

The 4<sup>th</sup> Annual R/C Combat Championships were held last month in Amarillo, Texas. Fourteen people had a big time at the event and as is usually the case, are looking forward to next years NATS.

NAMBA requested that we start a strictly warship club, instead of existing as the step-child to the NAMBA Speed Boaters,...so we did! Its first meeting was held immediately after the Championships banquet.

An executive board was formed which consists of President- Martin Schneider, Vice-President- Jeff Poindexter, Treasurer-Secretary-James West and Historian- Stan Watkins. Rule change recommendations were then voted on and everyone agreed that the Hoboy is improving in every way. The name of our club is .... "The R/C Warship Combat Club". I can't help out feel really optimistic about our future, we really worked hard to get this hobby off the ground and it's paying off.

### OBSERVATIONS OF THE FOUNDING\_FATHER

July 12-16,1982 was the biggest and the best R/C Warship battling ever. WOW! It was a lot of fun. At one point there were nine ships in the water at once battling. That was a new record.

Night battle was once again Fun, but cut short by axis fear of death from nearby lightning strikes.

The Tirpitz and Wichita exhibited very good reliability with the Astoria, Graf Spee, and Alabama being not far behind.

Reliability of the Alabama was so good, she was able to keep going even after four sinks!

The Allies were slaughtered. Why? Mainly due to the excellence of gunnery of the Tirpitz. She probably was directly responsible for the sinking of 10 Allied ships.

In the process her Captain Ober Super Grand Admiral Martin Schneider accumulated over 10,000 points. This is a record that should stand for many years. A rule change allowing Heavy Cruisers (and light cruisers over 9000 tons) to have 3 offensive/defensive units should mean fewer sinks in the future because cruisers will now typically have a pump.

The Allies have a big job ahead of them to try to dethrone the Axis' Schneider dynasty. Here's your chance to quit while you're ahead Martin. No, hang around, I've got a lot of revenge to take. I hope I

live long enough.

There was one bright spot at the Championships

for the Allies. Surprise. Surprise.

With great quantities of divine intervention ( I think God felt sorry for us) we decisively won the Convoy escort/Convoy raiding activities. After a disastrous start we actually won something.

of Scale- Dan Dees) and USS New Orleans (Billy Gainer) attacking the German Convy Freighter. She was ably defended by the DKM Tirpitz (Martin Schneider) and DKM Lutzow (with substitute driver D.W. Fluegel)-(Boyd Poot's God son).

After a hot exchange of BB's (the Tirpitz carries 1000 per sortie) both US Cruisers upended and sank. The Freighter had some hits on her but she survived.

Next, USS Astoria (Terry Darby) and USS Wichita (Yours Truly) were to take on the same two German watch dogs, while trying to inflict injury on the Freighter.

Then; the Earth shook, Thunder rolled, the German

radio receivers received "skip" from Australia and two minutes and 55 seconds after the sortie began the German Preighter (ex-Graf Spee) went to the bottom. When the smoke had cleared and the bubbles subsided, the ghostly forms of two heavy cruisers emerged, still floating and under full control.

The crowd and wives and children welcomed the victorious US Cruisers back from their watery grave.

This joyous welcome was cut short by the sobering announcement that Astoria and Wichita had to try to cheat death again and escort the Allied convoy freighter with the Lutzow and Tirpitz assigned as convoy raiders.

Oh well, Astoria and Wichita had had a bursting spark of glory and now it was time to pay the price.

And so, reluctantly, Astoria and Wichita bid the

safety of shore a fond farewell.

Trying to distract the German ships from their objective was tough. Wichita had soon emptied her magazines and was still trying to distract Lutzow when her radio glitched sending her speed control off the fast forward end. She went dead in the water. Now it was up to Lonely Astoria. She was determined to place herself between the enemy ships and the freighter. The oversized propellers of the freighter were rapidly draining her batteries and her speed was falling from slow to dead slow. Her captain Don Jackson was doing his best to present the Germans with a poor target, but he needed allied help. He also needed other help. Astoria heroically blocked several attacks and in the process was rammed four times. The Lutzow was finally out of ammunition. But the Tirpitz still had hundreds of BBs left. The Astoria was visibly lower in the water.

Wichita's Captain wondered why Captain Schneider didn't take the easy kill on dead Wichita. Astoria was finished. Her persistance had cost her life. Now why didn't Tirpitz close in for the kill? She wasn't moving. As the Allied Freighter moved out of danger, Tirpitz's captain announced that his ship (the mighty unsinkable Tirpitz) was dead in the water like Wichita. The Allied Convoy Freighter had been successfully escorted through Axis controlled waters.

The lion's share of the credit for this success. has to go to the Astoria. On her recovery it was discovered that she had been sunk by an axis ram.

The 500 points added to the Allies score helped

swell the margin of Allied victory.

The Final score, Allies 3002 Axis 1606. And an exciting aspect of R/C Warship Combat was born. I and Wichita are proud to have served in the Raiding group that sank the first ever convoy ship.

The star of R/C Warship combat is glowing noticeably Brighter. The future looks promising.

Let's Battle!

