



September 2001
Volume 7 – Issue 9

BASE OFFICERS
Commander:
 David Hamish
 6509 W. Devonshire
 Phoenix, AZ 85033-3350
 623-846-9245
 dhamish@qwest.net
Vice Commander:
 Glenn Herold
 839 North Rogers
 Mesa, AZ 85201-3849
 480-962-6115
 duke7@home.com
Secretary:
 Edgar Brooks
 517 Eagle Crest Dr
 Prescott, AZ 86301-5424
 928-778-4069
Treasurer & Memorial Chair:
 Bob May
 1902 East Karen Dr.
 Phoenix, AZ 85022-3915
 602-867-1445
Storekeeper:
 Garry L. Shumann
 824 North Rogers St.
 Mesa, AZ 85201-3849
 480-464-5263
 garry1@home.com
Membership/Webmaster:
 Ramon Samson
 9324 W Briarwood Cir
 Sun City, AZ 85351-1425
 623-815-9247
 rsamson@bnswest.net
Chaplain:
 Warner M Doyle
 13600 W. Roanoke Ave.
 Goodyear, AZ 85338-2236
 d-hdoyle@worldnet.att.net
Public Relations:
 Ben Acosta
 12914 W. Alvarado Rd.
 Avondale, AZ 85323-7142
 602-935-7752
 Benvirg@juno.com
Midwatch Editor/Publisher:
 John Wilson
 PO Box 31056
 Flagstaff, AZ 86003
 520-773-4946
 john.wilson@nau.edu



Lest We Forget Those Still On

September Eternal Patrol Days

USS S-5 (SS110)	Sept. 01, 1920	0 men lost.
USS GRAYLING (SS209)	Sept. 09, 1943	76 men lost
USS S-51 (SS162)	Sept. 25, 1925	34 men lost.
USS CISCO (SS290)	Sept. 28, 1943	76 men lost.

There Will Be No Meeting In September

From the Wardroom:

It is the time of the year for the National Convention in Peoria. Don Wannamaker and myself will be departing the 7th of September for Peoria and taking several thousand calendars to be sold. We should be back in town around the 17th of September. Hopefully we can report that the sales of the calendars far exceeded our expectations and we had to have additional shipments sent to us. Calendar Project Chairman Don Wannamaker continues to amaze us with his ability to turn up new prospects for the sale of calendars. It would be our desire that all members of Perch Base have their orders in for calendars and don't forget to get a few extras to send to friends and relatives to be used as stocking stuffers. Also while on the subject of calendars please do not pass up the opportunity to see Storekeeper Gary Shumann at a meeting and pick up a SVWWII calendar from him and not only show your support for Perch Base small stores but also for our mentors, the SubVets of WWII. We have said it many times before that every household can surely use two calendars and you have two of the best with USSVI/Perch Base and SVWWII. If you have not had the chance to see theirs, it is a memorial edition and for those that ask occasionally, this is the source for where the SubVets WWII Memorials are. Webmaster Ray Samson informs me that new changes have been made to include a page for the Pigboaters and a counter so we can see the number of hits our site is getting. Hopefully the new Constitution and By-Laws will have been mailed by the time this is received and all comments are welcomed. We now are working on getting a Policy and Procedures Manual put together and the Chairmen are working on the procedures for their areas. If after getting the new C/Bylaws and you feel there is a position you would like to help out in, please contact one of the base officers and jump in with both feet. This base is making great strides and it is the membership that is doing all that is getting done. Many times it is the Commander that hears the good stuff like, "really like what is being done", or "great job" on what ever project and the real workers do not get the word except from the "Midwatch". When you see members like Ed Brooks, Glen Herold, Bob May, Don Wanamaker, Frank Rumbaugh, Ben Acosta, Kenny Wayne,

Warren Doyle, Ray Samson, John Wilson, Jim Nelson, Associate members like Gary Shumann, Tom Tilly, take a second and thank them for the time they are putting into the base and for their donations that are making this the super base it is. It would be a mistake to not recognize all the Past Commanders for their ideas and thoughts that keep us on the right path. We are still working on getting a calling tree in effect so that we can get information out via electronic means and then forward by a small number of members willing to assist with this important function. If you have email and Membership Chairman Ramon Samson has not received that information please contact him and pass your email address to him. Ramon can be reached at rsamson@bnswest.net or 623-815-9247. Your information will only be used to get information about base activities or submarine information received via the Internet that is of an information type or humorous submarine related message. Shipmates at Palo Verde are trying to put together a tour and meeting in November and the date we are looking at is the 17th. This will be the weekend following the Veteran's Day parade and we are hoping to have the Pigboaters join us. Ben Acosta has been spear heading this effort and should prove to be an exciting day for us. Tom Tilly is planning some kind of keel laying for the float and this will have taken place by the time this is received. This will be reported in the next issue of the "Midwatch" and hopefully with pictures unless we get to carried away. Welcome to the new members, and especially the new Associate Members. It is our desire to make the associate members as much a part of our base as possible and welcome their involvement to the fullest extent. We in the wardroom are looking forward to seeing all at the upcoming meetings/events. Be aware, there will be no meeting in September due to the travels of many of the wardroom, but we will look forward to our meeting in October. At this time we plan to hold our October meeting at the normal meeting place, the American Legion Hall in Glendale. We have contacted Bremerton Base in hopes of getting the paper work that they have in place to assist us in establishing the Gary Patterson Memorial Scholarship Program. This will be an interesting and worthwhile project and any member wishing

to help with the administration of this please contact any of the wardroom located on the front of the newsletter. To bring this column to a close it is with great pleasure that we announce the new position of Base Chief Of The Boat and that Jim Nelson has accepted this position. It is with pride that we welcome him to this position. His duties will include but not be limited to ensuring that Perch Base has an adequate meeting place and arranging for the necessary equipment to hold the meetings. If you would be interested in assisting Jim, please contact him. Dave Harnish, Commander Perch Base

Minutes from August's Meeting

The regular monthly meeting of the members of the Arizona Submarine Veterans - Perch Base was convened at the American Legion Post #6; Prescott, AZ at 1313 hours, 11 August 2001. The meeting was called to order by the Base Commander - Dave Harnish. The members were led in the "pledge of allegiance"; followed by the dedication, moment of silence for our departed shipmates and "tolling of the boats". There were 24 members and 5 Guests attending the meeting according to the sailing list. The members welcomed new members Roy Miller and Brent Nelson (Jim Nelson's Submariner son). Reading of the minutes from the July 14 meeting was waived - since they are printed in the Base Newsletter "Midwatch". The motion was made, seconded and approved by voice vote that the minutes be approved as printed in the August newsletter. The Treasurer's report was read to the members. A motion was made and seconded that the financial report be accepted as read. The motion carried by voice vote of the members. Prior to the start of business, Dave Harnish thanked the membership for the kind words, cards, flowers and calls received while his wife Kay was in the hospital for surgery.

