

Will Montgomery
Frank Pittelli

If you haven't already done so, now is the time to get your entry form in for NATS 91. Those forms allow the CD (Will Montgomery) to perform a preliminary check on your boat, alerting you (in private) to any potential problems before you arrive in the Land of Pleasant Living (Maryland). A minor violation has already been discovered in this way and the captain has plenty of time to fix it. In case you don't already know, NATS 91 will be held from 14-19 July 1991. You should plan to arrive sometime on Sunday. Sunday afternoon is usually used by all captains to iron out any last minute problems, to take a few pot shots at Fluegel and, in general, to sit around and gab. A speed course and an accurate, albeit Axis, scale will be provided for those captains who feel the need to be legal. NATS officially begins at the Sunday evening captain's meeting that will probably be held around 7:30 at the motel. We have a room that should be sufficient for such a meeting, assuming that Fluegel hasn't already claimed it as his expansive dockyard. (The Bismark needs a LOT of room.)

Sometime in May, when flowers are blooming and a captain's mind turns to destruction, we will be sending out, to all people who have sent in entry forms, the official NATS 91 Captain's Package. Chock full of valuable information, the package is bound to be a collector's item and should prove very useful to the recipient. The package will include a map of the lake and motel area, an official schedule for NATS 91, and pictures of the 1988 and 1990 Von Fluegel Award Winners (suitable for framing).

As we stated in the last article, we will be staying at the Knight's Inn this year. All the rooms are ground level, double bed, double occupancy and run \$28.50 plus tax per night per week long stay. If we use ten or

more rooms, the rate will be \$26.50 per night. The motel has a pool and will allow us to use their conference room for the Sunday and Friday meetings, as well as for a workshop. Captains should make reservations themselves by calling the motel directly at 301-498-5553. You should inform them that you are part of the 'Meade Modelers Marine Division', 'The Boat Modelers', or 'The Boat People Mentioned by Frank Pittelli'. If you have any problem getting the discount rate, you should talk to the manager, Fred Harris, or call Frank at 301-266-8498 and he will take care of it. Some cots will be available, but you won't know until you arrive. So if you plan to have 3 in a room, be aware that you might have to get a little cozier than expected. As with any motel, you need to give them a credit card number or send them a deposit to reserve the room. If you need to cancel, deposits will be refunded in full if you inform them in writing at least a week in advance.

As was done last year, the CD and Site Host will be depending on the respective admirals to control their own captains, both at the lake and in public. Given Fluegel's long term experience in dealing with children and the fact that he is the Gross-est Admiral ever to pilot a ship, we have no doubt that the Axis fleet will be in complete compliance with all rules and will, in fact, be complete gentleman at all NATS functions. On the other hand, we have yet to hear from the Allied Cabin Boys concerning the selection of an Allied Grand Admiral. Any information in this regard would be gratefully appreciated, so that the CD can consult with the Admirals in advance to iron out the rules of engagement and resolve any major issues before everyone arrives. If no such admiral comes forth, we will be forced to assign one ourselves.

If you have any questions about NATS 1991, or want to make any comments ahead of time, send them to:

Will Montgomery
110 Thomas Road
Glen Burnie, MD 21060
301-760-8991



NATS 1991 will probably be "The World's Largest Model Naval War" and we would like to make it a great success. See you all there.
PS. Remember, you must be a card-carrying member of NAMBA and IRMWCC to participate (otherwise our insurance is invalid).

NATS 91 Entry Form

Capt Name _____

Phone Number _____

Ship Name _____

Ship Class _____

Model Length _____

Model Weight _____

Rib Count & Thickness _____

Bow/Stern Thickness _____

Crystals.(eg. FUTABA AM 78)

Brand	AM/FM/PCM	Channel
_____	_____	_____
_____	_____	_____
_____	_____	_____

Blow-by-Blow

Battle Reports

WHY IN ORLANDO?

The winter of 1990-91 was a tough one for Dan and Mary Hamilton. The rains in Decatur in December through March were brutal -- their trailer floor was damaged; Dan's workshop was flooded with water and much of his battling equipment and some ships were saturated with water. They decided to cancel hosting of 1991 Spring Southeastern Regionals because of these problems. Dan asked the Florida battlers to sponsor the Spring event if at all possible. Buddy Friend, Greg Wilson and Don Cole were the leaders in taking up the challenge and hosting a regional in Florida. They contacted me to see if I would drive to Florida to battle; I was excited to know that they had agreed to serve, so I volunteered to act as CD for the event and bring my trusty Apple III along for scoring. John was coming home to Lombard from China (where he had been roaming the country for three months) in mid-April, so he would also probably be available to make the trip and battle in Florida. Steve Baker and Bart Purvis (both from Georgia) also agreed to drive to Orlando rather than Decatur to test their ships against all comers. After a few weeks it looked like the number of battlers would be in the area of ten to twelve -- enough for a good fight to usher 1991 in with a bang. We would call this regional the Southeastern Southeastern meet, since it was to be held both south and east of Decatur, Alabama. (Southeastern Squared?)

JASS PREPARATION & TRIP SOUTH

During the 1991 winter I had been doing minor modifications to HMS TIGER -- installing a sump for the pump to minimize the amount of water that the hull had to carry before the pump would light off; installing a 75 bb magazine in "A" turret to take advantage of the new rules; removing the turning motor system; patching the hull and superstructure (from 1990 Nats damage); eliminating the xcvr battery using a battery eliminator diode; and other small, but time consuming, chores. My big winter project was to find and install new motors in place of the Dumas 6 V. jobs which have always required 8 V. to push the TIGER to 24 seconds. Rumors were floating out of the deep south that the Florida battlers had discovered "magic motors" which could propel a heavy cruiser through 100 feet in 16 seconds -- and they only cost about \$6 each!! All this performance and legend has it that these jewels only draw 1 amp loaded in the water; if all these specs were fact and not fiction, they would indeed be "magic motors". I called the Florida gang and was directed to a California company who was selling Mabuchi RS-550 motors for \$3.75. I sent for four of them and hastily installed two in HMS TIGER as soon as the UPS box arrived. The old BC really moved through the water, but the motors drew 2 amps each and sucked an X-cell string dry in about 10 minutes. "Magic motors", nuts -- would the Florida Allies lie to their president? Another long distance priority call was placed to Dixie; Greg Wilson said the real supplier was Edmund's Electronics in Kentucky. I placed another rush order to this supplier (they charged \$6.75 per motor) and awaited fate. These "magic motors" looked exactly like the California motors except they had a double metal case arrangement around the motor. I installed these and launched HMS TIGER on another test -- she blasted through 100 feet in 18 seconds and ran around for 50 minutes without slowing down (all this on 6 V., 10 amp hours); Holy Cow, these motors seemed to fill



A SEVEN COURSE MEAL
FOR AN AXIS CAPTAIN
SUBMITTED BY SUB LT HORNBLOWER

the bill. I had located the elusive "magic motors" at last. TIGER was rigged to run on a 10 amp hour battery for main drive and a 5 AH X-cell was installed for the pump. Now all I had to accomplish was slowing her down from 18 seconds to 24 seconds. Piece of Cake!!

My heavy cruiser, HMS BELFAST, required little work to bring her to battling condition. I retained the 6 V. Dumas motors since she makes 24 seconds with them -- I didn't need two ships to slow down. A few patches and some paint brought her to battle readiness. Oh yes, I did remove her rudder assisted turning system to get her to a legal 1991 condition.

John and I figured the trip to Florida would be an easy two day drive or an impossible one day jaunt, so we decided to stop in the Atlanta area (at Peachtree City) overnight on Thursday and convoy with Steve Baker on Friday to Orlando. The trip from Lombard to Georgia was an easy drive and the weather was beautiful. After 12 hours on the road we pulled into Baker's drive and inspected his new HMS INVINCIBLE, told sea stories and talked of weekend strategy. On Friday AM we buzzed down to Florida (following Greg's detailed maps) and checked into the Altamonte Springs motel at about 2:00 PM. It was 90 degrees and humid in Florida, but summer 1991 was here at last for two Illinois boys!!

