

Electric Boat NEWS

FEBRUARY 2002

Metrology Lab: 1 Million Calibrations And Counting

In record-keeping terms, 1 million of anything is quite a milestone.

Electric Boat's Metrology Lab, which calibrates virtually every measuring device used at EB, recently reached that milestone by calibrating its 1 millionth instrument – much to the surprise of lab employees.

"I hadn't realized we were getting near that amount, so when Craig (Adamson) showed

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Employees Talk, Managers Listen

The LEAN ENTERPRISE approach to business improvement



Editor's Note:
This is the first in a series of articles on Lean Enterprise that will appear from time to time in the Electric Boat News.

It's a concept that holds a lot of promise for Electric Boat.

It's called the Lean Enterprise and you'll be hearing much more about it over the coming months.

According to its proponents, it will improve quality, increase productivity and reduce cycle time. It will eliminate, simplify and redefine processes, while removing non-value-added steps and barriers to progress.

But it's not going to happen by itself. According to John Casey, VP – Operations, and one of the supporters of the Lean Enterprise, the success of the approach will hinge on two primary factors – the involvement of

Above: As part of a training session held to familiarize Mike Toner's staff with the principles of the Lean Enterprise, Legos were used to simulate production processes. In this photo, VP of Operations John Casey works with Finance Director Rob Smith. Observing Casey and Smith are VPs Bob Nardone, Joe Chontos and Dugan Shipway, and Senior Engineer Mike Sweeney (686).

more people across the organization in decision-making processes and the commitment of management to listen to those employees.

"Electric Boat will benefit from Lean by becoming more efficient,"

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Mike Toner,
President,
Electric Boat



Electric Boat **NEWS**

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The President's Corner

Any business guru who knows anything will tell you that the success or failure of a business can hinge on employee buy-in – the level of commitment each of us brings to his or her job and the overall objectives of the company.

It's hard to overstate how important it is for each of us to be emotionally and intellectually involved in our jobs. For more than a century now, the pride that comes from knowing that our submarines are the finest in the world has been a powerful motivator for the EB workforce.

Two years ago, we introduced another motivator – an incentive program that pays all employees \$500 (pre-tax) if certain financial goals are met by the end of the year. It's a way to share Electric Boat's financial success with everyone – salaried and hourly – who helped make it happen.

I'm happy to announce now that we will again offer this incentive program. That's the good news.

The other side of the coin is that attaining our financial goal will be a significant challenge. As you know, we use a concept known as earned hours – a measurement of work performed – to track our performance during the year. Our goal for 2002 is to attain 15.6 million earned hours, a significant increase from

2001's objective of 14.2 million hours. The increase in part reflects the higher workload we expect this year, largely from the SSGN program and the Virginia-class construction program.

As challenging as this year's goal may be, I don't doubt for a minute that we'll make it. We're introducing a program this year called Lean Enterprise (see story, page 1) that will enhance our quality, efficiency and productivity company-wide. And in the Innovation organization specifically, we're committed to reducing our costs as a way to strengthen our position as the leading design and engineering force in the shipbuilding industry (see story, page 7).

At EB, we've always risen to the challenge. It's a big part of what defines us as the best in the business. By working hard toward a common goal, we can keep the company successful and receive an extra check at the end of the year. Thanks for all your efforts and continuing support. ■



From left, Pete Barton (341) and Bob Martin (341) stand in one of the Metrology Lab's calibration rooms. Since a new record-keeping system was put into place in 1971, the lab has performed 1 million calibrations. Missing from photo is longtime Metrology Lab employee Gil Dionne (341).

Metrology Lab Calibrates Millionth Instrument

from page 1

me the numbers on the new box of cards, I said, 'Wow,'" said Bob Martin, an employee of the Metrology Lab since 1962.

Adamson, the lab supervisor, said he hadn't realized the million mark was approaching until he received a call from the printing company that supplies EB's metrology accountability tag (MAT) cards, which are used to record each calibration. The printing company, he said, wanted to know if it was OK to start numbering the cards at 000001 again.

"All of a sudden it clicked – hey, since we've been ordering these cards, there's been a million calibrations," Adamson said. "So we started digging through the file cabinets to see how long it had actually taken the group to do a million, and the earliest card we found was No. 31. It dates back to

" I hadn't realized we were getting near that amount, so when Craig (Adamson) showed me the numbers on the new box of cards, I said 'Wow'."

