

Contrails

Winter 2021

Volume 33, Issue 1



Ed Martino of the Buc-Le Aero Sportsman Club captured this “smokin” jet at their October jet fly-in.

President's Report

Bob Klenke



I think we can all agree that 2020 was just plain awful! Unfortunately, the first few weeks of 2021 weren't much better... However, in addition to the announcement of the vaccine, there were a few bright spots.

In the last issue, I talked about a couple of smaller jet events that I was able to attend. One of them was at the Fredericksburg RC Club field in June. It was a nice, relaxed event. Well, they decided to hold another one in early September. Frank Noll was the CD and in addition to local pilots, there were several that attended from out-of-state. I didn't take a lot of pictures, but I did take this one of the end of the flight line where I was located.



One of the out-of-state attendees was Pablo Fernandez. Pablo brought several of his EA aircraft, including his *Rogue*. Below, Pablo and Frank set up their *Rogues* for a photo opportunity – nice looking, unique paint schemes. Of course both Pablo and Frank flew their *Rogues* many times which was always exciting to watch.



Another bright spot was the Tiger Meet in South Carolina in October. This event was held at the Flying Tigers RC Club near Lake City, SC. The field has a long, smooth grass

runway and an open flying area. About 40 pilots attended the event from all over the east coast. I got a few pictures myself, as well as some submitted by other attendees.



Jeffrey Tolomeo from Pacific RC Jets won Best Military Flying the T-one Models' T-50 Black Eagles aircraft.



Adam Falk sent me several pictures of his L39 at the event. I think the smoke system works!



Gary Jones from the SC Jet Squadron sent me some pictures from the event. This one shows his Skymaster 1/5 F-16, and two turbine-powered foamies he was flying, an F-22 and an F-4. Both of them flew great. I'm not sure what turbine he had in them, but they apparently had an auto-restart feature. On one flight, I saw the F-4 flame out. Gary executed a perfect dead-stick landing and by the time he

President's Report (cont'd)

Bob Klenke

was down, the turbine was running again so he took off and flew a couple more laps! That's one of the benefits of low-cost, low-emotional attachment foamies!



Above is Gary's large EA *Havoc*. I believe he's since sold this aircraft in order to use the turbine and other equipment in his F-105 project. Gary is detailing the F-105 build in the Jet forum on RC Universe and if you aren't following it, you should – it's a really cool project and lots of good information is being exchanged.

Mike Pecue brought his EA *Shockwave*. Mike was having some fuel flow problems and got a lot of practice with his dead-stick landings, but he finally got it worked out. Mike and Larry Roper spend quite a bit of time hanging out in their "screened-in porch" which was pretty handy when the bugs were out in the first couple of days.



Here's the Airworld Hawker *Hunter* of Frank Alvarez. Frank won Pilot's Choice with this beautiful aircraft that he flies a lot – and it flies as good as it looks!

Pablo made it up from Florida for this one, too. He flew the heck out of his *Rogue* and the new *Wrath*. If I were going to get a 3D jet, I'd get a *Wrath*. Maybe someday when I win the lottery.... (top of next column).

Here's the crew from Richmond, VA (well Marty is from New York now, but we still claim him....) Bob Neal had his Skygate *Hawk*, BVM 1/6 F-16, and CARF J-10 (under the tent with the cover on). Marty had his BVM 1/6 F-16 and CARF *Hawk* which were hiding somewhere. That's my *Turbinator 2* from Boomerang Jets which is a *blast* to fly with a K85. That's also my scratch-built *Panther*. It flies great for a plane that is 18 years old!

It's Time to Renew Your Membership!

President's Report (cont'd)

Bob Klenke

Below are several views of the flight line and a few more of the aircraft during the event. If you've never attended this event and you like laid-back events and don't mind a grass runway (they have their advantages!), put this event on your calendar for fall 2021.



FAA Update

As usual, there's been developments and changes on the FAA regulation front. However, in spite of the character of this year, the developments have been fairly positive.

With respect to the 400' altitude limit, I attended an AMA SIG webinar in December that was held by Chad Budreau (AMA Executive Director) and Tyler Dobbs (AMA Government Affairs Director). In that webinar, Tyler described the Safety Risk Management (SRM) process that the FAA is using to address the problem that AMA clubs have with the 400' altitude limit. Currently, the AMA and FAA are working through the clubs who are located within controlled airspace. Many of these clubs, which have been in existence for many years, are now located in areas where the FAA UAS facility map limits the altitude for unmanned aircraft (including model aircraft) to less than 400' – sometimes as low as 100'.

