

Welcome to the new year 2020!

Brief introduction: I have been playing around with modeling on several different media throughout the years and have always wanted to return to Flying models. I finally got back. I have not been flying for as long as most our members but have found that to have significant value. The wealth of knowledge and raw experience I have found here, from all of you, has been priceless.

WDARC 2020: We have some very nice projects to begin, and one the others hinge on to be completed. It has come to the attention of the club, and I must say had a very positive response from all, that we need to begin working on our aesthetics. This begins with water! We are very close to completing this illusive task, but unfortunately Fall has paused our next steps. The other items can begin before we are permitted to access water. Other items we are considering, will be replacing the old fencing that is currently the Public Delineation line. We would like to replace it with the same fencing we recently placed for the pilot barricades, minus the catch netting. The next area of interest will be to clean up the "flower bed" area near the Memorial Stone. Possible scraping several inches down and placing a weed resistant material over the soil, then back filling with another material. We are currently considering gravel. I believe there are other items to consider as well, all of which we would like the WDA club membership to have a voice in. These will all be discussed at length in the coming months and executed when/if approved. Please come and join the discussion second Monday, of every month at the Woodland Library in the Leak Room.

The future of Model Aviation: I find myself constantly considering different ideas on how to grow as a Model Aviation Community, specifically our membership. I would like to hear any ideas you have in helping with this. I'm sure you have met our newer members with the younger pilots. It brings back fond memories, I'm sure. Let's make many more. Hope to see you at the Field and the meetings, Fly Safe!!!

Doug Vice

NEXT WDA CLUB MEETING

Woodland Library, Leake Room
Monday Jan. 13th @ 7pm
Board meeting @ 6pm

Prez Sez

Meetings Minutes Mike Frint

Modeler's Corner Systrema

FAA proposed regulations (and other solutions to problems that don't exist)

R. Geertson

Doug Vice

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December 9, 2019 Board Meeting Minutes

Board Members/Officers present: Vice President: Doug Vice, Treasurer: John Eaton, Secretary: Mike Frint. Board Members: Doug Barton, Sheldon Berkowitz, Mike O'Kane, Danny Winters. **Absent:** President: Kerry Roberson. Board Member: Chris Dellinger. Safety Officer: John Lett.

The meeting, held at the Woodland Public Library, was called to order by Doug Vice at 1806 hours. Eleven members were in attendance. By the end fourteeen members were in attendance. No guests or new members.

A motion was made by John E. to approve last month's Board meeting minutes. The motion was seconded by Sheldon and adopted.

Officer Reports:

President: Kerry was absent.

Vice President: Doug V. had nothing to report.

Treasurer: John reported that we had income from \$1355 in dues, \$85 in interest and a \$100 donation. Subtract an electric bill of \$146 and it resulted in a net income of \$1208. Dues are still coming in. He also reported the Everbank savings account in now known as TIA.

<u>Membership:</u> John reported that we have three new members. Some members from out of the area have paid for points they shouldn't have paid. These funds should be returned to the members or if said members are willing to donate the funds to the help the club then the club should send out thank you letters.

Secretary: Mike had nothing to report.

Old Business: Water supply/pumps/electrical-Art W. suggested that we reduce the intake pipe from six inches to three inch size. However, the big intake pipe has been pullled from the culvert for the rainy season. We will pick this back up in the spring season. It is estimated that we will not be getting much water from the cow fields anymore.

Event Report: Warbird Fun Fly-Robert K. reported that about a half dozen flyers showed up. Ben cooked burgers. **New Business:** Work Party is not needed. Some "winterizing" has been done and tarps are already taken down.

Nominations: Elections will be held during the General meeting tonight. The list of nominees was read aloud. Upcoming Event: Chilly and Chili fun fly on Jan 1 will be over by the time you read this. Forrest was doing the food coordination again. Thanks Forrest!

New Business, more: Sheldon brought up the issue of Jim Saare's trailer at the field. A lengthy discussion of field rules and the club's use permit ensued. Unfortunately, Jim was not in attendance. John E. and Doug B. will work with him on this issue. This issue should be resolved soon. More-Forrest requested to add a discussion of club participation in afterschool activities to the general meeting agenda tonight.

Meeting adjourned at 1851 hours.

