

Carl Brieske recounts the challenges and eventual success of the early flights on his recently acquired FlightLine F7F-3Tigercat

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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!

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President's Report: FPV Flight Suspended



By Jon Pruett

Per direction from the Federal Aviation Administration (FAA) to the Academy of Model Aeronautics (AMA), and to all AMA clubs in the region, no recreational First Person View (FPV) flight activities are allowed in the DC Special Flight Rules Area (SFRA).

The board has been in discussion with AMA HQ Government Relations, our AMA District VP, and AMA Associate District VP and it has been made very clear that per FAA definition and decree, no recreational FPV flight is authorized inside the DC SFRA.

Both fields NVRC operates, Poplar Ford and Lorton, are inside the SFRA and impacted by this requirement.

The FAA requires that all model aircraft flown under the Special Rule for Model Aircraft be flown within unaided visual line of sight (LOS) of the pilot. The definitions for visual line of sight published by the FAA specifically identifies that first person view (FPV) goggles do not qualify for maintaining LOS.

https://www.faa.gov/uas/getting started/model aircraft/

"Visual line-of-sight: While flying your drone you must be able to see it at all times using only your natural vision (which includes glasses and contacts, but not first person view goggles or binoculars)."

https://www.faa.gov/uas/getting_started/model_aircraft/media/ Definitions_terms_Special_Rule_for_Model_Aircraft.pdf

We are still seeking written confirmation that FPV flight using a standalone screen would be acceptable, but it is very clear that any recreational FPV using goggles is not allowable in the DC SFRA.

Until further notice, all FPV multi-rotor and wing races, practice sessions, and recreational flight activities at Poplar Ford and Lorton are suspended.

President's Report: FPV Flight Suspended



By Jon Pruett

The FAA has begun doing field checks in the region in the last two weeks, and we expect enforcement actions against anyone or any club found to be violating the rules. Any willful individual violations at NVRC fields will result in suspension of club flying privileges. It has been made clear that any club violations will cause NVRC to immediately lose AMA charter status. This would place the club in violation of our binding agreement with Fairfax County for use of the two fields, and result in NVRC becoming a static modeling club only.

So just don't do it.

The board is preparing a waiver request to the FAA to return to our previous FPV policies at Poplar Ford field. We are working with the AMA in this process, and expect that filing to be officially submitted in March. Per members' previous experience with the FAA waiver approval process in the SFRA, it is likely we will not be able to resume FPV activities at NVRC fields until the fall.

We are also working on identifying partnerships with other flying fields and clubs nearby but outside of the SFRA to help get our members back in the sky as soon as we can and resume our FPV racing series. If you have contacts or leads that can assist with this, please let me know.

If you have any questions, please contact me at the email address below. Please be patient if it takes me a day or two to reply - as you can imagine, this is more than a bit of a mess and we're working our way through it as quickly as we can.

Blue Skies,

Jonathan Pruett, President, NVRC jonathan.pruett@gmail.com

VP's Report: Updates from Poplar Ford and Lorton



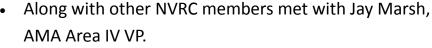
Compiled by Carl Lydick from John Roach's RC Groups Updates

As always, John Roach has been keeping busy keeping our flying sites in tip-top shape.

- Addressed rodent damage to Lorton shed
- Mowed Lorton field (2x this year). Remember, if you mow the Lorton site twice you will receive \$50 off your 2019 Lorton member-

ship!

- Did a tune-up on mower "Bob". Replaced blades, applied no-stick spray, and lubed before returning to service
- Serviced the battery in mower "Big Red". It is back in service despite missing a motor cowling



- Topics discussed included FPV Suspension, the SFRA, FAA Funding Bill and section 336, and NVRC member impact on the hobby
- AND MORE!



Servicing "Bob"



NVRC Members chat with Jay Marsh

Does this article feel familiar? It should, but it isn't a re-run. John spent loads of time again this month maintaining our flying sites. If you see John, shake his hand and say thank you for all the hard work he puts in to keep our facilities not just flyable but beautiful. Or, better yet, volunteer and give John and our other fantastic volunteers a hand! The grass is growing fast this time of year and everyone who cuts the grass or trims the pits is GREATLY appreciated. You've got time to kill while the batteries charge, right?

