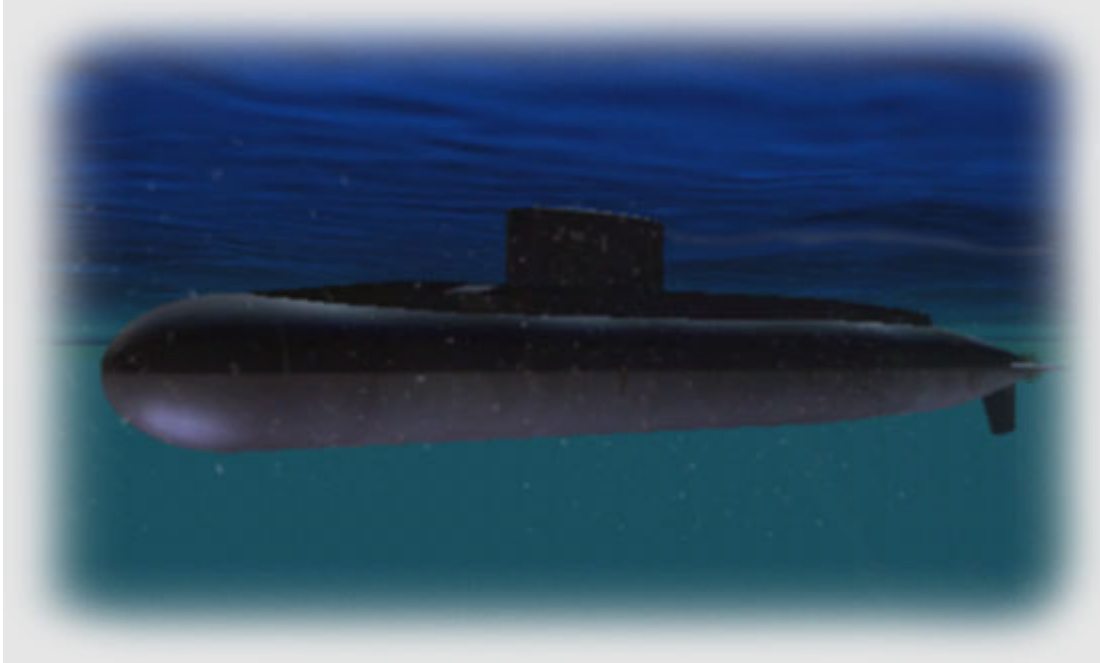# S.C.S. Dangerous Waters

by **Cat**

God bless Jamie Carlson and Sonalysts. Now is the winter of discontent for naval simulations modeling current-day conflict, and these guys are about the only ray of sunshine I know of. Since the repeated demise of *Harpoon 4*, the surface navy in particular has been under-represented, and the bulk of other efforts center on World War II. *Destroyer Command* is an example. Modeling World War II destroyers, it is the last surface-sim of note to be recently released, and along with the *Silent Hunter* submarine series comprise the best of recent naval releases. A new *Silent Hunter* is currently in production. However, nearly all the simulations scheduled for release in the upcoming months center on combat prior to 1950. What about the present day? Sea power is more important in the modern world than ever before!

Enter Sonalysts Combat Simulations. Sonalysts fill a huge gap in naval simulation. Since the *Harpoon 4* effort imploded, leaving only Advanced Gaming Systems's excellent revival of *Harpoon 3* and the earlier games in that series for modern naval simmers, Sonalysts stands alone in attacking the modern era and bringing gamers everywhere the chance to play Admiral in today's world. Most of their work has been concentrated in submarine sims. This team has professional connections to the United States Navy, particularly in the area of acoustics and sonars, and their connections show in their work. Their previous efforts, *688(I)* and *Sub Command*, are among the most realistic systems simulations ever to make it to the PC. Sonalysts even filled the gap for modern-day naval surface tactical gamers with *Fleet Command*, one of the most eminently editable and easy to master, fun to play naval games on the planet. Sonalysts seems to purposely cater to a niche market: the high-fidelity naval systems geek. Their diversity as a company enables them to do this, and such versatility is rare among entertainment software developers today. The equivalent would be Lockheed-Martin developing a sim of the F/A-22 for gamers (wouldn't *that* be something?) or Dassault releasing a Mirage III simulation.

