30/17

TOTAL INCOME	\$10310.30
TOTAL EXPENSE	\$3628.60
NET INCOME	\$6681.70
TOTAL CASH IN BANK	\$9692.34

Payments Outstanding **None**

Recap of B-17 project:

Income from Dinner/Dance, Lunches, and B-17 tours/flights:

	\$9064.30
Expenses for above:	\$3199.60
Gain from event:	\$5864.70

Jack Watson,
Treasurer

June Meeting Minutes

Minutes of a regular meeting of The Chapter held on Wednesday, June 14, 2017, at the "Bend Builders Assist"/Robertson Hangar at the Bend Municipal Airport. Meetings are held on the second Wednesday of each month.

ATTENDEES

There were 19 in attendance who signed the roster at this meeting. This included a few new members who joined tonight: Fred Berardo, Scott Morrison and Doug Hinchman. Welcome aboard!

DINNER

Dinner consisted of hamburgers, hot dogs, chicken, potato salad and French fries. Everyone enjoyed the food. Someone suggested dessert would be good. Tom said he would take it up with the chef, Mike.

CALL TO ORDER

Tom called the meeting to order at 6:42 PM. He started the meeting by asking us to go around the room and introduce ourselves and briefly mention our projects. We learned that Mike Bond's airplane was destroyed in the hailstorm in Madras when it was up there for its annual. Tom introduced us to his newest project, a Bede 5 that he purchased and hauled to Bend on a trailer. Tom used to work in a Bede factory, so he is excited to now own a Bede.

PROGRAM

Kim Muinch and Gary Miller did a PowerPoint presentation about the ADS-B In that some of us are planning to build for our airplanes. Obviously, this does not meet the requirements of the ADS-B Out that the FAA is requiring in most aircraft by the end of 2019. Kim & Gary's PowerPoint showed us an array of various kits we can purchase and several accessories, and then a myriad of cases in which to house the completed unit.

The kits cost as low as \$60 up to around \$300, with accessories costing anywhere from \$3 to \$30. Compare that to the cost of a Garmin GTS800 which is just under \$1,000, a Navworx ADS600B which is \$1500 or Stratus 2S-GDL 39 for \$899. There is a huge cost savings in building your own ADS device.

Forrest Seale and Fred Berardo added their names to the list of people who want to get together and build a device. Kim (& hopefully Gary) will set up a meeting within the next week or so where we can meet and discuss the options so we can intelligently purchase a kit to assemble. Once kits are purchased, Kim & Gary will set up a time/place where we can all get together and assemble our kits. It was 8:30 by the time the meeting was

ADJOURNED

Faye Phillips
Secretary

Tom Phy wins Bogardus Trophy

Your Prez received an award from EAA Chapter 105, Hillsboro, for flying the 2nd most "Young Eagles" in Oregon last year!

The award was presented by Tom Louris, Prez of Chapter 105,

Prez sez Tom is an old friend, who he was trying to get to our next meeting even though he's not going to be there himself.





Close-up of the Tom's Bogardus Trophy

Young Eagles Support Group Meeting

Agenda:

Who: Adults, Young Eagles, Potential Young Eagles, Eagles, Civil Air Patrol, and everyone interested in aerospace education.

What: A meeting to have fun with airplanes

When: 4 pm, Wednesday, July 12, 2017

Where: Bend Builders Assist (EAA) hangar, Bend Municipal Airport

Why: For Education, Safety, and FUN !!!!

4 PM Introductions: Introduce yourself to the group. Do you have flight experience? What are your plans involving aviation? How can we help you toward being a better pilot?

Topic: Review an emergency scenario of a teenage student pilot

Activities: 1) Inventory some useful emergency "survival" items. 2) Watch a short video of a teenage pilot who got lost and crashed the airplane while on her first solo cross-country flight. 3) Discuss what happened and how preventive measures could have helped. Which survival items would be most useful? FAA Safety Team Topic for June is: "Pilots and Medications"

Do you take any prescription drugs? Do you take any over the counter drugs? Do you have any medical conditions that require drugs periodically? How do/can these influence your flying?