NVRC Streamer Combat Report!



By Jon Pruett

The first streamer combat event of the year was a great success! We had great flying weather, and five pilots ready for fierce competition!

We followed the AMA Streamer Combat rules for the most part, including the spot landing at the end of each heat for extra points. There were some electrical challenges, and some mechanical ones, but everyone had a great time! And in between the combat heats anyone hanging out and not repairing something tossed up a plane for a quick flight.

At the end of the day **Mike Marr** kicked our butts with a commanding points lead. There was also a thrilling mid-air collision between Mike's Mig and Scott's Arrow which they both flew away from!

Keep an eye on the <u>website</u> for the next combat skirmish or event - and come join in!







NVRC Annual Display/Build Contest



REMINDER! This event will be held at the 5/17 meeting!

The annual NVRC spring Display Contest is named in memory of our own Bob Scott.

The following criteria apply:

Invitation: any aircraft that previously won in any category of a previous NVRC Display or Building Contest is invited to be presented for display only at the contest. Prior winners cannot compete a second time. You are invited but not required to display your trophy, and an information sheet with your aircraft.

Prior Year's Entry: any aircraft previously entered in a NVRC Building contest can be entered if it has not won one of the competition's categories.

SEE THE FULL DETAILS FOR THE DISPLAY CONTEST BY CLICKING HERE!













Some participants from years past!



Provided by John Roach, NVRC VP

Visitors and new members – A VDOT guy introduced himself. He is going to be a VDOT drone guy. Unfortunately we did not catch the gentlemen's name. If this is you, or if you know who this was please let us know! Warren Russell introduced himself. He flies drones.

Moving – Mark Franke awarded **Pat Dunlap** a Royal Air Force hat in recognition of the years of service that Pat has given to NVRC. Pat has retired and is moving to the Midwest where he can better enjoy flying RC.

FPV waiver – **Paul Lukas** is preparing to file a waiver request with the assistance of **Carl Brieske**. The plan is to base the request on accepted waivers that say, "We fly a piloted drone."

Bob Burnett mentioned the AMA push for members to contact their congressmen in support of an amendment to the House FAA re-authorization bill that would retain section 336. He noted that the AMA form letter process was easy to use.

Poplar Ford VP Report – The field was lumpy and in need of rolling.

Lorton VP Report – Component pricing for a charging system suggests we can afford to install a solar charging system at Lorton as another way to encourage Lorton use. A work day was initially scheduled for 28 April. Volunteers were invited to bring planes with them and fly following completion of seeding, aeration and minor fence work.

Treasurer Report – "We have enough money to buy a charging system."

Volunteer Projects – Chantilly Robotics Team was invited to the World Championship Robotics Competition in Chicago. **Mark Franke** raised \$12,000 for their trip. **Tony Claridge** announced that Monster Mini Golf donated \$250 to the Chantilly Robotics team and would donate 50% of their Friday night gate to the team.



Provided by John Roach, NVRC VP

Mystery Aircraft – The cockpit view shown was an AH-1 Huey Cobra.



Wakefield Forest Elementary STEAM Fair – Doug Fig, Jon Haitsuka and Paul Lukas did their level best to interest students in aviation with hands on model airplanes and student access to flight simulators.

Mark Franke gave a presentation on air brush weathering of model aircraft. He likened it to medical training – "See one, Do one, Teach one." His Iwata compressor was nice and quiet. The air brushes he uses are dual action in that they allow control of both paint flow and air flow. Good air brush work requires a clean air brush, so Mark showed the tools and techniques he uses to keep his air brush in good working order... tiny bottle brushes to clean orifices and a nylon scrub pad to clean the air brush wire. Isopropyl alcohol is used to thin Tamaya paints. Mark thins his paint about 50% to get



Mark and Jon add exhaust stains to a T-28

it thin enough to spray. He mentioned in passing that You Tube has great air brush tutorials. He then got busy, noting that the key thing is to practice <u>before</u> painting an air plane because air brushing is an art. Spray in small amounts instead of all at once. Humidity is also a factor and may cause a "cloudy" finish. If the paint starts to dry up in the brush, it will cause the brush to begin to spit. When this happens, wash and dry the brush before continuing.



