



The Seminole Flyer

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"The Seminole Flyer" is a publication of the Seminole Radio Control Club of Tallahassee, Florida

APRIL 2006

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Warbird Alley- Fly In March 18th. Lots of nice planes on hand.

Letter from the Editor-

Stephen Warmath

Well, **Perry** has come and gone for this year. The Club had a pretty good turnout. Frank and the Motley Crew are shown posing for a mug shot (right). A big reminder, **April Club Meeting at the Field 7:00 pm**. Come early and get some flying in. Food provided by HobbyTown.

This month we have coverage of the Warbird gathering, some information about fuel shelf life, and a general primer on fuels and tank mounting for glow engines. Beginner's Corner-**Buddy Boxes**

Happy Building & Flying- Steve



Man.....Look at all this stuff. Perry 2006

Chief Pilot- Mike Atkinson

Finally, we were able to have a club event as scheduled. March 18, 2006, was a beautiful day for our Spring Military Madness Fly-in. We had many visitors from the community with quite a few club members participating in the event. Our new "safety conscious" staging for the event provided a reasonable compromise between guest access to the aircraft and maintaining proper safety measures. Our annual event honoree was long time Seminole RC Club member, James Spivey. Jim served in the US Air Force during the Korean War. Congratulations to Jim, and also to our "Spectator Choice" winner and runner up, Geoff Lawrence (Hellcat) and Mike Levine (P-38).

The Apalachee Parkway Planning Committee community meeting has been scheduled for Tuesday, April 4, 2006, at 6:00. Jeff Owens will act as spokesperson for the club. We need a strong turnout from club members, as an updated survey of desired activities will be conducted. The survey will also be offered online. When available, I'll notify the membership of the website address of the online survey. I would expect developments to move a little faster after the survey is completed.

Members from the Emerald Coast Flying Club have contacted me. They are coordinating action with another club to provide static display and RC information before and during the upcoming Thunderbirds Air show in Panama City, at Tyndale AFB. (<http://tyndall.schultzairshows.com>) The event is scheduled for April 22, 23. If anyone is interested in participating, they need aircraft for static display, DVD/tapes, and old magazines to give away. Let me or Steve Warmath know if you are interested in being included. Finally, don't forget the **meeting this month has been scheduled for 7:00 at the field, Thursday, April 6, 2006**. Frank Bastos (Hobbytown USA) will be providing food. Bring something to fly and hang around for the meeting.

It is with saddened hearts we report the death of **Gordon Shick**. He passed away early last week from an apparent heart attack. He was remembered at a small memorial service at his church late last week. Gordon was a long time member of the club. He let his membership expire in 2004, but kept in contact with some of the members through the years. Gordon was a great person, always eager to help when he could. As a retired locksmith, many will remember Gordon was the one who donated the keys to the keyed lock we used to have at the field gate. He will be missed. Our thoughts and prayers are with his friends and family.

Michael Atkinson

Chief Copilot- Geoff Lawrence

Upcoming Local Events:

Saturday, **April 1**. Club member discount day at HobbyTown Tallahassee.

Friday & Saturday **March 31, April 1 Pop Curtis Memorial Fly In-** Hodges Hobbies

Tuesday, **April 4**. Leon County meeting. The first 30-45 minutes will be dedicated to updating the public on the landfill close out. Then, they are going to move into discussion of possible activities at the new park. We don't need the entire club to show up, but we do need a good turnout of out 15-20 members. We will have a club spokesperson, but the other members will be able to participate in the community survey at the meeting.

Saturday and Sunday, April 22 and 23. Open house and Air Show at Tyndall Air Force Base, Panama City. See: <http://tyndall.schultzairshows.com/> According to the schedule, Patty Wagstaff will be flying along with many other top names.

Saturday, April 29. Club Fun Fly at our field. I'm open to suggestions for events.

Saturday, May 13. We've tentatively scheduled a Float Fly for this date. We've been invited by Francis to hold our next Float Fly at his 30-acre pond. We'll discuss this date and location at the April meeting.

Saturday and Sunday, May 20 and 21. AirFest 2006 at the Tallahassee Airport.

Saturday May 27. Open House at our field.

Regional Events:

Venice IMAC 2006

FL

4/01/06-4/02/06 - Nokomis, FL (AA) Venice IMAC 2006 for 411, 412, 413, 414, 415(JSO). Site: Club Field. Bob Shapiro CD, 4427 Pompano Rd Venice FL 34293 PH:941-232-8188 email: bob.shapiro@verizon.net. Primitive camping permitted. Sponsor: RC FLYERS OF VENICE

7th Annual South Florida Jet-Together

FL

4/01/06-4/02/06 - Sunrise, FL (C) 7th Annual South Florida Jet-Together. Site: Markham Park. Jack Goldfarb CD, 6611 NW 98th Ave Tamarac FL 33321 PH:954-724-8338 email: hapyjac2@aol.com. Take to the sky over our 60 plus acres of flying field and smooth asphalt runway. All types of Jet aircraft welcome. Campground/RV with full hookups available in park with many area hotels. Awards for pilots, food and fun weekend. Sponsor: MARKHAM PARK PILOTS ASSOCIATION

