



The Dolphin Brotherhood

U.S. Navy Looking for an Extra Quiet Vessel for ASW Training

From The Strategy Page

The U.S. Navy is trying to hire a Swedish submarine to help in an anti-submarine warfare program. Sweden's submarines are all of very modern design and performance. Sweden pioneered AIP (Air Independent Propulsion), which allows non-nuclear subs to stay underwater for extended periods of time without snorkeling. Moreover, AIP gear is quieter than nuclear propulsion.

The United States wants to use the Swedish sub (Sweden only has five subs in service), and its crew, to help train American anti-submarine forces. The Swedish boat would be a "worst case" scenario, and this approach is preferred for training. The Swedes, of course, would also gain. In addition to the rent payments, the Swedish submarine sailors would get excellent experience at dealing with the most modern anti-submarine gear.

The Swedish navy is interested in the proposal, but the final decision is purely political. If the media gets on the wrong side of the idea, negative public opinion will spook the politicians and kill the plan.

The Gotland class Swedish subs are small (only 200 feet long) and have a small crew of 25.

GOTLAND CLASS (TYPE A19) ATTACK SUBMARINE INFORMATION

Kockums, a subsidiary of HDW of Germany, was awarded the contract in March 1990 to build the three *Gotland* Class submarines, *HMS Gotland*, *Uppland* and *Halland*. The first of class, *HMS Gotland*, was commissioned in 1996. The second and third, *HMS Uppland* and *Halland*, were commissioned in 1997.

COMBAT MANAGEMENT SYSTEM

The ship's combat management system is the 9SCS Mark 3 from Saabtech Vectronics (formerly CelsiusTech). The system carries the Swedish Royal Navy designation SESUB 940A. The system uses an extended version of the ADA software from Saabtech Vectronics' 9LV Mk 3 surface ship combat management system. The fire control system has the capacity to control several torpedoes in

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Commander's Corner

By Robert Opple, Base Commander



We have had an active year with several interesting speakers, but before we know it 2004 will be history. As the end of the year approaches, I

want to remind members of a few things.

First off, I want to encourage everyone to step forward and volunteer to run for one of the many positions of base leadership next year. I would like to present a slate of officers at the next meeting so please let me know if you are interested in running for one of the many offices.

Membership renewals have gone out. Remember that the price of lifetime memberships is increasing and you may

want to consider taking advantage of the current rates. When you are sending in your dues, please think about tossing in an extra \$10.00 for our Subvet Charities (USSVCF) to help support our various programs.

Finally, I hope you will consider attending the Christmas Luncheon at the Seattle Yacht Club. I'm really looking forward to it and hope to see you there as well.

Respectfully,
Robert Opple

WWII British Submariner Bill Jewell Dies

By Adam Bernstein, Washington Post Staff Writer

British submarine skipper Bill Jewell, who died August 18, 2004 in suburban London, had a vital role in one of the more macabre and celebrated clandestine operations of World War II - using a corpse planted with fake documents to fool Nazi intelligence.

Operation Mincemeat, as the wartime plan was known, was shrouded in such secrecy that not even Mr. Jewell's after-the-fact memoir noted the caper. Only later did books, articles and a 1956 film, "The Man Who Never Was," detail aspects of the story.

The deceit was intended to distract from the Allies' planned 1943 invasion of Sicily and sweep into Italy - the quickest way for them to reach Nazi-held Europe from North Africa. British intelligence formed a ruse: to plant on the southwest Spanish coast the body of a sham Royal Marines officer carrying "invasion" plans for Sardinia and southern Greece.

For most of his voyage, Mr. Jewell was the only one aboard his boat, *HMS Seraph*, to know about the feint. He was mum about the contents of a metal container in cold storage: an unidentified corpse from an English mortuary. This body, renamed Maj. William Martin, was chained to a briefcase containing false invasion plans. Naval intelligence also decided to add to Martin's portfolio signed letters from ranking officials, two theater stubs and a dramatic love letter from his "fiancée." In the pitch darkness at sea, as the *Seraph* hovered in the Gulf of Cadiz a mile off the Spanish coastline, Mr. Jewell ordered the metal container taken to the deck. It was 4:30 a.m. on April 30, 1943. He told the crew below he intended to launch a meteorological device. On deck, with only a few trusted officers watching, he gave a short burial service, reciting Psalm 39. He heaved the body into the water with a life vest and an upside-down life raft.

Back in London, death notices appeared for Martin, who was said to have died in a plane crash. As expected, the body made its way to shore - it was netted by a fisherman - and was buried in fascist-ruled neutral Spain. Although Spanish authorities returned the briefcase to the British, they had given copies of its contents to the Germans. The German high command took the bait and began arming for an invasion in Corsica and Sardinia, islands west of mainland Italy. The fortification of the wrong landing points was said to have been a costly error for German defenses. Hitler also sent Field Marshal Erwin Rommel to Greece and pulled two vital armored divisions from the Russian front.

Operation Mincemeat had been an unqualified success. However, the operation was almost scuttled at the start of the mission when British pilots initially mistook the surfaced *Seraph* for a Nazi vessel and attacked it.

Norman Limbury Auchinleck Jewell was born Oct. 24, 1913, in the Seychelles, where his father was a colonial officer. He was educated in England and joined the Royal Navy in 1936, volunteering for the submarine service.