For those clubs, the AMA has been working with the FAA to hold SRM panels to discuss model aircraft operations at those clubs. In the majority of cases, the club has been able to secure a Letter of Agreement (LOA) for operations in excess of 400'. In one case that Tyler described, the club was able to secure an LOA that allows routine model flying to 900' with a simple email notification process to allow model aircraft flying to 2000'. This is at an AMA field that is located in Class C airspace less than 2 miles from an airport. You can read about the details of another club that has secured a similar LOA in Lawrence Tougas' (AMA District X VP) column in the November 2020 issue of *Model Aviation*.

Tyler went on to say that once they have finished the SRM process for all of the AMA clubs in controlled airspace, he anticipated that they will be able to secure a "blanket" LOA for clubs in uncontrolled airspace (i.e., Class G) for model flying over 400' up to the base of the Class E airspace above, either 700' or 1200' (see my column on airspace in a previous issue of *Contrails*). He also recognized that this altitude may not be sufficient for some clubs in Class G airspace, so he envisioned an SRM process for those clubs individually in order to secure LOAs for operations to higher altitude.

This is good news, because as we know, turbine and high-powered EDF flying is nearly impossible under a 400' altitude limit and since we've been doing it completely safely for decades, encumbering us with that restrictive altitude

President's Report (cont'd)

Bob Klenke

limit is unnecessary as well as destructive to the hobby.

Also, as you have already heard, I am sure, the FAA released its final rule on Remote ID for unmanned aircraft (including models). The effort we all undertook to comment on the FAA's proposed RID rule paid off and the final rule is much less restrictive than originally proposed. In fact, the impact of the final rule on our flying will be very limited.

In the final rule, there are three ways to comply with the requirement for remote ID:

1. Operations in an FAA-Recognized Identification Areas (FRIA). Operations in these areas DO NOT require Remote ID on your aircraft as long as the aircraft is flown within visual line of sight (also a current AMA safety code requirement). These FRIAs can be applied for by a Community-Based Organization, like the AMA, they can be sized as needed to cover the operating area, they are valid for 48 months, and they can be renewed.

We had another webinar with Tyler Dobbs about this and he stated that the AMA will work with clubs to apply for a FRIA for their club site (the application process does not start for another 18 months), and help the club renew the FRIA when necessary. Tyler also stated that there will be a "waiver process" that will allow the establishment of temporary FRIAs for sanctioned events not held at an AMA club flying site.

2. Operation with a Remote ID Broadcast Module. For operations outside a FRIA, an operator of an unmanned aircraft can equip it with a Broadcast Module that transmits the required RID information – including its own serial number. That serial number must be entered into the registration information for the aircraft or operator. Aircraft operating with this Broadcast Module must also be flown within visual line-of-sight.

This option will be available for anyone who wants to fly a model outside of a FRIA. You can have one module, with its serial number associated with your recreational FAA registration number, and move it between aircraft as necessary. This is fairly straight forward technology – our current radio systems with telemetry already implement most of the requirements. I would fully expect, once the industry implements these modules, that they will be available for less than \$100 and perhaps much less than that.

3. Standard Remote ID for Unmanned Aircraft. This is standard RID requirement that will be implemented for "drones" as we know them. The Standard Remote ID message includes the aircraft ID (serial number of the aircraft or session ID); latitude/longitude, altitude, and velocity of

aircraft; latitude/longitude and altitude of Control Station; emergency status; and time mark.

This RID solution will ultimately have to be "built-in" to off-the-shelf unmanned aircraft that are sold at places like Best Buy and Walmart. The intent is to allow a Law Enforcement Official to be able to identify any unmanned aircraft that they observe operating in a dangerous or careless manner – operations that we've all heard much too much about in the news. Those RTF park flyers that everyone sells will likely have to have it as well. Again though, it's not really a significant technology leap as broadcasting this information is not that difficult. For example, for the DJI *Phantom* or *Mavic* photography drones that many of you have, they already transmit all of this information. The only change likely necessary for them to comply is a software modification to transmit the information in the proper RID format – which incidentally has yet to be designed.

It will be another two months before this rule is completely finalized and after that, there is a 30-month period before full compliance is required. During that time, the AMA will be working with the FAA to ease the compliance process for their members and clubs and make sure that there are no unforeseen issues with the final implementation.

Notice that the requirement to post the RID information on the internet and the fact that the FRIAs were supposed to eventually be eliminated have been removed from the final rule – both big wins for us in the modeling community. I'm familiar with the arguments that this will "only affect us and not the bad actors" or "this will not ever be enforced," etc. I hear you and agree with most of them, but the reality is that UAS (i.e. drone) technology will continue to advance and commercial uses will continue to expand, so these regulations were inevitable. With the help of the AMA and other aligned organizations like the EAA and AOPA, we've been able to continuously carve out an ability for us to continue to enjoy our hobby as we've been able to do in the past. I'm optimistic that with the efforts on our behalf of a lot of dedicated people, we will continue to do so.

