

RC Propbusters of Salem CT

www.rcpropbusters.com

Jim Holzworth, Newsletter Editor jimholzworth@gmail.com, 860-885-9260 RC Propbusters, Inc. ©

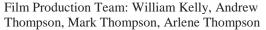
AMA Club No 191 Founded 1937

February 2019 Newsletter

Annual Prophusters Flying Field Cleanup, April 13 (rain date April 14/20). New England Aerotow, Salem, Connecticut, May 16-19. See page 3 FAA requires that drones must be registered and labeled. See page 4 Weekly indoor flying continues at St. Thomas More school. See page 5 Flying Field Rules Updated (2019-02-19). See page 10

Great turnout at Mark Thompson's premier showing of his documentary film *RC Propbusters Untold*, at the *Cragin Memorial Library* in Colchester Connecticut on Saturday, January 26th 2019.







Overflow crowd was fascinated and delighted.

RC Propbusters meetings: Third Tuesday of every month @ **7:30 PM**. Meeting location is **Salem Public Library**, CT Route 85, about one mile north of Salem Four Corners (Circle).

Learn to Fly!

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 RC airplanes, helicopters, drones, and gliders.

INSTRUCTORS

TOM VERNON	CHIEF PILOT	860-859-1584	JOE COMEROSKI	HELICOPTERS	860-848-3184
DENNIS DUPLICE	FIXED WING	860-376-6230	ED DEMING	HELICOPTERS	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	860-446-0050

^{*} Len Buffinton is a Glider and Aero-Tow expert who can also help you with fixed wing flying.

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.

Won't be long, now, Propbusters! Punxsutawney Phil predicts an early spring.







 $\frac{\text{http://www.iwindsurf.com/forums/viewtopic.php?t=27821\&postdays=0\&postorder=28c\&start=0\&sid=f062abfbef464dffac4f8eea97edd7e0}{\text{http://www.iwindsurf.com/forums/viewtopic.php?t=27821\&postdays=0\&postdays=0\&postdays=0&$

Newly Elected Club officers for 2019

President: Bill Mares
Vice President: Ed Deming
Treasurer: John Banks
Secretary: Peter Sylvester
Safety officer: Tom Vernon
Newsletter Editor: Jim Holzworth
Field Marshal: Shane Duffy

Board of Directors: Mark Thompson, Dave Hoffman,

Mark O'Connell, Bob Beauregard

CHECK OUT OUR WEBSITE: WWW.RCPROPBUSTERS.COM

If you want to contribute something to the website, you can do so on the forum or contact Mark Thompson at

mark@sterlingtec.net

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

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

February Aviation Events & Milestones

25 February 1784 (Italy) — The first balloon flight made in Italy takes place from the grounds of a villa owned by Chevalier Paul Andreani near Milan and uses a modified Montgolfière hot air design built by the brothers Charles and Augustin Gerli.

23 February 1921 (USA) — A team of pilots completes an experimental coast-to-coast mail flight; flying by day and night, they have linked San Francisco and Long Island in a day and half's flying time.

19 February 1937 (USA) — Howard Hughes establishes a new transcontinental speed record of 7 hours 28 minutes 25 seconds from Los Angeles to Newark, New Jersey.

21 February 1945 (Germany) — Republic P-47 "Thunderbolts" attack Berchtesgaden, Germany for the first time.

1 February 1964 (USA) — Entered Service: Boeing 727 with Eastern Air Lines.

9 February 1969 (USA) — First flight of the Boeing 747 "Jumbo Jet" airliner takes place in Seattle, Washington. The wide-bodied, long-range transport is capable of carrying 347 passengers, and is the largest aircraft in commercial airline service in the world. (OTM)

25 February 1990 (USA) — Smoke-free flights become mandatory throughout North America for all United States airlines.

New England Aerotow 2019

According to their website (https://www.scalesoaring.com/about-us), "Soaring is a passion that

can fuel a lifetime of enjoyment and friendships. ScaleSoaring.com is our creation, born of that love for soaring, on behalf of the worldwide radio controlled aero towing and scale soaring community. We are dedicated to providing a helpful and fun resource for beginners and seasoned experts alike. And we remain keenly interested in serving those new to the hobby so they can both succeed and help grow our ranks!"

https://www.scalesoaring.com/

https://www.scalesoaring.com/new-england-registration

New England Aerotow 2019
Salem, Connecticut
May 16-19, 2019
Event Registration



Couldn't have said it better myself!