Provided by John Roach, NVRC VP

Mark showed how to make realistic exhaust marks along his FMS Spitfire fuselage using black or gray paint. He then thinned his paint about 80% and applied it to panel lines and gently wiped the area in the direction of air



flow over the airframe. This made the panel lines of the model show up in a very realistic manner. He then showed another useful technique - isopropyl alcohol on a paper towel smeared in the direction of wind to make panel lines stand out as if they had a dirty weathered smudge on them. He then showed dry brush techniques using a camel's hair brush with most of the paint removed from its bristles. He streaked the brush along panel lines in the direction of air flow. As he did this he cautioned that it was hard to remove these marks if overdone. He likes to use pastels on exhausts. Apply pastel gently to give a hint of rust. Pastels are a powder and not paint, so they have to be clear coated after they are applied.

Show N Tell – Carl Brieske

explained the initial flight behavior of the FlightLine F7F-3 Tigercat that he recently purchased from Al Norcott who bought it at a silent



auction in Florida. They adjusted its CG with wheels down. They should have set the CG with gear up. This, and the strong drag when the gear was down, accounted for its less than great first flight handling. When the model was set up correctly and its gear retracted, it flew well. The moral of the story is that if you have a new plane, bring its manual along for its maiden flight so that you can verify that it has been correctly set up for flight.



Provided by John Roach, NVRC VP

Tony Claridge demonstrated an E-Flite tail setter, the Xvert VTOL. It is on sale at a reduced price of \$99.



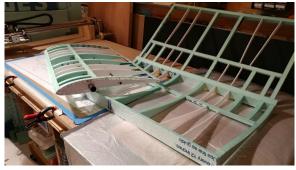
Eflite Xvert flies hands-off!

Carl Lydick removed the EDF from his F-16 and converted it into a hand-launched pusher that flies for 9 minutes at 100 mph with an 80 A ESC and a 1250 KV motor turning an 8x8 prop. He attributes its performance to the considerable weight saved by discarding the EDF unit and landing gear.

Bob Burnett showed off his Flex Innovation high performance aircraft equipped with an Aura gyro. The gyro is nice, but peculiar in that all trims must be set to dead neutral, including sub-trims. Trims can only be set thru a computer rather than the radio. During computer setup of the gyro, you tell it which radio you have and the software sets the gyro up accordingly.



Flex Innovations Ventique 60E



eight foot wingspan model of a FW canard that was wind tunnel tested but never flown before WWII ended. See his build progress HERE!

Jonathan Pruett described his plan to build an

FW-42 wing construction underway

Paul Lukas is looking for data about a CH-300 Pacemaker.



Upcoming Events:



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

May 17th <u>Display/Build Contest</u> & <u>Monthly Meeting</u>

May 20th <u>Poplar Ford Open House</u>

May 27th <u>Lorton Open House</u>

June 2nd Streamer Combat Skirmish & Blanket Swap Meet

June 3rd Pylon Races

June 17th Streamer Combat Event

June 21st <u>Monthly Meeting</u>

June 23rd <u>FARM Club Summer 2018 Float Fly</u>

July 7th Streamer Combat Skirmish & Blanket Swap Meet

July 15th <u>Pylon Races</u>

July 19th Monthly Meeting

July 22nd <u>Giant Scale Fly In</u>

August 4th Streamer Combat Skirmish & Blanket Swap Meet

August 16th <u>Monthly Meeting</u>

August 18th <u>Biplane Contest</u>

September 1st <u>Streamer Combat Skirmish</u> & <u>Blanket Swap Meet</u>

September 9th Pylon Races

September 20th Monthly Meeting

October 6th Fall Fun Fly

October 18th Monthly Meeting

Editor's Corner: SEFF 2018



By Carl Lydick

Please forgive me for the extra pages this month, but after a few days at SEFF I just have too much to share!

