NVRC

Builders Jason Starmer and Joshua Orchard, who both presented at the March meeting, discuss the finer points of scale modeling

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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

President, Jon Pruett, jonathan.pruett@gmail.com

Vice President, John Roach, jagroach@verizon.com

Secretary, Carl Hampton, champton@cox.net

Treasurer, Bob Freas, freasman@gmail.com

Chief Flight Instructor, Tony Claridge, tclaridge1@aol.com

Member-At-Large, Paul Lukas, paul.lukas@live.com

Member-At-Large, Tung Phung, ttp2d@virginia.edu

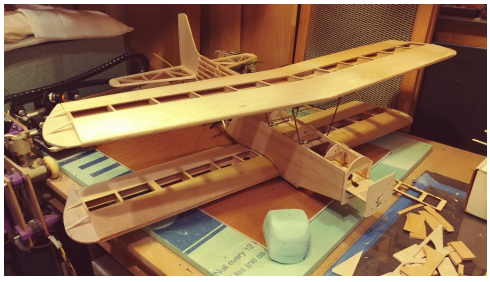
Past President, Mark Franke, mfranke@cox.com

President's Report: Flying Season Arrives!

By Jon Pruett, NVRC President

Hello modelers! Spring is in the air, the fields are drying out, and the danger of morning frostbite from holding a transmitter at dawn is almost gone! It's time to tune up the fleet, fix up any hanger rash, and finish those winter builds. Remember to take a good long look over your planes before those first flights of the year - things can happen while in storage. Make sure the control linkages are firm, the hinges are secure, and the servos aren't chattering so your second flight of the year can be as good as the first.

The annual display contest is at the May club meeting, and I'm sure this is the year I will be able to attend! There were a whole bunch of inspiring projects shared at the March club meeting - you'll read more about them later in the news letter - but remember you don't have to be working on a museum quality composite gasser project to come share it with us. We love to see all types of modeling projects, from scratch builds to Flite Test foam board kits to new paint jobs on Eflite ARF's to your favorite new tools and techniques. And if you're having a problem or stuck for inspiration, bring those too - we can help! There is an amazing spread of experience at the meetings from 40+ years of traditional modeling techniques to first time foam kit builders - so come out for some bench flying and we'll all learn something!



1970's Gee Bee Dreamer Biplane Kit

Bob Burnett built a great looking replacement biplane from plans in the last few weeks (ask him about the crash story - it's a good one). That inspired me to dig through my pile of biplane kits for something interesting to work on. At the fall auction last year I picked up a 1970's Gee Bee Dreamer Biplane Kit that was mostly complete, partially started, and will look great chasing Bob at the biplane contest this summer. This kit is nothing like a modern designed, laser cut kit with interlocking parts - it's more of a puzzle with parts missing and 300 words of instructions with no pictures. With a little research I found the 1972 Flying Models magazine where the plans were first published, as well as some information from prior builds that suggested some changes for better flying characteristics. The plans were in good shape, but of course I couldn't just follow them without making a few modifications like a removable power pod for easy battery access. I'm almost done framing it up, and really looking forward to covering it next week. There's something magical about seeing iron on covering smooth out over the frame and bring another plane to life!

So what project have you been working on this winter? Building a new plane, restoring an auction find, or assembling and putting some personal touches on a new ARF? We want to hear about it! Bring it to any club meeting or the display contest! Are you interested in starting your first build or using a new technique and don't know where to start? Come talk to us and we'll help you get going! I guarantee no matter what your level of experience, you will learn something new and have a great time sharing the fun of aeromodeling!

See you at the field - and the next club meeting!
Jon Pruett

VP's Report: Updates from Poplar Ford and Lorton

Compiled from John Roach's RC Groups Updates

- March 7th burn at Poplar Ford was a success.
- The area SE of the field that was burned extends from the frog bog to the tree line west of the field.

- We have a local archer who turned in a Convergence a few weeks ago. He has returned other aircraft in the past and is a good guy.
- As of March 19th Poplar was nearly dry (although more rains were on the way). Some flying was managed.

- March 30th was the work day for Lorton. With an injured back John dropped off some critical equipment (wheelbarrow, tarp, post hole digger, and digging bar). In further preparation for the work day **Bob Frease** accepted two truckloads of topsoil and he and **Jon Pruett** set to work moving soil. Lines were used to help with identifying the low areas needing to be filled.

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.