August 2013 Propbusters Newsletter

Fred Meyer

A CONTINUING APPEAL FOR INVOLVEMENT

Members of the RC Propbusters are privileged to have a well-developed and maintained flying site with a few members dedicated to make it better each year. Some work to hold events to earn the dollars needed to improve our field and to expand the visibility of our club, while others search for paths and ideas that can continue to improve our club and attract new members. Without question, out club members support our events and help make them successful; we solicit other clubs and unaffiliated AMA members to support our events, and it is time we recognize that we need to support other clubs and their events so our hobby can continue to grow and influence younger generations with the passions and careers this hobby can bring to them. We need the ideas from everyone with a vision for the future so our club can become still more exciting with a goal to become the best in Connecticut, and I would suggest, an AMA Leader Club. Clearly, we should be looking for opportunities to participate in local school events as well as city and town fairs where we can expose everyone to the excitement and skills of our hobby. Model Aviation in itself offers lifetime careers, and clearly can lead to fantastic careers in the world of Science & Engineering, disciplines we can never have enough of to insure a continuing leadership role for our Country. Get more involved with the direction of our club and spread the word about our fantastic hobby & its benefits to your friends and associates. Invite them to come on out and enjoy our field and our members.

Editor's Note: On January 12, 2015, RC Prophusters, Inc. became an AMA Gold Leader Club. http://old.rcprophusters.com/

There's still time to comply with the FAA!

From: https://www.engadget.com/2019/02/12/faa-drone-id-numbers-external/

FAA will require drones to display registration numbers externally

You have until February 23rd to mark the number on the outside of your drone.

Kris Holt, @krisholt

"Drone owners will soon need to display their device's registration numbers on the outside of the craft, the Federal Aviation Administration has declared. The agency, which last month proposed looser restrictions on drone night flights, posted the rule on a Federal Register preview site. The directive is set to take effect on February 23rd -- you'll need to mark the ID number on your drone's body by then.

FAA Rules apply to fixed-wing aircraft and helis, as well as drones.

https://www.faa.gov/uas/getting_started/

https://www.faa.gov/uas/recreational fliers/

 $\underline{\text{https://www.federalregister.gov/documents/2019/02/13/2019-00765/external-marking-requirement-for-small-unmanned-aircraft}$

https://s3.amazonaws.com/public-inspection.federalregister.gov/2019-00765.pdf

https://amablog.modelaircraft.org/amagov/2019/02/13/faa-issues-interim-final-rule-for-external-marking-requirement/

How to Label Your DRONE:

https://www.faa.gov/uas/getting started/register drone/media/UAS how to label Infographic.pdf

EDITOR'S NOTE: This issue of *RC Prophusters Newsletter* started with an idea to focus on building and assembling those flying models we were fortunate to receive as holiday gifts. Lots of Tips and Tricks! Then I changed my mind. I started to think more about quadcopters and drones.

Please click on the following links for some interesting reading about drones. They provide lots of good info about electronics, batteries, motors, and radio control. We'll save powered airplanes, gliders and sailplanes for later.

https://www.airspacemag.com/flight-today/build-your-own-drone-180951417/

http://beginnerflyer.com/build-a-drone/

https://ptgmedia.pearsoncmg.com/images/9780789755988/samplepages/9780789755988.pdf

https://elinux.org/images/1/1b/Building_a_Drone.pdf

http://www.1nvrc.com/wp-content/uploads/2017/10/FPV-Drone-Build.pdf

https://www.mne.psu.edu/sommer/me445/reports/Fa14.pdf

http://mydronelab.com/blog/how-to-build-a-drone.html

http://dronenodes.com/how-to-build-a-drone/

https://thedronegirl.com/2018/05/06/build-your-own-drone/

https://www.thecasefarm.co.uk/how-to-build-your-own-drone/

https://www.amazon.com/slp/build-your-own-drone/uakezsayb6smyqg

We should ask our resident experts (Dave Grainger and John Bagdasarian) for more information about quadcopters.

https://dronedj.com/2018/11/15/tello-edu/amp/

https://tellopilots.com/threads/programming-application-for-tello.16/

https://tellopilots.com/forums/tello-development.8/

See our club newsletter at http://rcpropbusters.com/index.html for some **Propbusters**.

See our club newsletter at http://rcpropbusters.com/index.html for some good and useful links about building and flying and stuff.



Propbusters weekly indoor flying

St. Thomas More School

45 Cottage Road, Oakdale, CT 06370

\$10 per person each night.

Sunday evenings from 7:30 to 10:30pm. Feb 24; March 3.

