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Do you have something for the next issue?

Send it along to the editor's email above!

Next issue this March

# Somerset RC

A Chartered Club of the Academy of Model Aeronautics est. 1972, AMA 1001

#### Dedicated to the Enjoyment and Promotion of Radio Control Model Airplane Flying

CLUB NEWSLETTER

www.somersetrc.org

**JAN-FEB 2019** 

A Multi-interest Model Airplane Club for <u>ALL AGES!</u>

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New Club President Domecq Smith with First Lady Peach at the Somerset RC Holiday Banquet.

## From the President

E ach January, our club comes together for its annual Holiday Party, and this year we said hello to a new President and honored our club's outgoing President, **Tony Rossi**. Tony has now been President for Somerset RC for two tenures, his last one lasting four years when he was elected in December of 2014. During that time, he saw the club through transition, and through all of the club's activ-

ities maintained his unique brand of enthusiasm for the hobby and for those who participate in it, regardless of what they fly.

In this inaugural issue, four articles were contributed by Somerset RC club members. Our feature construction article is by Larry Gray writing about his magnum opus Top Flite Giant Scale P-47D Razorback. In my opinion, it is an article as rewarding to read as any of those found in the usual modeling publications. And

Long-time modeler **Rich Blatt** shares some good advice regarding the long term care of glow engines. Rich can be aptly described as a walking file cabinet of glow

**Jim Vigani** shares his expertise on electric motor selection. His article is as clear as it is informative. It is an ideal go-to-source for motor selection for its succinctness and clarity. It removes guesswork from a subject that might be unfamiliar to model-

**Jon Gerber** is no stranger to the wider modeling community as well as within the AMA hierarchy. He contributes some words of wisdom regarding our roles as mem-

Other contributions include a write-up of our recent **Freeze Fly** which drew 10 of our stalwart members to North Branch Park's Lake District. Not to be turned back by the prevailing waters from heavy rains, our membership crossed an isthmus onto suitable land, not unlike our ancestors who crossed the Bering Strait some 20,000

Check out the **Mystery Plane Challenge** as well as a member profile of Somerset RC's new President **Domecq Smith**. All in all, it is an issue that I hope you will enjoy After reading it, won't you consider adding to a future issue? I thank **Duane Wilson**, Editor of the Senior Pattern Association's newsletter, for his help in making

As the new President I do not have the benefit of foresight as I write this, because it will only be with the experience of holding the office that I will be able to better appreciate what is involved in carrying it out. Tony undoubtedly possessed a successful recipe for the position, and I am grateful for his support as I move forward with the club. I had the opportunity to express this publically at our banquet and want to do so here for those who could not attend. Tony, we thank you for your service in sustaining our club and for making the hobby more enjoyable to our members. We wish the best to both you and Connie in your years ahead.

in fact, it has more good humor than will be found elsewhere.

ers familiar with glow and gas who want to try electric.

bers within the wider AMA community and beyond.

years ago so they too, could fly their model airplanes.



Keep 'em Flying! Tony Rossi









In model airplane friendship, -Domecq Smith

this issue come to life.

engine lore.

# Feature Construction Article **Top Flight Giant Scale P-47D Razorback** by Larry Gray



**y Top Flight Giant Scale P-47D** Razorback purchase was inspired by seeing other giant scale warbirds on YouTube and seeing them at various warbird events that I attended last year. I was considering the Top RC 89" P-51, The Top Flite Giant 86" F6F Hellcat, and the Top Flite Giant Scale P-47. I eliminated the Hellcat; she's a nice plane but she really didn't appeal to me. I kind of

set my sights on the Top RC 89" P-51, but it was out of stock with no in stock date. I waited over a month, and no luck. The P-47 was also out of stock also, but it did have a date for being back in stock. It took about three weeks before the 47 was back in stock. As soon as I found out it was available, I pulled the trigger.

I'm a big fan and have a great love of WWII aircraft. I currently own three P-51s, one P-40, one Zero, two F4U Corsairs, one Spitfire, one B-17, and two P-47s including this one. The Top Flite P-47 had good reviews and all the flight videos on YouTube made her look like a steady and predictable flyer without any bad habits. Overall, I think Top Flite makes a very good ARF. This is my third Top Flite ARF. I can't say Top Flite is any better than my two Phoenix warbird models. Phoenix makes a quality ARF, and I had no problems with the assembly of my Phoenix models.