Old Business

Dave Harnish informed the members that the revised Perch Base Constitution and By Laws has been approved and sanctioned to be in consonance with USSVI Constitution and By Laws, by the District 8 Commander. Therefore the revised document is approved and issued. Copies will be mailed to all members.

New Business

Base Commander Dave Harnish informed the membership of a letter the Base

received from the American Legion Post 29. In the letter, the Post Commander informed Perch Base that the Board of Directors for the American Legion Post considered the contribution made by Perch Base in appreciation for use of the facilities for monthly meetings, was insufficient to even pay the utilities for that period of time. Therefore, they would insist on a contract whereby Perch Base would pay the same daily use rate as others (\$75 per use). Perch Base Executive Board has approved an action by Dave Harnish to respond to the letter and ask to negotiate the contract and review it before presenting to the membership for approval. Dave announced that everyone interested in attending the Perch Base Christmas Party at Luke Air Force Base should let Donald Wannamaker know right away. Accommodations are limited and only a given number of attendees will be allowed to attend. The word is; "get your name in early". The party will be on December 8, 2001. The price to attend is \$15.00 per person. Dave informed the membership of the Executive Board's decision to suspend the September general meeting. He also briefed the membership on the offer to hold a meeting and plant tour at Palo Verde Nuclear Power Station (Arizona Public Service) during the month of November. Indicating that it looks like the best time would be on November 17th. He asked for membership to approve the event. A motion was made and seconded to hold the November meeting at Palo Verde. The motion carried by a show of hands vote. Without some unexpected event that acts to override the plan, the November meeting of the Perch Base will be held at Palo Verde Nuclear Station; Goodyear, Arizona. It was also announced that the Base will invite members of Submarine Veterans - WWII to attend the meeting and participate in the tour. Dave informed the membership that the new position; Chief of the Boat - Perch Base has been filled with Jim Nelson's accepting the position. Jim's service as Perch Base's Chief of the Boat has officially began.

Good of the Order

Congratulations were extended to shipmate Kenny Wayne for his daughter Collette having been selected to receive a \$750 college scholarship award from USSVI national scholarship committee. The members gave Kenny and Collette a rousing round of applause. Dave Harnish read a

proclamation prepared to thank and recognize Mrs. Tonnnette Herold for her work in designing and producing a logo/plaque for the Perch Base. Her design was approved by the membership at the June, 2001 meeting and will be reproduced in the forms of an embroidered patch and cast plaque. Both will be sold in the Perch Base ship's store. Kenny Wayne announced that he will have completed twelve of the submarine dolphins in the Rakoo medium by the October meeting. These are to be sold by the ship's store with all proceeds going to the, soon to be established, Gary Patterson Scholarship Fund. Dave Harnish informed Kenny and the membership that he will contact the Bremerton Base to acquire a copy of their procedures for running a scholarship program. Dave Harnish briefed the membership on the efforts in progress toward establishing a bonafide building program for a Perch Base meeting facility. He also informed the members of the decision made by Arizona Submarine Veterans - WWII to donate \$10, to a Perch Base building fund with certain accommodations for the WWII group. Dave indicated that the Perch Base is continuing to pursue gathering information with regard to property and arrangements to acquire or build a facility. The next meeting (October 13th, 2001) will be at the American Legion Post 29, Glendale, AZ. The 50/50 drawing was won by Dave Harnish. Dave donated the winner's share to the Base Treasury.

Adjournment

Roger Cousin was asked to lead the membership in a closing prayer after which it was moved, seconded and approved by voice vote that the meeting be adjourned. The meeting was adjourned at 1343 hours.

Welcome Aboard New Crewmen:

For the month of August we welcome aboard four new members. two of them being Associate Members. The first we all know, as he has been to several of our meeting. Tom Tilley is sponsored by Shipmate Glen Harold. With his wife Karen, they reside in Chandler. Tom has given freely of his time in heading up the USS Bang Atlantic Sail, that will adorn our parade trailer. This is gonna be really something to see. Our other associate member is a retired Air Force Colonel having served 30 years. Roy Miller and his wife Mary reside in Phoenix. Roy is a member of the Phoenix Society and has held a interest in

Submarines for many years. Roy is also sponsored by Glenn Harold. We also have two new Submariner's in the crew by name of Charlie "Chuck" Emmett. Chuck with his wife Karen live in Glendale. USS SEA LEOPARD (SS483) was his qualifying boat in 1963. Also served on USS BARB (SSN596), USS PERMIT (SSN594), and USS SCULPIN (SSN590). Our second submariner Brent Nelson is an active duty MM3(SS) on the USS SALT LAKE CITY (SSN716) who was recently "pined" with his Fathers "Shipmate Jim Nelson" Dolphins. We welcome all of these men to our group and look forward to seeing them at our meetings, and events.

A Word from Midwatch Writer:

I believe I have the consent of the Wardroom when making this statement, if not, there will be bits and pieces of my "aftersection" spread all over Sun City. Associate Members are a important and instrumental part of any organization. Any group that would "turn off" their associate membership are on a path of self destruction. All volunteer groups need the help and expertise of anybody they can get their hands on. It is a fact that most if not all the necessary work and accomplishments are a result of 25% of the memberships efforts. Without the efforts of our Associate Membership, the thoughts we had a year ago would not be the model of realization today. BZ's to all



Perch Base Booster Club 2001:

Thank you gentlemen, Thank you very much:

Ben Acosta, Jerry N. Allston, Kenneth R. Anderson, Jerry F. Becker, Kenneth E. Becker, Joseph A. Bernard, Harold J. Bidigare, Wayne A. Braastad, Michael J. Breitner, Thomas P. Burke, Greg A. Camron, James F. Clewett, Roger J. Cousin, Earl J. Crowley III, Stephen F. Day, Warner H Doyle Jr., Jeff Duncan, Ron "Doug" Eddy, Harry Ellis, Thomas E. Fooshee, Ray "Lee" Graybeal, Billy A. Grieves, Warren A. Grossetta, David R. Harnish, William L. Hatcher, J Tom Hellem, Glenn Herold, Lester R. Hillman, Stephen F. Hough, Davy Jones, Ron Kloch, Larry L. Krieger, Douglas M. La Rock, Robert A. Lancendorfer, Robert E. May, Hubert W. Maxey, Dennis Mc Comb,

