

**GENERAL DYNAMICS**

Bath Iron Works

# BIW NEWS

April  
2016

## ZUMWALT (DDG 1000) BUILDER'S TRIALS

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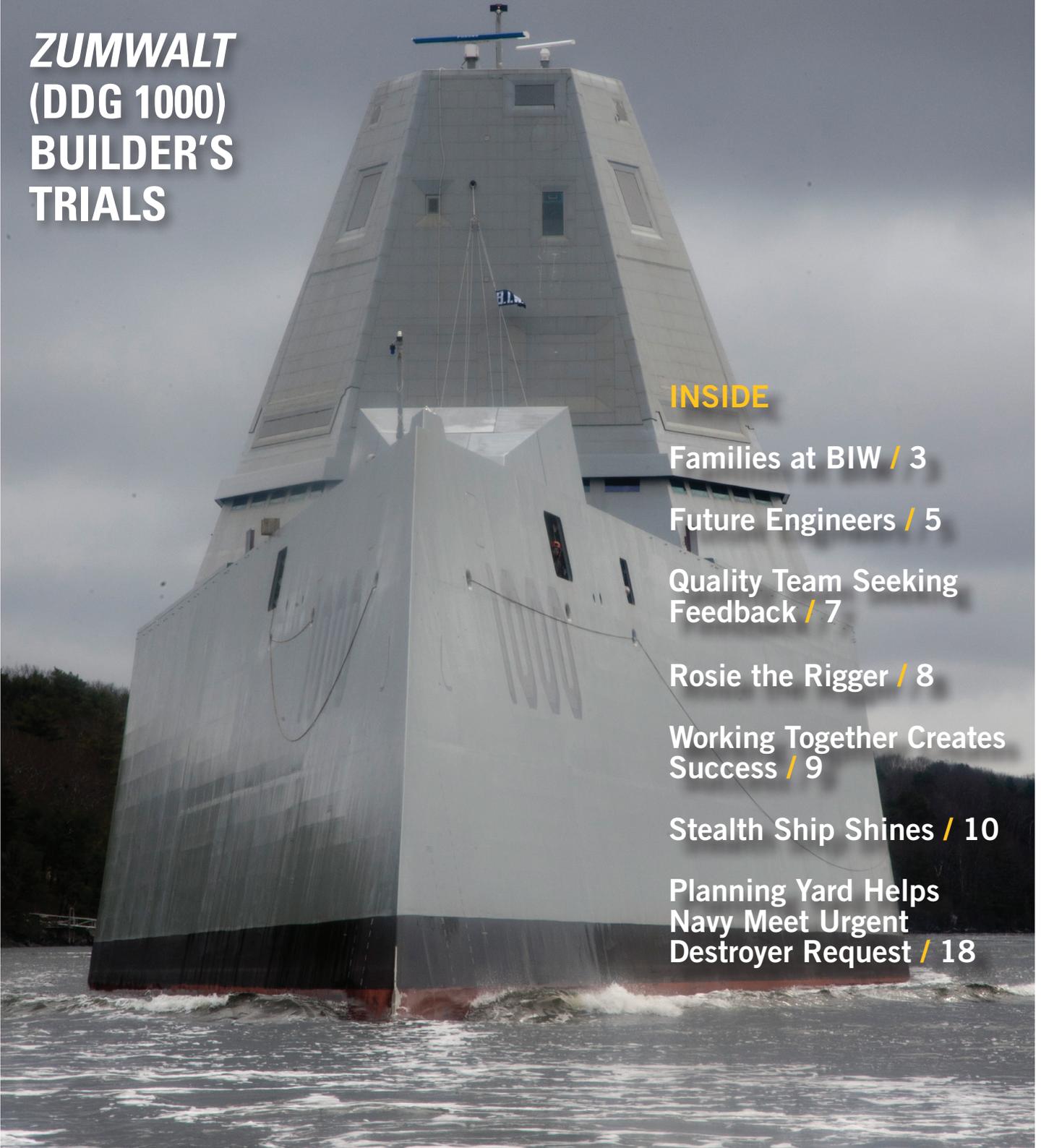
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# From the Helm

Fred Harris, President, Bath Iron Works

**A**t Bath Iron Works we continue to find ways to improve our processes and products, for our customers and for ourselves. Some of the important initiatives underway include an improved design-build process, increased First-Time Quality and better material delivery.

With design-build, we are working to ensure that design incorporates input from mechanics who will actually be using the drawings resulting from the design process, making certain that we produce a design which can be built efficiently.

We first applied the design-build model to DDG 1002's steel deckhouse. For that project, we brought together engineers, designers, planners and mechanics from a variety of trades to put together a plan for the new deckhouse. As the plan progressed toward a detail design, everyone involved would sign off on the drawings, confirming that a "buildable product" had been created.

Basically, we are taking the men and women who are on the front lines of manufacturing and we're giving them a say in our new designs – aiming their expertise at the plans they and their colleagues will have to use to build ships. This month, we are co-locating about 70 planners with the design staff to expand our design-build efforts for the Flight III upgrade to the DDG 51 class. If we win the U.S. Coast Guard Offshore Patrol Cutter Program, we will use a similar approach.

You can read more about these efforts on Page 9 of this issue.

We are also working hard to vastly improve First-Time Quality. Director of Ships Completion Phil Kinney and Director of Quality Mark Colby are leading a new Quality Team we formed in February. We have had that team conducting work order reviews to ensure all work is done and done right.

That team has found some serious problems that we must address. We are closing work orders on jobs that have manufacturing defects in them. These defects would have been corrected had the work been inspected. We're also closing work orders when the work isn't complete. We cannot afford to pass along problems to the next stage of construction.

We are committed to addressing these problems by making sure that our processes are sound and that our procedures are followed. We also need

to ensure that our people have the training, tools and materials they need to get the job done right – the first time, every time. If you find issues with a work order you can provide feedback by going to the "Planning" section on BIW's Intranet and clicking on "Work Order Feedback." If you would like to learn more about our Quality Team and the work it is doing, read the article on Page 7.

We continue the effort to change how we kit materials. Mechanics are now receiving material in some work packages that they previously had to travel to slump rooms to secure. Our goal

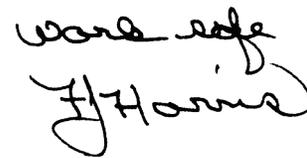
is to provide the mechanics with everything necessary for the job – right at the job site. The transition to more complete kits will take some time to implement as we move through a transition period designed to uncover issues and correct problems.

As we transition to this new system, we are consolidating unmanned slump rooms into staffed "Stock Rooms," allowing us to track issues and improve the entire process. We have distributed bulletins on the changes throughout the shipyard to keep everyone informed, and we'll update the workforce as we progress.

Feedback is critical, and I encourage anyone who has questions or suggestions as we transition to reach out to the Material Kitting Team through their front-line supervisor, by emailing [BIWSlumpReduction@gdbiw.com](mailto:BIWSlumpReduction@gdbiw.com) or by calling the hotline at X-1996 (days) or X-3886 (nights).

All of these efforts have a few things in common. We need to work together to identify the root causes of problems. We must not create workarounds that are a quick fix, but don't truly address the root causes. We all need to listen more and work together on solutions. Every one of us at BIW has a role to play in making this shipyard safer, more affordable and more competitive.

Together, we can secure our future.



