



NVRC member and Indoor enthusiast Don Szczur helps with trimming a foamie. LOTS of indoor flying took place this February.

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Want to see more here?

Send your newsletter contributions to
carllydick@hotmail.com.

NVRC is one of the largest radio control clubs in Virginia with over 200 members. Our primary flying field is located at Poplar Ford Park. Our new Lorton flying site is open on weekends. The club includes pilots in all areas of radio-controlled flight: Sport, Giant Scale, Electric, Sailplane, Aerobatics, Combat, and MultiRotor. NVRC has members with decades of expertise to share in many types of flying and building. Whether you're a beginner or someone looking for advanced techniques there are volunteer instructors to provide assistance. Don't be timid! Just ask for help!

In existence for over 50 years, NVRC is proud to be a club where everyone is welcome!

Officers and Contacts

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Past President, Mark Franke, mfranke@cox.com



President's Report: Welcome to 2019!

By Jon Pruett, NVRC President

Hello fellow builders and flyers! I was able to visit the AMA East Expo with two fellow club members this year, and had a great time browsing the swap meet, the vendor stalls, and gawking at the scale models. I'm always amazed and inspired by the modeling skill on display. In particular two different Douglas TBD Devastators builds caught my attention - one with an incredibly detailed cockpit and one slightly smaller model with beautifully sculpted panel and rivet details. Of course I found more than a few electronics connectors and hand tools of interest in the vendor stalls, but the swap meet really got my attention. In addition to a Fokker D.VIII plan and partially cut out parts set, I picked up a like new Horus X10S transmitter for only 60% of retail price!



Amazing cockpit detailing



Beautiful rivet details

At the Expo I was also able to meet up with RC friends from points north who I hadn't seen in several years, and spend some time chatting with Terry Dunn, a frequent kit & plane reviewer for Model Aviation Magazine. I was very impressed with the presentation by free flight record holder Rob Romash - his 2.5 and 4.5 gram models performed very well in the "windy" convention space and were surprisingly controllable. One of our club members spent a good deal of time talking with Rob after his presentation and was gifted with a piece of the fabled May 1999 rubber, widely acknowledged by free flight modelers as the best batch of rubber ever and very difficult to acquire now.

As everyone is getting ready for another great year of RC flying, we are making plans for some great new events, and some changes as well. Look for more details in the coming weeks on the Open House events at both Poplar Ford and Lorton, a Giant Scale fly in, and a Glider Day. We have also made some updates to the NVRC Streamer Combat safety rules to enable more people to join with a wider selection of planes. Look for the details on the new rules in this newsletter, and on our <http://www.1nvrc.com> website. The website has the updated event schedule for the whole year so you can plan ahead to come out and join the fun!

See you at the field,
Jon Pruett



VP's Report: Updates from Poplar Ford and Lorton

Compiled from John Roach's RC Groups Updates

- Wet weather continues to plague Poplar Ford.
- John shared these images from early February as proof that, despite the mud, some folks were still flying!



- As of February 22nd John declared that Poplar Ford was almost ready for Seaplane operation! Despite that he was able to:
 - Put the windsock back in service
 - Top off solar array batteries with distilled water
 - Took home mailbox fence post to repaint box and plane before reinstallation.
 - Evaluate field conditions. In short: Wet and bumpy.





NVRC Event Weather Policy: ALERT!!!

By Jon Pruett, NVRC President

Wet weather has been a growing challenge for our fields, especially Poplar Ford. To ensure we are able to consistently make and communicate decisions about event changes due to field conditions we have approved the following policy.

- If due to weather conditions Poplar Ford Field is deemed unsafe, or unable to handle the additional traffic of an event without damage, the event will be relocated to Lorton Burnett Field.
- This policy applies to all events tracked on the <http://www.1nvrc.com> website, with the exception of Multi-GP races which follow their normal weather cancellation policy and will not be relocated to Lorton Burnett Field.
- The relocation decision will be made by the event's Contest Director and one or more of the NVRC officers during the week leading up to the event.
- All members and guests are welcome to attend any regular or relocated event at Lorton Burnett Field, regardless of their Lorton Field Membership status.

Thanks!

- Jon Pruett





Indoor Warbird Fun Fly @ Westfield High!