OTOW Big Birds

FL

4/01/06 - Ocala, FL (C-Restricted to IMAA). OTOW Big Birds. Site: Club Field. Chuck Frederick CD, 9739 SW 99th Ave Ocala FL 34481 PH:352-237-2434 email: c67c@atlantic.net. Sponsor: ON TOP OF THE WORLD FLYERS

Warbirds Over Tampa

FL

4/08/06 - Seffner, FL (C) Warbirds Over Tampa. Site: Club Field. Jim Saiff CD, 2727 W Fletcher Ave #25C Tampa FL 33618 PH:813-969-4262 email: jsaiffchipmunkrc@earthlink.net. Concesesion Stand - Impound - \$5 landing fee. Sponsor: TRAC

FSS #4

FL

4/08/06-4/09-06 - Oviedo, FL (A) FSS #4 for 444(JSO). Site: Red Ember Road. Rick Eckel CD, 696 Brown Bear Ct Winter Springs FL 32708 PH:407-733-6380 email: raeckel@usa.net. Sponsor: ORLANDO BUZZARDS

April Fools/Spring Opener

FL

4/08/06-4/09/06 - Palm Bay, FL (AA) April Fools/Spring Opener for 101, 124, 140, 142,(J)(SO), 102, 103, 104, 105, 101C, 102-103C, 104-105C, 120, 122, 128, 150, 151, 152, 153, 154, 155, 160, 161, 162, 163(JSO). Site: Club Field. Rex Hinson CD, 1141 S Waterview Dr Inverness FL 34450 PH:352-344-5931 email: rexh@tampabay.rr.com. NFFS events: Nostalgia, Classic Gas, Classic Glider, O/T events, ½ A Texaco R/C, A Texaco R/C, Scale Texaco to .21, F1Q. Sponsor: FL MODELERS ASSOC

The Bash 2

FL

4/08/06 - Jacksonville, FL (C) The Bash 2. Site: Lannie Road Flying Field. Patrick Lanfri CD, 2305 Cedar Shores Circle Jacksonville FL 32210 PH:904-781-1146 email: lanpc@aol.com. Min 8 rounds SSC Combat. Concession stand, camping hard hats required. \$20 event fee. Sponsor: GATEWAY RC CLUB

GMA Spring Pattern Challenge

GA

4/8/06-4/9/06 - Cummings, GA (AA) GMA Spring Pattern Challenge for 401, 402, 403, 404, 406 (SJO). Site: Club Field. Lou Melancon CD, 105 Morton Walk Dr Alpharetta GA 30022 PH:770-521-1889 email: LMelancon@ikon.com; Georgiacombat@yahoo.com. Sponsor: GEORGIA MODEL AVIATORS

Fun Fly and Swap Meet

FL

4/09/06 - Punta Gorda, FL (C) Fun Fly and Swap Meet. Site: Hudson Field. Jose Figueroa CD, 1313 Osprey Drive Punta Gorda PH:941-661-6200 email: figueroaje@peoplepc.com. Club field located 7 miles east of Rt 75 on Rt 17. Sponsor: CHARLOTTE RADIO CONTROL SOCIETY

Warbirds Over BAMA

AL

4/15/06-4/16/06 - Tuscaloosa, AL (C) Warbirds Over BAMA. Site: Club Field. Frank Baity CD, 3805 Dearing Downs Dr Tuscaloosa AL 35405 PH:205-553-7131 email: frank.baity@wlm.falconjet.com. Located at 6655 Watermelon Rd, Tuscaloosa AL 35473 Map is available on our website at www.waam.us. Giant scale 80" mono, 60" biplane rule will apply. Camping available at field with no hookups. We plan a basic fun fly for our first War Bird even and look forward to seeing all of the "Big Iron" from the South East at our spacious flying site located near motels and restaurants. Landing fee \$20. Sponsor: WAAM

10th Annual Spring Classic

FL

4/22/06-4/23/06 - Land O Lakes, FL (AA) 10th Annual Spring Classic for 411, 412, 413, 414, 415(JSO). Site: Club Field. Dave Link CD, 4931 Kempton Woods Cir Wesley Chapel FL 33544 PH:813-843-3017 email: progolf99@yahoo.com. All classes plus freestyle. A grand champion will be awarded, must fly freestyle to qualify and winner can come from any class. Sponsor: BAY CITY FLYERS

Spring Fling 11th Annual

FL

4/22/06-4/23/06 - Ocala, FL (C) Spring Fling 11th Annual. Site: Club Field. Joe Anderson CD, 5400 SW 37th St Ocala FL 34474 PH:352-804-0807 email: 122yplace@aol.com. Join us at FL's best flying field. 48 x 600 paved runway. 150 x 900 grass. Campers welcome with no hookups. Food and beverage from cookshak available from our "fly girls". Sponsor: OCALA FLYING MODEL CLUB

