

PRINTED CIRCUIT

AMP'S Monthly Newsletter

September 2007

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Aero Modelers of Perrine
An AMA Chartered Club



Volume 48 no. 9



**President's Plugs
-by Tom Caldwell**

If things go according to plan come September 20th the South Florida Water Management District will become the owner of AMPS property since that is when the closing is scheduled. Club officers will contact the SFWMD liaison person who lives in Homestead

and work with him/her with regard to the ongoing operations of AMPS for the coming years.

At the last business meeting a field improvement committee was formed with 13 Club members agreeing to serve on this important committee which will look into all issues concerning changes to Silver Field once the SFWMD becomes the owner of the land and AMPS gets an additional 200 feet to the west and north in a leaseback deal with the District. If you have not signed up for this committee but would like to participate it is not a problem, just email or call a Club officer and let us know that you want to participate and you will be added to the committee.

One new thing that will have to be taken into consideration when planning what changes to make to the field is that after the sale to the

District AMPS is not going to have as much money as we had originally thought. This is because we have recently learned that the federal taxes which AMPS will have to pay will be greater than we had first been told. It turns out that the IRS taxes non-profit social clubs more than some other types of non-profit corporations, notwithstanding the tax exempt status that AMPS received from the IRS only a month or two ago.

More specifically, unless the sale proceeds from the land sale are reinvested in like property within 3 years of the sale AMPS will have to pay taxes on the gain which I understand would be about \$80,000, give or take some. AMPS' tax lawyer is looking into whether

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**Secretary's Servos
-by Bob Cox**

Business Meeting August 9th, 2007

Meeting called to order at 7:04 pm

There were a large number of new members and guests present for the meeting. They were asked to introduce themselves and were welcomed to the meeting.

The minutes for the June business meeting were accepted as printed in the club newsletter.

Treasurer's report was read by Vice President Tony Fandino. The treasurer's report was accepted as read.

Old Business

Report on progress of the sale of club property to the South Florida Water Management District given by Tom Caldwell.

Closing of the sale of the property will take place on September 20th in Miami Lakes.

Federal taxes resulting from the sale of the property can be as high as 15% which would result in the club having to pay up to \$80,000 dollars in taxes. The club can forgo paying taxes if it were to invest the moneys in more land. Another option is to file a request with the IRS for special consideration to wave the taxes due to the club being forced to sell the property. The cost of filing with the IRS for special consideration is \$8,700. Additionally, the club would receive interest on funds deposited into bank accounts. The interest gain would be taxable if it results in a

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Plugs, con't from page 1

it would make sense to seek from the IRS a special ruling which would exempt AMPS from having to pay such a tax but note that there is a filing fee of \$8,700 which is required in order for the IRS to even consider such a request.

We had planned to initially put the proceeds from the land sale, \$550,000, into high interest bank accounts (fully insured by the United States Government) which would have paid at today's rates about \$25,000 per year. We now know, however, that there is a 35% rule which states that if the Club's unrelated business income exceeds 35% of the Club's gross revenues that the tax exempt status of the Club could be lost. If it were lost then AMPS would be taxed like any other corporation. Interest from a bank account would probably be considered unrelated business income. If such interest was about \$25,000 that would exceed 35% of gross revenue so other arrangements will likely have to be made which may (or may not) include a scholarship fund under which AMPS would give away, in the form of scholarships, any amounts over 35%. Such a scholarship program would also require advance IRS approval.

Assuming that AMPS keeps its tax exempt status and that it's unrelated business income is no more than 35%, then that 35% will be taxed at the corporate rate which is another tax that we had not previously known about.

So, you see, AMPS will not have as much money in the future as we had thought which will probably impact the amount of money which AMPS can reasonably devote towards field improvements and field maintenance in the coming years. This is one of the factors that Club members on the field improvement committee will have to carefully consider.

As most of you know, the lease-back that AMPS is getting from the SFWMD is really only for a term of 6 months since either party can terminate the lease for any reason, or for no reason, with 6 months notice. Because of this fact it is my opinion that AMPS should try to keep in reserve, in some type of investment asset, as much money as it reasonably can so that in the event that the lease with the District is terminated AMPS will have funds to try to find another flying site, even if it is on a leasehold basis rather than an ownership basis. I would hate to see the AMPS club, which has been in existence since 1959, cease to exist due to a termination of the District lease. We have to make sure that doesn't happen!

The bottom line in my opinion is that the improvements to the field will have to be kept modest, so as to keep their cost down, and so as to keep ongoing maintenance costs down as well. This means that as much as we can we should rely upon club supplied labor, equipment and materials to do the work.