If you have any questions about any of these FAA rules or proposed rules, please let me know (rhklenke@gmail.com). If I don't know the answer, I will find out and I'll continue to follow the goings on in this area and voice the unique concerns of the jet modeling community.

I hope to see you all at the upcoming events in the 2021 flying season. Stay safe!

Bob

Treasurer's Report

Marty Gurewitz

Beginning Checking Account Balance 7/1/2020

\$5,388.70

Beginning PayPal Account Balance 7/1/2020

\$0.00

Income

Member Dues \$119.85

Total Income \$119.85

Expenses

Double payment of dues refund. \$24.27
Smith Petty Event Trophies (5) \$389.00
PIP Contrails printing/mailling \$961.30

Total Expenses \$1,374.57

Ending Checking Account Balance

\$4,133.98

Current Pay Pal Account Balance

\$406.82

Total Cash on Hand 12/31/2020

\$4,540.80



Vice President's Report

Jim McEwen

I write this at the end of a January which has been memorable not only for unseasonably warm weather and lack of snow here in Connecticut, but for the many recent events across the world and at home. I think we can all agree that 2020 truly sucked in so many different ways, but with the two Covid vaccines being distributed, and one which may be approved in the next couple of weeks, gives hope to people the world over that 2021 will be a better year. Of course, to those of you who have lost a family member or friend, from any cause, my heart goes out to you.

I'm sure that you've heard that we've lost a giant in the hobby; a man that was larger than life. Frank Tiano shall forever be a legend in the hearts and minds of so very many people, including me. With the New York state of mind and voice, Frank was a straight shooter who called it as he saw it and you have to respect that. But Frank was also a softie at heart; a man who loved his family and friends, a man whom I have seen moved to tears by the well-deserved appreciation, respect, and love that people have for him.

Long ago, using Frank's instructions published in *Model Airplane News*, I glassed my first set of wings. I dreamt of going to *Top Gun* (TG) ever since Frank thought it up. All I needed was a model and flying skills that were worthy, so it was many years before I made it, but it was well worth the time and effort. In TG, Frank created an event that was spectacular for the quality of the models and the flying, but even more so for the comradery between pilots. Frank was one-of-a-kind for sure! Godspeed, my friend, we all miss you so much already!

It was announced by Carol and the FTE folks that *Top Gun* (and Florida Jets) will be held this year. I will be attending TG and I hope to see many of your there as a tribute to Frank.



Frank and Carol Tiano.



Frank being presented with a thank you signed by the pilots of Top Gun 2018.



Frank, as I'll always remember him, keeping an eye on things at Top Gun.



One of the greatest thrills of my life was competing in Unlimited at Top Gun 2018 (many thanks to Steve Gladstone, Rick Marshal, and Cole Thornton) and winning a trophy!

OK, onto other things before I tear up, again.

When I lived in Phoenix, I had the luxury of having two jet fields with long asphalt runways about half-an-hour from home. Here in CT, there is a 375-foot grass field about 5 minutes away and 600-foot grass field about 45 minutes

Vice President's Report (cont'd)

Jim McEwen

away. These, naturally, are not suitable to fly "heavy metal" scale jets. Fortunately, there is also a full-scale asphalt runway about 70 minutes from home, but sometimes you just want to make a quick trip to the field rather than an expedition. As such, I had my eye out for a short-field grass-runway-capable jet that would also be easy to fly (to help knock the rust off the thumbs after a long winter) and would have a great performance envelope. I believe that I have found the answer in the *Turbinator 2* available from Boomerang Jets (www.boomerang-rc-jets.com).

Smaller than the original Zirola-designed *Turbinator*, the *Turbinator 2* has a 70" wingspan, 69" length, composite tip tanks, features plywood and balsa construction, and is typically fitted with a 60-70N thrust engine. I called Larry Roper at Boomerang who was most helpful in answering my questions and who suggested fitting an 85-sized engine to ensure success off a bumpy grass strip. OK, sounds good so far but I wanted to see one in action. Fortunately, I attended Bob Belluomini's Fall Jet Classic and had the opportunity to inspect Keith Wobler's Kingtech K-85-powered *Turbinator 2* as well as to see it fly. That was it; I was sold. Oh, that's the best part ... the *Turb 2*, complete with electric retracts, struts, and electric brakes sells for the unbeatable price of \$999. Just add a fuel tank, turbine, servos, receiver, and batteries and you're good to go.

The plane is available in three color schemes (red/white, orange/silver, and blue/yellow) but I wanted to do something unique so I stripped the covering film and glassed the model (using Z-poxy finishing resin and the same age-old instructions from Frank Tiano). I bought the orange/silver version but should have chosen one of the other schemes since I was stripping the covering. Solid colors strip off cleanly; there's just something about silver (regardless of who makes it) that seems to always delaminate. A few hours of sanding film remnants would have been avoided if I'd remembered the lessons learned from stripping silver film many years ago.



