

THE ROOKIES CORNER By Steve "Still wet behind the ears" Smith

When I got started in this hobby (obsession), Fluegel told me I should try to contribute, and one way I could do this was to write for Hullbusters (he must really be desperate for material!). He said that with my rookie point of view I could really help other rookies (talk about the blind leading the blind). Anyhow, this is the start of a (hopefully) regular column aimed(no pun intended) at the rookie and getting that first ship on the water.

However, through the generosity of Gerald Roberts and Grossadmiral Fluegel, I was able to get out on the water and get sunk a few times by some allied

Here are a few lessons I learned:

1) HAVE YOUR SHIP DONE! !!

I learned this one the hard way. It's no fun spending all your time in the shop while

everyone else is out battlin'.

If your ship does not yet have a working installed gun system, don't plan on completing Nationals is a time for making it at NATS. unreliable systems reliable (see #2). Also, spend your time looking at other peoples' ships and see how they work. Ask questions- you'll get

If your ship isn't finished, don't lose heart. Some old pro will probably let you use one of his ships. These guys are generous! (Did you get all the holes in the Lutzow patched yet, Fluegel?)

2) RELIABILITY, RELIABILITY, RELIABILITY!!! It's been said before Here are some

reliability problems I had:

WATERTIGHT BOX: wasn't! Ships built and captained by rookies are guaranteed to sink! Therefore, it is important to keep your radio receiver dry. Radios don't work when wet and take a while to dry out.

SOLUTION: Have a good cover seal. Keep other holes and openings to a minimum and seal well with silicone. Test for leaks by submerging box in bath tub or sink for several minutes. For additional protection, wrap receiver in plastic bag.

Observations of the Founding Father

By Stan Watkins

Greetings Combatants! I'm still in the unfurnished Rent Apartment so I don't have my wonderful Adam computer. I hope to be in our East Tennessee home by the end of October. Larry Manofsky is still alive and well : Knoxville. His address is 7208 wat Hampton Pl., Knoxville, TN 37923. Write him and help persuade him to get back in the holds His Zara is still beautiful! My temporary addr is is P.O. Box 668, Oak Ridge, TN 7983 Keep on building & battling. God Bless you all!

Let's bettle!



ELECTRICAL CONNECTIONS: Bad connections can result in malfunctioning radios, unreliable pumps, or the familiar "dead-in-the-water"

SOLUTION: Solder all permanent connections and wrap with heat-shrink or electrical tape. Secure removable connections with tape so they

don't come loose.

INTERNAL ARMOR: This Isn't reliability problem, but it can lead to sinks. Prevent BB's from going in one side of your ship and out the other (usually with a larger hole). this also protects the delicate systems and switches inside your ship.

SOLUTION: Internal armor can be as simple as a strip of Icxan wedged in place or screwed to

the insides of the ribs.

3) BRING ALL THE TOOLS USED TO BUILD A SHIP Granted, you'll probably have to leave the

table saw at home, but you'll never know what you might have to fix. If you go with a friend, Don't forget who'll bring what.

Some other useful items: materials.

Cordless tools Extra batteries

Extension cords and multiple outlet strips Grounding adapters

Desk lamp

Electric fan

Extra frequency crystals

Basting bulb to suck water out of ship

4) DON'T SET UP DOWN RANGE OF FLUEGEL

(Allies disregard this one)

Fluegel likes to test his guns in the shop and reputedly has the hardest hitting in the hobby. How do you think he keeps the Axis in line? Jawohl, Herr Grossadmiral

continued on next page

News from the Northeast

Okay, the biggest news is that the Northeast (Maryland Attack Group) is working on holding Nats. next year. The club has indicated that it wishes to sponser Nats. There are a few problems in the way but they look like they can be overcome. One - the motels out here are more expensive that those in Texas and Mo. Most of our members have indicated that contestants can stay over with them. Two - our battle lake is primitive - bushes and trees down to the water's edge. Similar to the river at Mo., except that the bottom is muddy (gooky). We will look for a better lake or clean up around ours. Three - our present workshop is too small for Nats, it is now a two car garage. We think we can come up with (rent) a better place without too much problem. At the pool group meeting, most of the Texans indicated that they would come to Nationals in Maryland, if we would hold it. So, alot depends upon the rest of the country - could you come to Maryland? Other choices at this point would seem to be Amarillo, TX., maybe Tenn. (if Stan can set it up). The Springfield group indicated they would be ready the year after but not this yearin all likelyhood.

How is the east doing? Well, we have eight captains (full memberships) with active ships in Maryland, and another five building. This should be pretty good since we only have an area about the size of Amarillo to pull form. We still have Carl, Bob Amend, and possibly Joe and Dwyer from out of state. At our spring regionals we had eight captains and had a fine time. We expect to have a fall regionals although the date has not been set yet. (I would expect it to be in Sept.) Call me at 301-993-8013 for more info. later. This is a daytime number although there is a recorder on it, if you want to leave a number and time for me to call back.

Steve Andrews recently purchased the California (it's third owner now) from Bob Amend, and intends to get it ready as soon as time and money permit. John French is talking about a BC (Japan), and Amend talks about everything but looks like the Q.E. is good enough for this year anyway. Marty (me) is now talking about a new Warspite if the crazy rules pass. Rick and Beth are not talking. Danny still pieces the Maryland together in time for most regionals. Dan Hayes took the aluminum lows to the pond and seems to be now considering a smaller ship. Will seems to be riding high with the South Dakota (what with the Yon Fluegel, Class 1 high sortie, and the Maryland Attack Group overall high point awards.) Looks like his Penscola will never see battle. Carl is still building house but says he can make it to fall regionals with one of the Iti Pocket BB's- he thinks. New members Ed Newbo, Nathan Blatau, Dan Rose, and Ronald Thibault are all working on cruisers.