What do you think about these issues? Even if you are not on the field improvement committee, I would like to have the benefits of

your ideas so please call me if you have any thoughts that might be helpful. Thanks.

Well, that's it for now. I will not be at the September Club meeting since I will be on vacation the first two weeks of September. VP Tony Fandino will run the meeting. Good flying and I hope to see you at Silver Field one of these days.

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net income greater than 35% of the clubs gross income from club activities (such as dues and income from events).

Field Improvements:

The club will have some decisions to make as to the improving and maintaining the property it will lease from the SFWMD. The club will have a total of 13 acres to maintain. The additional acreage could be used by the club to expand it's runways or other facilities.

David Hardeman of Park & Field Renovations, Inc. addressed the membership. David had five proposals for the improvement or expansion of the clubs runways. The average cost for improving the runways was \$2.35 a square foot. The proposals ranged in price from \$42,000 to \$210,000.

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<u>Club Management</u>	<u>Flight Instructors/Check Pilots</u>	<u>Sponsors</u>	
President: Tom Caldwell	Chief Instructor, Rey Mesa (305) 388-5564	Crown Hobbies	Hobby Nut
Vice President: Tony Fandino	Instructor, Tom Caldwell (305) 251-4136	7439 Coral Way	12679 Dixie Hgy.
Secretary: Bob Cox	Instructor, Juan Vallejo (305) 293-6278	Miami, FL	Miami, FL
Treasurer: Vicar Hernandez	Check Pilot, Tony Fandino (305) 693-1374	(305) 264-3964	(305) 235-9584
Safety Chairman: John Mitchell	Check Pilot, Mike Cipolato (305) 274-3835		
Events Committee Chairman: Vicar Hernandez	Check Pilot Abraham Horta (305) 209-2906		
Newsletter Editor: Chris Hogan		Warrick Custom Hobbies	
Webmaster: Vicar Hernandez		7676 Peters Road	
Annual dues are \$100. for Open Members, \$25. for Non Resident Members and \$25. for Juniors.		Ft. Lauderdale, FL	
Club approved frequency pins are required and cost \$2.50 for each channel used. Meetings are held at 7:00 PM the second Thursday of each month at the historic Dice House on the Southeast corner of S.W. 82nd Ave. and 100 St.		(305) 424-0605	
Please address inquiries to Aero-Modelers of Perrine 6925 SW 65 Ave. South Miami, FL 33143-3246 (305) 666-2126.			



Leidner's Roasted Limericks

The Blonds In R/C

There once was a young blond named Shirley,
Who took up flying R/C as a girly.
They should have stopped her,
From choosing a copter,
As Shirley, sent whirley, to gates
pearly, too early.

Do you remember a dumb blond
named Jane,
Who flew her brand new R/C in the
rain?
When it hit the dirt,
She soiled her skirt,
As "Plain Jane" plain, overburdened
her brain.

In England, a dumb blond named
Dolly,
Heard that flying R/C was quite
jolly.
So sure that a trainer,
Would be a "No Brainer"
She crashed, by her folly, by golly!

A conceited dumb blond named Lucille,
Thought her flight skill was quite a big
deal.

But her over control.
Gave too rapid a roll,
And ground the doomed plane to oat-
meal.

A famous movie star, named Faye
Wray,
Was as dumb as the blonds of today.
She led King Kong,
With her Siren's song,
To the air planes that blew him away!



Club required frequency pins are now available with or without the club logo. The standard pin is \$5.00 and it includes your first initial and last name. Now available also is the one with the club logo which can be engraved with your first initial and last name for a cost of \$10.00. Please email the club treasurer for ordering directions.

Servos, con't from page 2

Tom Caldwell suggested forming a Field Improvement Committee. Volunteers for the committee were the Board of Directors (Tom Caldwell, Vicar Hernandez, Tony Fandino and Bob Cox); also George Brod, Butch Wenrich, Mike Cipoloto, Mike Hunt, Cliff Root, Nick Mariano, Steven Andersen, Nick Capone and Eduardo Concepcion.

Aero Fest report:

Nick Capone has flyers and posters available for advertising of the Aero Fest. Nick will be forming a committee to help in setting up and running of activities at the Aero Fest. Volunteers are needed to help at the Aero Fest.

Vandalism:

There continues to be destruction of club property by un-known persons at the club field. The worst problem seems to be the riding of ATV's on the runways. This has left ruts in the runway that Cliff Root has to continually fill and smooth out so that we can fly our aircraft. There has been some discussion of installing a Security System at the field but it has been determined that any cameras or other equipment installed for this purpose would just be added targets for vandalism or would be stolen. Anyone having ideas on ways to curtail the vandalism please contact a board member.