[WWW.OneYardBIW.com](http://WWW.OneYardBIW.com)

# FAMILIES

## AT BIW

When we think of the phrase “BIW family,” it really rings true for the Veilleux clan.

**Jeff Veilleux (D20)**, Manager of Facilities, has worked at BIW for 34 years and during that time he has had two brothers, two sons and a niece work at the yard.

His brother Doug, who retired last month, started as a piping mechanic and worked his way through the trades before landing in the Door Shop at Hardings. Doug was at the shipyard just shy of 30 years.

Their brother John retired from the Purchasing Department after working for BIW for 28 years. John now flips houses and also volunteers for the Maine Children’s Home for Little Wanderers.



L to r: Savanna, John, Doug, family friend **Lee Carter (D19)**, Jeff, Drew and Dustin.

John’s daughter **Savanna** went through the BIW apprenticeship program and works in department 87 in the Engineering Design group focusing on electrical engineering at CROF. Savanna has been with the company for nine years.

Jeff’s son **Drew** joined the BIW team in 2014 and now has a position as a Production Coordinator on Hull 603. Jeff’s son **Dustin** has been with BIW for four years and is a Trade Planner for Hydro Testing.

“It’s kind of cool to have so many of my family members working here,” Jeff Veilleux said.

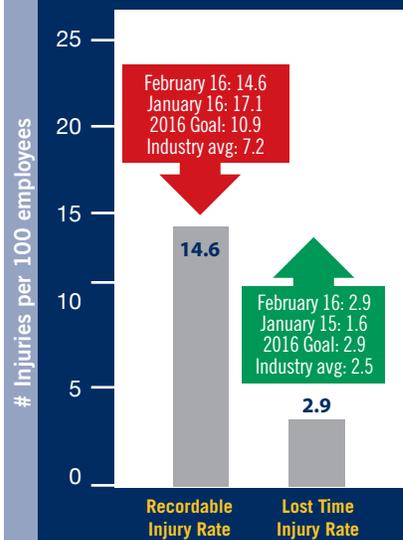


L to r: Dustin, Jeff and Drew Veilleux

## Safety Performance February 2016

### INJURY RATES

Cumulative Through February 2016

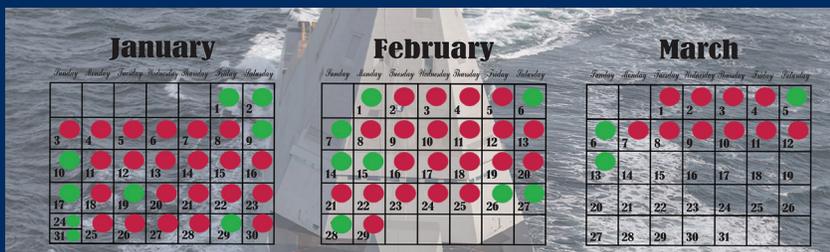


**KEY**  
Arrows show trend compared to previous month



Colors show performance to goal  
Meeting Goal Above Goal

## 2016 RECORDABLE/LOST TIME INJURIES



# BIW NEWS

BIW NEWS is published monthly by the Communications Department (D94) of Bath Iron Works and is produced internally in the BIW Print Shop.

## COMMENTS AND SUGGESTIONS ARE WELCOME

Forward to Danielle Olson at Mail Stop 1210 or by email at [danielle.olson@gdbiw.com](mailto:danielle.olson@gdbiw.com).

## INFORMATION CALL LINES

### FACILITY/SHIFT

Toll free information on facility status, work shift delays, and cancellations

**1-866-630-BATH (2284)**

### AUTO MESSENGER

Sign up (web address below) to receive automatic messages regarding emergent matters, including facility closures  
<https://asp.schoolmessenger.com/biworks/subscribe>

### MAIN GATE SECURITY (24/7)

**207-442-2266**

### AMBULANCE-FIRE-POLICE

Bath, Main Yard: **ext. 2222**  
Hardings, CW, EBMF: **ext. 1222**  
Bissons, CROF, James: **911**;  
then call **ext.1222**

### MEDICAL 207-442-2231

### BIW REC ASSOCIATION

For questions or suggestions regarding BIWRA programs **207-442-1113**

## REACHING OUT

Do you coach or officiate a spring sport or know a fellow BIW employee who does? We'd like to hear from you for a future story in BIW NEWS. Contact Danielle Olson at [Danielle.Olson@gdbiw.com](mailto:Danielle.Olson@gdbiw.com) or 442-5863.

# EMPLOYEE SPOTLIGHT

## TELL US A LITTLE ABOUT YOURSELF.

Born and raised in Biddeford and currently live there with my wife Geraldine of 47 years. I have a daughter Chantal and three grandchildren, Grace (16), Emma (14) and Camden (7) who live in Massachusetts. My wife and I make sure that we visit them at least once a month to spend time with our family.

## HOW LONG HAVE YOU WORKED AT BIW?

35 years, 18 of those years spent working in Portland.

## WHAT IS YOUR ROLE AT BIW?

Building all woodwork that goes on the ship from plaques to picture boards.

## WHAT WOULD PEOPLE NEVER GUESS YOU DO IN YOUR ROLE?

I was asked to build a wooden model of the DDG 1000 for a job fair. I haven't done something like that since I was a child.

## WHAT ASPECT OF YOUR JOB DO YOU ENJOY THE MOST?

Creating and building things that people appreciate, I never get tired of it.



# DON PARQUETTE



**Title** Carpenter—Hobby Shop  
**Been with BIW since** 1981  
**Department** 25

## WHAT KINDS OF HOBBIES AND INTERESTS DO YOU HAVE OUTSIDE OF WORK?

I enjoy golfing and working in my own shop, building furniture and just woodworking.

## WHAT IS ONE THING YOU COULDN'T LIVE WITHOUT?

My golf clubs.

## WHAT IS YOUR BIGGEST PET PEEVE?

Losing at cards, specifically poker.

## WHAT IS YOUR FAVORITE MOVIE OR BOOK?

My wife and I enjoy all movies, usually the ones that she picks out.

## NOMINATE OUR NEXT EMPLOYEE SPOTLIGHT

Want to see someone you know at BIW featured in our next employee spotlight? Nominate them today by emailing [danielle.olson@biw.com](mailto:danielle.olson@biw.com)

# FUTURE ENGINEERS

## Glimpse the Real Thing

A host of future engineers got an inside look at ship design, crane lifts and 3D scanning and printing at last month's Engineering Week EXPO in Orono.

Eight engineers represented BIW at the EXPO on March 15 at the University of Maine, which was hosted by the Maine Engineering Promotional Council (MEPC).

More than 50 exhibitions were on display with the primary audience being students K-12, as well as their parents, teachers and the public. More than 1,700 people attended the event.

The BIW exhibition showcased the shipyard's Engineering Department with an array of activities:

- Short range 3D scanning
- Ship materials demonstrations using virtual reality headsets
- 3D printing demonstration
- Kids ship-design activity
- Crane lift simulation
- Large interactive touch screen



Josh Botting demonstrates a crane lift simulation to a group of future engineers.

The volunteers that worked the exhibit were **Dave Sherburne (D86)**, **Katherine Cyr (D84)**, **Kyle Kelley**, **Suzanne Snowden**, **Andrew Cote**, **Paul Franklin**, **Eric Schuyler**, **Joshua Botting** and **William Syron** all from department 40.

