

How to

"PHOTO ENLARGE A PLAN SET"

First off, I can't draw a straight line, even with a straight edge. So how can I draw a plan for a ship without all of those drafting tools? Use a camera and a projector.

- Tools needed:
- 35mm camera
 - slide projector
 - close-up lens for camera
 - tape measure
 - 3 or more glass slide mounts.

Technology

The ship that I have chosen to build is not available in plan form but I have several line drawings (from books) on the same ship. Now comes the challenge, find a photo shop that has glass slide mounts for 35mm slides and a close-up adapter lens for your camera. The glass mounts should cost no more than \$1 each and the close-up lense should cost no more than \$10 or \$15. If you can't find a good photo store, you can mail order it, from "Spiratone", they advertize in most photo magazines.

Next, you have to photograph the photo or line drawing of the ship you want to model. You will need three views of the ship, one from the side, one from the top, and the hull form lines. If you have all of the views, then it will be easy to build from the "Photo plan". If you are missing any of the views, then it will be very frustrating. I don't recommend you try to build a ship without hull form lines, but I guess you could "Fudge it".

- Step 1: Load camera. Try using Kodak Tri-X Black and white film. 36 exposure length.
2. Place book (or printed matter) on flat surface and keep printed page as flat as possible.
3. Hold camera so that the camera back is parallel to art work. (if you have a tripod, use it)
4. Fill the viewfinder of the camera with the subject and center it.
5. Take several exposures of each view, IE- at least 10 at different settings so that you get negatives that vary in density.
6. After you have taken all three views, then have the film developed and pick the best negatives, and mount one of each view in the glass mounts.
7. Set up projector in darkened room and tape some Kraft paper on the wall. Try to keep the projector in the exact center of the paper so that you limit distortion.

8. Turn on the projector and insert the first slide. Move the projector closer or farther from the paper to get the proper size image, then trace in the lines on the Kraft paper.

If you use the Tri-X negative film the lines that are projected will be white or lighter than the background. The glass slide mounts are also needed so that the negative in the projector doesn't warp or pop while it is being traced on the paper. The lines that you will trace are just rough, but with the aid of a compass and a straight edge, you will have a reasonably accurate plan.

You will have to adjust the magnification of the image inbetween each tracing. The hull form lines are the most critical. If you can find someone with a black and white darkroom, you can enlarge the negative on photographic paper.

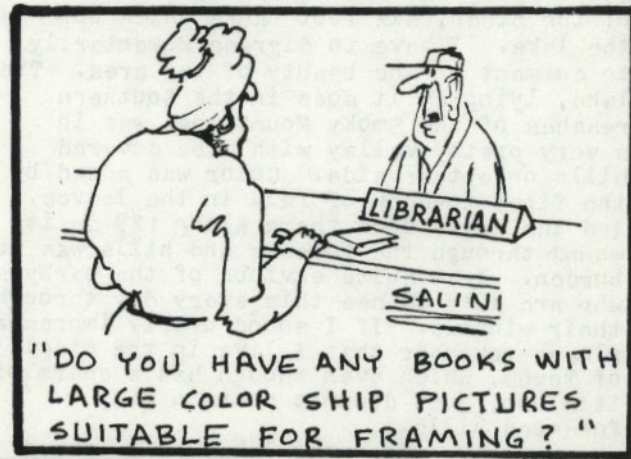
When you enlarge the negative of the hull form line the magnification has to be adjusted so that it meets the scale you are building in. Once the magnification is adjusted, then make three prints of the form lines. Then flip the negative and print it in reverse and make three more prints. After the prints are processed, cut them down the middle and tape a normal print to a reversed print, you will then have the complete rib form.

After you have completed all the steps above, you can start cutting the ribs using the two piece photo of the ribs.

This is not the easiest way to get a plan set. The easiest is to order one from MWP or Amarillo Scale Warship. But if they don't have what you want, then the only way out is to do it yourself. If there are any questions, please send me a tape, and I will try to answer them.

Carl Camurati
69-52 181 Street
Fresh Meadows, New York 11365

Carl



"NORTHEASTERN CLUB FORMED"

The "Splintered Hull R/C" Combat Club" has been formed. The membership has agreed that this is necessary if this hobby is going to grow and prosper.

The club will be under the guidance of the "National R/C Combat Club", and dues will be collected by the National Club. We will follow all the rules and requirements of the "National R/C Combat Club".

To join the club, send \$10.00, check or money order to Terry Darby, Chillhowee Ranger Station, Tallassee, Tennessee, 37878. The membership fee entitles you to a subscription of "Hullbusters", as well as the club dues.

We have agreed that membership to NAMBA is necessary if you want to participate in a sanctioned battle, therefore send \$18.50 to: James West, 1255 Iris, Amarillo, Texas 79107. James will fill out the forms and send them on to NAMBA. NAMBA membership expires at the end of each year, so you may as well send it out now.

We will be having a Northeastern Regional Battle on the second weekend in May, 1984. Anyone interested in joining our club and battling in the Spring Regionals, please contact:

Regional Director:
Robert Amend
Forest Creek Apartments
3302 Club House Drive
West Depford, N.J. 08066
Phone: 609-848-4421

Joe Vilar
827 Sip Street
Union City, N.J.
07087
201- 863-2223

or
Carl Camurati
69-52 181 Street
Fresh Meadows, N.Y. 11365
212-591-0290

When writing us, please include the following information:

1. The frequency of your radio or radios.
2. The number of ships you will bring to battle.
3. Nationality of your ships (Axis or Allied)
4. How many people you will bring to the battle.

THE SOUTHEAST REGIONALS

By James Foster
A tale of the sea

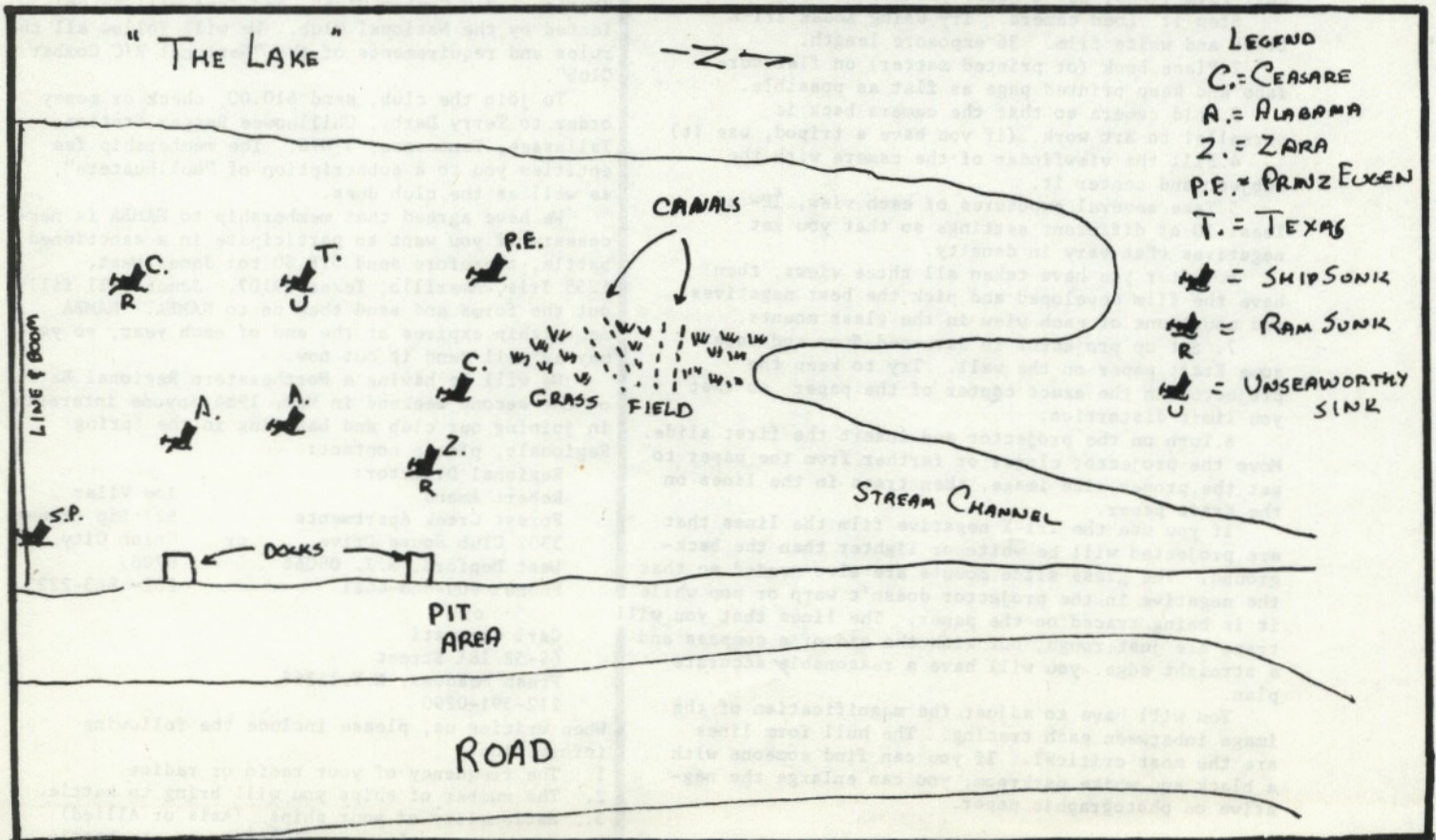
Having arrived at my in-laws house in Knoxville Thursday evening, I gave Terry a call to see what the schedule was for Friday. As expected, Friday would be devoted to individual challenges. Steve Milholland, Chris Lawson, and Bob Amend had already arrived at the Darby's house, and Larry Manofsky would be driving down from Knoxville. So there would be six ships available to initiate this particular contest, with more expected throughout the day.