### CONSUMER REPORT

Ster Watkins

When purchasing freon, for the first time expect to pay about \$2.30 per pound, or \$35.00 for a 15 pound container. The price of freon varies quite a bit e.g.-Dallas-\$35.00 to \$55.00. Many dealers only sell freon 22 to contractors, it's often not a retail product, so ask if they sell retail when you ask about the price and quantity.

When you purchase your freon you will need a valve which will cost about \$5.00 and I recommend a "metal screw on cap with washer" be purchased to prevent your

freon from leaking out while it's in storage.

Your freon investment may seem high, but if handled properly, and not wasted, it will last for several years By the way, at the NATS, freon was sold for 50¢ per fill up. I used 13 fill ups or \$6.50 for a week long battle with four guns. Fluegel

### RECOMMENDED READING

THE BATTLE FOR GUADACANAL by SAMUEL B. GRIFFITH II - BRIGADIER GENERAL, USMC (RET)

This book gives a good account of how the Marines. Army, Navy, and Air Force fought together for the control of an obscure island named Guadalcanal. The struggle lasted for six months. During this time, six naval battles were fought and sixty-five combat ships

The Japanese Navy was determined to destroy the American Forces on Guadalcanal, and in particular Henderson Field which was seized by American Marines on

August 7, 1942

LIEUTENANT

COMMANDER

CAPTAIN:

COMMODORE

ADMIRAL

Rear ADMIRAL VICE ADMIRAL

PLEET ADMIRAL

The book will let you relive the "night battles" when American 8 inch guns attempt to zero in on Japanese ships. In return, Japanese torpedoes leap from their tubes to flounder: PENSACOLA, MINNEAPOLIS, and NEW ORLEANS. Ironically Bottom Bay is appropriately

All of a sudden R/C combat night battles take on a new meaning. RECOMMENDED VIEWING



No glamour here! Such the real story of the German seaman on board a German U-Boat during World War II. After seeing this movie you may want to entertain the idea of (out-of-scale) submarines big enough to "MARK" \*BEARING\*FIRE 1\*FIRE 2\*DOWN PERISCOPE\*DIVE\*DIVE\*DIVE.

#### WHAT'S NEW IN R/C COMBAT? NAVAL RANK ???

I am taking the liberty of authorizing Naval Rank for R/C Combat. Your ideas on the subject will be considered and I will change rank requirements if I like your idea. I am most honorably sorry that I cannot be more democratic about this, but that's how the Japanese fortune cookie crumples. The following applies only to U.S. Naval R/C Combat modelers. Foreign Navies will be slightly different. ENSIGN

Anyone who expresses an interest in R/C Combat should be addressed accordingly. Having thus earned the rank of Ensign the desire for a promotion will hopefully prevail.

LT. JUNIOR GRADE \* This rank will be awarded to those who are actively building an R/C

Combat ship.

Successfully launching a completed ship that is fully radio controlled & has a least one (1) MK-GCH operated BB gun, scale # of motors, pro-

LT. COMMANDER

motes Lt. JG to Lt.
A minimum of 25 hours on the water with a fully operatable ship will automatically qualify a Lieutenant for promotion to the rank of Lt. Commander. (this is to encourage "stick time" and familiarization with a new ship)

Any Lieutenant or Lt. Commander who operates a R/C Combat ship and receives battle damage will assume

the rank of Commander.

Any Commander who participates in a Regional Combat Engagement will receive the rank of Captain. Five (5) or more ships must be operational during the engagement.

Participating in the Nationals will promote any officier to Commodore.

Ranks higher than Commodore will be handled at the Nationals by the "Father of R/C Combat" or by Committee, or by vote, but in any case should be bestowed sparingly and in the highest tradition befitting those who fall into the ranks of the elite

COMMANDER D. OSWALD

# How to .....Build the M.S.C. MARK II

The following excerpt is from a letter by Mr. Purvis McNutt; "She was always so unpredictable. Sometimes she was faster than I could handle, sometimes she was so slow I couldn't get anywhere with her. At times she would just sit and sulk no matter what I tried. There were even times that I would command her to come to me and she would back away faster than a theif at a policemans convention. I gave everything, money was no object, but nothing helped. Finally, one day, she went completely out of control. It was a very heart rendering scene, I felt so helpless.

Since that day we have not gone out at all. She just sits there wasting away. What can I do to save

her? Please help."

Do you know of a tragedy like this one? Maybe you have been through something similar. If so, take heart, there is now hope! All your problems can be solved by Old Doc Milhollands latest creation, the M.S.C. Mark I. The addition of an M.S.C. (Milholland Speed Control) Mark-I to your loved ones propulsion system will have her back in peak form in no time. Best of all she will be completely under YOUR control, slow when you feel mellow, fast when the need arises.

How do I get an M.S.C. Mark-I you ask? You

build it, with your own two little patty paws (a sol-

dering iron and screwdriver helps).

Now down to serious discussion.

Up to this point in time(June '82) the most popular spped control among R/C combaters has been based on the Radio Shack 4 position slide switch. This was described in David Oswalds article on the USS San Francisco in the July '82 issue of Scale Ship Modeler. The 4 position switch seems to be a reliable speed control, but it is rather limited in its possibilities. As the name implies, it allows only 4 possible positions, 2 speeds forward, neutral, reverse. Its major advantages is that it is cheap and easy to build.