John H. Michaud, Paul V Miller, Roger M Miller, Robert E. Mitchell, Joseph R. Mullins, Jim A. Nelson. James W. Newman Sr., Joseph S. Otreba, Thomas B. Patterson, Raymond A. Perron, Royce E Pettit, Phil Phillips, W Scott Prothero, Larry M. Rankin, Frank W. Rumbaugh, Ramon Samson, Rodney Sanborn, Douglas F. Schultz, Tyler C. Smith, Robert G. Sothern, Adrain M. Stuke, Donald Wannameker, Kenny Wayne, Edward J. Wolf, George Woods, Donald J Whitehead, Jerry D. Yowell.

Small Stores:

Our new storekeeper, Garry Shumann, is looking forward to sending much of his stores to all you members who want to send a Submarine gift this Holiday Season. Garry has a very comprehensive array of USSVI Small Stores, consisting of hats, shirts, sweat shirts, belt buckles, beer mugs, cocktail glasses, coffee mugs, and a slew of other memorabilia. We have a new source for Vest's as last months newsletter stated and forms for ordering may be found on the Perch Base web site. Don't forget the 2002 Calendar. Don Wannamaker has done a super job in getting this project off the ground and words alone are not sufficient to express our gratitude. Give Garry a call for ordering and don't forget that order forms can be printed off the Perch Base web site. (Garry's number on front cover)

Next Meeting and Location:

There will be no meeting for the month of September. Most all of the officers will be attending the USSVI National Convention in Peoria Illinois. The hopes are high that most of the 2002 Calendars will be sold there. Let us hope that all goes well for our "Wardroom". And pray for a safe trip ... there and back. Special Note!! As stated in the Wardroom message and on our website, the Christmas/Hanukkah party will again be held at Luke AFB. The cost will be \$15.00 per person. The dress code this year will be casual. You don't need to put a suit and tie on unless that is your desire. Get your reservations in early. We turned down 15/20 persons last year, due to having the quota met. It's your call

Scuttlebutt from the Lower Flats:

Shipmate Tom Tilley has gotten a real "head start" on the model of USS BANG (SS385) for mounting on the Perch Base trailer. As of

this date 08/17/2001, he has got the hull frames made and stringers installed for mounting the tank and superstructure skin. He has started with the trailer wheel well width and back figured from there to come up with a scale unit. A visit to our web page at <http://perch-base.org> will enlighten you as there will be a steady parade of pictures showing the progress. Take a peek. And check out the other pages while your there.

Message from the 52:

"From the barnacle covered hulls of 52 lost submarines and from the unmarked graves in enemy soil, comes a voice that has been gone for over 55 years. I died suddenly inside a 300 foot steel fighting ship, along with 75 other submarine Sailors. I am the voice of the starboard controllman, we used to stand watches together. The boat was ripped apart by the terrific explosion of a depth charge, bomb or torpedo from an enemy shipt or aircraft." "Just forward in my watery grave is your shipmate, Buss. He was the throttleman in the after engine room, and in each compartment forward there are the bodies of your shipmates Seaman Jones, Ship's Cook Swanson, Lieutenant Byers and a roll call of names that, in the final tally, adds up to over 3,600 submarines." "You know, we had a tough and dangerous job to do since we were taking the big war to the back door of our enemy and all the merchant ships they were guarding. My boat was out there doing what was expected of it but, unfortunately, we were at the right place at the wrong time. I was one of the 3,600 men who did not make it home. I missed out on all those nice things that I wanted to do, such as finish my education, get a good job, get married, raise a family and care for my aging parents. I gave my life, along with my shipmates, to make sure that you would have the opportunity to do all those things." "As the eyes and spokesman for my shipmates and myself who were 'casualties of the war-overdue and presumed lost,' I note that as the years have been slipping by, the number of 'Tolling of the Bell for the lost boats' ceremonies has decreased and there are fewer shipmates attending these events. The fervor of patriotism does not appear to burn as brightly as before." "I would appreciate if you, today's submarine Sailors, to whom I have passed the 'torch of victory' and heritage of our history, would take a few minutes to pay respect to my sacrifice. I

appreciate your sacrifices and wanted to know how I feel. I am watching you with pride. The echo is growing fainter, but I still hear from some of you. God Bless you, Shipmate." From the Commander Submarine Force, U.S. Pacific Fleet Web Page at <http://www.csp.navy.mil/ww2boats.htm>

Lost Boats and Crews for September:

USS S-5, (SS110) September 1, 1920 - No Men Lost

USS S-5 was lost when it foundered off Delaware Capes 40 miles offshore. All the crew escaped through a hole cut in hull in the tiller room. Submarine USS S-5 (SS-110) was authorized to be built by the United States Congressional Act of 4 March 1917 which stated in part, "of the vessels authorized in the Act, approved August twenty-ninth, nineteen hundred and sixteen, the construction of the following vessels shall be begun as soon as practical at a cost exclusive of armor and armament not to exceed the following amounts" eighteen coast submarines to have a surface displacement, of about eight hundred tons each, \$1,300,000 each. The keel of USS S-5 (SS-110) was laid down on 4 December 1917 by the Portsmouth Navy Yard at Kittery, Maine. The submarine was christened by Mrs. Glenn S. Burrell and launched on 10 November 1919. The S-boat was commissioned on 6 March 1920 with Lieutenant Commander Charles M. Cooke, Junior, in command. When commissioned, the S-3 Class coastal and harbor defense submarine was 231' in length overall; had an extreme beam of 21'10"; had a normal surface displacement of 876 tons, and, when in that condition, had a mean draft of 13'1". Submerged displacement was 1,092 tons. The submarine was of riveted construction. The designed compliment was four officers and thirty-four enlisted men. The boat could operate safely to depths of 200 feet. The submarine was armed with four 21-inch torpedo tubes installed in the bow. Twelve torpedoes were carried. One 4-inch/50 caliber deck gun was installed. The full load of diesel oil carried was 36,950 gallons, which fueled two 1,000 designed brake horsepower four-cycle Nelseco type diesel engines built by the New London Ship and Engine Company at Groton, Connecticut...which could drive the boat, via a diesel direct drive propulsion system,