The *Turbinator 2* glassed and primed! Also pictured is my new wingman, Jet, a Scottish Terrier frequently seen at the flying field.

The plane is in primer now but will be painted per the Grumman *Panther* Jolly Rogers scheme. It will be fitted with a Jet Tech "combi" fuel/smoke tank and I will probably add a Unilight system for navigation and landing lights.

I'm really looking forward to getting the *Turbinator* finished in time for (hopefully an early) Spring where I can sharpen

the flying skills to be ready for *Top Gun* at the end of April. Jet and I will be bringing the yellow *Rafale* again, as our "secret weapon" won't be ready to do battle with the other outstanding models like the one shown below built and flown by Mr Top Gun 2020 Bret Becker. Many thanks to David Hart for the photos.



Wency and Bret Becker with their U-2.



U-2 cockpit detail.



The scratch-built U-2 in flight at Top Gun.

Until next time, be safe!

Jim

**District III Report****Mark McCracken**

Ohio
Pennsylvania
West Virginia

Been a while since District III here in Pennsylvania has had any jet activity to write about, and this past year with Covid, has made it hard for most events to stay open. With the shutdown, or postponing of events, or even events closing for good it has been quiet for a while.

Somehow in 2020, a few clubs have gone against the odds, and had come through with a few great events and are planning to renew their events for the 2021 flying season.

BCAM, also known as Burks County Aero Modelers in Kutztown, PA put together a Giant-Scale event in the summer of 2020. This first-time event had a nice turn out, and yes, this was a giant-scale event - but a majority of the pilots were flying turbine-jets. BCAM is easily found, as it is only a few miles from the Farview field. It is a very nice field with great guys in their club, both of which made for a relaxing day of flying.

Buc-Le Aero Sportsman Club in Quakertown, PA was another club having a Giant-Scale event this past summer. Their event featured two days of hot summer weather and non-stop flying.

Two members of the Buc-Le club, Erik Rudjord and Jim Ellis, were able, in a very short time, to put together an early October two-day jet event. Thirty jet pilots from four, or maybe five, states came out to Quakertown, PA to burn crazy amounts of jet fuel. Photos curtesy of Ed Martino

At this time, I am not sure of any dates coming up this summer for jet events but will post them here in *Contrails* as I get them.

Stay safe and be careful!

Mark



District VII Report

Tim Toutant



Iowa
Michigan
Minnesota
Wisconsin

This past year has been a total wash when it came to flying our favorite aircraft. Many events were canceled either out of caution or from "stay-at-home" orders from the powers that be.

However, on a cool 40-degree day with plenty of sunshine, there were a few of us that were able to get together at the Fraser RC field and put in a few flights on new aircraft. My new good friend Reni Stephan maidenized his SU-30 along with Amanuel Zaya putting a few flights on his FreeWing F-22.



Having tried to reach out to the other states in my district, unfortunately, given the lack of responses - there is not a lot of information I can provide at this time. Hopefully this new year will bring great weather and no hint of viruses.

On another note, it appears that edfs are really starting to catch on due to their being relatively inexpensive and complete (with all the hardware, minus receivers, in many manufacturer's offerings).

The funds required to purchase a turbine are, without a doubt, a big cost, but are usually equaled or exceeded by the cost of the aircraft. Now that there are smaller turbines available, they can be installed into the foam jet aircraft, with some modifications, at a fraction of the expense. Look to see more of these in the future.

Several events are starting to line up in the new year and I hope to take advantage of some of these. Keep safe and let's get to flying.

Fly Safe!

Tim



I brought my new FW *Blue Angels* HP 90mm F-18 and a twin 80mm FW MIG-29. Both of these jets have the added simulated afterburners and they are super bright. The MIG has a random-motion-generator made by the RC Geek for the pilot's head movement, and the Model Sounds Inc *Shockwave-3* Sound System with doppler effect. It is very cool how this piece of equipment operates and it's super loud.





District VIII Report

Ron Schwarzkopf

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

Hello fellow mask-wearers from District VIII. It has been a while, and the Covid-19 saga continues.... A majority of jet events were cancelled last year – here's hoping that this year we'll get a bit of a reprieve from it all, and start getting back to normal. By the end of the last year I was able to make it to only two official events. It has been a decent time for building though. If you have a project you've been working on, please send me pics, and I'll get them in the next issue!

Upcoming events in District VIII

Mar 26-27, 2021: Houston Jet Rally, Bomber Field RC Club, Monaville, TX, Woody Lee CD

Listed event should be considered tentative, and, BYOM. (Bring Your Own Mask...)