So that's the news from the east. Except the heat has really taken it's toll on our lake - we now have algae problems and the level is the lowest we have ever seen it at this time of year. Come to our regionals - we have a backup lake if needed.

Marty

1988 Rules Ballot IR/CMWCC

1. Add to section II. H. 1

- 1) 1/2 ship units will be allowed in class 6 only A 1/2 ships unit would be a 25 shot gun or a pump with an 1/16 I.D. outlet hole.
- 2) Class 6 will be further broken down to the following classifications:
 - A. Light Cruisers built before 1922 1 units.
 - B. Light Cruisers built after 1922 and under 5,000 tons std. disp.
 - 1 unit.
- 2. Add the following:
 - 3. Freon tanks may extend no further then 1/4" from the hulls surface.
- 3. Change the following "III. B.5.b" to read:
 - b. A ship in "out of Control" status (2 minute or 5 minute) may only fire on ships which are firing on her.
- Delete "III. B. 5. c" 1.e. Out of Control (2 minute or 5 minute) can not be removed if control is regained.
- 5. Casement decks can be built to be inpenetrable if they are located 3

(scale) ft. or more in from the hull of the real ship. Barrels and Cupulas can be built inpenetrable in any case.

- 6. Change the following "III. B. 1" to read:
 - 1. Battle damage points are accrued by shooting holes in the opponents ship.
 - a. A BB entry hole in hull above the waterline will count 10 points.
 - b. A BB entry hole on the waterline will count 25 points.
 - c. A BB entry hole below the waterline will count 50 points.
- Any ship over 40,000 tons Std. displacement can cover all quadrants with guns. (Change to II. H. 7. c)
- Any ship over 40,000 tons Std. Displacement may have one rotating turrent with one gun. This would allow 2 guns in a side quadrant by including the rotating gun. (Change to II. H. 8. a)
- 9. Add to II. G. 2:

Pump outlets can not point above horizontal.

10. Move section II. E. 8 (....superstructure parts which exceed 1"....) to Scale section of rules. (II. B. 7) continued on next page

11. Add to section II. B. 5 - Each ship must have a scale number of props.

12. Modify section II. J. 4 to:

If a ship is in violation, a secret ballot will be taken among all participating captains (both sides) to decide if the violating ship can compete without correcting the violation. If one dissenting vote is received that ship CANNOT compete until the violation is corrected. This vote is taken only once for entire event (regionals, nationals, etc.)

3 A ship which sinks after five minute rule (or two) has expired, is declared sunk unless it returns to shore or touched (by human) before the sink occurs.

1988 BALLOT RESULTS

The results of the vote is that rules 1 through 5 and rule 9 did not pass (did not recieve 2/3 of the votes passed.) Rules that did pass are the rules which halve the battle damage points, increase the gun coverage of 40,000 tons Std. Battleships and Battlecruisers (2), move the superstructure parts to the scale section of the rules, require each ship to have a scale number of props as well as shafts, modify the violation voting to just once during an event, a ship is declared sunk unless it touches shore or is touched by a human after it's five minutes, and 1/150th. scale is not allowed after Jan. 1 except under the grandfather rule. These rule changes will be added to the published rules for next year and will be sent to all members as they join next year. Remember to join early next year, so your subscription to Hullbusters goes in early and you don't miss a issue.

Question #	Percentage				
1	51%				
2	65%				
3	57%				
4	65%				
5	53%				
6	88%				
7	76%				
8	82%				
9	24%				
10	92%				
11	67%				
12	80%				
13	69%				
. 14	81%				
	wired to page a rule)				

(Note: 66.66 or greater is required to pass a rule)

WEDNESDAY AT NATIONALS

By Peter Futschik, 30 Powell St., Sth. Yarra, 3141, Melbourne, Australia.

Another beautiful warm day. First off - light fleet battle. Generous Jass wanted to make it one light cruiser and one destroyer against another L.C. and D.D.

Stan insisted on Allied vs Axis. A compromise was reached and the battle pitted the Axis Gerald Roberts L.C. Noshire against the Allied L.C. Arethusa of Tom Jass and the D.D.'s of the father of warship combat and the father of Karl Shafer Jnr.

When the battle began the Gerald Roberts ship fought aggressively whilst the Allies milled about in admiration for their turning ability. When Gerald was out of BB's he wisely moved off and the Allies followed behind right out into the lake. They had yet to fire a shot. I could hardly see them. The Allies displayed great courage in taking their ships into rough water, but Gerald must have bribed them not to shoot at him. Gerald won. Next there was a one on one between the Suzuya and Mikuma, as Dirty Dave (why is he called dirty? He's so clean and pure!) and Jeff Lide had a family quarrel.

The sortie began with the Mikuma chewing up Dave's hull with its outside props. The hull hole in the Suzuya was rapidly patched with some duct tape but the Suzuya had a noisy shaft for the remainder of the battle. Jeff Lide gave an impressive demonstration of how foolish it is to just follow your opponents stern byshooting numerous holes in Dave's bow. Mysteriously he then changed places with Dave, who shot up Jeff's bow! I think Jeff won.

The Mikuma was aggressive and deserved to win, despite its distinctive side to side wobble. At one stage it appeared as though the Mikuma was sinking, but Stan and Fluegel assured me that Jeff's cruiser always

sails this way.

Next Fluegel's Scharnhorst fought Futschik's Scharnhorst. The Dallas T.V. people were there and whilst Karl Schafer thoughtfully distracted Futschik's attention, Fluegel was able to pound Futschik's bow. Fluegel won. If you are ever battling Fluegel count your holes carefully yourself; Fluegel tried to get a minute crack in my hull counted as an underwater hole!