at 15 knots on the surface in relatively calm seas. Power for submerged propulsion was provided by a main storage battery, divided into two sixty-cell batteries, manufactured by the Electric Storage Battery Company (EXIDE) at Philadelphia, Pennsylvania...which powered two 600 designed brake horsepower main propulsion motors manufactured by the Westinghouse Electric Company at Pittsburgh, Pennsylvania...which turned propeller shafts...which turned propellers...which could drive the submarine at 11 knots for a short period of time when operating beneath the surface of the sea. Slower submerged speeds resulted in greater endurances before the batteries needed to be recharged by the engines and generators. Following builder's trials, outfitting, and crew training, USS S-5 departed the Boston Navy Yard on 30 August 1920 to undergo full-power trials 55 miles off the Delaware Capes. On 1 September 1920, at 1300, she commenced a "crash dive" for a submerged test run. Water unexpectedly entered the submarine through the main air induction system, pouring into the torpedo room, control room, engine room, and the motor room. Normal procedure was to leave the main air induction valve open until the engines had a chance to come to a full stop, this operation being so timed as to occur just prior to complete submergence. In the case of USS S-5, however, the man responsible for operating this valve was momentarily distracted. Noticing his mistake, he grabbed the valve lever and jerked hard, causing the valve to jam open. After considerable difficulty, the system valves in the other compartments were closed, but all efforts to secure the torpedo room valve met with failure. The abandoned torpedo room flooded, making the boat bow heavy. An additional 80 tons of water in the motor room bilges caused her to settle on the bottom. It was now impossible to eject water from the torpedo room. An attempt was then made to pump out the motor room, but a gasket blew out and there were no means for repair. Lying 194 feet on the bottom, the crew had little hope of being found, much less of being rescued. Their situation now called for some original thinking. They reasoned that sufficient buoyancy in the after section could tilt the submarine on her nose and extend the stern above the surface. The tilt would cause the water in the motor room to drain forward

and increase buoyancy further. However, there was great risk involved because this would allow salt water to enter the battery room, which would generate deadly chlorine gas. They hoped to have enough time, after the water had entered, to close the watertight door before the gas could reach a dangerous level. After making preparations, air was applied to the after ballast and fuel tanks, blowing them dry. The stern began to rise and then shot to the surface. Men, floor plates, bilge water, and other loose objects fell through the length of the submarine. One man nearly drowned in the battery room, but was fished out and the compartment door was sealed against the gas. By tapping on the hull, it was determined that the stern extended about 17 feet above the surface of the water. With inadequate tools, they took turns trying to cut a hole in the thick hull. After 36 hours, they had only succeeded in making a hole three inches in diameter. Through the hole, crew members saw ships pass without stopping. Finally, the wooden steam-powered liberty ship "SS Alanthus" passed nearby. A seaman on watch spotted what he thought was a buoy through his binoculars, but the Captain of SS Alanthus knew that a buoy should not be that far out to sea, and turned his vessel around to investigate. Approaching in a lifeboat, the Captain asked: "What ship?" - "S-5." - "What nationality?" - "American." - "Where bound?" - "Hell by compass." SS Alanthus sent out SOS signals and tried without success to enlarge the hole in the submarine's stern for an escape passage for the entrapped crew. Responding to the SOS signals, the steamship "SS General Goethals" arrived at sundown and pried a huge steel plate from USS S-5's hull. Within an hour, all the submariners were out of their boat, some fifty-one hours after the ill-fated dive. The next morning, dozens of Navy ships came to the scene of the sinking. Battleship USS Ohio (BB-12) secured a towline to the stern of USS S-5, pulled her free of the bottom, and proceeded to tow her to more shallow water. After the S-boat had been under tow for about a mile, she slipped her lines. The loosened submarine bobbed, capsized, and then plunged to the bottom in deep water. No attempts were made to salvage USS S-5, and she was struck from the Navy List in 1921. Amazingly, this fourth submarine loss in the United States Navy resulted in no loss of

life. In 1989, 1990, and 1991, the relocated hull of USS S-5 (SS-110) was investigated by divers. A portion of the hull plating of USS S-5, that was removed by SS General Goethals to permit the S-boat's crew to escape from the sunken submarine, is on exhibit in the Navy Memorial Museum in the Washington Navy Yard in Washington, D. C.

USS GRAYLING (SS 209) September 9, 1943 - 76 Men Lost

Grayling (Lt. Cmdr. R. M. Brinker) departed Fremantle on 30 July 1943, for her eighth patrol, going through Makassar Strait and thence to the Philippine area. On 19 August, she reported having damaged a 6,000-ton freighter near Balikpapan, and the following day told of having sunk a 250-ton Taki Maru-type pocket tanker by gunfire in Sibutu Passage, taking one man prisoner. This was the last report received direct from USS GRAYLING. On 23 August, she completed a special mission at Pandan Bay, Panay, delivering cargo to guerrillas. Guerrillas reported this mission. Then she departed for Tablas Strait, there to reconnoiter until 2 September, when she would patrol approaches to Manila until 10 September. She was to return to Pearl Harbor for refit, passing from SubSoWesPac to Subpac on 13 September. She was not heard from after 19 August 1943, and on 30 September 1943, USS GRAYLING was reported as presumed lost. Following war's end, the Japanese have submitted the following reports, which bear on USS GRAYLING. On 27 August 1943 a torpedo attack was seen by the enemy, and the next day a surfaced submarine was seen northeast. Both of the positions were in the Tablas Strait area. On 9 September a surfaced U. S. submarine was seen inside Lingayen Gulf; this ties with USS GRAYLING's orders to patrol the approaches to Manila. It is said that the freighter-transport HOKUAN MARU was engaged in a submarine action on the 9th in the Philippine area, but no additional date were available, and no known enemy attacks could have sunk USS GRAYLING. Her loss may have been operational or by an unrecorded enemy attack. At any rate, it is certain that USS GRAYLING was lost between 9 and 12 September 1943 either in Lingayen Gulf or along the approaches to Manila. ComTaskFor 71 requested a transmission from USS GRAYLING on the latter date, but did not receive one. USS GRAYLING's first patrol, made in January

and February 1942, was a reconnaissance of the northern Gilbert Islands. She went to the Japanese homeland for her second patrol, and sank a freighter and damaged a sampan. Truk was the scene of USS GRAYLING's third patrol; she sank a large freighter. On her fourth patrol, this boat again went to Truk, and sank a medium tanker, while she damaged an aircraft transport. In January and February 1943, she patrolled the approaches to Manila on her fifth patrol. Here she sank two freighters and a medium freighter-transport and two schooners. Damage was done to a large tanker and two freighters. She went to the area west of Borneo for her seventh patrol, and sank a medium freighter and two sampans. Damage was done to a large tanker. Thus USS GRAYLING's total record is 16 ships sunk, totaling 61,400 tons, and six ships damaged, for a total of 36,000 tons.