His early duty was spent under the command of a dashing officer who routinely ignored dangers, for example, repeatedly dodging through minefields, but somehow managed to complete the mission at hand. Mr. Jewell was taken with such raw adventure and soon became known for his own exploits aboard the *Seraph*, of which he took command in 1942.

Among Mr. Jewell's other missions was to bring French Gen. Henri Honore Giraud, in Vichy France hiding from the Germans, to Gibraltar. There, it was hoped, he would help rally French forces to the Allied cause in North Africa. There was one problem: Giraud's intense dislike for the British, enough so that he would not board a British boat. To lure Giraud, Mr. Jewell's boat set sail as the *USS Seraph*, complete with American flag and a crew that pretended to speak like Yanks upon meeting the French warrior.

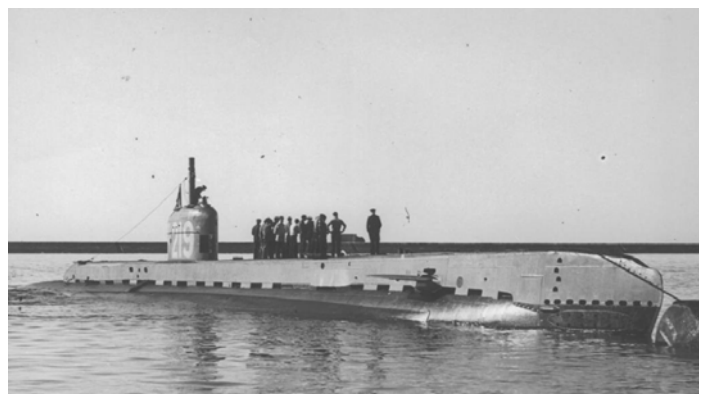
After Operation Mincemeat, Mr. Jewell helped lay marker buoys for the invasion of Sicily in July 1943.

His decorations included the U.S. Legion of Merit, as well as several British and French awards for gallantry.

After retiring from the Navy as an admiral in 1963, Mr. Jewell worked for a brewing company in Birmingham, England, and was named life president of the Submarine Old Comrades Association.

In 1945, a physical check revealed that Mr. Jewell had broken two vertebrae during a fall down a hatch years earlier. He had gone through much of the war with a broken neck.

Sailor, rest your oar



HMS Seraph

Future of Seattle Veterans Museum in Doubt

By Tan Vinh, Seattle Times staff reporter

In the past two years, the Seattle Veterans Museum at Benaroya Hall has become as much storehouse as shrine, filled with dog tags, helmets and other mementos left by old soldiers and widows seeking to keep their family legacies alive.

Some donors lost their sons in battle and didn't have grandchildren to bestow with Purple Hearts and letters from the trenches. Others have moved into retirement homes and didn't have room to store their uniforms and guns. And a few were afraid their younger relatives would sell their medals and pistols on eBay.

But this museum, entrusted with casket flags and other artifacts of the departed, may soon itself be gone.

The downtown museum, supported mostly through donations from veterans and run by volunteers, will close early next year unless it can raise more money to pay the \$900 monthly rent, said Todd Crooks, one of the museum founders.

"It's pretty depressing," Crooks said. "It's a huge disappointment. It would break my heart." Crooks said the museum has enough money to remain open until the end of December, then likely will return to its traveling-road-show roots until he can raise more money or find a cheaper location.

A military history buff, Crooks, 42, of Bothell collected enough antiques and artifacts dating back to the Civil War that friends encouraged him to showcase the collection at festivals during the late 1990s.

As interest in his displays grew, Crooks and two friends, Army reservist Hunter Floyd of Bothell and retired Navy reservist Jerry Bennett of Bellevue, figured they had enough artifacts for a permanent display.

Two years ago, they persuaded philanthropist Priscilla "Patsy" Bullitt Collins to allow them to open their museum in a room at Benaroya Hall and pay their rent.

The museum debuted on Sept. 11, 2002, with artifacts from every major American War and included grenade launchers and flight gear from World War II to the Vietnam War.

But Collins died last year, and fund raising has become a constant challenge since then. The urgency has become greater since, unexpectedly, dozens of veterans and families have entrusted the museum with their war memorabilia, Crooks said.

James Ehrler, 64, of Seattle donated his father's Bronze Star, combat infantry badge and military pictures because "I have no children. I am the last in the [family] line." A retiree who lives

downtown, Ehrler said his father, Roy Ehrler, died at 24, at a battle near Albstadt, Germany, in 1944. His body was never recovered. He sacrificed his life for this country, and "I didn't want him to be lost," his son said.

Before Alzheimer's robbed Bill Nelson of his war stories, the 82-year old Duvall resident donated his mementos, said his wife and caregiver, Joan Nelson. Among the items is a map he stole from a gas station in Munich so that his platoon could locate the city of Dachau to liberate the concentration camp there.

For many visitors, the highlights are not the 1907 Austrian Rothstle pistol or the recent display of Iraqi Republican Guard uniforms, but rather the precious stories behind the medals and letters.

One Bellevue man donated a letter belonging to his relatives.

June 12, 1944

When I awoke this morning the sun was shining & it really felt good. ... Mother, don't worry about me if the mail is slow coming through. I will write at every opportunity so you will know I am okay.

As always,

Your loving son

Ten days after writing the letter, Pvt. Walter L. Flotz was killed by a sniper in Cherbourg, France.

In a letter dated Feb. 3, 1991, John "Jack" Kendall Morgan of Seattle enclosed a sealed envelope to be opened "just in case."

Well, if you have to open this up, please don't worry about me. I'm alright, and for once I know something you don't, what Heaven's like.