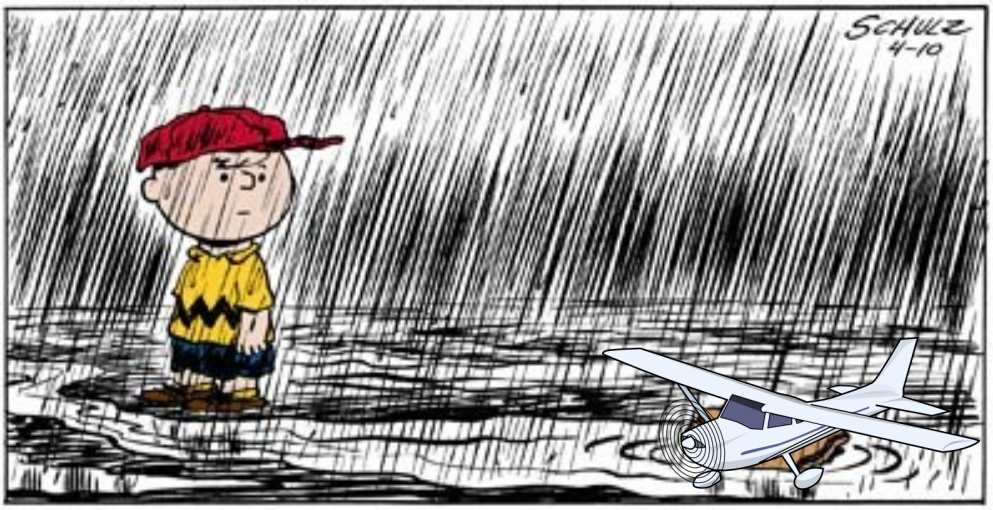
- This policy applies to all events tracked on the http://www.1nvrc.com web-site, with the exception of Multi-GP races which follow their normal weather cancellation policy and will not be relocated to Lorton Burnett Field.

- 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



NVRC STREAMER COMBAT ACTION REPORT

By Scott Fisher

On Saturday morning, 9 March, seven intrepid pilots showed up at Lorton-Burnett field for our first large NVRC streamer combat skirmish. The event participants braved relatively cold weather (was about 40-degrees) and wet, muddy conditions but there was virtually no wind and it turned out to be a great day. The Lorton-Burnett field was ideal for this type of event as it has unlimited visibility, no trees, and the open ground that allowed all to find their downed aircraft and parts easily. Plus, the ability to park cars and trucks right next to the shelter (and very short distance from the runway allowed a sort of "Race Pits" venue in the form of truck beds and car trunks/hatchbacks.

The Overall Structure of the Event:

The group fought five rounds of combat, each lasting 4-minutes (in future combats, we are going to use the AMA duration of 5-minutes). We used the standard AMA rules (Open RC Combat Event 755) for streamer combat, but with club-rules revised scoring; points were awarded for cutting an enemy streamer (100pts), landing on the runway within a certain distance from a centrally secured balloon (50pts), and being the first to pop the balloon while landing (50pts), AFTER the combat time duration was up. We'll be looking to into additional aspects of the official AMA scoring rules in later events. Each aircraft was limited to 3S electric power, with a max capacity of 2250mah – almost all of the contestants used either 3S 1300mah or 3s 2200mah batteries. In this skirmish, there were no limitations on aircraft type other than the battery size, so there was a wide variety of aircraft types and performance. We ARE thinking about minimum wingspan limits, but there were none for this skirmish. The round started when all aircraft were launched and the event coordinator called "Fights On!" – sometimes launches were slightly delayed so other contestants simply loitered at low throttle until all planes were in the air. Aircraft that crashed ended the round; if they could be repaired were allowed to participate in the next round. Aircraft that could not be repaired, or had to go home to be repaired were considered "KIA" and were removed from the event for the day. In the future, we plan to have "class" events so subgroups who want to have the combat with aircraft of similar performance can compete (many of us are now building Flite Test Simple Scouts- see link below). Additionally, we will be giving out some free FT Scout kits in future events, the event winner will give one to another "most deserving" competitor.