<u>December 9, 2019 General Meeting Minutes</u> Board Members/Officers present: Vice President: Doug

Vice, Treasurer: John Eaton, Secretary: Mike Frint. Board Members: Doug Barton, Sheldon Berkowitz, Mike O'Kane, Danny Winters. **Absent:** President: Kerry Roberson. Board Member: Chris Dellinger. Safety Officer: John Lett. The meeting, held at the Woodland Public Library, was called to order by Doug Vice at 1902 hours. Twenty-two persons were in attandance. No guests or new members.

A motion was made by Art W. to approve last month's general meeting minutes. The motion was seconded by Danny W. and adopted.

Officer reports:

President: Kerry was absent.

<u>Vice President:</u> Doug V. had nothing to report.

<u>Treasurer/Membership:</u> John repeated what he said during the Board meeting. He has issued 31 cards for 2020 so far and we have 14 life members.

<u>Secretary:</u> Mike briefly mentioned a breaking news story that a drone has possibly collided with a news helicopter in Los Angeles.

Safety: John was absent.

Chair reports:

Field Chair: Doug V. had nothing to report.

<u>Newsletter:</u> Rich had nothing to report. He did have a nice large model shipping box to give away.

Points: Stein was absent. **Website:** Kerry was absent.

<u>Old Business:</u> Water/power/electrical supplies-a heated discussion about this project occured. When the dust settled the end result is that the large supply pipe has already been removed from the culvert and this project will be resumed in the spring.

Events: Informal warbird fun fly-was held December 8th. Monty wants to sanction this event next time and has volunteered to put on the Wings of Victory event again.

New Business: Work party-not needed.

<u>Upcoming events:</u> Chilly and Chili fun fly on Jan 1 will be over by the time you read this. Forrest was doing the food coordination again. Thanks Forrest! Forrest is also working on the contest calendar. This prompted a lively discussion among the group about the necessity of events that close the field for regular flying days. Forrrest stated that the goal is to have one event a month.

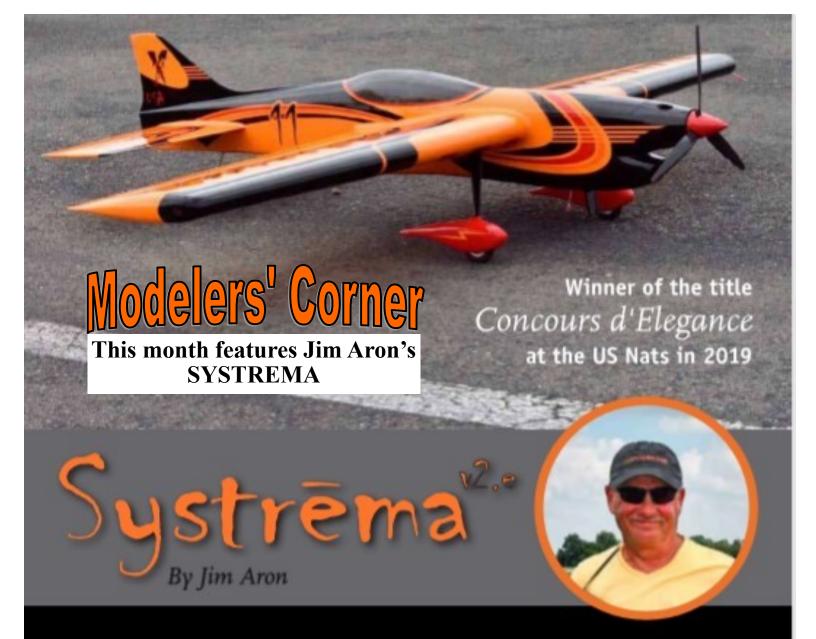
Afterschool Presentations: Forrest is proposing that the club participates in an afterschool program at the Woodland Christian School, which is a private school, possibly on Wednesdays.