Next we had a battle between the Gerald Roberts
Haruna, the Billy Grainger Prinz Eugen and the disgusting Allied South Dakota of Will Montgomery. In this
battle the Prinz Eugen was unusually pacifist, the Haruna
was battled with minimum regard for caution in the
lovely aggressive style we have come to associate with

Gerald Roberts.

I proposed that he be declared "Most fearless Axis" but no award was forthcoming on Friday night. I greatly prefer the non stylised battling Gerald does to the efficient but boring to onlookers style of the "experts" and "tactical" battlers where the competing two ships stay tail to tail for most of the battle as in the low scoring Fluegel/Will Montgomery clash.



Next the Japanese fleet Haruna/Suzuya/Mikuma fought Fluegel and Billy Grainger in a Japanese/German clash. Both sides fought well, but eventually the Germans won, aided by one brief period where Billy Grainger trapped

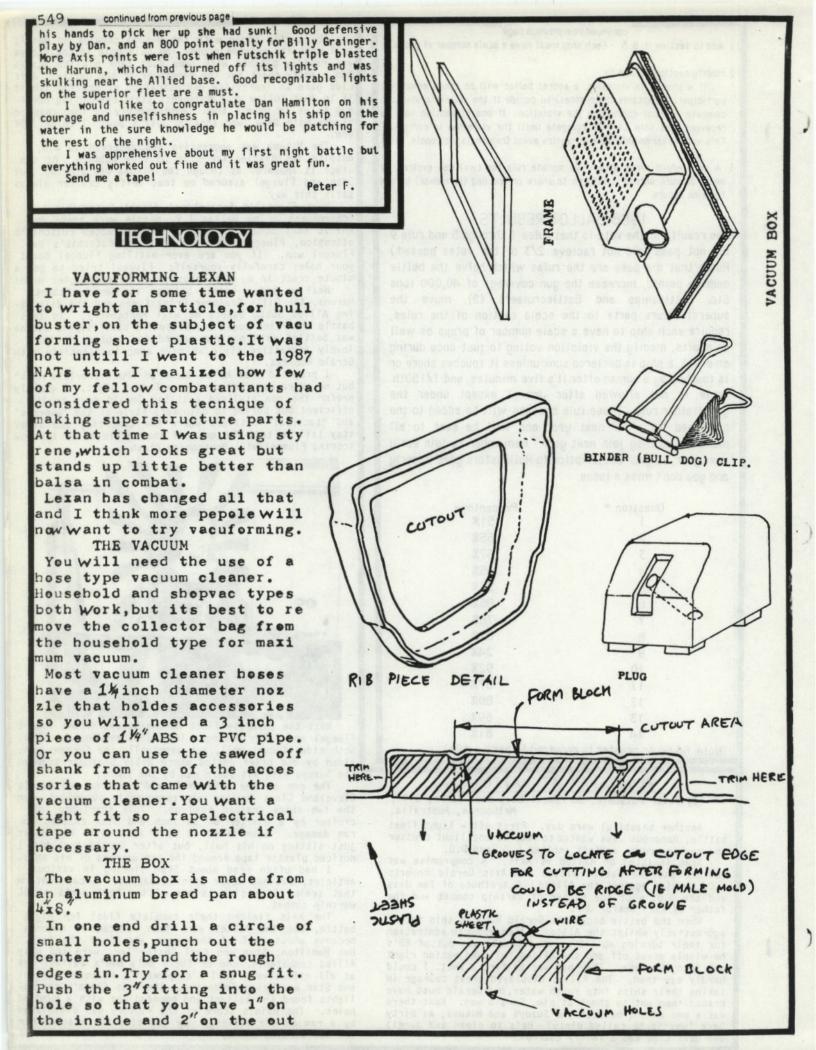
the Suzuya with his stern gun by the shore.

The one on one between Gerald's Haruna and Stan's Cleveland Class Cruiser was temporarily suspended when the two ships crashed head on. This shortened the cruiser by a quarter of an inch and Stan checked for ram damage. Stan liked to sail about with his decks just sitting on his hull, but after Gerald sank him I noticed plastic tape around the top corners of his ship.

I had often read about Stan sinking in various articles, but had never seen it happen. I can confirm that seeing Stan sink is one of the best parts of RC

warship combat.

The Axis fielded their complete fleet for night battle, but the Allies were much reduced in numbers because about half of them were afraid of the dark. Dan Hamilton, Stan and Karl Shafer Snr. were the only Allied combatants, and of these only Dan's Valiant was at all effective. Carl's ship wasn't in total control and Stan was being defensive. The Axis fleet's searchlights found the Valiant and pounded her with a hundred holes. The points score of the victory was diminished by a ram on the Valiant. By the time Dan reached her she was sinking and by the time he slowly stretched out



MULTI-PIECE VACCU-FORM HULL

side.Run a good heavy bead of silicone sealant around the inside and outside of this joint.Let the sealant cure completely.

The base is made from 7x14"
piece of plywood. Glue the
pan to the base with silicone
and position the pan so that
you have a 4"overhang at the
fitting end. This prevents
the Weight of the hose from
tipping the box up on end.
Again, let the sealant cure
completely.

Now you must drill holes in a grid pattern on the top of the box. The grid pattern should be a little larger than the largest part you in tend to make. The holes should be in diameter and no more than who between holes. Deburr the holes by twisting a war drill bit in each and then sand the surface smooth. Go eazy drilling the holes or you may bow the surface inward.

This can be made from 1/4 in. plywood. The opening must be large enough to fit over the top of the box and the handle should be long enough that you don't burn your hand.