Friday morning was spent in preparing the lake for the coming hostilities. This involved building stone docks for the launching of the ships, and installing the steps Terry had made for a safer descent of the steep, six foot banks which bordered the lake. I have to digress momentarily to comment on the beauty of the area. The lake, lying as it does in the Southern reaches of the Smoky Mountains, was in a very pretty valley with tree covered hills on either side. Color was added by the first touches of fall in the leaves. And the drive down there along 129 as it wound through the forests and hills was no burden. I am quite envious of the Darby's who are able to see this every day through their windows. If I sound overly impressed, please remember that I live in the middle of Texas, which even though has a charm of it's own, just doesn't contain many forested hills.

Anyway, after the lake was prepared the ships were made ready for battle. The first sortie was between Larry Manofsky's Zara and my own Pensacola class cruiser Austin. It was soon evident that the Zara had a speed advantage over the Austin as she raced in and got a couple of

good salvos off. The Austin so far had not been able to fire a shot due to the lack of a good target, the Zara just kept running out of range. Larry finally made a mistake and came to a halt astern of the Austin, and received a long line of holes down her port side as a result. There were a few more exchanges between the two ships when Larry pulled a suprise on me as I was chasing him. As the Austin was maneuvering to try and cut off the speeding Zara, Larry ignited the smoke bombs she carries in her bows and disappeared in a cloud of dense white smoke. I thought that she was again burning up one of her drive motors and in the interest of safety from the possibility of an exploding freon tank I beat a quick retreat. I must say the smoke screen was effective in that it saved the Zara from being shot. Soon after this both captains called five minutes and both made it back safely to port, even though the Zara's pumps could be seen working. During the recording of the damage Larry wondered if I had plated the hull of my ship with armor, as I had very few hull hits(2) and the sides of the Austin felt hard. I did use a hard grade of balsa on my hull but it can be holed, as damage I recieved at the MATS showed. As this topic of hull coverings was one of the items discussed at this regionals, I will talk in more detail on the subject at the end of this article.

The next sortie to be fought was between Steve's Alabama and Terry's Ceasare. The action was slow to start as Terry took the Ceasare up the stream channel (see map) and sat waiting for the Alabama to come to him. We found out after the battle that the Ceasare had lost one of her motors and Terry was understandably reluctant to go out and engage a ship as formidable as the Alabama with such a disadvantage. The



Alabama soon entered the stream and the battle was on. Terry fought a good defensive battle and the sortie was soon over. The Alabama came out ahead this sortie but considering the fact the Ceasare was handicapped the results could have been much worse. One of the nice things about this particular sortie as far as the spectators were concerned was the ballet like maneuvering of the two captains in an effort to avoid rams and obtain a good position for firing.

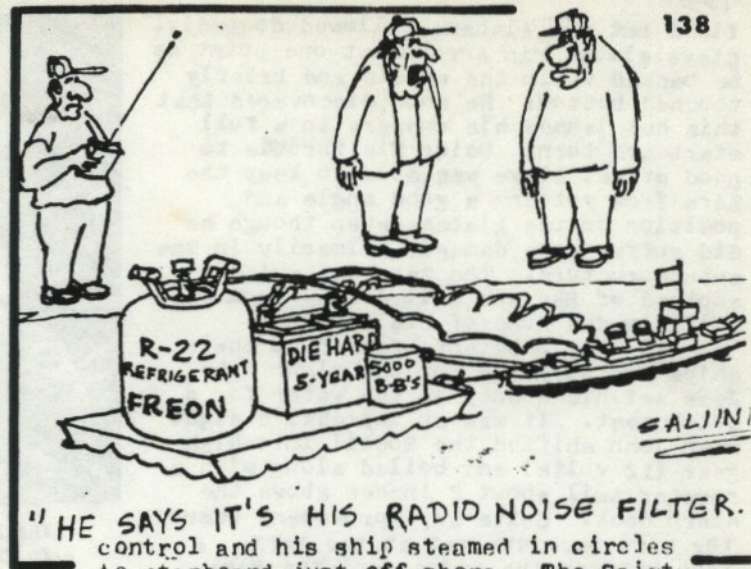
The next ships on the water were Chris Lawson's Saint Paul and Robert (Bob) Amend's Prinz Eugen. Bob had taken to calling his ship the Prince of Agony due to trouble he was having with his guns and speed control while preparing for the battle. There were also many gnats around bugging us allies, so naturally Bob said they were "Gnatzies"! Anyway, the two ships launched and engaged in mutual destruction. Attempted mutual destruction as it developed, as problems with their guns spurting or just not firing prevented any damage from occurring.

Zara and Austin were the next ships out to fight their second sortie of the battle. The Zara was pumping water from a hit below the water line from the first sortie, but showed no great danger of sinking. Neither captain was able to get any good shots in when the Zara rammed the Austin in the port bow. This caused a large hole and caused Larry to comment that the hull of the Austin wasn't all that hard after all. Luckily for Larry the radio receiver was sitting in that same area as Zara penetrated, and kept his bow from cutting any deeper than it did. A ram sinking would have been the result otherwise. The battle was postponed temporarily so I could put some tape over the hole before continuing.

While the emergency repairs were taking place on the Austin, the Alabama and the Ceasare engaged in their second sortie. Terry had repaired the errant motor and was able to steam at full speed this sortie. The ships again waltzed across the water with both captains being a bit more effective in their gunnery. It was during one of these close quarters skirmishes that the Alabama rammed the Ceasare at high speed in her bow extending below the water line. The collision apparently also knocked out the radio on the Ceasare as Terry was not able to control his ship fully or start his pumps. The Ceasare sank by the bow after about a minute while limping for shore. It was interesting the way gun turrets and masts kept floating to the surface long after she went down and helped mark her location. If it hadn't been for this unfortunate ram sinking, the Alabama would have won the battle 370 to 225.

The Austin and the Zara then continued their interrupted fight with nothing of any excitement happening. Both ships emptied what few BBs they had from earlier and went on five minutes. The pump kept the Zara afloat until after the five minutes were up and Larry went for a short cruise. The bow wave started leaking in the many holes and soon the Zara's bows were going down. Larry gave full ahead for shore and reached his ship just as her bows dove. Close!

