

Smoke Signals

Monthly Newsletter of the Meroke RC Club

February 2008

AMA Gold Leader Club #458 - established 1963



Cedar Creek "Gate"

For those of us who have been around for awhile - it was the issue with the power lines and then the proposed golf course. Now it's the issue with the removal of the personnel who "man" the security booth and gate.

At our last meeting, our flying buddy Harvey Schwartz, even though not a Meroke, came to our meeting and made a passionate presentation regarding this issue. With the "gatemen" moving onto the plant property, and into the newly to be constructed security booth - what's to become of our field? Will the Parks Department, or Public Safety or little green men from another planet man the deserted booth? Will someone with a bulldozer have fun tearing it down? Will Donald Trump incorporate it into his plans for Jones Beach? Will Sal open an ice cream stand in its place? Well, let me be serious for a moment - no one seems to know. Harvey and a few Merokes have formed an Ad Hoc committee to investigate the matter. We have received more stories about what will happen than people who have been spoken to.

It's premature to publish any of the committee's findings as there is no absolute definition of what will occur with the security booth and gate. What is very important at this time is that there are 2 upcoming meetings that everyone should attend. The first is a meeting of the Nassau County legislators this coming Monday - February 11th - at 10 AM at 1 West Street in Mineola. This building is one block west of the intersection of Franklin Avenue and Old Country Road on the south side of Old Country Road. As parking is extremely limited in this area, please come early.

And then, on Monday - March 11th - there will be a meeting at the Waste Treatment Plant. To attend this meeting, you must pre-register no later than March 7th. The call-in number for registration is 516-571-7347. At this time we have no indication of what time the meeting will be, but when you call, I'm certain they will be able to provide you with that information. I will also email it to every member when notice of the time is received.

Over the next few weeks, members of the Ad Hoc committee will be meeting with the Parks Commissioner, various local elected officials, reporters and just about anyone who will be useful in our quest.

Meroke Calendar

February 7 th	Club Meeting 8 PM - Show & Tell
February 11 th	Nassau County legislator's meeting at 10 AM at 1 West Street in Mineola
February 21 st	Club Meeting 8 PM - Virtual Fun Fly Cancelled - Program TBD
February 22 nd to 24 th	WRAMS Show
March 3 rd	Field Controllers Meeting - 7 PM at Levittown Hall
March 6 th	Club Meeting 8 PM - Show & Tell
March 8 th	Lebanon Flea Market (see page 7)
March 11 th	Meeting at Waste Treatment plant
March 20 th	Club Meeting 8 PM - Helicopter Fun Fly
June 8 th	Open Fun Fly
June 21 st	Club Picnic (tentative date)
August 3 rd	Come Fly with Us
December 4 th	Awards Dinner

Meetings are held the first and third Thursday of each month at 8:00 PM at the First Presbyterian Church of Levittown located at 474 Wantagh Avenue. The church is about 1 mile north of Exit 28N on the Southern State Parkway. Additional information can be found on the club website - www.merokes.com.

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Education	Charlie Lando	
Friends of Cedar Creek	George Carley	
Building Program	Charlie Lando	Ernie Schack
Archivists	Ron Berg	Stan Blum
Webmaster	Ted Evangelatos	
Social (Coffee)	Irv Kreutel	Al Hammer
Raffles	Mark Klein Nick Guiffre Ben Corbett	Curtis Underdue
Show and Tell	To be named	
Video Librarian	Mark Klein	Dave Bell
Come Fly With Me	Ernie Schack	Tony Pollio
Open Fly-In	Bob Reynolds	Gene Kolakowski
Monthly Fun Fly	Ted Evangelatos	
One Fly	Al Weiner	Chris Mantzaris
Picnic/Dinner	Nick Guiffre	
Contest Directors	Allen Berg Tony Pollio Tom Scotto	John De Sena Ernie Schack
Flight Instructors	Allen Berg Ted Evangelatos Dan Gramenga Gene Kolakowski Tim Murphy Rick Porqueddu Bill Streb Al Weiner	John De Sena Douglas Frie Mark Klein Ken Mandel Tony Pollio Bob Reynolds Ernie Schack

President's Message

We all must agree that this winter, so far, has been very conducive to flying. We have had some very pleasant weather and I hope it continues into our regular flying season.