Morgan, a helicopter pilot, was killed on Feb. 27, 1991, the last day of Operation Desert Storm. He was 28.

The personal letters and the telegrams informing local parents of their sons' deaths remain the most haunting and powerful, bringing some first-time visitors - grown men, and even battle-hardened veterans - to tears.

On a recent day, a veteran strolled into the museum, donated \$5, glanced at the World War II displays and murmured, "This is a little too close to home. I'm getting out of here."

For Crooks, what started as a hobby has become a weighty responsibility: "I am like the temporary guardian for all the stories of these guys and gals."

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A former aerospace engineer for Boeing, Crooks serves in the Naval Reserve on weekends. His free time is spent creating museum displays of each soldier's portraits, letters, medals and badges. Sometimes, he fills in the missing pages of their history - the name of an infantry in which a grandfather served or the battle where a sibling earned his Flying Cross.

His latest project is a medal someone turned in, a Purple Heart with the name John J. Murtha engraved on the back. The soldier was killed in World War II.

Crooks has been trying to piece together the man's life - what he did, where he came from, whether he had a wife and kids, and whether they want the medal back - or even know it exists.

Seattle Veterans Museum Information:

The Seattle Veterans Museum is at Benaroya Hall behind the Garden of Remembrance on Second Avenue, between Union and University streets in downtown Seattle. It features displays from every major American war - about 230 years of military history - and personal artifacts from local veterans.

Hours: 10 a.m. to 5 p.m. Saturdays and on military holidays or by appointment

Admission: \$3

www.seattleveteransmuseum.org

425-821-0489

To donate: Make checks payable to Seattle Veterans Museum and mail to: P.O. Box 82333, Kenmore, WA 98028

New Newsletter Editor

By Dave Schueler

Don Gentry has decided to step down as the newsletter editor for the Seattle Base. The previous newsletter was Don's last issue and I hope you will all join me in thanking Don for a job well done.

I have been tapped to take over the newsletter and look forward to the new task. This is my first issue; while I don't have any specific vision for the newsletter, I do hope to hear from all of you on what you would like to see in the newsletter. I also hope that many of you will step up and contribute to the newsletter by sending in a good sea story or reminiscence or forwarding an interesting news item to me (or one of the base officers).

My contact information is:

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We are still catching up on the Holland Club bios. Here is one more. The bios were prepared by Charlie Ryan, Seattle Base Secretary — Editor

Milford (Terry) Terrass, Commander USN (Ret), qualified USS Tusk, 1950

Holland Club inductee Commander Terrass was unable to attend the formal ceremony held July 31st because he was in Europe, but Charlie Ryan told a bit of his Navy biography as it had a direct link to the ceremonies. Terry graduated from the United States Naval Academy in 1948 and qualified in submarines on *USS Tusk*, SS-426, in 1950.

In August 1949, Terry took part in the dangerous at-sea rescue while serving on *Tusk* in the Barents Sea. *Tusk* was operating with *USS Cochino* (SS-345) in waters just north of Soviet territory when, on 25 August, *Cochino* suffered a battery explosion. *Tusk* rushed to the aid of the stricken submarine and provided medical supplies for *Cochino's* injured by lift rafts. One raft capsized in heavy seas sending a *Cochino* officer and a civilian Bureau of Ships employee into the icy waters. Both were recovered, but during the administration of artificial respiration on board *Tusk*, a wave broke over *Tusk's* deck washing away the civilian and 11 *Tusk* crewmen. Only five sailors were subsequently rescued. After those tragic events, *Tusk* and the limping *Cochino* headed for Hammerfest, Norway. Along the way another explosion erupted in *Cochino's* after battery, sealing *Cochino's* doom as water literally poured through her battered hull. *Tusk* came alongside *Cochino* in heavy seas, lashed herself to the sinking submarine and under the worst possible conditions, took all of *Cochino's* crew off safely. Minutes later, Terry was the officer on *Tusk's* wave-washed deck who cut loose the final line to *Cochino* just before she sank beneath the waves.

Commander Terrass was later the commanding officer of *USS Trutta* (SS-421), a Tench-GUPPY class diesel-electric attack submarine, and he participated in the construction and commissioning of *USS Seawolf* (SSN-575). *Seawolf*, commissioned in 1957, was the US Navy's second nuclear attack submarine and in 1958 she became the first submarine to operate independently of the Earth's atmosphere for 60 days. Terry then participated in the construction and the 1961 commissioning of *USS Abraham Lincoln*, SSBN-602. He eventually became commanding officer of the *USS Abraham Lincoln* Gold Crew. He retired from the Navy as a Commander in 1968 and then had a career in civilian nuclear power operations in California and Eastern Washington before retiring in Richland, WA where he currently resides.

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the water simultaneously. The 9SCS Mark 3 Combat Management System has three Type IID multifunction consoles from Terma. The terminals are for command and control, communications, and weapon control.

WEAPONS

The submarines are fitted with four 533mm (21 inch) torpedo tubes and two 400mm (15.75 inch) torpedo tubes.

The four 533mm tubes are used to launch the Type 613 torpedo. The Type 613 is a heavyweight anti-surface ship torpedo used by all Sweden's submarines. The torpedo is launched using a swim-out discharge system. It uses passive homing and wire guidance, with a 240kg (530 pound) warhead, a maximum speed of 40 knots, and range of 20km (12.4 miles). The *Gotland* class submarines typically carry 12 Type 613 torpedoes, which will eventually be replaced by the new anti-surface/anti-submarine Torpedo 62.