The P-47 arrived in a hefty box, professionally packed. The Saito arrived

#### That night, my wife said, "No, you can't take that to bed with you."

at the same time. Yet, it was four days before I opened the box of the P-47. On the other hand, I opened the Saito FG60 3 Cylinder immediately. It was love at first sight. That night, my wife said, "No, you can't take that to bed with you." So, I very carefully packed it back in the box, and sat it on the shelf. When I finally got around to opening the P-47 box, I was surprised to find there wasn't going to be much assembly required of this airplane; there's nothing to run from in assembling it. The instructions are straight forward and easy to understand. Nothing was left out.

I followed the suit of a few others, and decided to go with the Saito FG60cc 3 Cylinder Radial Engine. This engine was a perfect fit for the plane. The engine could not be mounted with the supplied 35mm standoffs unless a hole was drilled in the firewall allowing part of the carburetor to pass through it. Once that was done, the engine mounted with no issues, although later down the road, the engine and Keleo Exhaust Ring were going to give me a bit of trouble.

The engine balanced the airplane just right. No additional weight was



Ready to maiden.



"Pamela 2"





needed to achieve the correct CG. It was just a matter of shifting the Rx battery to the right position. I used a total of nine Hitec HS-5645MG Digital Ultra-Torque Metal Gear Servos. I decided to go with the Robart Manufacturing Electric Main and Tail Wheel Retracts. Robart has a set specifically for this model, and that was a blessing in itself. So many times I've had to cut and shim retracts to get them to fit in a particular model. This can take hours, even days to get them right. It took me about half hour tops to install the retracts, all custom built for this plane. Basically, all I had to do was drop them in place and drill the holes for the screws. Sweet. I don't care much for assembling and plumbing fuel tanks, so naturally I went with my favorite tank—the pre-assembled Rotoflow fuel tank. In my opinion, it's one of the best on the market today.

I was pleased to find that the ailerons, flaps and elevators are pre hinged. This saves a lot of assembly time. The only hinging I had to do was the rudder.

I left the engine installation and cowl cutting to The Master, Rich Blatt, and of course as usual, he did a superb job. Rich wanted to see what the engine looked like with the Keleo Exhaust Ring installed, and so did I. We pulled it out of the packaging, and Rich began trying to get it on the engine. I figured this would be simple, like one-two-three. Well, twenty minutes later Rich and I are pulling and tugging on this exhaust right trying to get it on the engine. We stopped and took a good look at it and came to the conclusion that this ring was defective; no way it's going on, it's definitely out of shape. It came with no directions. And why would you need directions to install something as simple as an exhaust ring? Line it up and tighten it up, right? Wrong. Well, I was all ready to put it back in the package and send it back when Rich noticed that on the packaging it said for installation instructions, go to this particular website. I pulled out my phone and went to the specified website. Rich and I watched the video and both of our jaws hit the floor-the video was 10 minutes long! You need to bolt the engine to a board, and put the board in a vice to keep the engine from moving. Then, you'll need a hammer, a pry bar, and lots of muscle to manhandle the exhaust into position. It took us a good half-hour to get it on the engine.

Assembly of the plane was pretty much straight forward. The wing halves went together without any issues as did the elevator and rudder assembly. I had to do some sanding to get the wings' belly pan to have the same curvature as the wing, and after that was done, gluing the belly pan to the wing wasn't a problem. The right wing has my initials on it, which was done by B&G Graphics, and I also used Water Slide Decal Paper to put my wife on the cowl and named the plane *Pamela* 2. My pilot was purchased from WarbirdPilots.com.

Overall, this plane went together without any major issues. I'd give the Top Flite Giant Scale P-47D a 9 on a scale of I-10. If you're looking for a giant scale warbird, I'd highly recommend this Top Flight P-47. The only problem you'll probably run into is actually getting one. It was on back order for almost two months before it came back into stock. Approximately three weeks later, it was out of stock again. The next step will be to break in the engine, and come this spring, I'll maiden the plane.

