

**GENERAL DYNAMICS**

Bath Iron Works

# BIW NEWS

May  
2016

## ZUMWALT (DDG 1000) ACCEPTANCE TRIALS



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# From the Helm

Fred Harris, President, Bath Iron Works

We have a number of important efforts underway here at Bath Iron Works as we seek to improve our efficiency and become more competitive. I consider our most critical initiative, however, to be continuously striving to make our workplace safer.

Our goal is to make sure everyone who comes into the yard—employee, vendor, visitor and others—leaves in the same condition in which they arrived. Personal responsibility is the most important part of this. Much of it comes down to the basics. Wearing your personal protective equipment, or PPE, is a basic rule. Following established policies and procedures is another one.

We're also asking that everyone take "two minutes for safety." What do I mean by that? As you start a job or task, take a couple of minutes to plan your work for safety. Consider the potential risks and hazards that may arise before you begin. Many of our injuries can be traced back to someone who simply didn't think things through.

Two minutes can make the difference between a safe, productive day and a ride in an ambulance.

Beyond personal responsibility, however, we also need to look at safety from a team perspective. Each and every one of us should feel empowered to speak up to help keep us all safe. If you see a fellow worker not using the right PPE, please say something to them! If someone is cutting corners or proceeding on a job in an unsafe way, you have the right—the obligation, really—to stay "Stop!"

If you are the person who has been approached by a fellow employee and asked to do your job more safely, please consider your reaction. Someone is trying to keep you safe. Please

be polite, considerate and appropriate. Your reaction may influence whether or not your colleague speaks up again. If they don't, someone down the road could get hurt.

We all need to extend our consideration of safety to those working around us. Together, we can be safer and smarter than any of us individually. We're looking at this idea in a few different ways. In an article on page 7, Kevin Mershon, our Director of Steel and Ground Assembly, discusses the work he's doing to promote shared responsibility for safety on the deckplates.

Beginning late last month, we started running four-hour safety training sessions for all our mechanics, and our manufacturing managers will attend a two-day safety training. Our goal is to have every member of our manufacturing workforce receive the training by the end of the year, reinforcing our focus on doing our work safely, above all else.

I'd like to end this column with congratulations to the entire BIW team for a very successful and safely conducted set of Acceptance Trials for DDG 1000. The ship has faced a number of challenges over the years, as any lead ship might. However, the recent success at Acceptance Trials can be directly attributed to the determination that is the hallmark of the BIW workforce.

Within weeks, DDG 1000 should be delivered to the Navy, and we'll soon be christening DDG 1001. You should all be proud of our accomplishments on this program.

*work safe*  
*F. Harris*

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Zumwalt (DDG1000) returns from Acceptance Trials.

# Supervisor's Awards Boost Team Spirit

Front Line Supervisor **Tim Vear** started his team's morning muster one day last month by presenting electrician **Jake Bernier** with "The Right Stuff" award, complete with a small plastic figure and a plaque.

Bernier, who has been on the crew of electricians working on Hull 603 since mid-February, has been accepted into a BIW Apprentice Program. He will attend classes at the Employee Development Center two days a week and work in the yard three days a week. In four years, he graduates with a Maine Maritime Academy degree in ship production.



**Jake Bernier**, electrician with "The Right Stuff."

Every other week, Vear presents awards to members of the crew—a practice Bernier says builds teamwork and morale.

"Recognition isn't something you get that often," Bernier said, holding his award—a two-inch figure in the green gear of a bomb squad

technician on a red base, colors chosen to reflect his Marine Corps service. "Even if it's just a group of 12 guys, it's pretty cool."

Brothers **Matthew** and **Justin Combs** both started working at BIW as electricians less than a year ago and

are very happy to be working for Vear. "The group really works well as a team; there is no hesitation when looking for guidance," said Justin.

Vear said everyone brings unique views and skills to the team.

"Recognizing an individual's contribution lets us all see each other's importance, value, and role in the group's achievements," Vear said. "Plus it's just fun."

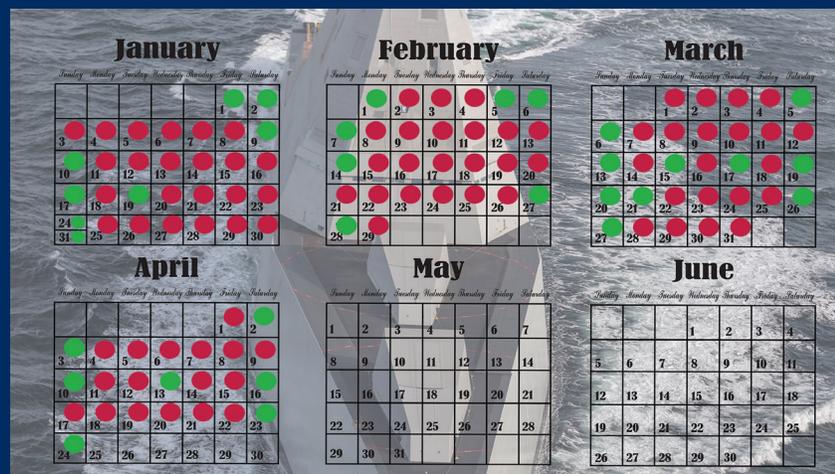
With an eye on retiring in a couple years, Vear said the shipyard is in good hands with talented young workers like his crew. He said the team identified half the PIIs in the department and 20 percent of the Good Catches.

"They are a great group of marine electricians and I have no worries for BIW with them in charge."



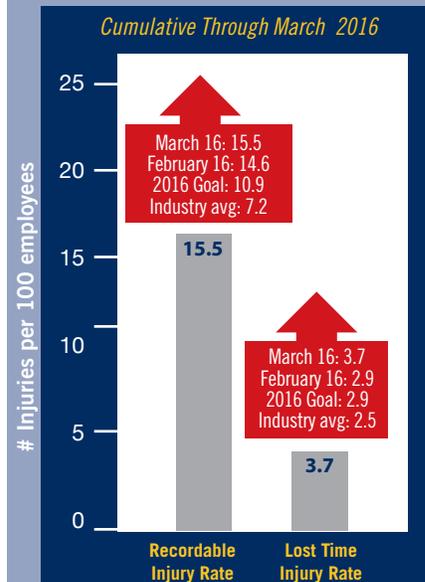
L to r: **Adam Tanguag, Jake Bernier, Tim Vear, Jason Kenney, Chris Eastman, Joe Foye, Tom Staples, Pete Hudson, Justin Combs, Alean Cherkis and Matt Combs**, all from the Electrical Department.

## 2016 RECORDABLE/LOST TIME INJURIES



## Safety Performance March 2016

### INJURY RATES



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

Rate Decreased  
 Rate Increased  
 No Change

Colors show performance to goal  
 Meeting Goal  
 Above Goal

# 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).

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# EMPLOYEE SPOTLIGHT

## TELL US A LITTLE ABOUT YOURSELF.

I was born, raised and still live in Brunswick. I went to St John's Catholic School through 8th grade then Brunswick High School, graduating in 1973. Bath Iron Works hired me in 1977. I am engaged to a wonderful woman, **Nancy Larsen**, a designer at the Church Road Office Facility (CROF). I have one daughter Amanda, a wonderful son-in-law, Jamie Favreau, and a new granddaughter, Taylor.

## HOW LONG HAVE YOU WORKED AT BIW?

I've been here 38 years. I started in the Outside Machinist Department as a material clerk. I was at the PSA Program Office until last year then moved here to the Planning Yard.

## WHAT IS YOUR ROLE AT BIW?

I'm a work plan manager. We manage work for ships in the fleet. When the government says we have a chance to work on a ship, our people check its condition, designers create drawings and we manage the work during that availability.

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

I enjoy interacting with people. I try to come to work every day on a positive note and leave every day on a positive note. If I can provide some happiness in someone's life or do something positive for someone not having a good day, then I've accomplished something.

# ROBERT DIONNE



**Title** Work Plan Manager

**Been with BIW since** 1977

**Department** 71

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

My motorcycle—a Yamaha Star Stratoliner—is a big thing for me. I like being on two wheels and feeling the wind in my hair.

## WHAT IS THE NUMBER ONE CHALLENGE YOU FACE IN YOUR JOB?

Right now this is a learning process for me. I pretty much evolved in the company and in the past, when I moved from one area to another, I had a pretty broad sense of knowledge in what I was doing, but I had never been involved in the Planning Yard and didn't have a lot of background here.