FRIDAY "FOOLIN' AROUND" & THE SITE

We three piled back into the vehicles and drove back to the downtown Orlando area following the map. The lake was in an older (but beautiful) section of town. It was HUGE -- with a sandy bottom. The water level was up due to recent rains in Florida, and there was some interesting battling areas near shore where small trees and bushes were partially underwater, with a channel to sail around them. We found the Florida gang's 100 foot speed course and tested HMS TIGER, HMS INVINCIBLE and HMS BELFAST. TIGER was slowed down to 24 seconds and we played around with the ships. Leif Goodson arrived with DKM VON DER TANN and she was launched into the lake for some cruisin'. After testing we returned to the motel (about 15 minutes away) and went to supper with Greg Wilson, Buddy Friend, Don Cole, Leif Goodson, Bart Purvis, Charlie Griffin and Mike Elledge. They treated me to supper since it was my birthday #52 -- thank you, gang!! We told more sea stories, divided up the teams and agreed to meet at 8:30 AM on Saturday to set up the area; battling would begin at 10:00 AM (sharp?).

FALL REGIONALS TIME !!!!!

By: Greg Wilson



Well its time for another fun time in Orlando Florida. The Spring Regionals was a blast. I'm Sorry everybody wasn't able to attend. This time we will be able to give everybody plenty of notice. The City of Orlando was out at Lake Davis Saturday and said " It was the best Organized event they had seen at the Lake. We can use Lake Davis anytime we Like." This time we will have the Fall Regionals Sept. 28th and 29th. I Hope everybody can make it this time. There will be Plenty of food and drinks Plus Plenty of Relaxing fun. Entrance fee will be \$12.00 so send it as soon as possible so we can set up the Food menu size. Also send me the frequencies you have to use. We didn't have any trouble last time but It still is nice to Know. Send your entrance fee and frequency to Greg Wilson, 496 Tamarack Street, Altamonte Springs, Florida 32714. I will send out Maps and motel information to anybody that wants one, so let me know. See you in Orlando.

ADVICE FROM THE VICE

Well another battling season is upon us. With this in mind we need to be sure that we have a Nats with no surprises in the freq.list or tree . The worse time I had at Nats last year was at the Capt..meeting Sun. night with an un--forseen freq. conflict ,until that night . We were able to work it out last year because of the low no. of conflicts, but we may not be that lucky this year. So if you haven't sent your Nats. entry form in with your freq.no., do it now. By this time you might give the C.D. a call to see if your chanel is already taken . So the best way to insure there are no suprisies is

COMMUNICATION .



I.J.N. Southern Command
Inland Sea

Capt. Gerald Roberts
ch.. 48,02

ORDER OF BATTLE

We hoped to keep the sides roughly Florida against the world while still relatively even in units and experience. The Brits hoped to steam together also. All of us really wanted to battle Axis vs. Allies (like Fluegel desires), but it would have been Leif Goodson and Charlie Griffin with a Japanese DD against about 9 of us.

FLORIDA FLEET

USS NORTH CAROLINA

Greg Wilson's 6 unit BB was the flagship of the Florida fleet. She is a 26 second ship with twin rudders and four guns -- two stern hammers and a side mount on each side forward, angled at 45 degrees. She is relatively new, but Greg has been developing her extensively during the 1990-91 winter. She would probably be assigned to engage HMS TIGER.

DKM VON der TANN

Leif Goodson had just returned from duty with the US Army (at Ft. Sill, Okla.) during "Desert Storm" which he volunteered for. Leif, we as a club are all proud of your actions and the patriotism you displayed!! Would the German BC be ready? Her four unit configuration was two broadside guns forward, one stern gun and a pump. Even minus her 1990 turning system she is a good turning ship. Her natural enemy would most likely be Baker's HMS INVINCIBLE.

USS OREGON CITY

Buddy Friend's new USA heavy cruiser was decked out in a neat blue and gray paint scheme. Buddy had her slowed to 24 seconds (she has the "magic motors") and she had gotten plenty of water time this winter. She was armed in typical CH fashion -- guns fore and aft, with a pump for defense.

USS MIAMI

Another American CH steamed for the Florida fleet. Don Cole's USS MIAMI was a definite contender for best of scale with her crisp construction and detailing. Don is also a relative newcomer to our hobby, but like Buddy and Greg, he was gaining sea time during the long warm Florida winter (when our northern

waters are frozen). Could one of these USA CHs offset the veteran HMS BELFAST during the weekend?

USS INDIANAPOLIS

The the third CH in the Florida fleet was Mike Elledge's USS INDIANAPOLIS; she was a former Buddy Friend CH which Mike had modified and was getting his rookie battling in. She would definitely be singled out for special attention during the weekend. She was armed in typical CH fashion.

INVADERS FLEET

HMS TIGER

John Jass would be slugging in close quarters with his HMS TIGER, a 4 1/2 unit WWI BC with 24 second speed. TIGER is a veteran, but her battery system has never been 100%; would the "magic motors" with 10 AH be the final answer? She is armed with 2 side guns up forward and a stern gun aft. She would be the slugger in our fleet -- would her single pump be too much of a disadvantage against the USS NORTH CAROLINA's six units?

HMS INVINCIBLE

Steve Baker's new WWI Brit BC was facing her maiden battle -- would all her new systems be reliable? She is a 26 second, 4 unit ship with short length and twin rudders. Steve had designed and built a pneumatic (freon powered) turret rotating system for her "A" turret. Her Dumas 6 V. motors drove her at 21 seconds before he slowed her to meet the rules. He had also installed twin stern guns with a pneumatic elevation system. Would all this new technology be reliable against the veteren DKM VON der TANN? Time would tell.

USS NASHVILLE

Bart Purvis from Baxley, Georgia brought his new USA CH (from a Skunkworks kit); he had built his own balsa superstructure and her detailing would make her another Best of Scale contender. The 3" AA guns and the 40 mm gun tubs were all present. He had installed six X-cells in her to provide 10 AH capacity, but the cells were installed standing on end (not laying down) and we quickly dubbed her "Rock and Roll" as she rolled heavily in turning. Her paint scheme made her look very much like Don Cole's USS MIAMI.

HMS BELFAST

The veteran British CH was piloted by the 'Die Man -- Tom Jass. HMS BELFAST was still outfitted in her usual configuration: two guns and a Jass

QUICK MOUNTS

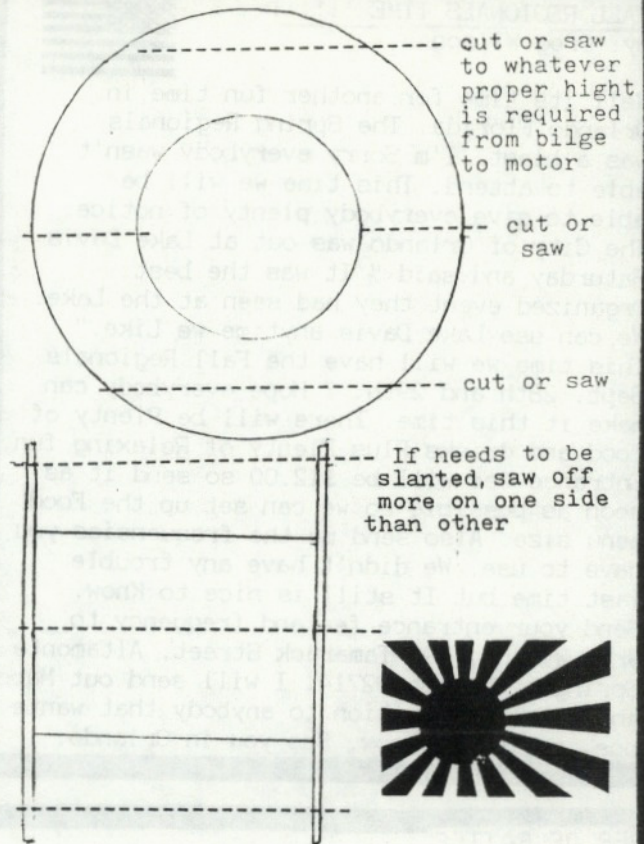
by: Capt. Sinkyu Tubottem I.J.N.