USS S-51 (SS 162), September 25, 1925 - 32 Men Lost

The new submarine was based at New London Conn., on 1 July 1922 as a unit of Submarine Division 4 and followed a normal peacetime training cycle, operating out of her home port with visits to Newport and Providence, R.I. She departed from New York on 4 January 1924 for the Canal Zone to participate in winter fleet maneuvers off Panama and in the Caribbean. During this cruise, she visited Trinidad, Guantanamo Bay, Culebra, and St. Thomas, V.I. After returning to New York on 30 April, she resumed type training off Block Island and in New England coastal waters. The USS S-51 sank off Block Island, 25 September 1925 with the loss of 32 lives after being rammed by SS City of Rome. She was raised 5 June 1926, struck from the Navy List 27 January 1930 and sold for scrapping 23 June 1930. The diving and heroic efforts to reach and raise the ship are well documented in the outstanding book 'On the Bottom' by Cdr Edward Ellsberg and the new book on Ellsberg by John Alden. USS S-51 was raised on 5 June 1926; struck from the Navy List on 27 January 1930; and sold for scrap on 23 June 1930 to the Borough Metal Company, Brooklyn, N.Y.

USS CISCO (SS 290), September 28, 1943 - 76 Men Lost

Venturing out for her first war patrol, USS CISCO (Lt. Cmdr. J. W. Coe), left Port

Darwin, Australia on September 18, 1943. That evening she returned to Darwin due to a derangement of the main hydraulic system which had occurred during the day's operations. The hydraulic system having been repaired to the satisfaction of the Commanding officer, USS CISCO once more departed on 19 September. USS CISCO's area was a large rectangular one in the South China Sea between Luzon and the coast of French Indo-China. In order to reach it, she was to pass through the Arafura Sea area, the Banda Sea, Manipa Strait, Molukka Passage, the Celebes Sea, Sibutu Passage, the Sulu Sea and Mindoro Strait. On 28 September, USS CISCO should have been due west of Mindanao in the center of the Sulu Sea. On that day a Japanese antisubmarine attack was made slightly north and east of USS CISCO's expected position. In reporting the attack the Japanese state "Found a sub trailing oil. Bombing. Ships cooperated with us. The oil continued to gush out even on tenth of October." The attack would seem to have been made planes in cooperation with ships. No submarine that returned from patrol reported having been attacked at this time and position. Nothing had been seen of or heard from USS CISCO since her departure from Darwin, and on 4 and 5 November 1943, Headquarters Task Force Seventy-One was unable to make radio contact with her. At the time of her loss it was considered very unlikely that a recurrence of trouble with her main hydraulic system could explain her sinking, and the only other possible clue was the fact that a Japanese plane was reported over Darwin at twenty thousand feet on the morning of her second departure. The attack listed above is thought to probably explain this loss. No enemy minefields are known to have been in her area, or enroute to it. Coe had previously made three war patrols as Commanding Officer of S-39, and three as Commanding Officer of Skipjack. He was considered a most able and successful Submarine Officer.

Important Dates in September:

- Sept. 02-1944 - USS Finback (SS-217) rescues Lieutenant (jg) George Bush, USNR (VT-51), shot down while attacking Chichi Jima
- Sept. 10-1925 - Submarine R-4 rescues crew of PN-9 10 miles from their

- destination of Hawaii
- Sept. 11-1942 - Pharmacist's Mate First Class Wheeler B. Lipes, USN, performs emergency appendectomy on Seaman First Class Darrell D. Rector, USNR, on board USS Seadragon (SS194) on patrol in South China Sea.
- Sept. 16-1958 - USS Grayback (SSG574) fires first operational launch of Regulus II surface to surface guided missile off CA coast; Missile carries first U.S. mail sent by guided missile.
- Sept. 28-1964 - First deployment of Polaris A-3 missile on USS Daniel Webster (SSBN 626) from Charleston, SC
- Sept. 29-1944 - USS Narwhal (SS-167) evacuates 81 Allied prisoners of war that survived sinking of Japanese Shinyo Maru from Sindangan Bay, Mindanao
- Sept. 30- 1944 - USS Nautilus (SS-168) lands supplies and evacuates some people from ~~Panay, Philippine Islands.~~

Small Subs Provide Big Payoffs:

CDR David M. Fox, USN, for Submarine Warfare Magazine. Have you ever looked at your submarine's propeller, perhaps during your last dry docking, and wondered, "Why is it shaped like that?" Or maybe you've wondered just how someone decided on the shape of the bow, or the sail, or other external parts of the hull. The answer, of course, is that the configuration of these components was chosen specifically to allow your ship to go fast and employ its sonar effectively while remaining as stealthy as possible. Making submarines quiet, efficient, and effective is our main mission at the Navy's Acoustic Research Detachment (ARD) at Bayview, Idaho. As an integral part of the Navy's Research, Development, Test and Evaluation (RDT&E) community namely, the Carderock Division, Naval Surface Warfare Center under the Naval Sea Systems Command - we execute this mission by operating large-scale submarine models on three ranges in Lake Pend Oreille, Idaho. A fourth range is used to pull submarine towed arrays behind a 60-foot surface vessel to evaluate array self noise using recording

equipment on the towing vessel. Why is the Navy in North Idaho of all places, 350 miles from the nearest ocean? Mostly, to take advantage of the conditions in Lake Pend Oreille. The largest lake in Idaho and the fifth deepest in the United States, Pend Oreille offers a virtually ideal venue for acoustic testing. First, it is deeper than 1,000 feet over an area exceeding 26 square miles, and its flat mud bottom minimizes sound reflection. A low level of particulates in the water results in minimal reverberation and scattering, and its ambient sound level is less than the ocean at Sea State Zero more than one fourth of the time. Moreover, the lake's water temperature remains at 39.5 degrees Fahrenheit below 300 feet all year, maximizing the repeatability of test results over time. Finally, at eight miles long by three to six miles wide, the testing volume is more than adequate. While it is clear why the Navy takes advantage of the ideal conditions at Lake Pend Oreille, a more significant question might be why the Navy needs to use large-scale models to test submarine technology at all? The simple answer is cost. We can do model testing here at a fraction of the expense of using full-scale, operational submarines out in the fleet, while the large scale of our models (1/5 size and up) yields performance characteristics in the lake that closely match those of full-scale submarines at sea. Since this quality of data cannot be obtained in small-scale model testing, our large models and large model operating ranges are vital to validating submarine stealth technology. ARD plays a key role in developing submarine stealth by serving as one element of a sequential process in which the RDT&E community validates new technology. This approach - shown in the accompanying sidebar - has been pursued by NAVSEA and the Carderock Division for more than forty years, resulting in the quietest and most capable Submarine Force ever.

