



The **Pinnacle**



Volume 54 Issue 81

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The Official Journal of the 495th R/C Squadron
Tewksbury, MA

AMA Gold Leader Club, Charter #340

**Opening Day
Spring Cleaning!**



This newsletter is e-mailed to whomever wants a copy each month. If you would like to be added to the list (or if you are receiving a copy and would like to be removed from the list) please contact the Editor at sales@advancednotebook.com

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495 R/C Squadron, Inc.

Next Meeting **Wednesday, May 3rd 7:30 P.M.**
Next Events R/C sailing and R/C sailboat racing
Club web site <http://www.495thsquadron.org>
Club Facebook <https://www.facebook.com/495th-RC-Squadron-240759615414>

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From the Editor

Newsletter is for everyone. If you have great ideas, stories and photos to share, please do email me @ (sales@advancednotebook.com)

Club member Bill Lentine and Robert Merlino share with us their winter projects. As a builder myself, I always like to see other people's build story. Not only to admire other people's dedication and job well done, most important is the inspiration for us to pick up where we left off and do the thing we love again.

I have put off my build project (1968 Sterling PT-17 Stearman kit) for almost 5 yrs, because I didn't know how to make a battery hatch. I see Bob successfully converted 3 of his old planes into electric power, all with functional battery hatch. I know now whom should I go for advice!

Flying season is here, guys work hard on the opening days to get the field ready. Thanks for all the people who showed up that day.

Calvin Hsieh
495th Newsletter Editor



Bill Smeltzer takes care of the field (2023.04.09)

2023 Club Calendar

Please be sure to check the 'Events' page on the club website on a regular basis, and stay up-to-date with all the fun and important activities we have planned this year

Date	Location	Event Description
Jan. 4, 2023	Tewksbury, MA	Club Meeting - TBD!
Feb. 1, 2023	Tewksbury, MA	Club Meeting - Italian Banquet!
Mar. 1, 2023	Tewksbury, MA	Club Meeting - Scale Building with John Hayes!
April 5, 2023	Tewksbury, MA	Club Meeting - Winter Project Show-n-Tell!
April 18, 2023	Tewksbury, MA	Ogonowski Field - Car Night Begins for 2023!
April 20, 2023	Tewksbury, MA	Ogonowski Field - Training Night Begins for 2023!
April 22, 2023	Tewksbury, MA	Ogonowski Field - Opening Day and Field Cleanup!
May 3, 2023	Tewksbury, MA	Club Meeting - TBD!
May 13, 2023	Tewksbury, MA	Ogonowski Field - Spring Fun Fly
May 20, 2023	Tewksbury, MA	Ogonowski Field - Heli fun Fly!
June 7, 2023	Tewksbury, MA	Club Meeting - TBD!
June 10, 2023	Tewksbury, MA	Ogonowski Field - 'Kid's Day' Fun Fly and BBQ
June 17, 2023	Tewksbury, MA	Ogonowski Field - Summer Fun Fly - Mike Pangione
July 5, 2023	Tewksbury, MA	Club Meeting - TBD!!
July 8, 2023	Tewksbury, MA	Ogonowski Field - Scale Fun Fly
Aug. 2, 2023	Tewksbury, MA	Club Meeting - Ice Cream Social
Aug. 12, 2023	Tewksbury, MA	Ogonowski Field - National Model Aviation Day Fun Fly
Aug. 19, 2023	Tewksbury, MA	Ogonowski Field - Multi-Club Fun Fly and BBQ!
Sept. 6, 2023	Tewksbury, MA	Club Meeting - Annual Swap Meet
Sept. 9, 2023	Tewksbury, MA	Ogonowski Field - Annual Member Picnic!
Oct. 4, 2023	Tewksbury, MA	Club Meeting - TBD!
Oct. 14, 2023	Tewksbury, MA	Ogonowski Field Work Party!
Oct. 15, 2023	Tewksbury, MA	Andover Pack 76 - Rockets!
Oct. 21, 2023	Tewksbury, MA	Fall Classic Car Rally!
Nov. 1, 2023	Tewksbury, MA	Club Meeting - Annual Business Meeting and Elections
Dec. 6, 2023	Tewksbury, MA	Club Meeting - TBD!!

View From The Left Seat™

By
John Morley, President, The 495th R/C Squadron, Inc.