Chris and Bob tried their luck again and the Prinz just didn't have much. Shortly after heading out Bob lost all



"HE SAYS IT'S HIS RADIO NOISE FILTER.

control and his ship steamed in circles to starboard just off shore. The Saint Paul steamed up to finish the crippled krauts off and fired a burst from the stern gun into her side. The angle was not good, however, and the only damage done was a small dent. Chris soon found that his bow gun would not fire and the battle soon ended. Neither captain had scored any points.

There was a delay at this point as everyone met those captains that had been arriving as the day went on. Dan and Mary Hamilton, Tom and John Jass, Tom Darby, and Gerrald Roberts had all arrived at different times that afternoon. It's always nice to renew friendships.

Dan Hamilton had arrived early enough to prep his ship and challenged the Prince of Agony to a battle. Bob accepted and the ships were on the water ready to fight. The Exeter of Dan Hamilton seemed slow, especially compared to the Prinz which was a fairly fast ship. The two captains approached bows on and then see-sawed back and forth as they waited for the other to make the first move. They both fired their bow guns at each other but all the BBs missed as they passed down the sides. The ships then started moving to try and get their stern batteries into action and ended the battle with no damage done to either side.

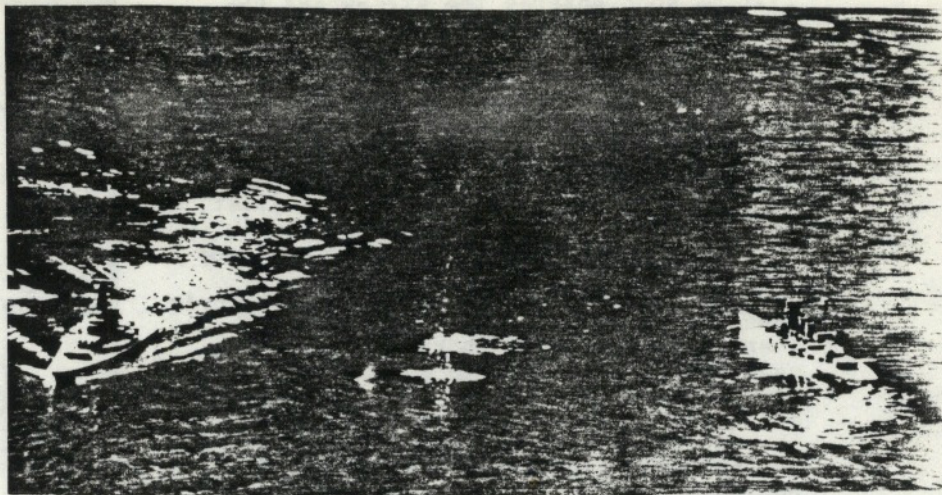
Steve had launched the Alabama and was waiting for an opponent while the Exeter and Prinz battled. Thinking that no one was interested in a fight he loosed a few bursts at various floating debris. Larry launched his Zara and the Alabama engaged in a speed race around the lake just to see who was faster and more handy in the stays. Larry eventually decided that he might as well fight and BBs were soon flying. At least Steve's front guns were not completely full. The Alabama chased the Zara and got in quite a few good hits on her hull and superstructure. The Zara hit the Bama once in her bow. As this somewhat unfair donnybrook ended the Exeter and the Prinz started their bows on see-saw for a minute or so before moving into serious battle. They both got some damage but due to ram penalties the scores were negative.

The last battle of the day took place as the sun was setting and the air began to get cooler. The Zara ventured from the safety of port to be pursued by the Alabama and take some hard hits. In an effort to escape, Larry steered into the shallow area near the grass

field but the Alabama followed doggedly. Steve almost ran aground at one point as he backed up in the shoals and briefly touched bottom. He soon discovered that this had jammed his rudders in a full starboard turn. Using his throttle to good effect Steve was able to keep the Zara from getting a good angle and position on the Alabama even though he did suffer some damage, primarily in the superstructure. The Zara was quickly emptied of BBs and sailed away from the still loaded guns of his opponent.

As the combatants packed up their ships and supplies for the night John Jass set his Rodney in the water for a quick test. It was an impressive sight when John shifted the Rodoil into high gear (12 volts) and boiled along with a rooster tail about 2 inches above the stern deck. Quite an improvement over the slow pace she set at the NATS. A race between the Rodney and the Bama won with the Limeys ahead, but not by as much as one would expect after seeing her at full speed. So ended the first day of the regionals.

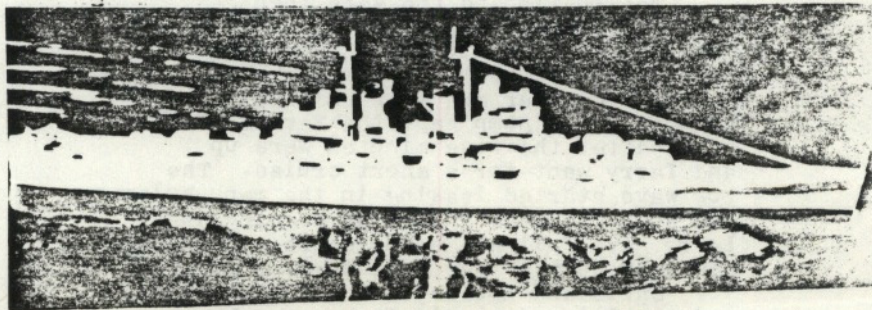
Saturday started cloudy and cool with intermittent sprinkles of rain cratering the surface of the water. The first big fleet battle would feature the Europeans on one side with the Rodney, Ceasare, Zara, Prinz Eugen, and Dan Hamilton's Z38 against the Americans with the Alabama, Saint Paul, Austin, and Tom Darby's Pensacola. Gerrald Robert's battleship Texas had a frequency conflict with the Rodney and would not enter the battle until the second sortie when the Rod would sit out. Both sides were confident as even though the Euro's outnumbered the U.S., the conflict seemed well balanced in terms of experience. The nine ships were on the water and ready to start by 12:30 and the word was given to go. The U.S. had decided ahead of time to match the Alabama against the Ceasare and the three cruisers would go after the two Euro cruisers. The Rodney would be avoided and the Z38 ignored as being too small and fast to catch. The two sides performed some initial maneuvering and then began to mix it up. The Austin soon found out that the bow gun would not fire when the Zara presented her side and nothing happened. Dan had the opposite problem with his Z boat as the entire magazine sputtered out in a shot at the Pensacola. Discretion being the better part of valor the Z38 quickly disappeared up the stream channel. Steve and Terry were busy stalking each other but neither captain showed any hesitation in pursuing any luckless cruiser that would stray too close to their guns. Larry's trick with the smoke bombs saved his Zara as the Alabama was hot on his tail. The familiar white smoke billowed out and completely hid his Italian ship. He happened to be moving with the wind and remained invisible for a considerable period of time. Larry said he couldn't see his ship and just gave her midships and full speed ahead, making good her escape. Meanwhile the Saint Paul was being shot at by the rest of the Euro fleet and the Austin tried to bring her stern gun to bear as Tom attempted to join the fight. The Pensacola had lost her 12 volt system just before the sortie and thus could only move at a very slow rate. He managed to be more effective than the Austin even so. At the end of the sortie Tom shot the Bama thinking she was the Ceasare. The fight and everyone's five minutes ended soon



The Alabama (left) fires on the Caesar. The splash goes to the top of photo.

after. The Saint Paul had been badly hurt with a couple of hits on the water line and a huge hole in her port stern running from the deck to the water line. The Alabama and the Ceasare received the greatest volume of damage though no dangerous holes.