By the time you read these words, Sonalysts' latest and greatest will either be on the market or getting darn close to

release. It is the third in the *688(I)* line of platform-command, high-fidelity systems management sims line, titled *S.C.S. Dangerous Waters*. Most in the press call it *"DW"* for short. But there's nothing short about this one, readers. Let's pop the hood and take a look, then you'll get to see one of the new platforms in action.

I have a late press beta and should have the bugs I'm seeing squashed. As to the bugs, I hesitate to dwell on technical problems that the team is aware of. I did experience problems with FSAA and anisotropic filtering, using the NVIDIA v61.77 drivers, and some sound card issues with my Aureal AC97 sound emulator. Again, the team is working on these issues and should have them dealt with prior to release. Even in late beta form the game installs from one CD and does so quickly and without fuss.

The menus are black-on-green and intended to evoke the look and feel of military data terminals. There are multiple scalable graphics options to fit most PCs out there, regardless of hardware. I don't have the minimum specs in my documentation, but most simmers should have the basic hardware to get decent frame rates.

Full out, the game has moving, 3d water and cloud effects, and it's really pretty. The only complaint I have is in the areas of the 3d modeling. This appears to be a little hit-and-miss, and though some of the models are the best I've seen outside *Lock On's* ships, some are pretty primitive. Compare the British Type 42 destroyer, an AI platform, with the Iranian *Sa'am (Alvand)* class Vosper-Thornycroft Mk V frigate. The 42 is excellently detailed, reminiscent of the model used in *Fleet Command*. The *Alvand* isn't. It too appears to be similar to the *FC* model, and lacking in detail.
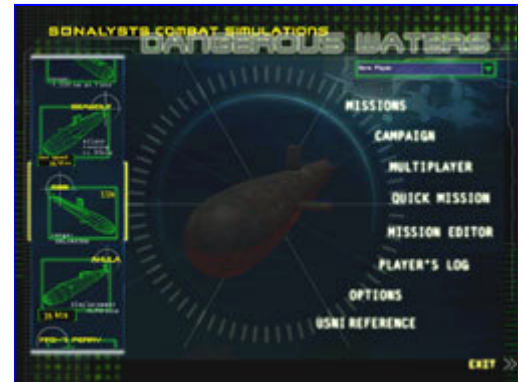
The Iranian ships will be seen by a lot of people as OPFOR, and as such should have a little more detail. The controllable ships and submarines, which we'll talk about next, are lovingly detailed, however.

Sonalysts adds a few more goodies with each iteration of the *688(I)* series. There appears to be a real "if it ain't broke, don't fix it" philosophy that adds on to existing, working software new features. Unlike other developers, they add and build on proven product, which is a business software development model I'm surprised we see so little of in entertainment software. Oleg Maddox's *IL-2* series is about the only recent series that develops in this fashion, though Igor Tishin's Eagle Dynamics company is beginning to go the same way with *Lock On*, and it's an exciting trend in my book. When *Sub Command* came along, the Los Angeles class were joined in the virtual controllable sea by the Seawolf and Russian *Akula* attack submarines. This development brought Russia, a major player in military submarines, for the first time into the sub sim world and allowed a player to captain an operational Russian attack submarine. This brought simmers to their feet and Sonalysts got just kudos for their work. Even Americans like to fly the military hardware of non-American countries. It's cool to see the world's military hardware in action. We see our nation's best and boldest in action on the PC frequently, and though we love our F-16s, F/A-18s, nuclear subs, and Abrams tanks, the chance to drive an Akula, fly a Mirage or MiG, or roll around in a T-72 is a sort of fun military voyeurism that most of us will never get to do for real.

DW adds some interesting things to the *Sub Command* arsenal. First up is the *Oliver Hazard Perry* class guided-missile frigate. Of all the choices of Western surface-warfare units, this one is probably the best one Sonalysts could have made from a sheer public-appeal standpoint. Why? Because everyone likes to virtually sail for his or her own navy, and the *Perry* class is in service with navies all over the world, including but not limited to Spain, Australia, New Zealand, the U.S., and Turkey. It's almost the universal good-guy, the F-4 Phantom of ships. The *Perry* frigate in game boasts the "one-armed bandit" Mark 13 missile launcher, capable of firing Harpoon anti-ship missiles or SM-2

"Standard" surface-to-air missiles. Standard also has a limited anti-ship capability and this appears to be modeled; in playing the beta I was able to target a Standard onto a surface unit and fire, though I was out of range when I did so. The *Perrys* also boast the U.S. Navy's OTO Melara 76mm automatic cannon, wire-guided torpedoes, and two, count 'em, two SH-60 LAMPS III helicopters. You can call "green deck" on the helos and launch them, and plot courses and give orders to the pilot through your ASTAC, the air controller aboard the ship. Several stations are modeled, from the bridge, to the radars, and sonars, and damage control. All stations will operate by AI unless you take them over yourself. You can even control a .50 Ma Deuce yourself for taking on small ships.