Well, there is nothing like writing a monthly column to really see how fast the time flies by! Each month, it sure seems like the deadline just comes sooner, and sooner! On a happy note, you may have noticed that the days are getting warmer and warmer, and it's staying light out until almost 8PM! This time of the year is one of my favorite times to fly as it's not yet too hot, and the insects have not yet really taken hold at the field, especially in the evening! I've currently got a pretty heavy work schedule that's keeping me away from the field more than I'd like, but I am flying when able! In spite of my schedule, I'm continuing to make good progress on my major "winter project", the Juniaer Models Tucano Turboprop powered by a Kingtech K45TP gas turbine turboprop engine! I just finished installing the electrically operated retractable landing gear, all flight control servos and linkages, and the turbine engine! This has been a big (and expensive!) project, but finally seeing the model assembled in my basement makes it all worthwhile! I hope to have the plane out to the field for the initial taxi tests later this summer!!

On a recent business trip to the west coast, I made another stop in the Phoenix area on the return for some additional glider flying! The trip was motivated by the recent acquisition of a commercial glider 'add-on' rating to my pilot certificate, and a desire to enjoy some warm southwest style weather! All my glider training has taken place at the 'Estrella Sailport' in Maricopa, AZ, about an hour drive southwest of Phoenix. Maricopa is a desert landscape surrounded by the majestic Estrella mountains, and boasts a climate that is ideal for year-round soaring. Arizona Soaring is owned and operated by Jason Stephens, a 5 time National Glider Aerobatic Champion, so the training they provide is surely second to none! Now that I'm glider rated, I plan to do as much glider flying at the Sterling, MA airport this summer as my schedule allows!



Schleicher ASK-21 Advance Aerobatic Glider

One other activity that I've recently taken up is acting as a tow plane pilot for the Greater Boston Soaring Club (www.soargbsc.com). The club operates two tow plane types, the Cessna L-19 'Bird Dog', and the Piper PA-25 'Pawnee'. The Bird Dog was originally used by the Air Force as an aerial observation aircraft (the 'L' means 'Liason'), and the 'Pawnee' was originally an aerial application (ie. agricultural spray) plane. Both models are high horsepower – required for glider towing – tailwheel airplanes. I was 'recruited' to fly the club tow planes one day last summer after arriving at Sterling in my Piper J3 Cub. One of the club officers asked about my tailwheel experience (I have about 300 hours of tailwheel time), and asked if I'd like to be a tow pilot! After completing the GBSC tow course, I became certified in the Bird Dog and the Pawnee for towing!



Cessna L-19 'Bird Dog'

A reminder that the weekly 'Car Race Night' on Tuesday evenings, and 'Flight Training Night' on Thursday night has resumed for the 2023 season! Although the weather has been a bit challenging, we are off to a good start so far! The plan is to have an informal barbeque of hamburgers and hotdogs at each of these weekly events when the weather permits. These activities are a great excuse to get out of the house on a weekday evening, so please plan to come out and enjoy the fun on Tuesday and Thursday evenings all summer!

Several members have asked for an update on the upcoming 'Remote ID' requirement for all 'Unmanned Aircraft Systems' (UAS), including our R/C airplanes and helicopters weighing over 250g (~ .55 lbs). As of this writing in early May 2023, the Remote ID requirement enacted in Set. 2022 is scheduled to go into effect on Saturday, Sept. 16th, 2023. On this day,

all UAS operating in the US National Airspace System **must be equipped** with a Remote ID (RID) module that broadcasts information about the UAS, and the control station (the UAS 'operator'). Happily, for R/C modelers, this seemingly onerous regulation does have a notable exception! The FAA will allow UAS operation without Remote ID at a designated 'FAA Recognized Identification Area' (FRIA). The FAA has designated the Academy of Model Aeronautics (AMA) as a Community Based Organization (CBO) to oversee the creation of FRIA areas for virtually all AMA clubs.



FAA FRIA Graphical Depiction

As of late Fall 2022, the 495th R/C Squadron, Inc. has applied to the AMA to have the Ogonowski Memorial Model Flying Field (the 'Pinnacle Street Field') designated as an FRIA area. Currently (May 2023), no FRIA areas have yet been established in the US, but that process should begin in earnest this summer. I have been designated as the Primary Point of Contact (PPOC) for this process, and rest assured, I am following this program very closely for the club! I will be sure to communicate any future developments as they occur!

The club Porta-Potty has now been secured with a combination lock to prevent unauthorized use by non-members! Bob Goulet, Bill Smeltzer and I installed the lock system in early December. As if to reinforce our decision to install a lock, a bicyclist stopped to use the restroom as we were finishing up the installation! Amazingly, he was a bit 'put out' by the fact that the restroom was no longer available for general public use! The Porta Potty lock protocol us as follows: Unlock the restroom for the duration of your personal use. If you will be at the field for an extended period, you may leave the restroom unlocked, but you must be responsible for locking it again before you leave the field! Do not rely on other members to lock the restroom! If you unlock it, you must take responsibility for ensuring that it is relocked before you leave the field! If the restroom remains unlocked, place the lock on the eye hook attached to the enclosure around the restroom for safe storage! Please remember this as we do not want to lose the lock! The lock combination will be provided to all paid members in a separate email!

Again, a reminder that each month the BOD will meet on the **Wednesday** evening immediately preceding the regular club meeting. Occasionally, the BOD does not meet in a given month due to schedule or calendar conflicts, and every effort will be made to notify the membership by email when this happens. As always, there is plenty of room at every BOD meeting, and the atmosphere is informal, so we invite interested members to attend! The next regular BOD meeting will be held on Wednesday May 31st, 2023 at 7:30 PM.

I hope you see all of you at upcoming club meetings, and at the field!



John Morley
President, The 495th R/C Squadron, Inc.

May 1st , 2023

My Winter Project

Bill Lentine

I had thought about building a kit plane for the last couple of years. It's been about 13 years since I have built a kit plane. It was a 54" Contender and made by Topflite with an OS 61 nitro motor.

So I visited ABC Hobby and looked on the shelves and saw some old-school model kit planes. The Javelin caught my eye and I decided to build this kit. I found it frustrating at first. Wings for me were a little tedious. But as I got into the kit more, and got used to using CA glue better, it was getting easier for me.

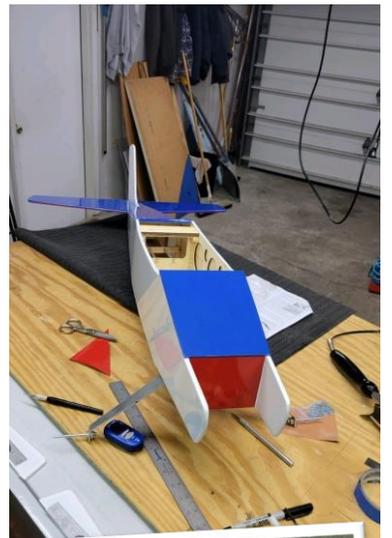
After building this kit, it was time to do lots of sanding. Smoothing out seams, rounding leading and trailing edges. I used Ultracote for covering, watched several YouTube videos and then I was ready to cover.

For power I decided to use 6S battery 4000MA. It's a little much for this plane I think, but I will find out. Videos showed on YouTube that they were using nitro motors up to .046 .055. For power I put in Extreme Flight Air Boss 80 amp ESC. XPWR 22 motor gonna use 6s 4000MA HRB batteries.

A 16x8 or 16x7 prop is used with this setup, which I use on my other 2 Extras. Only problem is that the landing gear they offer is too short for these props. The prop is about 1/2" from the ground. Using 3" wheels also. I bought a 3 blade 15x7 master airscrew prop to try. It's a little better for clearance. Bob Merlino has pointed out to me of another size if the 15x7 blade doesn't work out.



Bill @ club meeting "Winter Project Show n Tell" (4/05/2023)



I also built this beautiful Perigrin biplane ARF from Extreme Flight. I've been looking at biplanes for the last year and I've been waiting for something different to come out. Extreme Flight came out with this, and I had to have it! This build was so easy and everything is fitted perfectly. The cowl and spinner looks awesome!

EF has how-to-build videos on most of their planes. Lots of tips, how-to, and set-ups. For power is the same as the Javelin. 80amp Air Boss Esc XPWR 22 motor, 16x8 prop, 65 4000MA battery.

HAPPY FLYING!



Bill Lentine

Opening Day and Field Clean-up

Saturday April 22nd – The annual **Opening Day and Field Clean-up** event will be held at the Ogonowski Field on Pinnacle St. This year we will be concentrating on improvements to the parking area outside the guardrail. We are in need of wheelbarrows, shovels and rakes to spread and level a load of processed gravel that will be delivered before Saturday. As always, a noontime barbeque will be held, and open flying and driving will be available after the work is





Deja` Vu All Over Again

Robert Merlino

Well, Spring has sprung, another winter is behind us. I had a fairly productive winter in the R/C projects department. I managed a Kadet Seniorita ARF build, as well as two other airplane projects. The Seniorita is a girlfriend for my favorite Kadet Senior and fits in my overall strategy of flying a combination of home builds and ARFs. As expected, the ARF went together pretty quickly, kind of a warm-up exercise before the other two projects.

Interestingly, the other two projects I ended up doing were not at all what I had in mind originally. My original plan for the winter was to build two new glider kits and repair a beautiful Bird Of Time that was given to me. I figured I would build up a small fleet of gliders, given that I have plenty of airplanes.

That *was* the plan but...last fall, as I was rearranging my stash of *way-too-many-airplanes-in-the-basement*, a very dusty Sig Astro Hog came through my hands... one of my favorites from the past. Built in 2002, I hadn't flown the Hog in many years. I started reminiscing about all the fun times we had together at the field and a thought went through my head... "I wonder if I could convert it to electric power". A quick feasibility study revealed that electric conversion to be very doable, thus a project was born. In the next few weeks I retrofitted the Astro Hog with the latest electric drive, latest avionics and a few cosmetics to patch the engine cutouts in the cowl area.



Original maiden day of Super Chipmunk, fall of 1998, Burlington field. Chipmunk was brand new... pilots were a little younger too!

The conversion project turned out to be unexpectedly interesting and fun. A number of little challenges had to be solved, yet it was all doable without an overwhelming amount of work. The chosen motor and battery balanced the model well, without additional weight. I expected the electric version to end up heavier, but in fact the full up weight of the electrified Astro Hog turned out to be 6 Oz lighter than the original nitro version when carrying ½ tank of fuel. But more good news at the field. The lighter and more powerful Hog flew better than ever. A rejuvenated, fun new airplane... more nimble, smooth and quiet.

The verdict was in: the Astro Hog conversion was a resounding success! Based on this, why not do more conversions? Another search through my stash of *way-too-many-airplanes-in-the-basement* fished out two more beauties from the past: my Carl Goldberg Super Chipmunk, built in 1998 and my Great Planes UltraSport 60, built in 2005. Voila'... a no brainer, these would be my projects for the winter... electric conversion of the Super Chipmunk and the UltraSport. The gliders will have to wait. Clear the bench... we have special airplanes here!!



Astro Hog battery hatch

The UltraSport 60 went under the knife first, as it seemed a bigger challenge. The nose of the UltraSport is kind of narrow and tight, with no obvious place for a battery hatch. I considered cutting the top and create a removable canopy but this had all kinds of structural implications. Instead, I opted for a side hatch which required minimal work, with no impact to the internal structure. The battery sits where the 16 Oz fuel tank used to be. The hatch door comes off, then the Lipo pack is inserted and strapped down. This is not the most convenient battery access, but it will do. The motor sits in the former engine bay, with a removable side panel covering the opening for the OS FX91 that used to live there. The full up weight of the electric UltraSport came to about 7 Lb 7 Oz.



UltraSport battery hatch

The Super Chipmunk presented a different challenge. The nose of the plane is wide and there is plenty of room, however the long fiber glass cowl restricts where a battery hatch could be built. The only logical place is a few inches between the end of the cowl and the canopy. To make this work, a different solution was needed. Strapping the battery down was not an option here. I opted for a pocket where the Lipo pack just drops in and gets locked with a thumb screw. No Velcro, no straps. Works great, I think I will use this approach in future planes. The Chipmunk had plenty of room up front for the motor and the ESC. Most of the work went into making the removable section of the battery hatch and a new fiberglass canopy. I was lucky to find one on Ebay since Goldberg is not around anymore, unfortunately. One Oz of lead was required up front for balance. The full up weight of the electric Chipmunk came to 8 Lb 3 Oz, a little heavier than the UltraSport and Astro Hog.



Chipmunk battery hatch

Given the similar size and weight, all three planes received the same power system: Scorpion 4020-420k motor, Avian 100 Amp ESC, MA 3-blade 13x12 prop. The Astro Hog has basic servos, the Chipmunk and UltraSport received higher performance servos.

