ENGINEERING AND DESIGN PROGRAM
VICE PRESIDENT WILL LENNON DISCUSSES
THE STATUS OF THE OHIO REPLACEMENT PROGRAM
AT ELECTRIC BOAT

OHIO REPLACEMENT: THE WAY FORWARD
EB MARKS 50TH ANNIVERSARY OF USS THRESHER DISASTER

FALLS CHURCH, VA. General Dynamics has reported first-quarter 2013 net earnings of $571 million, or $1.62 per share on a diluted basis, compared to 2012 first-quarter net earnings of $564 million, or $1.57 per diluted share. First-quarter 2013 revenues were $7.4 billion.

Margins
Company-wide operating margins for the first quarter of 2013 were 11.4 percent, compared to 11.3 percent in first-quarter 2012.

Cash
Net cash provided by operating activities in the quarter totaled $504 million. Free cash flow from operations, defined as net cash provided by operating activities less capital expenditures, was $429 million in first-quarter 2013. In comparison, for the first quarter of 2012, net cash provided by operating activities was $414 million, and free cash flow from operations was $324 million.

Capital Deployment
The company repurchased 1 million outstanding shares on the open market in the first quarter, at an average price per share of $70. In addition, in March, the board of directors increased the company’s quarterly dividend by 10 percent to $0.56 per share. This represents the 16th consecutive annual dividend increase by the company.

Backlog
Funded backlog at the end of first-quarter 2013 was $42.4 billion, and total backlog was $48.5 billion. Significant awards received in the quarter include a $55 million order for production of Hydra-70 rockets, a $160 million contract for two additional combat and seaframe control systems for U.S. Navy Littoral Combat Ships and an award valued at more than $100 million for infrastructure support and modernization of a new government complex in northern Virginia.

In addition to total backlog, estimated potential contract value was $25.2 billion, representing management’s estimate of value in unfunded indefinite delivery, indefinite quantity (IDIQ) contracts and unexercised options. Total potential contract value, the sum of all backlog components, was $73.6 billion at the end of the quarter.

“General Dynamics’ first-quarter performance reflects our continued focus on operations, cost improvement and cash generation, as well as our commitment to meeting our customers’ requirements,” said Phebe N. Novakovic, chairman and chief executive officer. “This is a strong start toward achieving our objectives for the year.”

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Electric Boat’s Groton location occupies 118 acres along the Thames River.

Source: http://www.gdeb.com/about/locations/groton/
Would you describe the current status of the Ohio Replacement Program, particularly as it applies to Electric Boat?

Ohio Replacement is one of the nation’s top-priority programs because of its nuclear-deterrence mission.

Today, we have about 1,700 people, from almost all areas of the business, working on Ohio Replacement design-build-sustain teams. These employees represent all of the engineering and design disciplines, the operations organizations at Quonset Point and Groton as well as test, planning and materials. Ohio Replacement accounts for about 35 percent of the engineering-design workload today and will grow to about 50 percent over the next couple of years when we’ll have more than 2,400 people working on the program.

Over the next couple of years, we’ll increase the amount of construction involvement as we prototype and qualify the missile-tube erection sequence. We also need to validate the new IPDE tool that we’re putting in place. Construction begins in October 2020, at the start of Fiscal Year 2021.

What’s going to happen over the next 12 months?

It’s going to be a very busy time. Traditionally, the submarine design-build process comprises 11 different phases. In the design process itself there are three major phases to focus on: establishing the technical requirements; completing the ship’s arrangement – the 3D product model; and design disclosure. The design disclosure is what historically would be considered a drawing, but on Ohio Replacement we’re moving away from that.

When you work on the design you want to minimize the overlap between those three phases, because the more they overlap the more chance you have for rework as requirements change, which may result in iterating arrangements or design disclosures.

This year we’re really concentrating on the technical requirements – the ship specifications, as well as establishing the ship length, the baseline ship arrangement and its major features. Then you start to get down into a little more detail – system descriptions, system diagrams and component specifications. This upfront technical work will be the big focus of the next year.