There were 4 entries in the War Bird Fun Fly. VP John Roach unboxed his P-51D UM painted in 339 FG colors and added identifying marks of a veteran friend who passed away in 2017. He managed to bang up his bird pretty good before entering the race, but Don Szczur had some glue with him, so it was ready by race time. The first 3 planes across the finish line got gift cards. John went home with the remaining pylon balloon as a consolation prize.

A good time was had by all. Flying continued until basketball teams showed up at 11 a.m., to begin practicing for their noon games. A big THANK YOU to Don Szczur for coordinating and to Hobby Hangar for providing the prizes!

Results:

- 1st Place : Ross Baker \$25 gift card
- 2nd Place: Arlen Harbaugh \$20 gift card
- 3rd Place: Jim Salmon \$15 gift card
- 4th Place: John Roach



Indoor Free Flight Rubber Power

From John Roach's RC Groups Post

Don Szczur reserved the Westfield gym for tuning indoor free flight rubber-powered models to prepare student planes for upcoming competitions. Joe Carter snuck his electric capacitor-powered "Butterfly" free flight in and flew between rubber-powered test flights. Hobby Hanger helped out by allowing a Chantilly student to build his aircraft at Hobby Hanger the day before the tuning session. Several members of the DC Maxicutters were there to fly their models and lend tools and advice to the students. They brought along some really cool free flight models.



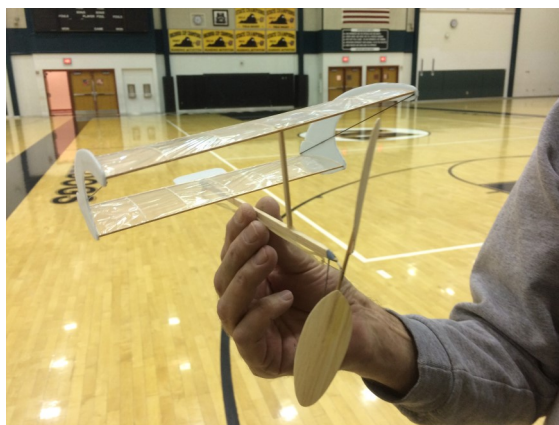
Hobby Hangar Providing Support



Mr. Copeland and an A-6 model



Westfield Students tuning their models



Great flying model designed by 12-year old!





NVRC Streamer Combat!

Come out and cut some streamers with us!

In 2019 NVRC will be hosting a number of Streamer Combat sessions. The next few events will be held on the following dates:

March 9th: [Streamer Combat Skirmish](#)

April 13th: [Streamer Combat Skirmish](#)

April 20th: [Streamer Combat!](#)

May 11th: [Streamer Combat Skirmish](#)

We follow the [AMA Radio Control Combat 2017-2018 safety rules](#) with the following additional safety restrictions at each field:

NVRC Combat Aircraft Special Requirements – Poplar Ford Field

- Electric Only – Battery size limit 3s2200
- Pusher Props Only- No Tractor style!
- More than 4 planes aloft at discretion of Safety Officer & Contest Director

NVRC Combat Aircraft Special Requirements – Lorton Burnett Field

- Class A size restriction (Max .15 cu.in. & 2.5 lbs or 3 pounds electric)
- Tractor style props OK
- More than 4 planes aloft at discretion of Safety Officer & Contest Director

Some pusher planes that work particularly well at Poplar Ford for this include;

[Laine's Planes Foam Cuda](#) (I love mine!)

[FPVWRA Spec Wing](#) (This one is great too!)

[Flite Test Mini Arrow](#) (Loads of fun but can be twitchy!)

[Flite Test Versa Wing](#) built in pusher configuration

[RCFoamKits Eluminator](#) (And I love flying this one!)

[RCFoamKits Foamenator](#)

[RMRC Nano Skyhunter](#)

[RA Cores EPP BluFO](#)

[RiteWing Zepher Mini Z](#)



NVRC on the WEB

Join us online for up to the minute news!

2019 will be a busy year for NVRC, and we will of course re-cap events here in the newsletter. If you want the latest, up to the minute news and events from the NVRC community you can join us online at the locations below. We encourage everyone to share anything RC related with the club. Beautiful day at Poplar or Lorton? Have a new toy you want to show off? The last landing didn't go as planned and now you've got a trash bag full of parts? We want to see it! (*especially the bag of parts!!*)

NVRC on Facebook



<https://www.facebook.com/groups/1nvrc/>

NVRC on RCGroups.com



<https://www.rcgroups.com/forums/..NVRC>

NVRC on Instagram



<https://www.instagram.com/nvrc.club/>

NVRC



<http://www.1nvrc.com/>



February Meeting Minutes:

Provided by John Roach, NVRC VP

Visitors and New Members – A new NVRC member, Bob English, said that he had signed up to join NVRC and had already been to the field.