It has been suggested that the club needs to put up signage stating that there is no trespassing or dumping.

New Business

Vicar Hernandez would suggest that the club reinstate the Associate memberships with the following provisions:

Associate membership would be a three to six month period.

Be required to attend two or three meetings.

Associate member must be at their vote in meeting.
Associate member must be accompanied by a member in good standing for their first three flying sessions.

An Associate member must take a test on field rules before becoming an open member.

Associate must submit a photo to the club for identification purposes.

50/50 drawing was won by Steven Andersen. Steven won \$21.

Meeting was adjourned at 8:12 pm.



Safety Matters -by John Mitchell

Spektrum systems are becoming very popular at the field and with any new system there have been some reported problems that all pilot / owners need to be aware of. If you own a Spektrum radio system please read through the following bulletins that have been posted and take the recommended actions as required.

Spektrum Aircraft Module Service Bulletin

When using the Spektrum JR module in JR10X transmitters, under specific conditions it's possible that unintended servo outputs can occur.

All of the following conditions are necessary to produce this issue:

- JR10X transmitter (all other JR 10 channel radios are immune)
- Spektrum AR9000 or JR921 receivers (all other RXs are immune)
- At least one non-digital servo is attached to the receiver.
- The programmed travel adjust/ sub trim or P mix must drive at least one of the servos past its end point.

If all of the above conditions are met it's possible that an un-commanded servo out can occur.

Spektrum engineers have solved the issue through a modules programming change. All future Spek-

Safety, con't on page 6

In Memory of John Margolis 1945-2007

John Margolis
South Florida's Model Aviation Ambassador
By Mike Laughlin

I first met John nine years ago during the Kendall Tamiami Aerofest. John was very involved with the EAA Young Eagles program, and was an avid model aviation enthusiast. I remember discussing the plans for the big bird fly in with John, and how we were looking for an alternative to dropping candy from a giant scale model airplane. John thought it would be a simple task to drop candy from his Piper Super Cub, since it could be flown low and slow, a perfect solution,

The Friday before event, I met with John to obtain the two way radio and to give him the time of the drop along with the three large 10 pound bags of hard candy.

The next day at the predetermined time I began to contact John, within five minutes he was ready to make his preliminary pass over the runway. I began announcing to the spectators about the procedure for the candy drop, positioned all the kids in the pit area and waited for the first pass. I remember calling John to make the first drop. I watched as John's assistant threw the entire bag of candy from the airplane. It fell straight down on the edge of the north runway and landed with a loud thud. The package did break on impact, and I signaled the kids to go ahead and run to the spot where the candy had landed. I remember speaking to John on the radio he asked if the drop was ok. I responded the location of the drop was fine but could you sprinkle the candy instead of dropping the entire bag! John was quick to respond back and replied:

"Well Michael if you wanted me to sprinkle the candy why didn't you ask me to do that in the first place" ?

I responded back: "John you are such a comedian"!

The second and third drops were absolutely perfect, right down the runway.



Safety, con't from page 4

trum modules shipped from Horizon will have the new programming installed. If you have experienced this issue or are concerned about this programming you may send your module in and we will reprogram it at no charge.

If you have any questions or concerns please contact our Product Support Team at 1-877-504-0233 or productsupport@horizonhobby.com We are available 8am to 7pm, Monday through Friday, CST.

Additional Pre-Flight Examination Requirement
We have recently become aware that when using the Spektrum modules in a JR transmitter, the coaxial cable can become detached from the connector on the back of the module if the transmitter is dropped or tipped over. While this is unlikely, the result is a significant decrease in range. We highly recommend that you check your coaxial cable connection prior to each flight.



If your connection has been damaged, please do not use the transmitter and contact our Product Support team for a replacement antenna. Our support staff can be reached toll free at (877)504-0233 or by e-mail at productsupport@horizonhobby.com

Spektrum AR9000 Service Bulletin

High Vibration Fatigue

Recently we've received three reported cases of AR9000 receivers failing when being used in high vibration applications. All failures occurred in Spektrum team member's 90-size glow helicopters mounted with minimal or no vibration isolation. In all three cases, the leads of the electrolytic can style capacitor on the base PCB experienced vibration fatigue and failure. Our staff is reworking all AR9000s in our stock to bond the capacitor to the PC board to eliminate any movement under vibration loads. All shipments as of 08/14/07 will be corrected and marked with a v1.2.

For customers that already have AR9000 receivers it's highly recommended that you return your AR9000 to our Spektrum service center and we will promptly correct the issue. If you feel confident in doing so, follow the instruction below to bond the capacitor to the PC board.