NVRC STREAMER COMBAT ACTION REPORT

By Scott Fisher (Images provided by Paul Lukas)

The Combat:

Combat was fast and furious in each of the 5 rounds. In total, there was one catastrophic mid-air collision (Scott and Jon – crashing head-to-head with both being considered KIA for the event), and several other mid-air collisions, wing scrapes, and/or failures that ended up in crashes. The planes were all of light foam construction and the ground was soft and muddy, so several of the aircraft were able to fly in following rounds after hitting the ground. Overall there were 7 participants, and a total of 30 aircraft flights [sorties]. Five times, a participant or two could not get airborne, for one reason or another. Four participants flew all rounds, with three missing one or two rounds. Images curtesy of Paul Lukas

Of the 30 aircraft sorties there were 9 streamer cuts and five aircraft KIA. Streamer cuts were achieved by: Mike M (x1), Gary (x2), Jon P (x3), and Colin (x3). The KIAs for the event were: Scott and Jon P's epic full-on head-to-head collision destroying Jons Eliminator wing and sending Scott's FT Bloody Wonder home with a devastated engine-firewall; Rich's FT Scout and his Arrow which were both lost in the swirl of maneuver combat; and John H's F-22 which was lost to unknown causes (though some say it collided with someone and then went down).

The Point Totals:

1. Colin, with 550pts (rolled in from college and dominated the scene…sad for us older guys, really)
2. Jon P, with 400pts (pretty respectable for our scale-modeling leader)
3. (tie) Gary, with 350pts, Mike M, with 350pts
4. Scott, with 150pts
5. John H, with 100pts
6. Rich, with 0pts (Rich had two aircraft KIA with issues so we know he will be back and it will be personal next time!)

NVRC STREAMER COMBAT ACTION REPORT

By Scott Fisher

Some Lessons Learned:

1) The streamer material we are using works great, even in rain and muddy ground. It is a bit pricy, but worth it for sure.

2) The required thread "leader" from the plane to the streamer is important, as it extends the streamer, and allows the plan to maneuver with less drag, and is AMA required.

3) Regular scotch tape can be used to repair streamers and even re-attach cut streamer parts to what streamer is left still attached to the plane.

4) Aircraft that are slower, can be more fun to combat with – rather than the simple "zoom and boom" technique, it can be really enjoyable to partake in slower, scale-like combat. We will be trying this soon with our FT Scout Class Combat events.

5) Lorton-Burnett Field is a great place for these combat events – the wide open location, the ability to park cars/trucks near the event line, and the ability to find anything that crashes really made for a super combat location.

6) Small fishing swivels can be attached to the back of an aircraft to eliminate or at least partially eliminate the streamer getting kinked or tangled in and after flight. We have been experimenting with putting these in-line on the thread "leader" near the attachment place on the aircraft. See link below.

7) Different color streamers are VERY USEFUL. The color allows you to find YOUR plane while in the swarm of planes, and also allows an easy method for identifying who cut who's streamer (it was surprising how many times the cutting plane would become entangled in the target plane's streamer).

8) Vertical maneuvers matter – interestingly, new pilots tended to end up pulling tight horizontal circles in order to evade or attack, while the more experienced folks would pull both horizontal and vertical maneuvers, pouncing down on the circle-flyers (of course, some of us, tried this and it nearly ended up in diving crashes!)

9) Brightly Colored Thread (we switched to Red) is critical for your "Leader" material so it can be seen on the ground (and thus has less of a chance to get under or around someone's shoe/boot!).

10) Between each round, contestants were able to conduct minor repairs and fix streamers. In general there was from 5-15min between rounds. In these breaks, contestants got a chance to rest, eat/drink, and In some cases get their "backup" plane ready due to primary aircraft failure or, in some cases destruction!

11) New map to the Lorton field is available HERE: http://www.1nvrc.com/lortonburnett-field-details/

NVRC STREAMER COMBAT ACTION REPORT

By Scott Fisher

Basic Requirements:

The basic requirements to compete include an **EXPENDABLE** aircraft powered with at maximum a 3S battery of less than 2275mah (note the aircraft must be able to sustain combat for at least 5-minutes), a streamer attached to the aircraft, made of the material noted below, that is 30-feet long, with a thread "leader" attachment at least 5-feet to 10-feet long. Note that combat flying takes some getting used to – it is confusing to fly your plane and look for others to streamer-cut, and in the process not get confused and "fly" someone else's plane – this is why different colored streamers are helpful.

