

SMOKE SIGNALS

NEWSLETTER

CALENDAR

OCTOBER 6

Club Meeting
Show & Tell

Mr Meroke meeting for past Mr Merokes prior to regular meeting

OCTOBER 20

Club Meeting

OCTOBER 23

"Hot Dog and Left Overs Sunday"
at the field



Send all suggestions to:
newsletter@meroke.com

BIRTHDAYS

**Michael Cheung
Allen Berg
Russell Rhine**

.....
UPCOMING PROGRAMS

October 15.....2016/2017 BUILDING CLUB BEGINS

November 17 MEETING...CLUB ELECTIONS

December 15 MEETING...CLUB AWARDS AND PIZZA

December 17...HOLIDAY DINNER

UPCOMING RAFFLE PRIZES

The raffle prizes are...OS 46, Magnum 72 4 Stroke, Phoenix Spitfire and GP Stick

If you can not make a meeting have your buddy buy some raffle tickets for you and support our club.

PICNIC REPORT by Gene Kolakowski

At the picnic besides good food and drink, some fun and games, badminton, bean bag toss and the delta dart contest Tony Pollio time keeper, Paul kept score. Each player had two flights and the total combined time determined the winner. We had 10 pilots, 3rd place Mark Trager, 2nd place Bob Hanken {last years winner} 1st place Lou Pinto. Prizes were \$50.00, \$25.00 and \$10.00.

PS - save your delta darts for next year
gene k.

NOTE

Due to technical difficulties the September meeting minutes will not appear in this edition of SMOKE SIGNALS.

*****Important**

DUES ARE REQUESTED TO BE PAID AT THE FIRST MEETING IN NOVEMBER.

SMOKE SIGNALS

MESSAGE FROM THE PRESIDENT

The Merokes have a lot going on as 2016 winds down. I'm pleased to report that September's Paint Ball event was more successful than the last one as the weather somewhat cooperated in the afternoon. We had a terrific turnout of club members and our thanks go out to those who helped put the event together including our fill-in CD Tony and Russ who worked out the details back in the spring. Although all the accounting isn't finished at the time of this writing, the preliminary results promise a modest profit.



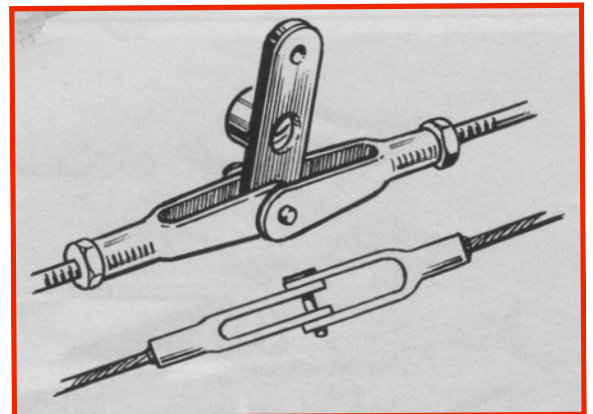
Also this past month we held our annual picnic which will spill over into our October 23, Eat What's Leftover Hot Dog Sunday at the field. The Year End Party is being sorted out and I hope to announce details at this Thursday's meeting. Right now, La Novella's in E. Meadow has offered us the best deal with a choice of appetizers, 5-7 entrees and desserts. The club will have to guarantee about 30-40 attendees. It also appears that the club will be able to subsidize about a third of the cost to members. This year's Mr. Meroke will be crowned at this gala so you don't want to miss it.

Elections are coming up in November which also happens to be the beginning of the club's fiscal year. Dues of \$60 will be collected the first meeting of that month. Please pay by check as it simplifies the treasurer's duties. If you haven't already renewed your AMA, now is the time and the club roster will be updated. Eric Williams sent me a note of thanks for the club's support of his candidacy for President of the AMA.

Here are some **HELPFUL HINTS** President Mark Klein found in an old **MODEL AIRPLANE NEWS** magazine and passed on to me. You will find more **HELPFUL TIPS** from DR PHIL on the next page.

AILERON PUSHROD

Here's a neat dual take-off for the aileron pushrod. Grind the pin from a metal clevis—punch the pinout if necessary, to create a hole in both ears of the clevis. Now mount the clevis to the servo arm utilizing the pin of the second superimposed clevis. This idea also lends itself to a miniature removable clevis pin made from a nail and held captive with a cotter pin, should the pin in the original clevis prove too short. Bill Andes, Lawrence, Kansas.