I'd like to share an easy light weight motor mount for cruisers and small ships that use motors with the same diameter as 4.8 Dumas and 380s. I started using these mounts back in 86, at Nats that year I showed Terry Darby and he said I should write an article about it ..

For all you people who never met Terry I considered him to be one of the best cruiser captains, and the best Allied cruiser captain at the time. (Sorry Terry you were only the best when you were running the Yubari). So I was impressed that he was impressed. Well here it is, Terry has come and gone but, the article never has.

You know all those electrical, soder, teflon, tape spools that you throw away when your thru. Yes these spools are what you use to make the motor mounts with. You first cut the spool in half, now your half done. Next you trim off enough of the edges of the spool to fit down in your bilge and also line up your motor with the stuffing box elevation wise. Then trim off excess edges on the sides of the motor mounts.

Make sure when your fitting the mount to the bilge you leave enough edge on the spool to allow a wire quick tie to pass underneath the mount between the mount and the bilge bottom. Simply line it up with motor and universals to stuffing box and glue it in. After glue has dried use a wire tie or two to strap your motors down. To change out motors you simply cut the ties and whip out some new ones for the next motor. Each spool makes two mounts.



pump. She is large enough to carry a separate pump battery in addition to her string of X-cells for propulsion.

DMB POLA

Mike Smith (a Floridian pressed into service with the northern enemy fleet) was driving Baker's Italian CH, DMB POLA. She was patched on Friday night at the motel. Mike is a rookie battler, but this ship would give him a reliable weapon to battle against his Florida buddies. DMB POLA was armed in typical CH fashion. Her drive batteries are unusual, however -- one 6 V. (4 AH) battery for each Skunkworks motor, with these batteries connected in series to power the pump motor with 12 V. for good performance.

IJN YUKIKAZE

A rookie Japanese DD from Florida was also added to the Invaders fleet to give us some speed. Charlie Griffin built this jewel and would captain her. She was equipped with a bow gun (singleshoot) and nicad cells. She was fast and could turn, but could she survive in a fleet of 10 other swirling ships? She has never been sunk in Florida battle, so she was a proven ship.

Lief Goodson & Greg Wilson at Lake side.



SATURDAY BATTLING

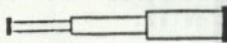
We arrived at 8:00 AM to string rope around the pit area and set up safety signs and place the safety glasses in boxes at vital locations. During the day there was a March of Dimes Walkathon in Orlando and we had big crowds walking on the sidewalk that edged our pit area. Plus, the park is evidently a popular walking area for families and retired Floridians -- we had numerous visitors during the day, but crowd control was not a problem at all. On Saturday the weather was in the low 90s and fairly humid, but we had a gentle breeze and shade trees in the pit area to keep us cool and comfortable.

FLEET BATTLE 1

The first battle got underway at about 10:10

AM!! Way to go, guys -- everyone was ready. The pond was calm and it was a glorious day for battling and blasting. The capital ships headed right for each other and USS NORTH CAROLINA and HMS TIGER were enjoying broadsiding each other while HMS INVINCIBLE and DKM VON der TANN sniffed at each other's stern in a turning match. HMS BELFAST was scoring some hits on USS NORTH CAROLINA as her attention was focused on HMS TIGER. Check your six, Greg. There was plenty of water to fight on and the cruisers were using quite a bit of it feeling each other out. USS NASHVILLE seemed to get the worst of some exchanges with USS OREGON CITY and USS MIAMI. USS INDIANAPOLIS was being more conservative as Mike E was testing her responses. DKM VON der TANN joined USS NORTH CAROLINA in doubling up on HMS TIGER; HMS INVINCIBLE rushed over (at 26 seconds) and joined the fray. IJN YUKIKAZE was out there somewhere, but she was hard to see with her low shape. The first sortie was a fierce affair, but

Observations of the Founding Father



By Stan Watkins, 4/20/91

This is the 13th anniversary of the first ever battle in the R/C Warship Combat hobby. On this date in 1978 the USS Arizona (mine) shot a hole in the USS Missouri (Jeff Poindexter's) in Gene Howe Park Lake in Amarillo, Texas. That old Arizona had (installed in 1980) a rotating turret with two firing guns that elevated and had independent firing control. This was a "crew" ship; she required two people to operate her. The Captain controlled rudder, throttle and the bow gun, while the gunner operated the

single aft turret. Now to news of current times. The IJN Yamato (Gerald Robert's) has 3 rotating turrets. Push button fired guns are legal. Concerns have been raised about the ability of the solenoid valves to be fired with a rapid pulse train. The large flow rate of these valves would allow a much higher than legal rate of fire. It may be necessary to place orifices in the pressure lines to limit the rate of fire to preclude typical axis cheating. There is an idea being proposed to allow the US North Carolina Class of BB's and the Japanese Nagato to be able to have 24 second speed so a builder would not have to build the Iowa class or Yamato to get 24 second speed. As in 1978, battleships are very much the in ships to build. This also happened in 1982. The Arizona was retrofitted with 12 guns and 4 pumps capable of 4 gallons per minute each. The rules were changed to eliminate rotate, reduce the pump outlet size, and reduce the total number of guns/pumps (units). Have fun with your complex battleships. I've already had mine!

Let's Battle,



USA

Stan

with no sinks registered both sides were disappointed with their shooting skills.

Sortie 1 Florida damage points were as follows: USS NORTH CAROLINA, 355; DKM VON der TANN, 490; USS INDIANAPOLIS, 70; USS MIAMI, 70; USS OREGON CITY, 100. The Invader ships were damaged to this degree: HMS TIGER, 460; HMS INVINCIBLE, 155; HMS BELFAST, 145; USS NASHVILLE, 150; DMB POLA, 30; IJN YUKIKAZE, 0. The Florida fleet was beaten 940 to 1085.

Sortie 2 began with all ships in the water and roaring to go -- almost. Before the battling even began HMS BELFAST found herself dead in the water (GREAT!!). I called "Five, out of control" and the sharks circled in for the kill in a feeding frenzy. HMS TIGER and HMS INVINCIBLE circled the wagons to defend me and the Florida gangsters fell all over themselves elbowing to kill HMS BELFAST. I was able to unload about 60 percent of my fore and aft magazines at ships

played their circle and fight game -- an even match. The CHs chased each other around and finally exhausted their bbs. Looked like an Invader victory if HMS BELFAST wasn't too riddled.

Florida Sortie 2 damage points were as follows: USS NORTH CAROLINA, 155; DKM VON der TANN, 110; USS INDIANAPOLIS, 1140 (sunk); USS MIAMI, 795 (sunk); USS OREGON CITY, 100. The Invader ships were less damaged: HMS TIGER, 275 (plus 400 penalty points); HMS INVINCIBLE, 25; HMS BELFAST, 945; USS NASHVILLE, 10; DMB POLA, 80; IJN YUKIKAZE, 0 again. The Invaders won this sortie, 2300 to 1365; they were victorious by a 2985 to 2305 total for the battle.

It was lunch time and also time to patch. The Florida gals provided a fabulous buffet for us to chow down on -- potato salad, fresh fruit salad, baked beans, chips, sandwiches, deserts and cold drinks. So, we replenished ourselves and our ships under the shade trees in the pit area. Better than in the wardroom on CVA-43!! First I had to drive back to the motel to solder the broken wiring lead on HMS BELFAST's throttle switch -- at least the Chevy wagon has air conditioning.

