



AMA GOLD LEADER CLUB

RC Propbusters of Salem CT

www.rcpropbusters.com

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RC Propbusters, Inc. ©

AMA Club No 191
Founded 1937

October 2021 Newsletter

New Meeting Location! Salem "Center School." See page 3.
Register your RC aircraft. See page 4.
Take The Recreational UAS Safety Test (TRUST), required by FAA! See page 8.



(Photo credit: Jim Holzworth)

First RC Propbusters regular monthly meeting at historic Salem Center School, October 19, 2021

RC Propbusters meetings are held on the third Tuesday of every month @ 7:30 PM. Meeting location is the historic Salem Center School at 250 Hartford Road (Route 85), about one mile north of Salem Four Corners (Circle).

If you have an interest, come to our field. There is usually a member there who will give you the opportunity to try flying a trainer type model either powered by an electric motor or fueled engine. The gentlemen listed below have generously offered to help you learn to fly r/c airplanes, helicopters, drones, and gliders.

INSTRUCTORS

TOM VERNON	CHIEF PILOT	860-859-1548	JOE COMEROSKI	HELICOPTERS	860-848-3184
DENNIS DUPLICE	FIXED WING	860-376-6230	ED DEMING	BOTH	860-884-3222
ROBERT LARSON	BOTH	860-526-2267	MARK O'CONNELL	BOTH	860-460-8835
KYLE SWAIDNER	** GLIDERS	860-405-5304	LEN BUFFINTON	* GLIDERS	860-395-8406
DAVE GRAINGER	FPV RACING	860-302-3169	RICHARD CROOKS	FIXED WING	860-271-5154
DAVE PRATT	FIXED WING	860-367-1134			

* Len Buffinton is a Glider and Aerotow expert who can also help you with fixed wing flying.

** Kyle Swaidner flies everything, and also is offering to introduce you to sidearm and discus launched GLIDERS.

If you are a student, hook up with one of these men and get trained.

Any club pilot can train you, but an instructor must sign you off.

R/C Propbusters, LLC. Officers for 2021

- President: Ed Deming
- Vice President: Dennis Duplice
- Treasurer: John Banks
- Secretary: Peter Sylvester
- Safety officer: Tom Vernon
- Newsletter Editor: Jim Holzworth
- Field Marshal: Shane Duffy
- Board of Directors: George White, Richard Cavanaugh, Dave Hoffman, Chip Allard

CHECK OUT OUR WEBSITE:

<http://rcpropbusters.com/>

Please submit ideas and tips for the newsletter to Jim Holzworth at jimholzworth@gmail.com

RC Propbusters Outerwear
available at



26A Bushnell Hollow Rd., Baltic, CT 06330
 Phone: 860-822-9777
 Email address: info@jdembroidering.com
<https://jdembroidering.com/index.php>

NOTICE (from the Editor): Do we have your correct email address?

If you are currently a member of R/C Propbusters in good-standing and can only receive the monthly newsletter from our website (<http://www.rcpropbusters.com>), maybe your email address has changed, or was incorrectly entered on our membership list. Monthly newsletters are sent individually (directly) to each club member at the email address listed on the membership list. If you have a new email address, or need to make a correction, please contact Jim Holzworth at jimholzworth@gmail.com. Our membership list will be updated.