– Bob Martin,
Metrology Lab employee

'71."

Pete Barton, who came to EB in 1962 but didn't join the lab until 1973, expressed similar surprise about reaching the milestone, and said the lab has come a long way since the early 1970s.

"When I first started here, most of our equipment was analog, and now, for the

most part, it's digital," he said of the scales, gauges and other calibration equipment he and his colleagues use each day. "The digital is more accurate, and for productivity, it's much quicker and user friendly."

Prior to using the MAT cards, Martin said he and his co-workers had to fill out much more detailed data sheets on each calibration, a process which was much more time-consuming. He said the "new" system was, and is, far better.

Besides Martin and Barton, Adamson credited Gil Dionne, an employee of the lab since 1965, and recent retiree Ralph Schramm with contributing heavily to the tally of calibrations.

"If you think about the volume, it's huge," Adamson said. ■



*Above: EB Heart Walk coordinator
Lauren Rapp*

Left: EB President Mike Toner congratulates Mary Anne Alfieri, the top Heart Walk fund raiser at EB and in the state of Connecticut

EB Walkers Put Soles Into Heart Walk Event Employees raise more than \$35,000

Electric Boat employees were recognized this month for raising more than \$35,000 for the American Heart Association through the organization's annual Heart Walk held last fall at Rocky Neck State Park in East Lyme.

Since EB employees began their participation in the event six years ago, they have raised more than \$214,000 for the charity.

According to Lauren Rapp (648), EB's Heart Walk coordinator, employees raised \$32,174 in 1996, a national record for a first-time participant that still stands today. The company has maintained its position as a leading contributor to the association since that time.

"It's not surprising that we'd do so well," said EB President Mike Toner. "Our employees have dug deep in their pockets

not only after the events of 9/11, but also for the Employees Community Services Campaign and now for the Heart Walk."

The Heart Association recognizes its top fund-raisers through membership in its \$500 Club, with 37 members in Connecticut who raised a total of \$31,427. Of those 37, four are EB employees – Garth Dolphin (464), Deneen Thaxton (400), Carol Cooke (418) and Mary Anne Alfieri (330), whose \$3,765 was tops in the state and 60th in the nation.

Rapp attributes EB's success to its network recruitment approach, a process that relies on company leaders to reach down into the organizations for support and participation. Fred Harris, VP – Programs, has headed up the effort at EB every year since the company began its involvement.

EB's approach has proved so successful

that it's now used as a model nationwide.

One result – EB's national ranking has dropped from 20th to 60th, although it remains number one in Southeastern Connecticut and second in the state. The EB team was the largest in the Southeastern Connecticut event, with more than 300 employees – plus families, friends and neighbors – completing the 5-mile route.

"It was a little painful to drop out of the top 20," said Rapp. "But when you think about it, it means that other organizations across the country are using our methods to raise more money, and that's great news."



The Jimmy Carter Diesel Generator: An EB Success Story

The Jimmy Carter (SSN23) is still a couple years away from completion, but one key component of the boat, the diesel generator, is ready for action today, according to supervisors who oversaw recent modifications to and subsequent tests of the engine and its power generating system.

“This is the first time we ever tested the Seawolf-class diesel outside the water,” said Area Superintendent Tim Beyer, whose area of responsibility includes the generator. “That’s the really significant part of this project.”

Chief Test Engineer Mike Ross and his crew oversaw the generator’s evaluation phase, which he said was quite involved.

“With the ship being so early on in construction, we had to determine what temporary systems had to be developed so we could run it” within Building 260, he said, adding the temporary setup included an exhaust system that extended to the exterior of the Main Yard Building Ways a couple hundred feet away.

The test phase, Ross explained, involved running the generator at full power to confirm its ability to provide enough electricity for a fully operational submarine. That aspect of the testing posed quite a few challenges of its own, he said, but it was nothing the employees couldn’t handle.

“Most of the input we got as to how to rig all the temporary systems came from the hourly employees,” Ross said. “They were a big player in what we were doing.

“It just shows what we can do when we all get together and act like a team, and that’s what we did,” he concluded.