Southwest Jet Rally non-event, September 2020

The HOTMAC club worked with the city of Waco to determine how this event could be held, but in the end it was decided to cancel this 2020 event and just have an unofficial, unadvertised fly-in. Several of us decided to show up and fly during different parts of the week, since we knew a few people had scheduled vacation time and travel from other states. So probably 25 attended at various times throughout the week. I was there for 2-3 days, and flew my mostly trusty *Reaction*. Part of the usual "Tucson Gang" attended, and it was great to visit with them. At a distance.



David Elizondo came up from Houston and brought his Blue Aggressor camo BVM F-16.

Fort Worth Thunderbirds 1st Jet Rally, October 2020

The Thunderbirds RC Club had their first jet fly-in during October. There were some last minute CD changes, and due to Covid-19, the organizers decided to make this a low-key event. CD'd by Tom Blakeney, I think the event was run quite well. There are several turbine fliers in the club from around the Fort Worth area, and many EDF fliers.... The event drew 20-25 fliers, even though Saturday was a bit on the windy side. The club was somewhat locked in with dates, and their event unfortunately coincided with the SHARKS Jet Rally in Shreveport, so maybe the dates can be tweaked for 2021. Sorry for the shortage of photos, but a Thunderbirds club member posted a nice video of the event at: <https://www.youtube.com/watch?v=Caut0arNaG4>.



Dan Avilla showed up and flew his relatively new *Havoc SS*.

A neat treat was John Christensen bringing his Mi-24 "Hind" turbine helicopter. It's a Heli Classics kit from Germany, and appeared and flew very scale-like. I wish I had not seen it, because now I want a scale helicopter. Hopefully in 2021 we can get this event going again. (Above, right).



District VIII Report (cont'd)

Ron Schwarzkopf



Tbirds: David Rosado's F-35.



Bob Brubaker's new BVM F100.

Jetoberfest Jet Rally – Oct 30-31, 2020

This event was the only official event I attended for 2020, CD'd by Woody Lee of the Bomber Field RC Club. As expected, attendance was held to around 20-25, with many of the usual fliers not travelling due to Covid-19. The weather was pretty decent, and many flights were flown. Bob Brubaker brought his BVM F-100, and did a great job finishing it. It had not flown at the time of this event, still needing final weight/balance, but I'm sure we'll see it flying for 2021.

Woody stated that the club had been discussing with Frank Tiano about the possibility of having a scale event for 2021 based on the *Top Gun* rules, and apparently Frank was all for the club holding a similar event. Perhaps a nice outcome, considering the sad passing of Frank just a few days before this column was being written. They are considering October 2021 for such an event, if it happens.



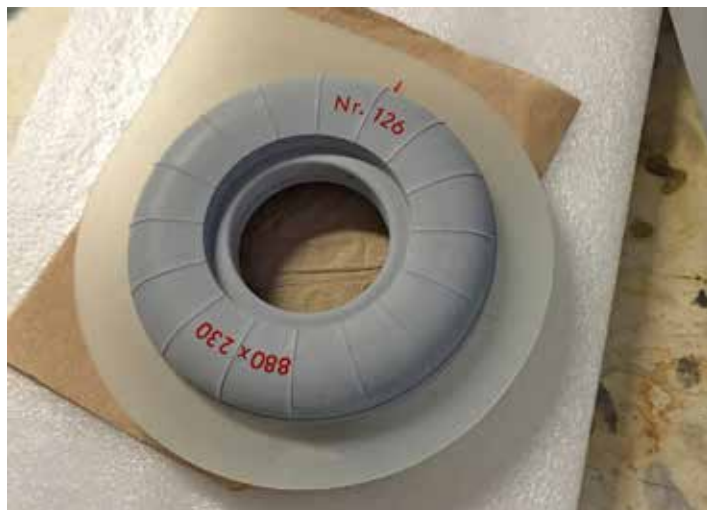
My Current Build Project – Sukhoi Su-17 *Fitter* and Tire Making 101.

Not much flying allows for a lot of building, so I've been making good progress. Around October 2020, I realized there were many mechanical things to address still on this model, and concluded that attempting a first flight before the end of the year was not realistic. That's just how it goes. We had been having some nice weather in October, so I decided to start getting the basic colors applied to the model exterior, then continue with the mechanical work during the colder months (servo install, canopy work, landing gear final installation, etc.) Below is a pic of the model, assembled during December 2020. There have been numerous tasks performed during assembly of this model, and one I wanted to cover was my attempt at casting tires for the main landing gear, as not having usable tires can often kill a project.



I had done a pretty extensive search looking for a 5.75" diameter tire that would be close to what I needed – in the end I could not find anything suitable that would be visually correct. Fellow flier Kevin Whitlow had gone down this road in the past, having cast tires for an Me-262 he once had, so I decided to use some of his methods and fit them to what I needed.