Here are some important links for folks who want to compete in future events:

Presco Biodegradable Roll Flagging Tape Streamer Material we use (get several colors):

https://www.amazon.com/dp/B077DH1VVR/ref=twister_B07KN138B7?_encoding=UTF8&th=1

Example Fish Swivel

https://www.amazon.com/gp/product/B01HLWUARW/ref=ppx_yo_dt_b_asin_title_o03_s00?ie=UTF8&psc=1

Example Leader Thread

https://www.walmart.com/ip/Coats-Clark-Dual-Duty-Hand-Quilting-Thread-250-yds-RED/20682913

Flite Test Scout (any 3S aircraft can be used but we plan to do some class combat with this one):

https://store.flitetest.com/flite-test-simple-scout-electric-airplane-952mm-flt-1055/p710209?gclid=CjwKCAiAiJPkBRAuEiwAEDXZZWVkKls8pZgPPWdj5HJPW8-f_mSAbeOfpVTZrz37BLGfFU1aug26PRoC44YQAvD_BwE

Overall it was a great event and, we hope, the start of a great new club tradition. Please come out and join us in future streamer combat events!

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:

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 planed 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/

March Meeting Minutes:

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

Visitors and New Members – **Jerry Bombardier** introduced himself. He is building a Great Planes Cub modeled after his father's full-size Cub. **Dan Harvens** then introduced himself. He currently only flies drones.

VP Report, Poplar Ford and Lorton – **John Roach** described Poplar Ford as almost dry until heavy rains arrived 21 March. Lorton was reported as in better shape. A Lorton work day was announced for 30 March. Top soil will be delivered Friday. It will be used to fill low spots in the Lorton runway. Wooden fencing may also be installed. Volunteers are invited to bring their own wheel barrows, shovels and garden rakes to join in the fun.

Treasurer's Report – Treasurer was unable to attend, but left a message that we are still solvent. **Johnathan Pruett** suggested the club purchase a full-size reproduction of a Sopwith Pup from a builder in New Zealand (price is $400,000) on the basis of the Treasurer's message.

AMA Meeting at PGRC – **Bob Burnett** summarized the meeting of AMA officials and local AMA clubs as a question and answer session. The AMA President was a no-show, but the AMA Executive Director was there along with Jay Marsh, District IV. The purpose of the meeting was to explain what the AMA is trying to do for AMA clubs within the DC SFRA. AMA is lobbying to raise our ceiling from 400 to 1200 feet. They reported that they did not see any additional regulations coming to the SFRA. Bob asked about requiring use of an IFF chip that would ID the flyer and flyer location when queried. Chad Budreau, AMA Executive Director said that the rumors were true – The FAA is spending millions on the development of drone identification systems.

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

AMA Meeting at PGRC (Continued) -As for recreational flyers, the AMA

1) Seeks to exempt AMA flying sites because they are known locations where members fly visual line of sight;
2) If unable to exempt AMA sites, the AMA suggests use of a smart phone app to ID self at a flying field and then sign off of the app when leaving the field.

The AMA hopes that the FAA will choose one of these two suggestions. A lot of AMA members at the meeting complained about being pushed around by those in charge of the SFRA and wanted to know why. Bob was told that those in charge of security were doing it because DHS, SS, and Capitol Police are of the opinion that drones are a threat – capable of delivering a bomb to the Capitol. Commercial UAV will have transponders as a consequence.

STEM Program – Don Szczur and **Carl Hampton** have greatly helped to make this program a success.

Mystery Plane – P-47, an eight ton wonder of a fighter plane and the topic of tonight's presentation by **Josh Orchard**.

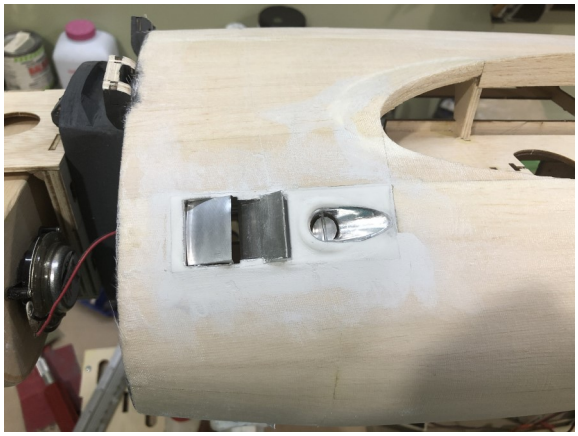
P-47 D "B-ARF" - Josh recently created a highly-detailed ARF that caught the eye of Horizon Hobby. They agreed to sponsor his project this year and only required that it had to be special. Josh chose to create a scale entry from a P-47 ARF by adding the fine details that would make it an outstanding model. His plans even included covering the aircraft with aluminum "Flite metal". (Editor's Note: Joshua has found a less expensive product that is nearly identical to Flite Metal and is yielding amazing results)