The second sortie started with the numerical advantage on the side of the U.S. this time. This was the Texas' debut in combat. It had been agreed that the Saint Paul would hang close to shore and be protected by the Austin in an effort to prevent a sink. The other three ships would go after the opposing cruisers. It was apparent the European tactics would be to go after the hurting Saint Paul. Almost immediately after battle started the Texas went down. Her low freeboard and loose deck fit let water come in over her stern as she backed to avoid fire from the Z38. Luckily for the U.S. side her only hit was in the superstructure so there was only the unseaworthiness penalty imposed instead of a sink. Gerrald was baptised very fast. After the Texas was recovered firing resumed with the Prinz, Zara and Ceasare all converging on the Saint Paul. The Austin was able to get some very good shot in as the Euro's tried to close with Chris' ship. In fact, they managed to get in each others way as they hastily tried to fire. At one point all three European ships were gathered in a large group as if at anchor while they avoided rams. Austin and Saint Paul both were able to get in some shots. About the only damage they had done was to blow off pieces of the superstructure on the Saint Paul. The appearance of the Alabama and the Pensacola scattered the European ships and Chris could relax. The Z38 had shot his bolt, so to speak, and took up her customary hiding place up the stream. Bob brought his Prinz back in after the Saint



The St. Paul.

Photo courtesy of Foster.

paul where he was maneuvered by Chris into a perfect setup for the Austin. BBs and balsa flew as the Kraut cruiser was thoroughly raked by several salvos down her starboard side. She soon started listing and headed off for safer waters. Bob reached the grass fields and shortly thereafter sank in shallow water. The Ceasare snuck in after the Paul while the Austin was after the Prinz and managed to put a couple hull hits in the cruiser before the Austin chased him off. Steve and Tom had been having a few exchanges with the Zara and Ceasare but with little effect by either side. While chasing the Zara Tom's attention was drawn to the Z38 lurking (skulking?) along the bank and tried to pursue this elusive ship. Dan made good his escape by way of the 'Canals'.

I have to stop the narrative at this point and explain the 'Canals'. Before the fleet action started, Larry had gone out and by pulling up grass from the field had made two passages through this obstruction to allow passage for fleeing European scum from the stream channel to a shallow bay. While this wasn't objectionable, after the channels were clear, Steve, who had the Alabama out for a test sail steered the large ship through these passages. As Larry was hoping to use these to escape from the Alabama, he went back and 'mined' the passages with some rocks. Some people will do anything to gain an edge, even though in all honesty I probably would have done the same thing.

The Ceasare had sailed over to see about helping against the Pensacola only to find herself trapped between her and the Austin which had arrived to help. The two cruisers shot a few holes in the Italian capital ship before their BBs ran out and the sortie ended. The Ceasare was pumping heavily at the end of the sortie and on examination an exit hole was found in her port bow about 1 1/2 inches below the water line. This had to be one of those freak shots as the entrance hole was 1/2 an inch above the water line on the starboard side and aster of the exit hole. The down angle had to be about 20%. We gave Terry the benefit of the doubt and had several people look at it to determine if the hole was the result of some underwater collision or was indeed an exit hole. The exit hole theory won.

This sortie was a definite win for the U.S., what with the sink of the Prinz and the damage to the Ceasare. The Europeans were also having a rough time with rams and lost 280 points the first two sorties alone. The U.S. had come through the sortie relatively untouched, with most of the damage on the Saint Paul.

The Rodney would again be fighting for the Europeans in the third sortie while the Saint Paul was withdrawing from the fight due to the damage she had taken. This meant the Europeans would have a four to three advantage for the final sortie of the battle. The Alabama and the Ceasare were both in bad shape, especially the Ceasare. Terry was having trouble with her bow pump not working. The wind had also risen and the waves looked just a little large as far as the cruisers were concerned. The cruiser captains hoped their pumps would work. The U.S. strategy was for the Austin and the Pensacola to go after the Ceasare and see if she could be sunk with the Alabama trying to avoid any more damage. There is not telling what the European side was planning other than doing the best they

could in a bad situation.

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The word to battle was given and the colonist cruisers quickly moved to teach the dirty continentals their what fors. Dan's Z boat was finally hit in the superstructure by the Pensacola before that little craft fired her 20 shots and ran away to hide. The Zara bravely attacked the two U.S. cruisers and dealt out damage to both while receiving some herself. The Rodney and the Alabama engaged each other while the Ceasare hung back near the entrance to the stream channel. After Tom and I shook off the pesky Zara we went after Terry in a wide formation in an attempt to outflank him no matter who he turned after. We managed to get a few holes in the Ceasare, primarily in the superstructure, when the Zara showed up to bother us some more. The Ceasare was getting lower in the water all the time and during the action around her the Zara was rammed and holed in her port bow by her. The hole was above the water line and didn't look to bad. The Ceasare sank soon after this collision mainly from the failure of the bow pump to work. Larry declined an opportunity to come to shore and examine the ram (he would not have made it in anyway) so the Austin and Pensacola set off in pursuit. The high waves poured in through the ram hole and sank her before either U.S. cruiser could get in range. When the Ceasare had gone down Steve came over to watch and left his Alabama floating unattended. The Rodney used this opportunity to blast her starboard side. They both came over to see the Zara sink and this time the Rodney rammed the Alabama hard in the port. As they disentangled themselves and started firing the Austin came up and shot what few BBs were left in her guns at the Rod, but with little effect. Tom had the only ship with ammo left and attempted to hit the Rodney, but she was just to fast and ran away from the Pensacola until her 5 minutes were up. The battle ended with the U.S. beating the Europeans 2320 to 355.

Before we all packed up for the day, there was an individual challenge between the Pensacola and the Rodney, this time with Tom Jass at the helm in his first combat outing. Neither sortie was very remarkable, with the Rodney able to run away from the cruiser with ease. Tom Jass had control problems in that he was used to a two channel plane and kept firing his side guns instead of turning the rudder as he intended. The control of the Rod is further different from the average ship in that the throttle is full speed with the stick down, as planes are arranged. I suppose it all depends on what one is used to when setting up the servo functions. Anyway, Tom Darby won the battle 65 to 10.

Sunday's hostilities were due to start at 10AM, but these were delayed while everyone searched for Gerrald's wallet. He was afraid that it had fallen out of his pocket while he waded to recover the Texas. A thorough search was made of the shore and lake bottom, but the wallet could not be found. Must people were afraid a spectator had picked it up and taken it. Luckily Gerrald found the billfold in the grass near the Darby's house later that day near where he had parked. Everyone was thankful and relieved as all of Gerrald's money was contained therein.

The first fight of the day was a one sortie individual challenge between the Pensacola and the Austin. I wanted to give

a demonstration of the hobby to my mother in law who had driven down to see the madness we engage in. I wasn't able to find an opponent on the European side to join me on the water, with Dan Hamilton just giving me a laugh when I approached him. They seemed to think the Austin's guns were to fierce to take. I am really indebted to Tom for assisting me in this request. The sortie got underway and the Pensacola again had trouble with the electrical system and lost the 12 volts to the motors, and thus was slower than the Austin. The two captains maneuvered and fired their way to the end with the Austin winning 380 to -20.

The first fleet battle would again pit the Americans with the Austin, Alabama and Pensacola (Chris was having trouble with the guns on the Saint Paul) against the Europeans with the Ceasare, Prinz Eugen, Rodney, and Exeter. Larry Manofsky could not make the Sunday battle due to school work. The first sortie started off with a bang when the Alabama sank almost immediately. The Rodney hit the Bama in the starboard bow right at the beginning of the sortie and knocked two large holes about $\frac{1}{2}$ an inch above the water line in her hull. Steve's superstructure was also knocked loose so the Alabama was brought to shore for a fast refit. Steve did not see the holes and raced at full speed from the dock for the Rodney. He went about 15 feet before the bow went down and the Alabama lifted her stern for the deep plunge to the bottom. The Austin managed to ram the battleship for a 50 point penalty as she sank, so sudden and unexpected was the incident. Talk about kicking a fellow when he is down, and your own team mate too! The rest of this sortie consisted of the two U.S. cruisers trying to avoid the many European ships. The pumps of both were working, but from the waves leaking through the deck seams rather than from any combat damage. The waves seemed to occur as the sun heated the mountains and created a severe updraft through the valleys, and if the skies were cloudy the air was still. You could have air in cloudy and still or sunny and windy. The sortie ended with minor damage to both sides and a sigh of relief from Tom and I.