WEIGHTING DOWN A WING



An inexpensive method of weighting down a wing, fuselage or most anything for that matter, during the building process, is to get some quart, half-gallon, and gallon size plastic empty milk containers. By pouring water in or out you can vary the weight up to 2, 4 1/2 or 8 1/2 pounds respectively. Be sure to cap and wipe dry the outside of the container to prevent water from getting onto the wood surface. This idea was submitted by Roland Chow of Monterey Park, California.



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HELPFUL TIPS FROM DR PHIL

The best way to set up your model for maximum performance and response to control inputs is to have all your control surfaces centered at their neutral positions without the use of trim or subtrim adjustments using your programmable transmitter. I like to make mechanical adjustments when you are building or setting up a model. I use a piece of scrap balsa and a couple of clothespins to fix the surfaces to neutral. Now you can make up and install your linkages without guessing at the center position. Do this along with the servo powered with the receiver so it is also in neutral position.

A fellow flyer lost his plane recently because the tape on his elevator servo came loose during flight. When I use double-side foam servo tape (I use 3M attachment tape), I always clean the servo case with some rubbing alcohol and then apply some clear tape to the case before applying the foam tape. I also make sure the surface to which I stick the servo is clean for a proper bond. If your servo case is dirty and has leftover foam tape adhesive in it, be sure to clean it before reinstalling the servo.

Save the environment and some money

If you saw one of your fellow flyers dumping a half gallon of fuel on the ground in the pits you might think it was environmentally unsound and just plain stupid with the cost of fuel nowadays. The truth is you have probably done this yourself over the last year. Every time you fuel your plane you loose about 1/2 ounce of fuel on the ground, maybe more if you are slow at the pump switch. One half ounce does not seem like very much, but if you fly 3 times a week for six months you could easily dump over a half gallon on the ground. This could cost you up to six dollars and that is just you. With twenty members doing the same thing that's comes to 10 gallons. That is a lot of fuel, no wonder the grass in the pits is dead. There is an easy way to save yourself some money and maybe help keep the pollution down a little. Best of all it will only cost about a dollar or maybe nothing at all. All you need is an empty 10oz. plastic bottle that is clear and a pressure fitting from a muffler. Simply drill a hole for the fitting near one edge of the cap and another 1/16 inch hole on the other side of the cap for a vent. Screw the fitting into the cap and use a small nut to hold it on. Clean the bottle well and make sure none of the plastic shavings from the drill is in the bottle. To use the bottle remove the pressure hose from your muffler as usual. Then attach it to the fitting on the bottle. Fill you tank until you see fuel entering the bottle. Stop the pump and replace the hose on your muffler. The bottle will hold more then enough to last all day without out emptying. When you are done flying remove the fuel from your plane as usual and then simply attach the pump hose to the bottle, tip the top of the bottle down with the vent hole up and pump the recovered fuel back into your fuel bottle as if you were draining the fuel tank in your plane. Most any clear fuel proof plastic or glass bottle with a tight cap will work fine, however a plastic one will not break and is light enough that if it falls over during fueling it will not pull the hose off. If your pressure hose to the muffler is too short to reach the bottle you can use a short piece of hose and a length of brass tubing left over from the last fuel tank you put together to make an extension. The only down side is that it is one more thing to drag to the field, but the bottle weighs next to nothing so it is not a big problem. You might want to attach a clip or loop of string to the bottle so it can hang off your flight box. For safety mark the bottle with a poison and flammable label. A child might mistake it for a soft drink so keep it out of a child's reach.

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PRIMARY TRAINING: Propeller Safety

I know articles like this seem to be very obvious and simplistic, we all say "I know all about safety I'm no Dummy!" Well I am one Dummy who needs reminding, so even though I have posted this article previously in SMOKE SIGNALS I feel it needs to surface every once in a while to help me and all of you remember that SAFETY COMES FIRST!!!



PRIMARY TRAINING

by Scott Stoops scotts@flyrc.com

Safety tips for everyone

As the newest member of the editorial staff of Fly RC magazine, I think I should introduce myself. Many of you will recognize my name from my regular reviews and how-to articles. They will continue, and I have also taken the helm of what I consider to be a very important section of this magazine—the monthly “Primary Training” column. My aviation background is one of deep involvement in all aspects of RC and full-size flying. As a lifelong RC modeler, airline captain and full-size aerobatics competitor, I find that training with a focus on continual improvement is one of the most important tools we can use to make this great hobby what it’s supposed to be—fun!