AMAC Spring Fly In

GA

4/22/06 - Leesburg, GA (C) AMAC Spring Fly In. Site: Club Field. Dan Stevens CD, 2816Somerset Dr Albany GA 31721 PH:229-439-8949 email: dan.stevens@mchsi.com. For map to field go to www.geocities.com/clubamac222/. 9am-4pm. \$10 landing fee. 80x500' grass runway + 30 acre flat grass over fly area. Raffle all day - 9C at 3pm. Midday demo featuring Mac Hodges/Dan Stevens with the B-29 and Bell X-1. Food and drink concession. Sponsor: AIRMASTERS MAC

Top Gun Invitational

FL

4/25/06-4/30/06 - Lakeland, FL (B) Top Gun Invitational for 512, 515, 520, 522(JSO). Site: Airport. Frank Tiano CD, 3607 Ventura Dr E Lakeland FL 33811 PH:863-370-1288. 150 Sale Airport representing 20 centuries. Huge manufacturers area. Awesome demos. The best RC Scale event in the world! Pit passes available. Got to www.franktiano.com for more info. Don't miss this one! Sponsor: IMPERIAL RC

Chap. 574 - "A.M.P.S. Aero Fest V - Giant Scale R/C Model Fly-In" - April 2, 2005

LF \$5 reg 8am fly 8am until dark RV SF GR food/bev registration includes lunch & event photo Located: A.M.P.S. Club Field Miami, FL Take Florida Turnpike South, exit West on SW 88th st. (Kendall Dr.) to Krome Ave South to SW168th St. Proceed West on SW 168th St. Approx. 2.2 miles. Follow A.M.P.S. signs to field.

Visit website at www.amps-rc.com for additional information.

Contact: Nick Capone 20120 Bel Aire Dr. Miami, FL 33189 (305) 254-2127

E-mail: NickRC3@aol.com

Chapt 584 & 171 - "10th Annual Spring Fling" - April 9, 2005

LF \$10/day or \$15 for both. Reg 8am fly 9am RV SF PR 600'X50' GR 1000'X200' food/bev All IMAA - AMA Rules apply. There will be no 3D Acro or Hovering type acro allowed other than special demos. - Contact CD regarding this! RV is welcome on Thursday 4-7 thru Saturday, Sunday 4-10-05 will be AMA fly what you bring w/3D flying allowed w/CD calling distance dead line. We have special RV area. No hookups. Nite flying possible all days. Come Join in on our 10th Annual Spring Fling. Located: 1020 SE 110th St OFMC Flying Site Ocala, FL

Contact: Russell J Stricker 10620 SW 27th Ave Apt H4 Ocala, FL 34476

E-mail: russell4214@att.net or

Website: www.ocalaflyingmodelclub.com

Chief Treasurer- Sam Varn

Editor's Note: The Treasurer's report is published for Members only. The public version of the Newsletter does not include this information.

Here are the details for this month.

**Cash -
Checking -
Savings -
Total Funds -**

Expenses this month totaled \$293.08 for the usual things, Port-O-Let rental (2 months...they didn't send me a bill one month so I had to catch up), field maintenance and the award for our war bird event honoree. No income or new members have been reported to me at this time.

Sam

Chief Scribe- Steve Warmath

The meeting was called to order at approximately 7:40 pm, March 2, 2006.

Visitor/ New member introductions- New Returning Members- **Buck Harris and Craig Dotson**
Guest- **Everett Olgelvy**

- **The Treasurer's Report-** Sam was out of town. Steve summarized our current asset allocations. Members requesting specific information regarding assets may contact Sam Varn. The Treasurer's report was accepted. Mike added that Sam had decided to wait until June to move the CD rather than pay the early withdrawal fee.

Old Business-

- The Float Fly was cancelled twice but there was an impromptu fly-in on Feb. 18th.
- The Warbird Fly-in is to be rescheduled for March 18th. The Fun-Fly scheduled for that weekend would be rescheduled.
- Reminder that Perry was tomorrow 3/3/06. The Club would have 6 tables.
- Jeff Owens reported that there was no change in Airfest. He was meeting with Airport Operations tomorrow 3/3/06. There will be a 200' height restriction. There will be two demos. 10:00 am and 2:00 pm. Designated pilots will fly for the Club. The EAA was very interested in having us participate. Access to the operations area for Club members to drop off their static displays will be a problem. Jeff said he would have access to a Golf Cart for maybe shuttling people and planes in. There may also be a PA system available to the Club. A Club Open House at the Flying field will be scheduled the week after Airfest. We will hand out flyers at Airfest. The Club still needs to get insurance.
- Mike reported that there was no information on the date for the next community meeting for the County Park. As soon as the activity survey is up, Mike will notify everyone by e-mail. It will be our responsibility to inform the County of our needs. The preferred orientation is East-West runway, pilots facing North. The County is anxious to help us. Richard Wynn asked if the Club would have to make any financial contributions to the County for field maintenance, etc. It was unknown at the time. The question was asked if a paved runway might be possible. Mike responded that the County was very interested in recycling and that maybe a runway paved with recycled rubber may be worth investigating. A question about fuel effects on the material was posed with no answer known. Geoff suggested that there may be some "Autonomy recognition" if the Club made some contribution to the County to defer maintenance costs.

