



A chartered member of the Academy of Model Aeronautics AMA Charter #216, 1969-2011



"The Seminole Flyer" is a publication of the Seminole Radio Control Club of Tallahassee, Florida September/October 2011

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# Letter from the Editor- Fred Schmidt

You will notice that this month's newsletter actually is a September/October edition. My work schedule has created a tremendous amount of activity for me and as a result, I missed getting out the September issue. My apologies to the club for the missed month. My schedule remains quite stiff, but I vow to complete the missions remaining this year. With the advance of the upcoming election cycle (National elections, not club elections) I will have to ask to step aside from the position of deriving news items for 2012. Please contact me or Jim should you be willing to pick up this task for the club.

### Fred

# **Chief Copilot- Jeff Owens**

The most recent Senior Pattern Association contest was held on August 20-21, 2011 in Chattanooga, Tennessee. Twenty-three contestants came from as far away as Dallas, Texas (they flew in an F33 Bonanza), Chicago, Illinois, Arkansas, Kentucky, Ohio, North Carolina, Tennessee, Georgia, and Florida. Contests are starting to be held outside of the Southeast in states such as Texas and Oklahoma. Interest in spreading!

In Chattanooga there were six entries in the Expert class. The flying was as close as I have ever seen it, even going back to when I competed in the 80s. The judges were complaining that it was hard to find fault with any of the maneuvers. In the end, the scores were very close. On the basis of the best four flights using scores normalized to a high of 1000, the winner (Eric Nessler from Ohio) had 4000 while his brother, in sixth place had 3834 – a difference of 166 points over four flights separating first and sixth! Now, each maneuver is scored on a basis of 1-10 points. So, to put it another way, if the winner averaged the maximum of 10 points per maneuver, then the sixth place flier averaged 9.6 points per maneuver!

After all was said and done, I ended up fifth. Not what I wanted, but there were lessons learned. Following up on the point of last month's column, there's always something new to learn – or relearn – about this hobby. I learned that I have to focus on three basics: 1) gracefulness of the presentation (Eric is unbelievably smooth on all the movements in each maneuver), 2) having equal radii on each corner of a particular maneuver (like the four corners of a Top Hat), and 3) centering the maneuvers in front of the judges (there is a downgrade for deviating

left or right). These are all basic points of pattern flying, but sometimes it takes a kick in the butt to reinforce old lessons and get one to refocus. That goes for just about any type of flying!

The other thing I learned is that I may be getting about all the performance I can hope for from my current plane. It started with a light-weight OS 55 AX in the nose, but last year I replaced it with a pumped OS FS 91 Surpass II four stroke which is about 8 oz heavier. So, I had to add a bunch of weight to the tail and now I am carrying nearly an extra 3/4 of a pound than I was before. But, lighter flies better, so all that extra weight is not good. I am finishing up a plans-built Deception which should be lighter, since I used contest weight balsa and I will engineer the equipment installation to have more of the weight to the rear. I hope to not have to add so much lead in the tail. I also moved the firewall back an inch to accommodate the four stroke – something I couldn't do on the present Compensator – and that will help with the balance. Well, it's Saturday afternoon, 100 degrees at the field, and I've been working on the final stages of the Deception in the air-conditioned comfort of the garage. Who says an old dog can't learn new tricks?

<u>Club Calendar</u>- The schedule reflects current Club events planned for the year to date. Check monthly for additions and deletions at the meetings and in the newsletter. For regional, sanctioned AMA events, see your AMA magazine or visit the AMA website section "Calendars".

# **Chief Scribe- Chris Bailey**

### Seminole Radio Control Club, Inc. Meeting Minutes August 4, 2011 Minutes recorded by Bill Ashbaker, Treasurer, for Chris Bailey, Secretary

Call to Order

The Seminole Radio Control Club monthly meeting was called to order on a hot, muggy and gnaty summer evening at the club flying field by Jeff Owens at 7:00 PM on Thursday, August 4, 2011. It was noted that no food was available for the meeting and that coordination should be improved.