With that, I have to ask one question: which kind of pilot and modeler do you want to be? You’d be surprised at the responses that this seemingly simple question elicits. The most common answers include superlatives like “good” and “great.” Others answer that question with a very specific goal: they want to be able to hover a model or fly low passes with their warbird. My own answer is that I want to be a safe and competent modeler. To some of you, that might seem so obvious that it goes without saying. Unfortunately, safety can easily be forgotten in the excitement of the moment.



LET’S BE SAFE FIRST

The traditional safety structure of AMA clubs has done a lot to reinforce good safety habits over the years. Unfortunately, with the advances made in electric flight and its often less organized and more isolated nature, we have many up-and-coming pilots who have little, if any, way to learn good safety practices. From time to time I will offer suggestions that will help keep you, your model and, most important, any spectators stay as safe as you can be. This is a great hobby for sharing with younger family members, and it is incumbent upon us to teach younger modelers how to be safe.

Your model airplane’s most dangerous part is its propeller. Even the smaller “park flyer” propellers can cause significant damage, as shown here. In the full-size aviation world, we assume that the propeller can turn at any moment. This is a great approach to dealing with your model airplane as well.

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SIMPLE TIPS TO KEEP YOU SAFE

- Treat every propeller as if it may turn at any moment.
- Treat every propeller as if it will fail structurally at any moment. Keep all body parts clear of the propeller arc at all times.
- Remove the propeller from the motor whenever you are doing ESC/motor setup, testing and programming.
- Properly secure your electric aircraft before you attach any power source; remember, it may start at any moment.
- Be sure to properly secure your model with a tie-down or have a helper hold it before you start its engine or motor.
- Between hand-props, give glow and gas airplanes a firm tug to ensure that the tie-down is holding them securely. One of my friends lost a few fingers when his model jumped forwards after starting with a loose tie-down rope.
- When tuning your engine, you must stay clear of the propeller arc. Preferably, tune the needles with the engine shut down.
- If it's available on your transmitter, use a throttle lock or a throttle kill function to avoid an unplanned application of throttle until you're ready to fly. I use this function religiously— but I never trust that it is activated! Check!
- Always tell spectators not to touch or move your model's propeller.
- Never, ever reuse a damaged propeller. The cost of an injury far outweighs the cost of a new propeller, even if it takes a quick drive to the hobby shop.
- Keep a first aid kit in your work shop and in your car.

CONCLUSION

I'm sure you're wondering about the story behind the photo shown here. Yes, that is my hand; and yes, I failed to heed my own recommended safety practices; in fact, I broke several rules. I'll set the stage for my accident: with a new 3D park flyer resting on the tailgate of my truck, I was preparing for its first flight. My first mistake was to plug the model in when it wasn't secured. After a quick control check, I realized that the rudder channel was backwards, so I entered my radio's programming mode with the model still powered up and still unsecured—mistakes 2 and 3. While intending to reverse the rudder channel, I inadvertently reversed the throttle channel, and the model leapt forward and attacked my hand. My initial reaction was one of shock. How could that little propeller have done that much damage?



Racing home with my hand wrapped tightly in a towel (no, I didn't have a first aid kit in the truck), I couldn't help but think of the avoidable consequences of my actions. What if my sons or my daughter had been with me standing next to the model? What if I had been flying a higher-powered model? The model in question was a 150W park flyer turning a 9-inch slowflyer propeller. Imagine the damage a 1500W 16-inch propeller would have done. The best case might have been that I lost a finger or two; in the worst case, I'd have lost the use of my hand.

Fortunately, my accident allowed me the opportunity and the clarity required to refocus my personal routine and make my flying as safe as it can be. Following the simple rules given here and focusing on safely when you operate your model will do wonders to keep you and your family and friends safe while you have fun flying or teaching them to fly.

Don't hesitate to contact me with your questions or comments at scotts@flyrc.com. Let's keep it safe out there, and till next time, remember that learning is fun!