FLEET BATTLE 2

Would the infamous Battling Worm turn in Battle 2? We would soon know. HMS TIGER and USS NORTH CAROLINA resumed their broadside hammering while the others paired off to resume the fray. HMS BELFAST and HMS INVINCIBLE attempted to operate together but there were so many shots available for the taking that they soon became separated. DKM VON der TANN singled out HMS INVINCIBLE for one on one treatment, while USS NASHVILLE and DMB POLA went after USS INDIANAPOLIS but USS OREGON CITY and USS MIAMI rushed to her aid. IJN YUKIKAZE was cruising the edges of the battle trying not to get rammed but still unloading her magazine into USS NORTH CAROLINA -- Charlie seemed obsessed with getting Greg for some past injury (pick on someone your own size, Charlie). The CHs were going at it hammer and tong, and DMB POLA seemed to be slowly settling. Mike hadn't yet lit off her pump; Baker rushed to his side to explain the finer points of her manual pump turn-on, but the ship didn't seem to have any control. In keeping with her Italian heritage, DMB POLA went down by the bow into the deep -- Mike swore she was not scuttled, however!! In mid battle HMS TIGER seemed to really be pumping hard, but damage didn't look too bad from onshore. Soon the battle wound down and TIGER went On Five with her pump streaming out a shaft of water. She parked and waited out



Tiger
Invincible
Von der Tann

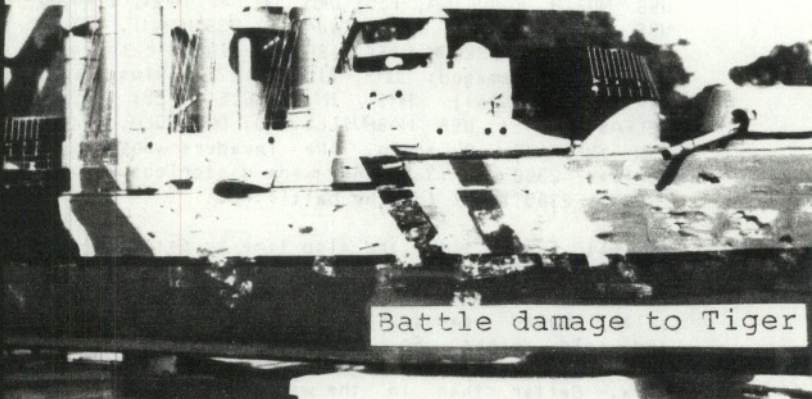
which sailed directly in my sights. During the swirl, IJN YUKIKAZE was tapped and capsized by HMS TIGER; Charlie's trip out into the pond to rescue her provided temporary respite for HMS BELFAST. During the battling USS INDIANAPOLIS was blasted for 34 hits above and 2 below and she slipped below the waves for the first sink (non-ram) of the weekend. USS MIAMI suffered seemingly minor damage but her pump did not light off and she also sank (later Don discovered that a pump lead was shot off). USS NORTH CAROLINA and HMS TIGER battled with each other while DKM VON der TANN and HMS INVINCIBLE

I WANT TO BUY USED SHIPS.

SEND: SHIPS NAME, PRICE AND A
CURRENT PICTURE.

WRITE TO: PAT HITE
912 CHESTNUT BLVD
CUYAHOGA FALLS, OHIO 44221

her time; but it looked like her pump was loosing a long, hard battle. With about a minute and a half left on her five, HMS TIGER slowly sank by the bow (shades of Milholland's USS ALABAMA). The Worm was turning! When TIGER was inspected, there were two holes about 3/8" in diameter 3" behind the bow and 1/4" above the waterline -- looked like a great stern shot from USS NORTH CAROLINA did the deed.



Battle damage to Tiger

Sortie 1 damage points for the Florida fleet were: USS NORTH CAROLINA, 540; DKM VON der TANN, 175; USS INDIANAPOLIS, 60; USS MIAMI, 0; USS OREGON CITY, 20. The Invader ships were blasted as shown: HMS TIGER, 1515 (sunk); HMS INVINCIBLE, 130; HMS BELFAST, 60; USS NASHVILLE, 85; DMB POLA, 760 (sunk); IJN YUKIKAZE, 0. The Florida fleet turned the worm for a lopsided 2550 to 795 victory.

Sometime after this sortie I noticed that I had lost my bifocal glasses; they were in my shirt pocket and they must have fallen out as I removed HMS BELFAST from the water. Nuts -- \$150 down the drain and worse yet, I can no longer see close work without them. I began the search in the pond at its edges. At least the bottom was sand. Don Cole and Mike Smith joined in and they soon located my eyes for me. Thanks a bunch, gentlemen; they were indeed perfect hosts.

The Invaders were down two ships as the battling resumed. HMS INVINCIBLE and HMS BELFAST tackled USS NORTH CAROLINA to attempt to keep her occupied and away from the cruisers. HMS BELFAST got entangled with USS NORTH CAROLINA's dual stern guns a few too many times during the battling for my liking. USS NASHVILLE was assigned to shadow USS OREGON CITY and USS MIAMI while IJN YUKIKAZE was to look for targets of opportunity and not get rammed by one of our ships. During the middle of the sortie USS OREGON CITY sank out in the middle of the lake and Buddy took the plunge into the warm water to

retrieve her. When she was pulled out she had ram damage which was the cause of her sink, but Buddy did not call ram during the battle, so her sink points counted against the Florida gang. Other damage during this sortie seemed light compared to the slaughter during the first melee.

Sortie 2 Florida damage points were as follows: USS NORTH CAROLINA, 60; DKM VON der TANN, 140; USS INDIANAPOLIS, 150; USS MIAMI, 0; USS OREGON CITY, 1050 (sunk). The Invader ships were damaged to this degree: HMS INVINCIBLE, 30; HMS BELFAST, 450; USS NASHVILLE, 90; DMB POLA, 30; IJN YUKIKAZE, 100. The Florida fleet lost Sortie 2, 1400 to 670, but Worm turned and they blasted their way to an impressive 3220 to 2195 win in Fleet 2.

FLEET BATTLE 3

We decided to make this a one sortie battle. Bart Purvis and Mike Smith decided to abstain due to battery capacity, so the Invaders were minus two ships as the last battle began, but HMS TIGER was patched and ready to go. Buddy Friend was sailing his DKM LUTZOW, a German heavy cruiser; I don't think she had yet been modified with a 75 bb magazine and 24 second speed per the 1991 rules -- but she was definitely a legal (if ugly) target.

The Florida fleet fielded 5 ships and the Invaders steamed 4 out to stem the Florida tide. DKM LUTZOW got herself into immediate trouble; she must have had some internal weight shift, for she took on a port list and had extensive red paint showing out of the water on her starboard side. HMS BELFAST roared over and fired some bow shots at her. HMS TIGER tried to disengage with USS NORTH CAROLINA and get at DKM LUTZOW. HMS INVINCIBLE and DKM VON der TANN even interrupted their battling to rush to the position of the listing CH. TIGER got some broadside shots in and HMS INVINCIBLE was trying to shake DKM VON der TANN and do the same. DKM LUTZOW was being blasted and her port stern deck was nearly awash, but she kept her speed in spite of the list and Buddy sailed her into shallow water near the shore. The CD (me) finally declared her sunk because of her deck being awash -- and the Floridians were not happy (an understatement?) with the decision. Neither it turned out were the Invaders -- HMS INVINCIBLE and HMS TIGER had finally positioned themselves on either side of DKM LUTZOW and TIGER especially had lots of LUTZOW red paint as



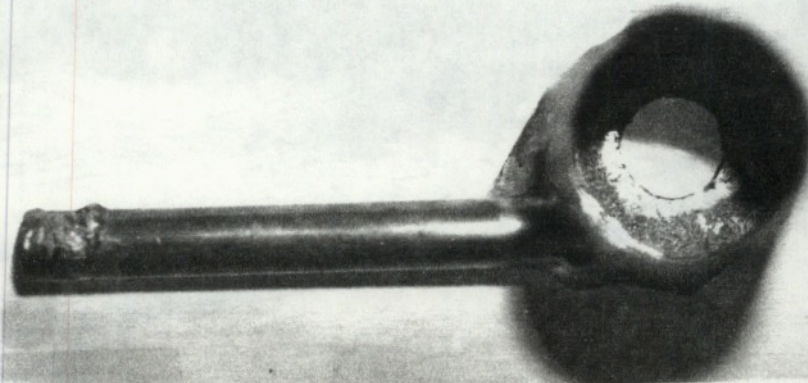


WILLS' MINI PUMP



I've built several small ships, and they need a small light pump to make them easier to built.