New Business-

- Marvin asked about possible reimbursement to those who provided food and drink at the Float-Fly. Mike said the Club was paying the AMA insurance at the lake and suggested that the Club could reimburse individuals \$30-\$40 to cover costs. The other concept was a “pay as you go” donation by Club members.
- Bob asked a question if anyone noted the article in AMA magazine about several people being seriously injured and even killed when they ran into poorly marked gates to RC flying sites. Most responded yes. Mike said that we had a pretty visible agricultural type gate but additional precautions will be provided. Sam would provide reflective tape for the gate.
- Mike noted that there was a new, local Internet forum in Tallahassee for RC interests. The site is www.tallyfreak.com We may want to add some participating links for local information.
- Bob Burke said that the field needed some routine maintenance, especially fences. Mike said he will get with John Hall and schedule a date and generate a work list.
- Geoff said the mower threw another belt. He has procured a new belt, oil filter and will service it.. It was noted also that the bolts for the aluminum ramps needed to be replaced.
- Bob Donohue is moving back to Michigan.
- Mike said he had obtained from Hall of Fame members, AMA, old RC/ modeling books and was looking for suggestions on what to do with them. Richard suggested we hang on to them and save them for a future clubhouse library.
- Upcoming Events- Warbird Fly on the 18th. Mike said he was contacted by a local Boys and Girls Club Director about the Club members coming out to the field and let the kids try flying. Maybe April 15th. Mike said the field would remain open.
- April Meeting will be at the field at 7:00. He encouraged everyone to come out early and fly. Dinner will be served after a short meeting.
- Ed showed embroidery he had of the old “Sammy Seminole” logo. Richard said they were working on some logo ideas and that when a concept was developed and approved by the officers it would be e-mailed to members for their comments. Steve told Richard he wouldn’t mind working directly with graphics person to develop and refine design.

With no additional business, the meeting was adjourned at approximately 8:45 pm.



Thanks to Geoff Lawrence for sending in this outrageous photo of the month. **“I don’t think so Tim”**.

Military Madness- Warbird Gathering- Steve Warmath

The event was rescheduled and held on March 18th at the field. It was a beautiful day with the wind blowing from the East, North, South, and everywhere in between. Sometimes it was dead calm. It was a good turnout of 20 or so planes and some spectators throughout the day. Models ranged from Bill's and Marvin's WWI planes to Russell's modern day turbine. There were a host of P-47's, P-51's, F6F, TEXAN II, P-38, F4F and a Spitfire or two and, well.....The Batmobile. The event Honoree was **James Spivey**, retired Air Force. The People's Choice went to **Geoff Lawrence** with his Giant Scale Planes/Raidentech F6F Hellcat.





Your Fuel Tank - by Clay Ramskill

Goodness knows, we have enough trouble keeping our "simple" little engines running properly -these seem to be a gazillion detail items that can cause them to run badly or not at all. Now we introduce another whole set of potential problem areas that affect the engines operation - the fuel tank and its setup.

Obviously the engine must have fuel to run - but how EASY it is for the engine to draw fuel from the tank can have lots of effect on just how WELL the engine runs in various flight conditions. Essentially, the engine creates a vacuum in the carburetor throat while running; normal air pressure in the tank (or muffler pressure if you use it) then forces the fuel into the carb through the needle valves that you have diligently set.

The problems that can arise from your tank setup can be grouped into several distinct areas:

Tank height: The farther "up" we must draw the fuel to get into the carb against the force of gravity, the less likely it will arrive in sufficient quantity. And as we maneuver the plane applying "G" forces, the forces required become even greater. So we can't have the tank too low in the plane with respect to the engines carburetor.

Most experts seem to agree that the centerline of the tank should be, optimally, about 3/8 - 1/2" below the centerline of the carb barrel. The tank should be mounted in the plane as near that goal as possible - but in some designs that can't be done! If you can't raise the tank, then lower the carb; since the carb is usually about an inch above the centerline of the engine, just side mounting the engine will lower the carb by an inch!

Head Pressure: The air pressure in the tank determines the actual pressure of the fuel going to the carb, PLUS the pressure exerted at the tank pickup point by the depth of the fuel in the tank. This extra pressure

exerted by the fuel (the "head") makes it easier for the engine to draw fuel when the tank is full, harder when the tank is empty. The result - your engine will lean out some, as the tank level gets lower. There isn't much we can do about this, although pressurizing the tank with muffler pressure eases the effect somewhat. Also a smaller tank (less difference in height between full and empty) helps.