The two 400 mm tubes are used to launch fire the Type 43 torpedo. The Type 43 torpedo is a lightweight anti-submarine torpedo. It uses wire guidance, with a 50kg (530 pound) warhead, a maximum speed of 35 knots, and range of 9km (5.6 miles). The *Gotland* class submarines typically carry four Type 43 torpedoes, which are currently being replaced by the Type 45 torpedo.

The *Gotland* class can also deploy the stand-off self-deployed Mine 42. The Mine 42, derived from a Type 27 torpedo, travels unguided to a predetermined location and sits on the seabed. The submarine has the capacity to carry 48 mines mounted externally in a girdle arrangement.

SENSORS

The submarine is equipped with a CSU 90-2 integrated sonar sensor suite from STN Atlas Elektronik. This includes a passive cylindrical bow array, an intercept array, and two passive flank arrays.

The submarine is fitted with a Kollmorgen search and attack periscope and a Terma Scanter navigation radar. The electronic support measures system is the Thales Defence Ltd. Manta radar surveillance and warning system. Manta carries out surveillance, detection, analysis, classification and identification of hostile radar threats.

PROPULSION SYSTEMS

The submarine is equipped with two MTU diesel engines and two Kockums V4-275R Stirling Air Independent Propulsion (AIP) units. The Stirling engines are mounted in elastic, soundproof modules

and provide up to 75kW each. The submarine has the capacity for two weeks of air independent propulsion at a speed of 5 knots without snorkeling. The AIP uses liquid oxygen and diesel fuel in a controlled inert (helium) environment. The AIP liquid oxygen tanks are located on the deck below the engines. The propulsion system provides a speed of 11 knots surfaced and 20 knots submerged.



HMS Gotland

Charitable Foundation News

By Pat Householder

Since the September Convention, Seattle Base Members have collectively contributed an additional \$720.00 to the Subvets Charitable Foundation and the base has pledged to match individuals contributions made prior to the next convention up to a total of \$750.00. These contributors include James Binnion, Robert Riddell, Robert Andrews, Ike Peterson, Jay Davis, Timothy Floersch, Ralph Sterley, Russell Oliver, Ronald Eggimann, James Davis, Larry Abbott, Pat Householder, C.A. Burlingame, Kingsley Parker, Donald Dufour, Jessie Nichols, William Coleman, Eugene Posel, Dale Ness, Larry Aasness, Carlton McDonald, Eric Muller, Michael Hein, and Lee Trunkhill. Thank you, Shipmates, and well done!

On the Internet:

USSVI National Website: <http://www.ussvi.org>
Seattle Base Website: <http://seattlebase.donmac.org>

Fire Onboard Canadian Submarine A Summary of the events on HMCS Chicoutimi

On Tue 05 Oct, two fires occurred onboard the Canadian diesel powered submarine *HMCS Chicoutimi*. The fires were in electrical circuits and caused extensive damage. *Chicoutimi* lost all power and propulsion. The submarine was on the surface at the time of the fires.

A variety of RN and RAF ships and aircraft were involved in the rescue. *HMS Montrose* arrived at the scene at 1300 on 06 Oct 04, and her CO acted as incident commander. Nimrod aircraft, *HMS Marlborough*, *RFA Wave Knight*, *RFA Argus*, 2 Sea King and a Merlin helicopter provided assistance as required.

There were 9 casualties, from smoke inhalation. Three of these gave cause for concern and were evacuated by helicopter to Sligo Hospital in the latter part of 06 Oct 04. The condition of one of these deteriorated to the extent that the helicopter diverted to Sligo Hospital, but Lt Chris Saunders RCN tragically could not be revived. The other casualties are now stable with their conditions improving. The remaining 6 smoke casualties were assessed as fit to remain onboard. A number of the crew from *Chicoutimi* have been transferred in small groups to *Montrose* for showers and hot meals, and given the opportunity to send emails to next of kin.

The specialist tug, *MV Anglian Prince* led the tow supported by the *MV Carolyn Chouest*, a US submarine support ship. The tow was transferred to the *Carolyn Chouest* on Saturday 10 October. The Royal Canadian Navy frigate *St Johns* made passage to the area, arriving on Saturday 9 October. She remains in Faslane in support of the *Chicoutimi*.

The key objectives were to ensure the safety of the crew, prevent the loss of the submarine, provide logistics, medical, aviation and moral support to the crew aboard.

Worthwhile progress was made in the restoration of at least partial electrical supply within the submarine. Temperatures remained tolerable and the atmosphere acceptable. The rudder function was restored to a limited extent, and three ballast tanks were blown, the fourth being left flooded to maintain the boat's trim for towing.

Specialist technical advice on the scene was embarked in *HMS Montrose*. Further technical groups continued to work ashore to scope options for the recovery. In addition, discussions were held between UK and Canadian staff, on how best to augment the submarine crew with additional specialists, and rest everyone as much as possible.



October 6, 2004



We Mourn the Death of a Brother Submariner

Lt. Chris Saunders, Canadian Navy

The combat systems engineer died after he was airlifted from *HMCS Chicoutimi* as the sub, badly damaged by a fire Tuesday, October 5th, drifted without engine power in rough seas off the Irish coast.

Saunders, 32, was described as a gregarious father of two young children who had a passion for mountain biking, motorcycles, and the Toronto Maple Leafs.