I am still looking for volunteers to run the Video Library and organize the Programs for this year. If you are interested in either, and I hope some of you are, please contact any of the Board members. Dr. Phil has mentioned that he will assist the person who steps up to take over the Programs, but he cannot do it all himself.

Not much has transpired from last month to now that I could share with you. We did finalize the schedule of events at the Aerodrome for the upcoming year and are now in the process of applying for the necessary sanctions from the AMA. We feel we have planned an exciting year ahead with some very subtle changes. As usual, we will be looking for volunteers to work these events, and I am sure you will be asked by the Committees responsible for the event to volunteer your time. Please try and find the time to volunteer. These events are Meroke sponsored events and as members, we need to support them. We have posted all the dates well in advance, have a look and mark your calendars accordingly so you can be available.

The Happy Fly (or whatever it might be called in the future) is being organized by Bob Reynolds and Gene Kolakowski. They plan to introduce new events and have some interesting prizes for the top finishers, so start practicing if you plan on competing in the Happy Fly. We would like to once again, compete against other local Clubs and this idea we are pursuing, but it is only in its infantile stages. As it progresses and if we make headway, we will keep you informed. Ted Evangelatos also has some changes to the Monthly One Fly, so again, practice. If you have any questions about these events, see Bob, Gene or Ted.

I am sure by now you have heard about the possible upcoming issue at Cedar Creek regarding the possible closure of the Guard Booth at the (continued on page 3)

(continued from page 2) entrance to the Cedar Creek Plant and the Aerodrome. As we find out more information, we will keep you informed by newsletter, at meetings and word of mouth. Again, this might affect all of us and other clubs, so please, if necessary, stay informed and please offer your time if needed .

As of this writing I am sure some of you have attended the Levittown Swap Meet and I hope you found what you were looking for. It's always a nice gesture to be able to support other Clubs in advancing the Hobby. Don't forget the WRAM Show soon approaching in February and the Lebanon Show in March.

As usual, if you have any ideas or suggestions to better our Club, please contact any Board member and make your voice heard. We are always open to suggestions.

Happy and Safe flying.

Letters to the Editor

Hello:

Our club, the Rose City Model Flyers from Welland, Ontario, Canada used your plans and had two made for tryouts last season. Was very popular and a few more will be made. Thanks for the article ... keep up the wonderful website. Thanks.

Rob Rittner
Vice President

Dr. Phil,

So the news is: Midwest makers of Aero-Gloss line will stop making dope and Topflight will stop making Lusterkote Spray. If you have a project that requires those paints, get them now...

As far as I know, SIG still supplies dope, as I purchased a few quarts of thinner and reducer last month. Just note that on orders of over 1 gallon there is a \$20 surcharge on top of the \$8 shipping & handling.

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I can share my experience with 2 other paints.

The new one to the hobby folks is House of Kolors - Kustom Kolors. Just got some today from the hobby shop. It was a mix of Flat White and Bright Blue to get the color Sky Blue for the bottom of my VK Triplane. Added their spray reducer and airbrushed it over red on to Sig Coverall, and it was perfect. This paint is nitro, gas and fuel proof. It's normally used on drag bikes. They offer a wide variety of finishes. I have also sprayed the replacement for Hobby-Poxy and it's called Klass Kote. They will be exhibiting at the WRAM show.

This is heavier than Kustom Kolors (which is evaporation dry). Klass-Kote is a 2 part epoxy type paint. Klass-Kote is a superb finish but needs a good mask if sprayed. It brushes well, but I don't recommend it. Use it on a larger aircraft where finish weight is not critical. I sprayed a Super Chipmunk that will be flown this spring.

Lastly, Nassau Hobby is having their annual inventory reduction sale from February 11th through the 18th. They will have many mark-downs on everything -- trains, planes and automobiles. This is only an in-store sale.