Also modeled is the P-3 "Orion" four-engined aircraft. Its function is antisubmarine patrol, and you can drop sonobouys, stream the magnetic anomaly detector, and hunt for enemy submarines, and drop torpedoes form the internal bomb bay. You can attack surface targets with Mavericks, and loadouts are player controllable. A word of warning, players-you can take the cockpit of the P-3 but this is not a flight simulation. The P-3 handles poorly and the views and cockpit controls are not realistic in any way. That's not the purpose of the P-3 in game. If you want a flight sim, get a flight sim. The purpose of the P-3 is to take command and order your crew to get the job done. Command is the name of the game. You've got the systems at your fingertips, and they're incredibly detailed. Also controllable is the LAMPS III MH-60

Seahawk helicopter. Like the P-3, you can control it and fly it. However, I have to stress that this is not a flight sim, and you don't have the control fidelity that you may be used to from games like the Enemy Engaged series or Longbow II. As in the P-3, its systems modeling is excellent. You can drop sonobouys and employ its various weapons systems. But the goal in this sim is tactical comand rather than pilotage.

If you're an old *Sub Command* or *688(I)* hand you now what I'm talking about. Let's be frank about this: *DW's* greatest strength is in submarines. The old players are here in all their glory and their systems modeling has been fine-tuned. If you've ever wondered what it's like to be a sonarman on a sub, here's your chance. Sounds are well done, and you have tools at your command to identify and classify contacts and intelligence funneled to you by your electronic and visual sources. You can pick up the USNI Reference, a tool Sonalysts designed to give you fingertip access to the platforms in the game, and use it to identify and classify your potential foe. We'll take a look at how it works with the third and most interesting of the new platforms, the *Kilo* class diesel-electric submarine.

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Kilo is billed by its Russian builders as the quietest fish in all the seven seas. More silent even than an American attack sub, and cheaper to acquire and operate. It is in service in at least four navies, those of Russia, Iran, India, and China. I'm going to turn this story over to a friend of ours who'll introduce you to the Kilo class submarine *Novorosslysk*, a deadly killing machine, and her crew.

Well, my friends, we meet again, yes? It is a quiet time today. We are taking a break between missions, and I have another relative who has come to call. We are a close-knit family, all of us in the military in one way or another. You

have met my grandmama already, who has taken a temporary apartment in Sochi, near the sea. You did know that Sochi is Russian soil, no? You see why we are so interested in the Sheikh and his depredations just over the border in Georgia and now we find that the dog Basayev in Chechnya is allied with him. War is close around us. And I have found that I, my grandmama's erstwhile protégé', am not her only reason for visiting our fair city.

Recently, I perused intelligence files in our Commander's office. I can tell you of this now, because their subject is now no longer a threat. I now know why this is, and so shall you. We were planning a preemptive strike on *Alvand*, a Vosper Mk V frigate of the Iranian navy. You may wonder why. Our Turkish neighbors are the reason why. They are now playing at strict neutrality, because their mullahs are about to fall from power. We are often heartened by the Turkish desire for freedom. Once, they nearly joined the European Union, after all. Even though they follow Muqtadeh's religion, the Turkish public has no stomach for a war in Georgia and they are tired of it. We gladly hear that the Ataturk faction is rising in power. I think often of my friend Kemal, of that faction, to whom I owe my life and my escape from the Suhumi airbase. I hope he is well. But I digress.

You see, our plans to sink the Iranian have been thwarted. Because someone else got there first! I found out this from my dinner companion last night. He is my uncle, Grigoriy Stepanovich Andreev. I should say Captain Andreev, of our Red Banner Fleet. It seems that his submarine *Novorosslysk* is based in Sochi harbor. He is the *other* reason for Grandmama's concern.

Uncle Grigoriy smiled foxily when I mentioned the puzzling disappearance of the Iranian frigate over our *borscht*. Taking a sip of tea, he leaned back and stroked his dark beard.