THE FRAME

Youll also need 6 or 8 binder clipes, sometimes called bull dog clips, for holding the lexan to the frame.

THE PLUG

In vacuming the mold or pat tern over Which you form your part is called a plug.

Plugs can be made from many materials wood, plaster, metal, polyester resin ect.

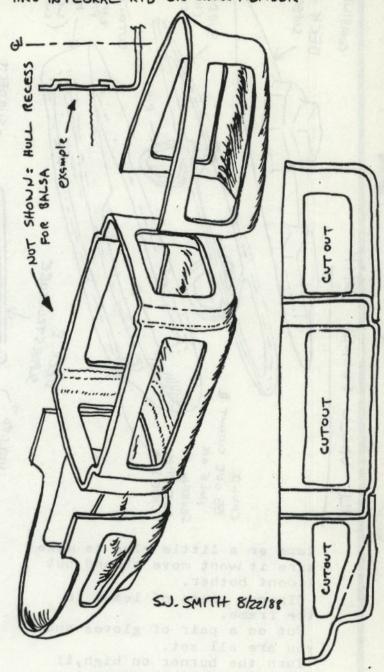
Some things to keep in mind..
..the part Will turn out
slightly larger than the plug.
..the plug must be able to
stand some heat and pressure..
..fine details do not form
very Well, they look much
better added onte the part
later..

- .. the plug must have a smooth finish..
- ..glue spacers to the bottom of the plug to ensure that the lexan forms to the bottom edge of the plug..

FORMING PARTS

I like to use a gas stove

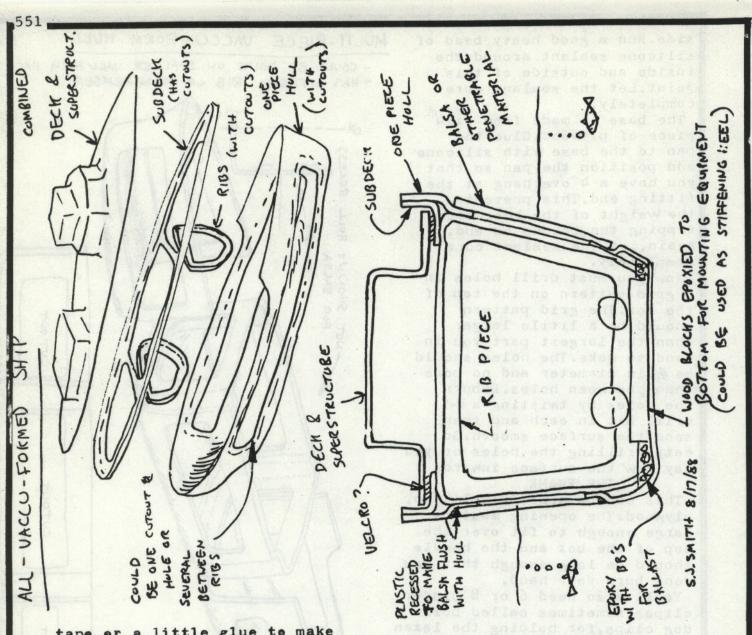
- COULD BE DONE ON SMALLER VACU FORM MACHINES - HAS INTEGRAL RIB OR CROSS MEMBER



because the heat can be turned off and on more quickly. If you use an electric stove remember that the burner Will be hot for some time after you turn it off. A small toast er oven or broiler oven Will also Work. (no, AXIS, you cant use the microwave).

Sit the vacuum box on the stove or on a counter top near by and make sure it wont fall off when the vacuum is turned on.

Place the plug on the box With its edges as close to as many holes as possiable. You may want to use dobble sided



tape or a little glue to make sure it wont move around but I dont bother.

Clamp a piece of lexan in the frame.

Put on a pair of gloves and you are all set.

Turn the burner on high, if you are useing an electric stove wait untill it heats up. Hold the frame horizontally about 8"to 10" above the burner and start counting as you rock it from side to side and move it around so that it heats up evenly.

Watch the lexan. As it heats up it will become wavy. The amount of time it takes for the waves to appear is about half the time it takes for the lexan to become hot enough

for vacumforming.
Keep counting. The lexan Will begen to droop or sag and give off a slight edor.

Turn on the vacuum. I hope you can do this while holding the frame over the burner, mine has a foot switch.

Now, quickly but smoothly, move the frame from the burner to the vacuum box and place it down over the plug. Before you can say I love allies your part will be formed.

If your part does not form and all you get is a dent in your lexan, move the frame back to the burner. The dent will go away, and you can try agan. If it dosent form this time you must start with a fresh peice. as the lexan gets thiner each time.

Practice, experment, you Will soon get the hang of it.

Let the vacuum run for a half min. or so before you turn it

min. or so before you turn it off. I hope you have already turned the burner off. continued on next page

from previous page

Let the lexan cool completely before you remove it from the plug.

.. tips on using vacufor med

parts..

..makeing small parts without using big pieces of lexan.. ..female molds(plugs are male)..

..why Axies dont need vacuum cleaners..

Blow-by-Blow

Battle Reports

Friday, last day of the Nats, 1988.

Texas. It is hot. Very hot. Hot enough that you can smell a British ship for miles, hot enough that you can't tell if the sweat pouring off your brow is from nerves or the sun.