Chris had managed to fix the guns of the Saint Paul and would give much needed help for the American team. The two sides closed with the Rodney rushing in on the Saint Paul right at the start, while the rest of the Europeans tried to trap the Austin and Pensacola. Somewhere in the melee the Saint Paul was holed below the water line on her port side and holed from a ram on her starboard stern. She slowly began to settle by the bow as the Rodney and Ceasare attempted a coup de gras on the mortally wounded ship. She soon went out of control and headed for the deep area outside of the combat area. Just as she reached the line stretched across the water to prevent just such an occurrence, she slipped under the water. Strangely enough, her forward superstructure caught on the line and kept her from being lost in the deep water at that point. The European cruisers fired all their BBs and moved into hiding up the stream channel, leaving the battleships to skirmish with the two U.S. ships. The Austin showed up and proceeded to chase these ships out of their haven. The front gun was empty so I wasn't able to do much unless I could get ahead of them.

They ran through the Canals with me in hot pursuit as they yelled for the Rodney & Ceasare to help them. I passed through after them and hit one of the rock 'mines' with no damage. The Rodney showed up to succor her team mates and before long the sortie was over. The Europeans were paying the U.S. back for the defeat of the previous day.

The Alabama would return in the third sortie as the Battleship South Dakota. The Exeter was finally caught in this sortie and a large hole blown in her port side and several other holes in her starboard side. She started to list to starboard which probably saved her as the pump was able to handle the leakage from the BB sized holes on that side. The Prinz took a below the water line hit on her starboard bow and started to list also as her pumps worked keeping her afloat. This damage must have been inflicted by the Alabama and Pensacola as the Austin was not effective at all this sortie. Neither ship sank or even received any more damage as the sortie ended. The U.S. won this sortie but the Europeans captured the battle by 1485 to 690.

The next fleet action of the day would pit the two experienced battleships, the Ceasare and Alabama, against a cruiser force of the Pensacola, Exeter, Austin, and the Rodney with only her two front firing guns loaded. This battle of the leviathans against the pygmies was almost a replay of the first sortie of the previous battle. The Rodney fired and hit the Alabama in the port bow causing two very large holes. The bow wave of the speeding ship poured in and the stern of Steve's ship again saluted us before disappearing once more beneath the surface. Terry commented to Steve that he was supposed to have stayed around a bit longer to help. The reason the balsa at the bow of the Alabama shattered so readily seemed to be caused by the very abrupt sheer stressing the wood. The Rodney seems to have a solution to this problem, which will be discussed later in the article. The cruiser fleet immediately converged on the Ceasare and accomplished surprisingly little considering their numerical superiority. The Rodney did manage to shoot the Austin in her haste to hit the Italian ship. The Ceasare did take one hit underwater below Y turret causing some pumping during her 5 minute wait.



"RADIO, BATTERY, FOUR TURRETS, TRIPLE BILGE PUMPS, ONLY FOUR THOUSAND HOURS RUNNING TIME AND I'M GONNA SELL IT AS A USED SHIP!"

than three total coats of Pactra aircraft dope (the three coats include any wood sealing coats used to attach the silkspan or smooth the surface.). Violations of this rule will be determined by a majority of experienced combatants at a major event and must be corrected before the ship may reenter combat. The captain may request a live firing test from a gun of his choice which if it penetrates the majority of the time in several locations on his ship's hull will allow him to further participate and prove his hull is legal..

I hope the above rule is clear enough for easy comprehension with no easy loopholes. One advantage to this system of covering a hull is that everyone must understand how to adjust their guns in order to be effective. Another and I think more important advantage is that the holes made in this type of hull are BB sized and the easy type of sinks such as those on the Alabama will not occur. This will maximize the effect of marksmanship on the part of the opposing captains and end the lucky shot type of sink.

As every large meeting by us nuts generates a lot of discussion on how to improve our hobby, the other area that seemed to draw a lot of attention was that of ship's speed. Just about everyone agreed (I am sure Fluegel won't) that the speed of the ships is getting way out of hand. Seeing the Rodney almost planing along points to the problem. The solution to this problem that most people liked involved not the establishment of some arbitrary and unenforceable speed limit, but rather the requirement that the drive motors be limited to just the Dumas 4.8V (or what Bob Spy can get through the importer he is contacting) driven by 6V in all ships. The speed would not be the same in all ships as those which are more efficiently designed (like the Bismark) will be faster than the older WWI era ships which were to stubby to be fast. I am not sure but the cruisers may be marginally faster in some cases, and slower in others. All in all, we felt that this requirement could not but improve the hobby and go far towards removing some of the inequalities between cruisers with small motor and battery room and the battleships which can use the large amp eating motors with enough battery capacity to drive them. An area well worth discussing.

Before ending this long article I just want to thank the Darbys for the hospitality they showed us all during the weekend of battle. Even though I did not stay overnight, I appreciated the meals and comfortable surroundings for our talks. I believe I speak for all us travelers when I say 'Thank you'.

P.S. If you who were at the regionals notice some discrepancy in the total score column, it is because I found an error of addition on one of the fleet sheets and corrected it. No big deal.

I also hope everyone forgives the terrible typing and other ways I have mangled the English language.



FROM THE PURSER'S OFFICE

The constitution that we are working on calls for the Treasurer to make a yearly financial report in the Dec. issue of Hull Busters. Well, the constitution hasn't been approved yet, but I would imagine most of you would like to know what's happening to the money you have sent in. This might not be the most interesting reading and definately it's not the most entertaining info in this issue of Hull Busters, but it is important. Let's get down to brass tacks.

Jan 1, 1983 was the moment of truth for the R.C. Warship Combat Club. We became a Club. Over the year, through Dec. 31, we accumulated 31 members (from 14 states). Five of these people made monetary contributions (in addition to the membership fees). Here's how the income and expenses break down.

INCOME	31 members x \$4.00 membership fee	= \$124.00
	Donations	= 92.00
	Hull Buster subscriptions	= 97.00
		<u>\$313.00</u>
EXPENSE	Fees to Hull Buster for Subscription	97.00
	Portion of National's expenditures	107.00
		<u>\$216.00</u>
	NAMBA Club & Lake Insurance Fees	55.00
	In Treasury, Dec. 31, 1983	<u>\$ 54.00</u>

That's it in a nut shell. We've got a whopping \$54.00 to begin 1984 with.

At one time I was a member of a group that said "What's the club need the money for? What do we get for our membership fees?" I now have my own opinion as to why the club needs money. Here's just 2 reasons - others will have different views - but here are 2 points to consider.

This is a new and dynamic national organization. It's impossible for the officers to confer with each other, ie, carry out club business without incurring expenses. The treasury might serve as a means of at least partially off-setting these expenses.

The most important use of club funds in my mind is shouldering part or all of the expenses of the National Championships. Ask Jeff Poindexter or Steve Milholland about the expenses they incurred as contest director for the nationals. Dan and Mary Hamilton can tell you that even hosting regional events can cut into a family budget. If we want to continue to have such events, we'll have to increase contestant fees, get a grant from the government or generate a wide operating base from club members. I don't think we can continue to count on independently wealthy? contest directors.

I guess a case could be made for those that don't plan to be at nationals not to join the club - thus save the membership fee. However, if you are interested in R.C. Combat and want to see it grow, you sure get a lot of publicity for that \$4.00.

I'm sure that the vast majority of club members are willing to make time and money contributions in the way of telephone bills, forms and all that's associated with setting up and conducting a sanctioned event. I know all of the current officers are. I don't want this club to cost a fortune, but I'd hate to see dedicated and able people not run for office or be a contest director because of the financial burden it could involve.