PUMP CASE: The pump case is made out of an 3/4" piece of copper tubing an 1 1/2" long. The bottom plate is made out of an piece of brass 1" square. The outlet is a piece of 1/4" copper or brass tubing 1" long. Solder the brass plate to the bottom of the 3/4" copper tubing. Drill out the center of the brass plate with a 3/8" drill bit. Drill a 1/4" hole as low as possible on the pump case. Cut 1/2" tubing to match, inside contour of the pump case then solder. Smooth inside edges of the pump case with a dremel grinding wheel.



IMPELLER: Start with an 1/16" dubro collar, drill it out to 5/64". Cut two thin grooves 180° from each other in collar. Cut a 3/4" diameter piece of .15" brass plate. Drill a 5/64" hole in the center of the plate. now cut out your impeller blades from 1/2" wide .15" thick brass stock, make them approx. 1/2" long. Now bend blades into a half round shape. Insert blades into collar place it on brass plate and solder.

MOTOR: First you need a Kyosho DM20 motor available from Tower Hobbies. Make sure not to get the motor with the ball bearings. (They will rust!) the motor cost 10 or 11 dollars whether you catch it on sale or not. (stock # KYOG1934) First thing you do with the motor is break it in. (24 hours on 2 volts dc) next thing seal all openings on the motor with epoxy, even around the magnets and the leads. Then grind a flat spot on the shaft for the set screw. Use a stainless steel set screw available from Exact Miniatures.

ASSEMBLY: Attach impeller to motor and check to see whether it is balanced. Then insert impeller into case as deep as possible, it may need to be trimmed. Depending on the thickness of the 3/4" copper tubing you may need to wrap the outside of the motor with



Japan



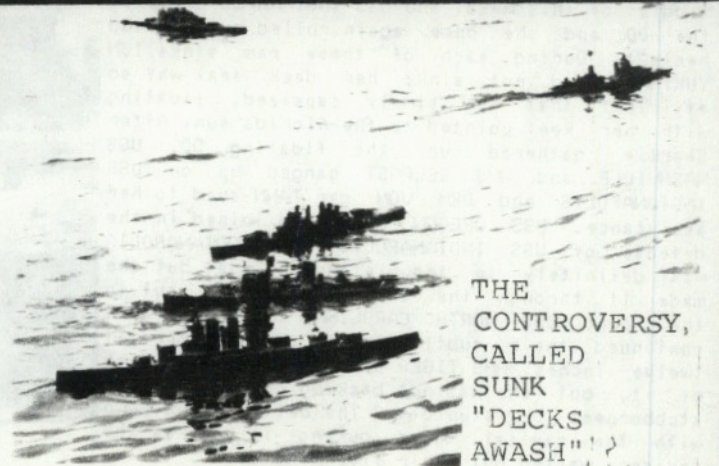
electrical tape. Once it is snug inside of the case and rotating freely. Wrap a piece of electric tape around motor and case. Now you are ready to test it. my results on 8 volts were a gallon in 50 seconds with a 4.5 amp draw. On 6 volts were a gallon per minute with a 5 amp draw. NO load draw is 1-1.3 amps. With this pump casing it is easy to test different impellers and get better results.

P.S. Please send in your entry forms today! So I can send you your info package.

William Montgomery
110 Thomas Rd
Glen Burnie, MD 21060
Phone # 301 760 8991

an inviting target. However, DKM LUTZOW had been blasted with 28 above, 8 on and 8 below her waterline when she was ruled sunk. Since everyone (both sides) seemed to be upset with the CD's decision, perhaps the decision was a valid and correct one. Oh well, that's why I was getting my huge salary as the CD!! Someone (?) got 2 hits below the waterline of IJN YUKIKAZE, and she sank for the first time in her career -- Greg was seen dancing a jig, as the Jap DD has been a constant thorn in his side all winter long. The battle wound down with all captains grumbling to themselves about "what might have been". The Combat Worm had turned again.

Sortie damage points for the Florida hosts were: USS NORTH CAROLINA, 350; DKM VON der TANN, 485; DKM LUTSZOW, 1580 (sunk with 8 on and 8 below the waterline); USS MIAMI, 80; USS INDIANAPOLIS, 10. The northern ships were damaged less seriously: HMS TIGER, 550; HMS INVINCIBLE, 80; HMS BELFAST, 90; IJN YUKIKAZE, 410 (sunk for the first time). The Invader fleet had broken the Saturday tie with a 2505 to 1130 victory.



THE
CONTROVERSY,
CALLED
SUNK
"DECKS
AWASH"!!?

SUNDAY BATTLING

The weather was again perfect for battling -- sunny, in the low 90s and cooled by a slight

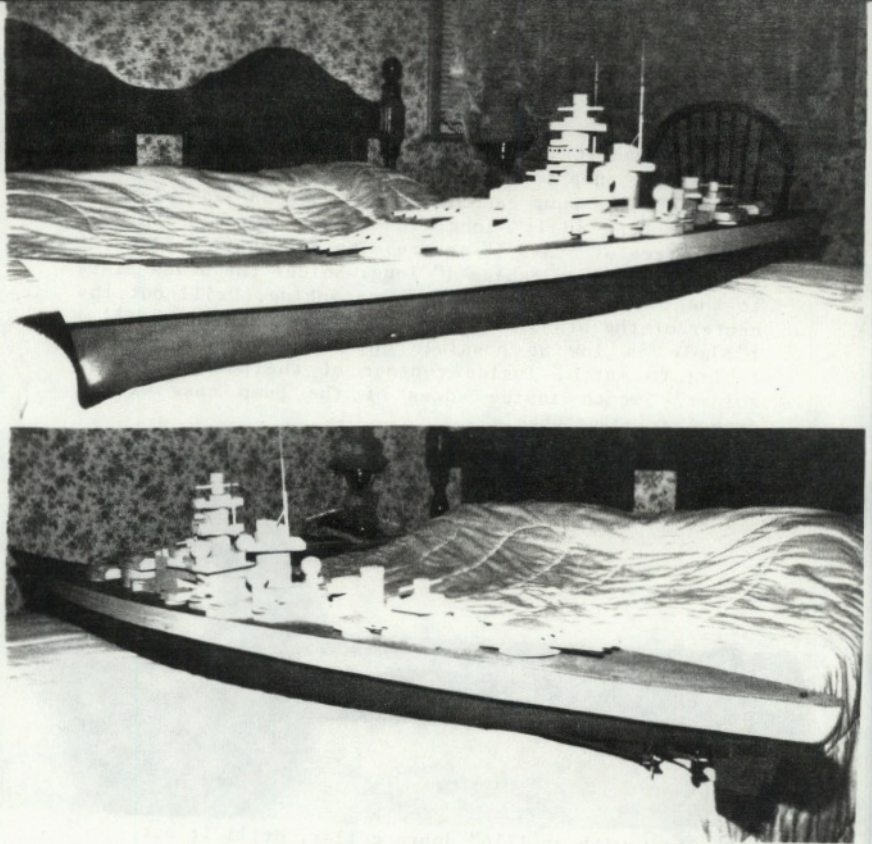
LET'S BATTLE! (FINALLY!)



By Ken Kelly

The other day, as I was putting the finishing touches on my DKM Gneisenau (Scharnhorst class BC), I began to reflect on how long I have been involved in IRCMWCC and the fact that I have not yet participated in a single battle! I have been a card carrying member of IRCMWCC for three years now, have been receiving Hull Busters for the same amount of time, have traveled to four combat events (some of them with my boat in various states of completion), poured uncountable amounts of time and labor into building the darn boat, and I have yet to punch a hole in some ones balsa! Or for that matter, have a hole punched in my balsa! An overzealous Allied captain did take a number of shots (from shore) at my boat while it was performing its shakedown cruise at last years Northeast Fall Regionals. Credits go to Marty for my "baptism of fire". I wish my guns would have been working so I could have returned fire.

Well, things will be different this year. I have my guns set up now - thanks Will for showing me how. I just put the finishing touches on my reworked Skunkworks pumps - thanks Ron Thibault for your "how to" article (I'm sure you Allied captains can't



wait to make me use them!). The boat runs and turns well - thanks Marty for all your advice. In general, the Gneisenau is ready to battle thanks to all of the help, advice, and inspiration from all of you club members.

breeze. Generally the water was calm with small waves from time to time.

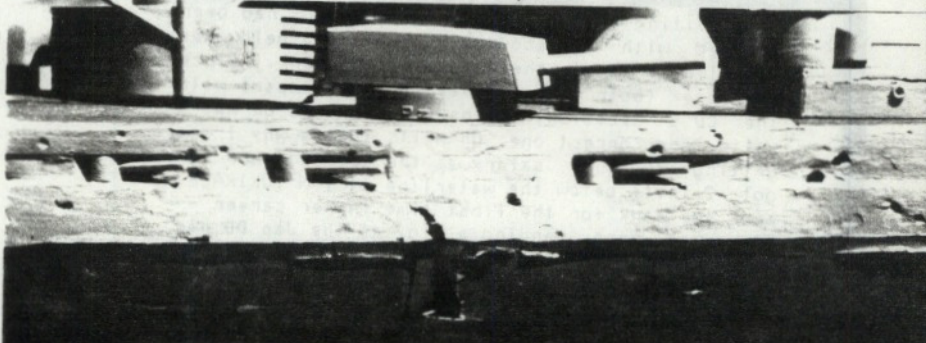
FLEET BATTLE 4

All ships were in the water and itching to go soon after 10:00 AM. John and Greg decided that they were having so much fun fighting USS NORTH CAROLINA and HMS TIGER side by side that in this battle they would just park alongside each other (no sense wasting batteries) and see who had the best pump -- dumb strategy, John. DKM VON der TANN and HMS INVINCIBLE kept their weekend long fight going and the cruisers played with each other. IJN YUKIKAZE was darting around in the middle of this mess, and USS INDIANAPOLIS tapped the DD and she once again rolled over (round heels?). During each of these ram sinks IJN YUKIKAZE did not sink; her deck seal was so efficient that she simply capsized, floating with her keel pointed to the Florida sun. After Charlie gathered up the floating DD, USS NASHVILLE and HMS BELFAST ganged up on USS INDIANAPOLIS and DKM VON der TANN sped to her assistance. USS OREGON CITY also joined in the defense of USS INDIANAPOLIS. USS INDIANAPOLIS was definitely in trouble and On Five, but she made it through the sortie. Meanwhile, out in the pond USS NORTH CAROLINA and HMS TIGER continued their subtle game of sledgehammers at twelve inches. HMS TIGER seemed to get the worst of it, but she was not backing down -- British stubbornness or stupidity? The battle wound down with the capital ships duking it out as the cruisers waited out their five minutes.

Florida Sortie 1 damage points were: USS NORTH CAROLINA, 300; DKM VON der TANN, 700 (6 on and 5 below the waterline); USS OREGON CITY, 190; USS INDIANAPOLIS, 470 (plus 400 ram penalty); USS MIAMI, 0. The Invader ships damage was: HMS

TIGER, 590; HMS INVINCIBLE, 295; HMS BELFAST, 70; USS NASHVILLE, 70; DMB POLA, 60; IJN YUKIKAZE, 0. The Florida fleet was beaten 1660 to 1085.

Back to business went USS NORTH CAROLINA and HMS TIGER; just another usual day at the office. USS INDIANAPOLIS rammed HMS BELFAST seriously in the early going, but we were both near the shore and HMS BELFAST steamed in with no problem. But the ram hole extended from gunwale to plywood, so I took my time and patched her with silkspan and dope, not duct tape. During my patching time in the pits DKM VON der TANN sank; when Leif pulled her out she too had been rammed, but he had not



A sinking ram.Von der Tann

called a ram on anyone, so it was classified as a combat sink for the Invaders. HMS BELFAST and USS INDIANAPOLIS rejoined the melee when the dope was dry and HMS TIGER went On Five with her pump lit off fully. Once again she sank slowly by the bow, much to the elation of the Florida fleet. But USS INDIANAPOLIS was also in trouble

The one thing that makes me realize more than anything how long I've been working on this boat is that my wife and I have had two children since I started building the Gneisenau. I'll never forget the excitement I felt at midnight, 10 Aug 89, when Claire (my better half) shouted "Ken, my water broke...stop working on that @\$&# boat!" or the frustration I felt as I desperately tried to de-Zap my fingers from the bottom of the hull. Almost two years later, at 12:30 AM on 1 Apr 91, I was still working on this same boat when my wife's battle cry alerted me to the impending birth of our second son (Claire seems to be setting an alarming pattern of giving birth during

the middle of the night). Luckily my fingers weren't Zapped to the hull this time.

This year will be the culmination of three years of planning and building for me. I even saved up enough vacation time so that I can attend the full week of Nationals this year. Until then, each night before I head off to bed, I take a look at my Gneisenau and run through my mental checklist: Hull - OK, guns - OK, radio - OK, watertight box - OK, pumps - OK, etc., etc., etc.. Yes, I'm finally ready to battle. I'll see you at Nats...

as she was grounded, and was filling with water by the stern. When the Invader ships were elbowing their way in to blast USS INDIANAPOLIS, HMS BELFAST carefully measured USS MIAMI for a few easy shots, as Don was not watching closely. I let loose with a salvo, and screaming erupted from Bart -- the USS MIAMI was really USS NASHVILLE in drag!! Cool shooting, Old Man!! USS INDIANAPOLIS also sank in the last minutes of the sortie to somewhat even out the score for the Invaders. Two BCs sunk and one CH at the tail end of the battle.

Sortie 2 damage points were as follows for Florida: USS NORTH CAROLINA, 1295 (7 on and 15 below the waterline); DKM VON der TANN, 930 (sunk); USS INDIANAPOLIS, 940 (sunk); USS MIAMI, 20; USS OREGON CITY, 40. The Invader ships suffered as follows: HMS TIGER, 1835 (sunk with 1 on and 9 below); HMS INVINCIBLE, 90; HMS BELFAST, 110; USS NASHVILLE, 90; DMB POLA, 30; IJN YUKIKAZE, 0. The Invader fleet won the second sortie 3225 to 2155; they won the battle by a lopsided 4885 to 3240 score.

It was meal time again -- horray! The fabulous buffet was magically set up for us again by the Florida regional hosts and we chowed down again. With the lunch food we had, subsequent suppers at fancy restaurants were a definite letdown!

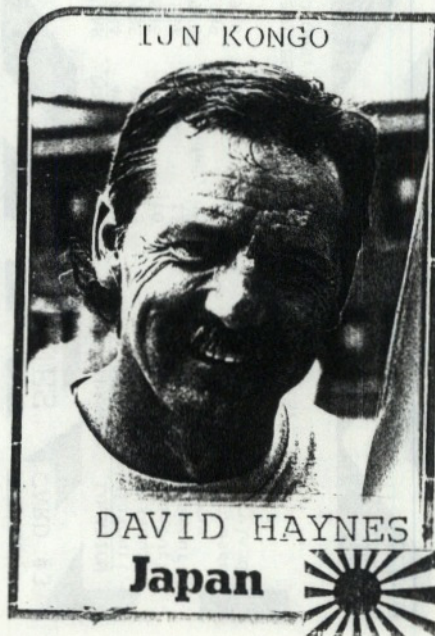
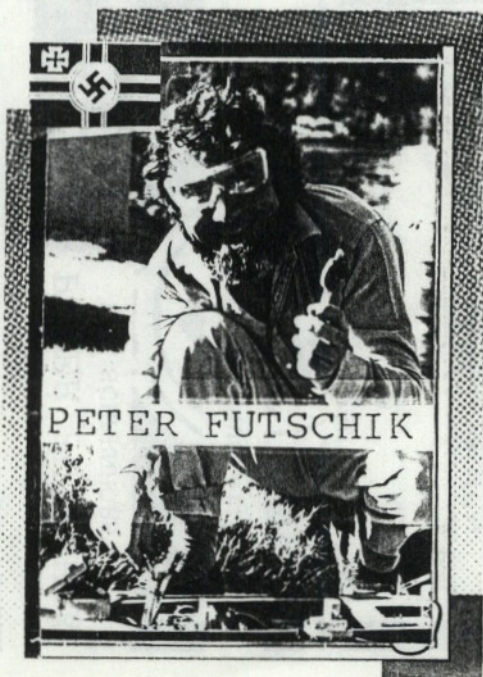
FLEET BATTLE 5