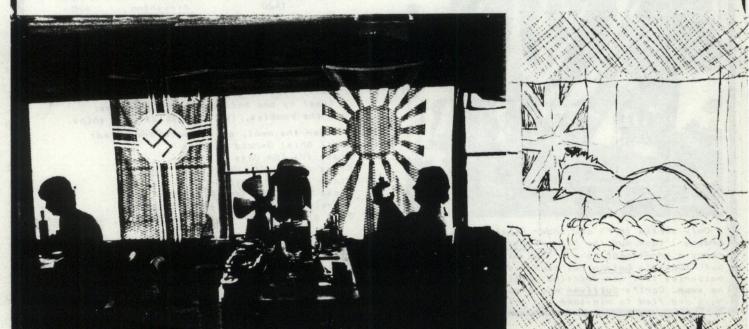
The day has not gone well. Off, in fact, to an ominous start. Dirty Dave, acting as CD, had snuck in before dawn's first light and handed out chits with the sort of enthusiasm normally seen only amongst the Highway Patrol. No one was spared. Feter Futschik's <u>Scharhorst</u>, a rudder with an "unusual" size ratio. Wade Koehn's <u>Lutzow</u>, ditto. Larry Dahl's Exeter, outside shaft and prop placement that was, er, suspect. The Green Hornet dba Harmna, out of Gerald Roberts, turning tighter than most sports cars. Carl Shaffer's York, no safety pins. Fluegel's Lutzow on a diet. Will Montgomery's S.D.B.B., illegal stringer. Stan, unable to count over two, lacked the four shafts crucial to the Oklahoma. Billy Gainer used his safety pins to hold up the Prince Eugene's Axis flags. Scott and Jeff Lide, Kirishima, thought secondary guns were the Uzis they were packing. Same for the Maya. James West newred a crane to get the Hipper afloat. Dan Hamilton's Valiant didn't have as many barrels as his Chrysler's carb. Marty Hayes's Will Inflexible, a bit on the chubby side.

Tom Jass's Belfast, a bit sluggish, minus a pair of prop shafts. Dirty, going against his Axis training, chitted himself, his Suzuya's waterline not quite where it ought to be.

Fleet battle predicament-strewn, mistakes everywhere: the Valiant rammed three times, but Dan, samurai-obstinate, refuses to check the damage, calls five, sinks 45 seconds later. The S.D.'s sidemounts wreaked havoc on a pair of ruokie Lutzows. A pair of Scharnhorsts and a recalcitrant radio sent the Inflexible to D: Jones's rusty locker. The York, small and speedy, still no match for the Suzuya. The Green Hornet, robbed of its sting by radio problems, hit hard by the C.K.C. The Prince Eugene mixing it up with the Old Man Jass. The Kipper and the Maya sneak up on the gorging S.D. It's hopeless: there's too much happening to have any hope of catching it all.

ALLIES AXIS 320 Suzuva S.D. Inflexible 910 Karana 270 O.K.C. 120 Lutzow(SS) 580 Lutzow(WK) 1350 Belfast 60 York 400 Hipper 60 1810 Eugene Scharnhorst 120 Scharnhorst(Flg)20

The Allies, for the first time, have a mission. Like the spineless, witless, cringing, bootlicking cowards they are, they go after the two crippled rookies. As the S.D. came in for the kill, the Karmna put a hullbetween the sidemounts on Steve's Lutzow. I called out of control on my own Lutzow; after five expired I moved to take the boat out of the water but the CD said no. Rookie that I was, I listened to him. The Karmna tried to push me to shore, but



After the frenzy was over, Fluegel checked the Scharnhorst for damage, following a ram by Stan. Picking up the ship by her stern caused the decks to go awash, and Stan claimed a sink, overruled, of course, by the CD. Sneaky, Stan. The F boys teamed up on the S.D., the only BC in the sortie for the Allies. Will's hull told the tale. Jeff Poindexter entered the Arethusa to aid the weakened Allies. The Prince Eugene and the Maya were quick to give him second thoughts. Cunning and quickness kept the Belfast just ahead of the Suzuya and Karmna, but couldn't entirely escape some heavier-than-normal damage. The York tagged the Hipper. Steve Smith at the helm of Fluegel's Lutzow was outrun and outgunned by the O.K.C.

ALL	IES	AXIS					
S.D.	560	Lutzow(SS) 30	00				
0.K.C.	80	Lutzow(WK) 14	0				
Belfast	240	Karmna	30				
York	120	Hipper	0				
Arethusa	340	Kirishima 420)				
	1340	Suzuya	40				
	A SHARE	scharnhorst 1:	20				
		Scharnhosst(F1)	140				
			240				



Only sortie in F9 and under Fluegel's direct orders I took out the Scharnhorst, looking to repay a compliment to the S.D. Steve Smith took out Fluegel's <u>Lutzow</u> but dead radio receiver batteries left him drifting helplessly. Ergo, he swam. Carl's Sullivan was attacked by the Maya and fled to mid-lake for safety. The



Belfast put a few well-placed shots into the Kirishima's bow. The <u>Prince Eugene</u> tries to tag the O.K.C. from a stern gun, but the Green Hornet, passing between the two, took the damage. Dan, having learned his lesson, does frequent ram-checks. The Belfast and Peter's Scharnhorst slugged it out at close range, guns blazing. Too intent on the Scharnhorst, the Belfast rams the Prince Eugene. The Arethusa does a limbo dance under a dredging cable to escape the Karmna. Jeff and Gerald both have control problems. The Japs call for support and Peter's Scharnhorst responds. James West gets out on an early five. The Belfast pounds the Japs until the Scharnhorst arrives on the scene. Dan pounds the Karmna from his sidemounts. A rookie with a fast strip, running strafing passes on the S.D., extracts a small measure of revenge.