BIW engineers look forward to participating in the EXPO every year and enjoy the opportunity to share their love of engineering and their experience at BIW.

The BIW exhibit was a big hit and couldn't have been possible without help from **Josh Miller (D10)**, **Ellen McIver** and **David Heath**, both from Department 40.

"After last year's Engineering Day, my kids begged me to take them this year," said **Gene Miller (D40)**, Senior Director, Engineering, who attended the event with his children. "All of the exhibits were well done. BIW had a strong presence and the volunteers were very enthusiastic. We had a great time and it was well worth the two-hour drive."

**Vince Quintana (D40)**, Principle Engineer System Integration, was the keynote speaker at a banquet the night before the EXPO which drew 162 people.

## From the Fleet

# USS McCampbell (DDG 85)



A Sea Hawk helicopter, attached to the "Warlords" of Helicopter Strike Squadron (HSM) 51, takes off from the flight deck of the Bath-built Arleigh Burke-class guided missile destroyer *USS McCampbell* (DDG 85) dur-

ing a flight operation near Guam on March 1. *McCampbell* is on patrol in the 7<sup>th</sup> Fleet area of operation in support of security and stability in the Indo-Asia-Pacific. Photo and text courtesy of U.S. Navy.

## Health Improvements

# Quitting Tobacco is Hard!

### DO YOU OR YOUR SPOUSE USE TOBACCO?

We know you've heard the research about the serious health problems caused by smoking, secondhand smoke and chewing tobacco. Perhaps you have thought about quitting but don't know where to start.

Maybe you've tried quitting in the past but were unsuccessful. Quitting is hard! Often, people who quit start again because of stress, weight gain and/or nicotine withdrawal. The good news is that BIW offers free resources for employees and spouses to quit tobacco, including health coaching with your Fit for Life coaches from TrestleTree.

### COACHING TO QUIT WORKS

According to the Centers for Disease Control (CDC), while medications such as nicotine replacement can help you quit, using medications together with health coaching gives you the best chance at success.

TrestleTree health coaches will help create a quit-plan just for you, to increase your chances of long-term success. TrestleTree health coaches use current medical research and a "whole person" approach and participants have better quit rates than the general population. In addition, while average weight gain for people who quit smoking is usually 5-10 lbs, *BIW health coaching participants who quit smoking in 2015 lost an average of more than 4 lbs!*



Front row, l to r: **Anthony Anderson**, Fit for Life Program Manager; **Heidi Werwaiss**, RN; **Brianna Monahan**, RD; **Betsy Peixotto**, Fit for Life Prevention Coordinator; **Kathy Coffey**, RD

Back row, l to r: **Jessica Loney**, RN; **Jessica Smith**, RN; **Rachael Hall**, RD; **Jen Ziegler**, RN; **Amanda Hopkins**, RD; **Jacqueline Maillet**, RD

### SAVE HUNDREDS ON YOUR HEALTH INSURANCE!

#### NEED ANOTHER REASON TO QUIT?

If you and any other tobacco user on your BIW health plan each complete at least four visits (or calls) with a Fit for Life coach focused on quitting tobacco, you can be switched to the lower, non-smoker premium on your BIW health insurance and save hundreds of dollars. You also can get reimbursed the difference all the way back to January 1, 2016!

It's never too late to quit. If you and/or your spouse would like to enroll in coaching, or just want more information, please call Fit for Life at 442-3145 or email [biwfitforlife@gdbiw.com](mailto:biwfitforlife@gdbiw.com).

*BIW health coaching participants who quit smoking in 2015 lost an average of more than 4 lbs!*

# QUALITY TEAM Seeking Feedback

**P**hil Kinney (D10) holds up a green gasket pulled from between the flanges of piping for the lube oil system on Hull 507, Rafael Peralta (DDG 115).

One side shows a brown smear where grit was imbedded by flange bolts being tightened after blasting, in an unsuccessful effort to make the system air tight. On another section, there is no sign of the compression mark that would indicate it was tightened enough at that spot.

Replacing the system's flange gaskets took four workers a month, said Kinney, Director of Ships Completion for the DDG 1000 class.

"If we tighten a flange's bolts upstream, it takes 15 to 30 minutes to get it done and done right," he said, saving about 10 hours work on the waterfront.

Kinney and Director of Quality **Mark Colby (Do6)** lead a Quality Team that was formed in February. The group has been conducting work order reviews to find ways to improve First-Time Quality (FTQ).

Members of the team also are soliciting input from supervisors and mechanics to identify systemic issues that lead to expensive rework.

"We love the feedback because it allows us to go upstream and fix the problem," said **Jim Carr (D84)**, Director of Trade Planning. He stressed that even input that was not acted on in the past needs to be raised again and become part of that review.

The group identified four keys to achieving First-Time Quality:

- Making sure that when a work order



Randy Johnson and **Brian Levesque (D10)** point out equipment which, when installed in the proper sequence, saves time compared to the practice of delaying installation until later, which results in rework.

*"There's a lot of gold out there and we can collect those nuggets. We just need things brought to the surface so we can find them and fix them."*

is marked complete, it is 100 percent complete, without any part being postponed. "If we crack the code on that, we'll be 85 to 90 percent there to First-Time Quality," Colby said.

- Accuracy control—making sure prescribed tolerances are met on all units and there are no defects.
- Finishing all hot work prior to units going to blast and paint because removing paint and insulation to do work later is costly.
- Ensuring that when systems are turned over for Stage Two testing, they perform as expected.

The work order reviews found a high number of defects - problems that would have been identified if the work had been inspected. The reviews revealed a

number of reasons jobs fall short of standards: training needs, materials absent from job kits, historical deviations from planning directions and inaccurate designs or plans.

Small problems often snowball into costly ones later in the production process, Kinney said. However, opportunities for improvement aren't confined to early stages of the manufacturing.

"We're finding at least as many problems downstream as we are upstream," Kinney said.

Reviews also looked at how to improve a job, even if it was technically complete, said **Randy Johnson (D10)**, Superintendent for Machinists.

The team found that trade managers (Superintendents, Asst. Superintendents, Area Superintendents Hull Managers, and Area Supervisors) need to spend more time on the deckplates and are now expected to spend at least six hours a day there. Planners also need to get closer to the actual work of production.

The key to success is feedback all along the production chain, Colby said.

"There's a lot of gold out there and we can collect those nuggets. We just need things brought to the surface so we can find them and fix them."

# BIW Employees, United Way: Decades of Partnership

The United Way Campaign Loaned Executive this year is **John Portela (D27)**, who first became involved with the United Way at BIW in 1976.

Portela has since served on the Board of Directors for the Bath Area United Way; United Way of America Board of Governors, Board of Trustees International and Campaign Chair for United Way MidCoast Maine.

Portela was the recipient of the Joseph Beirne Award from United Way of America—the highest award given to recognize local and national labor leaders who provide outstanding United Way volunteer service. He also co-chaired the BIW campaign from 1981–1993. He retired from his national role in 2009.

Portela continues a long tradition of BIW leadership with United Way which

dates back to the spring of 1956, when the Bath Area Chamber of Commerce spearheaded an effort to create a Community Chest. William Mussenden of Bath Iron Works became the first chairman.

The jurisdiction of the “Bath Area United Fund” included West Bath, Woolwich, Phippsburg, Georgetown and Arrowsic. The consensus was that the only way the drive would succeed was to have payroll deduction plans at area employers so workers could devote small amounts from each check that would add up to sizeable donations. Eighteen firms committed to payroll deduction plans, Bath Iron Works being one. BIW has offered the payroll deduction since that first campaign.