For the Ohio Replacement Program, this is the transition year. We’re transitioning out of concept studies and variations of what this ship might be to doing the hard technical work of defining what this ship will be. From there we can go off and develop the 3D product model and the design disclosures.

There are other things going on in addition to that technical work. We’re going to continue with the development and prototyping of our new design tool. There’s a lot of effort going on with the IT Department working with CSC and Siemens to put in place our new CAD and design management system for use in this design. As that comes into production, we’ll have to train our people. That’ll be a big effort.

And then we want to prototype it, to validate that it works. We’ll be working on a non-shipboard prototype, which works the bugs out of the system, and then we’ll move on to some tactical, shipboard prototypes in the not-too-distant future.

This effort will validate the way we plan to do business – from the design disclosure controlled under the technical authority of the design yard to the work instructions given to the mechanic under the build authority. Our vision is to reduce paper deliverables and instead feed electronic information directly to the mechanics and equipment in the shipyard to provide them what they need to do the task at hand.

The last thing we’ll focus on near term will be the qualification of our missile-tube and missile-compartment manufacturing assembly plan. We’re developing a Common Missile Compartment to support both the U.S. and the UK and we’re developing a design that maximizes the use of our modular construction techniques. So we need to get the design disclosures done.
OHIO REPLACEMENT ACCOUNTS FOR ABOUT 35 PERCENT OF THE ENGINEERING-DESIGN WORKLOAD TODAY AND WILL GROW TO ABOUT 50 PERCENT OVER THE NEXT COUPLE OF YEARS WHEN WE’LL HAVE MORE THAN 2,400 PEOPLE WORKING ON THE PROGRAM.

and get them out to the vendor base — the missile-tube vendor base has essentially been dormant for the last 20 years. We need to get the vendors under contract and get them started building missile tubes, which we will then take and put together to validate the design and a key part of the construction sequence for the missile compartment.

Then, lastly is cost reduction. The Navy has tasked us with taking costs out of the entire Ohio Replacement program — the costs for design, construction, operations and sustainment. This will require a huge effort from all of us that will be critical. That’s because the Ohio Replacement program, while extremely important, will be under tight cost-control scrutiny by the Navy and the Department of Defense.

To accomplish this, there is a Design For Affordability program that’s modeled on the Virginia program, which was very important to our effort to increase the production rate to two ships per year. So we’re taking advantage of Design-Build teams and their inherent capability to identify cost-reduction ideas and opportunities. What’s a little bit different with Ohio Replacement is that we’ve added the sustainment aspect to ensure the ship meets its operational availability requirements.
EBMA SALUTES 2013 SCHOLARSHIP WINNERS

The Electric Boat Management Association recently presented its 2013 scholarship awards. The recipients are, seated from left; Courtney Studwell, daughter of DOUGLAS STUDWELL (480); Julia Lane, daughter of CHRISTOPHER LANE (605); Samantha DeVito, daughter of MICHAEL DEVITO (451); Kimberly Codding, daughter of ROGER CODDING (454); Joni Moody, daughter of JAMES MOOD (658); and Julia Scott, daughter of KENNETH SCOTT (413). Standing are, from left, Amar Batra, son of GAUTAM BATRA (463); Eric Fast, son of KENNETH FAST (604); Daniel Gage, son of DONALD GAGE (491); and Joseph Ferraro, son of JOAN FERRARO (429).

Q&A CONTINUED FROM PAGE 4

What are the biggest challenges facing ORP?

Ultimately our challenge is to deliver 12 high-quality SSBNs that meet the Navy specifications on or ahead of schedule and on or below budget. At the highest level, that’s our goal.

In practical terms, we need to focus on four key areas of the ship design – the first being capability. The Navy has established a requirement that this platform perform its mission through 2080. So in terms of capabilities, we’re investing a lot to improve stealth and survivability. We will incorporate state-of-the-art sensors to meet all projected threats. We’re also introducing a lot of new technology – electric drive, for example, as well as existing technology from the Virginia program.

The second area we’re focusing on is producibility. We’re taking all the lessons learned from Virginia to ensure the ship is designed to support modular construction. We’re investing in the development of these new technologies to build the missile compartment using a concept called Integrated Tube and Hull or ITH, which allows us to build the missile compartment in a modular fashion at our Quonset Point manufacturing facility. That’s going to save us a tremendous amount of money and time.