Distance of fuel tank from the engine carb: The farther back in the plane that your tank is located from the carb center, the farther "up" the fuel must travel when the plane is going uphill! This is why we point the plane's nose up when setting the main needle; it is the worst-case situation. The farther the tank is back from the engine, the worse the situation. Remedies? A smaller (shorter!) tank is better. The tank should be located as near the firewall as possible. And the engine should be back as close to the firewall as practical.

Fuel Lines: Should be as straight as possible, and as short as possible. The longer the line, the more "drag" the fuel has as it is pushed to the carb. And any bends in the line constrict the flow some.

Fuel Tank Mounting: The tank should be isolated from the airframe as much as possible by mounting it in foam rubber. Too little foam or any direct contact with the airframe can transmit vibration to the tank, causing the fuel to foam up - then the carb is being supplied with air as well as fuel! Too much foam or too soft foam can cause the tank to shift during maneuvers, causing the fuel supply line to bend sharply or even kink.

Taking some extra care and planning while installing the fuel tank can save you a lot of grief - as well as a lot of dead stick landings!

FACTS ABOUT FUEL - *Storing Fuel for Maximum Shelf Life*

Don Nix, Past owner of Powermaster, Inc.

During the Q&A part of countless "Dog & Pony Shows" at hobby clubs all over the U.S., one of the frequently asked questions is, "What's the shelf life of fuel?" The answer is both simple and easy: Properly stored, model engine fuel will last almost indefinitely. So....what constitutes "properly stored"? Let's take a look.

Contrary to many things you might have read or heard, just about the only thing that adversely affects model fuel is the absorption of moisture from the air. Keep the air away from it, and your fuel will likely be potent longer than you are! Methanol - the major ingredient in model fuel - is hygroscopic. This means it's virtually 100% soluble in water, and absorbs moisture from the air like a vacuum cleaner sucking up dirt.

Most modelers have no idea how rapidly this can - and does - happen, and tend to be rather skeptical about the idea. Let me paint a picture for you: Almost everyone has spilled a little fuel on the top of their fuel can in their flight box. If so, you've no doubt noticed that the shallow film of raw fuel takes on a cloudy, milky look. What you are seeing is the methanol sucking moisture right out of the air. Since the quantity of fuel is thin with a lot of surface area, the absorption is rapid, the water won't mix with the oil and the fuel turns cloudy. Just remember how quickly this happens almost immediately....and it might give you an idea of just how quickly your fuel can be ruined if you leave the cap off, allow a vent tube to remain open, etc.

The wide surface area relative to the quantity of the fuel exposed is disproportionate, of course, to leaving the cap off the fuel jug, but I think you get the idea. In a humid condition such as exists in parts of the U.S., it doesn't take very long at all to adversely affect your fuel. And it doesn't take a large opening....a cross-threaded cap, a small vent line, etc. is all that's needed to do the damage.

The solution is simple, of course....just keep it tightly sealed. And yet, sometimes that's not enough. Most of us have seen small droplets condensed inside our fuel jugs after it's become partially empty. This is the result of condensation of moisture as the air trapped inside the jug cools. Until about a year ago, there was little we could do about this, but there is now a method to take care of this problem. Since it's not the purpose of this column to commercially promote our own products, those interested are invited to contact the writer at the e-mail address above, and we'll be happy to tell you about the product that will solve the problem.

For the reasons above, it's our opinion that it is rarely a good idea to buy model fuel in 55 gallon drums. Unless all the fuel is poured up the first time the drum is opened, a substantial volume of air is trapped inside the drum each time it's opened. Steel containers of any kind warm and cool much more readily and rapidly than plastic, and condensation is much more evident in this type container. The result is that the last portion of the drum of fuel is quite likely to be contaminated with moisture, sometimes to the point of being unusable.

There is another downside to buying fuel in drums, especially if more than one person is using it. With no control over the type container the fuel is dispensed into...perhaps not bearing sufficient or proper warnings, etc., the liability is incredibly high if an accident of any sort should occur. Model clubs considering this type of fuel purchase for their members should be particularly aware of the potential liability...which is huge!

While it's true that the UV in sunlight (or in fluorescent lights, for that matter) will cause pure Nitromethane to deteriorate over time, it's our experience that once the nitro is in solution and substantially diluted, the deteriorative effect is relatively minor.

To test this, some years ago we put a gallon of 10% fuel out in direct sunlight (in sunny Southern California) for a month. At the end of that time, we tested that fuel in an engine vs. fresh product and could see no difference. While it certainly won't hurt anything to store fuel away from direct sunlight, etc., it's our personal opinion that the adverse effect of sunlight on fuel under normal operating conditions is too little to worry about.