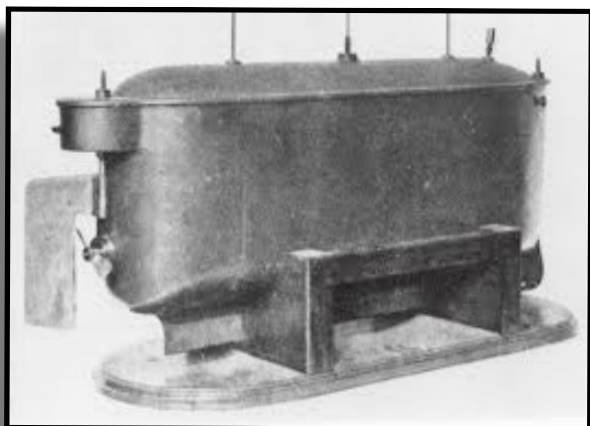
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As promised in last months SMOKE SIGNALS here is the conclusion of "Tesla The Father of RC "

TESLA'S MIRACLE BOAT

May 1, 1888

Patent #382,280 was granted to Nikola Tesla for the "electrical transmission of power".



The Robot Boat of Nikola Tesla Comes to Life

In 1898, six years before the Wright brothers flew, Nikola Tesla, a Serbian-born American immigrant, designed and built a pair of radio controlled, robot boats. He applied for and was granted patent number 613,809 "Method of and Apparatus for Controlling Mechanism of Moving Vessels or Vehicles" by the US Patent Office for these boats.

The craft were constructed of iron, powered by a electric battery of his own design, and equipped with a radio-mechanical receiver that accepted commands from a wireless transmitter. The boats were equipped with a large whip antenna, a modular space that could carry a charge, diving rudders, a prop and electric running lights that could

all be remotely controlled. Tesla demonstrated the vessels to a shocked crowd in an indoor pool at Madison Square Garden in New York City. The crowd was amazed how Tesla, always a showman, maneuvered his six-foot-long boat in patterns through the water, and then stopped and started the craft. He even had the forethought to equip his boats with a crude logic gate which prevented them from being taken over by another transmitter other than his own. The craft alarmed those in the crowd who saw it and who claimed it to be everything from magic and telepathy to being piloted by a trained monkey hidden inside.

"...there is something within me that might be an illusion as it is often the case with young enthusiastic people, but if I would be fortunate to achieve some of my ideals, it would be on the behalf of the whole of humanity. If those hopes would become fulfilled, the most exiting thought would be that it is a deed of a Serb. Long live Serbdom!"
Nikola Tesla, addressing thousands of Belgrade residents who came

Tesla is now credited with inventing modern radio as well; since the Supreme Court overturned [Guglielmo Marconi's](#) patent in 1943 in favor of Nikola Tesla's earlier patents. When an engineer (Otis Pond) once said to Tesla, "Looks as if Marconi got the jump on you" regarding Marconi's radio system, Tesla replied, "Marconi is a good fellow. Let him continue. He is using seventeen of my patents."



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TESLA'S MIRACLE BOAT



The same 110 years old electronic robot boat Tesla called telautomat has now been rebuilt by the Nikola Tesla Museum in Belgrade. The boat can sail for up to 12 hours and the museums worldwide are looking to buy its replica.

Due to the large interest of both domestic and international public, Nikola Tesla Museum is getting ready to show Tesla's magic and mysterious remotely-controlled robot boat once again on December 5, on the Museum Day. This miracle boat was exhibited during the past summer for the first time, with more than 4,000 people seeing it on Belgrade's Museum Night.

Tesla Indeed Invented the 21st Century

The builder of Tesla's remotely-guided boat designed in 1898, is Radomir Putnik, an engineer from the town near Belgrade, Zemun.

- This is Tesla's original boat, constructed according to his drafts and exclusively out of the materials which were available 110 years ago. It is composed of some 300 parts we created manually and were putting them together for the full nine months. In order to make these parts, we also had to construct the special tools. And we used cables with leather insulation as conductors, just like the ones Tesla had. The boat is 1.10 meters long and 38 centimeters high. It can even sail in the Ada Ciganlija Lake [in Belgrade], and throughout the day, – Putnik, the chief engineer on the project told Vecernje Novosti.