Submarine Model Range Facilities at ARD We have several separate ranges in the lake to test various aspects of submarine sound quieting. The Buoyant Vehicle Test Range (BVTR) measures the noise produced by hydrodynamic flow over the bow and forward section of a submarine, while not masking it with the sound of propulsion or other onboard machinery. By using buoyancy to propel the model upward - like

a cork – we avoid having to equip it with a propulsion system. Operation of the BVTR is very simple.

We use a shore-based winch to tow a buoyant submarine model (typically 1/5 the size of an SSN) to the bottom of the lake, stern first. A barge moored above and to the side of the range is used to control test operations, and hydrophones and accelerometers onboard the model are used to measure flow noise and operational data. After the model is hauled to the bottom and its motion settles out, we trip a release, and 15,000 to 25,000 pounds of buoyancy accelerate the model to the surface. As it nears terminal velocity, we have a window of four to six seconds to record the resulting flow noise. Near the end of the run, the stern planes are automatically shifted to dive, forcing the model to pitch over and ascend gently to the surface. The BVTR has been used to determine the optimal shape, material, coating, mounting scheme, and overall design of the bow dome on every class of nuclear submarine since the USS Sturgeon (SSN-637) class. Modern sonars are much more efficient because of these experiments, since flow noise and its interference as background noise have been significantly reduced. We use the Intermediate Scale Measuring System (ISMS) to test static (non-mobile) models. The newest of our ranges, ISMS consists of a 1,000-foot diameter submerged, horizontal circular hydrophone array, with an associated submerged sound projector array. We use a shore-based winch to haul the model to the center of the array (at a depth of about 500 feet), where it remains suspended for the duration of the test. The model is attached to a handling platform at the end of the haul-down cable, and operators can position it to present any desired aspect to the projector array. The ISMS can be used to measure the target strength of a submarine hull (that is, how effectively it re-radiates sound from a source not on the model) and how much sound is radiated into the water from a piece of machinery operating onboard. The data recording and processing equipment is on shore in Bayview, and is connected to the range 14 miles away by fiber-optic cables. Finally, the Large Scale Vehicle (LSV) Range uses large, un-manned, autonomous submarine models to evaluate propeller noise, structural acoustics (overall hull structural vibration), wake production, and

maneuvering and powering. In operation since 1987, the range itself consists of three distinct parts: Part 1-The Acoustic Tracking and Communications System (ATACS), which consists of six hydrophones spread over the bottom of the lake for tracking and controlling the model Part 2-The Radiated Noise Data Acquisition and Analysis System (RNDAAS), which consists of two vertical line hydrophone arrays that listen to the model as it drives by Part 3-The Onboard Data Acquisition System (ODAS), which uses sensors, signal processing, and recording equipment on the model itself to record its self-noise signature and operating parameters A specially configured Radiated Noise Barge (RNB) contains signal processing, operator control, and data recording equipment. Each time a test is conducted, the self-propelled RNB is driven to the range, where it is moored to a float and electronically connected to the ATACS and RNDAAS arrays. Two sound-isolated diesel generators on the RNB power the onboard instrumentation and the arrays once it is moored at the range. The ODAS system is self-contained on the model. To conserve battery power onboard, the model is towed to the range using a specially configured tender vessel.

Large Scale Vehicles

As one might expect, the two LSV models operated here are our largest and most complex vehicles. Essentially, they are unmanned, deep-diving submarines that operate under computer control. The LSVs are monitored, but not controlled, by the operators in the RNB and the tender that tows them, except during transit and in emergency situations. The first LSV, Kokanee (LSV-1), is a quarter-scale model of USS Seawolf (SSN-21) and is 90 feet long, 10 feet in diameter, and displaces 155 long tons. Kokanee looks like an SSN on the outside, but inside the forward half of the pressure hull, it contains 1,524 battery cells – about 25 tons worth – to provide power for the electrical propulsion motor (1,440 cells) and instrumentation (84 cells). The after half of the pressure hull contains the instrumentation, including guidance, navigation and control equipment, and the ODAS signal processors and recording equipment. The after compartment also contains a 3,000 horsepower electric propulsion motor, shaft bearings, and the propeller shaft itself. Kokanee's external stern configuration is similar to that of any

SSN. Because they significantly influence the acoustic signature of the model, the pressure hull and external structures simulate a Seawolf-class submarine very closely. Components inside the pressure hull have less effect on the acoustic signature, so we have substantial freedom there to deviate from the full-scale Seawolf configuration. (Obviously, we don't need a control room, crew's mess, or berthing spaces in an unmanned model.) Kokanee's stern control surfaces operate similarly to those on an SSN, except that they are operated by computer rather than Sailors. Kokanee was used to evaluate propulsor configurations for the Seawolf class, and was a key contributor to achieving the unprecedented stealth of those ships at high speed. Now, the model is also being used to evaluate propulsor and other technologies for the USS Virginia (SSN-774) class. Our newest model, Cutthroat (LSV-2), is the largest unmanned operational submarine in the world. A 0.294-scale model of the pre-commissioning USS Virginia, it is 111 feet long, 10 feet in diameter, and will displace 205 long tons when delivered. Currently still under the custody of the shipbuilder, a joint team from Newport News Shipbuilding and General Dynamics Electric Boat, Cutthroat will be delivered to the Navy and become operational in the summer of 2001. Construction will be completed at Bayview. Cutthroat is similar to Kokanee, but more advanced. Enhancements include a larger overall scale – 29 percent, vice 25 percent for Kokanee – which will improve the fidelity of test data to full-scale results. Cutthroat is designed to be more modular than Kokanee, so that major modifications, including radical hull changes, can be made with less impact to other systems onboard the vessel. Another advantage is an increase in ODAS capability. The Cutthroat ODAS will have twice as many data channels recorded as Kokanee at delivery – 512, vice 256 – and this is upgradable to 1,536 recorded channels. The Cutthroat ODAS converts the data from analog to digital form and processes the data digitally. In Cutthroat, data recording can be configured electronically under computer control, whereas Kokanee uses a patch panel. Cutthroat is equipped with a 3,000 horsepower permanent-magnet, radial-gap electric propulsion motor, provided to the Navy under a unique partnership agreement with General