Fuels for Glow Engines

The two essentials in our fuels for glow plug motors are oil and methanol. The methanol is what is burnt to provide the power and the oil is what keeps the motor from seizing up. Fairly obvious but the details are important. Another ingredient, which is almost always added to shop bought fuels, is nitro methane. This can add power to the engine but is not always necessary.

The most important starting point for our fuel is the oil. It's almost a case of "you can't have too much of a good thing". Different engines will tolerate different percentages of oil but I have yet to hear of an engine that won't tolerate too much oil. Too much oil can be defined as greater than the amount required for the engine to have a normal life span without being abused. Maybe I should say "more than is necessary" instead of "too much".

So what oils can we use? Since the early days of modeling the only oil ever used was Castor oil. It stays oily even at very high temperatures and is an excellent preservative against rusting of the steel parts in the engines. Probably the only drawbacks it has is that it is hard to wipe off the model (which shows how oily it is!) and that if an engine has not been run for an extended period it turns into what I can only describe as tree sap, very difficult to remove from bearings and other parts. Also it does tend to leave a layer of varnish on the piston and liner and carbon deposits in the muffler.

If you wish to make your own fuel then the best oil is Castrol M, which is available in various size containers. The most economical size is 5 liters.

Lately a lot of modelers are using synthetic oils. These have the advantage of being easy to wipe off (an extremely minor advantage, after all water is even easier but you wouldn't want to use that to lubricate your engine!) and it tends to keep the internals of the engine very clean (a very good point in its favor). Some modelers who would normally use Castor oil will occasionally run a few tanks of synthetic oil just to clean out the Castor varnishes. One thing to be careful of when using synthetic oil is that you don't allow the engine to run with a lean mixture. This not only makes the engine run hotter but also not as much oil is actually going through the engine, making things even worse. But synthetics and Castor can be mixed together in whatever proportion you wish. Most experienced modelers will have a minimum of 5% Castor mixed with the synthetic as corrosion protection.

Bulk synthetic oils are available at most Hobby Shops. There are quite a few different brands (and colors) and many and varied claims as to how good they are. My opinion is to leave the synthetics to the experts and go for Castor.

So how much oil is enough? In just about all engines, 20% oil is a safe amount. If in doubt no harm will come from adding a bit more but less than 20% can approach the safe minimum. Most engines made a long time ago had a cast iron piston running in a steel cylinder liner. If you have one of these motors then I would use no less than 25% oil and maybe up to 28%.

When asked what fuel they are using, modelers will generally say 4:1 or 3:1 and not say the percentage of oil. What does this mean?

As I have indicated earlier, fuel is composed mainly of oil and methanol. So 4:1 (said 4 to 1) means that there are 4 parts of methanol to 1 part of oil. This means that if we had 5 liters of fuel then 4 liters of it is methanol and 1 liter is oil. So that of the total 5 liters, one fifth is oil or 20%. Similarly, for 3:1 fuel, we would have 3 liters of methanol and 1 liter of oil. So that for 4 liters total of fuel, one quarter is oil or 25%.

Now that we have covered the oil, what about methanol? Once again, if you wish to make your own fuel then methanol is available in bulk from various suppliers. Some will only sell it in their own drum (20 liter) and others will refill your own container. It may take some ringing around to find a supplier who has it but most of the major oil company depots have it.

One thing to be aware of with methanol is that it is hygroscopic. This means that, as with brake fluid in a car, it will absorb moisture from the air. It doesn't take much dissolved water to make the fuel unusable. To avoid this happening never leave the top off any container longer than is necessary. And make certain that any container is completely airtight. Methanol can be stored for a very long time if totally sealed; it won't go "off". If it is suspected that there may be water in the fuel there is a neat trick to find out and also at least reduce the amount of water. Fill a glass jar (such as an old coffee jar) with the fuel and screw the lid on tightly. Then put the jar in the freezer. As it cools down any water in the fuel will freeze out as ice. But because ice is denser than fuel it will settle to the bottom of the jar almost like snow. You can then carefully decant most of this cleaned fuel into another container but be careful not to let any ice pour out. Clean and dry the jar and then repeat with the rest of your fuel.

I have mentioned another ingredient that can be added to the basic fuel, which is **nitro methane**. This is added to fuels to increase the power of the engine. In effect, the lower the compression ratio of the engine the more nitro it can tolerate. However all engines will work quite well without nitro although most modelers will say that a little nitro improves the idle by making it smoother and less likely to suddenly cut out.

Nitro is normally added in increments of 5% so that the lowest commercially available is 5% then 10%, 15% etc. Remember though that the higher the nitro content the thirstier the engine will be so that you not only use fuel faster but it costs more per liter as well.

One thing you may notice (especially if you mix your own fuel) is that when you shake the container there will be foam on top. This will also happen in the fuel tank and can lead to erratic running. The cure for this is to add a few droplets of Armorall (a car vinyl cleaner) to the bulk container. A tiny amount in a 20-liter drum is enough. To see the effect it has, shake the container to foam it up then add the few droplets and magically the foam disappears.