Jeff Owens presented the minutes from the July meeting to the membership for approval. The minutes were approved unanimously.

Bill Ashbaker presented the July treasurer's report. The report was approved unanimously.

There was some discussion about the recent theft of the club's fire extinguishers. It was suggested that the club may want to purchase deer cameras to keep track of late-night activities around the field. Bill Ashbaker will look into the cost and feasibility of deer cameras.

## Old business

Jeff Owens presented a discussion on the vandalized electrical timers for our electrical system. There was a suggestion to provide a box to enclose the timers with a combination lock. In this way, club members could open the boxes and reset the timers whenever they were inaccurate due to power failures. Another suggestion that may be effective and less expensive was to provide a locking bar across the front of the timer cases. The officers will look into the feasibility of the suggestions.

### New business

Fred Schmidt has been doing an outstanding job creating our newsletter each month. However he reports that beginning in January, his workload will increase. He requested help putting together materials for the newsletter. Fred is happy to continue to edit and assemble the newsletter, but he needs suggestions for articles and sources of information related to the suggestions. Fred is willing to continue to develop articles and get permission from sources to use materials, he just needs ideas and sources.

There was a suggestion that the club hold another swap meet sometime this fall.

There was a question about club interest in aircraft racing. It was noted that in the past club members conducted activities such as racing and combat flight. However, only a few members participated in these activities and interest was short-lived. However, if a substantial number of members are interested in racing, the club is happy to accommodate it.

### Adjournment

With no additional new items for discussion, the meeting was adjourned at 7:19 PM.

## Minutes from the September 1, 2011 meeting of the Seminole Radio Control Club

### Call to Order at 7:05pm

Announcement: On Saturday's, due to the amount of people using the football/soccer fields, please enter at the landfill entrance of the park. It may be a good idea to show questioning law enforcement officers your membership ID badge for easy passage through the park to the airfield.

### Administrative duties:

Minutes from the August 2, 2011 club meeting were approved.

**Treasures report:** Presented and approved. Announcement: If you have not paid your dues, please give a check to Bill Ashbaker or pay through PayPal.

## Old Business

Electricity Timers: A combo lock will be installed for members to access the electricity timers. Jim requested a volunteer to build a bar across the timers to prevent future tampering.

Fire Extinguishers: If you use a fire extinguisher or notice that one needs re-charging, please contact Bill Ashbaker so that he can replace it.

Civil Air Patrol: Several unsuccessful attempts were made to contract the Civil Air Patrol about a flying/training day for pilots.

## New Business

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Field Clean-up: Tristan reported that an estimate of \$500 was received to clean up the south end of the airfield next to pond. A motion and second was made to cap the cost of the clean up to \$500, and require officers' approval if the total expenses exceed the approved amount. Tristan volunteered to supervise the clean-up. Toys for Tots: Suggested date for the event is the first weekend following Thanksgiving weekend.

## With no further business on the agenda, the meeting was adjourned at 7:35p.m.

# **Chief Treasurer- Bill Ashbaker**

### Seminole RC Club

Financial Statement for July 29 through August 27, 2011

Accounts			
Premier Bank Checking Premier Bank Money Market Savings			\$1991.69
			\$20,616.17
PayPal	0		\$704.29
Talquin Electric Cash on Hand			\$4.85 \$216.75
Income		Expenses	
Dues/New Memberships	\$114.97	Mower: Maintenance	

Dues/new Memberships	\$114.97
Activity Sales	
Meeting: Food Reimbursement	\$0.00
Contributions/Donations	
Interest: Savings	\$9.46
-	

Mower: Maintenance Field: Improvements Field: Maintenance Field: Lease Publications

\$57.39

		Donations Fees: AMA	
		Fees: State of Florida	
		Meeting: Food & Refreshments Insurance: Mower	\$0.00
		Miscellaneous Utilities: Electric	\$24.68
Total Income	\$124.43	Total Expenses	\$82.07
Net Cash Flow	\$42.36		

We received a dues payment from one new member, Dave Bussey. Please welcome Dave at your first opportunity.