Saunders was declared dead at the hospital in Sligo, Ireland after doctors were unable to revive him.

Sailor, rest your oar

VICTORIA CLASS PATROL SUB INFORMATION

The Canadian Maritime Force purchased the four *Victoria* (formerly *Upholder*) class diesel-electric submarines from the UK Royal Navy - *HMCS Victoria* (876), *HMCS Windsor* (877), *HMCS Corner Brook* (878) and *HMCS Chicoutimi* (879). The *Victoria* Class replaces the decommissioned *Oberon* Class, the last of which was retired in July 2000. The first of class, *HMCS Victoria*, was commissioned in Halifax in December 2000 and the second, *Windsor*, in June 2003. *Corner Brook* was delivered in March 2003.

Work on the fourth vessel, *HMCS Chicoutimi*, was completed in September 2004. The vessel was handed over to the Canadian Navy at Faslane Naval Base in Scotland in October 2004. While sailing from the UK to Halifax, Canada, a serious electrical fire broke out on the vessel. The submarine was rescued by UK Royal Navy Type 23 frigate, *HMS Montrose*, which towed the stricken vessel to Faslane. One crew member died in the accident.

The UK's *Upholder* (Type 2400) class submarines were built by Vickers Shipbuilding and launched in the late 1980s and early 1990s. They were withdrawn from service in the British Royal Navy in 1994, following a defense review by the UK government. Canada purchased the submarines and a suite of trainers in 1998 and BAE Systems (formerly Vickers Shipbuilding) at Barrow in UK were contracted to refit the submarines. The submarines are being transferred to Halifax in Canada for commissioning.

One submarine, *HMCS Victoria*, operates in the Maritime Forces Pacific (MARFAC) fleet, which has a base at Esquimalt near Victoria in British Columbia. The other three submarines will operate

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within the Maritime Forces Atlantic (MARLANT) Fleet based in Halifax base.

The submarines are a central component of each of the two high readiness task groups, the Contingency Task Group, which operates on 10 days' readiness for deployment and the National Task Group which operates on 60 days' readiness.

DESIGN

The submarine has a single skin hull constructed of NQ1 high tensile steel. The skin of the submarine is fitted with about 22,000 elastomeric acoustic tiles to reduce the submarine's acoustic signature. The hull is a classical teardrop shape design, 70.3m in length by 7.6m in width and with a depth of hull of 5.5m. The fin or main sail houses a five-man lockout chamber. The submarine's escape and rescue system has been extensively upgraded with additional stowage space for escape stores and an underwater telephone to meet the Canadian Maritime Force requirements. The hull displacement is 2,168t surfaced and 2,455t dived.

The submarine accommodates a crew of 48 including seven officers. There is room for an additional five person mission crew, observers or training crew.

WEAPON SYSTEMS

Lockheed Martin Canada, Lockheed Martin Undersea Systems and Northstar Technical Inc (based in St John's Newfoundland) upgraded and installed the submarine's Lockheed Martin Librascope Torpedo Fire Control System (TFCS) to meet the operational requirements of the Canadian Navy. Components from the fire control system of the Oberon submarines were removed and installed. A UHF DAMA satellite communications system has also been fitted.

The submarine has six 533mm (21in) bow torpedo tubes equipped with air pumped discharge systems. The Sub-Harpoon missile firing and mine-laying capabilities originally on the *Upholder* Class have been removed. The torpedo room or weapons storage compartment houses racks for storing up to 18 Mk 48 Mod 4 heavyweight torpedoes. The torpedoes, operating at 40 knots speed, are deployed against targets over a range of 50km. The torpedo range is 38km at speeds up to 55 knots. The torpedoes use active and passive homing to approach the designated target.

COUNTERMEASURES

The ship is fitted with two submerged signal ejectors, small vertical discharge tubes that can launch either acoustic or bubble decoys.

The antenna of the passive Condor Systems Sea Search II electronic support measures (ESM) unit is fitted to the CK35 mast. The Sperry Guardian Star intercept radar also provides ESM.

SENSORS

The *Victoria* class submarine is equipped with the CK 35 search periscope and the CH 85 attack optronic periscope supplied by Thales Optronics. The CK35 search periscope incorporates a binocular optical system with an optical target ranging system. The CH85 attack periscope incorporates a monocular optical system and an infrared system. It is primarily used for surveillance and attacks on surface targets.

The submarine's long range sonars are the Thales Underwater Systems Type 2007 flank array sonar and the Type 2046 towed array sonar, both operating in passive mode and low frequency for long range detection and location. The Canadian Towed Array Sonar (CANTASS) has been integrated into the towed sonar suite.

The Thales Underwater Systems Type 2040 hull mounted sonar installed in the bow is a passive search and intercept sonar operating at medium frequency for optimum medium range performance.

NAVIGATION

The navigation suite includes a global positioning system, and a Kelvin Hughes Type 1007 and a Foruno portable navigation radar.

PROPULSION

The submarine is fitted with a diesel electric propulsion system driving a single shaft, based on two Paxman Valenta 16SZ diesel engines each rated at 2.7MW sustained power with two 2.8MW Alsthom alternators and an Alsthom motor rated at 4MW. The propulsion and power systems are controlled from the Machinery Control Room.

For operation under ice, the *Victoria* class submarines could be fitted with an air independent power system. The installation of an air-independent propulsion system might be considered in a future refit or upgrade program.