"Yes, Shoura, the Iranian will no longer be troubling you and your friends. Let me tell you a story."

Not long ago, we patrolled the coast, south in Georgian waters. We have many duties, you see. We gather intelligence for our forces. We monitor the cursed mujahids. We protect Allied shipping, and we are there, in case one of the aircraft constantly flying missions overhead is shot down. We are always near when you and your friends are in the sky. And we have other missions more secret still that you need not hear about. Our flagship, cruiser *Moskva*, is operating in the area and must also be protected. The Americans are operating their submarines here, but they are busy protecting American ships and so we monitor the coast. Imagine my surprise when we found something we were not looking for.

The Kilo at Sea   Maneuvering

Alvand is one of the frigates of the Iranian navy, as you have been told. A Vosper frigate, from Britain, with 4.5 inch guns and missiles. Built before you were born, when the American puppet, the Shah Reza Pahlavi ruled in Iran and our long knives were being sharpened to drink American blood and not that of the mujahid of the south. Is it not amazing that the Americans are now our friends again? My mother, your grandmother would say that this is a good thing, for she remembers the Americans from when they were our friends against the Nazis.

Of course, Iran is now the leading force supporting terrorists in Georgia and in Chechnya. So, the intelligence tells us that Iran is engaged in gun-running. And how, you may ask, did this warship advance through the Dardanelles? Past Istanbul, under the very noses of neutral Turkey? The same way we did. Quietly, carefully. Turkey is tired of war and they do not attempt to keep any of the belligerents out now. None of us have desires on Turkey and they know it. They prefer to let us fight, and though they tacitly support their Muslim brothers with materiel and volunteers, they no longer are in the fight personally.

At first, we did not know what we had. In the control room, all was quiet efficiency, you see. It was early in the day, and we would remain submerged. We cruised at periscope depth, at three knots quietly. *Novorosslysk* is as silent as a shadow on her electric motors. If need be we can raise our snorkel and use our diesel engines but they are loud and betray us to the hostile world above. We connect to the world at night, to change the foul air for fresh and send our radio mast up for orders. We were listening now. And we heard something we did not expect. A ping, cold, crystalline and loud. An *active* sonar ping!

"Conn, sonar. Contact bearing 063. An 18 kilohertz sonar! And we hear it on the hydrophone now, twin screws. Identify the contact as Master 01."

I pulled the *kashtan*, a small, chestnut shaped microphone, from the overhead.

"Classify the contact."

"It is a Western sonar, Captain. It does not approach. Bearing changing, now 070."

I looked at my *starpom*, Igor, who hovered nearby, anxiously.

"In these waters, a surface contact with a Western sonar? And twin screws? It must be enemy, a warship."

"Da. And close. and close. The Americans and British are too seaward of us, and the sonar signature is all wrong for one of the Turkish Perry class ships. Raise the scope. Let us see our new friend."

"Master 01's course now 179, speed twenty, range, 5000 meters."

The enemy came into sight in my scope. I twisted the magnification.

The Kilo's Radar Display   Sonar Active Intercept

Discovered

Visual on the Enemy Frigate

Classify Master 01

Designating from Nav Screen

"Mark bearing! One stack, one gun, forward. One smaller gun, aft. Vosper frigate, Mark V."

I punched the red button, to take a photograph of the ship. We would be sure of our friend before taking action. Suddenly, the ESM receiver blared! The enemy was operating his radar in addition to sonar, and it was bouncing off our periscope! We were dangerously exposed, and I lowered the scope instantly.

"Ahead one third. Right standard rudder, steady up on course 085."

I looked over at Igor, and gave him a wolfish grin.

"It is that Iranian frigate we were warned about. Right in our laps! And he does not know we are here."

Igor nodded. *"Shall we introduce ourselves?"*

"Da. Send the men to their action stations. Quietly. And quickly."

As he barked orders, I pulled down the *kashtan*.

"Torpedo room, this is the Captain. Firing point procedures for tubes one and two."

Tube one was loaded with the USET-80 torpedo. It has an active acoustic homing device. The 53-65K torpedo in tube two was different, and would pick up a ship's wake. If the first missed, the second would not. And we had more still. The Iranian would go to the bottom. In the torpedo room, feverish activity ensued.

The master chief petty officer scanned his board and gave quiet, forceful orders.

"Presets accepted. Flood tubes one and two, prepare to equalize."