Nominations/Elections: Elections for club officers and three Board member positions were held tonight. Doug V. pointed out that we actually needed a third nominee for Board Member (for Mike O'Kane to move to secretary) and then he

opened Nominations. John E. nominated Jeff Lovitt for Board and Jeff accepted. Prior nominations were: Robert Kozlowski for President, Doug Vice for Vice President, John Eaton for Treasurer, Mike O'Kane for Secretary, Keith Young and Chris Dellinger for Board Members. With no further nominations, Doug B. made a motion that we accept the Board and Officers as nominated. John E. seconded. A vote was taken and the elections were complete.

anyone knew how the "Phntom Pilot" device shown in the recent newsletter worked. Doug B. mentioned that Jim Aron's control line pattern model was fea-





rief History of Systrema v2.e Systrema v2.e evolved from my first Systrema which was built in 2010. The original Systrema was a small airframe (585 square inches) powered by a PA65 on an Eather pipe and later converted to electric. This airplane, as well as version 2. utilizes a Phil Granderson airfoil. The idea behind the original was to build a smaller airplane that presented larger than it was. That goal, I believe, was achieved at the expense of a very high wing loading. Phil Granderson's airfuil enabled that little ship to perform better than it had any right, but in the end, it was clear I either had to build a much lighter ship or go back to a larger airplane where the increased wing area could better handle the weight of the hardware. I decided on the second plan. The new airplane was designed for electric, was much

larger, sported an inline configuration, a slightly higher aspect ratio, and a new color palette. One difference was the use of seethrough open bays. In essence, the paint scheme informed the construction of this airplane and caused more headaches than I care to enumerate. The wing sheeting, for example, had to conform exactly to the proposed color design causing a strange D-tube which I feared might have structural issues. As a result, I felt the need to incorporate full span spar webs and a dual spar layout. This did not help to keep the weight down. Oh well. While the electric conversion on the original Systrema improved its performance significantly, the new ship is a much better airplane in all respects. I'm looking forward to getting to know it better.

Jim Aron



Cooling vent for motor and airscoop wich directs air over the ESC.



Hinged arming plug under swiveling magnetic hatch.



The finished model!



Simplified bottom paint scheme with foux invasion stripes. Note rear exhaust and titanium geor.



Spring loaded top hatch, "Spring" provided by carbon band in the basic structure.

Specifications:

Model Name: Systrema v2.e

Designers Jim Aron

Special features: Built up modified O-tube wing (wing sheeting conforms to dyed open bays), Polyspan on wing. Carbon vell everywhere else. Top Load/No Bolt Battery Hatch. Hidden Arming and Activation Smitch. Yatsenko Titanium Landing Gear System.

Span: 60.6 inches

Wing Area: 675 sq. inches

Moment arms: (Measured from the front of the wing to the back of the spinner and from hinge line to hinge line) nose moment 11 inches, talk moment 18.4 inches, overall length 48.25 inches.

Finish: Substrate Nitrate
Open Bays Dye infused nitrate
Primer Klass Kote #55 White Primer
Basecoat/Trim Color PPG Omni 2 stage
Urethane

Clear PPG Global: Clear D893

Hardener D884 Thinner D871

Motor: Ptettenberg 20-16

Battery: ThunderPower ProLite X TP2800-6S PX25

ESC: Jetti Spin 66

Timer: Igor Burger (Acc Timer

Prop: Igor 12x5 Narrow 3 Blade

RPM at Release: Approx. 9,700-9,800

depending on conditions

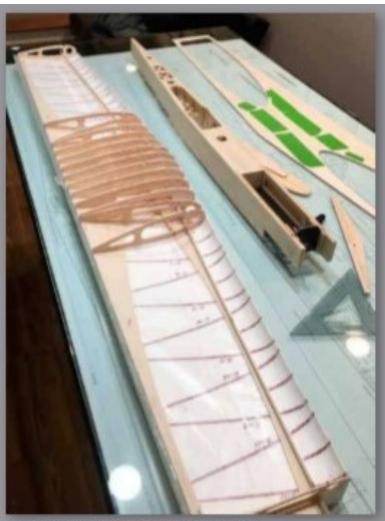
Lead-outs: .036" 19 strand steel

Line length: .018" 7 strand; 65' eyelet

to eyelet

Handle: Cox/Resinger Carbon Hardpoint

Weight "dry": 61 oz, "wet": 74 oz.



Early stages of Bob Hunt lost foam wing construction.



Note bottom belicrank mount and geodetic structure in fuselage.



Cox/Resinger hardpoint handle modified with a Fancher style balsa grip.



All ribs in place. Full span spar webs with lightening holes and trailing edge webs.