PERFORMANCE

The surface speed is 12 knots and the dived speed is 20 knots. While snorkeling the submarine can continue at up to 12 knots. The range at an 8 knots snorting speed is 8,000 miles. The submarine has a patrol endurance of 56 days. The hull is rated to a diving depth over 200m (656 ft).

Navy Taps Hollywood Flair

By Bob Susnjara, Chicago Daily Herald Staff Writer

After two years of planning, Great Lakes Naval Station is getting an \$82 million training facility combining Hollywood style and military discipline.

Battle Stations 21 - devised in part by BRC Imagination Arts and i.d.e.a.s, Disney MGM Studios' elite post-production company - will feature a mock ship with plenty of realism for a grueling, 12-hour event. Navy recruits must get through the current low-tech Battle Stations to become sailors.

During a ground-breaking ceremony Thursday on the site where Battle Stations 21 will rise at Great Lakes' Recruit Training Command near North Chicago, Rear Adm. Ann Rondeau said the cutting-edge facility will better prepare sailors for anything they'll encounter on the seas. "This Battle Stations 21 will be what made the sea warrior of the 21st century," Rondeau said.

Recruits at the Navy's only boot camp must shuttle between five buildings to participate in simulations for battle stations. That'll end when the new building opens in February 2007. As part of Battle Stations 21, recruits will be on the 500-foot USS Trayer, a guided-missile destroyer replica. USS Trayer, named for the Navy's first recruit division commander, will float in a moat with a seawater scent. Recruits will handle 12 scenarios on the USS Trayer, ranging from getting the ship moving to handling mass casualties. On average, 352 recruits will participate in the drills that test their essential skills.

Hollywood's high-tech know-how will be evident through the use of built-in MP3 players and infrared technology. Recruits going through Battle Stations 21 will hear sounds of rushing water, a roaring inferno and screaming or faintly breathing fallen shipmates. Lighting, special effects, props and piped-in aromas, such as seawater, also will create the Battle Stations 21 experience.

Vice Adm. Alfred Harms, commander of naval education and training command, praised what he called an "enormously powerful" civilian and military team working on Battle Stations 21. "We know that we will confidently be able to put our young men and women through this training experience," Harms said.

Chicago-based James McHugh Construction Co. will be the general contractor for the 171,000-square-foot structure. Navy officials said McHugh must work within stringent security requirements and not interfere with boot camp activities.

About 42,000 recruits are projected to graduate from Great Lakes this year. The naval base is in the middle of a roughly \$800 million rehabilitation and expansion project.

Wielding a mighty 'Hammer'

An exercise aboard the submarine *USS Georgia* features many new technologies that will be used by the Navy's transformed Tridents.

By Chris Barron, Kitsap Sun Staff

Aboard *USS Georgia* In the aptly named battle management center, a busy, tight space where intelligence is gathered and missions are planned, several personnel examined a sports page brought aboard the submarine that day.

As the military and civilian workers monitored real-time data and streaming video on rows of colorful screens, much of their talk centered on the previous night's playoff baseball scores. To the delight of those stuck in the sub the previous few days off the California coast, the visitors brought coveted information.

Then the irony was pointed out. With all the advanced and futuristic technology surrounding them, wasn't it odd they couldn't acquire simple baseball results? "That's a very good point," said one special forces member with a laugh. "I hadn't thought of that. We'll note that in our next report." Of course, those aboard the *Georgia*, which left the Bangor submarine base for good last month en route to its eventual conversion to a cruise-missile launcher, had more important duties than checking box scores.

In an exercise called "Silent Hammer," they were testing many of the systems and concepts that will be placed on four subs that will be transformed from Tridents to guided-missile launchers and special operations platforms, called SSGNs.

Those subs, three of which are already undergoing conversion, including two at Puget Sound Naval Shipyard, will move from a Cold War mission of deterrence to an active, quick-strike mission for today's world. Each will have a payload of 154 Tomahawk cruise missiles and 66 special forces personnel.

New to the submarine community will be the SSGNs' ability to serve as command and control centers for missions at sea and on the ground. With their advanced data and intelligence-gathering technology, the stealthy subs will be able to lead missions anywhere at any time.

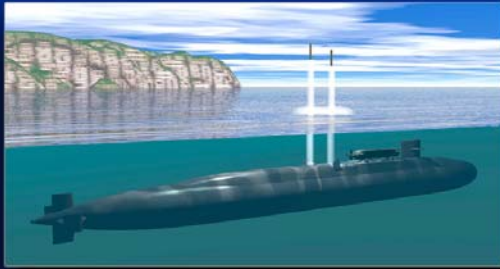
And for the first time, a task force commander with a staff of Air Force, Army and Navy special operations personnel will serve aboard each of the four SSGNs.

"This is new business for us, to be submerged and in communication with ground forces ashore and executing a mission," said Rear Adm. Mel Williams, commander of the Bangor-based

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SSGN: Dominating the Littoral Battlespace

Dual Advanced SEAL Delivery System (ASDS) and Dry Deck Shelter (DDS) Capability
Joint Task Force Connectivity



154 Strike Missiles



66 Special Operations Forces

SSGN Conceptual Drawing

Continued from previous page

Submarine Group 9. "It will be a multi-mission platform operated and commanded by Navy, but in support of joint forces. That is a big deal. That is transformation." And the crews of the SSGNs will be remarkably transformed while at sea.

Although still primarily Navy-manned, the subs will carry entire joint special operations teams much the way an aircraft carrier picks up its air wing of planes and personnel for deployment.