March Meeting Minutes: Continued

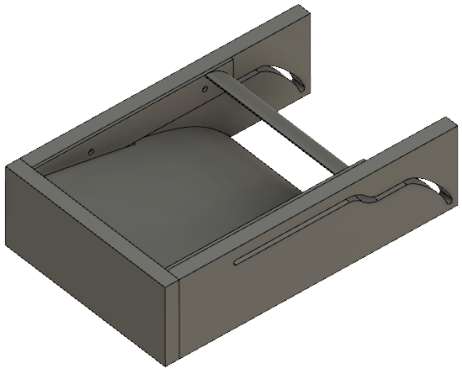
Provided by John Roach, NVRC VP and Carl Hampton, Secretary

P-47 D "B-ARF" (Continued)-

B-ARF stands for Builder's ARF, which is what a builder does to make something special. For instance, he 3D printed functional oil cooler and waste gate doors as well as functional cowl flaps. These features were critical to the performance of the real aircraft. If the actual intercooler doors were not working OK, the engine could lose up to 300 hp, so making these parts functional on the ARF was a necessary part of creating a more realistic model.



3D printed and installed. The Oil cooler and waste gate doors operate on a servo linked to throttle.



CAD design for the Intercooler door mechanism

Intercooler door installed and functional. These are also driven by a servo linked to the throttle position.

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

P-47 D "B-ARF" (Continued)-

There were other critical parts that needed to be added to the model to give it a more scale appearance. The P-47 has a constant speed variable pitch prop that was not present on the 3D printed engine that Josh wanted to use, so he drafted and 3D printed these additional parts and mounted them on the 3D printed engine. Rather than add lead to the nose to balance the model, Josh placed a sound system in the nose including a carefully designed balsa sound box for the acoustic transducer. Turning his attention to the other end of the aircraft, he devised a reliable way to open and close the tail gear doors during cycling of the landing gear. This is notoriously difficult to do, but Josh solved this by spring loading the tail gear doors so that they would close when the gear retracted. He uses 12 channels of his FrSky X10 radio to control all of the functions of the model. 3D printed drop tanks and bombs readily clicked into place on the wings but dropped reliably on command. **Johnathan Pruett** held the model in the air while Josh cycled the landing gear in order to demonstrate that the landing gear light that he had fabricated was fully functional as were the aircraft navigation lights. A wag pointed out and Josh admitted that the wing tip navigation lights were reversed. This will be corrected in short order well before it is entered into competition.

Cycling the gear shows off the custom fabricated inner gear doors and retractable landing light. Also of note… a look of genuine surprise from our very own Bob Burnett!

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

P-47 D "B-ARF" (Continued)-

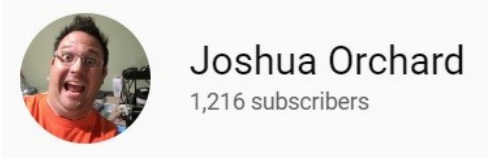
Bob Burnett questioned whether the model would be too heavy to fly. Josh replied that he removed all of the stock covering at the start of the project. It weighed 10.5 ounces. He then covered it in fiberglass which was a lighter but stronger covering. Josh then pointed out the instrument panel and controls. They were also 3D printed. He has uploaded all of his files to the Thingiverse so that anyone can use them, but he cautioned that some of the finely-detailed stuff has to be printed with a 0.2 nozzle at a slow print speed. His goal is to maiden his model of "Silver Lady" one month from now at SEFF. He has build threads on the RC Groups and Flite Test forums:

https://www.rcgroups.com/forums/showthread.php?3124769-Winter-Build-2018-19-Hangar-9-P-47D-Razorback

https://forum.flitetest.com/index.php?threads/winter-build-2018-19-hangar-9-p-47d-razorback.55044/

The engine hatch was the only modification to the ARF design. Josh modified his model to make the hatch more rounded where it terminated at the engine cowl. The only flaw in the model was that the servo leads need tweezers and dexterity to install. Josh fixed this with 3D printed lead guides to simplify connecting these wing wires. Josh noted in closing that anyone could have done the customizations. The only question would be, how much work would you want to do?