The next area is operational availability. Strategic missile submarines must meet very strict requirements to provide continuous at-sea deterrence. These ships come into port for 35 days, then patrol for 77 days and we have to make sure they maintain that cadence. So we’ve taken on that effort in the design area. The Ohio Replacement has a life-of-the-ship core, which means the submarine can perform the same mission the Ohio Class does today with fewer ships. In addition to the life-of-the-ship core, Electric Boat and the Navy had to do some other things to improve the maintenance capability of the Ohio Replacement submarine – increasing the shaft life, for example, to reduce the number of major availabilities.

The last area is affordability. The Ohio Replacement is a high priority for the nation, but it has to be affordable. We’re taking all our affordability goals and making sure we apply the lessons learned on Virginia to reduce the cost in all areas – design, construction, operations and sustainment. One of the ways we’re going to accomplish this goal is through the
Engaged in the Ohio Replace across all of the organizations to collaborate and integrate facility to improve our ability advantage of our New London explore how we can take full better place to work. better – a better business and a to make Electric Boat even Veritas survey to develop ways hard with the results of the others are also working very unfamiliarity they have with po our newer employees and the opportunity to benefit from the same token, we have an engines and designers. By transfer the knowledge of those with extensive submarine design experience to the newer workforce, we’ve got a group of very senior people who’ve been through several design programs. We also have an even larger number of relative- ly new folks who have not been through a full program yet. So our challenge is this: how do we transfer the knowledge of those with extensive submarine design experience to the newer engineers and designers.

Pete Halvordson, MDA-UAW President Bill Louis and are also working very hard with the results of the Veritas survey to develop ways to make Electric Boat even better – a better business and a better place to work.

And we’re continuing to explore how we can take full advantage of our New London facility to improve our ability to collaborate and integrate across all of the organizations engaged in the Ohio Replace- ment design.

**What kind of workforce development will be required to meet these challenges?**

We’re in a very interesting time. The workforce demo- graphics provide us with some great opportunities as well as some challenges. If you look at the Engineering and Design workforce, we’ve got a group of very senior people who’ve been through several design programs. We also have an even larger number of relatively new folks who have not been through a full program yet. So our challenge is this: how do we transfer the knowledge of those with extensive submarine design experience to the newer engineers and designers. By the same token, we have an opportunity to benefit from our newer employees and the familiarity they have with potentially relevant technologies.

Pete Halvordson, MDA-UAW President Bill Louis and others are also working very hard with the results of the Veritas survey to develop ways to make Electric Boat even better – a better business and a better place to work.

And we’re continuing to explore how we can take full advantage of our New London facility to improve our ability to collaborate and integrate across all of the organizations engaged in the Ohio Replacement design.

**KEEL IS LAID FOR SUBMARINE JOHN WARNER**

A keel-laying ceremony for the submarine John Warner (SSN-785) was held recently at Huntington Ingalls Industries - Newport News Shipbuilding.

The 12th Virginia-class submarine is named for former five-term U.S. Senator from Virginia and Secretary of the Navy John Warner.

In a time-honored Navy tradition, the initials of Jeanne Warner, the submarine’s sponsor, were welded onto a steel plate that will be permanently affixed to the submarine’s hull. The submarine’s namesake also had his initials welded onto the plate.

“The Navy and the submarine force are honored to have Mrs. Warner serve as the sponsor for the future USS John Warner,” said Capt. David Goggins, Virginia-class program manager. “The event marks the first major construction milestone for the submarine and helps forge a special bond between Mrs. Warner, her submarine, and her crew that will last for years to come.”

John Warner’s keel laying is the submarine’s first major event since it began construction in March 2010. The submarine is on track to continue the Virginia-class program’s trend of delivering submarines early to their contract delivery dates.

“John Warner’s keel laying is a special day for our Navy, the Commonwealth of Virginia and our shipbuilding partners,” said Rear Adm. David Johnson, program executive officer for submarines. “Building the Virginia Class is a team effort and the skill and commitment of the entire shipbuilding team is evident in the first-time quality and operational successes of these front-line platforms.”

The shipbuilders are working to ensure the submarine John Warner will extend the Virginia program’s record for delivery on or ahead of schedule and at or below target cost.

Speaking on behalf of Electric Boat, President Kevin Poitras said, “By sustaining this level of performance – and improving on it – the Virginia team will help ensure a continuing production rate of two submarines per year.

“An example of the team’s commitment to maintaining Virginia as a model acquisition program occurred less than a month ago, he said. “That was when North Dakota, the first Block III ship, achieved pressure-hull complete at Electric Boat’s shipyard. We reached this milestone two months earlier than any of the previous Virginia-class submarines.

“In the current defense-spending environment, it is imperative that each successive ship of the class embody similar meaningful cost and schedule improvements,” said Poitras. “As shipbuilders, we must renew our promise to our customer and congressional supporters to produce affordable Virginia-class submarines. By doing this, we will help the fleet attain the submarine force levels required to retain undersea dominance.”

Warner’s keel laying is the first of several major shipbuilding milestones for the Virginia-class program in 2013. The submarine Minnesota’s (SSN-783) commissioning is scheduled for Sept. 7 and North Dakota’s (SSN-784) christening is expected this fall. Delaware (SSN-791) will begin construction Sept. 2.
QUONSET POINT RESCUE TRAINING

THE QUONSET POINT FIRE MARSHAL’S OFFICE RECENTLY CONDUCTED SEARCH AND RESCUE TRAINING IN VARIOUS FACILITY BUILDINGS. IN THIS PHOTO, FIRE TECHNICIANS RESCUE ONE OF THEIR OWN FROM A SIMULATED STRUCTURE COLLAPSE. NOTE THAT THE RESCUE PERSONNEL HAVE NOMEX HOODS PULLED OVER THEIR FACES TO SIMULATE HEAVY-SMOKE CONDITIONS, WHICH CAN OBSCURE VISION. THIS EXERCISE IS ONE ELEMENT OF A RIGOROUS TRAINING PROGRAM THAT FIRE TECHNICIANS MUST COMPLETE. ADDITIONALLY ALL FIRE TECHNICIANS ARE NATIONALLY CERTIFIED EMERGENCY MEDICAL TECHNICIANS.

AUSTRALIAN AMBASSADOR VISITS ELECTRIC BOAT

For Australia, there are a few military capabilities that are going to make the difference “between survival and disappearance,” said Kim Beazley, the Australian ambassador to the U.S., during a recent visit to Electric Boat. They include air dominance, which will be attained through the purchase of U.S. Navy jets; amphibious operations, to be honed through the co-location of its forces with 3,000 U.S. Marines who will be moved to Darwin; and a top-notch submarine force.

The advice Australia is already getting from Electric Boat for its Collins-class submarines, and the technical advice it expects to tap as it moves into its next-generation submarine in its SEA 1000 program, “Give us a level of confidence that as we move into the development of the next submarine, we are going to be successful.

“The fact the best submarine designers in the world are on our side is going to be absolutely critical to Australia over the next 10 years,” Beazley said.

U.S. Rep. Joe Courtney, D-2nd Conn., brought Beazley to the shipyard after they met during the 2012 presidential campaign.

“There couldn’t be a better legislative ally of the American submarine community than Congressman Joe Courtney,” Beazley said.

“Electric Boat and the United States Navy have already helped us” address issues with the Collins class,” said Beazley, who was instrumental to getting that class into service when he held a Defense Ministry post.

His visit, he said, taught him “loads of things” where the partnership can be expanded, including learning production technologies that will help Australia contain costs as it moves forward with SEA 1000.