Bart had decked out USS NASHVILLE with a sign made from masking tape which ran from mast to



mast; it read, "Don't shoot me, Jaes." Would that do the trick? The last battle of the regionals began with all ships except USS INDIANAPOLIS in the water ready to go. John was finally getting the message that a BC can't trade broadsides with a BB on an even basis; he vowed to chase CHs and not park alongside the USS NORTH CAROLINA during this battle. Things were going along at a much calmer pace than in the morning, but somewhere in the middle of the battle HMS TIGER when was forcing her way through a melee she rammed USS NASHVILLE and the CH just rolled over and sank -- without a hole in her hull. (Remember those batteries standing up in the hull of USS NASHVILLE?) To compound the bad news, John was so amazed that he drove TIGER into USS OREGON CITY and opened up her hull also. Two birds with one pass! Guess the Jasses just couldn't resist Bart's USS NASHVILLE. USS MIAMI also bit the dust during the fight to make the score one cruiser down on each side. Even with the 800 ram points assessed against HMS TIGER, the Invaders squeaked out a narrow Sortie 1 victory.

During Sortie 1 the Florida fleet experienced the following damage points: USS NORTH CAROLINA, 445; DKM VON der TANN, 170; USS MIAMI, 780 (sunk); USS OREGON CITY, 90. The Invader ships were damaged: HMS TIGER, 200 (plus 800 penalty points); HMS INVINCIBLE, 155; HMS BELFAST, 120; USS NASHVILLE, 0; DMB POLA, 50; IJN YUKIKAZE, 50. The Florida fleet was defeated again, 1485 to 575 (685 to 575 with penalty points counted).

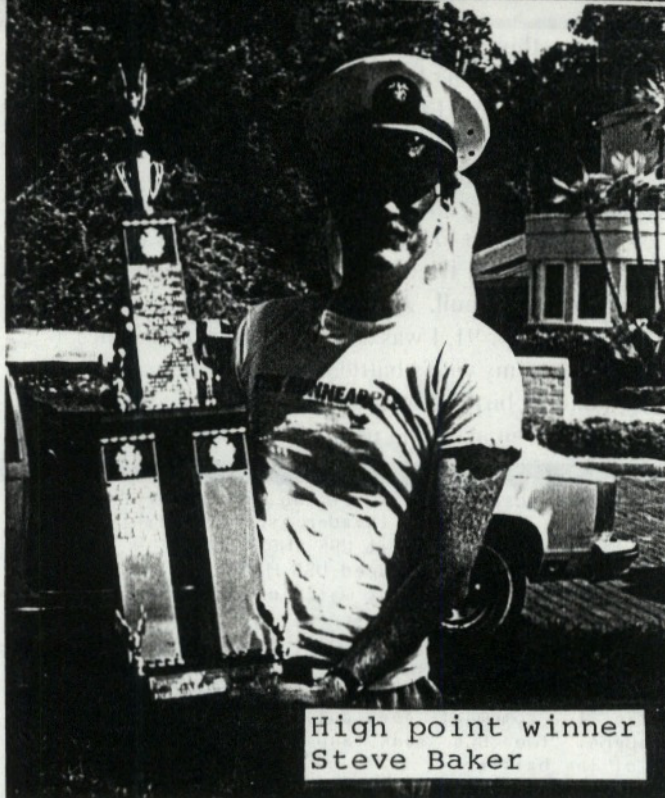


USS MIAMI was out of Sortie 2, but USS INDIANAPOLIS was back in and eager to go. HMS INVINCIBLE grounded herself in the weeds near the shore and was pounded by DKM VON der TANN and USS NORTH CAROLINA. HMS TIGER and HMS BELFAST rushed in to aid the BC, and USS OREGON CITY and USS INDIANAPOLIS added to the confusion. Seemed that USS NORTH CAROLINA was taking real damage in her defense role. TIGER was repaying some weekend debts. USS NASHVILLE was also in this sortie, but Bart seemed to be avoiding the Jasses ships -- good strategy! During the later stages of the fight, after HMS INVINCIBLE freed herself from the weeds, DMB POLA appeared to be slowly sinking by the bow -- and no pump lit off again. The Invader captains chanted, "Pump, POLA, pump!!" several times before Mike got the pump fired off. POLA began to get ahead of the water, and lived through the battle with damage but no sink. What a boring sortie; TIGER rammed no one, and HMS BELFAST did not shoot USS NASHVILLE. IJN YUKIKAZE cruised through both sorties with no damage to finish out the day in perfect fashion.

Sortie 2 Florida fleet damage points were as follows: USS NORTH CAROLINA, 710; DKM VON der TANN, 170; USS INDIANAPOLIS, 60; USS OREGON CITY, 500. The Invader ships were less damaged: HMS TIGER, 285; HMS INVINCIBLE, 210; HMS BELFAST, 30; USS NASHVILLE, 150; DMB POLA, 280; IJN YUKIKAZE, 0. The Invader fleet maintained their winning ways and the Florida fleet was beaten 1440 to 955 in Sortie 2; the final Fleet 5 score was 2125 to 1530 in favor of the Invaders.

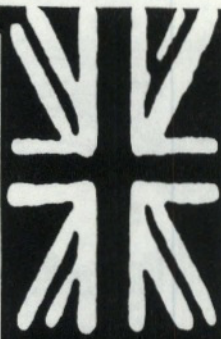
SCORES & AWARDS

When all the Sunday points were totaled (manually), some surprises were evident. With the Invaders winning 4 of 5 fleet battles their ships would be expected to fare well, but for HMS BELFAST (a CH) to finish second in total points was a real jolt. During the five fleet battles there were numerous sinks (three capital ships, eight cruisers and one destroyer), so there were plenty of points to distribute. The final official total point scores for the ships are shown below:



High point winner
Steve Baker

- Steve Baker.....3512
- Tom Jass.....3073
- Greg Wilson.....3016
- Bart Purvis.....2424
- Leif Goodson.....2414
- Buddy Friend.....2112
- Mike Smith.....2047
- Don Cole.....1903
- John Jass.....1881



CARD #1 1991

MARTY HAYES

HMS WARSPITTE

YEAR	POINTS	PLACED	PARTICIPANTS	LOCATION
1984	605	20	23	Missouri
1985	3914	5	23	Missouri
1986	2964	18	29	Missouri
1987	6121	5	29	Missouri
1988	Attended, no data		18(?)	Texas
1989	3930	7	25	Tennessee
1990	2480	18	32	Maryland

OFFICERS: Secretary twice (?) A Hull Buster Product
Treasurer twice (?)

PETER FUTSCHIK
DKM SCHARNHORST

CARD #2

A Hull Buster Product

1991

YEAR	POINTS	PLACED	PARTICIPANTS	LOCATION
1987	4452	11	29	Missouri
1988	Attended, no data		18	Texas
1990	4238	5	32	Maryland

Peter is the only participating International member of the club. He is a resident of Australia.