October Aviation Events & Milestones

- 9 October 1890 (France) — The first full-sized manned airplane to leave the ground under its own power is Frenchman Clement Ader's steam-powered, propeller-driven aircraft.
- 6 October 1908 (France) — Wilbur Wright and a French writer make the first passenger flight of over one hour.
- 4 October 1909 (USA) — More than a million New Yorkers watch as Wilbur Wright makes a flight along the Hudson River.
- 11 October 1910 (USA) — President Teddy Roosevelt becomes the first United States President to fly when he is taken up in St. Louis.
- 2 October 1918 (USA) — The Kettering Bug pilotless airplane being developed by Charles F. Kettering makes its first successful unmanned flight test, albeit for only nine seconds.
- 28 October 1924 (USA) — Army planes broke up cloud formation with electrified sand.
- 15 October 1939 (USA) — New York Mayor Fiorello La Guardia dedicates an airport in Flushing bearing his name. La Guardia airport is the costliest to build at the time, \$45 million.
- 14 October 1947 (USA) — Capt. Charles “Chuck” Yeager becomes the first person to fly faster than sound. Yeager “breaks the sound barrier” in his Bell X-1 airplane, “Glamorous Glennis,” named after his wife. He was able to reach 670-mph or Mach 1.015 at Muroc Dry Lake, California.
- 4 October 1957 (USA) — Russia launches the first Earth satellite. The 184-lb. “Sputnik” attains an orbital velocity of 5 miles per second.
- 10 October 1957 (USA) — President Eisenhower announces that the United States will attempt to launch a four-pound “test” satellite in December.
- 31 October 1968 (USA) — President Johnson orders a halt to bombing of North Vietnam.

<https://www.skytamer.com/October.html>

Practice, Practice, Practice,

... but PLEASE practice social distancing.

New Propbusters Meeting Location

Beginning October 2021 regularly scheduled Propbusters monthly meeting are being held at the *Salem Center School*, 250 Hartford Rd Salem, CT 06420.

The *Center School* is in the Salem CT historic district.

<https://historicbuildingsct.com/center-school-salem-1885/>



"The mastery of the turn is the story of how aviation became practical as a means of transportation. It is the story of how the world became small."

— William Langewiesche

Read more at <https://www.brainyquote.com/topics/aviation>

Reminder from Club President and Club Safety Officer:

"Due to the construction across from our field on Route 82, it is especially important to remember to always conduct a very THOROUGH preflight safety-check of your aircraft, and do not fly near Route 82, as required by the club Safety Rules. We request that all members help by politely reminding any pilots who inadvertently fly too close to the northern tree line and Route 82."

"COMMON SENSE, RESPECT FOR OTHER PILOTS, AND GOOD FIELD ETIQUETTE ALL GO A LONG WAY TOWARDS MINIMIZING REQUIRED RULES. REMEMBER: IT'S ALL ABOUT HAVING FUN WITH AVIATION MODELING IN A SAFE AND ENJOYABLE MANNER. SAFETY IS EVERYONES RESPONSIBILITY! IF YOU HAVE ANY QUESTIONS OR DON'T UNDERSTAND ANY OF THESE RULES, DON'T HESITATE TO ASK YOUR CLUB SAFETY OFFICER, ANY CLUB OFFICER, OR ANY EXPERIENCED PILOT FOR CLARIFICATION."

R/C Probusters Flying Field Rules PFFR 9/10, REV. 3 10/19

FAA Recreational Flyer Registration

Register your RC aircraft at:

<https://faadronezone.faa.gov/#/register>

Renew your RC aircraft registration at:

<https://faadronezone.faa.gov/#/>

How much does it cost to renew a registration?

\$5 through the [FAADroneZone](https://faadronezone.faa.gov/#/).

Just so you know, ...

The Paper Airplane Guy

One for the books... (author unknown)

Did people make paper airplanes before real planes? Yes and no. They were called paper darts before airplanes became part of our vocabulary. So, in a way, paper airplanes only happened after the Wright Brothers.

However, there are books dating back to 1864 (that's right—civil war era) that contain instructions for paper darts. At least 40 years before the invention of powered, controllable, human aviation, Americans were throwing paper darts around.



Paper darts may date much farther back. Leonardo Da Vinci describes making paper darts from parchment, so that gets us back to the late 1400s or early 1500s AD. His drawings get up-close to the concept of turbulent and laminar flow. His observational skills were amazing. The Chinese, having invented paper about 2,000 years ago, are generally credited with having folded the first paper airplanes. It's only an assumption built around the idea that they actually invented paper kites. It's not much of a stretch to believe they may have come up with a paper airplane in their experiments. There's no solid evidence either way.

