

June 2017

Volume 15 Issue 6



# Flying Pilgrims Aero News

Next Meeting: July 19th 2017 at 7:00pm

# Location - Flying Pilgrims Club Air Field

This may be a good time for those of you who were reluctant to attend the more formal meetings at EAA hanger.



Inside This Issue
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President Bill Slabey opened the meeting at 7 pm with 27 people present.

# **Discussions**

# **Old Business**

# Field operations and lawn care:

The mowing service appears to be cutting the field lower. After 6 days of growth the grass is still reasonably short. All members seamed in agreement.

### Entrance Road:

Thanks to everyone for driving slow on the incoming road. let's keep up the good practice which will provide us with a long-lasting repair.  $\sim$  Please drive slow  $\sim$ 

### Canton Festival:

Jack Kezelian would like to thank the people who came out and helped with the promotional booth that was held at the Canton community "The Taste of Liberty Fest".

Bill Slabey commented on how well the public responded to Jack's jet engine startup's and Real Flite notebook simulator. Unfortunately, not enough members and airplanes showed to keep up with public interest. Over all this is a great idea and with a few changes and more volunteers, this could turn out to be a major factor in promoting the club and the September ¼ scale event. As a reminder to members, now and planning for the future year, we need to step up and help with club events.



# Pilot Training:

Ed Hernandez commented on how well everyone was coming along. Brandon was signed off on one of the windiest days aloft. A lot of windy days have been reported this early summer and hopefully this will improve as we move into midsummer weather.

The 40-size glow trainer Eagle is back and ready for testing. Last year a good-hearted member donated a nice 6 channel 2.4 GHz Spectrum transmitter. For training purposes, we were able to pair that up with another donated JR transmitter for use as a buddy box. All should be ready soon.

# **New Business**

# New Members & Guests:

John Road just moved into the area and is looking to for a place to fly. John is an avid flyer with a wide selection of aircraft. Tim Swartz a new member has been practicing on the simulator and is looking forward to flying on trainer night. A worm welcome to our guest and new crew member.

### FIELD OPERATION SAFETY starts with all members!

Follow the "SEE AND AVOID" GUIDANCE set forth by the AMA.

Call out warnings of approaching full size aircraft.

Fly at a safe low altitude relative to oncoming full size aircraft.

Because of our location relative to Willow Run Airport, we have a 400 Ft. height restriction.

Commercial test development of UAV's is prohibited at the field.

# June 11th Club Fun Fly:

The First Pre-Summer Fun Fly was held on June 14 with all attending having a great time.

Sponsored by: Glenn McIntosh, Don Kolehmainen & Joe Nazelli

Glenn really went all out with his new portable fryer, treating us with an additional entrées of French fries and cheese sticks. A really Great Job of volunteering by our dedicated members!







Our Next Scheduled Club Fun Fly's:

July 23<sup>rd</sup> The Jack Swint Memorial fun fly Hosted by: Glenn McInstosh, Joe Nazelli, Don Kolehmainen

August 20<sup>th</sup> The Corn Roast Hosted by: Glenn McInstosh, Joe Nazelli, Don Kolehmainen

> September 16<sup>th</sup> & 17<sup>th</sup> The Fall Phase out Contest Director: Jack Kezelian

# Dan D (Sec)

If you have any items you would like to sell and list in the newsletter, feel free to email me pictures. I will be happy to list them. Anything worth mentioning for the Fun Stuff section, ongoing projects etc. are welcome as well.

secretary@flyingpilgrims.com

If you're interested in getting more information or joining the club. Please feel free to contact me by phone at 734-482-8258; See us at the field or attend our monthly meeting, now being held at the club air field. The address is 7121 Ridge Road Superior Township. Google maps, search "Flying Pilgrims Trail"

Note: A high resolution copy of the **newsletter and pictures** can be viewed or downloaded via the <u>Microsoft OneDrive</u> secure link provided at top of letter. All links referred to in this letter are listed at the top and should be active depending on your browser settings.