“The United States is streets ahead of anyone else… and the U.S. is pulling further away,” Beazley said.
The Maintenance and Modernization organization’s Hawaii work force recently restored two submarine Tomahawk Vertical Launch System (VLS) maintenance platforms to service, supporting high-priority waterfront operations and maintenance at Pearl Harbor, the Navy’s largest submarine home port. Deteriorated by weather, age and wear, the platforms were rigorously restored by the team to full strength and service. SUBPAC’s Maintenance Directorate noted “… the professional manner in which [the EB] team ... provided us with “as new” platforms … now able to conduct more weapons loads and maintenance … BZ.” Shown above is the team with a completed VLS platform section ready to depart the HSI-EB shop facility for Pearl Harbor. From left are BRENDAN PARAGES, MATT TANAKA, GENERAL FOREMAN MARK TANAKA (Matt Tanaka’s father), CHRIS PETERSON and RAY MORALES (not present, MIKE PORTILLO, DUSTIN ROBERTS, JIMMY LIENGKUL and BURT TOPINIO). BZ or Bravo Zulu is a naval signal meaning “Well Done.”

DAFFODILS RAISE CANCER SOCIETY DONATIONS

GROTON EMPLOYEES CONTRIBUTED A TOTAL OF $14,100 DURING THE AMERICAN CANCER SOCIETY’S ANNUAL DAFFODIL DAYS EVENT, MAKING ELECTRIC BOAT ONE OF THE TOP CORPORATE FUNDRAISERS IN CONNECTICUT FOR ANOTHER YEAR. SOME 45 EMPLOYEES VOLUNTEERED TO SELL THE FLOWERS, INCLUDING TWO OF THE TOP SELLERS, DIANE JUHNEVICZ (491), LEFT, AND DEBORA MACMURRAY (445). DONNA HAVRILLA (601) AND LISA TROLAN (605) WERE THE EVENT’S CO-CHAIRWOMEN AT ELECTRIC BOAT.
ONE of STAN MENITZ’ first duties when he reported to his new job at Electric Boat in 1963 was to pack up the mechanical design office where he would be working and move it into the newest building on the grounds – Building 197. He moved into the top floor where they would use the latest technology – 21-foot drafting boards. But it didn’t stay the top floor for long, as EB added a new floor to the engineering building the following year. Wheelbarrows became a common sight in his office and the scent of fresh cement permeated the floor.

Menitz (431) still has his first pay stub, with a net pay of $43.51. He’d started on a Wednesday so it only covered three weekdays, and the total worked out to about $2.06 per hour. Menitz was recently recognized for achieving 50 years with Electric Boat during a breakfast with President KEVIN J. POITRAS and his senior staff.

“I wonder what’s going to happen in my next 50?” Menitz joked. Poitras said executives at Electric Boat understand the value of the experience that Menitz brings to the job. Menitz recounted an instance where they were trying to solve a design issue on USS Jimmy Carter (SSN-23), and he suggested a solution similar to what had been used on the NR-1, which he worked on during the 1960s. It turned out to be the right answer.

He said one thing experienced staff can do is to point out to more junior designers and engineers those areas where tried and true methods are the best.

“It’s simple and straightforward. Do it by the drafting manual. If we get innovative, be careful, there are years of experience behind what has been created,” Menitz said.

He added that everyone has to adapt to the times as well. Before the Virginia program started, for instance, all the drafting boards were traded for computers. Today Menitz thinks the best part of his job is working with computer graphics, particularly on the steering and diving design for the Seawolf and Virginia classes with BOB WALSH (492).

“If you get an engineer who knows his stuff you can do some good work together,” Menitz said.

DON NOEL started at Electric Boat in 1962 as a four-step learner carpenter making about $2 an hour, and while he thought he would be building submarines, his skills were soon put to a different use.

Flasher, Greenling and Gato – all Thresher-class submarines as they were known at the time – were under construction in the South Yard, and two more were taking shape in the North Yard. In fact, the year after he started, EB did its first ever double launch, with Flasher and Tecumseh both sliding down the ways on June 22.

“I went down into the yard to work on the launchings for two weeks, and ended up staying for 15 months,” Noel told President KEVIN J. POITRAS and his staff during a breakfast to mark his 50th anniversary with the company.

“I went down into the yard to work on the launchings for two weeks, and ended up staying for 15 months,” Noel told President KEVIN J. POITRAS and his staff during a breakfast to mark his 50th anniversary with the company.

It took him a little longer than 50 years to get to that landmark because of a break in service. Laid off January 1964, he came back after four months and applied for a job, but was told there were no openings. So he came back every day and said he would keep coming back until they let him at least fill out an application.

“When I came, I didn’t know port from starboard. And now I think I do,” he joked. CATIA, the computerized drafting program he has been using, is a far cry from the drafting tables he started on, he said. “It was hard to get used to from triangles and T-squares and pencils, but enjoyable.”

Over the years he has worked on many of the historic submarine such as Seawolf, Triton, Narwhal, even Nautilus three times. Today, he’s 24th in seniority at the shipyard.

“Everyone hears about that and asks me when I’m going to retire, but I tell them, you ought to be talking to the 23 in front of me,” Noel joked. “Everyone wants the number one spot, so no one really wants to go.”
The Electric Boat Fire Department recently put D-12 into service, its newest engine/pumper truck designed specifically to fight fires in a shipyard. It comes equipped with self-contained breathing apparatus built into each seat so firefighters can slip into their harness on the way to a call and be ready to roll, and equipment that allows quick hookup to shipyard air so the truck can recharge the systems.

The truck carries 500 gallons of water and 30 gallons of firefighting foam, and an exhaust fan that can move 3,000 cubic feet of air a minute to quickly clear smoky spaces.

“This truck gives us the equipment we need to respond to almost any emergency you can imagine,” said Fire Chief JEFF FIRMIN. And since Electric Boat is part of the New London County Mutual Aid network, it means towns in the Groton area could also benefit from its unique capabilities, Firmin said.

The Ferrara engine truck has a 450-horsepower Cummins diesel engine but is still quiet enough for fire fighters to carry on a conversation on the way to a fire scene – which is important so they can be formulating a plan of attack en route.

Other compartments are loaded with hand tools such as bolt cutters, shovels, sledge hammers, axes, picks and pry bars, as well as a variety of hydraulic/electric tools for cutting and pneumatic air bags for lifting almost any material that might get in the way of the fire response team, as well as a Smart Power 6.2 kilowatt generator to keep it all running.

D-12 is equipped with ladders and hundreds of feet of hose to get deep into any area quickly, a deck gun that can deliver hundreds of gallons per minute on a fire, a high intensity LED light bar to illuminate the scene at night or in foul weather, a built-in radio charger that keeps communications gear ready at all times, and tarps for covering material to prevent water damage if needed.

General Dynamics Electric Boat is in business to earn a fair return on behalf of our shareholders. We must therefore ensure that we conduct ourselves in accordance with the following principles:

**USE ASSETS WISELY**
How we manage assets reflects our personal and company values.

**OFFER A FAIR DEAL**
We use our values to make hard decisions and offer the best products at a fair price.

**DELIVER ON PROMISES**
We are people of our word and deliver on our promises to earn stakeholder trust.

**EARN A FAIR RETURN**
As we deliver on our promises we must contract for a fair return.

**OUR BUSINESS CONDUCT REFLECTS OUR BUSINESS ETHICS PRINCIPLES**
Your supervisor, manager and Human Resources personnel are available to assist you with questions concerning employee conduct and company principles. Electric Boat Ethics Director Frank Capizzano (860-433-1278) is also available to assist anyone regarding questions or issues that may relate to business ethics principles or ethical decision making. The GD Ethics Hotline is available 24/7 for anyone with an ethical question, concern or complaint and may be reached at 800-433-8442 or 700-613-6315 for International callers. Online access is available at www.gd.ethicspoint.com.

**REMEMBER – WHEN IN DOUBT ALWAYS ASK.**
I am referring to earmuffs or any other form of hearing-protection device. Since most of us are creatures of habit, if we make hearing protection easily available we are likely to use it when necessary. Take our last blizzard. How many of us were using snow blowers? These machines run well above the noise level that can damage our hearing. And many of us were exposed to hours of hazardous noise during this one storm. If we had hearing protection located on or near the snow blower, we would likely have remembered to use it.

What we do in our lives outside of work can expose us to hearing damage without our knowing it. Have you been to an action movie lately? Wow, are they loud – and I don’t see anyone wearing hearing protection. Who would think you’re getting dosed with loud hazardous noise by just going to a movie? Some movie goers will even experience a muffled dull sensation or ear ringing when the film is over. Did you ever notice how high you raise the volume on your car radio when you have the window open? Just think of the amount of loud noise that is reaching your ear through the combination of wind noise and radio noise.