As we approach the 2016 BIW United Way Employee Pledge Campaign and its 60<sup>th</sup> anniversary, let’s work together to



Portela, United Way Campaign Loaned Executive

build on this success. Our generous contributions to the agencies affiliated with the United Way benefit thousands of people in and around our communities.

## Shipyard’s ‘Rosie the Rigger’

**Victoria “Tori” Jones (D32)**, BIW’s only woman rigger, doesn’t flinch from hard work.

After struggling to pay the bills as a single mom working a series of retail jobs, Jones six years ago signed on to a training program with Women Unlimited, which helps women enter traditionally male jobs. She earned her Class B driver’s license, attended a construction skills boot camp and got her first taste of welding.

That led to a welding certification, work building the Veterans Memorial Bridge in Portland and, eventually, to a job as a shipfitter at BIW.

Now, she’s a rigger, preparing heavy loads for cranes to move. The Phippsburg native says she doesn’t mind being BIW’s only female rigger.

“I played football in high school with the guys,” she says with a smile. “More



Jones, BIW’s only female rigger, secures a crane’s chains to a steel bar at Hardings.

women should be encouraged to try this,” she said, giving a nod to the women before her who blazed the trail.

Her co-workers have been eager to share their knowledge and experience, she said.

It’s not surprising Jones found her way to BIW.

“On one side of my family, I’m fifth generation and I have third and fourth generation on the other side,” she said.



# Working Together Creates Success

In 2013, the Navy had a competition for the design of the deckhouse for DDG 1002; BIW decided to include planners and mechanics in a “design-build” process, to correct problems that can occur in the product lifecycle down the road. The “steel superstructure team,” led by **George Camp (D40)**, **Jim Carr (D84)**, **John Foster (D10)** and **Eric London (D87)**, was charged with creating the design for the new steel deckhouse. A group of designers, planners, pipefitters and shipfitters worked together to create a design that we ultimately won for the last ship in the *Zumwalt* class.

Following on that success, BIW decided to apply the design-build technique to the Flight III program. Flight III is an upgrade to the *Arleigh Burke*-class destroyer with large modifications that impact the most fundamental aspects of the ship class, like its generators and radars. It affects 75 of the 90 zones on the ship, by far one of the largest upgrades that BIW has worked on.

Led by Camp, Carr, **Eric Nicholson (D40)**, **Bob Ferrara (D87)** and **Tony Clukey (D10)**, about 70 planners are co-locating with the design staff in April to support the design-build.

“By taking the approach used on the deckhouse and expanding it by actually co-locating all parties, including the mechanics, is really taking this approach to the next level” London said.



L to r: Bob Arnall, **Darren Meserve (D87)**, **Tim Kelley (D40)** George Pooters, Jeff Matthews, **Andy Benson (D87)**, **Essence Grotton (D87)** and **Pete Doyon (D87)**.

Design-build begins with engineers, designers, planners and manufacturing personnel formulating a strategic plan. As the design matures, representatives from each of these areas monitor progress towards written goals, also known as produce ability requirements or PARs. The process culminates with the sign off of the drawings emphasizing the confirmation that a buildable product has been created.

“We are challenging design every step of the way,” said **Bob Arnall (D10)**, an electrical specialist who is part of the design build team.

This is an aggressive approach that Nicholson believes will have a high reward in the end. “By avoiding massive amounts of trade base changes, like FEPAs (field engineering production assistance), after you issue the design, you

are putting the company in a more competitive position,” he said. When production is involved in the design you are avoiding rework later in the construction cycle. This approach makes BIW more competitive for future proposals.

“The design-build team has been working well with the designers, giving us a great opportunity to influence ship design to make a more safe and producible product for BIW and still deliver a high quality ship to the U.S. Navy,” said **George Pooters (D50)**.



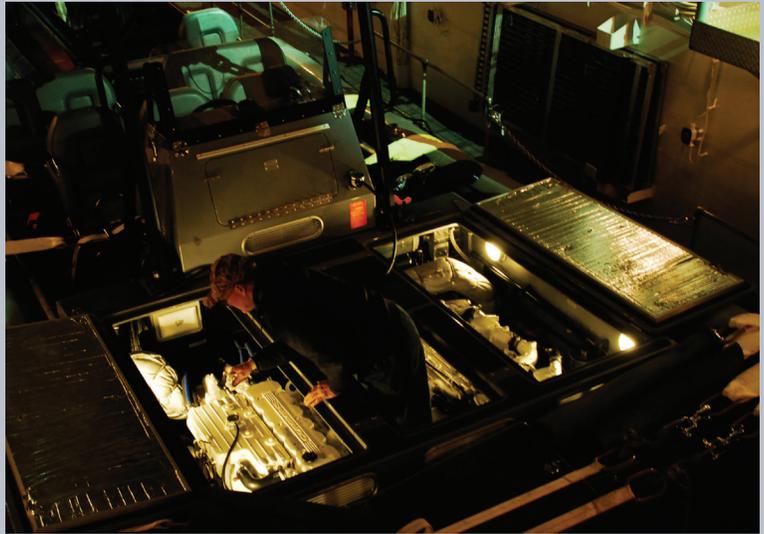
L to r: Members of the design-build team **Bob Arnall (D10)**, **Jeff Matthews (D17)**, **Mike Averell (D84)**, **Gerry Cloutier (D15)**, Pooters and **Ken Beasley (D19)** who was unavailable for the photo.

# STEALTH SHIP SHINES IN BUILDER'S TRIALS



*“In a few weeks, we will present and demonstrate ship systems and capabilities to a special group of Navy inspectors called INSURV. Many people will be working long days and weekends to prepare for that visit. It will be a hectic time but we’ll be prepared. The ship is in good shape now and getting better with each day.”*

— **Steve Colfer,**  
Director of Test and Trials



**D** DG 1000's shafts start turning hard as the ship slips away from the Kennebec River and into the Gulf of Maine, and the BIW crew starts getting ready for the first big test on Builder's Trials.

Outside machinist **Bob Gordon (D09)** checks out the Rigid-Hull Inflatable Boat (RHIB)'s twin engines while other boat-launch crew members begin loosening the straps that hold the boat in place.

**Scott Thomas (D81)** slides behind the RHIB's console and **Ben Bovey (D68)**, **Jeff Ellis (D20)**, **Karl Blood (D68)** and Gordon all get aboard—ready to launch. In mere minutes, the RHIB tilts up, slides back and launches into the sea. BIW and Navy observers applaud enthusiastically—the first test is a success, or, as one guy calls out “‘A’ for the Day!”

**Mike Beaulé (D09)** sits at the boat launch controls, watching everything closely. An outside machinist, he's worked on the launch system for four years. For him, it's a pleasure to see it all work just like it's supposed to.

“This is where all the hard work you do makes you feel good,” said Beaulé. “It's awesome.”

For the next two days, BIW's men and women put DDG 1000 through its paces on trials, testing propulsion, life safety systems, steering and more. They then spent an extra day at sea helping to train *Zumwalt's* Pre-Commissioning Unit—the crew that's standing ready to accept the ship upon delivery.

Riggers, carpenters, electricians, material clerks, engineers, tinsmiths, pipefitters, preservation technicians and others all manned various stations. On trials, they ran tests, cleaned the ship, fixed problems, stood watch and more.