FAQs

Electric v. IC

What we are all looking for is dependable and controllable power. There is certainly plenty of power available from both electric and IC. Typically, we control our IC setups with venturi size, nitro content, amount and type of oil in our fuel, tuned pipe volume and/or length, etc.

With an electric setup we have the ability to program our ESC's and timers to accomplish the same things. And with the advent of the accelerometers that many of us use, the level and resolution of possible adjustments is almost endless.

Both systems work just fine. Ask David Pitzgerald, our current National Champion, if he feels there is any disadvantage with his use of a PA75. However, I have never achieved results that are as fine tuned and effective as David Fitzgerald's or Brett Buck's RO-Jett 61 for that matter. For me, the switch to electric instantly removed variables that I never completely conquered. The electric system is totally repeatable and infinitely adjustable, especially with the accelerometer. In a matter of a couple of minutes, one can adjust for almost any atmospheric condition. That was a game changer for me. On a less serious note, it's cleaner, as well.

Cox/Resinger Carbon Hardpoint Handle

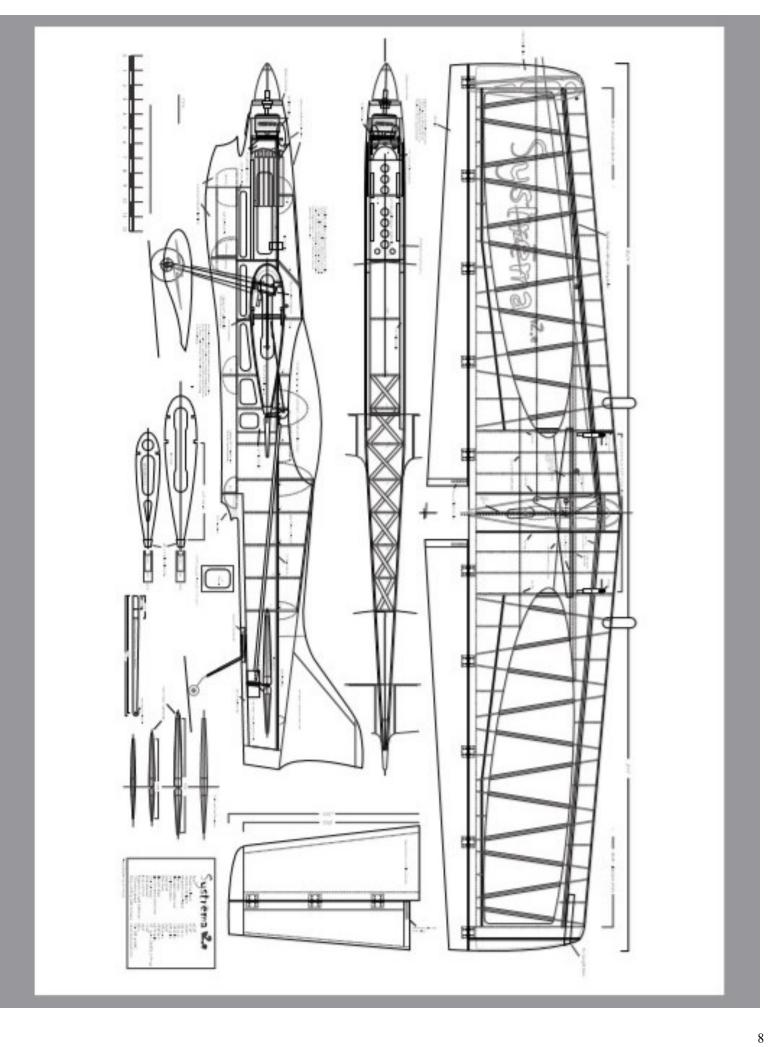
The Cos/Resinger handle (which, to be fair, is based on Paul Walker's handle) is extremely light and increases the "feel or feedback" from the airplane. My handle is 24 grams including line clips, grip tape, and safety thong. I was skeptical that the lighter weight would matter much until I tried it.

How do the trick hatches work?