So what do you get for your four dollars - Not a membership card - Not a patch - nothing that you can put your finger on - but what you do is foster R.C. Combat. Nambe Club affiliation dues of \$15.00 a year are paid from the treasury. Site insurance for lakes has also been purchased with this money and some expenses incurred in setting up the nationals has been offset.

Well, that's the treasurer's report and thought. I hope all of you feel as positive as I do about this hobby and the club.

See you at the lake,
Terry Darby

How to STILL SMOKIN'
or
How I avoided being ventilated by the ALABAMA and set my boat on fire at the same time.

By; Larry Manofsky

During the course of World War II an occasional weapons system was developed that had all the promise of an ultimate weapon, yet due to lack of technical knowledge was never really effective. In keeping with this tradition of self-sabotage, the I.R.N. ZARA recently introduced in combat a smoke system for use in avoiding enemy contact. The perfect weapon for an Italian flagship.

During the second sortie of fleet battle held during the Southeast Regionals last Sept. 30, the ZARA was out of ammunition, low in the water and being pursued by the Milholland ALABAMA. Having installed the smoke screen system a week earlier, I saw the perfect opportunity to make a spectacular getaway. I hit the transmitter switch and within a few seconds three smoke bombs deep within the hull ignited.

The ZARA was engulfed in a large ball of thick, white smoke that slowly began to drift downwind. Luckily her bow was pointed in this direction and to remain hidden, all I had to do was apply a little power to keep up with the smoke.

It was a full 10 seconds before the ZARA was visible again at a position about 30 feet downwind from the ignition point. To those on the shore, the stunt appeared almost as an optical illusion. One second the boat was there, then as the smoke drifted from her last position, the boat was gone.

A perfect escape, until the smoke dissipated and I could see brown smoke leaking from cracks in the deck and a small fire burning a hole in the starboard side just adjacent to the exhaust port. Within a few seconds the problems burnt themselves out and I was able to complete the the sortie.

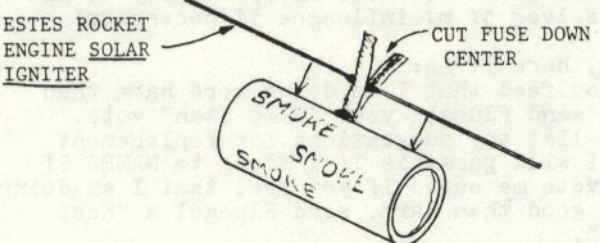
Since then I have put some time into reworking the system to remove the firebugs. It is now seaworthy and plans are shown for those who might be fool enough to try it.

Procedures:

The smoke bombs needed are cylindrical with the fuse sticking out of the side. Round casings will not work. Make sure that the smoke bomb is marked SMOKE somewhere. If it is not marked, don't buy it. You may be picking up a cherry-bomb or M-80 by mistake. (Allied captains ignore the last 3 sentences).

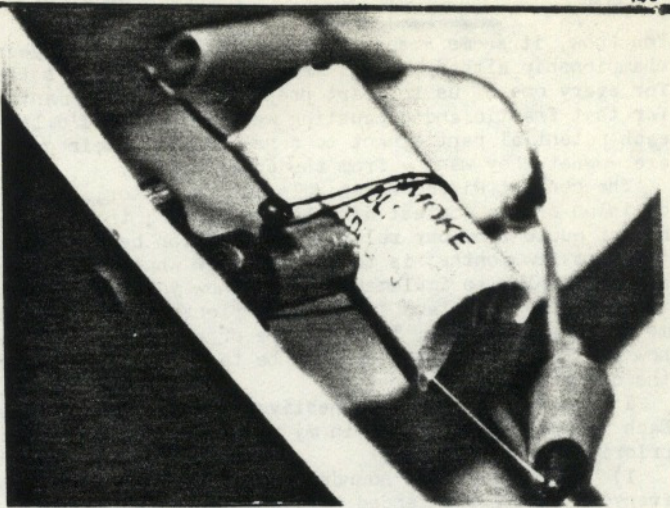
Split the fuse down the middle with an Exacto and trim it so that 1/2 inch is remaining.

Lay an Estes Rocket Engine Solar Igniter through the slit and tape it to the casing. Be careful, these nichrome wire fuses are very fragile and break easily. You will probably have to try a few times to get it right. The fuses can be obtained anywhere that model rockets are sold.



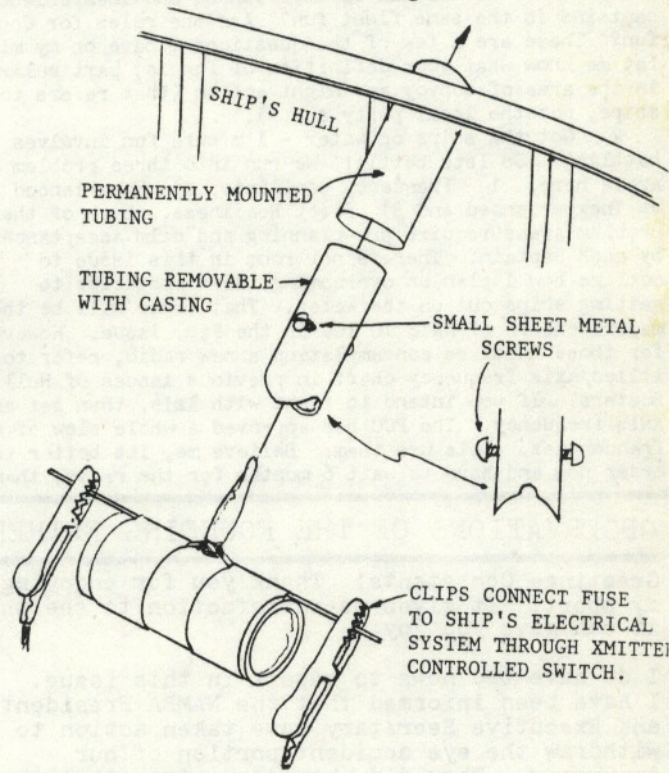
The drawings show the remaining steps and are pretty much self-explanatory. To improve your chances of operating safely the following tips would be helpful:

- 1) The smoke outlet should be mounted high on the side of the hull and pointing out horizontally over the water. The smoke bomb has a tendency to spit out molten gunpowder and this stuff will burn small holes in anything it falls on. It is not wise to direct the smoke out of your



The complete system installed. The bomb is held in place by wire that is wrapped around the small screws and then around the casing.

TECHNOLOGY



smokestack unless you have a narrow deck. Keep the outlet high so that the fuse will not get wet.

- 2) Do not let the tubing used for the outlet short out the nichrome wire fuse. Be sure the fuse is covered with tape.
- 3) To avoid burning your hull in the area adjacent to the smoke outlet, cover the hull for about an inch around with Reynolds Wrap and repaint.
- 4) The switch on your transmitter that is used to control ignition should be safetied in the off position to avoid accidentally setting it off.
- 5) The smoke exhaust tubes will have to be scraped of gunpowder residue after each firing.
- 6) For best results, the smoke should be used in light wind conditions when your ship is moving slowly downwind. This allows the ship to remain covered for the maximum amount of time while moving out of the area.
- 7) These cylindrical smoke bombs have a nasty habit of melting through the sealing compound at each end. This causes a sticky substance to be sprayed around the inside of the ship, melting anything it touches. To remedy this, all

you need to do is securely wrap the ends of the bomb with 3-4 layers of masking tape so that the sealing compound is covered.

You know, it seems absurd to be talking about next year's championship already; but I truly believe that it's time for every one of us to start preparing, at least mentally for that frantic and exhausting week in July. I'd like each potential participant to consider what their goals are - what they want - from the championship.

The contest director can rule as a dictator, "the decision of the contest director is final"; that's a direct quote from our rules. My intention here, and over the next few months, is to let you know what my ideas are and how I plan to implement them. Know your own expectations, review my plans for OUR championship and then let me know now by phone, letter, tape or any other method, how you feel. Next Spring will be to late - I'll be in the dictator mode.