ALL	IES	AXIS	
S.D.	580	Scharnhorst	340*
O.K.C.	220	Scharnhorst(ri	ki)380
Belfast	120	(S\$) Lutzow	1590
Valiant	200	Prince Eugene	0
Sullivan	60	Hipper	0
Arethusa	240	Maya	140*
	1420	Kirishima	410
			2860

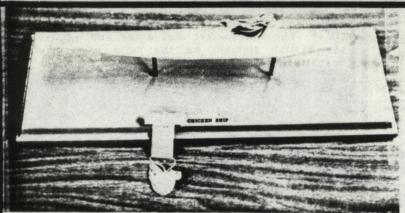
*100 pts. ram

Herr Fluegel's strategy: fleet battle, with the Axis leading 6 to 4 prios to F9, give both his ships to the rookies. The Axis would probably lose F9 (and did), but triumphed in fleet by one battle. Thanks, Fluegel, from the rookies, for the use of your ships.

After the meal, awards were presented: Small Ship: Gerald Roberts Class IV: Tom Jass Class III: Marty Hayes Class II: Dan Hamilton Class I: and the Von Fluegel Travelling award: Will Montgomery Best of Scale: Fluegel and Futschick, Scharnhorst

A most deserving Tom Jass received the Brian Spychalski award. Jass is an Ally even the Axis xenophobes can salute.

Axis Grand Admiral Fluegel won the Texas Triple Crown, an attractive trophy in the shape of Texas with his name inscribed on



a plate across the bottom. But what the heli is a <u>longhorn</u> doing on it?!? Put a longhorn on a lake and he'll sink. Besides, Fluegel's got all the bull we need. A ship would be more appropriate.

A few unannounced awards were made. Peter Futschick received a ten-gallon hat from Steve Milholand. A little Texas two-stepping and some beer brought Peter a measure of, er, culture. Peter's appearance will live in infamy...

Finally, Scott Lide presented my personal favorite award: the Chickenship Award, given 554 along with a medal to that boat which most consistently hovered at the absolute edge of its transmitter agnge, a boat you'd've needed binoculars to spot, a boat that gave new meaning to the phrase "neutral waters." CARL SHAFER is the winner of this FIRST annual award.

Everyone had a grand time at the Nats. Folk came from great distances, with and without boats, to make new friends or renew ties with old ones. A shame we couldn't spend more time together. But I'll be back, barring death or other trauma, now and forever.

By the way, scuttlebutt has it that the Lides weighed their ships on a digital scale and came up two pounds lighter than at Nats. But then, what's scuttlebutt, right? I mean, scuttlebutt has it that I paid off fluegel for the Rookie of the Year award. What a laugh. Hope you like that radio, fluegel...

Reported by Axis slave
Joe Mama
Technical Assistance and
Legal Advice by the People'S
Democratic Navy of Libya

News From Port Variable By Chris Pearce

Feeling rather prolific, I thought that I might have some good news for y'all out there. Since I came to Owego, NY, I have found an excellent hobby shop about fifteen minutes away. This place is a warehouse, and they offer stuff at pretty cheap prices. I recently bought some Airtronics mini servos here for \$12.50 ea, Dumas 4.8V motors for \$8, and etc. However, for the price addition of the US Snail, you could probably order these from Tower for a similar amount.

Where this story gets interesting, however, is batteries. Here, I found some Aristo-Craft 6V 4AH gel cells for \$10.00 each. The batteries weigh 1.75 lbs. each, and measure 1-13/16" X 2-3/4" X 6" It's best to allow 6-1/2" because these batteries have the automotive style quick connect tabs on them. With the right tabs, this is a really nice feature. Now the best thing about these batteries is that you can fit two of them into the average cruiser that would ordinarily carry only four X-Cells. (They only weigh a little more.) These batteries do take up a bit of space, but then you can't expect a free lunch. All I can say is that I plan on buying six more so I can have more than enough if I build a battleship in the near future. The hardest part will be charging them all.

APPLICATION NOTES FOR MAINTENANCE FREE RECHARGEABLE SEALED BATTERY

- Fix the battery securely to protect it from abnormal shakes and shocks.
- Never light a match or a cigarette near a recently charged battery.
- Carefully attach the clamps of charger to the battery in proper polarity (usually red to positive and black to negative).
- Charge method (constant voltage charging)

	Standby use	Cyclic use	ı
Set charging voltage (20 C) Max. initial charging current		2.40-2.45v/cell 0.25CA	100

(C:nominal capacity A:ampere)

- Batteries should not be stored in a discharged state or at a hot place.
- Never let gasoline, thinner or organic solvent fall on the battery, do not use cloth soaked with such material to clean the battery.
- For a long period of storage, fully charge the battery and keep it in a dry place with low temperature (-20°C ~40°C)
- During storage, recharge the battery at least every six months.

Nominal Capacity Voltage 20H.R. (V) (AH)	6 1.2	6 3.0	6 4.0	14-6) 6 4.5	9 9	6 8.0	0.01	6 3.0	0.9 9	6 8.0	12 1.2	12 3.0	12 4.5	12 6.0	12 45
Model	NP1.2-6	NP3-6	NP4-6	NP4.5-6(TL4-6)	NP6-6	9-84N	NP10-6	PE3-6	PE6-6	PE8-6	NP1.2-12	NP3-12	NP4.5-12	NP6-12	NP6.5-12

But get this, they offer other batteries; I just haven't seen them at the store. Inside the boxes with the batteries were lists of all the different models, voltages, and amp ratings. I've no idea how they could be gotten, but perhaps the more resourceful could figure something out. (Send an inquiry, perhaps?)

Meanwhill, what this all comes down to is that if enough of you are interested, I can talk to these guys or maybe even Aristocraft themselves, (If that's possible) with the intention of organizing a mass buy, in hopes of a standard or mini servos (They cost the same, and airtronics standard or mini servos (They cost the same, and are adaptable to Futaba or other radios, so you can take all the plugs off you. bad Futaba servos and put them on a good Airtronics servo. If any of you are interested in any of the above possibilities, talk to me. If all else fails, I can probably get the batteries to you for about \$13 each. We'll have to wait and see...