I started with a tire shape that I had designed in Solidworks, and instead of 3d printing the part, I had it grown using an SLS process (Selective Laser Sintered) Printer. This is a



Finished plug with parting plane.

process where a machine has a tank of powdered Nylon material - the powdered Nylon is levelled off flat very accurately, then a laser cures the powder to an outline of the tire. An additional dusting of powdered Nylon is spread onto the cured part and powder, and another layer is cured with the laser. After hundreds of layers of this laser-cured powder have been made, you have a finished part. The part still has layered steps much like a 3D-printed (FDM) part, but they are very fine, and barely visible. Plus, the part can have a substantial wall thickness, so the part can be quite strong, in case the part needs to have a mild vacuum or pressure applied. After sanding and priming, I added vinyl-cut lettering for the tire size, as a bit of a scale feature.

Next step is to make the tire molds. I had been doing some casting anyway using Smooth-On products for details on the *Fitter*, so I wondered if I could use the same material to make the molds. As I've covered in previous articles for molding, I cut to shape a parting plane out of fiberglass sheet that would be placed at the centerplane of the wheel, thus creating a left and right half. A box or frame was built around the tire (I used FDM printing to create the box – though one could easily create one out of thin wood, etc). This forms a "tank" where we will then pour the mold material. The material I used to pour the first half of the mold is from Smooth-On, called MoldStar 30. Thirty is the durometer rating – it is quite flexible, and would allow the mold to be "peeled" away from the final tire part. I allowed the mold to cure thoroughly and came back the following day, removed the parting plane, and poured the opposite side of the part, once again using a frame around the outer shape to create a tank to pour this second batch of MoldStar 30. The following day, the molds were opened up, the tire plug was removed, and we now have usable molds.

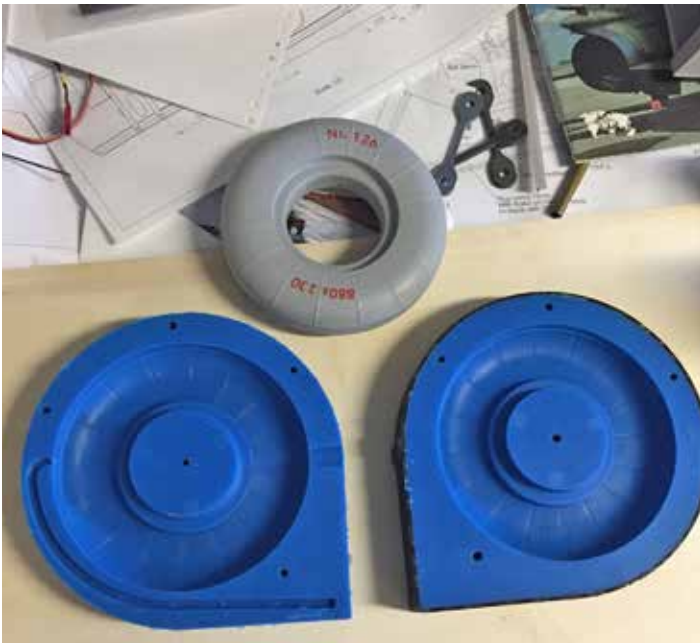


Tire plug with first half of the mold poured.

Remember to Renew Your Membership!

District VIII Report (cont'd)

Ron Schwarzkopf



Tire plug with mold halves.

(ED note: Reference material must ALWAYS be at hand).

I decided to use Smooth-On PMC-780 rubber compound with black dye, to pour the actual tires. 80 is the Durometer rating, so the tire will be much more rigid than the mold. This was all an experiment, and had nothing to really base the needed tire rigidity on. A solidly cast tire can be quite heavy, so I decided I would try to create a lighter-weight foam core or donut, and "suspend" it into the mold, so the cast material would fill around the core. The foam core was made from 5/8" diameter "backer rod," and I used short lengths of .032" diameter music wire to locate and clamp it within the mold halves. By doing this I saved around 4 ounces of tire weight, compared to pouring a solid rubber tire. I could save a couple more ounces by using 3/4" backer rod, but I figured I'd save that experiment for later.



With mold release sprayed on the mold halves, the core/wire frame was centered into the mold cavity, and the other mold half was closed onto the assembly and held together with many clamps. The PMC-780 was mixed, then quickly injected into the mold, with the fill point entering the mold cavity from the bottom, and venting out the top of the mold. Warning, this material gets thick fast.



Filling mold with syringe.



A finished tire ready to remove from the mold.

In the end, I was able to cast 3 tires that appear to be usable, and I now have a whole lot of ideas on how to improve the operation! The most important ones are that casting requires good ventilation, and one must work quickly when using this tire material. Feel free to contact me if you want more of the lessons learned.