Beyer said the testing phase was preceded by modifications to the vendor-supplied



“ We had to take everything off. Then, after the restoration of the diesel, the trades had to complete the running of cables and hookups of switchboards and the diesel control panel to support diesel electrical operations. Then we had to go to test. This is the first time we ever tested the Seawolf-class diesel outside the water. That’s the really significant part of this project. ”

*– Tim Beyer
Area Superintendent*

diesel engine and design changes to some of the diesel piping systems. The modifications and design changes, he said, were based on lessons learned following the completion and commissioning of the first two ships of the class, the USS Seawolf (SSN21) and USS Connecticut (SSN22).

With the Navy’s concurrence, Electric Boat employees devoted thousands of hours to the project. As Beyer explained, the project was extremely labor intensive and the varied tasks required that much of the engine and connecting components be taken apart, which further complicated matters.

“We had to take everything off,” he said. “Then, after the restoration of the diesel, the trades had to complete the running of cables and hookups of switchboards and the diesel control panel to support diesel electrical operations.”

Senior Engineer Tag Griffin (460) provided deckplate and technical guidance to the tradespeople who were assigned to the project – mostly from Depts. 241, 242, 243 and 244, he said. Also contributing were numerous employees from Depts. 272, ships test, and 460, construction engineering.

“The trades did a really tremendous job,” Griffin said. “We ended up with absolutely no problems when we ran it.” ■

Pipefitter Creates New Tool In Pursuit Of Perfection

Art Shaw prides himself on being a perfectionist. The pipefitter-hanger in Department 243 is so dedicated to detail that he developed his own center-punch tool for when he needs to manufacture pipe hanger shims and spacers for the submarines being built at Electric Boat.

Shaw, an EB employee for nearly 23 years, said shims and spacers are made by drilling through the length of a metal rod and then cutting the rod into slices of varying thicknesses. The trick, he said, is to drill through the exact center of the rod so the shims and spacers align perfectly when they're used to adjust a pipe hanger on a boat.

"I think one of the best things is to get the piece to come out perfect," Shaw said. "When you're first-rate – and we're all first-rate here – you want them to be perfect."

Shaw said an older but less precise method to prepare a rod for drilling is to carefully draw an X on the end and then use a manual tap.

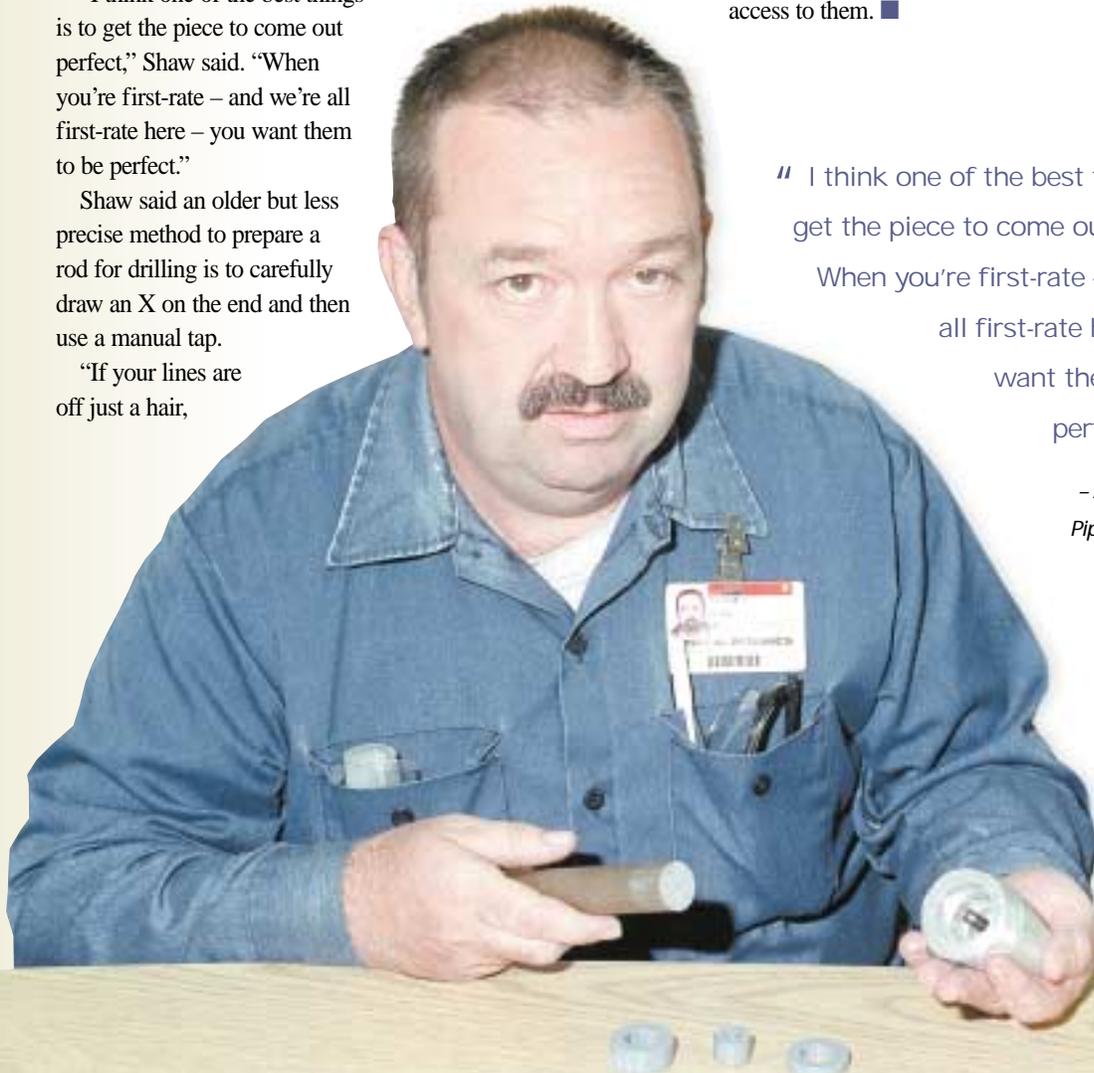
"If your lines are off just a hair,

or you can't quite see the X because the punch gets in the way, it may not come out perfect, and then it discourages you from going back to do more," he explained.

While EB can simply buy shims and spacers from a vendor or have EB's own Machine Shop make them, Shaw said he found it quicker to do them himself in the Pipe Shop, particularly if he needs only a limited supply.

When Shaw created his center punch tool, he designed it with rings of varying sizes so it fits like a glove over the ends of several diameters of rod. A self-contained tap in its center makes the process foolproof, he said.

The tool has proven itself so useful that his Pipe Shop supervisors are going to have a few extras made for the Pipe Shop tool cribs so Shaw's co-workers can have access to them. ■



" I think one of the best things is to get the piece to come out perfect.

When you're first-rate – and we're all first-rate here – you want them to be perfect. "

– Art Shaw,
Pipefitter / Hanger
(243)

Firebaugh Declares War On Cost

“How are we going to do more for our customer for the money he has in his budget?” asked Millard Firebaugh. “One way would be to get more blood from the turnip ... or beat the drum faster to get everybody to row faster. But that’s not what we’re gonna do.

“What we are gonna do is provide the tools and processes so that the design and engineering organization can be more productive,” said Firebaugh, EB’s vice president – Innovation and chief engineer. Firebaugh addressed a standing-room-only crowd in the Tech Center recently to describe the strategies Innovation will employ in its war on cost.

“There’s no question in my mind that we have at Electric Boat the best design and engineering team on this planet – especially when it comes to ships,” he said. “But it’s also clear that for us to carry the day in the future we’re going to have to increase our productivity.”

For Firebaugh, the rationale for the war on cost is straightforward – improvements in Innovation’s efficiency will provide the Navy with more design and engineering products for the dollar, while enhancing long-term job security for EB employees.

He outlined three objectives for the year, two of which are based on specific Virginia-program costs in the year 2000.

- Reduce design/engineering costs by 50 percent from the baseline year 2000 Virginia costs.

- Develop a plan for 2003 to reduce costs to 25 percent of the baseline Virginia, and identify specific ways to accomplish that objective.

- Produce design and engineering products that facilitate cost-efficient ship construction. “Mike Toner has established similar aggressive targets for the shipyard so as we work to reduce the cost of design, we’ll also be working to deliver designs that will make it easier for

Operations to build ships,” Firebaugh said.

Specifically, he said, the cost-reduction objectives will be met by the following actions:

- Elimination of non-value-added steps in design and engineering processes.

- Elimination of rework. Rework adds to costs.

- Reduction in cycle times. Time carries with it considerable support costs.

Much of the improvement Firebaugh is calling for is based on a concept known as Lean Enterprise (See related story, page 1). This is an initiative now under way at Electric Boat that aims to increase efficiency and improve product quality while eliminating extra effort. Four pilot teams in Innovation have recently begun training in Lean Enterprise processes.

Additionally, Firebaugh said, in the next few weeks a new program will be introduced to facilitate voluntary individual suggestions and participation in process improvements.

The ultimate goal, he said, is to help the Navy stabilize and increase the size of its fleet. “The Navy needs more ships. But they’re at a point where, if they’re going to do that – to build ships at a greater rate – they’re going to do it with the amount of money they’re getting now. There isn’t likely to be any big increase in money for shipbuilding,” he said.

“Innovation’s cost-reduction program will support the Navy’s goal by providing more design and engineering products for the same price, while at the same time helping Operations build more producible and affordable ships, two critical factors in increasing the size of the Navy fleet,” Firebaugh said. ■

Apprentice Alumni Association Offers Two Scholarships

The Electric Boat Apprentice Alumni Association (EBAAA) will offer two educational scholarship awards of \$1,500 and \$1,000 to graduating high school seniors.

The awards will be given to children of association members on the basis of their academic qualifications and desire to continue their education.

Applications can be obtained from any member of the EBAAA board of directors and must be submitted no later than April 5.

For more information, contact Mark Antrop, ext. 31833, or Phil Ludlow, ext. 32084. ■

Forney Joins Academic Panel On Advanced Systems

Scott Forney, EB’s director of Advanced Power Systems, has been named to the Industry Advisory Board of Florida State University’s Center for Advanced Power Systems.

“We appreciate the opportunity to assist in the important task of transitioning the Navy to all-electric warships and acknowledge the importance of enhancing the connection between Office of Naval Research-sponsored R&D and the shipbuilders who turn R&D into real ships,” said Millard Firebaugh, VP – Innovation and Chief Engineer, in describing the significance of Forney’s appointment. ■

Norwich Tech Students Pay A Visit



Background from left, Bill Amburn (241) and Chuck Henry (241) give nine students from Norwich Regional Vocational-Technical School an introduction in fiber optics and other aspects of submarine construction that Electric Boat's electrical shop is responsible for. The students, from Norwich Tech's electrical program, were among 32 Norwich Tech students who toured the shipyard earlier this month as part of the company's high school outreach program. The purpose of the program is to give local high-schoolers a firsthand look at EB in hopes that they'll consider coming to work here after graduation.

Technical Lecture Series: Spring 2002

EB's Technical Lecture Series will kick off March 7. The series is intended to provide employees with a comprehensive overview of Electric Boat's products, services, and resources. The lectures are also intended to foster pride among employees for the roles they play in engineering, design, support, and construction.

Program Structure:

Open to all employees.

Lectures will be presented Thursdays at 2:30 p.m. and 4 p.m. in the Technology Center Cafeteria. The 4 p.m. lecture is available at most EB sites by VTC.

Attendance is voluntary; however, attendance is recorded. Employees who attend 60 percent or more of the lectures in a series receive a certificate and letter for commendable attendance.

No charge numbers are provided.

Spring '02 Program

War on Cost:

Ray Williams, March 7

NRMD - Nuclear Regional Maintenance Department:

Paul Dagle, Craig Coppage, March 14

Virginia Class Electric Plant:

Herb Rattley, March 21

Common Parts Catalog

Implementation at EB and BIW:
Barry Espeseth, Ed Gladue, April 4

Advanced Hull Form Inshore Demonstrator (AHFID) Rim Driven Propulsor :

Mike Quadrini, April 11

SSGN Overview:

John Biederka, April 18

Electric Boat Update :

Mike Toner, April 25

Import/Export Requirements:

Rose McBride, May 2

For information, call Carol (Berge) Stergio, x32703, or Chris Colombo, x38016.

LEAN ENTERPRISE

– To Improve Quality, Increase Productivity, And Reduce Cycle Time

from page 1

says Casey. “And that will allow us to demonstrate to our customer and the country that we’re continuing to drive costs out of our product.

Casey described Lean as a form of continuous improvement that focuses first on understanding the processes used to design and build submarines. “There’s a great deal of learning that has to occur,” he said. “We have a tendency to be a little bit insular in this company. With the Lean approach, we’ll identify what techniques are available to understand not just the details in a specific process, but how the process works as a whole.

“Because our product is so complex, it’s easy to become inundated with the details associated with a given task, without stepping back and reviewing the process itself,” he said. “Lean is a formal and rigorous set of tools and procedures that enables us to understand what’s occurring in each phase of design and construction and make it more efficient.”

The notion to introduce the Lean philosophy at Electric Boat accelerated last May when representatives from NASSCO traveled to the Groton area to explain how they employed Lean to improve their shipbuilding processes, says Dick Palmieri, executive director, Lean Enterprise Steering Committee. The steering committee is overseeing the introduction and implementation of Lean at EB. Other members are John Holmander, representing Quonset Point; Mike Alu, Groton Operations; Will Lennon and Pete Halvordson, Programs; Ray Williams, Design; Gene Harper, Human Resources; Bill Newton, Finance; Steve Labreque, Quality; Harry Winthrop, Planning; Bob Imbruglio, Process Improvement at Quonset Point, and Mike Sweeney, Process Improvement at Groton. The steering committee is co-chaired by Casey; Millard Firebaugh, VP – Innovation and chief engineer; and Bob Scheel, VP – Quality and Materials.

So far, says Palmieri, about 300 supervisors, managers, and salaried personnel have received training in Lean methods.

In the near future, cross-functional groups of employees at both Quonset Point and Groton will begin training as four pilot projects are kicked off to validate the potential for Lean methods on submarine construction work. These projects are: SSN-776 main sea water valve assembly in the Groton Machine Shop; SSN-23 wide aperture array installation in Building 260 in Groton; SSN-776 ship’s control station man-

ufacturing in the sheet metal and electrical shops at Quonset Point; and SSN-776 coolant charging pump package installation, also at Quonset Point. The objective in each case is to develop an in-depth understanding of the processes involved and identify steps in the processes that can be simplified.

“We expect to come out of these pilots with success in applying the Lean techniques,” says Palmieri. “We will then have the confidence to look for additional pilot projects. We’ll use the people who participated on the initial projects to form the basis of the new teams for the new projects.”

According to Palmieri, one of the messages coming from the training sessions held so far has been this: Upper management must support the Lean concept for it to succeed. To that end, he said, EB President Mike Toner and his staff participated in their own training session to gain an understanding of the concepts involved and an appreciation for the potential Lean holds for the business. Toner made it clear at this training session that the discriminating trait for Electric Boat is the talented, experienced people. Lean is the tool they can use to improve the work processes at Electric Boat.

One significant potential is the opportunity for Electric Boat to differentiate itself from other shipyards. “We’re a relatively small shipyard, with a high degree of complexity,” Casey says. “We have the chance now to distinguish ourselves not by the volume of work, but by our ability – through our people – to understand it better and improve the way we do it.

“Lean will involve more people thinking about their work, questioning traditional methods, and developing solutions to improve safety, quality, productivity and efficiency,” he says. “And that’s very healthy for the business and each of us as employees.” ■

Tech Lecture Participants Are Honored

Forty-four employees were recognized earlier this month for their participation in the fall 2001 Technical Lecture Series.

EB President Mike Toner, who along with Innovation VP and Chief Engineer Millard Firebaugh presented certificates to the participants, noted that nearly 500 employees recorded their attendance at the eight lectures, although many others attended. Forty-five of these employees received certificates for attending five or more sessions. Since the program began in the fall of 1997, more than 8,000 employees have attended 88 lectures.

The following employees were honored at a breakfast in the Technology Center cafeteria for their presentations:

Submarine Full Service

Support – What it means here and in Australia: Dugan Shipway, Glenn Knowles and Chris Colombo.

COATS – the History, the Facility and How We Conduct Testing: Hal Drurey, Matt Cormier, Rich Springman, Tom Veitch, Ron Mauldin, Pete Liwski, Donna MacDonald.

Submarine Payloads and Sensors – Team Forward Pass and Team 2020: Al Malchiodi, Bill Lillie, Kevin Flanagan and Anita Kaiser.

Wireless Applications on Submarines – “EB Unplugged”: Tom Skrmetti, Bill Minor, Mike Lame, Paul Duhaime, Otis Harris, Aleta Gleason, Ken Fast, Jessica Libertini, Scott Philipp, Chris Buffon, Terry Brake and Anita Kaiser.

The Manta UUV Project: A NUWC/EB Collaboration: Mark Bennett, Lance Johnson, Liam Farragher and Anita Kaiser.

Trade Shows and Symposia –

Where EB Exhibits and Why: Neil Ruenzel, Dave Tela and Dean Jacobowitz.

Inventions and Patents – The Intellectual Property of Electric Boat: Millard Firebaugh, Dave Swedin and Peter Schwarz.