For further details, contact Dave Grainger,

david.grainger@sbcglobal.net, or Joe Comeroski, JMCOM54@atlanticbb.net

Quadcopter Explained Thoroughly

"The quadcopter concept is not new. Manned quadcopter designs appeared in the 1920s and 1930s, but these early concepts had bad performance, a high level of instability, and required a lot of pilot inputs. The advancement of electronic technology in flight control computers, coreless or brushless motors, smaller microprocessors, batteries, accelerometers, cameras, and even GPS systems made it possible to design and fly quadcopters. The simplicity of the quadcopter has made it a very effective aerial photography and video platform."

https://www.droneomega.com/what-is-a-quadcopter/

http://beginnerflyer.com/build-a-drone/

HOW TO BUILD A DRONE - A DEFINITIVE GUIDE FOR NEWBIES

"So, you want to build a drone? Awesome! The following tutorial is going to guide you through every step of

the process. Let me warn you: it's pretty long (5,000+ words), so you may want to bookmark this page. Why did I make this guide so long? Basically, a lot goes into building a drone, so I want to make sure I leave nothing out. From understanding basic UAV/drone terminology, to assembling the different parts of an RC quadcopter, you're going to learn all the steps, from A-Z, on how to build a drone."

http://beginnerflyer.com/build-a-drone/



Quadcopter Flight School

http://quadcopter101.blogspot.com/

Quadcopter 101

https://www.youtube.com/channel/UC90A4JdsSoFm1Okfu0DHTuQ

How to Fly a Drone

A Beginner's Guide to Multirotor Systems & Flight Proficiency



In this guide, you'll learn how to fly a guadcopter (or any other multirotor drone).

Everyone goes through different struggles when piloting a quadcopter for the first time. Multirotor flying definitely has a learning curve. So, if you're having trouble flying your quad, you're just getting started, or you're looking to hone your skills — don't worry. You're in the right place. https://uavcoach.com/how-to-fly-a-quadcopter-guide/

FYI!

Anyone who was so impressed by Dave Grainger's demo of his Ryze Tello drone that you bought one (or you're thinking about it), you might be interested in the cellphone app *DroneBlocks*. DroneBlocks uses the Scratch programming language to create navigation patterns and missions.

https://www.youtube.com/watch?v=5NGPrMP1r2Y

Ryze Tello drone | How to program your Tello with DroneBlocks App!

SuperdanTech

Published on May 16, 2018

I am showing in this video how you can use the DroneBlocks App (similar to Scratch on PC) to program your Tello drone to fly totally autonomously! You have to see it to believe it! DroneBlocks uses a graphical programming language that is very easy to learn and use. In this video I give a very simple example where we will have Tello fly a square pattern and then land totally on its own, without any pilot interaction. Don't miss my other videos on this amazing drone from Ryze Tech. Remember that LIKES are very much appreciated if you enjoyed this video. Don't forget to subscribe for more cool stuff on fun technology. Thank you for visiting my channel. www.superdantech.com

https://www.youtube.com/watch?v=5NGPrMP1r2Y https://www.youtube.com/channel/UCxSxkZD7LxLgFwJk902biUQ

Tips & Tricks

Flying a drone indoors: Considerations & Tips

By <u>V Kadamatt</u> | <u>Guides</u>

"Flying a drone indoors? That is dangerous and/or outright boring, right? Not necessarily. In this post we'll discuss why you should consider flying your craft indoors, how to pick the right craft, how to make indoor flying fun and challenging and some considerations you must take into account. You'll also see how you can utilize indoor flying to your advantage to master flying a multirotor/helicopter!"

http://www.droneybee.com/flying-a-drone-indoors/ http://www.droneybee.com/drone-regulations-safety/ http://www.droneybee.com/

Exploring Drone Aerodynamics with Computers

Author: Kayvon Sharghi

For decades, NASA has used computer models to simulate the flow of air around aircraft in order to test designs and improve

the performance of next-generation vehicles.

At NASA's Ames Research Center in California's Silicon Valley, researchers recently used this technique to explore the aerodynamics of a popular example of a small, battery-powered drone, a modified DJI Phantom 3 quadcopter.

Go to the website

https://www.nasa.gov/image-feature/ames/exploring-drone-aerodynamics-with-computers for a cool video of the airflow, and the rest of the story.



Simulation of the DJI Phantom 3 during flight. Airflow interactions are shown as undulating lines. Pressure changes are shown using color. Areas of high pressure are red; low are blue. *Credits: NASA Ames Research Center/NASA Advanced Supercomputing Division/Tim Sandstrom*

Models of the Month

Two "kids at heart" show models of the month and more. John Behne assembled the wooden airplane he was given when he was a little boy (~1941-42), and his new toy, a PT-17 1.1m BNF Basic with AS3X (EFL3350). [Tom Vernon says it's actually a N2S Stearman Yellow Peril.] Ed Deming showed his new Blade 130 S BNF Basic heli with SAFE Technology (BLH9350), and a Sky RC BD 200 Battery Discharger & Analyzer. Ed also showed a half-dozen snap shots of him holding model airplanes he built as a young boy. Very impressive!



US.NAT. 433

John's childhood toy and his new toy, a PT-17 BNF. https://www.horizonhobby.com/pt-17-11m-bnf-basic-efl3350

John Behne with his toy airplane.