In October 2008, the National Institute on Deafness and Other Communication Disorders (NIDCD), part of the National Institutes of Health, launched “It’s a Noisy Planet. Protect Their Hearing.” The Noisy Planet campaign is designed to increase awareness among parents of children ages 8 to 12 (“tweens”) about the causes and prevention of noise-induced hearing loss (NIHL). With this information, parents and other caring adults can encourage children to adopt healthy habits that will help them protect their hearing for life.

NIDCD is focusing its campaign on the parents of tweens because children at this age are becoming more independent and developing their own attitudes and habits related to their health. They also are beginning to develop their own listening, leisure and work habits. Consequently, the tween years present an opportunity to educate children about their hearing and how to protect it.

When parents, teachers, or supervisors on the job remind us about protecting our hearing, hopefully we listen. Don’t let it be too late to get the message. Hearing loss from noise damages the sensitive nerves in the hearing organ. Once those nerves have been damaged the hearing cannot be naturally restored. NIHL is completely preventable. Yet approximately 26 million Americans between the ages of 20 and 69 have high-frequency hearing loss from overexposure to loud noises at or outside of work. More than 30 million Americans are exposed to dangerous levels of noise on a regular basis according to the NIDCD.

What can you do to ensure you are sufficiently protected against potentially damaging noise?

The way hearing-protection devices fit our ears is critical to their effectiveness. Here are a few helpful tips to make sure you are inserting your earplugs correctly.

1. Roll the entire earplug as small as you can. Be careful not to put any ridges in the earplug. You must apply a sufficient amount of pressure to get the earplug small enough for insertion. You can use two hands or roll the plug between your palms.

2. Reach around your head with your opposite hand, grab the middle to upper portion of your outer ear and pull. This will open your ear canal for insertion of the plug. You must continue to roll the plug in the hand you are going to use to insert the plug to keep it compressed the entire time.

3. Insert the plug in your ear as far as it will go. You may feel a twinge. This means you have reached the boney portion of your ear canal – you are not touching your eardrum. The earplug can sit against that bone without causing any discomfort or danger. You do not need to hold the plug in your ear.

4. To assess the fit, look in a mirror if possible. The plug should not be hanging out of your ear canal; only a small portion of the plug should be
showing. To check if there is any leakage from the earplug, put the cup of your hand over your ears while you are exposed to loud noise and quickly cover and uncover your ears. There should be no difference in the loudness of the sound. If the sound gets louder and softer while you are covering and uncovering your ears then the earplugs may be leaking.

5. If the earplugs don’t fit properly, look for another type or size and repeat the process. There are many different styles and sizes to fit almost every ear canal including those for small children or adults. There is always the option of professionally made custom earplugs for hard-to-fit ears.

6. If you try earmuffs, make sure nothing breaks the seal around your ear when the muffs are on, such as glasses, hair or hats.

7. If the noise is extremely loud and you want to protect yourself sufficiently you can always use double protection – earplugs and muffs worn together.

8. Most importantly, reduce the noise at its source if possible. Distance yourself from the noise source. Turn down the noise when possible; use a barrier to shield yourself from the noise.

Most of the staff at the Yard Hospital and Quonset Point Dispensary are certified to assess and teach proper hearing-protection device insertion and use. As always I am happy to work individually with anyone who requests a personal hearing-protection fitting. We are now using a meter as part of our normal hearing conservation training to measure the effectiveness of an individual’s hearing protector. You can reach me at 860-433-6107, or the Yard Hospital at 860-433-3470.

Be smart about how you interact with loud noise and listen carefully; do whatever is necessary to protect and preserve your hearing.
ELECTRIC BOAT SAFETY PERFORMANCE

YEAR TO DATE DECEMBER 2013

Recordable Injury Rate (RIR)

GOAL ≤ 5.19

YTD: 5.21

Lost Workday Injury Rate (LWIR)

GOAL ≤ 1.80

YTD: 1.44

Severity Rate (SEV)

GOAL ≤ 82.40

YTD: 47.14