We could hear the taps open as water from the Black Sea rushed into the tubes, followed by the hiss of air as the michman equalized pressure and opened outer doors. At their report of ready, I gave the orders.

Loading Torpedos

Flood Tubes 1 and 2

Equalize Pressure
Tubes 1 and 2

Match Bearings
and Open Outer Doors

"Sonar, final bearing?"

"Bearing now 075. Course 179, speed twenty, range still 5000 meters."

"Weapons free. Match bearings for tubes one and two, and shoot."

Igor relayed the order. In the torpedo room, the chief flipped open the cover for the firing buttons and uttered a short prayer, then pressed. The hiss-hiss of compressed air told us that our torpedoes were in the water.

USET-80 Torpedo

Torpedo in Route

Wake Homing Torpedo Launches

Wake Homing Torpedo

"Conn, Sonar, torpedoes running normally."

"Igor, take her down to seventy meters! Steer course 093!"

I grasped at the overhead support and braced as *Novorosslysk* sought deeper water. Igor worriedly watched his stopwatch as I looked over the torpedo michman's shoulder at the active torpedo display. Soon, they would go active and begin their search patterns.

Torpedo Displays

"Make tubes four and five ready in all respects."

Tube three was loaded with a missile-launched torpedo, what the Westerners call the SS-N-15 Starfish. Quite

unsuitable for anti-ship operations, but I wished it kept in reserve in case an Iranian submarine was about. I ordered five loaded with the USET-80, as four already was loaded with the wake-homing type 53.

Prepare Tube 4

Firing Point Procedures
Tubes 5 and 6

On the screen, it was apparent that the Type 53 already in the water was a miss. Its search pattern could not find the Iranian, which was now maneuvering toward us.

"Igor, firing point procedures for tube four. Quickly!"

Our third torpedo was in the water. On the screen, Master 01's position could not be determined with clarity. We reduced speed, fought to keep the ship from cavitation, while trying to roll under a thermocline where the enemy sonar lash could not find us. The air bubbles caused by our screw cavitation would give us away as if we set of a grenade by our hull.

Suddenly, the first USET-80 torpedo changed course! Inexplicably, it headed for empty waters, aft of Master 01's last plotted position. Igor and I looked into each other's eyes in amazement.

"Captain, do you think…?"

"It has locked onto something, Igor Pavelovich. Let us hope that something is the Iranian. Or we will all be in for an interesting time."
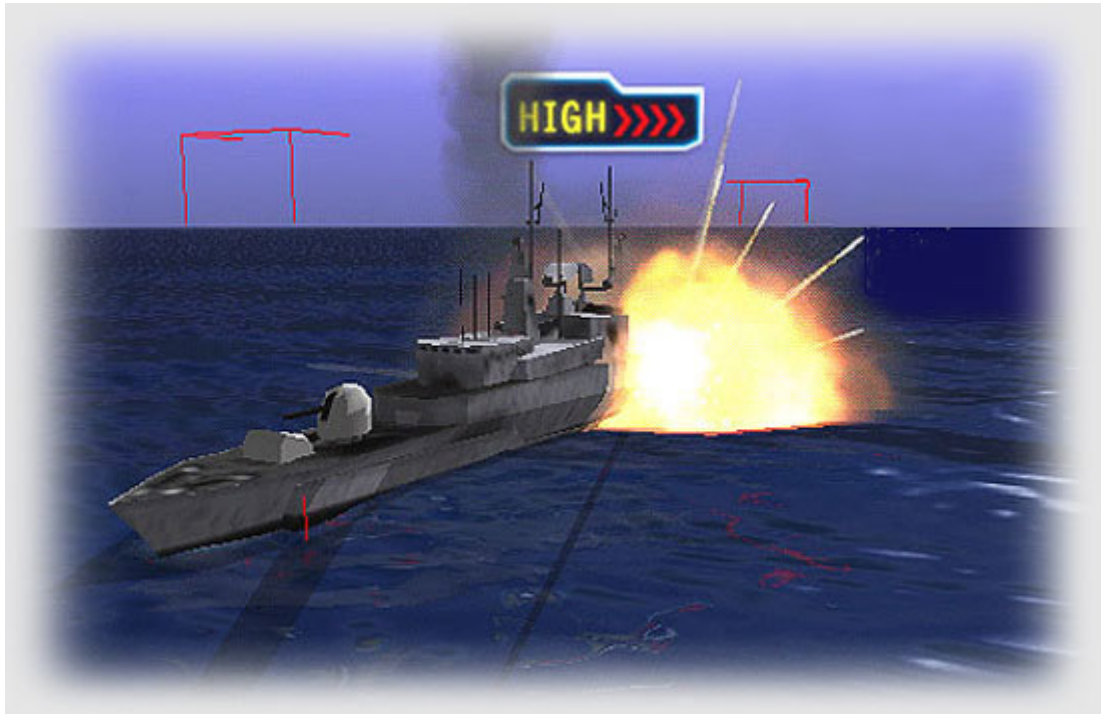
Suddenly, an explosion in the water, clear for all to hear! The ship erupted in cheering from the crew, cut short as Igor shouted *"Silence!"*