SEFF is definitely a road trip, taking us about 13 hours to make it to Americus Georgia from Northern Virginia. When you arrive you'll be greeted by an immaculate 1700ft Bermuda grass runway, onsite bathrooms with showers, plenty of shelters, and loads of room for camping. There is even a pond for float flying! While there were several hundred pilots present the flight line rarely felt crowded.

Taking advantage of the perfect runway and huge amount of open space I finally got some successful flights on my 95" Parkflyer Plastics P-40 Warhawk. This airplane had a violent encounter with the fence at Poplar Ford on her maiden attempt several years ago. When repaired she was plagued by landing gear issues and repeatedly grounded, so it was a relief to finally see her fly! She flies LIGHT, as expected, and would benefit from a bit of extra weight for



After 4 years... She FLIES!

better penetration, but I'm happy with her and will continue to tweak her. You can see video of her <u>maiden flight HERE</u> and video of her <u>other flights HERE</u>. There was a scary stall on the maiden flight when she caught a tailwind on the downwind turn and almost went in!



The new Hangar 9 P-47 Flies VERY nice!

I also put many flights in on the new Hangar 9 20cc P-47. She flies on rails and slows down surprisingly well for her weight (13lbs). Even with a 6s 8000 mAh pack she still took several ounces in the nose to balance, so I doubt there is much weight that can be cut. Flight times are nice though! I haven't had an opportunity to fly her at Poplar Ford or Lorton yet, but I suspect she will handle either field well.

Editor's Corner:



By Carl Lydick

There were loads of amazing people and planes at the event, but I'll just take the time to share 3 of them here.

Several months ago Joshua Orchard visited our club meeting with his Bugatti 100P. He flew his latest build, a BEAUTIFUL Top Flight Corsair. In addition to his usual attention to panel lines and rivets, Joshua added articulated cowl flaps, a functional canopy, functional elevator boost tab, bomb drops, and a gorgeous 3D printed radial. He also included an FPV cam-



era built into the cockpit that captured great video of the maiden flight. Now that she has flown he is working to outfit the cockpit with a detailed interior with articulated controls (throttle, stick, and rudder pedals). While he will not pilot her FPV the details should make for very fun ride-alongs. You can see video of the <u>flight and onboard views HERE</u>! You can also read through his <u>full build thread here</u>.



Another highlight of the trip was meeting John Morgan and getting to watch the maiden of his 1/5th scale F2A-2 Brewster Buffalo. As someone who is enthusiastic about scratch building, particularly with foam, John has been an idol of mine for years. He is an amazing craftsman who builds flying works of art using innovative methods and materials. His latest build, the Brewster Buffalo pictured here, is a foam and fiberglass model that uses many weight

savings techniques. The finished model comes in at 17lbs... 11lbs less than the similarly sized Jerry Bates version. You can watch the maiden video HERE and read the build thread HERE.

Editor's Corner:



By Carl Lydick

The last model I wanted to share is a BIG one. **Damon Atwood** started construction of this model in 2010 but shelved her when he was unhappy with the original wing design. He



Damon Atwood and the Emmaselle II

pulled her out last year and designed a new set of wings at 188" span. She arrived at SEFF only partially complet and Damon spent the first few days of the event wrapping her up and 3D printing the dummy engine and details. We were lucky to arrive in time to catch the maiden/certification flight on Thursday. The flight line was shut down and they skies were cleared in case there were any issues. She flew perfectly!

Damon named the aircraft after his daughter Emma, hence the "Emmaselle II" was born. All up weight is 52lbs and the wing cube loading is a only 5.2! We joked with Damon that if he wanted longer flights he could just thermal it. She is setup with a Hacker A-100, a Castle HV 160 and runs on 10s-2P making 6300 watts. You can see her maiden flight and highlights of later flights HERE!



Beautiful low-pass



Can you believe THIS is 3D printed?

In addition to building amazing aircraft, Damon also runs a business where he sells 3D printed engines for RC aircraft. Pictured here is the radial he printed for the Emmaselle II. You can visit his website at http://atwoodaviation.net/. The kits are not cheap, but they are GORGEOUS!

Thanks for indulging me in the LONG update. If you have content you would like shared with the club please send it to me at carllydick@hotmail.com!