That's it for now. Happy building, flying, and mask-wearing....

Ron

**District X Report**

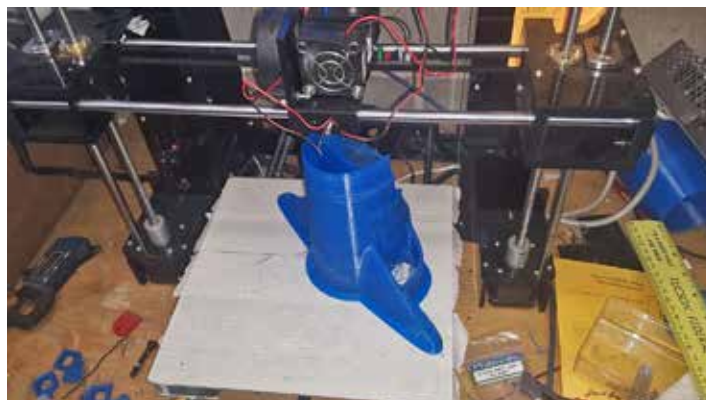
Arizona
California
Guam
Hawaii
Nevada
Utah

David Reynolds

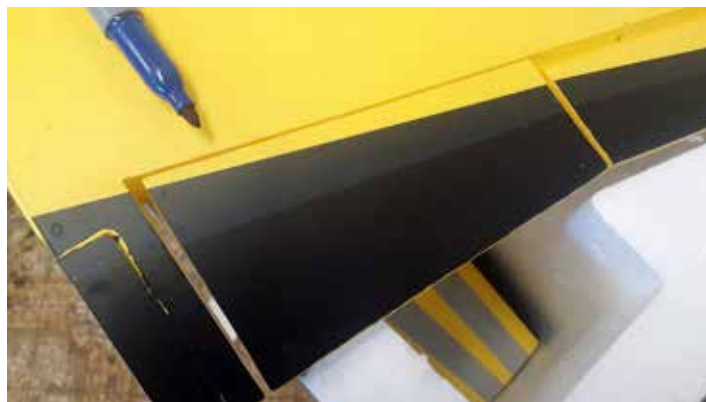
Happy New Year! Here's to hoping it's a better one and that's all I'll say about that.

Starting off this column is the unhappy report of the passing of Colonel Robert Thacker. Others are much better placed to write about his accomplishments and exploits, both in model and full-scale aviation, than I am so I will simply say this: Colonel Thacker was a fixture at jet rallies and had a genuine love of all things aviation. He will be missed.

I have been spending some more time with my 3D printer and recently did a first flight of a printed airplane that turned out to be a nice flying machine. So of course, I next went looking for something more jet to print. That was found in the Eclipsion EGW-80 EDF. The EGW-80 is a small EDF running a 50mm fan and spans just 31 inches. It should make for a cute little jet that I look forward to getting in the air. You can get the files from <https://www.eclipsion-airplanes.com/>. I hope to have a flight report by the next issue.



New to the stable is a 70mm *SkySword* from Hobby King. It was one of those magical moments of an interesting looking airplane, a good sale, and having a coupon. Quality is average for a foamy with the first issue being the decals flake off easily. Not a big problem for me as I was planning on painting it anyway. What bothered me most upon taking it out of the box was that for a "fast" airplane, it seems to be getting up speed with some unnecessary drag.

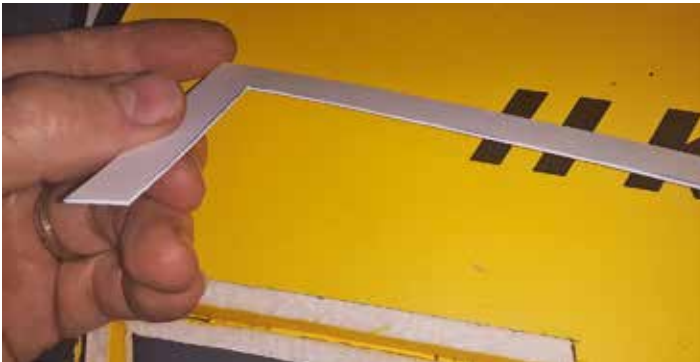


The first parasite I addressed, and the one that there is really no excuse for, was the gap around the flaps. To close them up, I hit the local hobby shop and went to the railroad section and picked up some construction plastic. I cut out some panels to cover up the gaps, did some careful work with a new razor blade to create a recess for the panels and presto, no more unsightly gap!



District X Report (cont'd)

David Reynolds



The next bit of smoothing is landing gear doors. For this, I found a 3D print file for some doors on the main legs on Thingiverse and went back to the construction plastic for wheel doors that are actuated by a servo in the fuselage.