6 PM Burgers on the grill – donations accepted

6:30 PM EAA Chapter 1345, High Desert Flyers, monthly meeting

I hope you can make it,

Dale Anderson



Top 3 winners at 2017 ISEF with Ivo Zell at center. See his story below.

Z flying wing

At the Intel International Science and Engineering Fair (ISEF), the top winner, 18-year-old Ivo Zell, received \$75,000 for his design of a small “flying wing” drone.

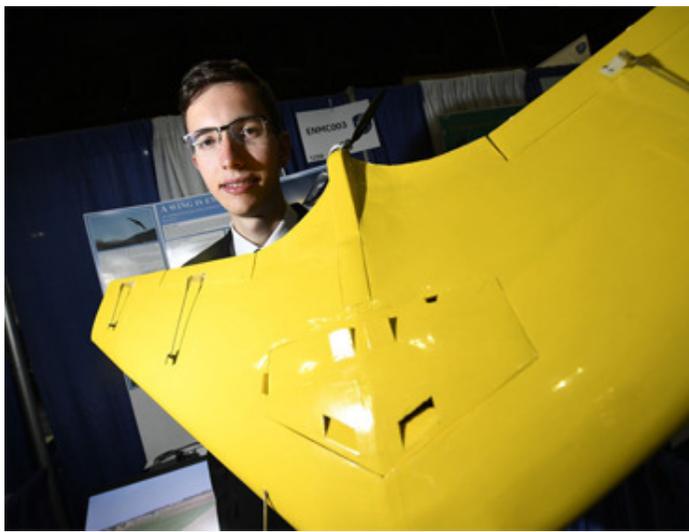
The teen attends Schloss Hansenberg International School in Geisenheim-Johannisberg, Germany.

The craft he created and flew was inspired by aeronautical research conducted in his home country early in the last century.

His project earned him the Gordon E. Moore award, named for Intel’s co-founder.

Two other winners each took home huge awards as well. In all, about one-third of all finalists received some sort of award for their research. Together, those awards totaled roughly \$4 million.

ISEF has been honoring young researchers since 1950. Created and run by [Society for Science & the Public](#) (SSP), it is the world’s largest international pre-college science competition. Now sponsored by Intel, ISEF this year brought together students from 78 countries, regions and territories.



Ivo Zell took the top prize in this year’s Intel ISEF competition for his aerodynamics improvement that could lead to more stable aircraft.

High flying design

On most of today’s aircraft, all parts of the wing — from the body of the aircraft out to the wingtips — generate a relatively smooth distribution of lift.

Lift keeps an aircraft aloft, but drops off toward the wingtips, notes Ivo. If you graphed the magnitude of the lift on the wing as seen from the front of the plane, it would look like the top half of an ellipse, he explains.

Early last century, two German brothers thought a different lift pattern might work better. An aircraft that included nothing but a wing would be more stable if the distribution of its lift was bell-shaped, not elliptical. In other words, far more of the lift would be generated nearer the aircraft’s body. But their designs were never tested. So Ivo decided to build his own version of the design to see if it would actually fly. One big benefit of the design: It should be stable enough to fly without needing a sophisticated computer to control it.

Ivo used software to design a small plane with the bell-shaped distribution of lift. Using a 3-D printer, he built the craft’s internal structure from a lightweight plastic. Then, he covered those plastic ribs with thin sheets of balsa, a type of light wood. Finally, he added a plastic coating to help protect the balsa wood from damage. His model had a wingspan of about 1.23 meters (4 feet). And even though the plane’s motor only put out about 400 watts of power, it could fly at speeds up to 160 kilometers (100 miles) per hour.

Ivo has not yet tested his aircraft in a wind tunnel. But he has flown the model using the same simple radio controls that guide many other types of model aircraft. He confirmed that his design is stable enough to fly without complicated computers. A “flying wing” based on Ivo’s design might experience a bit more drag than one with the normal distribution of lift. But, the teen reports, his design is a lot more stable in flight. “The trade-off of slightly more drag but increased stability would be worth it,” he argues.

Ivo intends to study aeronautical engineering. He also will continue to build and fly small drones.

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