VP Report, Poplar Ford and Lorton – John Roach described Poplar Ford as very wet and Lorton as windy and cold, but mostly dry. [He visited Poplar Ford the next day to put the wind sock back in service and top off the battery cells of the solar array. Standing water at the east end of the runway was more than ankle deep.]

FAA external labeling requirement – All sUAS and UAS are to externally display their FAA registration number effective 25 February 2019. John Roach suggested use of a labeling machine to print ¼ inch tall labels that can be discreetly placed below the horizontal stabilizer to comply. Jon Pruett cautioned members to be aware of scam sites charging \$60 to register you with the FAA. The cost to register with the FAA is \$5.

Treasurer's Report – The treasurer was out of town, but left word with the NVRC President that we have money.

Mystery Plane – Ansaldo A.1 Balilla, an Italian WWI fighter that Italy did not use in the war, but later sold to the Poles and Russians who then used them in combat against one another after WWI.



The Ansaldo A.1 Balilla

February Meeting Minutes:

Provided by John Roach, NVRC VP

Special Guests – Carl Lydick demonstrated how is using Autodesk 360 software to create instrument panels for his 1/9 scale B-17 G cockpit. The software is free to hobbyists. Carl walked us through digitizing the relative dimensions of an instrument panel photograph to create a 3-dimensional scale rendering that can be printed with a 3-D printer. He shares the STL files that he creates on Thingiverse.



Carl Lydick's 1/9 scale B-17G cockpit is coming together

The next special guest was **Kwang Ko** of Hobby Hanger. He described the features of the new Horizon smart chargers and batteries including a unique battery feature – self discharge to storage voltage from fully charged if not used within a day or so of being fully charged. The new batteries can be used with any charger, but if used with a Horizon smart charger, they will report number of charge cycles, number of abnormal discharges, and the storage potential is adjustable. The charger is presently available as AC or DC, but not yet available as AC/DC. It is forward and backwards compatible, shows battery capacity as percentage as well as battery internal resistance. However, a battery checker accessory is required to display this information. The charger remembers your charging habits, identifies battery type, and does not have to use a balance lead. A chip in the battery stores this battery information. Price of a 200 W charger is \$60 single and \$149 for a dual port 200 W charger.



The Smart charger and battery, from Horizon Hobby



February Meeting Minutes:

Provided by John Roach, NVRC VP

Kwang then turned our attention to the new **Timber X**. It has a modified wing with dual bevel flaps and ailerons. Its AR636 receiver controls 6 servos but “hears” up to 9 channels. This allows you to mix controls and invoke them through the upper channels of your radio.



Timber X retails for \$249.99

RC News – Jon Pruett summarized new products in recent RC news. Oratex RC has released RC weight polyester fabric covering. E-Flite now sells a foamie F-15, a new Blade helicopter, the Nano 52, and the Blade Inductrix Switch Air. This latest Inductrix can be configured as ground speeder, a quad flyer, or a fixed wing flyer that is also a quad.

Events – Paul Lukas is in search of volunteers to help with the Wakefield Forest Elementary School **STEAM event, 28 March from 6 to 8 pm**. **Combat Streamer Skirmish will be 9 March** at Poplar Ford or Lorton (weather dependent as to which field). **Multi-GP race day is 10 March** at Poplar Ford. The last **Indoor Fun Fly at the National Building Museum will be 24 March** from 11am to 4 pm. Suggestions for a suitable indoor flying site to replace the National Building Museum site would be welcome.

It was mentioned at this point that Forestry Tape, a biodegradable water resistant tape is now the tape of choice from which to make the 30 foot streamers towed in combat streamer competitions.

February Meeting Minutes:

Provided by John Roach, NVRC VP

Show N Tell – Charlie Koustenis led off by describing a spark ignition conversion of a multi-cylinder glow engine. The dry washer on the front of the engine is replaced with a washer that contains magnets and the magnetic pickup used to control ignition timing. Cylinder #1 is set 30 degrees before TDC. Glow plugs are replaced with Saito spark plugs. The advantages of spark ignition are that it burns fuel more efficiently and does not require nitro fuel.