-Larry Gray



Saito FG60 3 Cylinder



Pilot from WarbirdPilots.com



At the workshop of Rich Blatt.



The author and his finished P-47.

# Engine Workshop How to Take Care of Your Glow Engines by Rich Blatt



f you own a glow engine, two or four- stroke, and would like it to last longer, I have a couple of suggestions for you:





OS 65 2-stroke

OS 56-a 4-stroke

- Never wrap your engine in a plastic bag. This will allow moisture to remain in the engine which will cause rust on the steel components. Cloth is a much better choice.
- Run your engine dry after your flying session.
- Use some type of after run oil. I use ATF Automatic Transmission Fluid, which keeps the internal parts covered with a film of lubricant.
- Try not to over-lean your engine. This will cause varnish and cause flaking of a plated cylinder.
- If you are running a four-stroke—at the end of the flying season, I would remove the valve covers and lubricate the valve train which consists of the rocker arms, springs, push rods, and valve stems.
- When flying, be sure to use the correct propeller. Too small a prop will cause over-revving. A large prop will put too large of a load causing over- heating.
- For those of you who have a bearing engine, bearings do wear after time. If you choose to make a repair, I would suggest a stainless steel replacement.
- And finally,

#### HAVE FUN FLYING! KEEP ON FLYING WITH GLOW AND GAS!

-Rich Blatt

## On Electrics **How to Choose the Size of an Electric Motor** by Jim Vigani



ne of the questions that is most often asked is: "What size motor do I need?" To answer that question, you first need to know a few things about the model. Most importantly, what is the weight of the model and the desired flight performance?

If the motor is going to be used in a glow-to-electric conversion, the power of a good ball bearing, ABC 2-stroke glow engine is equivalent to about 2000 watts electrical input for every one cubic inch of displacement. To get the equivalent

wattage for an electric motor, simply multiply the engine displacement by 2000. For a 4-stroke engine, the conversion factor is approximately 1500 watts per cubic inch.

As a rule of thumb, the power required for the typical performance requirements for specific types of plane are:

**Motor Gliders:** The light-weight construction with very low wings loadings of these types of planes typically do not require a large amount of power to pull them through the air. Generally, 50 to 60 watts per pound will provide very decent performance.

**Trainers:** These types of aircraft typically have a higher wing loading than gliders, and spend a lot of their time flying at mid throttle settings. A power input of 70 to 80 watts per pound provides good performance with a bit of reserve to get out of some "oops situations."

**Sport Models:** Models such as an Ugly Stick or Great Planes Sportster require about 100 to 120 watts per pound. These classes of models generally fly faster than trainers and are good for basic aerobatics.

**Pattern and Warbirds:** Although different, both these classes of models require about the same amount of power for good performance. For pattern models, the ability to carry speed through the maneuvers is important. For warbirds, the higher wing loading requires sufficient amount of power to keep you out of trouble. Somewhere between 140 to 160 watts per pound is a good choice for this category.

**3-D Aerobatic Models:** Generally, these types of models like a thrust-to-weight ratio of 2:1. This allows hovering at about 1/2 throttle. 200 to 220 watts per pound is a good choice.

Since electric motors are basically constant speed devices, and the fact that they will try to spin a prop at the same speed no matter what, both load and prop selection are of foremost importance if you want to get the best performance without overloading the motor. There are a number of ways to see what the prop performance and loading will be. These include prop charts provided by the motor manufacturer, or one of the motor calculation programs available on-line. The one I most often use is Scorpion Calc. It's a free download available on the Inov8tive Design Website. <a href="http://innov8tivedesigns.com/">http://innov8tivedesigns.com/</a>

Until next time, -Jim Vigani

## AMA Report **We are Family, Neighbors, Friends** by Jon Gerber, AMA AVP



y name is Jon Gerber. I want to begin by wishing everyone a very HAPPY NEW YEAR.

While this report will focus on the AMA, I would like to begin by sharing some personal experiences that I have had over the past half century during my time flying model aircraft. I am doing this because I firmly believe that our past is the key to a successful and bright future.

A long time ago, I had a friend who was a commercial pilot. He shared a recent conversation he had with his copilot. While taxiing his 757, they were following a Cessna 172 out to their departure runway. His co-pilot complained about their slow progress down the taxiway behind this little airplane. Tom responded, "Never forget where you came from....your place in this seat began in a seat very much like the seat down there."

I believe that when you forget your past, you lose an important perspective of the future. It is nice to sit around and reminisce about the good old days. Just maybe, we should try to find a way to make the good old days into our today.

I have a friend who was his club president a few years ago. During a meeting, he looked across the 70 plus members sitting in front of him. The 70 was both the number of members present and their average age. He thought, "If everyone left this meeting tonight and no one returned for next month's meeting, no one would pay any attention.....we are all that old." He turned his thoughts into action and did something. He created a series of events that included the typical static and flying demonstrations, however, he also introduced audience participation. He set up a workshop that had both adults and their children build AMA Delta Darts. He then used their rubber-powered creations in a competition event. They had a ball. Prizes included a couple of trainers. And his efforts produced over 15 new members young members.

# Just maybe, we should try to find a way to make the good old days into our today.

So... let's get involved and creative. We have the opportunity through AMA programs like TAKE OFF AND GROW GRANTS, YOUTH LEADERSHIP AWARDS, AMA SCHOLARSHIPS and AMA FLYING SITE GRANTS to help grow our hobby and secure our future. Coordinate your activity, creativity and imagination with the resources of the AMA, and I believe that—THE SKY IS THE LIMIT. Become a Leader Member and share your ideas. Get involved. Most of the model flying demonstrations that I go to feature great pilots doing incredible things with their planes, and that's fine. However, we should also include trainers and sport models that illustrate how these great pilots progressed to their current levels of performance.

Flying a model airplane is much more than a skill—it is an accomplishment; it is a doorway to confidence, selfrespect and self-esteem. It is that feeling of accomplishment that we should be celebrating and using as the foundation and spring-board in our pursuit of future accomplishments and goals. With all the talk about the need for STEM pro-

grams, you would think that our school systems would be breaking down our doors to get involved. Maybe, just maybe, we can make that happen with a bit of encouragement and effort. Flying a model plane is science, history, math, art, and a whole lot more. Always remember:

WE ARE FAMILY, NEIGHBORS, FRIENDS; WE ARE COMMUNITY. Sincerely, -Jon K Gerber



## Freeze Fly 2019 by Domecq Smith



NORTH BRANCH PARK, NJ—A song I really liked catching on the radio during the 70<sup>s</sup> was the Doobie Brothers' "Black Water." It begins with acoustic guitar, the drums eventually coming in with the lyric, "Well, if it rains, I don't care! Don't make no difference to me."

Yes, you probably know where this is going...

Freeze Fly 2019, held on January 1<sup>st</sup> was in name only, with temperature being above freezing, but conditions enough to keep all but the most stalwart of modelers indoors, with gusts of wind, lakes of water, and mud in abundance.

Despite this, five planes took to the sky brought by Domecq Smith, Dave Szabo, Tim Cullen, Tony Rossi, and Robbie DeVergillo. Some members who didn't come with a plane wished they had brought one. A new crash log



We few. We happy few. From L to R: Domecq Smith, Dave Rollino, John Samtak, Dave

From L to R: Domecq Smith, Dave Rollino, John Samtak, Dave Lachowski, Tim Cullen, Dave Szabo, Larry Gray, Robbie and Tony DeVergillo (not pictured: Tony Rossi and Larry Forni).

made by Dave Szabo was installed on the frequency box, and with



gusts that threatened planes both in the air and on the ground, the day ended up with no marks on the crash log. All in all, it was a proud day for the club.

The day was



At the far right-hand side of the field.

any victory, Robbie DeVegillo's Corsair, which he flew dauntlessly amidst threatening winds, received damage from a violent gust at the day's end while

Robbie DeVergillo and his wind

-pummeled Corsair.

not without irony, however; although the crash log could not claim

amidst threatening winds, received damage from a violent gust at the day's end while he was simply holding it.

To reach the flying site, taking the usual route from the gravel parking lot was not an option due to nearly



Dave Szabo installing the new

crash log.

Happy Landings. Domecq Smith walks from the hump after a flight.

a foot of standing water behind the frequency board. Rather, a bold plan of action was adopted by Domecq Smith and Dave Szabo to access the field from the gravel road that runs along the far right side of the field. Midway along this road, a narrow isthmus of land not wholly inundated with water allowed passage to the middle of the field where "the hump" or "carrier deck" (as it is affectionately known) was found—that elevated topography afforded the driest ground on that day. Setting up camp there, we were able to commence operations.

We agreed to launch planes at the same time to inaugurate the New Year with three electrics and one glow plane taking to the air simultaneously. Yet, as the morning progressed, gusts became more frequent and then steady. Not to be grounded however, pilots flew their planes in spite of the conditions and with intact landings.

—Domecq Smith 8

# MÝSTERÝ PLANE CHALLENGE

Can you name the vintage model airplane below? It was built from a kit from a popular kit manufacturer during the late 70<sup>s</sup>. If you would like to identify the engine too, go ahead! Send your answers to Domecq Smith at **domecqsmith@msn.com**. Answers will be published in the March/April Newsletter.



Would you like to send a picture of a plane for a future Mystery Plane Challenge? If so, please send your picture to the email address above!

# Just Who is Your President, Anyway?

Member Profile

**I** have been in the hobby for most of my life, first experiencing the thrill of running ½A engines in those injection molded plastic crates called Cox airplanes (control line) as an eight-year-old under a hot Texas sun in the early 70s. In addition

to receiving those first propeller nicks on my hands sautéed in glow fuel, I learned basic two-stroke glow engine theory from those planes. I also managed to get them into the air. Those that came down hard provided from the debris an engine to tinker with. Some-

times it was fun just watching them run—it wasn't a big deal for a kid back then to start and hold a running .049 glow engine in a bare hand.

In those halcyon days, I built many of the Sterling beginner control line models too, having loads of fun with my younger brother Dion, who built and flew them along with me in our school yard just a brief bike ride away. Riding as kids with one hand on the handle bars and the other holding the flight box with planes strapped to it remains a fun memory.

Elusive to me in those days, however, was radio control, it being far beyond my reach in cost

and ability. When a tidy windfall of money came available to me during my midteens on a parish cruise as the result of a cooperating slot machine, it went immediately and without question towards the purchase of a four-channel radio. Two servos from that prized radio were installed into my first RC plane—an Ace "Alpha." It had two channels with an .09 Cox Medallion bolted up front. It was

not the ideal trainer, but with my instructor (mechanical trim tabs getting moved with each pass of the transmitter) it taught me to fly RC. .40 and .60 sized ships followed. Later, I pursued RC soaring and  $CO_2$  free flight after moving to the east coast in my 20<sup>s</sup>. After a hiatus for a decade during my thirties, I returned to the hobby about ten years ago. I currently enjoy flying sport, and have started learning the discipline of pattern; I have always admired the lines of the classic pattern ships from the 60s and 70s.

And the building bug never left me.

I have three adult children who can all fly RC. The bug never quite bit them though, but two of them (my sons) come out to the field with me on occasion and enjoy a flight or two.

I am a musician, teaching public school music in Plainfield, NJ since 2000. I am also Director of Music for St. John the Evangelist Roman Catholic Church in Orange, NJ where I play weekend Masses on their historic pipe organ (come out and visit sometime). I'm a published composer with pieces performed occasionally in area sanctuaries.

My wife, First Lady Peach, is also an educator and likes to cook. She compares today's growing pre-prepared food culture to ARFs (no offense). I am blessed that she is my wife and that she supports my hobby.

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-Domecq Smith











### Somerset RC Membership Application

Name:	Date:
Address:	

 Phone: Home:
 Cell:

 AMA Number:
 Email:

To obtain an AMA Membership go to: http://www.modelaircraft.org/ Membership is \$30.00 for adults \$4.00 for students up to the age of 21

Mail all applications with check to : Dave Szabo 12 Shoshoni Way Branchburg NJ 08876 Make check out to "Somerset RC Club"

Paying by PayPal send to: <u>Somersetradiocontrol@gmail.com</u> Put your name in the notes and use the": "send to a friend option. Meetings are 8:00pm every last Tuesday of the month at: American Legion Post 306 707 Legion Place Middlesex, NJ 08846 732-356-9699

For full club information, please visit SomersetRC.org