I've set four primary objectives for the championship. Each is equally important in my mind so don't interpret priority based on order.

1) HAVE FUN - that sounds simple and I'm sure that everyone that has attended previous contests has had fun. But there are many different levels or ways to have fun. Is four battles a day for five days fun? Is night fleet battle fun? Is the mix of experienced and inexperienced captains in the same fleet fun? Are the rules for Convoy fun? These are a few of the questions I have on my mind. Let me know what your definition of fun is, particularly in the area of convoy and night action (that refers to ships, not the local party spots).

2) Get the ships on water - I'm sure fun involves battling. So lets battle! We run into three problem areas here. 1) Frequency conflicts 2) Experienced vs Inexperienced and 3) Fleet Readiness. Each of these problem areas require pre-planning and calm acceptance by each captain. There's not room in this issue to outline how I plan on overcoming these obstacles to getting ships out on the water. That topic will be the major concern of NATS TO YCU in the Feb. issue. However, for those that are contemplating a new radio, refer to the allied/axis frequency chart in previous issues of Hull Busters. If you intend to fight with Axis, then get an Axis frequency. The FCC has approved a whole slew of new frequencies. Lets use them. Believe me, its better to order now and have to wait 6 months for the radio, than

have 4 or 5 people show up with the same frequency. Remember, Tom Jass is willing to act as a clearing house to let you know who is on what frequency. More on this next time.

3) Safety - my major concern here is eyes. I was shocked at the number of people that were hit by "BB's" during the Nationals. As much as I dislike eye glasses, I feel its a must for those people that are around the boats. You may as well start looking for some type of eye protection now - it will be a requirement at lakeside. I've used three different kinds - and of course the one that was most comfortable was the most expensive. I've gone to industrial safety glasses. They don't slip or fog up like the goggles or hobby glasses I've tried. Remember you will have to wear some type of eye protection at the championship meet!

4) Financially Independent Championship - I guess this is more of a personal goal, but it could affect each of you. My brother accuses me of being a penny pincher - I guess he's right. I don't want entry fees, club fees, NAMBA fees etc. to keep people from participating at a meet, but there are expenses involved in this type of event. I would like to keep entry fees down to \$25.00 or less if possible. We know that we will need to buy chemicals to have the lake cleared, trophy and ribbon expenses as well as a number of odds and ends. James Foster is acting as chairperson soliciting (begging) sponsors. This year we are after monetary sponsors as well as door prizes. Unfortunately, its to early to tell you how much it will cost to enter the championship but as I said, we'll be working to keep expenses down.

One last thought - Fluegel says that several people have asked if smoke bombs are legal. As I interpret the rules, they might be. It all depends on how much smoke. The key would be how long the smoke hides the ship or lake. The rules indicate that gadgets can't increase the survivability of a ship. So a 30 second smoke bomb could be OK, but a 5 minute burn would hide the ship to long. HOWEVER, the City of Springfield has an ordinance against fire works. I think it would be best if we didn't plan to use the smoke bombs. I'll ask Steve to look into this further though.

See you at the lake,
Terry

OBSERVATIONS OF THE FOUNDING FATHER

Greetings Combatants! Thank you for enjoying my sport. It gives me satisfaction to see that it can give you joy.

I do have bad news to report in this issue. I have been informed that the NAMBA President and Executive Secretary have taken action to withdraw the eye accident portion of our insurance. They did, however, state that they felt that the R/C Warship Combat Club members and leadership were not the problem.

A Person not affiliated with any R/C Warship Combat club has some gun designs that concern these NAMBA officials. No safety rules

have satisfied these concerns. Whether these fears are justified or not, I cannot say, as I do not have all the facts.

Since I learned of this negative insurance situation, I have taken some action to possibly help get the insurance reinstated. It can be a very complicated issue since it deals with the burden of proof of total control of the situation vs. some element of trust vs. the presence of incentives for violating safety rules vs. enforcement vs. safety documentation equipment vs. changes after inspection etc.

These factors have become an increasingly complex problem as more people and more diverse ideas have entered the picture.

NAMBA is even performing some of their own tests, independent of any combat club in an

effort to better understand the factors involved in this nebulous area. When these results are in, I will elaborate.

In the meantime it would be an excellent idea to look into the possibility of finding our own insurance underwriters. If anyone can help in pursuing this search it would be appreciated. We may have enough members now that we can even save membership money with another underwriter. Concerning NAMBA, I have tried to represent you to NAMBA well. Since I am only human and there are many humans I may not be the best one for the job. In fact I could be hurting my beloved hobby and hobbies more than I am helping. If this is so I need to go! Since I am an appointed official you cannot vote me out. You need an opportunity to rid yourselves of my influence if necessary!

Okay, here it is:

If you feel that I am doing more harm than good send Fluegel your "Dump Stan" vote. Also list any suggestions for replacement and I will pass this list along to NAMBA if you vote me out. If you feel that I am doing more good than harm, send Fluegel a "Keep Stan".

It is your duty to my hobby to "Dump or Keep" me as you believe will most benefit your hobby. If you do not vote because you are not emotional about either situation then only the emotional people will have their will expressed and they will rule. I will only stay if at least 67% of the voters wish me to stay. This way a lack of your vote will be a partial "Dump" vote. As to who is eligible to vote, I would request that since it

is a hobby of the battlers that you vote only if you have participated in a NAMBA battle. Fluegel since you are so fair and open minded, you decide who is qualified to vote and count the results. Please publish them in the next Hull Busters. I can be very vindictive, so if I loose I will try to sink you.(Again).

Let's Battle!

Stan

P.S. As NAMBA's Officer in charge I must accept the blame for the loss of the eye insurance just as Admiral Husband Kimmel had to accept the blame for the Pearl Harbor attack on December 7, 1941.

JEFF'S FIGHTING SHIPS

If you have battled from the day after the 1982 Championships to the last day of the 1983 Championships, please send a 3x5 color or B & W photograph of your ship or ships that participated in combat (picture of ship itself should be at least 3" long). Also, send tec details and combat history of your ship(s). Only ships that fought according to the rules of the National R/C Warship Combat Club will be considered eligible. P.S. Send info to Jeff Poindexter, 3202 Vernon Street, Amarillo, Texas 79103

DO NOT SEND in your NAMBA Membership Dues until notification is posted in Hull Busters. Terry Darby



YOUR LAST HULL BUSTERS

By Fluegel

This is your last one unless you resubscribe. Send 6 bucks to me and prove to the world that you have less than no taste. By the way, the next Scale Ship Modeler is supposed to have a combat article, so subscribe to it also. The special issue of Hull Busters should reach your hands (if you subscribed) this December.....MERRY CHRISTMAS!

How to

BUILD Life Rafts Quick and Easy

By Ralph Gibbons

Here's a quick and easy (Dirty ?) way to make scale life rafts for your ship.

1. Lay some tracing paper over the plans and trace the oval shape of the life raft. Make sure you trace the inside of the ring, this is the same as the outside shape of the platform.

2. Cut this out and transfer this shape onto 1/16th plywood. Cut out 2 pieces of ply and sand to shape. Check to the plans and get ready for step 3.

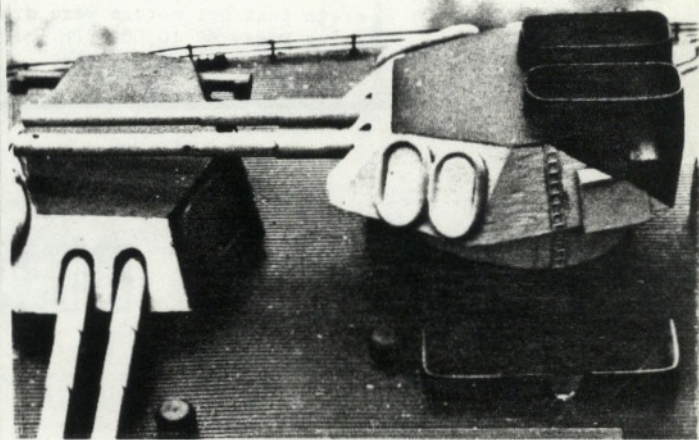
3. Carefully place the 2 little pieces of plywood in your shirt pocket and go to your favorite hardware store(make sure they sell "O" rings first. Find the proper size "O" ring that is a fairly tight fit over your plywood template. buy as many "O" rings as rafts. Don't tell the clerk what they're for,he'll think you're nuts.