As of August 27, 28 members have not renewed their membership for the July 1 through December 31 half year. However, six of the 28 have notified me that they intend to renew their memberships within the next few days.

The field maintenance costs are for new and recharging fire extinguishers and gas for the mower.

#### Seminole RC Club

Financial Statement for August 28 through, September28, 2011

Accounts	
Premier Bank Checking	\$1,448.72
Premier Bank Money Market Savings	\$20,625.06
PayPal	\$771.72
Talquin Electric	\$0.00
Cash on Hand	\$149.00
Total Available Funds at End of Month	\$22,994.50

Income	<b>*</b> · <b>- -</b> -	Expenses	
Dues/New Memberships	\$187.50	Mower: Maintenance	
Activity Sales		Field: Improvements	\$500.00
Meeting: Food Reimbursement	\$65.00	Field: Maintenance	\$261.65
Contributions/Donations		Field: Lease	
Interest: Savings	\$8.89	Publications	
-		Donations	
		Fees: AMA	
		Fees: State of Florida	
		Fees: Bank	
		Meeting: Food & Refreshments	\$81.97
		Insurance: Mower	
		Miscellaneous	
		Utilities: Electric	\$24.45
Total Income	\$261.39	Total Expenses	\$868.07
Net Cash Flow	-\$606.68		

We received a dues payment from three new members, Lee Bryant, Ron Lowers and Kevin Knapp. Also, Murray Baker says his check is in the mail. Please welcome Lee, Ron, Kevin and Murray at your first opportunity.

We have depleted our initial credit with Talquin Electric. Future monthly electric costs will come from our checking account. Our electric cost has remained about the same each month since the service was installed.

Field improvement costs are for clearing the south end of the runway approach to the pond. Thank you to Tristan for managing the project. Field maintenance costs are for recharging fire extinguishers, a new yard blower, new mower blades and gas for the mower.

# A Future Controller?

Dan Ouellet referred this interesting topic to us...

Like Gizmo For You's Flow smartphone announced in 2009, the OSRC control system runs Linux on the Gumstix Overo Earth single-board computer (SBC), which in turn is based on the Texas Instruments (TI) Cortex-A8 OMAP3503 processor. The OSRC (below) also supports the newer, Wi-Fi and Bluetooth enabled Overo Air module, which has a similarly tiny footprint of 0.7 x 2.3 x 0.2 inches (17 x 58 x 4.2mm).

### OSRC control unit mock-up

GizmoForYou has a novel approach to developing devices. The group builds custom gadgets according to members' suggestions, and sells the open-spec devices online. GizmoForYou encourages its members to customize any of these modules or develop new ones.

The Gizmo developers post notes on their progress, and respond to member suggestions for new ideas and improvements. All software source files and hardware documentation are posted as open source, including schematics, mechanical designs, and PCB designs, says the project. GizmoForYou also sells all the parts, PCBs, and tools required to build each gizmo, so members can build their own devices or spin off new versions. Finished systems are also typically available for sale.

The OSRC system has been designed, and a prototype is underway and about two months away, according to Gizmo For You director Demetris Rouslan Zavorotnitsienko, in an email. If all goes well, a completed device could be finished two months after that, in time for the holidays, he added. As usual, the group expects that members will add suggestions, as well as send pre-orders to adequately fund the product.

The device is divided into the control unit and a simpler transceiver unit that's attached to the remotely controlled vehicle, which could be a small-scale model airplane, helicopter, car, or boat.



The main criteria by which remote control systems are categorized are the number of channels and the type of signal being used, says Gizmo For You. On the OSRC,

the designerswent for a higher-end system with 16-plus channels and a 2.4GHz RF modem that has a range of 10 to 40 kilometers (6.2 to 24.9 miles). A 900MHz radio will also be available, according to Zavorotnitsienko.



The ground-based control unit is designed to be carried with a strap and features a 2200-3300mAh lithium-polymer battery with internal charger, says Gizmo For You. The memory allotment is not listed, but the Overo Earth (pictured above) and Overo Air SBCs both support 256MB or 512MB of DDR RAM, plus 256MB of NAND flash. A microSD slot is also said to be available on the OSRC.