Dynamics Electric Boat, the owner of the technology. This motor is easily upgradable to 6,000 horsepower. Other order-of-magnitude improvements were engineered into the guidance, navigation, control, and propulsion systems, including the addition of torque sensors and other sensors of mechanical data for better reconstruction of the scenario. Payoff for the Navy The addition of Cutthroat to the ARD model fleet is expected to provide improvements to the Virginia class in the areas of stealth, hydrodynamics, hydroacoustics, and propulsor design, thus supporting technology insertion into current and future SSNs. Two promising areas for future research include submarine maneuverability and electric propulsion development. Cutthroat can be modified extensively – but inexpensively – to determine optimum sail shapes and other parameters for maneuverability, and we can evaluate operating procedures – for example, maximum permissible rudder angles at flank speed – without risking damage to an operational SSN or harm to Sailors. We can also use Cutthroat or Kokanee to test SSN electric-drive ideas and components at much less cost than modifying a full-scale SSN. If required, we could completely replace either model's propulsion system with a completely different version, and evaluate designs before they get into the fleet. The cost to do that to an operational SSN, in dollars and time, would be prohibitive. The nation can no longer afford the kind of full-scale submarine prototyping that was pursued in the 1950s and 1960s and which led to the USS Tullibee (SSN-597), USS Jack (SSN-605), and USS Glenard P. Lipscomb (SSN-685). Large-scale model testing provides accurate results at a modest cost. And the ARD represents a low-cost, high-payoff test facility that will help keep our Submarine Force number one in the world for the next 100 years and beyond. CDR Fox is the Officer in Charge of the Acoustic Research Detachment.

Bits & Pieces:

AUG02-03. Guam Delegation Visits Portsmouth Naval Shipyard By Debbie White, Public Affairs Officer, Portsmouth Naval Shipyard When USS CITY OF CORPUS CHRISTI (SSN 705) leaves the Shipyard she will head for her new homeport in Agana, Guam. This will be the first Los Angeles Class submarine to be homeported there.

According to the Chief of the Boat, MMCM(SS) Greaney, "the crew is really excited about the move and can't wait to get there." The Guam Chamber of Commerce recently visited the Shipyard to extend a warm welcome to the crew. They showed the Sailors and their families a film about Guam, talked about the area, and answered many questions. "Guam is a very desirable place to live and is a great homeport for Navy submariners." said Tom Michels, President, Guam Chamber of Commerce. "We look forward to having CITY OF CORPUS CHRISTI as part of our community." Guam is only three jet-hours away from the Asian capitals of Tokyo, Taipei and Manila, and it welcomed more than one million tourists last year. The island is Japan's Miami Beach. Situated in the Western Pacific, across the International Date Line, it is the largest of more than 2,000 islands scattered between Hawaii and the Philippines. With about 140,000 residents and more than 7,000 military personnel and their family members, Guam is the most populated island in the geographical area known as Micronesia. Guam, the southernmost island in the Marianas archipelago, is 212 square miles in size, and part of an underwater mountain range running southward from Japan. In 1950, Congress passed the Organic Act which gave Chamorros (people of Guam) U.S. citizenship and Guam became an organized unincorporated territory of the United States. Chamorros and the remaining portion of the population is a mixture of American, Chinese, Filipino, Japanese, Korean, Micronesian and other nationalities. The predominant spoken language is English, and currency, postal services, and most banking services are U.S.-based.

New's of Kursk Lifting Operation:

Key official Russian documents giving instructions for the technical stages of the Kursk lift operation – the Safety Certificate and the Environmental Security Certificate – have been made available exclusively to strana.ru by the information department of the Russian president and the command of the Russian Navy. They were written by Russian experts and signed by naval Deputy Commander Mikhail Barskov and chief designer of the Rubin Submarine Design Bureau Igor Spassky. The Safety Certificate gives instructions on the conduct of the task, specifying measures to be taken as the

forward compartment is cut off and during other critical phases of the operation. It analyses potential emergencies during the lifting of the vessel and on its way to dock, charting action to ensure radiation control and to guarantee the safety of missiles and torpedoes on board. The Environmental Security Certificate gives instructions to ensure environmental security as the work proceeds. Sections of the documents recording Kursk's last moments record that the boat was armed with 24 torpedoes, and cruise missiles with conventional, non-nuclear warheads when the accident happened. After what was called the initial cause of the sinking, several torpedoes exploded in the first compartment, with the power equivalent of between 2.5 and 5 tonnes of TNT, the authors said. Severe damage meant Kursk could be brought to the surface only after the front section was removed, they added, noting that evidence showed lifting, transportation and docking of the submarine was secure from its weapons if safety procedures were followed. Radiation monitoring was said to show Kursk's nuclear reactors remained shut down after automatic safety functions ruling out spontaneous chain reaction were triggered at the time of the accident. Movement of the submarine as it was being lifted, transported and installed in dock would not change the condition of the reactors' radiation containment barrier, the authors added.

08/19/2001 Vice Admiral Barskov neither confirms nor refutes version concerning torpedo detonation aboard the British scientists draw a parallel between the accident aboard the HMS Sidon submarine and the disaster with the Kursk. They maintain that in the latter case the cause may have been due to a torpedo filled with concentrated hydrogen peroxide. Replying to a question from the authors of this theory at the Wednesday presentation of Web site www.kursk141.org, Vice Admiral Mikhail Barskov said that they had been working on such an option right from the beginning. He explained further that serious lab investigations were going on in that direction right now, and when they are completed, it may be possible to draw corresponding conclusions. But to speak on this subject, he added, it was first necessary to understand what highly concentrated hydrogen peroxide fluid was. "If it is spilled,

nothing terrible will happen. If certain catalysts are used, it will only break down. Certain conditions are required for it to explode, and we are now trying to establish whether such conditions existed aboard the Kursk at the time of the disaster," he pointed out. There was an accident on board the HMS Sidon in June 1955 off the coast of Portland as a result of which 13 seamen in its torpedo bay were killed. It was established during the inquiry that the explosion occurred due to an error in controlling torpedo firing when the torpedo had been accidentally started before it had been fired. That was an experimental torpedo whose engine had been filled with that same highly concentrated hydrogen peroxide fluid (also known as HTP - High Test Peroxide) which upon contact with a metal practically instantaneously breaks down into water vapor and oxygen. The documents can be read in full in the Dossier section of this web-site.
<http://www.kursk141.org/>