Dennis Andreas

From the Editor

We are losing fields all across the United States, and right in our own backyard - Hempstead Harbor is of concern. Hopefully the message from Roy Coniglio of the HHAMS (page 8) is good news for our friends up north. The people working on this issue are putting in long hours meeting with each other and with others in our community. No one says definitively that our field is in jeopardy; but why wait for something to happen. That's why the Ad Hoc committee is being extremely proactive in this matter. Your support is greatly needed. Attend those 2 important meetings, ask what you can do and please - treat this issue seriously. Have any suggestions? Have any contacts within the Nassau County government? Send anything you have, yes anything you think useful to merokenews@optonline.net or call any of our officers.

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Tech Tip

Li-Po Battery Storage

There are certain things you can do for long-term LiPo storage that will prolong the life of a battery pack. How and where the packs are stored is perhaps the biggest factor in prolonging their performance. Keep batteries in a cool dark environment and not in a place with temperature extremes such as a car, a trailer or an un-insulated storage shed. High temperatures will destroy a battery in short order, so always keep battery packs out of the sun and heat. The other extreme is allowing packs to freeze; this will also damage them beyond repair. A refrigerator that maintains a temperature of about 40 to 45 degrees is just about the perfect place to store packs (do not use the kitchen refrigerator that has food in it). Allow the packs to come to room temperature before using or charging.

LiPo batteries do self-discharge—granted, at a very slow rate; but over time, they will lose their charge. Packs that go completely dead, or fall below 2.5 volts per cell, can be damaged beyond repair and thus become useless. Never store a discharged battery for long periods of time. Also, don't store a fully charged battery because the cells will drift and discharge at different rates and result in a pack in which the cells have become out of balance from one another. If left unbalanced, the cells in this battery pack will continue to drift farther apart after each charge and discharge cycle. The best thing to do is put the batteries away with a "storage charge" of about 3.85 volts. This gives each cell enough voltage to keep them stable for long-term storage. The cells will discharge at a similar rate and maintain a better balanced pack over time. When it's time for the charge and discharge cycles to begin, the battery pack will start the cycle in balance and will perform better. The other advantage of the 3.85V charge is that it still provides plenty of storage time before the pack reaches the low-voltage minimum of 2.5 volts per cell.

It is recommended that you label the battery with the date and type of charge (i.e., full or storage), as it's easy

to forget when you've last charged a battery pack. Also, when you charge the battery for the first time after storage, charge it at 1½C until it is fully charged. This brings up all the cells at a slower rate and will help to keep them in balance.

Use these suggestions for LiPo storage to help prolong the life of your battery pack, so come spring, your plane will continue to perform at its best with lots of e-power.

Show & Tell

We had 7 participants in the January Show and Tell:

- Tim Murphy showed his \$80 Fong40 3D Fun Fly ARF with an OS 46AX
- Ed Wiemann spoke about his new Thunder Tiger 4-stroke 75 and also his custom-built muffler for his Focke-Wulf
- Tony Pollio showed his 1990 vintage Kyosho EP Concept helicopter that he converted over to a brushless motor
- Len Schroeder showed his Nitro Models Lama4 helicopter
- Lenny also spoke about the Top-Flite Elder that he built
- Lou Pinto was up next with many of the useful tools that he bought from Harbor Freight
- Finally, Ben Corbett spoke at length about the Century Hawk 30 helicopter that he acquired and how he set it up - Ben also won the prize, a set of hobby knives

2008 AMA Cards

IMPORTANT! You need to show your new 2008 AMA membership cards to Herb Henery before the end of February as an updated list has to be sent to the AMA shortly.

February Birthdays

- 2 *George Carley*
- 7 *Jack Stone*
- 11 *Robert Colquhoun*
- 12 *Jack Tramuta*
- 16 *Gene Kolakowski*
- 17 *Nick Giroffi*
- 19 *Richard Boll*
- 23 *Ed Wiemann******
- 26 *John Townsend*
- * *Big One*



Engine Myths Busted

When the air is moist, airplane engines should perform well because the air is denser.