Ed Deming shows his new heli, a Blade 130 S BNF Basic with SAFE Technology (BLH9350) https://www.horizonhobby.com/blade-130-s-bnf-basic-with-safe-blh9350



Sky RC BD 200 Battery Discharger & Analyzer. https://www.skyrc.com/BD200

Flying Field Rules Updated

Rules were voted on and approved (effective April 15th 2019) as read below:

<u>Muffler Requirements – Giant Scale</u>

- Single Cylinder Engines with displacement of 56cc or over are required to have full length "cannister style" mufflers or Tuned pipes to assist in reducing their noise footprint.
- Multi-Cylinder Engines with an individual cylinder displacement of 36cc's or greater are required to have "cannister style" mufflers or Tuned pipes to assist in reducing their noise footprint.
- If an aircraft, by design or by assembly, is not capable of accepting cannister-style mufflers or tuned pipes per the requirements described above, the airplane may be tested to see if it is in compliance with the current sound guidelines/Sound test present in the club bylaws.
 - o If the aircraft meets the sound rules without the described exhaust systems above, it will be permitted to fly.
 - Members are also always afforded the ability to have their airplane tested in lieu of the above "exhaust type" measures to ensure compliance with the sound rules to avoid making changes to aircraft that would otherwise meet requirements.

Sound Footprint - "Prop Rip"

Definition: "Prop Rip" is described as the point at which the aircraft's propeller tips achieve high subsonic and possibly super-sonic speeds resulting in a loud and audible "cracking" or "ripping" noise over and above what is observed under a lesser throttle position or "loaded" condition.

- It is realized that "prop rip" can occur accidentally under certain flying conditions and a pilot must make all efforts to minimize "prop rip" at all times.
- If a pilot's aircraft and engine enter a condition where "Prop Rip" occurs, he/she must immediately reduce power to eliminate the excessive noise.
- If a pilot continues to maintain the high level of noise caused by prop rip in excess of 5 seconds, the pilot is to be advised of the condition/warned and asked to refrain.
- If the pilot continues to create the excessive noise via Prop Rip again after being advised/warned either in the same flight or subsequent flights (exceeding the time limit set above for curing accidental ripping-conditions), the pilot and subsequent aircraft will be grounded.
- If a member is not following the advisement/warnings from club members or officers (as this is a community enforced rule), the members are to advise the Club Officers for further review and official action.
- As with any of the rules, by-laws of the club, or required conduct, failure to follow these items and/or willingly ignoring them can lead to further actions up to and including expulsion from the club via established guidelines in the By-laws.

Flight Safety Rule Addition:

- Pilots are not to purposely put their aircraft into a position where it is executing a maneuver of any nature that is considered "high energy" (High energy described as high speed and/or high airframe stress) in the direction of the flight line/pit area, parking lot, or spectating areas.
- Due to the possibility of failure of a component at any time for any reason, pilots must be diligent to ensure that they maintain all safety boundaries and make all attempts to avoid putting their aircraft into an attitude or course where if a failure were to occur, the aircraft could continue on into the designated Pit, Parking, or Spectator areas.

Minutes of the February 19th, 2019 RC Propbusters Meeting

The meeting was called to order at 7:30 PM with 20 members present.

Minutes of the January 2019 meeting read and excepted.

Treasury report:

Opening balance: \$3353.26
 Expenses: \$40
 Savings account: 28008.98

o Income and dues: \$1492.07 o Ending balance: \$4805.33

Read and accepted

Events

- Field Cleanup: April 13, rain date April 14/20. - E-Fun Fly: July 13 (rain date 14)

Aero Tow: May 16-19 - Neighborhood fun fly: Aug 17

- Memorial Fun Fly: June 15-16

Motion passed to accept dates for the event.

- Plainfield town business management asked us to do a demo. No date set yet.

Old Business:

Mark's movie was a great success.

New Business:

- Per FAA, drones have to be registered and visibly labeled.

Good and Welfare:

- We have lots of new members coming in. We need to enforce noise levels. Will order a recordable DB meter.
- John has the proposal for our "**Field Rules**" changes for noise limitation. Will post it in the newsletter and on the website for everybody to read it. Motion passed to have the new rules accepted effective April 15th 2019.
- Hossein Nadimi's flying poses security risk despite having been warned multiple times. Motion carried to send "Cease and desist all flying on club property until further notice" to Hossein.
- The pylon racing seems to pose risks for the club (e.g. flyaway racer at 100mph)
- John proposed additional safety rule changes specially regarding "high energy" flying.

New Members

John Butler

Show and tell

- John: 1940s wood airplane model (non flying). + N2S Horizon biplane.
- Ed: 130S Blade Heli flies pretty good!

Club	Officer	attendance:
------	---------	-------------

<u>x</u> President <u>x</u> Vice President <u>X</u> Treasurer <u>X</u> Secretary <u>X</u> Security Officer Adjourned at 8:45

Respectfully submitted by Peter Sylvester.