# Flying Pilgrims Club Officers for 2017

President: – Bill Slabey
Vice President: – Joe McCarthy Trustees: Steve Cecale

Secretary: – Daniel Debens Don Kolehmainen
Treasurer: – Jordan Hall Joe Nazelli

Safety Officer: – Glenn McIntosh Chief Flight Instructor: Ed Hernandez

Lead Instructor: – Ed. Hernandez Sub Instructor:

Webmaster: - Carl Cornell

# Show & Tell:

Tom Byrnes brought out a model his son made as a gift for Father's Day. It was a rare privilege to this very fine model of Tom's home built full size Lancaster airplane. This model goes to show you that it doesn't have to fly to be a "master" model piece.





Tom's home built Lancaster





### Next up:

Carl Cornell been working with his new 3D printer and presented us with a printed piece of a P51 wing root section. Carl followed up with pictures and a nice article by him. More pictures can be seen in the expert information file on MS OneDrive, in the cloud.





### 3D Printing by Carl:

There are many options available for 3D printing. Some are turnkey and other require significant assembly and setup. I choose a Prusa i3. It is an open source design and available from several sources. Gear Best is an option but they are known for slow shipping and poor customer services. I ended up ordering from an eBay seller that would ship from the USA and have no complaints. A couple of key features for this printer is the print volume size, cost, and community of users that can offer support. There is a Facebook group and a number of forums to learn from or ask questions. Many owners make a hobby of modifying or upgrading their printer but I have done very little of that.

The i3 takes several hours to assemble printer while following the video instructions. It comes with everything required including tools and an SD memory card. Once assembled a few printable files were already on the memory card for the purposes of testing. For accurate prints a calibration cube is printed and measured to ensure that everything is aligned (square) and working correctly (motor drive and belt tension correct). There are several tutorials online to calibrate if needed. Checking and correcting any issues does not seem difficult. Mine didn't need calibration.

The first step to printing something is to create or obtain a design file. Many files are available for free online. Websites such as <a href="https://www.thingiverse.com">www.thingiverse.com</a> exist specifically for sharing 3D printable designs. There are many others and some sites you would not expect such as the library of files published by NASA. Just in case someone needs an accurate model of a Saturn V rocket. The design file or files can be downloaded to the hard drive of your PC.

The next step is to use software to convert the design into instructions the 3D print controller can read. These instructions are called G code. The software used is called a slicer. Essentially the slicer takes the design and cuts it into thin 2D layers. The layer representation is used to generate the code to drive the machine for each layer the printer will create as it builds up the part. Several slicers are available. An open source slicer called Cura is the most popular. A recent version of Cura was on the memory card that came with my printer. Updated versions are available to download as well. Some basic configuration is required so that the software understands the size and capability of your printer. Picking your printer and a few other options is all that is required.

Once the software is installed a design file is loaded into the slicer and a visual representation is displayed. Some options such as material being used, quality desired, and a few other settings are required. After choosing settings the software will execute the slicing operation and an output file containing the G code will be created. It can be saved to the computer or the memory card. The memory card is the easy way to transfer the file to the printer. After saving the G code to the memory card it can be ejected from the PC and moved to the printer. On the printer, the file can be chosen using the menu options on the printer display. once selected the printer will warm up and begin the process of printing.

There are many options available to configure the printer and slicing software. These options are there to help with various printing situations and to aid in improving overall print quality. An example of this is the support option used to provide the capability of printing parts that overhang. Without support the printed material would sag and drop deforming the overhang. Most online designs will specify options that should be used when printing. There are also many online resources for individuals that want to learn more about 3D printing.

The printer I purchased, use eBay search 172566716516.

A popular source for design (design.stl) files - <a href="https://www.thingiverse.com/">https://www.thingiverse.com/</a>
A source for RC plane designs (not free but the best) - <a href="https://3dlabprint.com/">https://3dlabprint.com/</a>

# Al Fullilove's Cessna 170:



Some Pictures from the Baldwin Jet meet:







