

Introduction

By Fluegel

This will be short, because I have a lot of wonderful Contributing Authors! THANKS! I have started a "Calendar" article. If you need something enclosed, please let me know.

I will publish Thursday's and Friday's battle report in the October issue describing the Axis come from behind victory!

Blow-by-Blow

Battle Reports

Massacre Monday

By Chris Pearce

Monday saw the start of the 1992 Nationals, the war we had all been waiting for. Battlers from all around had gathered in Orlando, where our gracious hosts provided us with fair seas and fairer weather. The Allied and Axis fleets that gathered there to do battle were greatly changed from the last year, both featuring new ships, and new captains.

The defending Axis were present in force, with more captains than ever before, and a host of ships both new and legendary. The captains, and their ships are as follows:

Mike Blattau: Mike brought his SMS Lutzow for her second Nationals. She was in much the same configuration as the year before, but no one doubted that she was an effective and powerful ship.

Nathan Blattau: Nathan brought the second member of the Tri-Pack, the SMS Derfflinger. She featured few improvements, but then Nathan would be hard pressed to improve on her performance in 1991.

Mike Deskin: Mike arrived Tuesday with his Mogador, and Fred's Gloire. Both ships were in good shape, but Mike was perhaps best known for his skill at piloting borrowed Axis battleships.

Jay Edwards: Jay's DMB Vittorio Veneto was beautiful as always, her only improvement being some new wiring. Jay has always been an effective captain with her, and she was expected to be a great help to her side.

D.W. Fluegel: Fluegel's DKM Bismark was again the flagship of the Axis fleet. Improvements from the previous year included a second pump, better damage control, piston guns, and unbelievable turning ability.

For Sale

CO2 Regulator - \$17.50 George Goff

This grand old veteran would lead the Axis to either victory, or defeat.

Lief Goodson: Lief brought the second DKM Bismark, a new ship with a lot of new technology. She had done well at the Spring Regionals in Baxley, and Lief was hoping that she would do even better in Orlando.

David Haynes: Dave's IJN Kongo was greatly improved over her springtime configuration, with better guns, and much more reliable batteries. She was expected to be a quick and hard hitting addition to the Axis fleet.

Ron Hunt: Ron's DKM Prinz Eugen was an attractive addition to the Axis fleet. Ron's first ship had very good turning ability and good reliability; he would be a promising hope for his fleet.

Terry Keef: Terry came to Nats with his DKM Graf Spee. She was a good looking ship, with good systems. Terry was expected to stay on the fringes and play the run and gun game.

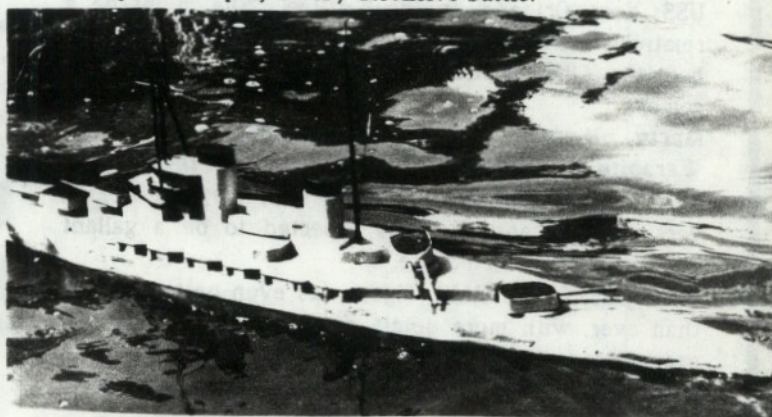
Wade Koehn: Wade's DKM Lutzow was looking her best ever, with reliable guns, pump, and propulsion. Wade was looking forward to the chance to win High Sortie Cruiser for the third year in a row.

Will Montgomery: Will's IJN Nagato was a new ship which had had her share of problems, both in Baxley, and at Annapolis. Will had built her a new pump, but it was doubted that she would be as effective as the veteran IJN Hiei, which Will also brought, just in case.

Steve Milholland: Steve's DKM Lutzow was a new Skunkworks product, featuring air compressors and a fiberglass hull. The ship looked very sharp and ingenious, but it was anybody's guess whether it would all work on the water.

Frank Pitelli: The unofficial leader of the Tri-Pack, Frank brought his SMS Hindenburg for her second Nats.

Her gun configuration was drastically changed, with dual stern side mounts and a bow gun, and Frank was expected to play a very defensive battle.



Gerald Roberts: Gerald's IJN Abukuma featured another last minute refit, with new batteries. Gerald hoped that the extra endurance would enable his light cruiser to stay around and fight with the big ships, and still have the energy to get away later. Gerald also brought the IJN Musashi, in case the Axis needed a little help.

Joe Vilar: Joe brought his beautiful DMB Roma for on

more Nationals. She was looking as good as ever, and her guns were looking fiercer than ever. Joe might not fight her aggressively, but she appeared to be able to take care of herself.

Opposing this vast armada was one of the most powerful fleets the Allies had ever fielded. The Allies may have been defeated in the past year's event, but they were looking forward to the chance to wreak vengeance upon the Axis, and it looked as though they might have the ships to do it this year. Supporting this effort were:

Chris Au: Chris brought his new HMS Iron Duke to bolster the Allied effort. Although a new ship in the hands of a relatively new captain, she featured some of the best in Allied technology, and her captain had trained with some of the best.

Dave Au: Dave brought his brand new HMS Lion to his debut Nationals. Having been finished in the days prior to Nats, she would doubtless have some bugs, but the Allies were looking forward to having a little more 24 second firepower on their side.

Steve Baker: Steve's HMS Invincible was looking even better than in 1991, with a better pump, more reliable systems, and more freeboard. These improvements, and Steve's experience, were expected to make their mark on the battling.

Paul Broring: Paul's new USS Washington was newly infamous for her performance in Baxley, and with her speed, maneuverability and firepower, she was expected to be one of the mainstays of the Allied effort.

Don Cole: Don's USS Alabama was a sharp looking example of the class, with fair firepower and two pumps. Don was relatively new to the battleship scene, but the Allies were glad to have him along.

Brian Craven: Brian's USS South Dakota was in good shape, with an excellent pump and the latest in electronic fire control. Her details were excellent, and if she battled as good as she looked, the Axis would be in for a shock.

Mike Elledge: Mike's Sevastopol was an example of some of the leading edges of technology, with her CO2 system. She featured a new gun configuration and would be a reliable addition to the Allied effort.

George Goff: One of the newer Allies, George brought his USS New Orleans to the battling. She might be a relatively new ship, but George was expected to help hold the Allied cruiser force together in the battles to come.

Marty Hayes: Marty brought his newest HMS Warspite to Nats, hoping to get his feet into the world of CO2, and gear drives. She was easily his best looking version ever, and she was expected to be a gallant addition to the Allied cause.

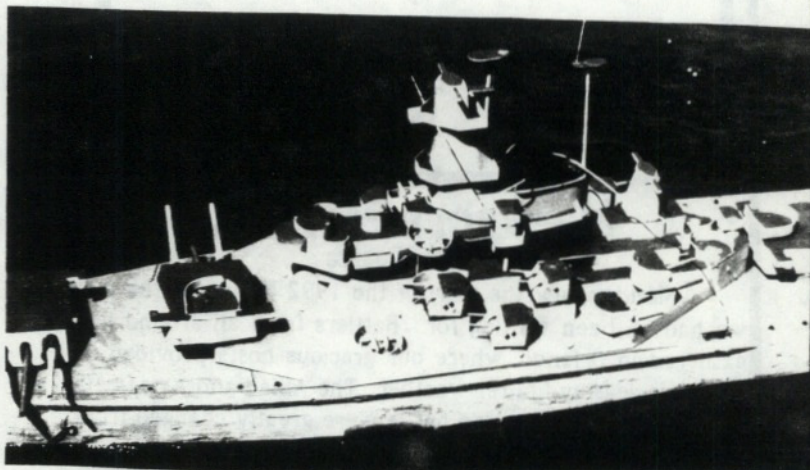
Tom Jass: Tom's HMS Tiger was even better looking than ever, with more detail, and a new hull. She had experienced reliability problems at Baxley, but the Allies hoped that she perform to her usual high standards for this event.

Jim Pate: The Admiral of the Allied Fleet brought his proven USS Indiana to the fray. Her systems were better than ever, and she had been the cornerstone of the Allied victories in Texas. If Jim's strategies were as effective as his systems, the Allies could hardly go wrong.

Chris Pearce: Chris brought his new HMS Vanguard to the event, to battle and to sell. She was a big ship, and perhaps too much for Chris to handle, but she would help give the Allies some of the 24 second firepower they had lacked before. Chris also brought the HMS Queen Elizabeth, just in case the big ship proved to be big trouble.

Bart Purvis: Bart brought his sharp looking, new USS Pennsylvania to her first Nats. Bart's ship was very well detailed, and appeared to have good, reliable systems. Could he make the transition from cruisers successfully? The Allies hoped so.

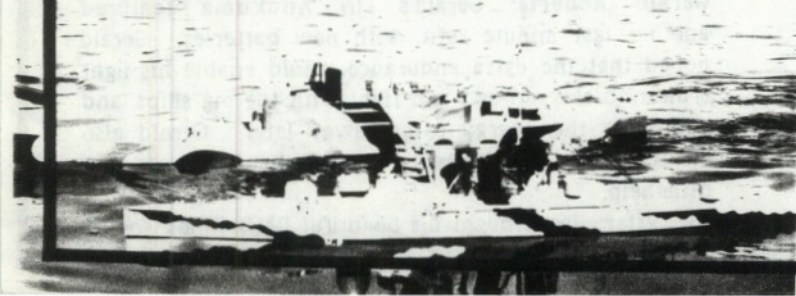
Francis Rogowski: Francis brought his veteran Gangut to the event, as powerful as ever. She featured some of the hardest hitting guns in the Allied fleet, and her captain was one of the best shots in the hobby. Her firepower would be needed before the week's end.



Adam Thibault: Adam was again captain of the USS Louisville, this time with a new CO2 system. She might not be a powerful ship, but the Allies hoped that Adam could steer her out of trouble, and provide some assistance to the Allied cause.

Ron Thibault: Adam's father brought his well worn USS Arizona to battle, with CO2, and better gun placement to boot. She would surely help the Allied cause before it was all over.

Greg Wilson: Greg's USS North Carolina was virtually a new ship compared to last year, with a new hull, and



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A NOTE OF THANKS
by James Kantor

I have just finished moving to Freeport, Illinois, from Maryland. I entered the hobby through the Maryland Attack Group and have had a lot of fun. I wish to thank all the members of the MAG for their help to a rookie. They were always willing to answer idiotic (in retrospect) rookie questions that seemed so obvious once you know what you're talking about.

I purchased the old WARSPITE from Marty Hayes and renamed it MALAYA. I was guided to sources of materials necessary for the rebuilding of my ship. I was shown how various members of the club built their ships and was aided in turning piles of parts into a single ship. Some members even invited me over to help with my ship. Francis Ragowski spent a full afternoon helping me put together a lid for my radio box. I was shown how to build my pumps and guns, which, despite my normal lack of talent and to my great surprise, actually work. I must credit the many people who were willing to spend a little time helping a total rookie get an operational ship together. Marty Hayes showed me the new WARSPITE and told me how he set up his ship. I was showered with tips and tricks of the trade, all gathered through years of experience. These many gems of advice came into great use as I stumbled through my rebuilding efforts.

My first battle was the Southeast Regional. I carpooled with the rest of the club and was invited to sleep in a tent set up at Bart Purvis's house. I spent the night before we left Maryland frantically working on my ship. I did not get any sleep and slept on the trip down. Due to radio conflicts and some remaining difficulties with my ship, I borrowed Paul "Doc" Broring's TIGER for Saturday's battles. I did not sink, though I did forget to turn my pump on (true rookie

error). Will Montgomery had to remind me to turn it on. If you were at Southeast or got a copy of the video, you can hear him yelling, "Who's running the TIGER? Turn your pump on!" I spent some of Saturday night up with Danny Shultz trying to patch some problems up. I found that I had leaks in my Freon tanks, pinched magazines, non-firing guns, and all sorts of other bugs. I had been hampered in gun testing by my inability to find Freon 22 anywhere. "Doc" was generous enough to loan me some Freon. With the loan of tools and equipment from Bart and other battlers at his house, I managed to get the MALAYA running (on speed to my total amazement) and went out for Sunday's battle. I was unable to get my bow gun working and had to go out with just two stern guns. I also had to leave my pumps running continuously as I had no switch. I went out and discovered that my stern guns locked up after 2 or 3 shots. I called five and disappeared. I went out to join the free-for-all and had the indignity to sink my ship unseaworthily.

I went home with my battered ship and spent many days working on it. Francis gave me two, almost empty Freon tanks that allowed me to test my guns and get them working. By Northeast Regionals I managed to fix most of my bugs. My pumps worked and had a radio switch and I actually had working guns. I sank in Saturday's battle due to clogged pumps, but I did much better on Sunday. I actually managed to survive an Axis Four ship attack by running the length of the pond (it helped I was running a little fast, one of my drag props fell off).

Despite my various problems, I always had fun with the hobby. I owe a great debt to the members of the MAG for their openness and willingness to help a rookie. I believe that clubs are the best way to get new members into the hobby. I have been unable to find a R/C boat club nearby. I would appreciate hearing from anyone near me. I live at 848 W. Stephenson St. Freeport, IL 61032 and can be reached at (815) 232-6431.

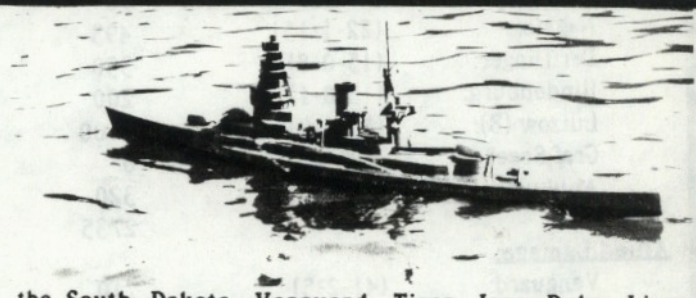
new systems. Greg was recognized as one of the more effective battlers, and it was hoped that he would be a key in the coming battles.

Rick Whitsell: A surprise from out West, Rick brought his brand new USS North Carolina. Rick's ship was very beautiful, and contained some very innovative ideas. Being a new ship however, the Allies were not sure if she could contribute significantly, or if she would make it on the water at all.

These, then were the fleets that converged in the seas North of Orlando to do battle. As the maneuvers began Monday morning, no one was sure of the battles' outcome, but all knew that it would be a close and hard fought event, filled with glory, and crushing consequences for each side. As the first fleet battle began, it was not just a contest of numbers of ships, or even quality, but of strategy.

Battle #1A, Sortie 1: Fleet battle 1A began long before the whistle at 10:10 Monday morning. Strategies were being formulated long before the battlers reached the lake, or even Orlando, in the case of the Allies.

The Allied Admiralty expected the Axis to lead with their strongest hand, in hopes of scoring an early victory and setting the tone of the entire week's battling. Though the Allied A and B fleets were nominally even, the A fleet was seeded with more experienced captains, and Fleet Admiral Jim Pate with his Indiana. Other units consisted of



the South Dakota, Vanguard, Tiger, Iron Duke, Lion, Gangut, and Louisville.

The Axis strategy was unknown to the Allies, but at the end of the battle it appeared to be to fight a "run and gun" battle, hoping that their superior speed would win them the victory as it had so often before. As expected, they did lead with some of their strongest captains and ships, fielding the Roma, Nagato, Derfflinger, Hindenburg, Lutzow, Graf Spee, and Abukuma.

At the start of the battle, Fluegel mentioned on the tape, "I predict that the winner of the first battle, group A, will be the winner of the Nationals." As the whistle sounded, Vanguard and Tiger led the charge in a long flanking maneuver intended to hold our target, the Nagato, to the anvil, until our 26 second ships would arrive to provide the hammer. The Tri-Pack was noticeably absent from the action, no doubt saving themselves for a more

opportune moment.

As battling continued, *Vanguard*, *Indiana*, and *South Dakota* pursued *Nagato*, and at one point, Jim's triple stern guns rang out, bringing devastation to the *Nagato*'s port bow. Will's escort, the *Abukuma* fought to help, but a light cruiser could only do so much.

On another front, the *Louisville* was found limping toward shore, pumping. As *Vanguard* bumped *Roma* and got called on a non-damaging ram, *Louisville* took revenge by shooting *Gangut*. (That's teamwork for you...) Frank's *Hindenburg*, our secondary target, got some good hits on an aggressive *Tiger*, and participated in a pursuit of the *Gangut*.

While this was happening, Will's *Nagato* was fighting all comers, pumping, and holding her own. The cruisers, *Abukuma*, *Graf Spee*, and *Louisville* were seen out in neutral waters, either on five, or playing it very safe. *Roma* entered a stern duel with *Warspite*, and *Tiger* came in on a ram check. *Vanguard*, however paid the price for aggressiveness, chasing the stern gun of Mike's *Lutzow* just a little too long, and taking heavy bow damage.

As the battle started winding down, Adam's *Louisville* came off five, and desperate captains attempted to hit any target with their remaining ammo. The sortie ended with most ships pumping, but none seriously, and the *Tri-Pack* running from Allied capital ships.

After the sortie ended, Fluegel asked Jim, "How is it to battle real Axis?" Jim replied, "Well, I'll tell you what it's like to fight real Axis. Real Axis run like cowardly dogs, whereas you at least stand and fight and die like a man." Fluegel's answer was, "I don't know how to take that." The overall impression was that the battle was a tactical draw, and Allied frustration was high with the Axis captains who wouldn't stand and fight. Scoring later revealed the following results:

Axis Damage:

Roma:	(2-0-1)	70
Nagato:	(22-1-15)	495
Derfflinger:	(15-0-8)	550
Hindenburg:	(15-0-1)	200
Lutzow (B):	(55-4-9)	1100
Graf Spee:	(0-0-0)	0
Abukuma:	(12-4-2)	320
Total:		2735

Allied Damage:

Vanguard:	(41-2-5)	710
Indiana:	(9-2-1)	190
South Dakota:	(8-0-0)	80
Iron Duke:	(19-1-4)	415
Gangut:	(6-1-2)	185
Lion:	(15-2-8)	600
Louisville:	(11-1-2)	235
Total:		2485

Tiger was the ultimate stealth ship, taking no damage, and receiving no score because her score sheet was lost. A 100 point ram penalty was assessed against Mike Blattau, leaving the total 2735 to 2385. Although not a draw, the first sortie was close indeed.

Fleet Battle #1B Sortie 1: The B fleet battle began with the following Allied ships participating: Admiral Paul's *Washington*, *Alabama*, *North Carolina*, *Arizona*, *Pennsylvania*, *Sevastopol*, *Invincible*, and *New Orleans*. The Allied plan was to concentrate on the two

Battle Calendar

Sept. 19-20	Unsanctioned Battle - Houston Call Wade, (713) 952-3078
★ Sept. 12-13	Maryland (410) Battle Call Will, (301) 760-8991 } ★
Sept. 25th	Deadline for Oct. Hull Busters
★ Oct. 10-11	Unsanctioned(?) Battle, Baxley, Georgia \$12 entry fee. Call Bart, (912) 367-3622
Oct. 15th	Deadline for Axis Admiral vote
Nov. 25th	Deadline for Dec. Hull Busters
Jan. 25th	Deadline for Feb. Hull Busters
Mar. 25th	Deadline for Apr. Hull Busters
May ???	Southeast Regionals
May ???	Northeast Regionals
May ???	Unsanctioned Battle - Texas
May 25th	Deadline for June Hull Busters
July 12-16	1993 Nationals - Houston, TX
Nov. 25th	Deadline for Dec. Hull Busters
Jan. 25th	Deadline for Feb. Hull Busters
Mar. 25th	Deadline for Apr. Hull Busters
May ???	Southeast Regionals
May ???	Northeast Regionals
May ???	Unsanctioned Battle - Texas
May 25th	Deadline for June Hull Busters
July 12-16	1993 Nationals - Houston, TX

Bismark s. The Axis fleet, on the other hand, consisted of the two *Bismarks*, *Vittorio Veneto*, *Kongo*, *Lutzow*, and the *Prinz Eugen*.

As the sortie began, *Arizona* stern mounted Fluegel's *Bismark*. *Invincible* pursued Lief's *Bismark*, and the *Vittorio Veneto* pursued the *Sevastopol*. Fluegel's *Bismark* fired some sterns at the *Alabama*, and the battle divided into two melees, one with Fluegel and the *Prinz Eugen* against *North Carolina*, *Washington*, *Alabama* and *Pennsylvania*; and the other consisting of the rest of the two fleets.

As battling continued, *Invincible* was seen to take the *Lutzow* under stern fire, and *Sevastopol* went side-to-side with *Kongo*. An exchange occurred between Fluegel and the *Washington*, and *Kongo* was off in pursuit of the *New Orleans*. Fluegel was heard to yell at this point, "Guys, I'm the target" Fluegel proceeded to run toward the rest of his fleet, taking sterns from the *Washington* along the way.

In another venue, *Vittorio Veneto* caught the *New Orleans* for a few hits, and the *Invincible* had a sidemount session with Lief's *Bismark*, and came away pumping; not a good sign for the battlecruiser.

As the battle around Fluegel wound down, the *New Orleans* lasted out her five minutes. A peppered *Lutzow* then rammed the *North Carolina* for 200 points, and the *Kongo* trapped a hapless *Sevastopol*. Things slowed down after that, and the Allied A fleet captains were heard lamenting that they couldn't have been in this battle, with the seemingly ample targets. Scoring showed the following results:

Axis Damage:

Bismark (F):	(39-4-15)	1240
Bismark (G):	(54-4-4)	840
Vittorio Veneto:	(10-0-0)	100
Kongo:	(41-0-4)	610
Lutzow (K):	(22-0-2)	320
Prinz Eugen:	(5-1-0)	75
Total:		3185

Allied Damage:

Alabama:	(41-0-0)	410
North Carolina:	(4-0-2)	140
Washington:	(26-2-3)	460
Arizona:	(3-0-0)	30
Pennsylvania:	(16-1-2)	285
Sevastopol:	(6-0-4)	260
Invincible:	(12-0-1)	170
New Orleans:	(16-5-6)	585
Total:		2340

Subtracting Wade's 200 point ram penalty, the score was 3185 to 2140. The Allies might not have realized it, but they had taken a strong lead; could they hold on to it???

Fleet Battle 1A Sortie 2: A Fleet's second sortie began with two Axis withdrawals. Terry withdrew the Graf Spee because of mechanical problems. On the other hand, Gerald didn't hear the whistles, and missed the sortie; he wasn't penalized for the withdrawal, aside from missing the action, that is. The Allied strategy was to use their 24 second ships (Vanguard and Tiger) to pursue the damaged Lutzow and sink her, if possible.

Mike called five minutes immediately after the whistle blew, and was chased down the shoreline by Tiger and Vanguard, who weren't able to inflict any serious damage. The two ships did, however, meet the Roma on the way back to the battle scene, and Tiger got some good hits in.

As the sortie continued, Roma wandered astern of the Indiana, and took a serious amount of damage from about eight salvos. Aside from that, the rest of the Axis ships just ran from the Allied opposition, attempting to minimize their damage and avoid sinks. The Allied frustration level increased greatly, but the points tally revealed the following:

Axis Damage:

Roma:	(36-0-8)	760
Nagato:	(3-0-2)	130
Derfflinger:	(14-0-1)	190
Hindenburg:	(6-0-1)	110
Lutzow (B):	(0-1-0)	25
Graf Spee:	(Withdraw)	350
Total:		1565

Allied Damage:

Vanguard:	(3-0-0)	30
Indiana:	(0-0-0)	0
South Dakota:	(4-1-0)	65
Iron Duke:	(8-1-1)	155
Gangut:	(4-0-0)	40
Lion:	(4-0-0)	40
Louisville:	(0-0-0)	0
Total:		490

The Axis had realized their goal of taking light damage and avoiding sinks, but the Allies managed to take even less damage. A 50 point ram penalty was assessed against Frank, and this brought the total score to Allies: 4300, Axis 2825. The Axis had ran, and used their superior speed, and they still lost; what would happen when they chose to stand and fight.

Fleet Battle #1B Sortie 2: B fleet's second sortie started with New Orleans hidden inside a concrete harbor. Kongo approached to attack, but got mossed and took some grief from Invincible. Kongo seemed to be forgotten, however, as the Alabama ran afoul of one of Lief's sidemounts and took a tremendous amount of damage. The Allied ships came to Don's rescue, but it was anybody's guess if they could help Alabama last out her five minutes as she listed about the lake.

It was a tense time, as Axis ships would come to

CO2 SYSTEMS, SOURCES AND SUGGESTIONS

By: Bart Purvis

Mike Elledge in Orlando has devised working CO2 systems for our ships using commercially manufactured components. He has spent hours, dollars and sweat in bringing the systems to a point where they are safe and easy to install. My personal thanks to Mike for his pioneering work and for his help in getting me rigged up for CO2. The following is due to Mike's efforts. All I'm doing is trying to put his work into words.

SHIPBOARD CO2 SYSTEMS**REGULATOR**

So far the smallest, lightest and most suitable regulator we have located is the Williams 150 female CO2 regulator from Williams Products Inc., Phone 800-235-4112. The regulator weighs 14 oz. and costs about \$15 plus shipping.

The outlet pressure of the regulator is controled by a spring. To alter pressure a quick and easy spring change is required. Although Williams offers springs from 30-200 lbs. it seems that our rules limit us to 140 lbs. top end while the ability to reasonably penetrate hulls needs 100 lbs. on the low end. Williams offers three different springs in our required range. These are 100, 125 and 140 lb. springs. Specify which pressure spring you desire when ordering. Three ships at Nats used 100 lb. springs while three used 140 lb. springs. All seemed to work without problems.

The O-ring in my regulator distorted fairly rapidly, possibly because of frequent removal and replacement of the tank for filling, so it was replaced several times during Nats. You might order spares from Williams (40¢ each) and change as you deem necessary.

ONBOARD REFILLABLE TANKS

7 oz. and 3½ oz. refillable aluminum CO2 tanks at around \$30 each are available from the local paintball store. 7 oz. tanks weigh 13 oz. and 3½ oz. tanks weigh 8 oz.

ON-OFF VALVE WITH RUPTURE DISC

The last shipboard component is the on/off valve with rupture disc. This item is available from the paintball store, weighs 5 oz. and costs around \$35. Specify that you want the valve for the 7 oz. tank because valves for 20 oz. tanks have different threads.

ASSEMBLY

Get a 1/4" NPT male plug from the auto parts store or plumbing supply house. Drill and tap a 10/32" hole through the plug. Place a bead of Loctite around the threads and screw the plug into the outlet port of the Williams regulator. Now you can use the familiar Clippard fittings and tubing to get gas to your guns.

Remove and discard the valve core from the on/off valve with needlenose pliers. Place

attack, and be driven away by other Allied battleships, but not without some cost to Alabama. Finally, she came off her five, just as it appeared that it would be too late. Scoring later revealed that the Axis had made gains in the second sortie, but would they be enough?

Axis Damage:

Bismark (F):	(46-2-2)	610
Bismark (G):	(37-4-2)	470
Vittorio Veneto:	(8-0-0)	80
Kongo:	(28-4-7)	730
Prinz Eugen:	(0-0-0)	0
Total:		1970

Allied Damage:

Alabama:	(22-5-13)	995
North Carolina:	(17-1-4)	395
Washington:	(19-1-3)	365
Arizona:	(12-1-1)	195
Pennsylvania:	(5-0-0)	50
Sevastopol:	(14-3-4)	415
Invincible:	(23-1-1)	305
New Orleans:	(10-3-1)	225
Total:		2945

There were no ram penalties in this sortie. The Allies had taken a beating in the second sortie, but they barely came out ahead with a 5155 to 5085 victory. As the battlers broke for lunch, one could hardly have guessed that the Allies had won both fleet battles.

Between fleet battles, the Allies chose to juggle their fleet composition somewhat, trading the Alabama and Arizona for the Vanguard, Tiger, and Louisville. The plan was to concentrate the 24 second ships in the B fleet where they could do the most good, and force the Axis A fleet to fight it out with our sluggers. The Axis, meanwhile, perhaps sensing their defeat in the morning's A fleet battle, were faced with a dilemma; they could continue the running game and hope for a victory (And endure the Allied taunts), or they could play aggressive, and hope to overwhelm the opposition.

Fleet Battle #2A Sortie 1: This fleet battle began with the Allies expecting another tough and frustrating sortie. Their fleet consisted of the Indiana, South Dakota, Arizona, Warspite, Iron Duke, Gangut, and Lion. The Axis fleet consisted of the same ships, the Roma, Nagato, Derfflinger, Hindenburg, Lutzow, Graf Spee, and Abukuma.

As war was declared, it appeared that the same old run and gun game was going to be happening, and Indiana drew first blood on the Abukuma. Lutzow and Abukuma attacked one of the Au brothers, probably the Iron Duke, and drew some blood. Lutzow then strayed astern of the Indiana and took a terrific pounding from Jim's stern mount. As Jim later said, "The ship was like a rabbit, frozen in the headlights, just before it gets run over."

However, before the Allies could get too excited, the Warspite sank with little damage and pump failure. Nagato was believed to be instrumental in the sink. After Marty recovered his ship, the Iron Duke engaged in a pursuit of the Derfflinger. Indiana and South Dakota joined the fun and trapped the Derfflinger against the shore where she took serious damage before escaping.

As Nagato and Abukuma retired from the battle, Derfflinger and Indiana went side to side as Jim and Nathan had it out to see who had the hottest side mounts in the hobby. Jim appeared to get the better of the exchange. Meanwhile, and aggressive Iron Duke ran through the melee without heed to damage.

As the sortie came to a close, Indiana called five, and then the pursuit began, as the Tri-Pack attempted to sink the Allied Admiral. Other Allies came to help, but couldn't come quickly enough to help the unarmed ship. The unarmed Indiana, however, held her own, and even managed to sink the Hindenburg, distracting Frank so much that he forgot to turn her pump on.

The Axis had indeed turned their strategy around during this battle. Perhaps Marty's sink gave them confidence and drew out their blood lust. Whatever the cause, it was to the Allies' favor as the scores were:

a 1/8" bead of Loctite around the bottom threads and screw the valve into the tank. Tighten with a wrench while your helper hand holds the tank. Don't use a vise or other extreme measures.

Now screw the assembled tank/valve into the Williams regulator and your CO2 refillable shipboard system is complete.

SHIPBOARD CO2 SYSTEM WITH DISPOSABLE TANK

Tasco Co. (310) 531-0515 sells a puncture pin adapter called Fassst Max #2 which screws into the Williams 150 regulator. You then screw a disposable 2 oz. CO2 cartridge into the Fassst Max and the system is completed. Fassst Max costs around \$35 and the disposable cartridges are around \$2 each.

HOW MANY SHOTS?

The number of shots per ounce of CO2 is wildly variable. How heavy is your trigger finger? How tightly are you tweaked? Do you use poppets or solenoids? At Nats a US heavy cruiser used a 2 oz. tank, a Russian battlecruiser used a 3½ oz. tank and three US class 5 battleships used 7 oz. tanks. Your choice captain!

CO2 FILL SYSTEMS

FILL TANKS

Fill tanks can be purchased from your local welding supply or compressed gas shop. The tanks range from 2 lbs. to 50 lbs. in size. You can turn the small tanks upside down during the fill procedure but you must have the dealer install a siphon tube in the larger sizes so that liquid, rather than gaseous, CO2 flows to the ship's tank during the fill process. You will need to check with your own dealer about prices. The only information I can give is that my 20 lb. fill tank with siphon tube installed cost \$125. In Orlando, FL 20 lbs. of CO2 liquid cost \$9.01 and in Waycross, GA the same amount cost \$13.68.

MINI-FILL STATION

The mini-fill station is a high pressure hose that connects to the fill tank at one end and to the ship's tank at the other. A valve to vent CO2 to atmosphere is placed between the two tank connectors. At this stage of our development and knowledge I recommend that the mini-fill station be purchased from your local paintball dealer at a cost of around \$55. However, when we locate a source of high

Axis Damage:

Roma:	(19-1-4)	415
Nagato:	(22-1-6)	545
Derfflinger:	(27-1-8)	695
Hindenburg:	(27-0-3 + 800)	1220
Lutzow (B):	(110-9-7)	1675
Graf Spee:	(0-0-0)	0
Abukuma:	(12-0-2)	220
Total:		4770

Allied Damage:

Indiana:	(33-2-1)	430
South Dakota:	(8-2-2)	230
Arizona:	(11-1-2)	235
Warspite:	(4-0-3 + 900)	1090
Iron Duke:	(22-4-8)	720
Gangut:	(10-0-0)	100
Lion:	(17-0-3)	320
Louisville:	(11-1-2)	235
Total:		3125

There were no ram penalties in this sortie, so as the B fleet prepared to sortie, the Axis were faced with a considerable task to overcome their 4770-3125 deficit. They would have to fight hard, and see some sinks to win this battle.

Fleet Battle #2B Sortie 1: The B Fleet battle began with the Allied fleet slightly reinforced; North Carolina, Washington, Pennsylvania, Sevastopol, Invincible, and New Orleans were joined by Vanguard, Tiger, and Louisville. The Allied plan was to use their increased 24 second power to bring a Bismark to bay. The Axis sortied with the two Bismarks, Vittorio Veneto, Kongo, Lutzow, and Prinz Eugen.

Battle began with the Allied fast squadron making a sweep around the outside, hoping to trap hapless Axis against the shore. Fluegel's Bismark began pursuit of an Allied cruiser, and had to defend against an aggressive Sevastopol. Invincible proceeded to slug it out side to side with the Bismark, as the Vittorio Veneto and Vanguard had it out. Tiger was meanwhile engaged with the Lutzow. Kongo then engaged Vanguard, and both traded sidemounts.

Sevastopol came in for some more Bismark action, and was joined by Pennsylvania, Invincible, and a cruiser. Prinz Eugen sped past, and a cruiser attempted to get past the stern of a revolving Bismark.

Elsewhere, Washington attempted to engage Kongo, but Dave evaded. Louisville rammed Tiger, as Kongo decided to engage Washington after all. At a critical moment, North Carolina's pump quit working, and Lief's Bismark approached to offer broadside punishment. Kongo and Lief's Bismark moved in to attack, and Vanguard and Washington moved in to defend. Kongo's sidemount was empty, and Lief's sidemount appeared to be too close to inflict serious damage. Invincible joined Washington and Vanguard in defense, as Washington blocked the attackers off. Fluegel moved in for the kill, and attacked defender Washington. Kongo called a ram on Pennsylvania, with no damage, and Invincible sidemounted Fluegel, who was trying to sidemount North Carolina. However, the Axis efforts were for naught, as the North Carolina survived her five minutes and was brought in.

After Greg left the water, Fluegel attempted to pursue the pumping Washington, who was leaving the scene of the crime. Vittorio Veneto helped by holding Washington down with her stern gun. Invincible added some



"HURRY, BEFORE ANYONE SEES US!"

pressure hoses and connectors the cost of this item may be lowered considerably.

SCALES

An accurate and adequate scale is absolutely necessary for safe filling and use of CO2. Don't try to skimp or save a few pennies in this vital area. Your bathroom scale or a \$3.50 postal scale is not sufficient. Get a good scale and use it properly for safety's sake.

At Nats I used a good postal scale but the type of scale required me to overfill my tank, weigh and then blow off the excess until the proper amount of CO2 remained in the tank. There is nothing wrong with this, but it is wasteful of gas. Mike Elledge has a better way. He uses a digital fisherman's scale from K-Mart (\$15 Blue Light Special), hangs his tank from the scale and slowly fills to the exact proper weight. No waste, no strain!

FILLING THE SHIP'S CO2 TANK

Attach the mini-fill station to the fill tank and close the vent valve.

Remove the ship's tank from your model and attach it to the other end of the mini-fill station. Open the ship's tank valve.

Open the fill tank valve and allow several ounces of CO2 liquid to flow into the ship's tank. A slow count of 3 is usually sufficient. Close the fill tank valve.

Open the vent valve. This allows all CO2 in the ship's tank to escape to atmosphere and cools the tank considerably. You will note frost forming on the bottom 1/3 of the tank. Close the vent valve.

Open the fill tank valve. This will again allow liquid CO2 to flow to the ship's tank. If you use a hanging scale allow not more than 6 oz. of CO2 in the 7 oz. tank and not more than 3 oz. in the 3 1/2 oz. tank. If you use a conventional scale overfill, weigh and blow off excess at the end of the fill procedure.

Close the fill tank valve. Close the ship's tank valve. Open the vent valve allowing CO2 in the hose to vent to atmosphere. Close the vent valve and remove your filled ship's tank from the mini-fill station.

sidemounts to the recipe, peppering Fluegel's Bismark, as Vittorio Veneto worked to get some sidemounts on Washington.

After a lengthy ram check, Pennsylvania and Kongo rejoined the battle, and Pennsylvania sterned the stern gunned the Kongo a few times, with some help from Invincible. Fluegel's Bismark had left the scene of battle, but Washington and Vittorio Veneto passed close by her as the chase continued. Another ram victim, Tiger came back in, as Pennsylvania fired some sidemounts at Kongo.

The battle appeared to wind down at this point, but an unsuspecting Lief paid too much attention to lakeside conversation, and didn't notice Louisville pelting the Bismark from long range. Parting shots were exchanged between Vittorio Veneto and Sevastopol, and after Jay called five, Lutzow, Sevastopol, and Pennsylvania were the last ships fighting.

Axis Damage:

Bismark (F):	(74-9-6)	1265
Bismark (G):	(50-3-10)	1075
Vittorio Veneto:	(8-0-1)	130
Kongo:	(5-0-0)	50
Lutzow (K):	(5-0-3)	200
Prinz Eugen:	(6-0-3)	210
Total:		2930

Allied Damage:

Vanguard:	(19-2-1)	290
N. Carolina:	(19-3-2)	365
Washington:	(17-0-3)	320
Pennsylvania:	(6-1-1)	135
Sevastopol:	(15-0-1)	200
Invincible:	(3-1-1)	105
New Orleans:	(5-0-0)	50
Louisville:	(8-0-0)	80
Total:		1625

Adam Thibault was the rammer for this sortie, and his 200 point penalty left the score at: Allies 2730, Axis 1625. The Axis B fleet, like their A fleet companions were faced with a thousand point deficit to overcome in the second sortie. Could they do it???

Fleet Battle #2A Sortie 2: A fleet's second sortie began with the Allies intending to send the heavily damaged Lutzow to the bottom, and the Axis hoping to pick out one of the weaker Allies for punishment, in hopes of regaining the lead.

As war was declared, Gerald discovered that Abukuma's gun hose had blown off again, leaving the cruiser without firepower. The Lutzow looked a little sluggish, but Mike seemed intent on keeping her in the battle. Derfflinger took some stern shots from Indiana, but greater drama appeared, as Arizona started to look low in the water.

As Arizona moved into the protected area behind the grate, she got caught on a weed, and Derfflinger and Lutzow moved in to attack, while South Dakota and Iron Duke defended. With so many capital ships battling in so small an area, the fighting was sure to be savage.

Sidemounts could be heard as the battle continued, and just as Arizona came free, South Dakota got caught in the weeds next to shore. As the two Derfflingers shifted targets to South Dakota, Nagato made a brief firing pass and pursued the fleeing Arizona. Finally, Indiana arrived on the scene, and the carnage began.

Forty-two triple stern salvos rang out against the hull of the Lutzow, which had gotten caught in the weeds next to South Dakota, and Mike called five out of control. Derfflinger gallantly moved in to protect Lutzow with her hull, as Indiana moved in with her starboard sidemount. As the damage poured in, Derfflinger was seen to list dramatically to starboard as if torpedoed, and sank moments later to the sound of Allied cheers. Coming around with his other sidemount, Jim was disappointed to realize that its hose had come loose.

Arizona, meanwhile, had cleared the scene of destruction and sought refuge in the weeds. Pumping out, she was free from the attentions of Nagato, who was not eager to risk getting caught. Lutzow finally crept away from the shore, low in the water and pumping.

South Dakota also got free, but there were few Axis ships available to add to her damage. Nagato came to

Weigh the tank again. If you are over the recommended amounts blow off the excess and re-weigh until you are safely within limits.

NOTES AND OBSERVATIONS

If your local paintball store is nonexistent or can't help you give Dragon's Realm in Orlando a call at (407) 823-7246. Identify yourself as a warship modeler.

CO2 venting gives off a sudden and a very loud noise. As a matter of courtesy and of safety warn nearby people before you vent CO2.

The large fill tanks should be either affixed to an upright (tree), fitted with a stand or be laid on their side when not in use. A large, heavy metal tank scraping down your shin or landing on your foot will be quiet painful.

SELF-CONTAINED CO2 SYSTEMS FOR SMALLER SHIPS

Taso Co. (310) 531-0515 sells a puncture pin adapter called Fassst Max #2. It screws into the Williams 103-100 CO2 regulator. You then screw a disposable 2 oz. CO2 cartridge into the Fassst Max and the system is completed. When ordered from Taso the cost of Fassst Max

is \$29.95 + shipping and cost of a 2 oz. CO2 cartridges is \$1.95 + shipping. Your local paintball store may have both items available on the shelf.

The 12 gram CO2 cartridges available at Walmart and K-Mart can also be used in our ships. There is a puncture pin adapter for these cartridges available at your paintball store for about \$30-\$35. This adapter goes by various names such as Rat Attack or Thunder Pig (love that terminology). Again, the adapter screws into the Williams regulator and the 12 gram cartridge screws into the adapter.

PAINTBALL SUPPLY SOURCES

NATIONAL MAIL ORDER SOURCES

Dragons Realm (407) 823-7246
 Taso Co. (310) 531-0515
 National Paintball Supply East (800) 346-5615
 Top Gun Paintball Games (908) 244-1136
 The Pro Shop (800) 238-2215
 Action Sports Graphics (914) 624-1004
 Ground Zero (800) 747-2332
 Gramps & Grizzly (800) 843-6086

LOCAL SOURCES AND STORES

attack, and called a non-damaging ram. Roma joined the fray, as the Axis tried to salve their loss by taking South Dakota with them. They failed, however, as South Dakota survived her five minutes. Lutzow also survived her five, and the battle wound to a close with two Axis battlecruisers sunk, and another severely damaged. The pride of the Tri-Pack also seemed to be a casualty of this action, as they all seemed a bit subdued. Scoring revealed what all suspected; that the Axis were the most severely hit, with the following damage:

Axis Damage:

Roma:	(22-0-5)	470
Derfflinger:	(10-8-25 + 800)	2350
Lutzow (B):	(91-9-23)	2285
Graf Spee:	(0-0-0)	0
Abukuma:	(6-0-3)	210
Total:		5650

Allied Damage:

Indiana:	(29-2-5)	590
South Dakota:	(44-3-7)	865
Arizona:	(15-2-5)	450
Iron Duke:	(16-2-3)	360
Gangut:	(0-1-0)	25
Lion:	(0-0-0)	0
Total:		2290

The battle ended with no damaging rams on either side, and the final score was Allies: 10420, Axis: 5415. It is interesting to note that the Lutzow survived 201 above, 18 on and 30 below the waterline hits. Perhaps Mike should write an article about damage control for Hull Busters.

Fleet Battle #2B Sortie 2: Monday's last sortie began with Fluegel planning to call five and run, depending on his teammates to help him survive his serious damage. On the Allied side, Vanguard's batteries were so low after the first sortie that they would not activate her solenoids; she began the sortie at the edge of visual range, next to the large island.

As war was declared, Lief's Bismark entered the fray, and Vittorio Veneto fired a few rounds at Louisville. Invincible and Bismark exchanged rounds, both ships heedless of damage. Significant things were afoot, however, on the other side of the lake.

Hiding behind some bushes, Fluegel's Bismark sought

to rest out her five minutes in peace. Espied by lookouts from Vanguard, Washington and Tiger were vectored toward the target. While Sevastopol and Invincible worked on Lief's Bismark, and Vittorio Veneto entered the fray to distract Sevastopol from Lief's ship, Washington was the first to approach Fluegel's Bismark.

Fluegel was first pounded by Washington, who emptied her magazines, and cleared a path so that Tiger could join in the destruction. Prinz Eugen courageously defended her flagship, taking several hits that would otherwise have added to Fluegel's woes. Fluegel survived his five, and Tiger pursued Prinz Eugen further into the bushes. Tiger was just barely rescued from being stuck in the bushes herself, by a clever move from Washington.

Back in the main battle, Invincible chased Kongo, and North Carolina was pumping. Kongo began pursuing an a listing New Orleans, and managed to get some sidemounts on target, as Invincible sidemounted Vittorio Veneto, and then changed targets to Lief's Bismark.

Tiger returned to the battle as Kongo continued to pursue New Orleans around the concrete "bunker", and Tiger and Vittorio Veneto traded broadsides. New Orleans survived her five, and as the last sortie wound down, Invincible battled Vittorio Veneto, and soon all were on five. Scoring of the day's final sortie revealed:



PAINTBALL SUPPLY SOURCES

MAIL ORDER SOURCES

- Dragons Realm (407) 823-7246
- Taso Co. (310) 531-0515
- National Paintball Supply East (800)346-5615
- Top Gun Paintball Games (908) 244-1136
- The Pro Shop (800) 238-2215
- Action Sports Graphics (914) 624-1004
- Ground Zero (800) 747-2332
- Gramps & Grizzly (800) 843-6086

LOCAL SOURCES AND STORES

- ILLINOIS**
- The Adventure Game**
23 West North Avenue
Northlake, IL 60164
708-531-1413
 - Bad Boyz Toyz**
17913 S. Torrance Ave.
Lansing, IL 60438
704-418-8888
 - Emperor's HQ**
5744 W. Irving Park Road
Chicago, IL 60634
312-777-8668
 - Forest Lumber & Paintball Products**
17280 S Cicero Avenue
Country Club Hills, IL 60471
708-799-8252
 - JAS Military Supply**
1420 West Jefferson Street
Joliet, IL 60435
815-741-1622
 - Line of Fire**
1605 W 1st Avenue, Rt 8
Coal Valley, IL 61240
309-799-5200
 - Master of the Game**
914 Greenwood Avenue
Glenview, IL 60025
708-998-8277
 - Paintball Blitz**
Routes 418 21
Gurnee, IL 60025
708-998-8287
 - Pneumatic Ordnance**
4118 Douglas Drive
Zion, IL 60099-7330
708-746-4707
 - The Stealth Games**
PO Box 13
Cordova, IL 61242
809-523-3896

Axis: Elect Your Fleet Admiral By Gross Admiral Fluegel (Lame Duck)

It's time to vote. I have enjoyed the opportunity to serve my noble warriors, and I feel proud of the job I have done. But it is time to pass the torch. Eight (non-consecutive) years of Gross Admiralty makes it clear to me whom I should commend to you for this position. In the Northeast, I propose Will and Frank. In the Southeast, Lief and Lief. In Texas, Dirty Dave Haynes. All these outstanding gentlemen have provided commitment, communication skills, people skills, convoy ships, and spunk! You may think of other jewels who shine in the Axis crown. Feel free to vote for whoever you want (Except me). List three names; the first name will count as three votes, and the third name will count as one vote. Mail the ballot (next page) to the club secretary (Lief) and stand back for more bold and innovative leadership. The Axis Admirals stand alone and above the riff raff of the Allied mongrels.

Axis Damage:**872**

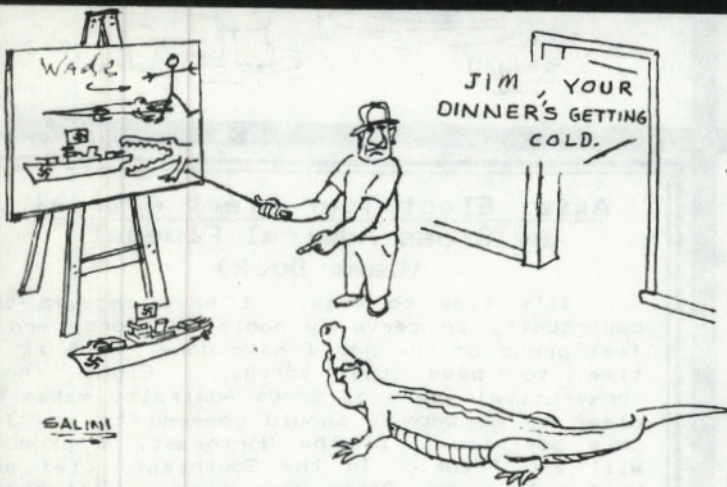
Bismark (F):	(46-1-4)	685
Bismark (G):	(42-2-1)	520
Vittorio Veneto:	(25-0-0)	250
Kongo:	(19-0-0)	190
Lutzow (K):	(3-1-(-1????))	5
Prinz Eugen:	(36-2-0)	410
Total:		2060

Allied Damage:

Vanguard:	(0-0-0)	0
North Carolina:	(5-0-1)	100
Washington:	(4-0-0)	40
Pennsylvania:	(14-0-3)	290
Sevastopol:	(9-0-2)	190
Tiger:	(6-0-1)	110
Invincible:	(27-7-8)	845
Louisville:	(10-1-3)	275
New Orleans:	(5-4-3)	300
Total:		2150

As the scores show, the Axis caught up in the second sortie, with neither side suffering from ram penalties and an interesting -1 below the waterline hit on Lutzow, but their efforts were not enough, as the Allies won the fourth fleet battle of the day by a score of 4790 to 3775.

And this was the story of Massacre Monday; a day when two determined fleets met in battle, and through every battle, one came out the victor. By margins small and large, the Allies won each of the fleet battles on Monday, won the day, and built up a 7,565 point lead. Would Fluegel's prediction come true? Would the Allies be able to sustain their performance and win their first Nats since 1989?? Would the Tri-Pack muster the courage to face the Indiana in another battle, or would they cower in fear for the rest of the week??? These and other questions would be answered as each battle unfolded, until the final battle that would decide the supremacy of the seas. As for the Allies, that night they knew that they had won a battle, but they might very easily lose the war.

**Axis Admiral Ballot**

1. Gross Admiral _____
2. Gross Admiral _____
3. Gross Admiral _____

Mail to Lief Goodson,
4419 Selkirk Lane E.
Lakeland, Fla. 33813

Last post date for voting is Oct. 15th

TEXAS

Adventure Expedition
1308 Chestnut Street
Commerce, TX 75428
903-886-7681

Air-Cav Paintball Supplies
1624 Fort Worth Hwy.
Weatherford, TX 76086
817-594-6423

Barritz Paintball World
Indoor Field, & Pro Shop
806 Sampson St.
Houston, TX 77003
713-229-8137

C.M. Support Inc.
4312 Forney Ave
Suite 107
Mesquite, TX 75149
214-216-7487

D.A.M. Games of E Tex
PO Box 5277
Longview, TX 75608
214-297-2075

Chuck's Hobby
3602 Slide Road
Lubbock, TX 79414
806-797-1883

Direct Hit
1701 Rolling Creek
Houston, TX 77090
713-440-3006

Fun on the Run
6632 Aztec Court
Fort Worth, TX 76135
817-237-5505
817-237-7110

Green Beret
2213 North 10 St.
McAllen, TX 78501
512-687-3141

Hunter's Headquarters
2200 Airport Frey
Suite 480
Bedford, TX 76022
817-283-9100

Line of Fire Texas
9100 North Hwy 287
Fort Worth, TX 74101
817-475-3764

Lone Star Combat
2513 West Lido
Midland, TX 79701
915-694-1501

Paintball Park
Jimsons Street
Mosier Valley
Bedford, TX 76022
817-283-7748

Survival Games of
Dallas Ft. Worth
105 Waits Circle
Garland, TX 75043
817-267-3048

Waits Bike Shop
1701 North Main
Cleburn, TX 76031
817-645-7241

GEORGIA

Arkenstone Paintball
7257 Cedar Crest Road
Acworth, GA 30101
404-974-2535

Atlanta Survival Game
5720 Grove Point Road
Alpharetta, GA 30021
404-623-0241

North Georgia Air Games
Smith & Manning Lake Rd.
Rome, GA 30061
404-325-1500

Paintball Atlanta
1425 Market Blvd.
Suite 1320-D-5
Roswell, GA 30076
404-594-0912

South GA Army/Navy
528 West 7th Street
Tifton, GA 31704
912-382-9811

Warpaint For Jet
276 Pine Chapel Road NE
Calhoun, GA 30701
404-625-2447

FLORIDA

Action Adventure Games
2703 SW 64th Avenue
Miramar, FL 33023
305-966-1020;
beeper: 305-528-GAME

AFM Combat
1330 University Blvd. N.
Jacksonville, FL 32211
904-743-7110

Dragons Realm
12245 University Blvd.
Orlando, FL 32817
407-823-7246

Elite Forces Field
Cowcreek Road
Edgewater, FL
904-767-2131

Gl Jeff's
5257 Ridgewood Avenue
Allendale, FL 32123
904-767-2131

GT Gear Company
7958 Pines Blvd.,
Suite 225
Pembroke Pines, FL 3309
305-437-0429

Guerrilla Games
111 W. Olympia Avenue
Punta Gorda, FL 33950
813-637-8865

HQ Military Surplus
1450 Skipper Road
Tampa, FL 33619
813-971-8805

Holly Army Navy
3440 Avenue G, N.W.
Winter Haven, FL 33880
813-967-5920

John & Anita's
1850 Maryland Ave., N.E.
St. Petersburg, FL 33703

Mike's Guns & Paintball PX
10428 Acme Road
W. Palm Beach, FL 33406
407-439-0755

Paintball Express
11398 West Flagler Street
#202
Miami, FL 33174
305-221-0160

Paintball Park
2402 State Road 39 S
Zephyrhills, FL
813-783-FUNN

Rembrandt's Paintball Suppl
8380 Ulmerton Road
Suite 202
Largo, FL 34641
813-530-4590

South Florida Paintball
7216 S.W. 8th Street
Suite 2
Miami, FL 33144
305-267-1122

TENNESSEE

Games Unlimited
152 North Lowry
Symrna, TN 37167
615-459-4400

Splat-1 Adventures
3635 Western Avenue
Knoxville, TN 37921
615-525-6831

Splatterball Adventure
8813 Saint John's Road
Chattanooga, TN 37343
615-842-2340

Splatters, Inc.
Route # 1, Box 238F
Beech Bluff, TN 38313
901-999-3824

LOUISIANA

Flag Raiders
17851 Millor Dollar Road
Covington, LA 70433
504-883-7987

Ultimate Survival Games
301 North 3rd Street
Leesville, LA 71448
318-239-0120

Sunny at Sunset
8260 Sunset Strip
Sunrise, FL 33322
305-41-2070

Survival City
111 W. Olympia Avenue
Punta Gorda, FL 33950
813-729-0909

Trojan Trades
9696 S.W. 40th Street
Miami, FL 33165
305-221-1371

Var! Military Surplus
3598 Fowler Street
Fort Myers, FL 33901
813-939-1171

NORTH CAROLINA

Idol's Adventure Spo
Highway 74 West
Rockingham, NC 2838

Orn's Adventure Spo
1111 Bateman Street
Rockingham, NC 2838
9-9-997-2697

Triangle Air Gun Gam
715 Pinewood Drive
A-ax, NC 27502
9-9-362-4547

Click Shots
E Law Shopping Cent
894 Elm Street
Fayetteville, NC 28303
919-323-5209