DAVID HAYNES

CARD #3

YEAR	POINTS	PLACED	PARTICIPANTS	LOCATION
1984	4630	11	23	Missouri
1985	6042	3	23	Missouri
1986	4452	11	29	Missouri
1987	4452	11	29	Missouri
1988	attended, no data		18	Texas
1989	2747	12	25	Tennessee
1990	3465	12	32	Maryland

OFFICERS: President, Contest Director
HONORS: Rookie of the Year

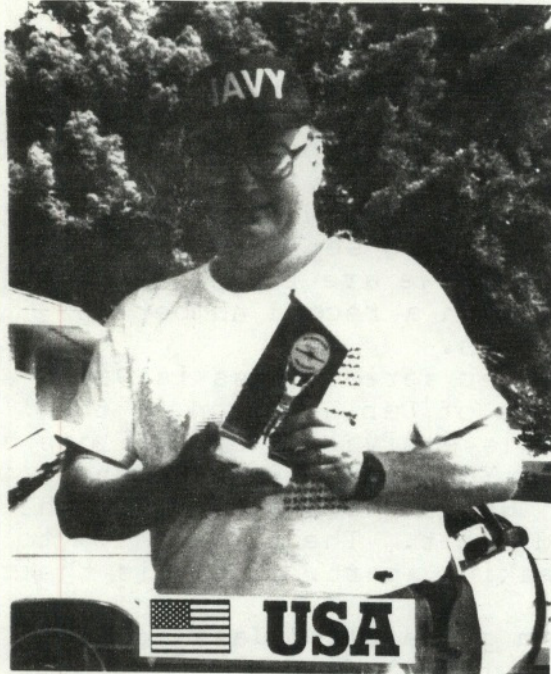
IJN KONGO

A Hull Buster Product

1991

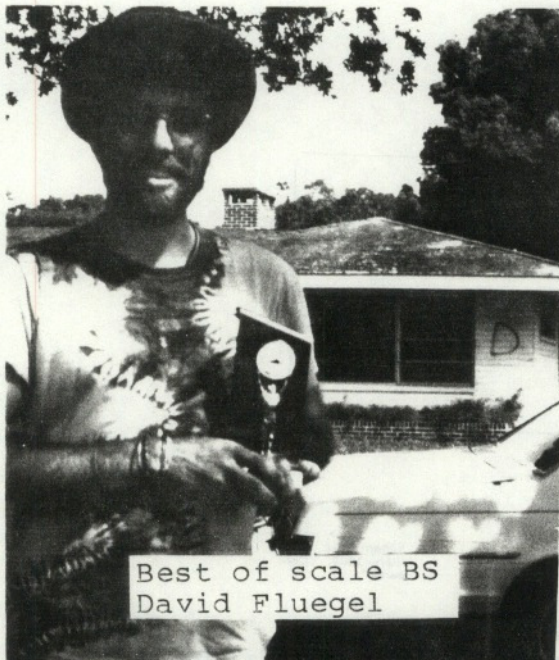
Charlie Griffin.....1756

Mike Elledge.....1386



The Florida gang had purchased slick trophies of original design. The following awards were given to the winners of the first regional ever held in Florida:

- High Point Ship.....Steve Baker
HMS INVINCIBLE
- High Point BB/BC.....Greg Wilson
USS NORTH CAROLINA
- High Point CH.....Tom Jass
HMS BELFAST
- Best Of Scale (BB/BC)...John Jass
HMS TIGER
- Best Of Scale (CH).....Bart Purvis
USS NASHVILLE
- Most Fearless Ship.....Charlie Griffin
IJN YUKIKAZE



Best of scale BS
David Fluegel

The last three were awards voted by all the captains who battled. In addition we all were presented with beautiful certificates of participation from the Florida club. They certainly put on a first class event -- good company, good battling, good food and beautiful weather. Thanks to all the Florida guys and gals who made this truly a FIRST CLASS EVENT. We'll be back in the fall to renew acquaintances and friendships!!

After the official battling was over DKM VON der TANN and HMS TIGER got it on for a "Texas Death Match" (reload freon and bbs and go out and pound until one ship is on the water and the other is below.) Both BCs pounded each other unmercifully during Sortie 1, but HMS TIGER was pumping much harder at the end. Reload and resume! DKM VON der TANN emerged the winner during the second sortie as TIGER slid below the calm waters for the third time in Orlando. Good job, Leif -- there wasn't any elaborate strategy during this battle, just tie up alongside and shoot!

NEWS FROM THE NORTH
EAST. The Germans are waiting!
Frank, Michael and Nathan



Hull Busters The Form

Name _____ Phone (____) _____
 Address _____ State _____
 Zip _____

I am subscribing and have enclosed\$ _____
 I have not recieved my _____ issue of Hull Busters
 I have a new address, see above.

Subscription rates are \$6 in Feb,\$5 in Apr, \$4 in Jun, \$3 in Aug, \$2 in Oct, \$1 in Dec. Subscribe for the current year only, please.
 Foreign rates are doubled. Advertising rates are \$2.00 per 8 lines.
 Articles for Hull Busters should be single spaced, 4 & 3/4" wide.
 Start articles with a title and a "by" line.
 Send articles and/or subscription money to:
 Herr Fluegel 3524 Gray Drive Mesquite Texas 75150



CONCLUSION GROSS ADMIRAL FLUEGEL

The photo suggests that Will is serious about weighing our ships. Okay Will, we got the message. Let's be courteous and send in the NAT'S Entry Form. I think it will help them prepare for us, so help yourself and send it in! (page 771).

Marty and Lief speak highly of an article in U.S. Boat and Ship Modeler. It's title is something like "How to increase the throw of a servo." Sounds like a useful

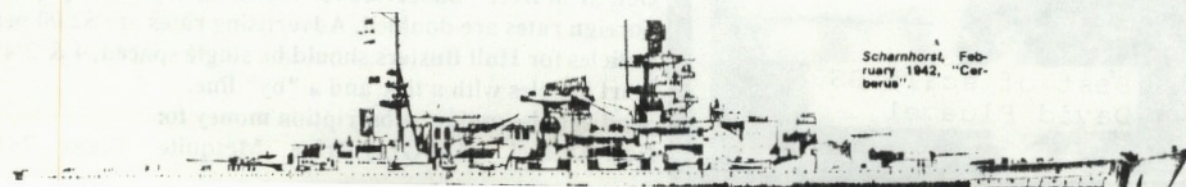
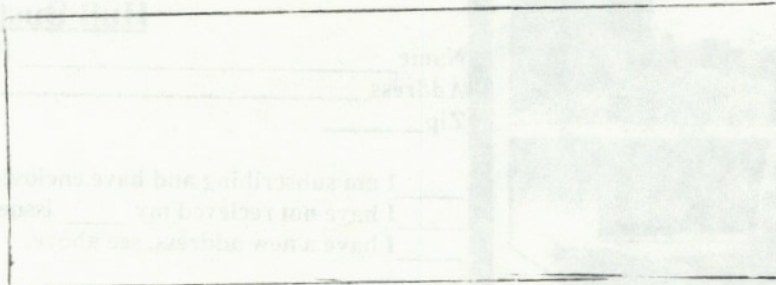
skill to have for the fashionable new hobby trend, rotating turrets.

The 91 NAT'S seems to be unwinding down from the initial "Mother of All Battles" expectations. Peter F., maybe one of the Lides, Stan, and Brian Craven may be missing. Let's hope they create an opportunity to attend the NAT'S. Still, with 30 or less battlers we may not have to break into two separate fleets. Let's hope we are forced into two fleets with a record number of combatants.

Another serious loss is Dan. The loss of Dan Hamilton to the Allies is equivalent to the loss of Admiral Yamamoto to the Japanese in WWII. He is the back bone of the Allied fleet. The Allies seem to be breaking apart. Where is their hope?

I am grateful to Jass and the other authors of this important pre-NAT's issue. Their contributions make this newsletter possible. I humbly believe that Hull Busters has been important in sustaining and nurturing the Magnificent Obsession. I solicit six prompt authors for the six days of NAT'S. Please consider this responsibility by telling me you will cover a day at NAT'S. P.S. If you don't have any NAMBA Data. Their number is 619-424-6380. Don't wait, they're slow.

D.W. OR KATHERINE FLUEGEL
3524 GRAY DR.
MESQUITE TX. 75150



Scharnhorst, February 1942, "Cerberus"