Considerable amount of testing went into finding the right size Lipo pack. Although all three planes could fly with a standard 6s 5000 Lipo, I found that such pack would be overkill, with unnecessary long flight time and unnecessary extra weight. Instead of brute force, a better strategy was to find the smallest Lipo which provided a 10 minute flight, more or less. I ended up with 6s 3300mah Lipos. Much better!! This size pack shaved ½ Lb compared to the 5000, very noticeable for planes of this size. In fact, with this size pack, all three planes are actually 6-8 Oz lighter than their respective original nitro version (with ½ tank of fuel). This more balanced combination retains or enhances the original flight characteristics of these airplanes.

Current status of electric version:

- **Astro Hog:** flying great since last November. Routinely getting 10+ minute flights with 3300 pack.
- **Super Chipmunk:** maiden last week, flying awesome. Not quite getting 10 minute flights with 3300 pack, more like 8 min. Adequate, but I may have to bump up the battery size a little, if I want 10 min.
- **UltraSport:** maiden voyage coming up soon.

Now that it's done, this turned out to be a very rewarding project. I get to relive three of my favorite airplanes from the past in a whole new way. For this trio... it's deja`vu all over again!



Robert Merlino

Planes For Sales

I'm planning to sell off my two larger planes. I just don't fly enough to trust my skills anymore. I'll keep my smaller planes just in case I get the urge to fly. Fact is, I'm just getting old!

I'm putting the word out to see who might be interested. Both planes are Flightline models from Motion RC. They both have complete custom paint jobs. They both have Spectrum receivers and I can export the Tx file if you would like.



They are both dialed in real nice, and they are both well behaved in the air. The counter rotating props make take offs a breeze. Original documentation will be included. Price will be very reasonable.

Contact Ernie Poole
erniepoole@verizon.net
978-604-8321



Multi - Club Swap Meet 2023

On Saturday, June 24th, the 495th R/C Squadron, Inc. will host a multi-club swap meet at the Ogonowski Memorial Flying Field. Starting at 10AM, and running until 2PM, this event will be an opportunity for our club members, and members of other clubs to buy, sell, and swap R/C related equipment! There will be no fee for participating in the swap meet, and a barbeque lunch will be served for a modest donation! All participants are encouraged to bring tables, chairs and sun shades as required for this event! Open flying (must be AMA members for non-club members), and driving will be permitted during the event!

The date for the Multi-Club swap meet will be Saturday, June 24th, 2023, with a rain date of Sunday, June 25th, 2023.



Club Calendar

Club Events

April 18, 2023	Car Night Begins for 2023!
April 20, 2023	Training Night Begins for 2023!
April 22, 2023	Opening Day and Field Cleanup!
May 3, 2023	Club Meeting
May 13, 2023	Spring Fun Fly
May 20, 2023	Heli fun Fly!
June 7, 2023	Club Meeting
June 10, 2023	'Kid's Day' Fun Fly and BBQ
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Oct. 21, 2023	Fall Classic Car Rally!
Nov. 1, 2023	Club Meeting - Annual Business Meeting and Elections
Dec. 6, 2023	Club Meeting

R/C Suppliers:

ABC RC & Hobby 11 Rockingham Rd, Windham, NH https://www.horizonhobby.com	(603) 458-6481 All Around
http://hobbyking.com	All Around
https://rcexcitement.com	Cars
https://twistedhobbys.com	Profile Foamies
https://innov8tivedesigns.com	Great Motors
https://fpvlab.com/	FPV Equipment
http://www.crashtesthobby.com	Toughest Planes
https://www.towerhobbies.com	All Around
http://www.amazon.com	Extra All Around

Handy Links:

Renew Your AMA Membership Online
<https://www.modelaircraft.org/joinrenew.aspx>

495th Membership Application
http://www.495thsquadron.org/PDF_Files/Membership_Application.pdf

Online Groups
<http://www.rcgroups.com/forums/index.php>
<http://www.helifreak.com>
<http://www.wattflyer.com/forums>
<http://www.rcuniverse.com>

Local R/C Groups
<http://www.mcrcf.org> Billerica, Mass
<http://www.burlington-rc.com> Burlington, Mass
<http://www.nhflyingtigers.com/> Derry, NH
<http://www.snhrc.org> Hudson, NH
<http://www.snhflyingeagles.org> Merrimack, NH

R/C Related Podcast
<http://allthingsthatfly.com/> Excellent electric power help
<http://rctodayshow.com/> Mixed group with great advice