The Pro Shop
Al Quick Shots
Eutaw Movie Theater
Fayetteville, NC 28303
919-323-5209

ARKANSAS

Flag Raiders of North A
Rt. #1, Box 79-C
Folmer, AR 72479
101-668-7272

The Hideaway
Route 1, Box 117A
Wionia, AR 72173
501-796-2729

MARYLAND

Frontline Action Games
PO Box 178
Forest Hill, MD 21054
301-893-3500

MD Surplus & Outdow
3256, Route 5, Suite 201
Waldorf, MD 20601-9808
301-645-0077

On Target Inc.
2618 Annapolis Road
Severn, MD 21144
301-551-7777

Standard Supplies
4 Chestnut Street
Galthersburg, MD 20877
301-464-1694

SOUTH CAROLINA

Freedom Paintball
1891 River Oak Rd.
Inman, SC 24349

National Paintball Supply Co
1200 Woodruff Road, L-38
Greenville, SC 29607
803-458-7221

Vanguard Paintball
429 Kook Store Rd.
Columbia, SC 29203
803-786-4539

MINNESOTA

Paintball Express
20648 Jaguar Avenue
Lakville, MN 55044
612-469-1879

Paintball Tag Games
612-141-6832

Splat Zone Survival
RR 1, Box 270
Mankato, MN 56001
507-278-4120

U Preview of the Decisions Made at the Nats Rule Meeting

By Fluegel

The proposed rules that have already been printed in Hull Busters can be found on p. 831, #1, 2, 3; p. 857 (delete procedure #1 and change pressure to 150 psi. on Frank's rule). Other proposals include

Use any material for hull skin as long as it is not self-sealing and will pass the 18" drop test.

Slow down classes 4, 5, 6, and 7 by 1 second.

Allow Hood, Renown, Scharnhorst, and Alaska 1/2 extra unit.

Give rules precedence over ship list, except for specific exceptions. Six unit Nagato is first exception.

Allow battleships over 590' 26 second speed. (This would make Baden, Rivadavia, and WW1 King George class 26 second speed.)

Class 3 and smaller ships may change batteries between sorties.

All ships will be hull hardness tested at Nats before battling begins.

Guns may not elevate above horizontal.

Pumps may not be angled above 20 degrees.

The Contest Directory may assess penalties not covered by the rules.

The participating battlers are the only occupants along the shore and 5' behind the shore. Exceptions are fleet admirals and Contest Director approved cameramen.

Many other rules will be on the ballot; this is just a sample. A rather lengthy proposal by Ron on Campaign will also be voted on. These proposals were generated by the 91-92 E-Board's assignment to clarify and re-organize the Campaign Rules. The bulk of this proposal work was performed by Ron. Thanks, Ron.

From what I've read in the last issue of HULLBUSTERS, it will be illegal to vent all types of Freon to the atmosphere by July 1st. So this means alternative gun gas systems need to be developed & installed. The most promising systems appear to be the compressor and CO2 systems that the west coast clubs have been using for some time. Due to the size and weight of these different systems there may have to be some rule changes. For example, should compressor type ships be allowed to change batteries?

I have been experimenting with the Williams Products CO2 regulator (see last issue of HULLBUSTERS). The one I have is the 103 series with the CO2 nut attached which I have not been able to remove as it is Locktited(tm) in. I tried to order one of the 150 series female thread regulator direct from Williams but they do not sell direct to the public, but they do sell them to businesses (Price: \$16-\$17 + Shipping). I've tried the local welding shops, but no one stocks it.

One experiment I've tried with the regulator is hooking it up to a CO2 cartridge adapter used by the paint/splatball gamers. I've gotten over 50 shots off of one cartridge. Rate of fire is excellent and I've had no freeze-up problems, provided the cartridge is kept at a slight angle. However, one drawback is that you can only use one cartridge per regulator. Also it costs about the same as a larger CO2 tank (adapter cost: \$25). CO2 cartridges run about 60 cents each. Maybe it would work on a destroyer where you only have 50 shots and space is tight though the regulator itself weighs about a pound by itself.

Please write or call me if you need any more information.

Fluegel's Best and Worst

By Fluegel

Best: When my Campaign strategy almost won the first strategic victory.

Another Best: On Monday, I was battling four fast Allied battleships. It seemed like they were closing in on me when I turned/rotated and brought my stern guns to bear and blasted one of them. Frank said, "Just seeing that maneuver has already made my Nationals worthwhile."

Worst: Shark.

Lessons Learned: Jim Pate showed me an exciting new way to build gun tees.

MY BEST/WORST OF NATS AND WHAT DID I LEARN

By Steve "FAB" Baker Lt. (Sr. Grade)
Commander H.M.S. Invincible

My best of Nats.

The people. Like some sage said, "It's the battling that gets you into the hobby, but it's the people that keep you there."

My worst of Nats.

When people got upset. Folks this is a fun game. When people get mad and upset it robs the fun from everyone.

What I learned.

Never ride to the awards banquet with Tom.
Never put your ship where Tom can shoot you when he is tweaking his guns.
Always room with Tom when possible.
Always have Bart as your wing-man.

CHEAP, SIMPLE SHOT TRAP by Steve Smith

How many of you have BB's all over the floor of your shop area from test firing your guns in the shop? I ended this problem by making a shot trap from a large cardboard mailing tube. Plug one end and stuff it with crumpled newspapers. Don't stuff them too tightly or the BB's will just bounce back out. You could also use plastic pipe or metal ducting instead of cardboard tube.

Chris's Best and Worst

By Chris Pearce

Best Moment: Friday, sailing the Queen Elizabeth once again, enjoying her responsiveness and turning ability, and hearing that precious "thunk" of b-b's hitting below Axis waterlines.

Second Best Moment: Spraying Axis captains in the face with my specially designed anti-personnel pump outlets.

Worst Moment: Losing my camera - Has anyone seen a Nikon 35mm SLR containing a roll full of Vanguard and Nats pictures???

Second Worst Moment(s): That five letter "F" word; the one that doesn't power our guns, but still has a lot of hot air.

Lesson Learned: Know yourself, and know your ship. I built a ship this year that did not suit my style of battling, and paid the price in frustration and ineffectiveness. A good ship is only effective if it's in the hands of someone who knows how to (and is willing) to battle it properly.

Conclusion
By Chris & Fluegel

Before we leave y'all, we would like to extend a great big THANK YOU!!! to our WONDERFUL SITE HOST, DON COLE and all the GREAT GUYS FROM FLORIDA who helped make this one of the most fun Nats ever. Thanks are also due to TOM JASS, one of the greatest CD's our hobby has ever seen. Without guys like these, willing to sacrifice their time and energy so that we might have more fun, our hobby might not be the Magnificent Obsession that it is.

Another note - Don't send a rule proposal unless it is endorsed by three club members. Space in this newsletter is precious, and I would rather spend it on construction articles, battle reports, and articles for rookies than on everyone's gripes about the rules. We have a good system, let's use it. If you do send unendorsed rule proposals, don't be surprised if it doesn't get printed.

Lastly, all you battlers be sure and send your best and worst articles from Nats. How did you do? What did you learn? Enquiring minds want to know.

Greg Willson, (407) 774-4666 after 7:30 pm, contributed a lengthy article concerning a variety of attractive T-shirts that you can buy. I will run his article next issue, along with Tuesday, Thursday & Fridays battle report.

CO2 SYSTEMS, SOURCES AND SUGGESTIONS

By: Bart Purvis

Ya'll come to the fall S.E. Regionals hosted by the Georgia Attack Group. The \$12 entry fee includes soft drinks, Saturday lunch and Sunday lunch. Early registration is encouraged.

Our motel will be the Pine Lodge Motel, 500 South Main Street, Baxley, GA 31513, Tel (912) 367-3622. Room rates are around \$35 plus tax.

For additional information contact Bart Purvis (912) 367-7306, Rt. 7 Box 465, Baxley, GA 31513



N.E. REGIONALS MARYLAND, SEPT 12-13, 1992

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S.E. REGIONALS BAXLEY, GA OCT 10-11, 1992

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D.W. OR KATHERINE FLUEGEL
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