A few R/C combaters have broken down and paid cold hard cash for an electronic speed control. offer an infinite speed curve with very efficient power consumption. The major disadvantages of electronic controls are their cost (Starting at \$35 up to roughly half your W-2) and their reliability in an application where they are likely to be submerged occasionally (als Putaba servos).

The Milholland Speed Control (this may sound pretentious but it's my only claim to fame) is based on a resistor network that gives a finite number of forward speeds. You can build as many or as few speeds as you wish. My model has eight. This is slightly excessive and unnecessary for combat. You may want to limit yours to 6 or h forward speeds.

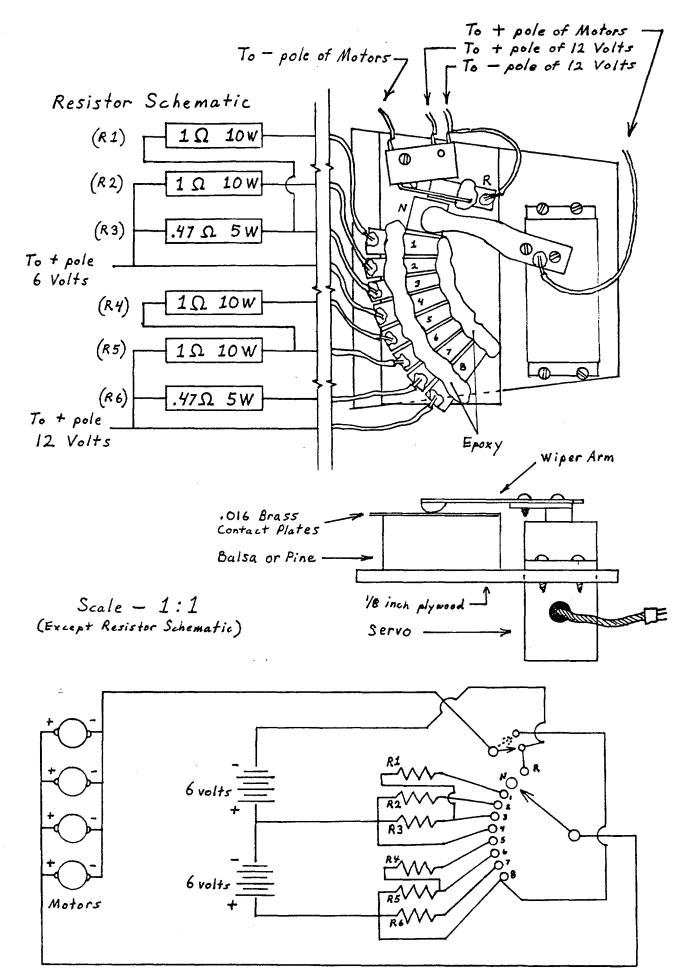
The plans show provision for one speed reverse. This is a full 12 volts of reversed polarity to the motors. Full speed reverse is generally all that is necessary as the only purpose for reverse in combat is

to avoid collision.

Electronics purists will immediately realize that a resistor control is not as efficient in power consumption as an electronic control. They are correct but I believe that this system is much more cost effective for people on a budget. You can buy a cheap electonic control for around \$35 then spend another \$20 for 2 batteries(total \$55), or you can build an M.S.C. for about \$6, then spend \$20 for batteries (total \$26). The \$29 difference can buy a lot of BB's or even a spare set of batteries with change left. As far as efficiency goes, I have no problems. My USS Alabama has two 6 volt 6 amp hour (Dorcy 6N6-3B) batteries for motive power. puration is 90 to 100 minutes minimum for a full charge. Since most sorties will last only 15 or 30 minutes, I see no problem in going a full battle (3 sorties) on my one set of batteries. Only Experiment will tell about your particular motor/battery combination.

As for reliablility, my ship has approximately 25 hours cruising time with this control and NO malfunctions of any kind related to motor power.

BUILDING There have been several Axis captains say they were interested in building this control, so I will try to make these directions easy enough for any simpleton to follow.



cont. First, acquire all required materials. The wiper arm should be carried by any hobby shop which caters to electric R/C car enthusiasts. If not, make one from brass strip. All other materials should be readily available.

Cut the plywood mount to fit your chosen location (keep in mind the location of your receiver and the length of servo leads). Cut servo hole and mount the Screw wiper arm to servo arm. Position balsa servo. or pine block as shown, make sure wiper arm contacts block throughout its entire arc of travel and that there is room on one end of block to mount the microswitch.

Hold a pencil against the end of wiper arm and run servo through complete arc(with trim centered) marking the arms travel. Cut a 3/4 inch length from the .016 brass strip and Super Jet to the clockwise end of the arc so that wiper will make full contact when at that end of its travel. Cut a piece of scrap brass sheet or strip to cover at least 3/8 inch of arc. Glue it across arc adjacent to but not touching the 1/4 inch strip. This is the neutral position.

Next measure the remaining arc. Then decide how many forward speeds you will want. If you decide that 8 speeds is OK, mark the remaining arc into 8 equal sections. Cut the brass strip into eight 7/8 inch lenghts. Trim all pieces to a wedge shape that will fit between each pair of marks without touching the adjacent plate. Super Jet all eight plates into place. For insurance, run a bead epoxy over the inner ends of the plates and across the plates outside the wipers reach but leaving ends for solder connections.