Air density may seem like a vague concept, but in fact, it is very well defined by meteorologists. The density of any substance is simply the amount of mass in a given volume. For gases that are not confined, the density can vary with different atmospheric conditions. The denser the air, the more air molecules there are in a given space.

People and engines are similar in that both are air-breathing machines. Both function best when the air density is at a certain level and lose performance as the air becomes less dense. Oxygen is the fuel, and the less we have of it, the lower our power output. Just as our breathing becomes labored as we hike up a mountain and the air becomes less dense, airplane engines can't produce sea-level horsepower. The more air we can get into the cylinder, the more fuel we can add to keep the correct fuel/air ratio, and the more power the engine will produce. Also, the propeller produces less thrust because it is less efficient in thin air.

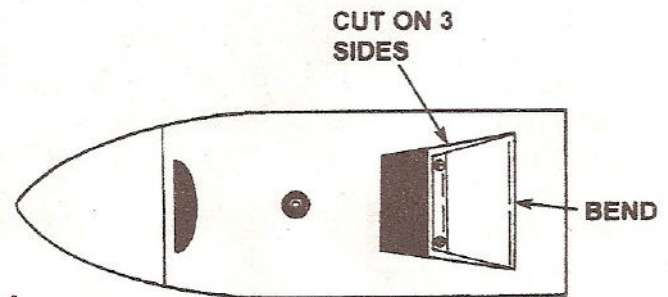
Humidity has the effect of reducing air density. You may ask how that can be; water is obviously denser than air. The key is that we are talking about water vapor, not water. Water vapor is actually water in its gaseous state. According to scientific references, water vapor is approximately 5/8 the weight of dry air. If you doubt this, take a look at a cup of hot water; the rising steam is proof that water vapor is lighter than air. Given that water vapor is lighter than air, it is easy to see its effect on engine performance. For a given sector of air, the more water vapor present, the more the dry air will be displaced by the less dense, moist air. This less dense mixture will result in less oxygen for the engine and less power. Another way to look at it is that the water molecules are taking up space that would otherwise be used by dry air. Water molecules don't burn; therefore, there is less usable air for combustion. Less air means less fuel is needed to keep the correct fuel/air ratio and, consequently, less power.

Full-scale pilots are intimately familiar with the "three H's" that rob performance: high altitude, heat and

humidity. All of these cause a reduction in air density and engine performance. Another feature of our atmosphere is that warm air has the ability to hold more moisture than cooler air. Now you know why your takeoff roll is so much longer on a hot, muggy day.

Another Tech Tip

The following tip by Mark Klein was published in the February 2008 issue of RC Report and brought to the Smoke Signals attention by Lou Pinto. For those of us who subscribe to RC Report, have a tip published and you will receive a free 2-year subscription to this great publication.



1.

1. From Mark Klein, of New Hyde Park, NY. Many modelers cut oval or rectangular cooling air exit holes in their cowls. The problem with that is, it creates an air dam if it's not near the firewall. Mark lays out a trapezoidal shape, and cuts it on the front three sides, leaving the aft edge of the opening intact. He then bends it down, securing the front to the bottom of the firewall or a cross member with screws. When cutting outlet holes this way, a ducting baffle is formed for the air to escape. Ideally, the area of the outlet should be about three times the inlet for best cooling. Also, most of the fuel residues will exit through the duct, leaving the cowl's interior cleaner.

Calculating Gear Reduction Ratios

It is useful to be able to calculate your gearbox's reduction ratio. First, count the number of teeth on the smaller pinion gear that's attached to the motor shaft. It may have something like 10 teeth. In turn, this pinion gear will mesh to a much larger spur gear, which might have, for example, 50 teeth. If you divide the spur-gear teeth (50) by the pinion-gear teeth (10; $50/10=5$), the resulting number is referred to as a 5:1 reduction ratio. Using this ratio, a motor might turn at 10,000rpm while the prop turns at just 2,000rpm (1/5 the motor speed).