There are five hatches on this airplane: two elevator access hatches, an accelerometer access hatch, an arming plug and activation

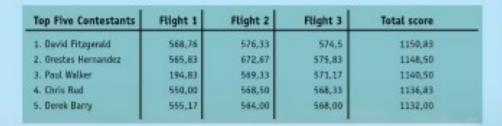
switch access hatch, and, of course, the battery hatch. The first three use a typical a-56 machine screw approach. With the top load battery hatch, I wanted to avoid having to unscrew the hatch before and after every flight because I'm lazy and because machine screws are aesthetically not very pleasing. This hatch does not use magnets which I have found unreliable on a hatch this size. It is essentially spring loaded with a band of carbon. A small plywood tongue in the front and two plywood clips at the rear hold the hatch in place and merely needs a slight squeeze to remove. The small hatch that hides the arming plug and activation switch on the bottom of the nose swivels on a pivot in the center of the hatch and stays in place with a small rare earth magnet at the rear of the batch. See attached photos!

Jim Aron





US Nats 2019





David Fitzgerold and Paul Walker now have twelve Nats wies each



<u>From the Editor:</u> **My fellow WDA club members**, Happy New Year 2020! This marks at least 15 (cumulative) years I have functioned as WDA newsletter editor and my 48th year of fascination with model aircraft.

For me, it all started with an abandoned Cox .049 Babe Bee engine that just happened to catch my eye as I was walking home from school (wow, remember actually WALKING every-

where?) – and no, it wasn't through 6 feet of snow... I'm a California native! The year was 1971.

That dirty, discarded Cox Babe Bee was lying in a drainage ditch which paralleled my little street, "Meadow Lane," in unincorporated Walnut Creek, CA, and it was the figurative 'seed' which planted in me a life-long fascination with model engines and all the wonderful things they could power! My father did not share my interest, but did recognize the diminutive Cox as some sort of 'engine,' so we cleaned it up and set it on my dresser. A neighborhood boy with whom I became friends, noticed the Cox and affirmed that it was indeed an engine; that his father was an avid control line

flyer who could positively I.D. the engine at a glance. Identity affirmed, the boy's father informed me that with a new glow head, some fuel, a prop and a starting battery, we could bring the Cox to life! With a few dollars from my paper route (remember when kids could earn

money delivering newspapers?), I purchased a Cox starter kit from Howard's Hobby House at Sun Valley Mall in Concord. When that Babe Bee crackled to life, filling an old tool shed with the wonderful smell of burning methanol and castor oil, I WAS HOOKED!!!

Now, 48 years later, my life-long hobby is genuinely threatened by draconian FAA regulations which will change our hobby forever, if not kill it all together!

The proposed FAA requirements are a solution to a problem that does not exist... which compels me to express my opinion pertaining to RC field fencing / barriers in general, and the fencing in front of our Pilot Stations, specifically.

My idea of the perfect RC flying site does not include ANY barriers beyond a fence separating the parking area from everything else. Indeed, the pits, taxi ways, runway, and starting areas should be unencumbered by ANY barriers of ANY kind, shade structures being the one exception. If you think this sounds unsafe and radical, I would direct you to dozens of YouTube videos of flying sites in Europe where such a lay-out has been the norm for decades. In many countries, alcohol is served and consumed at the field!

Now by no means am I condoning the combining of alcohol and the operation of vehicles of ANY kind ... Not at all! But my point is this: IF such a field lay-out were truly dangerous, wouldn't modelers at those "unprotected" flying sites be risking life and limb every time they engaged in flying RC? But in fact, there is NO reported increase in modeling accidents or injuries at European flying sites.

Our obsession with protective barriers seems to be a solution for problems that do not exist.





I know these barriers are erected with the best of intentions. But my opinion is based upon my own observations and experience flying RC in Germany and communicating with modelers who live and fly RC in Europe.

I TRULY APPRECIATE the hard work done at our field by a handful of dedicated club members. Whether I agree

with every field mod made, I DO appreciate the work a very dedicated few do! Thank you!

The AMA provides club guidelines, including field lay-outs. In their publication #706, they offer the following as it pertains to pilot barriers:

Barrier: (if desired) Designed to stop models from veering into pilots' and/or spectators' positions (Includes plastic or chainlink fencing, hay bales, shrubbery, etc. These may run the length of the flight line or be short to protect a single pilot station). If using metal fencing (chainlink, etc.) consider that the transmitter antenna needs to be in the clear of any metal that could cause loss of signal to the aircraft. Consider using non-metallic materials such as orange plastic fence materials.