Mount the micro switch as shown using only one screw. This will allow the switch to be pivoted for adjustment. You may have to notch the end of the switch lever for clearance over the reverse plate and epoxy. Putting s shim under the switch body also works. Put a small drop of epoxy or electrical tape on the end of the switch lever where it con tacts the wiper for insulation. Adjust the switch on pivot/hold screw so that switch "clicks" just Before wiper contacts the reverse plate.

Decide where the resistor network will be located. On my Alabama, the control is between ribs 3 and h with the network underneath on either side or tne keel. Notice that the resistor network is actually two separate networks. The first halr (R1,2,3) is connected to the first 4 contact plates starting at neutral and going counter-clockwise. Lay out the contorl board and R1, R2, & R3 in roughly the same relative positions they will be when installed.

Using appropriate lengths of 22 ga. stranded hookup wire, solder one end of a wire to plate 1 and the other end to one lead of Rl. Make your solder connections as close to the resistor as possible and trim the excess lead. Repeat this procedure, plate 2 to R2 and plate 3 to R3.

Per the illustration, connect the loose lead of R1 to R3 on the same lead that is tied to plate 3. Connect with wire or tie together the two loose leads of R2 and R3. Solder two wires to this connection, one goes to plate 4, one goes to the + pole of 6 volts This completes the wiring of speeds 1 thru 4.

Repeat this procedure with the last 4 speeds, R4 to plate 5, R5 to plate 6, R6 to plate 7, and the - pole of 12 volts to plate 8. Note that the loose lead of Rh is tied to the plate of R5.

The remaining connections are made just as shown in the illustration, The common lead of the micro switch is wired to the negative pole of the motors. The closed (center) lead of the micro switch is tied to the positive pole of 12 volts, this connection can be a short piece of wire run over to the battery side of R5 or R6 or to plate 8. The open lead of the micro switch is tied to the positive pole of the motors. If you are building an Axis ship I recommend that you dispense with batteries and solder all wires to a convenient rock.

One final note: This article gives details for a system using 12 volt motors and 12 volts of power. If you are using a 6 volt/power combination you may have to do some experimenting to determine the resistor values necessary for the lower speeds.

LIST OF MATERIALS

- Wiper arm-Associated Electronics #3712
- 2.

Submini Lever Switch-Radio Shack #275-016 Brass Strip-1/4 x 12 x .016 inch thick

- Resistor-.47 ohm, 5 watt, Radio Shack 271-130 4. 2 each
- Resistor-1 ohm, 10 watt, Radio Shack 271-131 u each
- 22 ga. stranded hookup wire, Radio Shack 278-6. 1307
- 1 piece Balsa or Pine, 1 1/4 x 9/16 x 3 inches à. 1 piece 1/8 or 1/4 inch plywood, cut to fit between any two unused ribs(minimum dimensions 2 1/4 x 3 inches)

1 servo of your choice (I recommend Kraft, Royal, Ace or Hobby Lobby if you are Allied, Futaba if you are a Kraut)

10. 5 Minute Epoxy (1/2 inch bolts if your name is Stan Watkins)

This concludes my article on contruction of the M.S.C. Mark-I. If you have any questions concerning construction or operation of this fabulous device please contact me at the following address. Rt. 9, Box 492 Happy Sailing,

65804 Springfield, Mo. Steven O. Milioliand Phone 417-869-0025

P.S. (August 1, 1982) After an estimated 10 more hours of running time and  $\mu$  trips to the bottom of Gene Howe Lake, the USS Alabama still boasts a propulsion system with a flawless record (armament and pumps need a little work however).

EDITORIAL

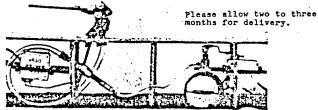
Several courts have wrestled with the definition of "pornography". This year at the Championships I realized what my afinition is. It seemed my bee bee magazines wouldn't feed right, the bee bees would get stuck in kinks rendering the gun ineffec-That's when I realized that kinky magazines tive. are obscene. Fluegel

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IJN Nachi class ... Sept. 18 USS Baltimore class.Mid. 18 HMS Kent class.....Mid. 18 #\$12.50 plus \$2.50 parce

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The above form was used at this years ChampionShips. It is THE form to use when reporting your battes to the Club. In order to receive credit for your points, Xerox this form, fill it in and send it to "James West, 900 Charlotte Apt # 22F, Amarillo, Texas 79107". James will in turn keep us abreast of the Standings. Should there be any questions concerning this form, tell James. I know it's not super clear to me, and I'm an Axies!

### A BAPTISM BY FIRE

The Experiences of a Rookie at the R/C Combat Nationals

About two years ago I made the grave error of picking up a copy of <a href="Scale Ship Modeler">Scale Ship Modeler</a> which contained an article entitled "RC Combat - now a reality". I had found a hobby (or disease?).

I could think of several ships I would like to build but, having never built an R/C model before, I decided to buy the MWP plan set and build it exactly as recommended by those lunatics in Amarillo. Later, with experience, maybe I could try something different.

The choice of plans was easy - it would be a New Orleans-class cruiser (since that was the only one they had). I also ordered guns and motors at the same time.