In order to construct the boat, the team of experts first needed to decipher and figure out Tesla's notes. This unique genius had a habit of recording only the rough sketches of his ideas, while keeping the essence of the each new invention in the head. In the same way the idea of a remotely-controlled robot ship was roughly sketched as an idea to have the transmitter which sends a signal via the receiver on the boat, and under the condition that both signals get through, the engine would turn on and the propeller would start rotating.

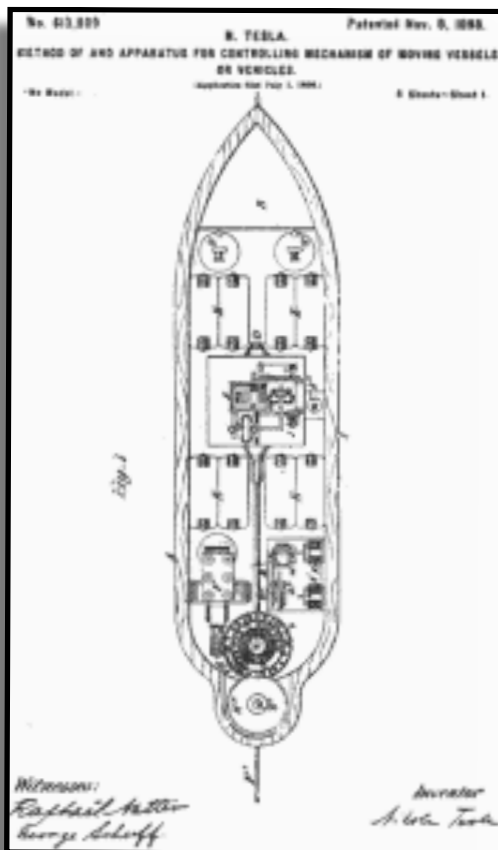
- Tesla first invented wireless transmission of the energy and signals, and then the command for the ship. Namely, he came up with the electronic "I" logic circuit, which works in two frequencies. This circuit will not run the motor unless it recognizes it in the other frequency, – Putnik explains.

Tesla's "I" circuit is today built in all the computers as a miniature chip, which contains the system of the transfer of electronic impulses, which is just one of the ways Nikola Tesla had stepped into the 21st century at the end of the 19th.



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TESLA'S MIRACLE BOAT



“Such a Machine Should Have Organs...”

A six-member team had dealt with the problem of deciphering the enigma, including academician Aleksandar Marinčić, engineers Jasmina Zečević, Nenad Spasić, Zoran Ristić, Radomir Putnik, and the mechanic Bane Juranović.

Tesla's diagram for the robot boat

The work included scientific research, experiments and the use of modern and special type of equipment.

The model of Tesla boat was realized based on the description of his patent number 613,809, from 1898, titled “Method of and Apparatus for Controlling Mechanism of Moving Vessels or Vehicles”. The second part of the invention was patented under the number 725,605 and the title “The Signaling System”.

Ship constructors have made the transmitter and the receiver of the signal, a special ball with the electric motor, which gets turned on when the signal enters the ship command. Keel and hull of the ship are made of the clear clirite, and rotor and stator are made of lead and metal plates, and the copper wire. They fill the battery which powers the motor, which turns the propeller, enabling the ship to sail for 12 hours at least.

With this invention Tesla had practically founded the automatics. He was saying: “Such a machine should have the driving force, the organs for the movement, organs of control and one or more of the sensory

organs, which would be set in motion by the external stimuli,” – director of the Tesla Museum Vladimir Jelenković said.

According to Vecernje Novosti, the remotely-controlled ship is even today generating great interest among the scientists, academies and museums around the world.

- The preview of Tesla ship had caused great interest of the scientific audience, and we were invited by the Conference of European Museums to present this original project to the rest of Europe. We have also been asked to display the project on the site of the Association of the Museums of Central Europe. The interest was expressed for our museum to produce several replicas and sell them, or trade them for some other scientific works from the museums abroad, – director Jelenković said.

Pentagon Swipes Tesla's Patent

Academic Aleksandar Marinčić said that Tesla's perfected system of the wireless transfer of commands was presented in the United States at the end of the 19th century, but it wasn't met with the enthusiasm on behalf of American Army and Navy, to which it was offered for commercialization.

Unofficially, however, it is well known that Pentagon secretly adopted Tesla's project for the remotely controlled ship and realized it, but only after the Second World War. Based on this invention of Nikola Tesla, American navy developed several projects of torpedoes and remote control of ship war projectiles in the 20th century.