Otherwise, on the Hullbusters front, I am quite willing to write an article on how to convert plugs on these silly servos. (It's not immediately obvious, since the wires are arranged differently on the plug.) More interestingly, I have discovered how to make a spring loaded piston gun with backfeed with a minimum of effort. I will probably make an update of my gun system article one of these days, and include these details, and others.

However, I've rambled enough, so let me tell you where you can find me. I'm now at: 333 Main St., Owego, NY 13827, and my phone number is (607) 687-6186. I'll be here until Thanksgiving week, so you'll have to get a hold of mereally quick about the batteries, before I go back 1000 miles to school... So, until later, that's all from wherever I

Yours, Chris

One Sided Battle

by Curly Barrett

The DKM Lutzow battled the HMS Indolence in a one sided battle on September 7, 1988. The site was Port Polar Bear Pond, on a windy day.

The 4-unit British tug was fresh out of the Port Polar Bear dockyards and had not gone on sea trials yet. This was a shakedown cruise it will long remember. Chris Gennaro and I filled the guns and freon tanks while thousands of fans cheered us on (actually there were no spectators, but for propaganda purposes let's just say there were a thousand). The Lutzow headed out to await the sheep for slaughter.

The young british ship was acting up and the captain soon had two nearly nonfunctional side mounts. He was so disheartened that he really didn't tweak his lone working bow gun prior to battle.

The battle was quick and painful.

The HMS Indeterminate soon called five as it's pump was on and it's weaponry inferior. The Allied scum tried to outrun and dodge the lithe Panzerschiffe....The Lutzow ate it alive!

Final score showed that both ships had survived, however, the three hull hits the British had scored was soured by the 50 point ram penalty for a total of 10 points.

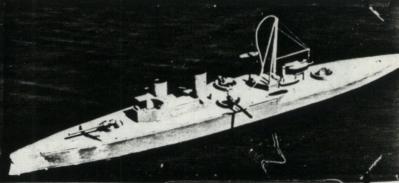
The Lutzow had been accurate - hitting 39 out of 100 for a total of 1140. Ouch! Of the 39 hits, 35 of them hit the Port side! A one sided battle.

While the British licked their wounds a rematch was scheduled for September 17.

All out mar mas declared I I I

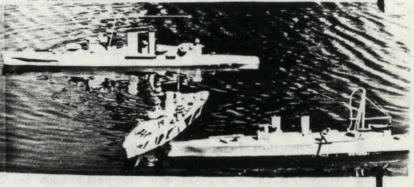
This was to be a friendly little two on two battle between the Lutzow and Graf Spee of Curly and Steve Smith, and the Exeter and Indomitable of Larry Dahl and Chris Gennaro. This complete meeting of Port Polar Bear was rounded out with newcomer Steve Schmidt and Amy Barrett, who had to settle for pulling the trigger on the movie camera.

When the battle started the Graf Spee was "in Brest for repairs of an undetermined length of time". The Luizow set sail alone and sortied with the British flotsam on the calm waters of this beautiful day.



The battling was fun and frenzied. The cruisers were dancing with each other as the battle cruiser plowed between, figuring out his new gunnery. A spurting bow gun hampered the *Indomitable*, but the plumes of water off both sides showed his sidemounts to be effective, or at least - functional.

Although all three ships were 26 second ships, speed seems to be worth very little in these sorties. What was noticably effective was a fast turning ship. The three ships all turned well with the edge going (maybe) to the German design. The battling was ruthless. A ram was followed first by three quick shots, then by asking if the ship would be brought in, but before it could make shore it was stafed again. A nasty bunch of tea drinkers up here in the northland.



Halfway through the battle Larry unexpectedly called "5" on the HMS Exiting and slunk away in true Allied fashion. Salvage operations later found the Exeter in shallow water performing first-hand depth readings. It seems a blade broke off of his impeller and the pump stopped. Larry had fairly slight damage, but it doesn't take too much for a ship with no pump. The tumultuous roar of the fans told the tale. One down, one to go!

Somewhere in here a propulsion failure caused the Luizow to lose it's port drive for the remainder of the day. Later examination would reveal an uncoupled fuse connection. Of course, for propaganda reasons, sabotage is suspected, but since I can't even get at the little things I'm sure no one else got near them. It may actually have been sot open, though I say no concrete evidence of it.

The second sortie found Steve much closer to being battle ready. He would limp in at the end. Luckily the end would come quickly as the Lutzow was able devote it's full attention toward the *Invisible* and put 3 on, 4 below, and 23 above, including 9 in the critical bow area. A combination of this damage and running instead of standing-still sent the Allied barge into the murky depths.

While the champagne was going around, the Germans decided to have a 1-on-1.

Steve's pretty virgin ship hit the water moving

continued on next page

A Letter from garl L. Shafer o en letter to the board and members. Luring a sometimes e ter discution on the rules nowin tion I wish to apolagize to antone to felt my remarks were tersonaly among the trem. that we not my int on, in coments were for the outter sat and future of this club. I do some at byth back myred changes for de mouseur of autock-noing rules, at rather to gain more of a degree parity betreen the fleets. And iso to make more and differnt ship esirable to battle. A no in regards the discustions on casements, I an see both sides of it, It boils exh to, the haves and have nots! for one can see no parity in bat eling with a logo

ad my rules proposal concerning ight cruisers was completly changed belot and did repersent the etent whitch was voted on and pas ad at the nominating meeting. I voted against Prop. #1 and urge oth ers to also. The proposal should we read as follows:

1) 1/2 ships unit wil be a 25 tot gun or # 1/16 1.1. outlet hole.