It took a long time to build my ship. I had hoped to attend the 1981 Nationals but other interests kept me from working on my ship and there was no hope of completing it in time. (Yes, R/C combatants do occasionally have other interests.) Since there were no fellow lunatics to do battle here in the Pacific Northwest, I took my time, finishing U.S.S. San Francisco in the spring of 1982.

Soon it was time for the 1982 Nationals and still, for lack of an enemy, I had not fired a shot in anger. In fact, I had some trouble firing shots at all. The R/C minigun is tricky to learn to use. I could see that there were a number of things I would only understand fully by going to Amarillo.

So I flew to Amarillo the day before the Nationals, rented a car and drove to Stan Watkin's house. He and Fluegel were in his shop preparing their ships to go to the lake.

Upon arrival at the lake I immediately noticed, with a "sinking" feeling, that my ship moved like a freighter amongst a flotilla of destroyers. Now, this would be fine if those other ships were my escorts, but some of those other ships were going to be shooting at me the next day.

That's when I learned that everyone else used twelve volts. But my plan set clearly showed a six-volt battery and I used the motors Stan sent me. Fine, said Stan, but that was two years ago. Lesson no. 1 - keep abreast of changing technology.

Next day - day one of the 1982 Nationals - I participated in one sortie of fleet battle. Being relatively inexperienced as a helmsman and also aware of my slow speed I gingerly skirted the edge of the battle, desperately trying not to ram anyone and occasionally popping off an opportune shot until, with great relief, I called five minutes when my guns appeared to no longer respond. I managed to dodge Kraut fire long enough to make it back to shore with minor damage.

Since my magazines were still about half full I began to suspect that I had other problems besides speed. It didn't take long to discover that, in order for the gun to fire reliably, the valve on the freon tank needed to open a bit further. This meant I had to eliminate one gun, since I needed the full travel of one servo to fire one gun. In order to fire two guns with one servo, it requires a more powerful servo - lesson no. 2.

The rest of that day was spent watching fleet combat after I ran around purchasing new batteries which would fit in my ship. That night was typical of most of the rest of the week. Back to Jeff Poindexter's shop ("drydock" for most of us out-of-towners) after grabbing a quick bite to eat, then work, work till after midnight in an attempt to be battle-ready the next morning (reminiscent of Yorktown before Midway). Lesson no. 3 - a trip to the R/C Combat Nationals is not a vacation.

Next day back at Gene Howe Lake I discovered that, even though I successfully crammed two six-volt batteries into my ship where one had been before, now I had other problems. The increased voltage set up too much radio interference. Back to drydock for a major refit. Lesson no. 4 - keep servos and receiver as far from motors as possible.

I was able to accomplish this engineering feat in time to get back to the lake and sink myself that day. New Orleans-class cruisers have a very low freeboard from midships aft and require a very tightly sealed afterdeck to be seaworthy. Mine wasn't. Lesson no. 5 - don't go full throttle in reverse unless your deck is sealed like a submarine or your ship might become one. Mine did.

Since Wednesday was night combat there would be no daytime battling. That meant that Tuesday night we could relax - we had all next day to get ready again.

There was very little that I needed to do. Everything worked fine in the shop so Wednesday I helped other people wire up searchlights for night battle.

About 10:30 Wednesday night we were ready to fight. I was really looking forward to this battle because up till then most of my time had been spent modifying my ship to make it work. Now my after deck was firmly screwed down and everything appeared to be in fighting trim. I wanted Axis blood. I put my ship in the water and sallied forth. Lesson no. 6 - if your ship works fine in the shop with your transmitter on the bench right next to it, step back ten feet and see if you still have control. You might not. I didn't. Which brings us to lesson no. 7 - if your ship sinks or your equipment gets wet for any reason, take it all apart and dry it out thoroughly. A small amount of moisture in my receiver knocked me out of night combat before I even began.

The most memorable moment of night combat was watching Terry Darby's U.S.S. Astoria sink in a blaze of glory - literally. With two searchlights forward, two astern, two aport, and two to starboard, she went down with them all on and sat on the bottom in an eerie glow. Good thing, too. No telling how long it would have taken to find her otherwise.

Next day, aforementioned moisture in receiver discovered and removed, I sortied against Martin Schneider's DKM Lutzow. The good part about this is that Martin left his awesome Tirpitz at home that day. The bad part is that he proved that it isn't Tirpitz that makes him a successful R/C combatant. By now I was becoming quite adept at dismantling servos and drying them out. I was also beginning to realize that my only chance to score many points would be if someone ran aground or lost control while we were battling. Fat chance.

Friday I sortied against Fluegel's DKM Bismarck. I felt a little more confident since he had been having problems all week with her. This time I managed not to sink and escaped with a mere two or three hundred points worth of damage (Bismarck was unscathed). The reason I stayed afloat was simple - I was faster. I outran him. I could have used a stern gun.

Up to this time I had only participated in one sortic per day (if my five minutes out of control during night combat counts as a sortic). This is due in large part to Murphy's Law. In R/C combat if anything at all can go wrong or malfunction, it will. Count on it.

Friday afternoon a new event was introduced, convoy battle, replacing target gunnery. In this event a couple of ships escort an unarmed vessel (convoy ship) while enemy ships (convoy raiders) try to sink it or score points on it. All points are doubled on the convoy vessel.