Ask Dr Phil

Hi Dr. Phil,

Many times while screwing control horns onto elevators, rudders, and ailerons my screwdriver slips inevitably putting a hole in my new airplane's covering. Any hints on how to prevent this from happening?

One good way of preventing your screwdriver from slipping is to take a small piece of fuel tubing about $\frac{3}{4}$ of an inch long. Slide the fuel tubing over the tip of the screwdriver and then take the tip of the fuel tubing and slide it over the screw. The screwdriver tip is now tight to the screw and hopefully you will prevent any more slipping.

Dear Dr. Phil,

Since it's the building season can we have a little discussion on glues?

We sure can. I copied over some information from this great website www.airfieldmodels.com:

Most glues are of one of two types:

Evaporation Types

Glue is solvent or water-based and dries by evaporation of the solvent.

Chemical cure types

These glues cure by chemical process. They are further broken down to one or two-part glues. Two-part glues must be mixed in some ratio before the glue can be used. Two-part chemical-cure glues do not shrink significantly. One-part types may or may not shrink.

Excess glue can be wiped up with solvent while wet or scraped off with a razor blade after it is cured. Larger quantities can be mixed in a disposable container such as yogurt cups, tuna cans, etc. Some glues will melt plastic, but I have not had any problem mixing epoxies in plastic containers.

One-part glues that cure include Cyanoacrylates (AKA Super Glue or CA) and silicone sealant. Two-part glues include epoxies.

If you happen to say "dry" when you mean "cure" someone will undoubtedly correct you. Even though he's right, feel free to ignore him. For all practical purposes, "dry" and "cure" mean the same thing — the glue hardened about as much as it's going to and it isn't wet any more.

Note: Multi-Part adhesives should be mixed on a non-porous surface or container. Cardboard and other porous surfaces will prevent the glue from being mixed in the proper proportions due to the glue soaking into the surface. This may result in the glue not curing properly.

Strength

As a rule of thumb, stronger glues tend to be heavier. Therefore, select a glue that is strong enough to do the job but do not go over-board. For example, there is no good reason to use epoxy to glue wing sheeting together but a lot of reasons not to. Slow drying glues tend to be stronger than fast drying glues because they have more time to soak into the wood — at least that's the reason most commonly given. It's a true statement but there is another important problems with fast-drying glues. They tend to be brittle.

Materials it can bond

Most glues are intended for certain materials. Using the wrong glue can cause a variety of problems including excess weight, difficult finishing and glue joints failing.

Fuel-proof

Fuel should not be able to get inside the airframe and fuel-proofness is not much of a consideration for general construction. Fuel tank can and do split open from improper assembly, defective molding or design or a crash. The fuel compartment should definitely be coated with something fuel proof such as epoxy or polyurethane (paint). Joints around the firewall should also be glued with a fuel-proof glue.

Sanding ease

Often you will need to sand a glue joint between two pieces of wood. If the glue is significantly harder than the surrounding materials, the glue will not sand away at the same rate as the materials it is bonding. Usually this results in an unsightly ridge that will be seen under the final finish.

Pot-Life

How long the glue stays useable after it has been dispensed or mixed in an open container.

Working time

This is not the same as pot-life. Glues that cure tend to heat up. In the pot, they will cure faster than in a thin film. Therefore, many of these glues can still be worked after being applied to a part even though the glue in the pot is too thick to use.

Tip: The time given for epoxies is the working time, not the curing time. For example, 15 minute epoxy has a 15 minute working time. Cure time is usually 30-60 minutes depending on the brand and climate.

Cure time

Cure time is how long a glue takes to fully harden. Note that the time given is for practical purposes. Most glues that cure tend to continue the chemical curing process for months.

Shelf-life

All glues have a shelf life. This is how long it can sit on the shelf before it goes bad. My advice is to not buy any more glue than you can reasonably use within a year or so after you purchase it even though some glues have shelf lives of years. Shelf life is strongly affected by the climate (heat, humidity, UV light, etc.).