Opposite page: **Bob Gordon (D09)**, **Scott Thomas (D86)**, **Ben Bovey (D68)**, **Jeff Ellis (D20)** and **Karl Blood (D68)** in left photo; **Josh Mansir (D25)**, **Bill Pratt (D25)** and **Chris Allyn (D25)** in right photo. This page, clockwise from top left: **Ryan Shafer (D09)** and **Paul Crow (D09)**; **Bob Gordon (D09)**; **Charles Wight (D40)**; and **Norm Bossie (D25)**.





**Greg Sukeforth (D31)**, a tinsmith and 33-year BIW employee, said the whole experience of being at sea is enjoyable.

“It’s good to say you’ve been on the first ship of its kind,” he said, pausing as he and fellow tinsmith **Bob Roy (D17)** test pressure and air flow in one of many airlocks between passages.

Adds Roy, “It’s a lot of running around, figuring out problems, troubleshooting.”

For many aboard, it was their first time at sea on trials with BIW. **Heather Bailey (D27)**, a preservation tech on DDG 116, has been at BIW for two years. These were her first trials and though she expected to get seasick, she was fine.

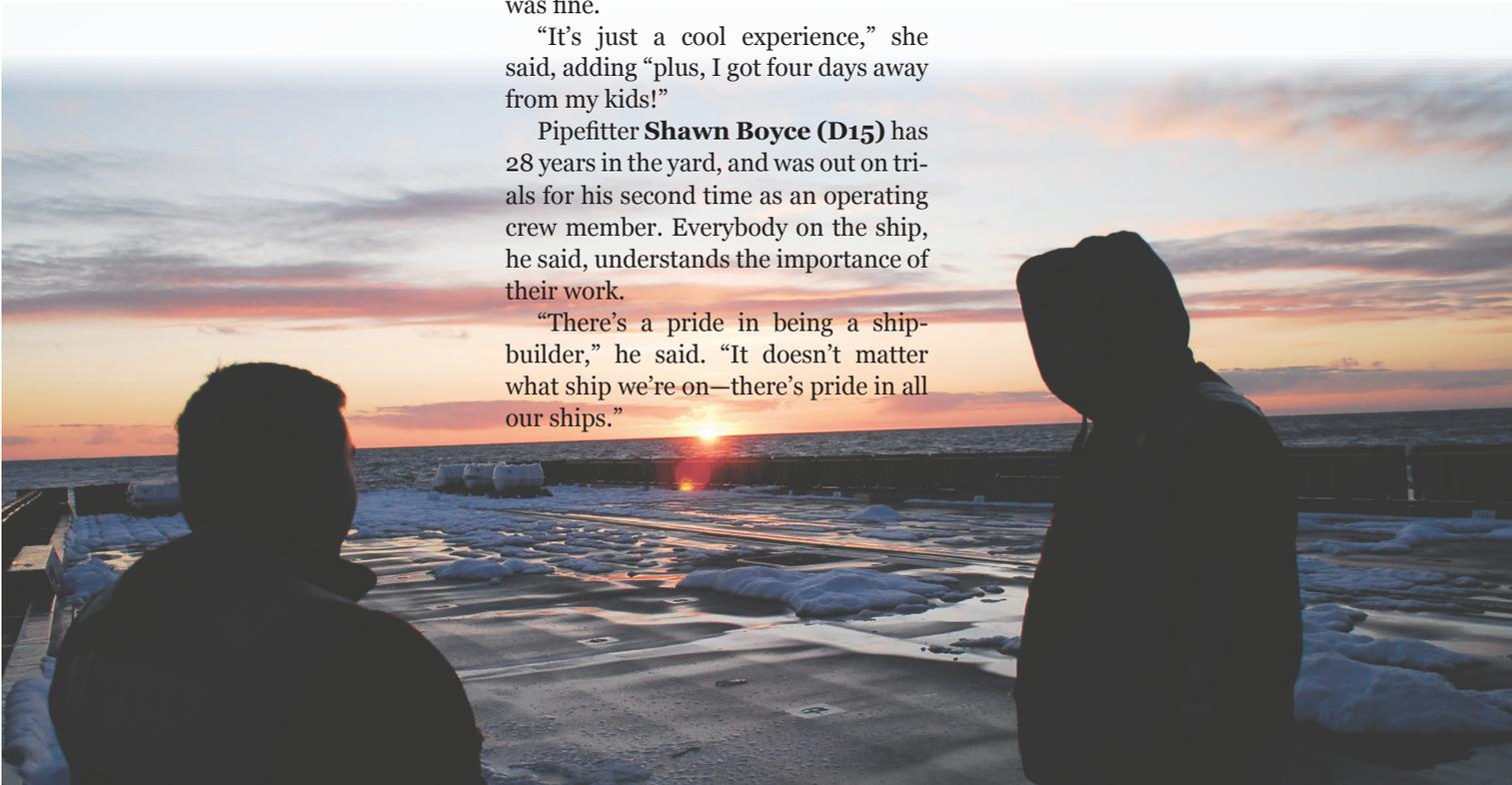
“It’s just a cool experience,” she said, adding “plus, I got four days away from my kids!”

Pipefitter **Shawn Boyce (D15)** has 28 years in the yard, and was out on trials for his second time as an operating crew member. Everybody on the ship, he said, understands the importance of their work.

“There’s a pride in being a ship-builder,” he said. “It doesn’t matter what ship we’re on—there’s pride in all our ships.”



*Clockwise from bottom: Alex Hatherley (D07) and Keith Bickford (D15); Jesse Hines (D25); Heather Bailey (D27); Hatherley and Bickford; Mike Beaulé (D09).*



# Snapshot of BIW History by Andy Toppan

## *Into the guided missile era and the 1960s*

*Guided missile technology had evolved rapidly since the end of WWII, and by the mid-1950s the Navy was ready to build destroyers armed primarily with missiles, rather than guns.*

**B**IW's first ships of this era were the *Dewey* and *Preble*, hulls 333 and 334, ordered in late 1956. Members of the 10-ship *Farragut*-class, these large destroyers were officially designated as "destroyer leaders" or "frigates" (DLGs), and their design was derived from the earlier *Mitscher*-class frigates built at BIW. Perhaps because of this familiarity with the design, and despite being the last of their class ordered, BIW's ships were the first delivered and commissioned in 1959–1960.

The frigates were closely followed by four *Charles F. Adams*-class guided missile destroyers (DDGs), including the lead ship of the class, ordered in 1957 and 1958. The design of these ships was based on the familiar *Sherman*-class destroyers, again substituting missiles for some guns. BIW's ships, hulls 335–338, were delivered in 1960–1961, and were forerunners of 23 ships of the class for the U.S. Navy.

Next in line were three *Leahy*-class frigates (DLGs) ordered in 1958. These ships were completely new, larger, and for the first time designed



*Belknap (DLG 26) and Josephus Daniels (DLG 27), BIW Hulls 342 and 343, fitting out during the winter of 1964.*

entirely for guided missiles, with no significant gun armament. BIW received contracts for only three of nine ships in the class, reflecting increasingly stiff competition for declining shipbuilding work, as more yards fought for a smaller number of ships.