I'm always a bit amused by finding such an obvious “seam in the zone”. The history of paper flight is clearly missing from our books and collected knowledge. It may have been so commonplace, from the dawn of paper, that it was hardly worth mentioning. Paper was once a very valuable commodity; rare and difficult to make. So much so, that a mere strip of paper wrapping would've almost certainly been worth more than the value of the gift. Immediately adopting of the invention of paper as the date of inventing the paper airplane seems a bit off.

I imagine that paper folding and paper planes came tumbling into existence with scraps of discarded paper. Folding a piece of paper is such an organic experiment. We break a blade of grass or a leaf as youngsters to simply experience the limits of the material. It's part of learning about the world. We may never know about the very first paper airplane. One day, an ancient Egyptian text may be unearthed showing a paper airplane. One day, perhaps an ancient Chinese tablet will reveal a folded dart. That will only deepen the mystery, which is certainly one for the books.

In the same way that paper darts gave way to paper airplanes, so too, did the ballistic dart give way to the gliding design for the distance

record. The evolution is not complete. It's only in progress. Some new, great hybrid design may be in the works. And that will be one for the books as well.



This article appears at: <https://www.thepaperairplane.com/single-post/one-for-the-books>

Check out *The Paper Airplane Guy* at: <https://www.thepaperairplane.com/>

[How many drones does it take to screw in a lightbulb? One, with 'Interstellar' soundtrack](#)

[Ishveena Singh](#) - Oct. 22nd 2021 5:55 am PT [@IshveenaSingh](#)

Watch at: <https://dronedj.com/2021/10/22/drone-screw-in-lightbulb-interstellar-viral-video/>

Published on *Model Aviation* (<https://www.modelaviation.com>)

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The history of Radio Control

Written by Bob Noll How RC technology evolved in the US Education As seen in the August 2018 issue of Model Aviation.

Read the entire article at: <https://www.modelaviation.com/print/1672>

It all started with Dr. Walter Good and his twin brother, Bill, in 1937. They could never have imagined what the hobby of RC model airplanes would be today. I'll take you with me as we travel along the timeline of RC development since the Good brothers made their historic flights at the Kalamazoo, Michigan, airport. Those first flights were made with an 8-foot Free Flight (FF) model into which the brothers installed their primitive RC equipment. They designed and built their Big Guff airplane in 1938 specifically for RC. That same year, Ross Hull, an avid modeler from Australia, flew a 13-foot RC glider at a famous glider site near Elmira, New York. As early as 1938, Leo Weiss was recognized as describing the first tone reed system, an eight-channel radio system. Raytheon developed its ultrasensitive RK-62 tube, which enabled the development of the single-tube receiver.



Howard McEntee published details with schematics for his twin-frequency transmitter in 1939. One of the earliest publications of a multifunction, single-channel RC system was by Thracey Petrides and Leon Hillman in 1941. The U.S. Army used RC airplanes called Radioplanes as artillery target drones during World War II. FCC Order 130-C went into effect on March 1, 1946, and created the 6-meter band allocation for the amateur service as 50 to 54 MHz. Many modelers, such as I, quickly learned some radio theory and Morse code to be able to fly on the 6-meter band, which gave them an almost personalized frequency at local fields.

The Good brothers, Bill (L) and Walt, at the 1940 Nats. The pair won the RC Nats in 1938, 1939, and 1940. Photo by Ted Just.

Timeline of Radio Control (until 2010)

Radio control has a history of just over 100 years. Here is a timeline of some of the important highlights.