Hull View of the Target

A hit!

Into the still air that followed, an excited report from Sonar came over the interphone.

"Conn, I have an explosion from the last known bearing of Master 01!"

I nodded at Igor. *"Make your depth nineteen meters. All stop."* The ship began to slowly rise.

"Sonar, Conn. Report all contacts."

"Bearing 090, designate Sierra 1. It sounds like hull noises, breaking up! I think we got him, sir!"

"Nineteen meters, Captain."

"Da. Raise the electronics mast. Scan with the radar. Report all contacts."

The Kilo Raises Periscope   Scope Shot

Of course, the picture was clean by then, for the Iranian was heading for the bottom of the Black Sea, fifteen hundred meters down. We recovered forty-two of her crew, including her captain.

"And I'm sure he will have some interesting things to tell the FSB, eh, Shoura?"

Uncle Grigoriy took a sip of his tea, a satisfied look on his face.

"You must come and sail with us, sometime."

I demurred at that invitation. I do not think I would be welcome in so confined a place. And besides, my place is in the sky, with Vasily, and Alexei, and our comrades. Soon, duty will call again, and Uncle Grigoriy and I will have to return to war. But for now, I returned my attention to my *borscht*, and the beauty of a sunset over the Black Sea, which we watched from the outside dining area of our hotel in Sochi.

As you can see, *DW* is loaded with detail. One can navigate and give orders from both the station screens and the overall navigation screen. In the Nav screen, you can see the known contacts, marked with Naval Tactical Data System symbols. You have total control of your platform, but here's the catch: you are literally the captain of your own ship. And that's all. You have no control over allied ships. The best you can do is select a contact and click "promote to link" in the stations panels. Then the allied AI ship will go after the contact, because you've transmitted link data to him. But you've no control over how the AI does his job, like you had in *Fleet Command*. There is a reason for that.

DW is really designed for multiplay. Yes, players. Multiplay. If you've ever wanted to have those modern-day sub-vs-sub-vs-ship-vs-plane duels, here it is in grand glory. Because according to Jamie Carlson, *DW's* biggest fun will be the ability to collaborate in multiplayer with other units to identify and attack the enemy team, without fragging your own teammates. If you've ever really wanted to play underwater chess, here's your chance. Same goes for you surface-warfare nuts. Here's your chance to see if you really can got get a modern day sub from the surface and live. Are your helicopters and sonars equal to the deadly sub?

I had a lot of fun playing with *Dangerous Waters*. I'm a naval-sim neophyte. Though I had *688(I)* and have seen *Sub Command* in action, I'm at heart an Airedale and prefer to fly fixed-wing fast movers, so I'm not as good at games like *DW* as many of you are. But I loved *Fleet Command* and I can tell you that if you liked the previous offerings from Sonalysts, you'll love this one. It retains the mission editors and campaigns you're fond of, and the editors offer endless flexibility to create games for single player and multiplayer, from one mission to a full-blown online, "gut-bustin', mother-lovin' NAVY war," as Kirk Douglas said in that great war movie, *In Harm's Way*. The sea is your oyster in *DW* and if this is where your heart is you will not be disappointed. *Anchors aweigh!*

S.C.S. Dangerous Waters will be available exclusively through **Battlefront.com**.

System Specs

- AMD Athlon 3000+ processor

- MachSpeed N2PAP-Lite motherboard with onboard Aureal AC97 sound

- PNY Technologies Verto GeForce FX 5950 Ultra

- 1GB Kingston PC2700 DDR DRAM

- Creative 12x CD-ROM

- Maxtor 40GB main drive

- DirectX Version 9.0a

- Windows 2000 with SP4