The challenges of constrained budgets and competition were again evident in the *Belknap*-class DLGs awarded in 1961. The ships were designed as a cheaper version of the prior *Leahy*-class, and BIW's bids were so low that there was little chance of making a profit, but five of nine ships in the class were contracted to BIW and were delivered in 1964–1967.

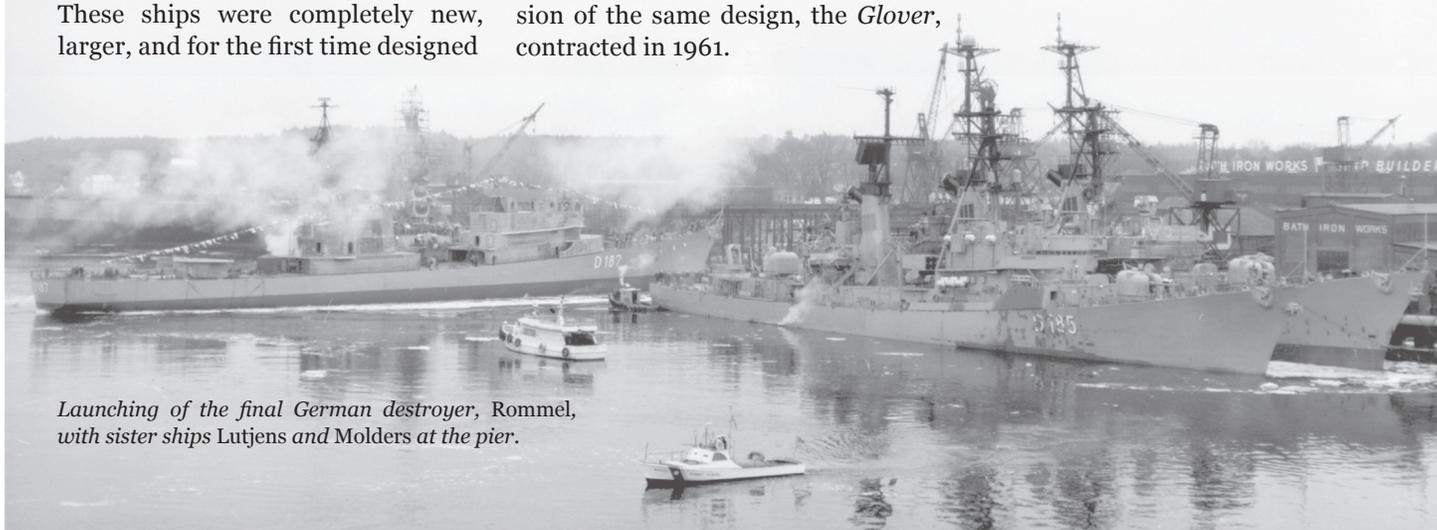
After several years of building large, expensive destroyers or frigates, the Navy again turned to smaller, cheaper destroyer escorts. In 1962 BIW was outbid on contracts for nine ships, but won three *Brooke*-class guided missile destroyer escorts in 1963, following an experimental version of the same design, the *Glover*, contracted in 1961.

While there seemed to be great promise in these contracts, the *Brooke*-class was soon deemed "too expensive" and cut short, and the *Glover* turned into a complex technology development project. BIW was entirely outbid for the next group of "cheaper" ships the 46-ship *Knox*-class, whose construction kept other shipyards busy well into the 1970s.

The ships mentioned above, and their sister ships built elsewhere, formed the bulk of the US Navy's destroyer-type fleet during the early Cold War era. After roughly 30 years of service, they were all retired in the early 1990s as the Cold War ended and the new *Arleigh Burke*-class destroyers came online. Of these ships, only *Charles F. Adams* remains in existence today, moored in Philadelphia awaiting scrapping.

The final ships of this era were three variants of the *Charles F. Adams*-class DDGs, built for West Germany and delivered in 1969–1970. These ships hold a unique place in BIW history as the only warships built for a foreign navy. They enjoyed a relatively long life in German service, with two ships serving until 2003 and one, the *Molders*, surviving today as a museum.

*Next month—The DX Program leaves BIW's fate uncertain, and a return to commercial shipbuilding*



*Launching of the final German destroyer, Rommel, with sister ships Lutjens and Molders at the pier.*

# PROCESS IMPROVEMENT CORNER

by Tim Glinatsis



We are off and running in 2016 with new PIIs coming in daily!

CALL THE CPI HOTLINE at ext. 5171 for help submitting your Process Improvement ideas

This year, the CPI team is focusing on improving the way you receive feedback on your ideas.

If you're a mechanic, you may have met your CPI Coordinator by now. At right is a list of who they are.

The Coordinators are here to help with feedback and remove roadblocks; don't hesitate to get ahold of one of them if you need help with a PII. We're also working to get the word out on your ideas so they are shared and used in all areas of the shipyard that can benefit. With collaboration, we'll become an even better shipyard.

This month, I would like to highlight the Paint Shop's effort in making their work more efficient. The Preservation Technicians, Sign Painters and Sandblasters lead all trades with 137 PIIs implemented in just the first 10 weeks of 2016.

Here are a few examples of the PIIs coming from these tradesmen and women:

**In the blast building**, we use barrels to collect the dust created from the grit. The grated flooring in the building makes it difficult to operate a pallet jack when trying to move the barrels around. **Tobey Frizzle (D30)** decided to lay three-quarter inch plywood on top of the grating for a smooth surface on which to operate the pallet jack. This idea makes changing out the barrels much easier and safer.



Jeromy Lee

**Jeromy Lee (D27)** noticed that there was no way for the temporary ventilation crew to know which tanks were being worked during the week. If temporary ventilation was removed while workers were out of the tanks, there would be significant delay in getting the tanks ready to be worked again. Lee recommended a "Tanks Being Worked" board which could be checked before removing ventilation to ensure work is complete in the tank. Lee's simple idea improves communication and saves time.

TRADE	NAME	PHONE NUMBER
C02/C70/102/S18/Y02	Joe Henry	442-6153
E02	Jim Burak	442-4412
M04/004	Chris (Charles) Davis	442-4805
M20/M21	TBD	TBD
P10/S06	Rose Smeltzer	442-5081
P18	Eric Anderson	442-5079
S40	Tony Leclair	442-4239
T04	Bob Dorr	442-4157
W12	Shon Martin	442-3659



Ben Bishop

**Ben Bishop (D27)** always struggled to get proper paint coverage when using the standard three-inch disposable paint rollers in tight places, such as behind or under foundations. So he suggested we purchase a smaller diameter roller with an ergonomic, reusable handle. Bishop's suggestion improved safety, saved time and improved quality.

**A mechanic on the crew** suggested using sanding sponges instead of sandpaper for irregular shapes. He found it difficult to grip the sandpaper and get a good quality finish. The sanding sponges are easier on the hands, produce better quality, last longer and cost less than sandpaper. In addition to the sanding sponges, an extension for the paint spray gun was added to better access hard to reach places. Both those ideas improve ergonomics, save time, and improve quality.

The Paint Department is off to a great start this year with these good ideas and many more like them. At this rate, they may have a CPI award in their future! Keep the ideas coming and let us know if there's anything we can do to help.

# New Fabrication Leadership

**Kirk Lussier (D10)** says workers at Hardings are making good progress at whittling down a backlog on steel pieces needed by production to stay on schedule.



Lussier

Lussier was made Superintendent of Fabrication at the end of February and his top priority was getting through a backlog of 5,000 items.