Source: <http://www.stormthecastle.com/model-airplanes/timeline-of-radio-control.htm>

- 1871 - Alphonse Penaud launches the Planophere 131 feet in the air, powered by a wound up rubber band and inspires many people to believe that powered flight has potential.
- 1898 - Nikola Tesla designs and builds the first pair of radio controlled boats, demonstrating the vessels to a shocked crowd at Madison Square Garden. Tesla refers to his boats as "teleautomatons."
- 1903 - The world's first RC apparatus is born. The Telekino is presented by Leonardo Torres Quevedo at the Paris Academy of Science. During this, he demonstrates the ability to remotely control a robot via electromagnetic waves causing it to execute various commands.
- 1917 - During WWI Archibald Low, the "father of radio guidance systems", creates an aerial drone plane for the Royal Flying Corps, which is radio controlled and intended as a guided bomb.
- 1932 - The model aeroplane flies for its first time in this important era of RC development. We can thank the military for their contribution in remote control technology during WWII.
- 1937 - Walter Good, along with his brother William, is credited with constructing and operating the first fully-functional RC airplane. With the help of his plane, "Big Guff," Walter gives RC enthusiasts a reason to take to the skies. This historic plane is now on display at the Smithsonian.
- 1940s - Gas powered tether cars, a.k.a Spindizzies, are model cars powered by a miniature gas engine. This classic car became popular in the early '40s, but can only be started up to run in circles around the tether pole.
- 1950 - Remote control models gain popularity during the 1950's, but are limited by battery capacities and must be recharged frequently until the invention of the transistor.
- 1967 - The beginning of RC hobby car racing and production of car "kits". Pioneers make 1/8th scale pan cars and even 19 cubic inch 2-stroke model plane engines.
- 1968 - Dr. Dieter Schluter, an engineer from West Germany builds the first fully controllable RC model helicopter and is credited as the father of RC helicopter flight.
- 1970 - Companies begin introducing off-road RC vehicles. However, the Tamiya Rough Rider revolutionizes racing due to its die-cast suspension and big rubber tires for off-road areas. The RC buggy was born.
- 1993 - 1:10 scale electric cars and trucks gain in popularity and performance causing prices for motors, batteries and tires to soar. To make things more affordable, parking lot races of the 80's were reinstated.
- 1995 - RC makes a whirring debut as Andy's fun-loving remote controlled car in Disney/Pixar's first CGI feature film - Toy Story.
- 2008 - The world's largest RC airplane contest (literally) is held in Florida. Aptly named Top Gun, a total of 125 participants compete over a period of five days.
- 2010 - After 6 years of successful Mars exploration, NASA announces on March 24th the RC instructed exploration rovers, Spirit and Opportunity, have vastly exceeded their driving distance goal of just 600 meters.
- 2010 - On July 1, DARPA announces a \$33 million dollar contract for Northrop Grumman to demonstrate autonomous aerial refueling using two UAV NASA Global Hawks.
- 2010 - DARPA plans to fund their next phases of research by remotely controlling brain activity using ultrasound. These remote signals affect areas of the brain that regulate alertness and cognition in hopes that it will improve alertness and alleviate stress, anxiety and pain in soldiers.
- 2010 - Horizon Fuel Cell Technologies debuts "H-CELL 2.0", the world's one and only hydrogen fuel cell hybrid power-train for high performance hobby grade model RC vehicles.

See also: <https://www.modelaviation.com/history-of-rc> and <http://www.rcfoam.com/history-of-rc-timeline-a-1839.html>

The Recreational UAS Safety Test (TRUST)

All Propbusters are now required to take and pass The Recreational UAS Safety Test (TRUST), ... but don't worry!



The Academy of Model Aeronautics is an FAA-approved Test Administrator of The Recreational UAS Safety Test (TRUST). TRUST is a collaboration between the FAA and industry to provide TRUST and educational safety material to Recreational Flyers.

<https://www.modelaircraft.org/trust>

The Recreational UAS Safety Test (TRUST) FAQ

June 22, 2021, UPDATED TRUST INFORMATION:

The AMA has now been approved to administer The Recreational UAS Safety Test, or TRUST. AMA has worked closely with the Federal Aviation Administration (FAA), ensuring that TRUST meets the intent of Congress without placing an undue burden on our hobby community.

Since 1936, the AMA has been dedicated to the hobby of model aviation, to educational programming, and safety in the airspace. We are offering the TRUST to the entire community of model aviation enthusiasts free of charge.

Q: What is "TRUST"?