I was "elected" to be a raider, along with Billy Gainer

I was "elected" to be a raider, along with Billy Gainer and his U.S.S. New Orleans, in the first convoy battle. James West's Graf Spee was the Axis convoy vessel.

As soon as we were in the water Billy discovered his freon tanks were empty. Apparently he had only enough gas left to "tweak" his guns on the shore. As soon as those Krauts discovered this they pounced on him. Meanwhile, I was doing pretty well, at least compared to my previous sorties. I got some hits and soon ran out of ammo and headed for safer water with Tirpitz hot on my tail. I knew I was okay because I had a slight speed advantage and there were less than two minutes to go (convoy battles last 10 minutes). Then the unexpected happened - Murphy's Law again. I lost control and went dead in the water. Dead. Martin Schneider casually pulled the Tirpitz alongside and opened fire. War really is hell. Little bits of balsa flew everywhere. After retrieving San Francisco from the bottom of Gene Howe Lake I discovered that my throttle servo had gone beyond its limit of travel and gotten stuck there. A mechanical stop would have prevented that - another valuable lesson.

Since it was now late in the last afternoon of the Nationals I dismantled my electronics and packed everything away for the flight home without making any repairs. Then I watched Stan Watkins and Terry Darby extract some measure of vengeance for the past week's Allied drubbing at the hands of the Axis fleet.

As raiders on their first convoy sortie, Stan's Wichita and Terry's Astoria sank the Axis convoy ship in two minutes and fifty-three seconds. Sweet revenge.

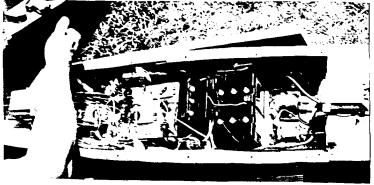
Next sortie Wichita and Astoria were escorts for Jeff Poindexter's old battleship Texas (with Don Jackson at the helm). They mounted a valiant defense, screening Texas well and taking numerous hits. Finally, in desperation, those devious Krauts had to resort to ram-sinking the Astoria. If you can't win fair and square, then cheat. Actually, we know it was an accident, but we won't admit it to the Krauts.

Anyway, the 1982 Nationals ended as U.S.S. Astoria settled slowly to the muddy bottom of Gene Howe Lake.

By this time I had gained a wealth of knowledge (most of it the hard way) about R/C combat and R/C combat ships, which was a lot of my reason for going. Now I was ready to go and build a new ship using this hard-earned experience.

### SHOW AND TELL

So you will get a better understanding of the 82 Championships the following pictorial article is presented. Unfortunately some photos do not xerox well, so every ship isn't shown (to be exact 92.857 percent are shown). The text below the photo attempts to relay the pertinent information about the Commanders and their ships, but once again this is only my best guess. The frequencies used will be listed in a future Busters. Now sit back and enjoy the wonderful world of "Massacre of the Allies" brought to you in blurry Black & White.



I Axie

Martin Schneider. Excellent builder. Very Aggressive.

Tirpitz

Lutzow

2 guns forward, 1 starboard, 1 stern &

port.

4 bilge pumps.

4 flood lights, servo operated.
Powered by Associated electronics 05
motors with Dumas gear reduction
Dumas universals, Motorcycle batteries,

Terry turning system.

Fast and maneuverable, four position throttle. Kraft radio, no elevate.

2 guns forward, both elevate, four posi-

tion throttle, famt, maneuverable, no lights, Kraft radio.



Fluegel. Excellent defensively and a Wonderful Human Being.

Bismarck | 1 gun forward, 1 gun starboard, 1 gun stern & 1 port. Average speed and maneuverability. 2 four gallon pumps, powered by 5 motorcycle batteries, two four position throttles, home-made universals and props. Six spot lights servo operated. Hobby Lobby Radio.



James West. Famous for stern gun effectiveness.

Graf Spee 1 gun bow, 1 gun stern, 2 lights. Slow,
unmaneuverable. Futaba Radio.



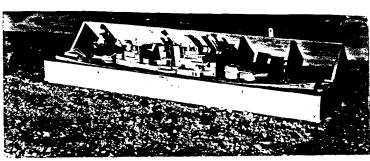
Dave Garrett. Rookie

Belzono 2 guns forward, good speed, poor maneuverability. Futaba Radio.



Kay Poindexter. Good defensively.

Algeries 1 gun forward, 1 light, poor maneuverability and speed. Four position throttle, home-made props and universals. Futaba Radio.

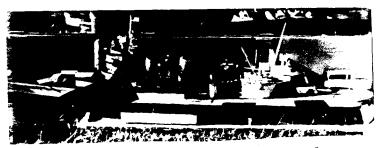


Allies
Stan Watkins. Well-rounded in all aspects.
Wichita 2 guns forward, both elevate. Powered by old Radio Shack motors, 2 number 68 batteries, home-made universals & props. Two spot lights radio controlled, very maneuverable, average speed.
Royal Radio.



Steve Milholland. Determined.

Alabama
6 guns in manually rotatable turrets.
6 spot lights and 2 running lights. 2
pumps, powered by old Radio Shack
motors, Homannd throttle and Dumas
l inch plastic props. Fast and maneuverable. The hull is prone to receiving unusually large beebee damage.