The special ops command staff will represent all branches of service, leading a team of more than 60 Navy SEALs, who can change a dynamic aboard a sub with their free-wheeling yet intense ways.

Having a wide variety of personnel hasn't gone unnoticed on the *Georgia*. "We've gone from our own little world to a great big world," said Cmdr. John Tannen, commanding officer of the *Georgia*. Walking through the submarine, one could observe those in Army and Air Force uniforms. Also, many wore uniforms with no identifying insignias of rank, branch or names.

With the super secret world of special ops aboard, the "Silent Service" of submarines is taken to a whole new level. Many people were unable, or unwilling, to reveal whom they worked for or what their jobs were. That makes for a somewhat confusing time for regular *Georgia* crew members, who many times aren't sure who is who.

"Some of them don't wear their insignias for obvious reasons, but it's not been difficult, just different," said Culinary Specialist 1st Class Tony Allen, a nearly 20-year Navy member. "We're not all Navy around here anymore, so we keep our Ps and

Qs straight and keep the Air Force jokes to ourselves."

More than 1,000 people are participating in the 10-day Silent Hammer exercise, which ends this week. Air Force and Navy planes, with cameras aboard, simulated unmanned aerial vehicles launched from the *Georgia*, and teams of SEALs left in small rubber crafts to simulate going ashore via mini subs that will be attached to the decks of the SSGNs.

In January 2003, *USS Florida*, the former Bangor sub now undergoing a conversion in Virginia, participated in the first SSGN exercise, called "Giant Shadow." It launched an unmanned underwater vehicle from one of its massive 40-foot-long tubes. That exercise paled in comparison to Silent Hammer. "We took the concepts of Giant Shadow and put them into a much more real-world scenario with real-world operators," said Cmdr. David Duryea, the former *Florida* commander now in charge of advanced technologies for the SSGN program. "The goal is to collect the data and the analysis and to get the feedback of the joint operators to allow us to make the decisions (about the SSGN program)."

USS Ohio, the first Trident to be converted, will be out of Puget Sound Naval Shipyard by early 2006 and back in the fleet in late 2007. The Michigan, also undergoing conversion at PSNS, will follow the next year.

Georgia, the last of the four, will begin its conversion in March at Norfolk Naval Shipyard. After completing Silent Hammer, it will head for the East Coast, leaving Bangor and its Trident past behind.

USSVI Life Membership at Bargain Rates!

Seattle Base members need to remember that effective January 1, 2005, there is a *large* increase in the USSVI Life Dues payment. USSVI members may still obtain the much less expensive current life membership rates as long as they pay for them *before* December 31, 2004.

National Life Dues

	<i>Before 31 Dec 2004</i>	<i>After 31 Dec 2004</i>
Under 45 years old	\$250	\$500
46-55 years old	\$150	\$400
56-65 years old	\$100	\$300
66-75 years old	\$ 50	\$200
Over 75 years old	\$ 50	\$100

National and Seattle Base *annual* dues structure for 2005: New annual members from October 2004 and all members renewing for calendar year 2005 pay this new dues structure:

	National Dues	Seattle Base Dues	Total Dues
One Year	\$20	\$10	\$30
Three Years	\$55	\$25	\$80
Five Year	\$90	\$40	\$130

Life membership for Seattle Base will be the same as for National.

USSVI National officer and former Seattle Base Commander Pat Householder notes: "A person who is a National Life Member certainly has the Seattle Base annual dues option open to him. If a USSVI member doesn't pay his Base dues, but has paid his national dues, he remains a USSVI member but becomes a Member at Large (MAL). Anyone who doesn't pay his National dues, but has pays his Base dues, is dropped from USSVI regardless of his base dues status, and he cannot be a Base member unless he is a National member in good standing."

Send you renewal dues to our Base Treasurer:
James H. Harper
US Submarine Veterans
12105 48th Drive SE
Everett, WA 98208-9106

Seattle Base members attend 9/11 Memorial Service

On the 3rd of September Erv Schmidt, Ed Kirchgessner, Jim Harper, Tim Floesch attended the September 11th Memorial Service in Everett, WA. Sponsored by the Snohomish County Central Memorial Committee, this event will be held every year to remember those who perished on 9/11. The Seattle SubVet Base was well represented as all the members wore their sub vests & Seattle Base hats.

2004 Seattle Base Officers and Chairs

Commander:	Bob Opple	425-747-1247
Sr. Vice Commander:	Karl "Dutch" Krompholz	253-631-5736
Jr. Vice Commander:	Ric Hedman	206-335-7424
Secretary:	Charlie Ryan	509-996-4272
Treasurer:	Jim Harper	425-357-6485
Membership Chair:	Peter McCafferty	206-784-8920
Ceremonies Chair:	Don Masoero	253-941-4133
Base Chaplain:	Don Smith/ Mike Bennett	360-273-9416 206-767-1934
Chief of the Boat:	Ted Taylor	425-228-3764
Newsletter Editor:	Dave Schueler	206-243-6784
Base Storekeeper:	Bill Giese	425-355-5590
Webmaster:	Don Smith	360-273-9416
Foxtrot COB:	Dave Goodson	425-823-3507

Welcome Aboard New Crewmember

Chris Breum | John Marshall 07/80

Upcoming Meetings

Nov. 17 at Redmond VFW Hall
Dec. 18 Holiday Luncheon at Seattle Yacht Club

Binnacle List

- ★ Robert Robertson had carpal tunnel surgery.
- ★ Tom Rice has an unspecified medical issue.