Set (also Tack or Grab)

Set is when the glue "grabs" but not when it is fully dried or cured. For solvent and water based glues this is when the glue reaches a state where the parts are firmly held

in place, but could be taken apart — possibly without damaging anything. For adhesives that cure, it is the stage where the glue has cured to the point where the parts are firmly bonded in place, but has not fully hardened.

Surface Protection

Sometimes an adhesive is used to protect a surface. This property can take precedence over bonding characteristics. For example, if you want a smooth, long lasting surface to mount a servo using foam tape, then epoxy is a good choice.

The strength of epoxy is irrelevant in this case. What is important is that exposed, cured epoxy withstands exposure to the environment better than many other adhesives while creating a non-porous surface that foam tape adheres to well.

Carpenter's glue is a bad choice because it shrinks as it dries so the surface won't be as flat and smooth as desired and it also breaks down if too exposed.

Hope this helps a little. Now unstuck your fingers and get back to building.

See you at the field, Dr. Phil

Lebanon Flea Market

The Lebanon Radio Control Flea Market is March 8th. It is one of the largest R/C Flea Markets in the U.S.A. with over 600 tables. The Suffolk Aero Modelers are interested in running a bus from LI to Lebanon, leaving at 4:00AM and arriving there about 8:30AM just before the doors open. As of right now the cost would be \$40 round trip. The bus will leave the fairgrounds approx. 1:00PM and hopefully be back on Long Island by 5:00PM. There will be plenty of room in the luggage bays for storage. If interested, call or E-mail Richard Green at 631-957-5123 or rmgreen27@optonline.net. The cut-off date is February 13th, 2008.

To Lou Pinto who donated the knife set as a prize for January's Show & Tell & Joe Cieslewicz for donating a plane to the Builder's Club

Thanks!

Hempstead Harbor Update

Following is a copy of an email that I received from Roy Coniglio of the HHAMS RC Club regarding their issue with the field in Port Washington. Following is the email message that Roy is sending out to HHAMS members as of February 5th.

Today we had a meeting with Town of North Hempstead Supervisor Jon Kaiman and Town Parks Commissioner Gerald Olsen. In attendance were Head Field Controller Simeon Patestas, Chief Safety Officer Larry Acevedo, Ken Casser and myself. We discussed several issues, starting with the cost of opening the Aerodrome. We emphasized to Mr. Kaiman that the runways are part of the current remediation project and paid for by the County and that the HHAMS will foot the bill for the rest of the new facility. We discussed the Field Controller system and how it came about and how it works. We also discussed permits and insurance matters.

We discussed the noise complaints that Councilman Pollack has claimed and explained to Mr. Kaiman that we took noise readings, canvassed the homes closest to the field and showed him the record of complaints acquired from the Port Washington Police Department.

Since 1996 there have been sixteen complaints filed with the police concerning various issues, such as dogs on the property, dirt bikers, paint-ballers, vandalism, gunshots and trespassers. Eight of those

complaints were filed by HHAMS members and none of the complaints had anything to do with the operation of the Aerodrome. I believe we have defused that issue.

We asked that the Town get in contact with the County Public Works Department, which is running the remediation project, soon so that we can have the construction plans altered to reflect the new runway layout. As of now, the County plans to replace the runways as they existed. We explained that the new runway layout will provide a safer operation and accommodate more fliers.

While not committing to the Aerodrome in the long term, Mr. Kaiman did say that he will arrange a meeting with the County in the next week or two to give his okay about the new runways and then we can meet with them to detail the new layout. He said that while the Town's aim is to consider many proposals for that land, it is not clear as to exactly what will be developed, if anything, and that it might very well take several years to realize any plans, and he will help us get back into operation in the meantime.

All things considered, we all felt that it was a constructive meeting and will get us one step closer to getting the Aerodrome back in operation. I'd like to thank the above mentioned members and all the others who have helped in this campaign to reopen our field. It has been a great group effort and while we are encouraged by today's meeting, it isn't over yet.

CHICKEN WINGS®



BY MICHAEL AND STEFAN STRASSER