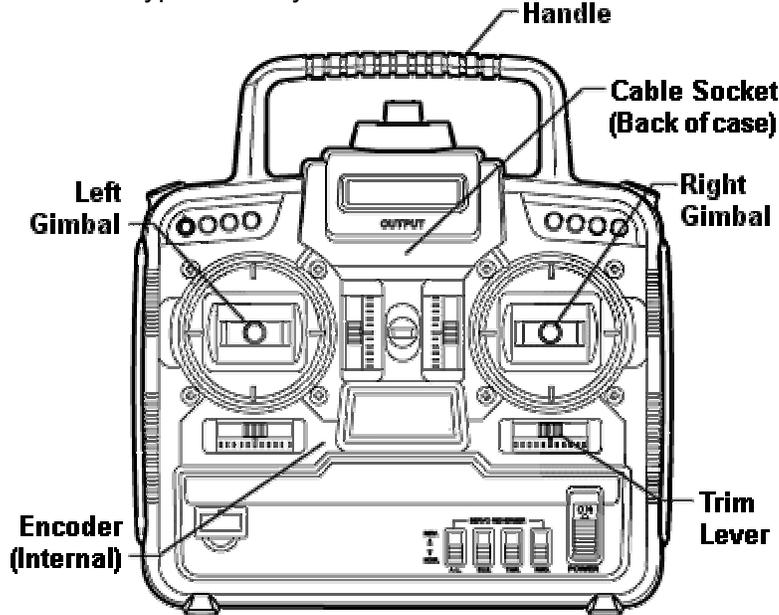
A final word on fuel. Keep it CLEAN. Use clean containers; make sure that any funnels used when pouring from can to can are clean. Preferably use a filter when pumping fuel into the model's tank (car fuel filters are excellent) and fit another filter in the fuel line between the tank and the engine's needle valve. It only takes the tiniest speck of rubbish to partly block the needle valve and suddenly make your engine run lean, overheat and seize. A filter is a couple of dollars while a new piston and liner can be \$100. Don't assume that you don't need a final filter in the fuel line. If you have a new fuel tank then you might be shocked by the amount of plastic particles just waiting to get flushed out to the needle valve. Some brands of tank are quite good but others need a little care.

Beginner's Corner- Buddy Boxes

A trainer box, or buddy box, system is nothing more than a transmitter that has had the battery pack, antenna, and crystal removed. This could be a box that is specifically built for this purpose by the manufacturer of the student's radio system or an old transmitter that has been converted. The big advantage of this is that it allows the student to fly using only his radio gear and not interfering with the instructor's system. A complete transmitter can be used as a buddy box but care must be taken to ensure that the power switch is not turned on.

In a trainer system, the transmitter is the master unit and the buddy box is the slave. The instructor uses the master unit and the student uses the slave. The instructor *allows* the student to control the model by holding the trainer switch. When he releases it, he takes control away from the student. Although, many people have learned to fly using this method, very few people know how this system actually works. For an overview of how a radio control system works, read [Radio Control System Operation](#). An understanding of how a radio works will greatly simplify the understanding of the buddy box operation.

A typical buddy box consists of most of the same basic components of a transmitter.



- Gimbal (or Stick) - The device that allows the user to input desired control movements into the transmitter
- Handle - The device for carrying the buddy box
- Trim Lever - Slides used to adjust control surfaces during flight

Internally, the only important part of the buddy box is the encoder. This is the component that makes the buddy box system function.

Since the buddy box does not have a battery and since the encoder must be powered up to operate, the buddy box gets its power through the trainer cord from the master unit. The master unit powers up the slave unit through the buddy cord and a single wire from the slave unit to the master carries the encoded pulse train. This would mean that five (5) wires would be required; 2 for power, 2 for the encoded signal and a shield. When the instructor switches the trainer switch, power goes from the master to the encoder of the slave unit and powers it up. The slave unit components become the remote controls and encoder for the master unit. The controls sticks and encoder of the master unit do not function as long as the trainer switch is held on. This allows the slave unit to become the controlling unit.

The radio frequency (RF) section is the part of the transmitter that actually generates the radio signal. The RF section of the master unit interprets the pulse train from the slave unit and a particular amplitude or frequency variation is generated to represent the pulse train. The radio signal is carried to the antenna and radiated from the transmitter.

The buddy box continues to operate as long as the instructor holds the trainer switch. When the trainer switch is released, power is removed from the encoder of the slave and it no longer operates.

For Sale

T-Shirts For Sale:

Seminole RC Club t-shirts are available for purchase. We have a variety of sizes available. White pocket t-shirts are only \$10, while gray and tan pocket t-shirts are \$11. I have 2 XL gray shirts with a collar. These are \$15. The ordering of the shirts is a benefit for club members. We have priced the shirts low, where we are essentially at a break-even point. So, we need to sell all of the shirts real soon. Shirts will be available at the club meetings and all club sponsored events.