Joint Technology Committee: Mel Olsson, Jack Morgan, Glenn Walsh, Doug Witt, Bill Giustini, Pete Johnson, Beau St. Hilaire, Steve Hancock, Ron Medrzychowski and Mark Zimnoski.

Also honored at the breakfast were Luis Negron, Ron Hundt and Mike Campbell of the Facilities staff, who reconfigured the cafeteria to accommodate the lectures along with Sandra Graey, Brian Kondratowicz, Donald Kaschel and Brent Cugini. ■

Since the program began in the fall of 1997, more than 8,000 employees have attended 88 lectures.

Classified

AUTO/TRUCKS

BUICK RIATA 2 DR COUPE, 1988 - \$6,000 or best offer. 608-9952 (day), 536-5488 (eve).

CHEVY LUMINA, 1994 - 4 door excellent condition, new battery, tires & shocks, winterized, remote starter system; \$4,000. 401-539-6150.

GMC SUBURBAN DIESEL, 1985 - \$2,000 or best offer. 608-9952 (day), 536-5488 (eve).

HONDA PRELUDE, 1987 - red, 4 cyl., 5 speed, sunroof, a/c, am/fm stereo/cass, new 50k radials, mileage 169k, runs great. Good work or to school car; \$2,700. 887-3071, leave message.

MERCURY GRAND MARQUIS, 1989 - 4 door sedan, V8, 99k. Needs some work, priced accordingly; \$1,000 or best offer. 848-8943.

NISSAN PICK-UP, 1989 - 5-speed, 4 wd, oversized brakes and tires, \$2,500 or best offer. 608-9952 (day), 536-5488 (eve).

VOLKSWAGEN JETTA GLX SEDAN 4D, 1996 - 2.8 liter V6, 5-speed manual transmission, new tires, 50k, excellent condition; \$11,000 or best offer. 401-322-7160 after 5:00 pm

AUTO PARTS

McCALLEN PROSTOCK CHASSIS AND ROLL CAGE - Used. Good for Waterford or Thompson late or Prostock; quick sale \$1,700 or best offer. 567-9089.

BOATS

SEA SPRITE V-HULL RUN-ABOUT, 1979 - fiberglass 15 1/2 ft, 1988 65 H.P. Suzuki outboard, E-Z loader trailer; \$3,000. Call Chris at 572-9011.

MISCELLANEOUS

AMERICAN GIRL DOLL, clothes & furniture, child's rocking chair, dollhouse furniture, Fisher Price school house, doll wooden cradle, new porcelain doll, Mickey Mouse Earrings, 1986 Barbie Doll car. 401-596-5788.

BLUE WILLOW DINNER PLATES made in England, adult's rocking chair, new bridal veil, Fenton glass basket, pink glass cake dish, beaded Indian headpiece, vintage jewelry. 401-596-5788.

GOLF GLUBS - Ping Zing Knock-Offs, set of irons, steel shafts, 2 thru PW, plus SW; price negotiable. 401-596-4290.

POWER CHAIR - brand new Hoveround with Bruno chair lift; \$5,000. 425-8159, leave message.

RUG - two oriental, 8 ft x 11.5 ft, excellent condition; \$600 each. 599-4469.

SKI BOOTS - Salomon Equipe, size 270, used once, excellent condition, can be molded; \$125. 572-9491.

Service Awards

40 years

321 Lynn J. Brackett
355 John D. Rubino

35 years

434 James A. Londregan
445 Robert H. Rubio
452 Geraghty I. Hawkins
452 John J. Stets

30 years

241 Dana J. Caviggia
241 William J. Terranova

25 years

100 Andrew G. Kosloskey
100 Robert D. Reed
200 Dennis L. Mayo
229 Andrew J. Klucky Jr
241 David T. Wright
242 Paul A. Lukas
242 Phillip Robichaud Jr
243 Todd W. Cropper
243 James P. Davis
243 Gloria G. Dugan
243 Danny M. Field
243 Anthony S. James
243 Harold N. Manuel Jr
243 Donald R. Wingertsman