A: "TRUST" stands for The Recreational UAS Safety Test

Q: Why do I need to take TRUST?

A: The Knowledge and Safety Test is a congressional mandate in the FAA Reauthorization Act of 2018. **All UAS users** must pass the test in order to operate a recreational model aircraft (UAS) within the National Airspace System (NAS).

Read about TRUST at: https://amablog.modelaircraft.org/amagov/2021/02/24/the-recreational-uas-safety-test-trust-faq/?_ga=2.63574188.2031676889.1626979269-1294394244.1626979269

NOTE: According to a 2021-07-22 letter from Andy Argenio (our AMA District I vice-president) to Ed Deming and Dennis Duplice,

"Taking the test is required by law however ... no deadline was made known. We are advising all AMA members to take the TRUST test. ... If a member is involved in an incident with his/her sUAS/model-aircraft and is asked to show a printout or a digital image to authenticate that they have taken the test to an FAA person or Law Enforcement they can be issued a citation and be fined if they haven't proof on them that they took the test."

Tips & Tricks

Maiden Flight Checklist

On our website, there is a maiden pre-flight checklist every club member would do well to study and use. This checklist is mainly for the new, inexperienced, member of the club, but may help everyone. This checklist should be performed prior to bringing your airplane to the flying field. Find the checklist at: <http://rcpropbusters.com/maiden-flight-checklist-1.html> and <http://rcpropbusters.com/maiden-flight-checklist-2.html>.

Thanks to Peter Sylvester for the html version of the list. The list was originally published on the Old Propbusters website. Author is unknown. Of course, most items for engines apply to electric motors, as well.

Download printable version here: <http://old.rcpropbusters.com/maiden/checklist.pdf>

Selling rc airplanes, helis, and stuff?

We are encouraging members to use the Propbusters *facebook* site to sell rc airplanes, helis, and stuff.

Go to: <https://www.facebook.com/search/top/?q=rcpropbusters>

Which electric motor is equal to what glow engine?

Saint Maurice

07-27-2006, 02:50 PM

Q) How do you tell which Electric Motor is equal to what Glow Engine?

A) One of the biggest confusions for most people selecting an electric motor is, "What is a watt?" The glow guys are used to horsepower and electric power systems are measured in watts.

(1 hp = 746 watts or about 750 watts)

Don't go by the max rating for HP that engine manufacturers publish. That is a MAX figure and very seldom is an engine for sport use operated at that figure. The h.p. drops off quite a bit when the RPM is not at the rated figure which is usually around 16,000 RPM's or greater.

Glow Engines vs. Electric Motors

1. ♠ .20-size glow engine / **300w electric motor**
2. ♠ (OS Max 0.20 engine develops 0.4 hp = **300w electric motor (AXI 2820)**)
3. ♠ .35-size glow engine / **500w electric motor**
4. ♠ (Fox 0.35 stunt engine develops 0.7 hp = **522w electric motor**)(AXI 2826)
5. ♠ .40-size glow engine develops 1.0 hp = **750w electric motor (AXI 2826 or 4120)**
6. ♠ .60-size glow engine develops 1.3 hp = **975w electric motor (AXI 4120 or 4130)**
7. ♠ .90-size glow engine develops 1.6 hp = **1200w electric motor (AXI 5320 or 4130)**
8. ♠ 1.20-size glow engine develops 3.0 hp = **2250w electric motor (AXI 5330)**
9. ♠ DA-50 develops 5.0 hp = **3750w electric motor (AXI 5330)**
10. ♠ DA-100 develops 9.8 hp = **7311w electric motor (Double AXI 5330)**

See E-flite [Park 400](#) and [Power 60](#) series that mimic replacement sizes for old brushed motors and glow engines. http://www.gregcovey.com/Glow_Conversions_Made_Easy.htm

Read the entire thread and chart at: <https://www.wattflyer.com/forums/showthread.php?t=8859>

Model of the Month

No airplanes, helis, or quads were on display this month, but Peter Sylvester introduced members to a RealFlight simulator with our very own flying field as the environment! Pictured at right is Ed Deming showing Tom Vernon the RealFlight program. Pictured below is Peter Sylvester explain how he adapted the RealFlight system.