You can check out Joshua Orchard's YouTube channel at the link below. He plans to finish the model in the coming weeks and display **AND** maiden her at SEFF at the end of the month. Keep an eye on his YouTube channel for video of this beauty in the near future!

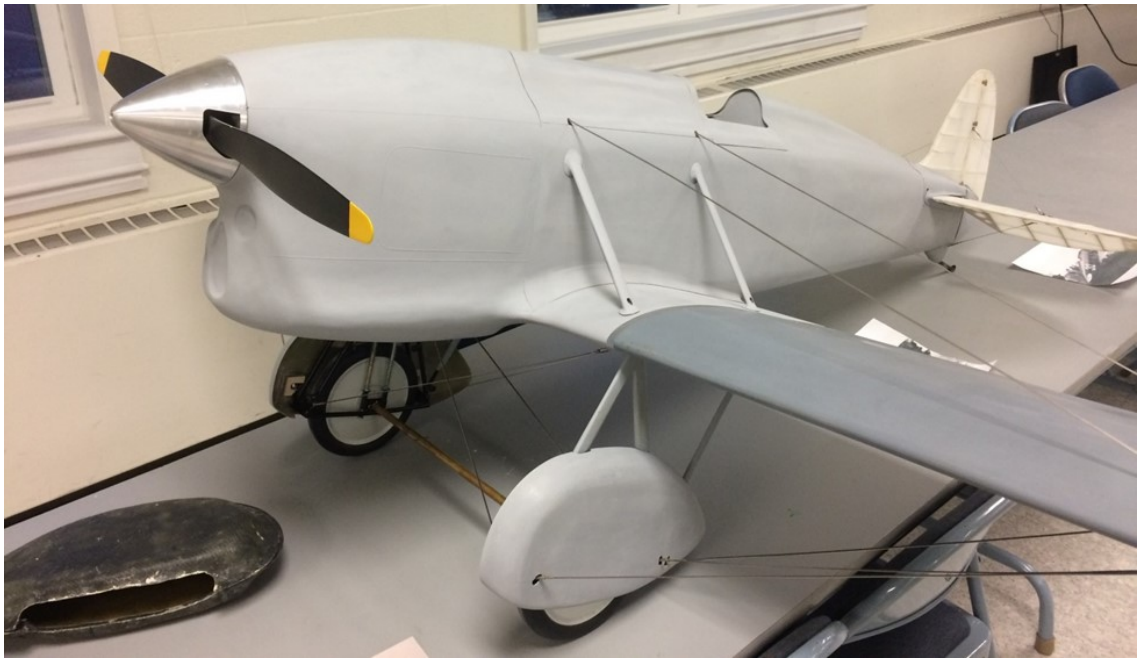


Joshua Orchard on YouTube!

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

Jason Starmer then took the floor to update us on his 3 year scratch build project of the Travel Air Mystery Ship. The last time he spoke, he showed us the landing gear that he had fabricated as the first step in his project because it was the hardest component to build. This time, we were shown a complete mockup consisting of completed parts and male plug part molds that would be used to mold the remaining pieces of the aircraft fuselage.



The beautiful craftmanship of Jason Starmer on display. The model is surprisingly light for its size.

The nose shown is a male plug for a fiberglass mold. The nose has 28 louvers. Jason tried to fabricate them from 0.008 lithoplate, but it was too fragile, so he chose to use common aluminum flashing, which is about twice as thick. He heats the metal with a torch after rubbing soap on its back surface. When the soap coating starts to brown, the metal is at the proper temperature to shape. If it work hardens, just re-heat it. He created the tail by carving it from foam, covering it with packing tape so that fiberglass would not stick to it, fiberglassing the tail and then replacing the carved foam tail with the lighter, fiberglass shell that he had created by covering the foam tail in fiberglass.

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

Early Mystery Ship with the inline Chevrolet engine.

The airplane backstory centered on its participation in the National Air Races. They were a big deal and Army always won until Walter Beech decided to beat Army. He gave his engineers 6 months to design, build and race a plane. The streamlined "Travel Air Mystery Ship" equipped with a radial engine beat Army badly…so badly that it lapped the Army entry. The Army then came out with the Pea Shooter that looks a lot like the Travel Air. The in-line 6 cylinder aircraft was a one off. Instead of a radial engine, it used a Chevrolet engine that was not fully developed. The engine caused many problems for the team. The aircraft won its race in spite of these problems and was promptly retired. Poncho Barnes bought it and raced it using a radial engine (round cowl). The plane still exists, but Jason only has photographs and retrospective blueprints of the inline six variant to use in the construction of his model. Both Jason and Josh received Hobby Hanger gift cards in recognition of their presentations to the meeting.