25 years

244 Thomas G. Goodale
244 Richard A. Palazzo
244 Ralph J. Spero
246 David K. Leclair
252 Kenneth A. Deus
252 Gordon N. Doak Jr
252 Daniel D. Dorval
252 Eulalio C. Fontanez
252 Arthur F. Henderson
252 Sandy S. Lebitz
252 Mark D. Oddo
252 Robert C. Tardif
252 Edward R. Welles III
252 Fred J. Wood
272 Reginald Strickland
275 Michael J. Van Reysen
322 Kevin T. Cronin
330 Wilburn D. Stone Jr
341 Raymond R. Goyette
355 Laurence E. Crooker
355 Douglas G. McIntyre Jr
355 Glenn M. Patterson
411 Jerry D. Kaufman
433 Robert J. Nurdin
434 Chester P. Atkins
452 Richard F. Miller
453 John W. Jones
458 Nancy A. Nardone
459 Lowell L. Benton
459 Charles F. Bruno
459 Edward D. Gardner
459 Barry D. Rappoport
459 Joseph L. Ruggiero
459 James A. Schiessl
477 Terry L. Randolph
496 Joseph Grzelak Jr
505 Charles Bartnicki Jr
508 Mark A. Wagner
686 James R. Stetson
745 Anthony J. Adamo

25 years

795 Robert J. Urbani Jr
901 Harold W. Braley Jr
901 David Dasilva
901 Edward F. Hobin
901 Brian P. Lavendier
901 Michael Marum
901 Louis J. Valerio
902 Kevin J. Giannola
902 Rocco G. Carlini
902 Charles J. Evans
902 Thomas W. Walsh
903 Paul D. Jeffrey
903 Michael C. Rice
903 Albert A. Santoro Jr
904 Randall T. Clark
904 William M. Dematteo
904 Randall C. Janelle
904 Howard N. Schaffer
904 Manuel Sola Jr
904 Steven R. Nowicki
911 Robert G. Adams
911 Kevin M. Dillon
911 Bruce A. Dulude
911 Patricia A. Johnson
911 Thomas M. Malikowski
911 Richard F. Rebello
915 Eugene E. Cunha
915 Victor J. Darocha
915 Robert S. Dorian Jr
915 George H. Escobar
915 Glenn A. Fucci
915 David R. Gardiner
915 Henry H. Gold
915 Michael Garneau
915 Michael A. Hervieux
915 Kevin M. Higham
915 Robert F. Hirsch Jr
915 Ronnie L. Lambert
915 Michael J. Reynolds
915 John P. Salerno

25 years

915 John F. Sheridan
915 William D. Sousa
924 Maurici P. Jorge
924 Patrick J. Moran
935 Richard S. Bliven
950 Sharon T. Collins
957 David J. Freitas
957 Richard L. Fournier
957 George Goodman
957 Albert J. Petrarca Jr
962 Michael R. Reynolds
969 Robert A. Cornwell
970 Miriam Eldridge

20 years

229 Ernest P. Cassidy
242 Gary J. Chavis
405 Jeffrey R. Douglas
438 John F. Morgan III
438 Nicholas V. Mucci
452 Steven R. Close
453 Donald C. Penman II
458 Laurie L. Carbone
484 Frank E. Capone
493 Mark S. Page
915 Douglas A. Lawrence
915 Antonio J. Quaresma

Memphis On The Thames

EB obtains maintenance work in partnership with Navy yard

The partnership between Electric Boat and Portsmouth Naval Shipyard (PNSY) will be hard to miss in the near future when the USS Memphis (SSN-691) ties up in Graving Dock 2 for a six-month work period.

That will be primarily because of the presence of 100 or so PNSY employees in the shipyard. But it's not as if they're taking work from Electric Boat. The opposite is occurring, in fact, according to Pete Cawley, director of offsite operations.

Although the work period is a naval shipyard job, it will benefit EB in two ways, he

said.

First, up to 55 EB employees will be assigned to Memphis during the work period. These will include supervisors, engineers and tradespeople working as subcontractors to PNSY.

Secondly, the Navy will lease the graving dock from EB under a five-year agreement to keep the facility available for submarine maintenance work. That's worth an annual \$1.3 million to the company, with individual docking fees extra. This lease is intended to take the place of Oakridge, a floating dry dock that had been at the submarine

base and has since been decommissioned.

"While EB could have been involved in the work period if it had been performed at the sub base, our level of participation is much higher with Memphis at the shipyard," Cawley said. Previously, similar work has been performed on the waterfront under the terms of the EB/PNSY partnership, including repairs to the NR-1. EB will continue with its efforts to secure additional work under the same arrangement, said Cawley. ■