For the servos, I will be ordering servo covers from Park Flyer Plastics. If you've never checked them out you should. While as the name suggests, they focus on the smaller side of things, they do offer cockpit kits, drop tanks, missiles, and other scale details.

The other bit of modifying for the *SkySword* is something that I have been wanting to do for a while, a thrust reverser. When I took it out of the box, I took a look at the plastic tail cone and started thinking that it was a good starting point. Once the cone was cut off, I cut it in half and drilled some holes on the end for pivot points. I next did some CAD (Cardboard Aided Design) to create the shapes needed for closing off the cone at the right angle to deflect the thrust. Once I had the shape set, I transferred it to some sheet plastic. I have yet to put power to it, but when I do I'll be sure to post video up on the Facebook page.

I have been doing a lot of cutting of plastic lately and to do that I have been using a somewhat repurposed tool. Next time you are in your local hobby shop, wander on over to the RC car section and look for Lexan body scissors. Hobby grade RC cars use vacuum-formed Lexan for the bodies and most of those need to be trimmed before they are mounted to the chassis. Many different companies sell these scissors and they all seem to be the same. The blades are sharp, short, and have a slight curve to them. As a result, they make short work of cutting plastic and handle curves very well. They are great for cutting out canopies and any other vacuum formed parts you may encounter. Yes, you can just use any pair of scissors, but it's one of those tools that once you try it, you'll wonder why you didn't get it a long time ago.



That's it for this go around. Here's to getting together in the future and doing some actual flying!

Dave

Canada District Report

Jeff Daly



Hello friends. What a tough year on the jet hobby! Our local fields for flying were open in Canada, but all but one jet event was cancelled in Ontario due to COVID-19. I was fortunate to attend that event in September 2020 at the Thunderthrust over Chatham-Kent, which against all odds, went ahead. It was fun and nice to be out in the sun ... more below. Not much flying in 2020 ... but I didn't break anything to fix either!

Before I talk about Thunderthrust, I have news for those flying jets in the Ottawa valley region and surrounding area. There is a new jet facility just south of Ottawa in Kars, Ontario. It is operating under the Ottawa Valley Jets and is a relief to local pilots who now have a nice facility to fly at, thanks to the family of one of the club members who owns a sod farm. The facility is a sod runway of over 1000 feet in length with no major obstacles. Having not flown from grass in many years, I tried it out with my *Bandit* and no problems. Next year, it will be rolled to make it even better. Perhaps, Ottawa Valley Jets will hold a local jet event there in 2021.



New Ottawa Valley Jet flying field, Kars, Ontario.

8th Annual Thunderthrust Over Chatham Kent Jet Rally

Thanks to Peter Doupnik for obtaining agreement from the federal airport at Chatham Kent to host the 8th annual jet event at Chatham, Ontario. Twenty-five pilots attended and JPO sponsored it as well. Due to COVID-19, there were strict protocols in place that included wearing of masks, daily temperature checks and separation of pilots from each other in the tented area. Spotting for pilots was well managed with the spotter standing a few feet behind the pilot with a mask on. We all adapted and had a great time with no complaints, only happiness to be flying. Most pilots arrived on the Wednesday and left on Sunday. Amazingly, the weather was very good, but heavy crosswinds at times from the South caused some havoc with jets trying to get on the ground without hitting a runway landing light ... there were a few expensive incidents. JPO sponsored a *Top Gun* award, the only one in Canada in 2020, which went to the event CD Peter Doupnik for the outstanding effort to make Thunderthrust 2020 a reality during the COVID crisis. Here are some photos taken by myself and Ken Park.

Fingers crossed for an awesome 2021! See you when the snow melts! Take care!

Jeff



Mike Block's Skymaster F-4.

Canada District Report (cont'd)

Jeff Daly



Ted Antonopoulos' Viperjet.



Anton Krikorian's colorful sport jet.

Bryan Mailloux and his *Classic Flash*.

Some local transportation on this restored Honda mini-trike.

Mike Basso had an inflight H-stab failure on this *Viperjet*.

Owen's DV8R.





Gary Arthur and his *Havoc*.



A nice F-16!



Remember to Renew!



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Please add/renew my JPO membership!

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City: _____ State: _____ Zip: _____

Email Address: _____

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*AMA membership is required for U.S. Residents. JPO Annual Membership Fee is \$25.

Renewal can be online at: www.jetpilots.org via PayPal or credit card; or you can fill out and send with check or money order made out to: "The Jet Pilot's Organization" to: Marty Gurewitz, JPO Secretary/Treasurer, 40 Oval Place, New City, NY, 10956



The Flying Tigers field has a really handy hanger for overnight storage. It was quite full during the Tiger Meet, SC event.