The system ships with a 4.8-inch, 800 x 480 touchscreen that will use AMOLED technology unless the group decides it has

to settle for LED technology, according to Zavorotnitsienko. He adds that that the 4.8-inch model shown in the detail diagram below will likely be the final size, although the spec list still says 4.3-inches. A smaller, secondary status touchscreen will offer a monochrome display with backlighting.

The black-colored area that includes the 4.8-inch screen is detachable, according to Zavorotnitsienko, and communicates with the main control device via Wi-Fi. This enables a secondary user to control an optional video camera on the vehicle while the other user is piloting the craft, he added.



#### OSRC control unit detail

The remote vehicle is primarily controlled via a variety of sticks and buttons, as shown in the images above. These can be function-swapped in software, according to the group.

One of the "cool and original" features touted for the OSRC is its selfactuating, self-correcting control stick capability. Users will be able to choose a self-actuating mode that mimics the moves of an expert RC pilot, says Gizmo For You.

The sticks will "actually move for you, sensing the Yaw or Roll of your vehicle and realigning your fingers while you fly," writes Zavorotnitsienko, who admits to being an RC enthusiast. "Even

replaying your own moves is possible once the actuated sticks are in place," he adds.

As noted, the OSRC controls remote vehicles via a two-way, 2.4GHz or 900MHz RF modem. The device enables 16 channels for remotely controlling different sensors and servos. However, it could move up to as many as 40 channels in some configurations, says the group, although it does not offer further details.

Also available is a GPS transmitter for tracking and, with flying vehicles, UAV control. If you purchase the version with the Overo Air SBC, Wi-Fi and Bluetooth are also said to be available.

The Bluetooth support leads to the second listed "cool and original" feature: a separate Bluetooth-enabled control stick. This would enable, for example, a secondary co-pilot to handle some of the control functions.

There do not appear to be mock-ups or detailed specs for the receiver device that attaches to the vehicle, but it's said to run on an undisclosed ARM microprocessor running custom firmware loaded via a microSD slot. A 2.4GHz radio and GPS are integrated in the unit to match the control device's functionality, says Gizmo For You. Also available are accelerometers and a gyro mechanism, says the group.

It is unclear how the receiver unit and software would be integrated with an off-the-shelf model vehicle, but no doubt taming that sort of complexity is part of the fun. Note that some of the below specs could change, and -- as an open source device with a modular design -- the OSRC lets hobbyist gadget makers add or remove inputs and sensors, says the group.

Features and specifications for the Control Unit prototype are currently listed as:

- Processor -- Gumstix Overo Earth or Overo Air, both at 600MHz or 720MHz clock rates, depending on the TI OMAP3503 (Cortex-A8) SoC model used
- Memory -- 256MB or 512MB of DDR RAM; 256MB NAND flash
- Flash/storage expansion -- microSD slot
- Display -- 4.8-inch AMOLED or LCD display with video streaming support; secondary, smaller status display with "touch & backlight"; optional removable main display
- Wireless communications:
  - 2.4GHz or 900MHz RF modem (two-way) with high-speed encryption; 10 to 40-Km (6.2 to 24.9-mile) range
  - o GPS
  - $\circ$   $\;$  Bluetooth (Overo Air model only) for optional external thumbstick controller  $\;$
  - Wi-Fi (Overo Air model only)
- Controls:
  - 16 channels (up to 40 in some configurations)

- o interchangeable functional switches
- function buttons
- o analog stick and navigation controls
- o replaceable and upgradable "switch to pot" and "stick to stick"
- optional RPM meter for multi-blade systems
   self-actuated, self-correcting sticks with learning feature
- Battery -- 2200 3300mAh lithium-polymer battery with internal charger

#### Features and specifications for the OSRC receiver unit are said to include:

- Processor -- ARM processor (undecided)
- Memory expansion -- microSD slot •
- Wireless -- 2.4GHz RF modem; GPS
- Controls and sensors:
  - 16 channels (up to 40 in some configurations)
  - o onboard servo mixing
  - o accelerometers
  - o gyro

#### The Linux-based user interface on the control unit is said to offer the following features:

- complete, free switch customizing
- channel mixing
- camera control for UAV or quad-copter video capture
- onboard video preview, direct from vehicle
- real-time sensor display from model
- potential 3D simulation and tracking software based on sources such as "Street Maps and/or Linux based UI's for GPS tracking"
- standard RC features, including exponential, mixing, model type, settings transfer, etc.