Hobbico Nextar Trainer System. Complete with ready to fly Airplane, 4-channel radio, flight simulator, and flight stabilization system. \$200 View www.towerhobbies.com/products/hobbico/hcaa17r.html for details

Contact: John Hall – john_hall@mindstring.com

Blackhorse Models Twister .40 - New in Box - www.americanpioneerhobbies.com/twister.html Retail Price \$99 plus shipping. Will sell for \$90 - Contact: Joe Satterwhite - 644-1725 877-5086, 766-5717

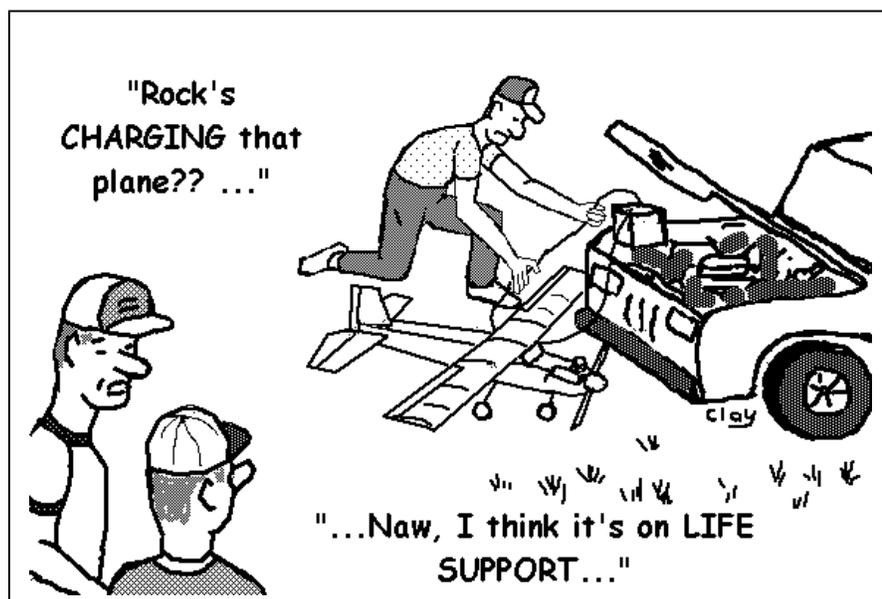
Hitec Radio – 3 Channel – With NiCds – Transmitter and Receiver – Great for electrics - 2 available \$40 in original box - \$35 without box Contact: Mike Atkinson nexnbax1@comcast.net or 656-2200

Live auction on Saturday April 15th at Affiliated Coins, Apalachee Parkway.

Historical aviation photos, posters, military memorabilia, airboat, uniforms, etc.

Items can be seen at their Apalachee Parkway location during business hours prior to the auction or viewed online here:

<http://search.liveauctions.ebay.com/ws/search/LiveAuctionSearch?ahid=3296&ccn=Collectibles+%26+Memorabilia&fis=1&frts=0&isl=0&lc=1&sacti=19064>



Seminole Radio Control Club

Tallahassee, FL

AMA Charter #216, 1969-2006

SRCC Officers

President – Mike Atkinson
Vice President – Geoff Lawrence
Secretary/ Newsletter Editor – Steve Warmath
Treasurer - Sam Varn
Field Marshall – John Hall
Field Safety Officer- Gordie Meade

Field Hours

12 Noon till Dark- These hours apply to **all** aircraft, gas **and** electric.

Training Notes

To schedule a training time contact Mike Atkinson.

Flight Instructors

Mike Atkinson (Coordinator) 926-4692 (H)
Ed Budzyna Jeff Owens Bob Burke
Geoff Lawrence John Clark

Club Meeting Location and Time

The regular club meetings are held on the first Thursday of each month at 7:30 PM at the Grace Lutheran Church on Miccosukee Rd. Head out Miccosukee Rd., cross Capital Circle NE, and the entrance will be the first one on your right. Once you park, follow the sidewalk around the left side of the building and go down the hill. We meet in a room on the first level.

Submissions- Submissions are requested to be in M.S. Word format. Photos should be in .jpg or .tif format. Vector art accepted in Corel, Illustrator and AUTOCAD format. We will, however, accept anything to make it easier for those who wish to contribute. Submissions are due no later than the 23rd of the month. Send your submissions to ssw@nettally.com or by phone, Steve at 509-0672.

Editor's note: Please contact the editor for any reporting contribution assistance and for reporting formatting problems, errors, omissions or corrections. The views expressed in the newsletter are of those of the specific authors and do not represent a majority consensus of the club membership unless voted upon at a club meeting. **For Sale** items will be cleared from the newsletter every month. If you wish your ad to keep running, it must be resubmitted prior to the 23rd deadline.

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