RealFlight - Panoramic Photo field

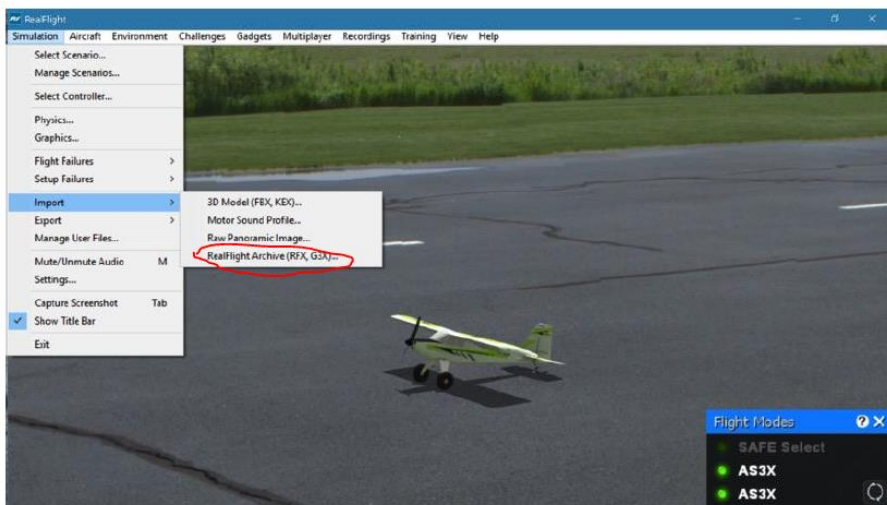
Download the "repropb-photofield_v2.rfx" file from our RC Propbusters website:

<http://rcpropbusters.com/index.html>

To import the site into your RealFlight G4 or above:

In RealFlight simulator's menu go to **Simulation > Import > RealFlight Archive** and/or read the RealFlight manual. The manual can be accessed from the RealFlight simulator's menu at: **Help > RealFlight Help...**

Find Propbusters Flying Field under tab: **Environment > Select Airport > Custom Airports > Photofields.**



Airport environment displays as **RCPropB-PhotoField_V2a.**

Minutes of the October 19th, 2021 RC Propbusters Meeting

The meeting was called to order at 7:32 PM with 8 members present at Salem Center School.

Minutes of the September 2021 meeting were read and approved.

Treasury Report:

- o Opening balance: \$2436.51
- o Expenses: \$167.86
- o Savings account: \$36054.13
- o Income and dues: \$117.24
- o Ending balance: \$2385.89

Events:

- Informal Thanksgiving aerotow event is anticipated to be organized by Len Buffinton. (Black Friday)

Old Business:

- Work on flying field will continue in the fall. Will get quotes from contractors about the improvements we want (leveling, seeding, etc...).
- Please take the FAA safety test (TRUST). The AMA website has a link to it. Everybody is required to take it and the test is not difficult.
- John brought up an issue with our Tax Id and the new requirements for PayPal to report transactions above \$600. He will keep looking into it.

New Business:

- The club is getting inundated with RC estate sales of family members who passed away. Really old stuff that has no value. Ed suggested to craft a standard response for non-club members. For club members we can put adds on our Facebook page.
- Membership can be renewed for 2022 but stickers will not be sent out till December.

Good and Welfare:

- New rentals across from the flying field will open next January.
- John Gadbois offered a couple of loads of asphalt tailings.

New Members:

- Simon Holley, Thomas Moore. – voted in.

Show and tell:

- Ed demonstrated (on his laptop) the RCPropbusters flying field for RealFlight that is now available for download from our website.

Club Officer attendance:

President Vice President Treasurer Secretary Safety Officer Field Marshal

Meeting adjourned at 8:18 pm.

Respectfully submitted by Peter Sylvester.