4. Cut out rectangular blanks from 1/16th balsa, grain should run lengthwise. Be sure the blanks are approx 1/8th bigger than the templates. Make some extras as you'll probably split some in step6.

5. Take 2 long straight pins("T" pins are fine),and make two matching holes in each ply template. Make a sandwich of the balsa blanks, with the plywood templates on the outside, insert the "T" pins to hold the stack together, and sand (use a small block and no heavier than 100 grit) all balsa blanks to shape. Try not to make your stacks much thicker than an inch or so. (Sounds like its the way we used to make wing ribs doesn't it/).

6. The "O" rings should be a fairly tight fit over your nice smooth balsa blanks, (if they're not repeat step 6). Work all of the "O" rings over the blanks and secure with a drop of hotstuff and set aside for painting.

These rafts really work, I placed one in my shirt pocket one morning, and promptly forgot it. Several days later my wife called me into the basement, next to the washing machine. There, floating contentedly, after 2 wash, 3 rinse, and 2 spin dry cycles, none the worse for wear, was the prototype raft that I hadintended to mail to Dan Dees.



← CUT

SURVEY: #1 I want Stan Watkins to remain as the Combat NAMBA Representative, Yes ___ No ___ #2 I want some type of speed rule, Yes ___ No ___ No Opinion ___ #3 I have battled in a sanctioned battle, Yes ___ No ___ #4 One hour of battle time is worth using for qualifying ships, Yes ___ No ___ No Opinion ___ #5 The Executive Board should be the only governing power in the hobby, Yes ___ No ___ No Opinion ___ #6 I would be willing to pay more for Hull Busters if it would make it better quality, Yes ___ No ___ No Opinion ___ #7 Insurance is worth the NAMBA dues, Yes ___ No ___ No Opinion ___ #8 There is an 80% probability that I will battle in a sanctioned battle in 1984, Yes ___ No ___ #9 It is worth dividing our total numbers in order to establish a 2nd set of rules for a larger scale class of ships, Yes ___ No ___ No Opinion ___ #10 I have a workable understanding of the rules, Yes ___ No ___ No Opinion ___

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R/C COMBAT BECOMING A
REALITY IN THE NORTHEAST. "NORTHEAST"

Sept. 10, Egbert's Lake, Hibernia, NJ.

OFFICIAL POINT STANDINGS
November 26, 1983

S. Watkins	3534
Terry Darby	2860
James Foster	2575
S. Milholland	2397
D.W. Fluegel	1913
Tom Darby	1869
M. Schnider	1215
Dan Hamilton	1188
John Jass	960
James West	956
Cris Lawson	642
Larry Manofsk	606
J. Poindexter	587
Billy Gainer	501
Joe Stline	458
Gereld Roberts	373
Bob Amons	315
Dan Dees	58
Tom Jass	10
Ladonna Poindexter	0
Loy Rasmussen	0

* Scores do not include points from 1 set of fleet battle damage reports that was not sent from the 1983 Fall Tenn. Reg.

Axis rookies engaged in a little fun, (not much of a battle) and spent the day working out the bugs in their ships.

Joe Vilar, and myself went up to visit Harry DeVeau and his wife Joan at their campsite at Egbert's Lake. It could not have been a better day for the lake, being the temperature was in the 90's.

All was well until I launched the RIN ANDREA DORIA. Her trials went very poorly at the beginning. She was stuck in the weeds and then proceeded to melt down all of her wire going to the speed control. Lesson: Don't use #22 wire on motors that draw ten amps a piece at stall. Also, don't use Tamiya 15A circuit breakers. All that was necessary was to cut out the old and patch in with "test leads".

Meanwhile, on the other end of the bench, was Joe and his Scharnhorst, filling his tank and hooking up his gun to a gun "elevate" servo. He put his deck on, (very secure), and then discovers that he didn't turn the radio on.

Lesson: Make a remote switch extension, so you can turn it on and off easily.

Well, we had our first Sortie and it was very boring. 0-0

Schornhorst was very slow and unresponsive. The Doria was too fast, and very wasteful in the amperage that her motors were drawing. She was using Dumas 6V 10,000 RPM motors that draw 4-5 Amps per, and she had two.

Lesson: Check that your wiring is right, Joe had

one of the two 6V 6Amp batteries hooked up wrong. Result, only 6 volts going to 12 volt motors. And when your wiring is right, get motors that are more reasonable in current draw.

After chasing the bathers out of the lake, we started the second sortie. It was much better than the first. We really hit something. Scharnhorst scored two hits, one being a superstructure hit and the second being a below waterline hit on the Doria. But the Doria was not down for the count yet. Her rear, (and only), mounted gun served her well and inflicted numerous hits on Scharnhorst's hull, six above waterline, one below waterline, one superstructure.

Well, we had many false starts for the third Sortie, but it finally happened. The action was fast and it all ended too soon. Scharnhorst had taken a BB in her forward below waterline compartments and was flooding badly, two holes- one going in and one coming out. The Sortie ended and both Axis ships headed for shore. We had our taste of blood, even if it was Axis. I understand that Allied blood is even sweeter. All in all, the day went very well and we had a great time.

Harry DeVeau, Joe Vilar and Bob Amend and myself are trying to form a club here in the Northeast. Maybe all of the guns that Stan has sent up to this neck of the woods will get some use.

If anyone is interested in battling in the Northeast, please get in touch with one of us. We are planning a Spring Regionals and it would be more fun if more than three people showed up.

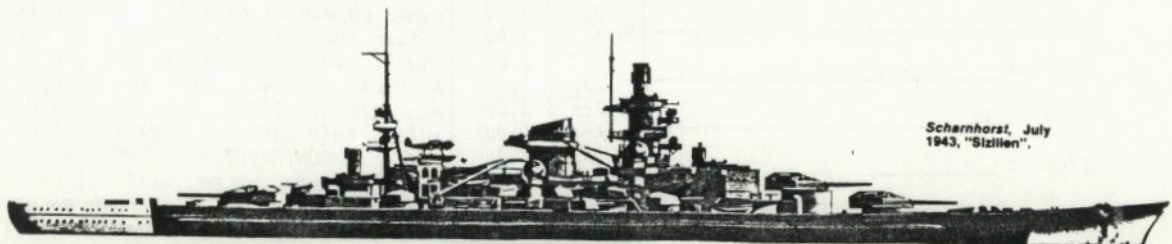
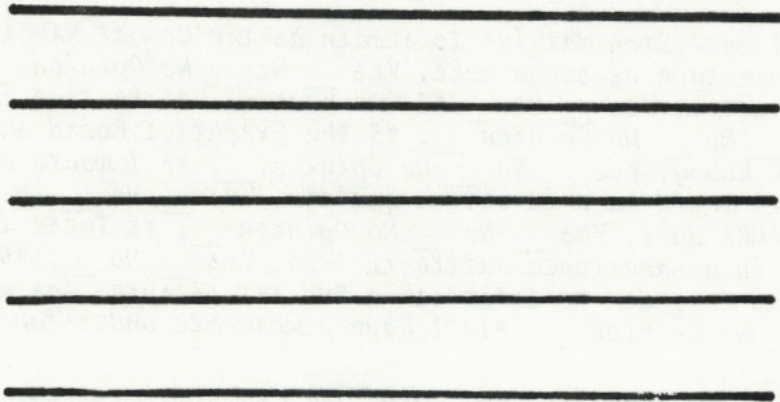
(Handwritten signature)



NEWSLETTER

3524 Gray Drive
Mesquite, TX 75150

Fluegel



Scharnhorst, July 1943, "Sizilien".