Earlier in 2009, GizmoForYou announced a GPS-equipped baseboard for the previous Gumstix Verdex SBC, which like the Overo SBCs, has been a mainstay of the embedded Linux hobbyist gadget and robotics communities.

### **Availability**

The Open Source RC (OSRC) is expected to be available starting at \$670 in kit form for both the controller and receiver, says Gizmo For You. The prototype could be done in as little as two months, with the commercially available product due two months after that, or around November or December.

More information may be found at this Gizmo For You OSRC page as well as on thisIndieGoGo funding page for the device. Gizmo For You is actively looking for new members and financial contributors.



# Seminole Radio Control Club Member Items for Sale:

Avistar 40 trainer.

Hangar 9 F-22 Raptor

Blade 400 **T-Rex 500** Hangar 9 PTS P-51 Mustang

ARF, BNF, RTF - your choice best reasonable offer ARF ....needs new home no reasonable offer refused. BNF heli here again best reasonable offer. BNF, plus extras...\$500.00 or higher offer ARF best reasonable offer.

Please call David Settles at 421-1615 after 5pm or email dsettles@yahoo.com

# Seminole Radio Control Club Tallahassee, FL AMA Charter #216, 1969-2010

SRCC Officers		Training Notes	
President	Jim Ogorek	To schedule a training t	ime contact Mike Atkinson.
Vice President	Jeff Owens	Flight Instructors	
Secretary	Chris Bailey	Primary/Advanced Flight Instructors	
Newsletter Editor	Fred Schmidt	Mike Atkinson	926-4692
Treasurer	Bill Ashbaker	Geoff Lawrence	942-9807
Field Safety Officer	Dave Sellers	Jim Ogorek	766-2477
-		Chris Bailey	322-4047
Field Hours		Primary/Advanced He	licopter Flight Instructor
Electrics/ Sailplanes	9:00 am till 9:00 pm.	John Hall	893-6457
Gassers and Nitro	12 Noon till Dusk.	Chris Bailey	322-4047
Electric Service	8:30 am- 9:15 p,m	Ground School/Airwol	rthiness Inst. (Fixed Wing)
	•	Jeff Owens	894-2504
		Hobby Town Flight De	emonstrator
		Frank Bastos	671-2030

# **Club Meeting Location and Time**

**November- March:** The regular club meetings are held on the first Thursday of each month at **7:00 PM** at **HobbyTown** on Thomasville Road. The Club offers food and drinks for a small charge at 6:30. **April- October:** The regular club meetings are held on the first Thursday of each month at **7:00 PM** at the Flying Field. The Club offers food and drinks for a small charge at 6:30.

**Newsletter Submissions-** Submissions are requested to be in M.S. Word format or via e-mail text. Photos should be in .jpg or .tif format. We will, however, accept anything to make it easier for those who wish to contribute. Submissions are due no later than the 28th of the month. Send your submissions to Fred Schmidt. <u>schmidtfjs@gmail.com</u>

SRCC thanks Graybar Electric in Tallahassee for its assistance in helping to upgrade our flying facility.





Invites you to attend our Fall Fly-In Saturday, October 22, 2011 9AM – 3PM

Proceeds Will Benefit Lee County Animal Control

Open Flying Format - \$10.00 landing fee for registered pilots. Pilot & Spectator Raffle.

Hamburgers, Hotdogs, and Soft Drinks Available. Flying Demonstrations at 12:30 PM.

Spectators Welcome - "No Charge"