I do not trust a tiny 4 inch 2.4 Ghz transmitter antenna when it is shielded behind a metal cyclone fence which may be acting as a crude Faraday Cage –

Far'a'day cage, noun

A grounded metal screen surrounding a piece of equipment to <u>exclude</u> electrostatic and <u>electromagnetic</u> <u>influences</u>. (i.e. radio frequency)

I tend to move around while I fly and have on multiple occasions, found my transmitter antenna pushed up against the metal fencing in front of the pilot stations. It was disconcerting and immediately concerned me about possible radio signal attenuation! You can blame it on me for not standing still or for holding my transmitter waist high, but I am sure I'm not the only one who has had this experience with the pilot station fencing.

I do not like barriers anywhere near the flight line, period.

BUT what I dislike far more is an intrusive federal bureacracy creating regulations for problems that DO NOT EXIST, and I hope that ALL MODELERS will UNITE in opposing the FAA proposed new rules governing our model aircraft!!

The FAA is pushing for us all to have transponders in our model aircraft, broadcasting the model's position and I.D., so that they can be identified and located – just like a full scale aircraft. These transponders would communicate

with the outside world via cellular service (NEITHER of which is going to be without cost) and our model's information would be monitored by a Central Unmanned Aerial Vehicle control system.

The other proposed scenario is "Limited" operation of your model aircraft. Under this scenario, you would not be required to equip your aircraft with an on-board beacon or transponder. BUT - you would be required to go online and "announce" (to the CUAV police) your intention to fly. Your "flight box" would be limited to 133 yards from the launch point! **400 feet in any direction**. When your model exceeds 400 feet East, West, or North, you would be in violation of the FAA. (when your model exceeds 400 feet south, you will need a large trash bag)

Imagine the greatly increased potential for mid-air collusions when ALL RC aircraft are confined to a 400 foot flight box?! You can kiss anything large or fast, good-bye. Such a restriction will relegate RC pilots to little more than park flyers. Whether operating with an on-board transponder OR flying under the limited rules, internet or cellular connectivity is <u>required</u>. Obviously, some remote locations will not have connectivity, thus, you cannot fly.

The third proposed scenario doesn't require aircraft transponders or connecting to the internet, but WOULD limit RC flight to **FAA designated RC flying sites**... no doubt, very few and very far between, and the '400 foot in any direction' rule would remain in effect.

The FAA's motivation is purportedly, "public safety," but the data <u>does not support this fallacious assertion</u>. Like RC field barriers "protecting us" from all manner of model aircraft calamity, this a solution for a problem that simply does not exist, nor has it ever existed. IF so, we could easily rattle off accidents that justify such measures.

My personal experience with the protective properties of pilot station fencing? I've had two close encounters: I was flying at the Tokay Modelers. They too have waist-high (perhaps even a bit higher) fencing all along the front of the pilot stations. Ben Ponzo was my spotter. I had my eyes affixed to my aircraft when in a split second I heard Ben yell "look out" as he also pulled me backwards away from the fence. Another modeler had launched his giant scale P-51. Veering towards the pilot stations on take-off, the Mustang had already rotated and was at HEAD high altitude. Had Ben not acted quickly, I would have been hit by the airplane. The waist-high pilot fencing did absolutely nothing to protect me from the errant Mustang.

My other experience was at our field. I was landing a small one channel airplane and allowed it to veer from the runway centerline, eastward towards me at the pilot station. It dead-sticked in the dirt area in front of the pilot fencing but then bounced into the fence, breaking the stab. Without a fence, neither the plane nor any pilot would have been harmed.

I am sure we can all conjure up dire scenarios in which pilot station and other flying field barriers would avert catastrophic outcomes, but in actual practice over DECADES of RC aircraft flying, accidents resulting from a lack of fencing are exceedingly rare, while at the same time, we all have ample anecdotal evidence of damaged RC aircraft directly resulting from "protective barriers." **There were no barriers at our old flying site... btw.**

So, WHAT is my point in all this? I was inspired to rant thanks to new Draconian FAA proposals and felt this to be the proper forum in which to again voice my opposition to field barriers of ANY kind, save a single tall fence separating vehicles and spectators from all RC activity, like we see at so many European RC flying sites.