Step 1

Using a small flat screwdriver open the receiver case by gently prying on the tabs to release the bottom half of the case and remove the PC board.



Step 2

Gently, slightly raise the capacitor as shown and apply contact cement or hot glue between the capacitor and the PC board as shown. Do not use acid based RTV.



Step 3

Press the capacitor back in place making sure the capacitor is securely bonded to the PC board.



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Step 4

Reinstall the PC board in the case and snap the case halves in place.



SPEKTRUM Air Receiver Power Requirements Recommended Guidelines

Receiver Power System Requirements:

With all radio installations it is vital the onboard power system provides adequate power of 4.5 volts or more without interruption to the receiver even when the system is fully loaded (servos at maximum flight loads). This becomes especially critical with giant scale models that utilize multiple high torque/ high current servos. Inadequate power systems that are unable to provide the necessary minimum voltage to the receiver during flight loads have become the number one cause of in flight failures. Some of the power system components that affect the ability to properly deliver adequate power include: the selected receiver battery pack (number of cells, capacity, cell type, state of charge), switch harness, battery leads, regulator (if used), power bus (if used).

While Spectrum's receivers' minimum operational voltage is 3.5 volts, it is highly recommended the system be tested per the guidelines below to a minimum acceptable voltage of 4.8 volts during ground testing. This will provide head room to compensate for battery discharging or if the actual flight loads are greater than the ground test loads.

Recommended power system guidelines:

1. When setting up large or complex aircraft with multiple high torque servos, it's highly recommend a current and volt meter (Hangar 9 HAN172) be used. Plug the volt meter in an open channel port in the receiver and with the system on, load the control surfaces (apply pressure with your hand) while monitoring the voltage at the receiver. The voltage should remain above 4.5 volts even when all servos are heavily loaded.

2. With the current meter inline with the receiver

battery lead, load the control surfaces (apply pressure with your hand) while monitoring the current. The maximum continuous recommended current for a single heavy duty servo/battery lead is three amps while short duration current spikes of up to five amps is acceptable. Consequently if your system draws more than three amps continuous or five amps for short durations, a single battery pack with a single switch harness plugged into the receiver for power will be inadequate. It will be necessary to use multiple packs with multiple switches and multiple leads plugged into the receiver.

3. If using a regulator it's important the above tests be done for an extended period of 5 minutes. When current passes through a regulator heat is generated and this heat causes the regulator to increase resistance which in turn causes even more heat to build up (thermal runaway). While a regulator may provide adequate power for a short duration it's important to test its ability over time as the regulator may not be able to maintain voltage at significant power levels.

4. For really large aircraft or complex models (35% and larger or jets) multiple battery packs with multiple switch harnesses are necessary or in many cases one of the commercially available power boxes/ busses is recommended. No matter what power systems you choose always carry out test #1 above making sure that the receiver is constantly provided with 4 volts or more under all conditions.

5. The latest generation of Nickel Metal Hydride batteries incorporate a new chemistry mandated to be more environmentally friendly. These batteries when charged with peak detection fast chargers have tendencies to false peak (not fully charge) repeatedly. These include all brands of NiMh batteries. If using NiMh packs be especially cautious when charging making absolutely sure that the battery is fully charged. It is recommended to use a charger that can display total charge current. Note the number of mAh put into a discharged pack to verify it has been charged to capacity.

Take care and enjoy flying. Remember SAFETY MATTERS.

SEMPRA Quickie 500 & Quarter Midget Race

September 29th & 30th, 2007

Sponsored by: Markham Park Pilot's Association and Broward County Parks

Starts at 8:30 A.M. Call for information

Experience the fun and excitement of Radio Control Pylon Racing

Two different racing events will be held each day. Saturday: AMA SEMPRA Q-500 (428) and an AMA (424) race will be held, with separate matrixes. On Sunday we will hold a 422 Quarter Midget and 424 combinations. The modified 424 event is a great way to experience racing with minimal start up costs and slower flight speeds. The aircraft is a Q-500 type and the engine will be the Thunder Tiger PRO-40. Have a plane already? You would like to give it a try? Call for information on acceptability of alternatives. The modified 424 race is a newcomer's event with fun for all that participate.

Call for information and a complete set of rules:

Jim Perdue 954-683-2660 or Ray Brown 305-205-9500

Hotel Information; Las Palmas Hotel 3003 N. University Drive, Sunrise, Fl. 33322

Reservations, 954-315-2176 mention NMPRA for special rate \$99.00 per night.

Website mppaonline.net