Terry Darby. Skilled in gunnery and scale building.

Astoria

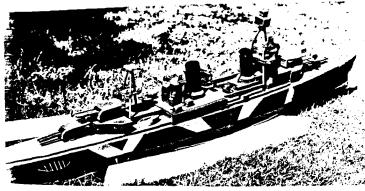
l bow gun, l stern gun. Props are home-made, universals are factory, motors are old Radio Shack. The throttle is a 5 position switch and she carries several spot lights. Average to good speed, average maneuverability, poor stability, The radio is an Airtronics.



Billy Gainer. Rookie

New Orleans 2 guns forward that fire simultaneously. ship has spot lights and the radio and power system is unknown.

She is very fast and has good maneuverability. Stability is poor. Batteries are 2 number 68's.



Brian Spycalsky. Rookie

Pensacola 2 guns forward, factory props, universals, throttle and gear reduction.

She has lights and the radio brand is unknown. The speed is slow to average and the maneuverability is fair. Good stability.

No Poto

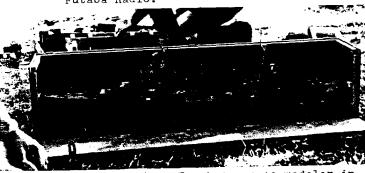
Dale Beaver. Rookie

1 gun forward, 2 pumps. Unknown radio and props. Universals by Dumas and home-made throttle. The Hood may have the longest cruising range in R/C combat. Maneuverability and speed are noor. 4 spot lights.



Jeff Poindexter. Poor defensively? Good C.D!

Houston I gun forward. Old Radio Shack motors,
home-made props and throttle and universals. Average speed and maneuverability.
Futaba Radio.



Dan Dees. Rookie. The best scale modeler in R/C combat.

San Francisco 2 guns forward. Terry turning system, 2 motorcycle batteries, homemade throttle, universals and props. Very fast, good maneuverability. Poor stability, unknown Radio Brand. 4 spot lights.



Don Jackson. Sometimes awesome sometimes aweful.

Helena 2 guns forward. Average to good speed, maneuverability and stability. Rest is unknown.

## 

For unto you this day is born An Allie, and they shall Call him James Darby. Best wishes and Congratulations to the Darbys, for the birth of James on July 19,1982.

### RULE RECOMMENDATIONS

#1. In a collision, both participants will loose 20points regardless of whose fault it was. Any damage incurred will penalize the affinding ship additionally.

Boid Post

#2. All Superstructure on a ship during "Best of Scale" judging shall be left on board for the duration of the event.

Farley Hop

### 1983 CHAMPIONSHIPS

The 83 Championships are probably going to be held in Springfield, Missouri. The date is VERY tentatively scheduled for the week of July 4th. The Contest director will be Steve Milholland. Steve has already began preparing for the event. One simple but important quality of the lakes in Missouri is shade!

Don't use the "O ring safety valve" that M.W.P.Co. sent out about two months ago. They typically leak. Instead, went your tank per instructions.

HOW TO...
Terry Darby showed me something a bit different last June. Terry mixes baby powder with polyurethane as a sealer-filler. This is done only as a first coat, and will need sanding. Terry also told me "and it makes the

ship smell really good"!

## Rule Changes Ey J. West

Vοιυ	S	CA 41 M est
Yes	No	
1:	()	1. To be a most same Amount of the bound of the
		1. To be a registered voter one must have participated in a NAMBA sanction battle within the prior 24 months of the vote.
11	0	2. Registered voters who have participated in one of the two most recent championships will have their votes count
0	11	twice. 3. Rudder size must not be larger than scale on ships smaller
8	2	than battle cruisers.  4. A battle cruiser may have the number of guns that the real
7	3	ship had. (Amended)  5. Between sorties water may be removed from a ship's hull,
11	0	but battle damage maynot be repaired! If a ship refuses to battle in the 2nd or 3rd sortie without repairing battle damage, 250 points will be awarded to the opporing ship or fleet. Battle damage may then be repaired. (Amended)  6. A ship must finish a battle with the same propulsion and
	v	pump batteries it started with. (Battles consist of three sorties.) The exception to this rule are the radio receiver batteries. A penalty of 250 points will be charged to the ship violating this rule.
11	0	7. All ships at an "Annual Championship" battle must have a full ret of main turrets to legally enter a sortie.
11 Witho	0 drawn	<ul><li>8. No ship shall exceed a speed of 100 ft per 25 seconds.</li><li>9. If two ships contact, the collision rule must be invoked, even if the two ships are on the same team.</li></ul>
3	8	10. Only men can vote.
11	0	11. The target for "target gunnery" should be changed to an object that can be hit from any angle (360°).
11	0	12. Guns may be mounted in superstructure if the main turret is physically too small to house the gun. No tactical advantage may be gained, such as peculiar trajectories due to the flexibility this rule allows.
11	0	13. Rules may not be changed but once a year. The time and place of the annual voting shall be announced at least 30 days prior to the event.
11	0	14. Same as rule # one.
11	0	15.
		A. It is legal to use Vacuum formed plastic ships or portions of ships in R/C Warship Combat. Handicap factors accept able to majority of the combatants engaged in the contests will be incorporated to compensate for any advantage that the vacuum formed parts have over balsa parts. (AMENDED)  B. Handicap Factors shall be determined by tests established by majority of the contest participants. (AMENDED)
1	.1	6 16. A pump is to be defined as a unit whore motor is no larger than one propusition motor in physical size with only one inlet.
7		17. Heavy cruisors and Light cruisors over 9000 tons may have three offensive/defensive units.
1	.1	0 18. Light cruisors under 9000 tons may only have 2 offensive/ defensive units.
1		10 19. A battleship will be limited to six units.
10	)	20. In order to shorten pit time, points will be awarded to those ships who are ready to battle at the appointed time during the first fleet battle of the day, 100 points per ship assigned to the purposed fleets.
10	)	1 21. Solid balsa in the hull at or near the waterline cannot extend more than 1 inch behind the bow and 1 inch in front of the