The tailfeathers of the Mystery Ship, covered with Solartex and detailed down to the rib stitching.

The model drew a LOT of well deserved attention. We can't wait to see her completed and in the air!

Follow Jason's amazing build on the RC Scale Builder forum. CLICK HERE!

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

RC News – Jon Pruett reported that **Joe SzcZur** is competing in indoor competition in Greece. He was in fourth place at the time of the NVRC meeting. The Air Force is testing the XQ-58A unmanned fighter jet. It is intended to fly wing with manned aircraft in combat. Dynam has released a 1200 mm P-51 D. Flite Test announced release of a 46" wingspan Corsair built with new fabrication techniques that result in more rounded surfaces. Luminer is now selling a 2407-size motor that is 560 watts for $25. E-Flite is now selling a V-22 Osprey VTOL in Basic ($230) and PNP ($210) forms.

Events – The 9 March combat event introduced a new event consisting of 5 rounds of 4 minutes each under AMA 755 rules. See the full report for this event on page 5 of this newsletter.

Show N Tell –

Tony Claridge showed his J3 Cub while describing some of its safety features. For example, if his aircraft is 6S or more, he uses separate flight and receiver batteries. He also uses a dual backup control system running into a regulator. He does use a BEC, but he also has a separate backup source to power his radio.

Bob Burnett showed his finished Ultimate Bipe made from the parts he was cutting from templates at the time of our February meeting. It looks great and is ready for the annual biplane contest.

March Meeting Minutes: Continued

Provided by John Roach, NVRC VP and Carl Hampton, Secretary

Show N Tell (Continued)–

Kenny showed his fully repaired Miss Moffett that he plans to fly again this season.

Ron showed his latest canard pusher that he intends to enter in pylon races.

Bob Burnett won a battery charger in the Show-N-Tell drawing.

50/50 Drawing – Jon Roach won the $6 pot.

Upcoming Events:

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

April 13th	Streamer Combat Skirmish
April 14th	NVRC Multi-Rotor Racing
April 18th	NVRC Club Meeting
April 20th	Streamer Combat
May 11th	Spring Fun Fly and Poplar Ford Open House
May 11th	Streamer Combat Skirmish
May 12th	NVRC Multi-Rotor Racing
May 16th	Build Contest (monthly meeting)
May 25th	Lorton Glider Day
June 2nd	Pylon Races
June 8th	Streamer Combat Skirmish
June 9th	NVRC Multi-Rotor Racing
June 15th	Streamer Combat
June 20th	NVRC Club Meeting
June 23rd	Giant Scale Fly-In and Open House
July 13th	Streamer Combat Skirmish
July 14th	NVRC Multi-Rotor Racing
July 18th	NVRC Club Meeting

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

Editor's Corner: Builder's Paradise

By Carl Lydick

As someone who is passionate about the building side of this wonderful hobby, the March meeting was one I'm glad I didn't miss. I've been following along online with both of the builds featured and the models did not disappoint in person. I'm lucky to live not far from **Jason**, and he may catch me peeking through his windows to get a glimpse of the Mystery Ship as he finishes work on her. I'm also lucky to be traveling to SEFF with **Joshua** within the month and will be behind the camera as that beautiful model flies for the first time. The show and tell also featured a number of built models. Building is alive and well at NVRC. Get your models ready for the Annual Display Contest in May! I can't wait to see what we've got this year.

As for my own projects, life has thrown a monkey wrench in the last few weeks of building. An unexpected change at work and a honey-do list of spring cleaning tasks has kept me out of the shop for about 2 weeks, but the interruption will be temporary. I was able to get out and enjoy flying with friends this past weekend, and in the next 3 weeks I'll be wrapping up assembly of a B-17 ARF that will serve as a test bed for various systems for the big build. This model will be my first exposure to the Horus 10S radio and Open TX and although they are proven and reliable I don't want the first plane I fly with them to be the "big one". I'll break in the new system and test bed model at SEFF at the end of this month.

Foamy ARF B-17 pieces next to the Sweet Pea.

I hope everyone is feeling the excitement that comes with spring and the beginning of a new flying season. Blue skies and smooth landings everyone! See you at the field!