“Our mission is to have no late work orders,” he said. The key is making sure the facility’s large burning machines work continually, without having to wait for steel sheets to be placed or cut pieces removed.

“How we load and unload this machine has a huge bearing on how much cutting time he gets,” Lussier said, gesturing to the mechanic seated in the control cab of the apparatus.

Pieces are cut 20 hours a day and the facility is operating seven days a week, he said.

Parts also need to be in inventory locations, so they can be located and delivered to fabricators and installation.

“Nothing’s worse than the guy in Bath who can’t work because the part’s not in the right inventory location.” The materials team has done a nice job of addressing that, he said.

Lussier previously worked in design-build for the DDG 1000, on Flight III upgrades, in Ultra Hall and earlier in his career at EBMF and the Machine Shop.

Also taking on new assignments in fabrication are **Jason Gasper (D10)**, Hardings Plant Manager, **Michelle Riley (D40)**, EBMF Plant Manager and **Don Smith (D10)**, Machine Shop Manager.

They represent what Lussier values in a leadership team.

“I look for people who have energy and are problem solvers.”

Hardings is new territory for Lussier, but he’s settling in.

“The people out here and at EBMF are great people,” he said. “You couldn’t ask for more skilled craftsmen.”



A welder fabricates an item at Hardings.



A large burning machine shapes pieces from a steel plate at Hardings.

## PCU and BIW *WORKING TOGETHER*

**O**n March 9-10, the DDG 1000 Pre-Commissioning Unit (PCU) completed fire hose training with the help of the BIW Fire Department. “In the spirit of firefighting, we immediately responded to **Lieutenant Aaron Getty’s** request for support assistance,” said **Mike Clarke (D26)**, BIW Fire Chief.

Members of the PCU took turns wielding the hose to prepare them for the pressure the shipboard system produces. BIW provided the use of its fire truck, Engine I, for the training.

“It was great working with the yard and we hope to do it again,” said Getty.



Members of PCU train with a fire hose.

Right inset: Lieutenant Aaron Getty and **Dominic Massiano (D26)**.



# BIW Service Anniversaries

## February 2016

Dept	Name	Dept	Name	Dept	Name	Dept	Name
	<b>40 Years</b>						
84	Williams, Michael Robert	80	Douglass, Richard Raymond	40	Seymour, Peter John	86	Mead-von Huene, Katherine
	<b>35 Years</b>	81	Bechard, Mark David	40	Wheelock, Michael Paul	87	Ritzen-Dalton, Patricia Ann
10	Reed, Matthew Lawrence	81	Footer, Stephen Robert	82	Kingsbury, Kelly Lee		<b>5 Years</b>
10	Rioux, Catherine D	84	Gosselin, Stephen Richard	84	Philbrook, David Warren	06	MacCabe, Richard Harley
15	Labbe Jr, Maurice Joseph	86	Drehobl, David Andrew	91	Nichols, Karen Sue	26	Barbour, Daniel Scott
19	Morin, Barry Michael	86	Furrow, Dennis Gordon		<b>25 Years</b>	26	Saxon, Richard Edwin
20	Spicer, Joyce Marie	86	Ramsay, Scott Clayton	91	Parker, Jeffrey Conrad	27	Bean, Kyle Michael
24	Rothwell, John Harwood	87	Cunningham, Mary Abigail		<b>20 Years</b>	27	Cole, Jamey Lee
27	Haggett, Glen Stuart	87	Rice, Roy Raymond	10	Garland, Joseph Allen	27	Heath, Jason Todd
27	Henderson, William James	87	Thibeault, Larry John		<b>10 Years</b>	32	Carpenter, Scott Raymond
32	Toth, Patrick Michael	91	Fournier, Thomas Joseph	06	Giordano, Gerald Kenneth	78	O'Brien, Michael Ryan
43	Ranks, Richard Allan		<b>30 Years</b>	40	Waller, Roy Bert		
50	Baker, Philip Arnold	21	Skillings, Gary Allan				
52	Neal, Larry Arnold	24	Everett II, Stetson Henry				
		24	Simard, Linda Sue				

# BIW Welcome

The following employees recently joined BIW.  
Please welcome them.

## February 2016

Name	Dept	Name	Dept	Name	Dept
Achey, Stephen Dennis	4300	Goodison, Kaleb Matthew	5000	Murchison Jr, Edgar Raymond*	2700
Barrett, Jason Michael	5000	Grant, Douglas Hamilton	5000	Nason, Ian Frederick	0700
Beardsley, Robert Avelino	2601	Grenham, Scott Patrick	2601	Neil, Theodore Paul	2601
Bouchard, Christopher John	9105	Grindrod, Nicole Kristina	5000	Olson, Gregory Boone	4300
Bouchard, Tyler James	5000	Hamblin, Ross Edward	2700	Perry, Harvey Carlton	5000
Brawn, Jacob Tyler	5000	Hench, David Scott	9400	Peters, Brian Matthew	5000
Briske, Jess Edward	8700	Hill, Michael Edwin	2700	Polk, Gregory Allen	4300
Brown, Shelley Ann	1000	Huff, Nathan Edward	4300	Prokosch, Adam John	5000
Butts, Charles Edward	5000	Hull, Robert Lincoln	9105	Reffett, Jeremy Joseph	4300
Coffey, Patrick Allen	2602	Hutchings, Joseph St Charles	4300	Richards, Zachery Dean	5000



The flight deck of Zumwalt stretches toward the Portland skyline.