Auburn Veteran's Day Parade

Auburn, Washington is designated by the Veterans Day National Committee as a Regional Site for the Saturday, November 6th Celebration of Veterans Day 2004. This year's parade will start at 11:00.

We Submarine Veterans (USSVI & SVWWII) are the lead and featured group this year. Regardless of your base or chapter, please come and join with your fellow sub vets in participating in this important celebration and parade and we need a large turnout this year considering our status in the parade.

Wear your 'colors' and assemble at the USS Bonefish float at "F" and "Main St." in Auburn no later than 10:00 AM on November 6th.

Following the parade there is a luncheon that starts around 1:30 at which Seattle Base Commander, Bob Opple, will be a featured speaker.

For more information about the parade, other Veteran's Day events, and to sign up for the luncheon, visit the website that follows and click on the Auburn Veteran's Day Observance:

<http://www.ci.auburn.wa.us/>



**Submarine Veterans of World War II and United States Submarine Veterans Inc. Joint
Holiday Lunch at the Seattle Yacht Club**

Saturday, December 18, 2004 from 11:00-3:00

Lockwood Chapter of Subvets of WWII and USSVI Seattle Base will hold another Christmas social and luncheon at the Seattle Yacht Club. Our private dining room overlooking yacht moorages and Portage Bay houseboats features a full size Christmas Tree, blazing fire and Bing Crosby Christmas songs in the background. It's the perfect ambiance for shipmates, spouses and guests to catch up on the past year's events and plan new adventures for 2005.

This is a semi-formal event. All veterans are encouraged to wear uniforms and/or medals!

Following the cocktail hour and three-course luncheon, WWII vets, post-war submarine veterans and guests will reminisce about past Christmas deployments and hear how WWII vets spent the *Christmas of '44*. The cost is \$35 for each Subvet and \$35 for each guest or Ladies Auxiliary member. An additional no-host cash bar will offer cocktails, beer, wine and non-alcoholic beverages.

Lunch includes salad and desert and this year's entrée choices are:

- 1) Poached Fillet of Salmon with Peppercorn Béarnaise Sauce
- OR
- 2) New York Strip Sirloin with Peppercorn Béarnaise Sauce

Please circle each person's entrée choice and print name as you want in on name tags

Subvet _____	Salmon Strip Sirloin
Qual Boat and Qual Year _____	
Guest _____	Salmon Strip Sirloin
Guest _____	Salmon Strip Sirloin
Guest _____	Salmon Strip Sirloin
Address _____	
City, State, ZIP _____	
Telephone _____	

Total reservations _____ x \$35.00 = Total Payment _____

Mail this form and check made out to USSVI Seattle Base to:

Jim Harper
 US Submarine Veterans (Holiday Lunch)
 12105 48th Drive SE
 Everett, WA 98208-9106

Last year's event sold out! Seating is limited and reservations will be honored in the order payment is received.

Call Charlie Ryan – (206) 525-0935 – for additional information or questions.

USSVI Seattle Base
c/o Robert Opple
4607 142nd PI SE
Bellevue, WA 98006

To:

*"No matter where you travel, when you meet a guy who's been..
There's an instant kind of friendship 'cause we're brothers of the 'phin."*

- Robert Reed, G.W. Carver (SSBN-656) -

Submarine Virginia is brought to life in Norfolk

By Allison Connolly, The Virginian-Pilot

After 10 years in the making, the first of the Navy's new class of fast-attack submarines was officially commissioned into service before nearly 5,000 invited guests at Norfolk Naval Station.

The boat's sponsor, Lynda Johnson Robb, daughter of former President Lyndon Johnson and wife of former U.S. Sen. Charles Robb, gave the commissioning cry, "Man our ship and bring her to life." To that, the 120 or so sailors yelled out "Aye, aye, ma'am" and ran toward the boat. As the band played "Anchors Aweigh," they lined up shoulder to shoulder across the top of the sub and stood at attention as the audience applauded.

The \$2.2 billion submarine is the most technologically advanced in the fleet. It was designed for post-Cold War threats such as terrorism, with enhanced surveillance capabilities and accommodations for Navy SEALs and unmanned underwater vehicles. "It's the only warship that can show up in your back yard and you don't know it's there," said Lt. Cmdr. Joe Santos, Weapons Officer on the Virginia.

The quality of life on the Virginia is better, too, said PO1 Shane Johnson. Each sailor has his own "rack" or bed, with an electrical socket and

controls to a bedside fan. "Ever since I first heard the concept for it, I said, 'I want to be on it,'" Johnson said.

The ninth ship to bear its name, the Virginia is the first of the class to be built by the team of Northrop Grumman Newport News and General Dynamics Electric Boat in Groton, Conn.

Several members of the U.S. Submarine Veterans of World War II were in the audience. They compared *Virginia* to the subs they served on decades ago. "It's altogether different," said Wayne Finney of Norfolk, who is in his early 80s and served on *USS Bumper*. "We never had anything like that." "I'm very impressed by the sub and the ability it has," said Chuck Meyer, 79, of Norfolk who served on *USS Drum*. "The people who work on them are much smarter than we were." He should know, his son Bob Meyer manages construction of the *Virginia*-class submarines for Northrop Grumman Newport News. "I'm very proud of him," Meyer said. "I was in the sub service and now he's over there making them."

Virginia will leave sometime this week for its homeport in Groton, Conn. It will probably spend the next year conducting more trials before its first deployment.