I am positive there are valid arguments for and against... I believe I have heard them all. My position is my own and in no way seeks to denigrate those who have put great effort into doing what they felt was the right thing for the good of everybody at Woodland Davis Aeromodelers. And when it comes right down to it, I don't find field barriers to be all that problematic... all I have to do is avoid flying into them! But I'm still uneasy when standing behind the quasi "Faraday cage" we have created in front of the pilot's stations.

As a modeling community, we now face a FAR MORE FORMIDABLE THREAT to the enjoyment of our RC hobby from an over-reaching federal government behemoth. **IF these Draconian FAA proposals go into effect, field fencing will be the least of our worries!**

FYI – that is my 'political rant' for the year. My views are now well-known and I have no intention of beating this drum further. We now face much bigger threats (than a fence) to our enjoyment of this hobby. I would encourage all WDA members to become familiar with the FAA proposals that <u>WILL KILL OUR HOBBY!</u>

I posted these videos on our WDA Facebook page and I highly recommend you watch them:

https://www.youtube.com/watch?v=HjpTLAn87pQ&fbclid=IwAR1jCMqRWqhkFqkMmb0nuQk ySIud6SVqeakeZpyODZQjaeADMmMXXoaDoc

AMA Air Video: https://www.modelaircraft.org/amaair

Government Relations

The FAA released the long-awaited proposed rule on UAS remote identification on December 26. While the proposal includes some elements that we advocated for, there are several concerning elements as well. We will need everyone's help to ensure that the final rule on remote ID works as best as possible for our community.

For years, AMA has advocated for an approach to remote ID that would allow recreational operators to meet the safety and security objectives of the rule by operating at fixed flying sites or by using a software-based app solution. We pushed strongly for this approach from our position on the Remote ID Aviation Rulemaking Committee, which influenced the proposed rule, and will continue to advocate for this solution to remote ID.

The good news is that some elements of our suggested approach are included in the FAA's proposed rule. Most importantly, the proposal includes a way to comply with remote ID by flying at an established location without adding equipment to your model.

However, there are several problems with the proposed rule that we will be pushing back on. At a high-level there are three major areas of concern. First, the rule should provide community-based organizations (CBOs) like AMA more flexibility to establish and maintain flying locations that count for remote ID compliance. Second, the rule should account for flying locations that may not have internet connectivity, as many safe places to fly are in rural areas with little or no service. Third, the rule should not require modelers to register every aircraft individually. For members with many aircraft, this is overly costly and unsustainable for aircraft that are built by hand.

Please keep in mind the proposed remote ID rule is just that – a proposal. The rule is not final yet, and a 60-day comment period began on December 31. In the coming days, we will be asking for everyone's help writing to the FAA about our concerns and suggestions to address them. We have also requested an extension on the comment period to give everyone more time to weigh-in.

Please closely watch your email and AMA social media for more direction on how to officially send comments to the FAA on the remote ID proposal.

Lastly, it is important to know that the remote ID rule will not be finalized for potentially two years. We also expect a period of several more years after the rule is finalized before compliance is required.

For a summary of FAA's proposal for Remote Identification of UAS visit our <u>blog</u>. As always, please contact AMA Government Affairs at (765) 287-1256 or amagov@modelaircraft.org with any questions.

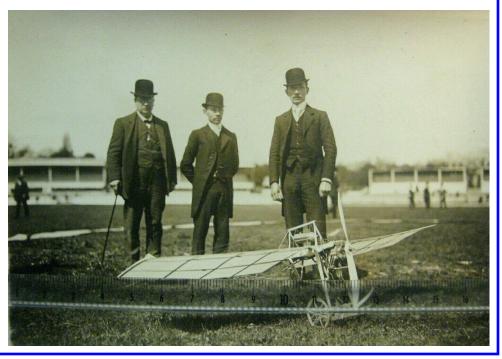
There is a 60-day comment period. To comment, please go to: modelaircraft.org/gov

The Godefroy Brothers, winners of the second Coupe Gordon-Bennett des petits aéroplanes at Paris.

One of the very first model airplanes.

Powered by a 42cc V twin.

No doubt these early model aviation rebels failed to install an on-board transponder...



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Jet Turbine Instructors

 \Rightarrow **OPEN**

Helicopter Instructor (Only):

 \Rightarrow **OPEN**



Next Club Meeting: Monday Jan. 13th at 7pm

Woodland Public Library "Leake" Rm., 250 1st St, Woodland, CA



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