Your Tax Dollars at Work:

J. A. Jones Management Services, Inc., Charlotte, N.C., is being awarded a \$43,556,697 firm-fixed-price contract with award-fee and indefinite-quantity provisions for base operating support at Naval Submarine Base, Kings Bay. This contract contains options, which if exercised, will bring the total cumulative value of this contract to \$445,210,289. Work will be performed in Kings Bay, Ga., and is expected to be completed by September 2002. Contract funds will not expire at the end of the current fiscal year. This contract was competitively procured with 201 proposals solicited and three offers received. The Engineering Field Activity Southeast, Resident Officer in Charge of Construction, Kings Bay, Kings Bay, Ga., is the contracting activity (N69272-00-D-3170). Lockheed Martin, Management and Data Systems, Philadelphia, Pa., is being awarded a \$30,712,000 ceiling-priced letter contract for the design, development, and production to modify the United States Navy Tactical Tomahawk Weapons Control System for use on the United Kingdom ASTUTE Class Submarine for the Government of the United Kingdom under the Foreign Military Sales Program. Work will be performed in King of Prussia, Pa. (39.4%); Manassas, Va. (23.5%); Dahlgren, Va. (13.7%); Cherry Hill, N.J. (1%); and the

United Kingdom (22.4%); and is expected to be completed in August 2004. Contract funds will not expire at the end of the current fiscal year. This contract was not competitively procured. The Naval Air Systems Command, Patuxent River, Md., is the contracting activity (N00019-01-C-0027).

Health-care improvements delayed due to lack of funds :

By Deborah Funk Navy Times staff writer: A money shortage is delaying new Tricare benefits that should already be in place, including a much lower limit on what military retirees pay out of pocket in total cost shares and deductibles in any given year. Tricare officials say it will be six to 12 months before the health care program can follow through on reducing that "catastrophic cap" for retirees. Also stalled are benefits to pay travel expenses for Tricare Prime users and for children's physicals required by school officials. Those programs and others legally took effect Oct. 30, 2000, when the Defense Authorization Act for the current fiscal year was signed into law. But funding for the benefits was not included in the money Congress had already appropriated before the Authorization Act was approved. Tricare officials are advising military families to hold onto their medical receipts, including their explanation of benefits forms, so they can be reimbursed when money becomes available. In a prepared statement, Tricare officials said they will "widely publish the date upon which beneficiaries may submit claims with the required receipts." Managed-care contractors will accept and handle claims for services rendered retroactive to "the effective date established by Congress," the statement said. Defense health officials say they are at least \$1.4 billion short for the fiscal year that ends Sept. 30. They've already been dipping into their planned third- and fourth-quarter budgets for this fiscal year, which is barely half over. "The shortfall is real and already is imposing negative effects on active-duty and retired families," said Sue Schwartz, deputy director of government relations for health affairs with The Reserve Officers Association. "Every additional day it is not addressed, active and retired members are forced to finance the current shortfall from their own pockets." Congress reduced the catastrophic cap for retirees from \$7,500 to \$3000. But until funds become available to

cover the additional government costs sparked by that reduction, retirees must still pay applicable cost-shares and deductibles up to \$7,500 unless they make different arrangements with their supplemental insurance carriers — assuming they even carry such policies. TROA persuaded the managers of its Tricare supplemental insurance policy to continue to cover cost shares up to \$7,500. "What about all the other people out there?" Schwartz said. Other delayed benefits include reimbursing travel expenses for Prime patients when they are referred to specialty care more than 100 miles away from their primary care manager, and covering costs of school-required physicals for children ages 5 through 11. The coverage does not extend to sports-related physical exams. Also, families who live with a military member stationed in a remote area will have to save receipts so they can be reimbursed for medical bills. They were supposed to have their out-of-pocket expenses covered as of October. Meg Kulungowski, a senior issues specialist in government relations with the National Military Family Association, said the new benefits raised expectations among military families who are now being asked to sit tight, forced to use their own money for expenses that legally should be covered. "It's not the way you typically do business in the military," Kulungowski said, although she thinks Tricare officials are "doing the best they can." <http://navytimes.com>

The Scam of Scam's:

Do not dial 809 area code's and here's why! Be sure to read this and pass it on to all your friends and family so they don't get scammed! Don't respond to emails, phone calls, or web pages which tell you to call an "809" phone number. This is a very important

issue of Scam Busters because it alerts you to a scam that is spreading "extremely" quickly, can easily cost you \$24100 or more and is difficult to avoid unless you are aware of it. Thank Verizon for bringing this scam to our attention. It has also been identified by the National Fraud Information Center and is costing victims a lot of money.

HERE'S HOW IT WORKS: You will receive a message on your answering machine or pager, which asks you to call a number beginning with area code 809. The reason you're asked to call varies. It can be to receive information about a family member who has been ill, to tell you someone has been arrested, died, to let you know you have won a wonderful prize, etc. In each case, you are told to call the 809 number right away. Since there are so many new area codes these days, people unknowingly return these calls. If you call from the US, you will apparently be charged \$2425.00 per minute. Or, you'll get a long, encoded message. **WHY IT WORKS:** The 809 area code is located in the British Virgin Islands (the Bahamas). The 809 area code can be used as a "pay-per-call" number, similar to 900 numbers in the US. Since 809 is not in the US, it is not covered by US regulations of 900 numbers, which require that you be notified and warned of charges and rates involved when you call a "pay-per-call" number. Trying to fight the charges afterwards can become a real nightmare. That's because you did actually make the call. If you complain, both your local phone company and your long distance carrier will not want to get involved and will most likely tell you that they are simply providing the billing for foreign company. You'll end up dealing with a foreign company that argues they have done nothing wrong. Sandi Van Handel AT&T Field Service Manager (920)687-9045 Submitted by Shipmate Doug La Rock

Return To:
U. S. Submarine Veterans
Perch Base
6509 W. Devonshire
Glendale, AZ 85033-3350



85006+1128 14