11 0 22. A battle will be made up of 3 sorties.

10

23. There shall be no stringer used within ½ inch of the top or bottom of the waterline unless the shape of the hull dictates it.

11 0 24. Cruisors and Smaller ships shall not have guns pointing directly off the side..

### VISCIOUS RUMORS

Admiral Watkin's hat is an ex-milkman's hat!

### PLAN SETS

Jeff Poindexter announced that the Nachi (Jap cruiser) plan set will be complete by August 20th. Jeff also told me that "pocket Battleships" are now included on the list of ship plans to be sold.

### cont. · · · · A Baptism By Fire --

Next year I hope to go again, but not just to learn abou R/C combat. Now I have a much better reason - those craz people down there are my friends. And the next contest director has a lot to live up to. Jeff Poindexter, with help from his wife Kay, did a superb job this year. They literally opened their home to us for the week. In fact, it was wonderful to travel so far and find everyone so friendly and helpful and willing to provide transportation. My thanks to them all.

### CONCLUSION

- Dan Dees

You may not be aware of it but this Buster has set a land-mark. It paid for itself? No, I slandered, purged and misrepresented the truth better than the past Busters? No(I don't think). Then what land-mark was set? I'll tell you, I didn't write it! Contributing authors did, you and your friend, and I couldn't be happier about it. Cue the drum roll....It is with proper pomp and dignity that I hearby annouce the continuation of the "Hull Busters".... thank you, thank you.... enough with the drums gang.

Full Busters has been an experiment. The bi question was "will other R/C combatants send me articles to publish"? It seems they will. I fully expect it will pay for itself someday, but in the mean time it is helping the Hobby and more importantly, people. My long term goal is to get filthy rich! I'll use my money to buy friends and intimidate people...but that's later.

Allies have written most of this Busters, as my account of the Championships (the true one), will be in the Next Busters, there just wasn't room in this issue. The rest of the next Busters will be by contributing authors....My favorite people. Please, please send them in for all of us to enjoy. I have learned that the Hull Busters is enjoyed by the whole family, so articles by you women and kids are also appreciated. I'm not picky, how-about "How it is to be the Mother of a neighbor of an R/c Combatant"....what does that mean...?

Oh yeah, I also need "How to" Articles. Well, thanks one more time to the contributing authors that make Hull Busters live....Drum roll please as I call out their names...Mary Hamilton, Dan Dees, Steve Milholland, David Oswald, Stan Watkins, Jeff Poindexter, James West, Boyd Poot, Wilton Feel and Anonymous, And Salini too.

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Fluegel c/o Leland Pet. 2101 McKinney Ave. Dallas, Texas 75201 The price is 50¢ per evennumbered month that is left in the year.

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5	STAN WATKINS	270	38	-195	63	80	82	0	220	131	130	25	36	23	D	32	3	938	432	1370	1386	2756	10	13	23
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8	BILLY GAINER	120	0	0	0	0	82	88	U	0	130	0	36	23	5	32	0	516	0	516	115	631	3	7	10
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13	DAN DEES	0	38	0	0	0	0	0	0	0	0_	0	36	0	0	32	3	109	0	109	115	224	2	4	6
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### TRIBULATIONS OF AN R/C'S COMBAT WIFE

Innocently we sent for a B-B gun that was used in RC combat, before we could get the gun we received a tape from a D.W. Fluegel who extolled the virtues of RC combat as an elite group of people or weirdo's.

Before I knew it the plans were ordered, and we

begin receiving tapes from various people from all over the country. We also started receiving phone calls from Loy Rasmussen and low and behold another combater popped into our lire.

We soon received the plans for our ship and ordered the wood, now the construction has started, and my entire house has become a massive pile of sawdust. But we wives must endure for the good of the navy.

We spent the next few months working on a ship we knew nothing about and sacrificing all other wordly goods for The Pursuit of the Hobby.

We travelled and visited people we had never seen before and I suddenly round myself enjoying every minute of it.

I now have ordered my own Radio control system even though I have nothing to control but hope in the future I will have a Destroyer, if only I can hurry Dan to finish his snip and start on mine.

S

D

Elevate

Let's Build. Mory Hamilton COMBATAN

What

INFORMATION

our name	How many seconds to
hips name	travel 100 feet from
ate started	1.) running start
hip will have "how many"	2.) standing start
unsmounted	How many seconds to turn
	360° from rupning start

Pumps Motors Props Batteries Lights

TATUS	OF	SHIPS	CONSTRUCTION