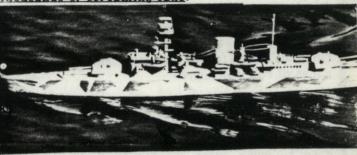
- 2)alight cruisers over 5,000 ton. built after 1922 - 2 units
- b Light cruisers over 5,000 tons built before 1922 and 1/2 units
 - c Light cruisers under 5,000 tons built before 1:22 -1 unit or 1/2 and 1/2 unit.
 - d Light cruisers under 5,000 tons built after 1922 -1 and 1/2 units.
 - e This not change the classes and the 1/2 unit can be eig ther a gun or a pump. The full unit can only be split an 4c.

I feel this proposal should be resubmitted to the members for a new vote. And after closly look ing over this proposal I think the merits of passing it will be agreed upon.

I also want to thank the Ammer rilo group for hoisting the Nats. this year. You made us out-oftowners feel at home.

And our C/I. "Lirty" Lave, You did a great job on an unthankless position. THANAS. (even if we did ot always agree).

continued from previous page slow, with no bow gun and a poorly tweaked stern However, his wisely purchased Carl-Pump proved too much for the Lutzow to overcome, but it didn't stop the damage as the Graf Spee took the pounding fury of a man trying to clear the pond. Lots of sun light poured into Steve's hull along with lots of water. When the balsa settled, the two sister ships sailed side by side into port to the cheering of thousands of screaming fans.



The totals were tallied and even Amy agreed Curly would be hard to live with as he had beaten the rest of Port Polar Bear by a score of 4090 - 160.

Damage goes as follows:

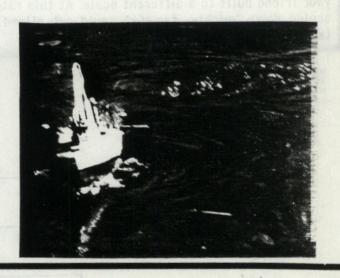
Lutzow- 8 above..... indomitable- 3 on, 4 below, 23 above, SUNK....1810 Exeter- 1 on, 1 below, 13 above, SUNK..........1010

The captains agreed it was fun, but would be more fun if all of the ships were more reliable and better prepared. Future battles are expected, but nothing was definite at this writing.

Any other good Axis propaganda material should be sent to : Curly Barrett

2816 Silver Ln. *106 Saint Anthony, Mn 55421 (612) 781-0858

Have a happy hobby! Our feet are stained.



THE FORM I am subscribing and have enclosed \$ I have a new address. I haven't received my _____issue of Hull Busters: To Subscribe send this form with your money. to Herr Fluegel/3524 Gray Drive/Mesquite,
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is _____. Advertising rates are \$2.00 per 8 lines. All articles should be singled spaced and 4 3/4 inches wide. Please start your article with a title and a "By line". Rates are \$6 in Feb, \$5 in Apr, \$4 in Jun, \$3 in Aug, \$2 in Oct and \$1 in Dec. All Foreign rates are doubled. Do not subcribe for 1989 Issues.

About the Peter Principle

This is one man's opinion of two men's ideas. The August article from Peter and Tom was designed so people could build whatever ship they want without feeling like a target from the keel up. My return discussion is as follows:

- 1). The idea of the hobby is NOT based on the fact that all ships are created equal, nor should the rules be modified to achieve that end. Aren't 25 pages of rules enough?
- 2). There are always going to be some ships that are better than others as long as there are rules, and as long as there are physics. Designers worked long and hard to make their ships turn faster than their predecessor's. Let's not Un-design the ships so there is no advantage to one over the other. If that is your desire there is a small group of battlers looking into a standard class hobby.
- 3). While it would be nice to look at the fleet and see all different classes of ships, I don't imagine the German fleet at Jutland, upon seeing the Barham, Malaya, Valiant and Warspite, all cruising in line towards them, complained that it was boring and that the British should sail different classes of ships in a battle.
- 4). This changing size and classes is not good for the looks of the hobby. Who wants to battle a Scharnhorst that is longer than the Tipritz which your friend built to a different scale. At this rate a scaled down "mighty Yamato" could get sliced in two on a ram from the Tromp

- 5). The rush to build the ideal ship is a race that only a few allies seem interested in. I fall to see where several Axis, if any, are building the Vittorio. Lutzow yes, Scharnhorst maybe, but the people you are upset at are the Allies.
- 6). As for the slow ships not being built....I am currently building a Konig, 28 sec 5 unit beauty. And while I'd rather have a Scarnhorst like all the other little Adolfs in the world, I'd have to knock the window out of the Chevette to transport it. Here again the problem may be that the Axis never designed ugly pig dog ships like their Allied counterparts did.
- 7). Some people like the idea of battling with an (Axis) underdog ship. I suppose it's redundant to say "an allied underdog ship". Anyone can win with a winner, but a good combatant can win with a loser. I may have to eat a lot of crow when the *Konig* sails, but I feel a good captain can make her a winner.
- 8). Comparing the Yamato to the Vittorio, based on performance in the course of the war, puts the two-war Schleswig-Holstein as a much more "powerful" ship than the shortlived Hood (Britian's largest and deepest battlecruiser). The Admiral Scheer was far more impressive than the "flash in the pan" Bismark, yet ou rules don't reflect that...but should they?

In conclusion, I feel it's time the Allies stopped creating rules to make up for their incompetence and start performing better so we Axis' can see other ships sink besides a *South Dakota*. In the words of the immortal Mercury Peabody, "There are no bad ships, only bad Captains!".

HULL BUSTERS VERY LIMITED 3524 GRAY DRIVE MESQUITE, TX 75150