# BIW In Remembrance

**Edward W. Davis Sr. (R)**  
 March 17, 2016  
 35 Years  
*Associate Engineer*

**Vala T. Kotow (R)**  
 January 8, 2016  
 12 Years  
*Designer 3rd Class*

**Lucas J. Fortin (A)**  
 March 12, 2016  
 3 years  
*Welder III*

**Neil R. Yannayon (R)**  
 March 8, 2016  
 20 Years  
*Electrician III*

**Wayne M. Hamilton Sr. (R)**  
 March 3, 2016  
 13 Years  
*Maintenance Custodian III*

**Stephen A. Jordan (LTD)**  
 March 22, 2016  
 38 Years  
*Principal Project Manager*

# BIW Retirees

## February 2016

**09-00 Richard R. Labbe**  
 33 Years  
*Outside Machinist III*

**50-00 Donald J. Rainville**  
 25 Years, 10 Months  
*Shipfitter III*

**10-00 James M. Price**  
 29 Years  
*Front Line Supervisor*

**54-00 Joanna H. Bragdon**  
 15 Years, 8 Months  
*Sr. Import/Export Specialist*

**15-00 Raymond J. Gagne**  
 36 Years, 4 Months  
*Pipefitter III*

**66-00 James C. Palmer Jr.**  
 27 Years, 5 Months  
*Insulator III*

**19-00 Maurice E. Libby Jr.**  
 37 Years  
*Electrician III*

**77-00 Mark J. Lamarre**  
 29 Years, 2 Months  
*International Programs Manager*

**20-00 Richard F. Suiter**  
 37 Years, 10 Months  
*Maintenance Pipefitter III*

**87-00 Michael E. Blais**  
 33 Years, 9 Months  
*Designer 1st Class*

**29-00 Craig M. Stanley**  
 37 Years, 10 Months  
*Heavy Equipment Operator III*

**91-05 Stephen M. Glidden**  
 36 Years, 4 Months  
*Planning Tech*

**43-00 Alan C. Ladd**  
 42 Years, 5 Months  
*Welder III*

**91-05 Terry L. Sirois**  
 40 Years, 3 Months  
*Planning Tech*

**43-00 Glen A. Stevens II**  
 34 Years, 8 Months  
*Welder III*

**94-00 Dixie A. Stedman**  
 36 Years, 11 Months  
*Principal, Communications*

**45-05 Jill V. Morris**  
 33 Years, 4 Months  
*Administrative Technician*

**50-00 Herman J. Lizotte**  
 33 Years, 8 Months  
*Shipfitter III*

# Performance Incentive

**Performance Period**  
**November 2, 2015–May, 1, 2016**

**PERIOD GOALS:** Status as of Mar. 23, 2016.

- **1. Hazard IDs/"Good Catches"**
  - Identify 750 Hazards by Jan. 31, 2016 and receive ½ payout; identify 750 additional hazards by May 1, 2016 and receive ½ payout
  - Or, Identify a total of 1500 hazards by May 1, 2016 for full payout
  - The existing "Good Catch" program will be used to capture employees' descriptions of hazards or behaviors observed and actions taken to address them.
- **2. Implement 3,000 additional Performance Improvement Initiatives (PII) within the Continuous Process Improvement Management System over the period from Nov. 2, 2015 to May 1, 2016 to achieve a program total of 8,130 since inception.**
- **3. Average 98% overtime attendance rate (e.g., OVT No Faults) over the period from Nov. 2, 2015 to May 1, 2016.**
- **4. Performance**
  - Close 22,860 installation work orders with required quality by Jan. 31, 2016 and receive ½ payout and close 25,090 installation work orders with required quality by May 1, 2016 and receive ½ payout.
  - Or, close 47,950 installation work orders with required quality by May 1, 2016 for full payout.
  - Work orders must be closed in sequence scheduled (out-of-sequence work may not be pulled in).

# Planning Yard Helps Navy Meet Urgent Destroyer Request



The USS Porter (DDG 78), test fires the newly installed rolling airframe missile (SeaRAM) anti-ship defense system during training off the coast of Spain.

When the Navy identified an emergent threat in the Mediterranean, the service announced plans to quickly replace the aft Phalanx 20 mm cannon with a guided missile launcher on destroyers there.

It would be up to a team from Bath Iron Works Planning Yard to figure out how to mount the new system so it would be effective, safe for the sailors on board and not pose a hazard to the sensitive equipment already crowded onto the deck of a DDG 51.

They also would have to do it in about half the time normally allotted for such a project.

“Typically for this type of a change, we would have taken easily a two-year window to look at that,” says **Mark Fochesato (D86)**, Combat Systems Engineer, who helped lead the effort. “We easily cut the time in half from the start . . . For Planning Yard purposes, it was pretty much light speed.”

The Navy is back-fitting four destroyers currently based in Rota, Spain: the *Porter* (DDG 78,) *Donald Cook*

(DDG 75,) *Carney* (DDG 64) and *Ross* (DDG 71.) The ships are part of NATO’s ballistic missile defense shield for Europe. This month, crews are installing the system on the Bath-built *Carney*.

BIW crews had to design the integration of the weapon system with the hull as well as with all the mechanical, electrical and combat systems that need to tie together.

“Blast protection is a huge issue,” Fochesato said. “When a missile launches, there’s a 15 to 20-foot blow torch out of the back of that missile, with very significant temperature and pressure.”

Fochesato said crews worked overtime but the Navy and the shipyard also helped speed up the process. The team was given full access to the ship while it was in Norfolk, Virginia before deploying to Spain.

The project also benefitted from an experienced group that could “hit the ground running,” including: **Steve Rose, Weldon Larkin, Mike Guptil, Dennis Duval, Megan Rines, Tim Clark, Ed Muzeroll and Dave Sher-**

**burne, (all D86).**

A three-dimensional scanning tool provided precise images they could refer to as work progressed.

“It is a culmination of the cooperation of several program offices and agencies...ensuring that out here on the front lines, we receive the capabilities we need, when we need them,” Commander Andria Slough, commanding officer of the *Porter*, told United Press International.



Weldon Larkin, part of the Life Cycle Engineering team, conducts a ship check on the *Carney* (DDG 64) at Naval Station Mayport near Jacksonville, Florida.

# SAFETY HUB



*By Vince Dickinson*

*It is a busy time on the safety front.*



*Rob Lailer and Mike Coombs*

## From Good Catches to Grand Champions



*L to r: Members of the Shell Shop crew that identified 77 Good Catches: Nick LeBlanc, Travis Harrington (D43), Cody Lambert (D43), David Dow (D43), Don Cressey (D43), Peter Chick (D43), Dwight Archer (D10) and John Bean (D43).*

### Good Catch Milestone

On March 13 we hit another milestone in safety. We recorded our 1,607<sup>th</sup> Good Catch, beating our goal of 1,500 for the incentive period. A Good Catch is a potential safety hazard that is identified and corrected before the hazard results in an injury. This program captures the essence of the culture change we are trying to achieve here at BIW—getting everyone involved in safety. Leading the charge on Good Catches was **Nick LeBlanc's (D10)** crew in the Shell Shop with a total of 77. The individual with the most Good Catches submitted was **Robby Hawkins (D06)** (NDT Tech) with 44. This is outstanding participation and helps pave the way in our journey to safety excellence.

### Ergo Cup Winners

On March 23–24 **Mike Coombs** and **Rob Lailer**, both from department 09, were representing BIW at the Applied Ergonomics Conference. They were the 2015 BIW Ergo Cup Grand Champions. They, along with new BIW Employees, **Arthur Gaudreau, Jeff Smith, Casey Smith** and **Alex Fish**, from department 09, conceived, designed and built “The Transit Spider.” Using scrap material and an air ratchet, this device drastically improves installation of RCMP packing for telflex cables. The new process not only is 50 percent faster but it reduces the ergonomic forces by 83 percent. This is another great ex-

ample of our team making process improvements which make a safer workplace. Best of luck to them!

### Workers' Memorial Day

Workers' Memorial Day is observed every year on April 28. This date was chosen because it is the anniversary of the Occupational Health and Safety Act in the USA and commemorates the day of a construction accident in Connecticut that claimed 28 lives.

It is a day to honor those workers who have died on the job, to acknowledge the grievous suffering experienced by their families and communities, and to recommit ourselves to the fight for safe and healthful workplaces for all workers.

Under the Occupational Safety and Health Act of 1970 (OSHA was established the following year), employers are responsible for providing safe and healthful workplaces for their workers. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards and providing training, education and assistance. OSHA reports that 4,679 workers died on the job in 2014. It has not released 2015 statistics yet.

It takes every one of us looking out for each other to ensure that this does not happen at BIW. Take a moment on April 28 to remember those workers who died on the job and use it as an ever present reminder to keep your head in the game and be safe.

# GENERAL DYNAMICS

Bath Iron Works

700 Washington Street  
Bath, ME 04530

PRSR STD  
U.S. POSTAGE PAID  
BATH, ME  
04530  
PERMIT NO.31



## Faces of BIW



*William Pelletier (D25), Lionel Thompson (D25), Ronald Theriault (D25), Brian Saucier (D25), Jean Belanger (D25) and Hugh Lancaster (D10) stand on the BIW pier as they prepare to remove the bow lines for the Zumwalt (DDG 1000) for Builder's Trials.*