Conversion of a beautiful Radial glow engine

Bob Bumett described how he is building another Ultimate Bipe from plans since the kits are no longer sold. He uses a light box to trace a pattern piece from the plans and then glues this pattern onto wood with heat sensitive glue so that the pattern can be removed and used again after the part has been cut out. **Carl Brieske** suggested stacking parts to cut several at once, but Bob replied that he did not like doing that.



Bob uses heat to release and re-use plans sprayed with 3M-45

50/50 Drawing – Jon Haitzuka won the \$10 pot.



Upcoming Events:

See the Events Calendar at www.1NVRC.com for more details!

March 9th	<u>Streamer Combat Skirmish</u>
March 10th	<u>NVRC Multi-Rotor Racing</u>
March 13th	<u>Tiny Whoover Races</u>
March 21st	<u>NVRC Club Meeting</u>
March 24th	<u>LAST Indoor Flying at National Building Museum</u>
March 27th	<u>Tiny Whoover Races</u>
April 13th	<u>Streamer Combat Skirmish</u>
April 14th	<u>NVRC Multi-Rotor Racing</u>
April 18th	<u>NVRC Club Meeting</u>
April 20th	<u>Streamer Combat</u>
May 11th	<u>Spring Fun Fly and Poplar Ford Open House</u>
May 11th	<u>Streamer Combat Skirmish</u>
May 12th	<u>NVRC Multi-Rotor Racing</u>
May 16th	<u>Build Contest (monthly meeting)</u>
May 25th	<u>Lorton Glider Day</u>
June 2nd	<u>Pylon Races</u>
June 8th	<u>Streamer Combat Skirmish</u>
June 9th	<u>NVRC Multi-Rotor Racing</u>
June 15th	<u>Streamer Combat</u>

And **MORE** to come! Check www.1nvrc.com/events for more details!

Editor's Corner: SEFF 2018

By Carl Lydick

During the February monthly meeting I shared a quick demo on using Autodesk Fusion 360 to create instrument panels for scale models. In that demo I mentioned that I'd put together a step by step video for the process and I wanted to share that here.

[FUSION 360 for RC: EASY Instrument Panels](#)



I also mentioned that there were great resources out there where you can find and use parts other people have designed. I wanted to elaborate a bit on that here and mention a model being built by a friend of the club. Joshua Orchard has visited us from MD a few times to share a pair of models. He brought a scratch built Bugatti 100P to a club meeting and talked about building the custom CONTRA-rotating dual motor setup. He also brought a beautifully detailed Corsair to one of our cookout evenings and demonstrated how he articulated the cowl flaps, printed the tail gear, and animated the cockpit.

Joshua's current build is an ARF. Or, more accurately, a B-ARF (the B stands for Builder's). Joshua has taken a popular ARF model, the new Hangar 9 20cc P-47, and has kicked it up SEVREAL notches. He built articulated oil cooler and waste gate vents, articulated cowl flaps, functional intercooler doors, scale wheel hubs and brakes, scale 76 gallon drop tanks, and a highly detailed interior with instrument and side panels and a scale gunsight. He created 3D prints of all of these parts, and has now made the files available on his Thingiverse page.



3D printed Oil Cooler and Waste Gate Vents



3D printed parts articulate the functional Inter-cooler vents





Editor's Corner: SEFF 2018

By Carl Lydick

In my opinion this is an exciting development in the hobby. Not only is it becoming easier to create scale parts for ourselves, but more and more scale details are being shared in open source community for all of us to use.

Here I'm just going to link a few Thingiverse pages and collections for you to browse through. If you have questions about getting something printed, or getting started with printing, please let me know!

[Thingiverse \(A great source for printable stuff\)](#)

[Joshua Orchard's Thingiverse page, featuring the P-47 but also with parts for the Corsair and a nice Bomb Drop mechanism.](#)

[A nice collection of printable RC Airplane Parts](#)

[Instrument panel \(full panels + parts\)](#)

[Collection of Dummy Radial engine parts](#)

[My own \(growing\) Thingiverse page](#)

[And of course, 3D Lab Print has a WIDE selection of fully printable aircraft \(for sale of course\)](#)

There are a LOT more resources out there, but I wanted to give a sampling of the kind of things 3D printing is offering to the hobby right now.

I hope everyone is surviving the poor weather and getting in as much flying as they can. Have a great month and I'll see you all at the March meeting!