## WHAT IS YOUR BIGGEST PET PEEVE?

People that don't appreciate what they have, whether it be your job or family or whatever.

## 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)

# DDG 1001 POWERS UP

Crews working on *Michael Monsoor* (DDG 1001) at the Land Level Transfer Facility last month sent 4,160 volts coursing through the thousands of feet of cable that power the ship, achieving Energize High Voltage (EHV) in 40 percent fewer hours than the first ship in the *Zumwalt*-class.

**Jeff Desrosiers**, Electrical Test Assistant Superintendent, said energizing the electrical system allows crews to test all the other components on the ship.

“It’s the heart of the ship,” Desrosiers said. “It starts the blood being pumped out to the rest of the ship so the rest of the ship comes alive.”

A lesson learned from the first ship was to have the largest and most complex spaces of the ship complete, because once high voltage is energized it is more dangerous and sometimes impossible to do other work there like spray painting. In addition, the team on DDG 1001 used the Engineering Control System (ECS) to operate the high-voltage system during initial light-off. Desrosiers described ECS, which controls power to different ship systems, as the brain that tells the heart to distribute blood.

Being able to energize the system remotely by a computer through ECS was a major leap forward compared to the first ship in the class, said **Evan Gilman**, Ship Superintendent.

“Because we did the ECS up front, when we lit off the high voltage we were able to turn a switch, instead of physically closing breakers,” like on DDG 1000, Gilman said. “It’s safer. It’s doing it the way the ship is designed and not doing work-arounds before the ship is fully built.”

The ship’s turbines aren’t generating the power yet. Instead, power is coming from the shipyard.

The *Zumwalt* class uses 4,160-volt power compared to the 450 volts used by DDG 51s and many employees working on DDG 1001 were new to it. That much power means the consequences of a mistake can be much more dangerous.

“We talk safety every single day. All the crews do,” Desrosiers said. “We have a lot



A gauge on DDG 1001 shows that the ship now is energized by 4,160 volts of shore power.

*“It’s the heart of the ship,” Desrosiers said. “It starts the blood being pumped out to the rest of the ship so the rest of the ship comes alive.”*

of procedures in place about protecting electricians and everyone else on the ship.”

The crew proactively delayed EHV for a couple of days to make sure everyone knew what to expect.

“We recognized we had to take a few days and do more education for our newer people” about the differences of working with 4,160 volts, Gilman said. “That also gave the technicians more time to be sure everything was safe.”

A practice instituted on DDG 1000, and continually in use on DDG 1001, is to perform Failure Modes and Effects Analysis, (FMEAs) before major activities. Basically, everyone gets together to brainstorm what could go wrong, then develop practices or procedures to prevent it. The FMEA process has been a great way to plan and make sure we have a safe and efficient process for doing some of the most complex activities in the shipyard, Gilman said.

Crews on *Michael Monsoor* have benefitted from lessons learned on the lead-ship *Zumwalt*, making for smoother and swifter progress on this ship.

It was months after activating 4,160-volt power before *Zumwalt* was able to test the 1,000-volt Integrated Fight Through Power (IFTP) system. On *Michael Monsoor*, Gilman said, it was a few days.



L to r: **Scott Bonk**, Hull Test Manager, **Jeff Desrosiers**, Electrical Test Assistant Superintendent and **Evan Gilman**, Ship Superintendent, led the effort to Energize High Voltage (EHV) on DDG 1001.

## Health Improvements

# No hospital is good at everything

### *Quality varies just as much as price*

That being the case, it's a good thing you have **Healthcare Bluebook** to make it easier to find out where to go to get the care you need. Now available to *all BIW employees currently on any of our health plans*, Healthcare Bluebook is a tool to help you research the quality of inpatient procedures at regional hospitals.

Quality rankings are designed to help you understand how hospitals rank in each clinical area and include things like complications, safety and more, so you can find the right hospital for your needs.

Where you go for healthcare services also can make a big difference on the price tag. The Healthcare Bluebook Fair Price™ lets you know what you should be paying for quality care, so you don't pay more than you have to.

Remember to confirm whether your provider is in-network before scheduling a procedure.

Use your computer or smartphone to search for quality or cost information on Healthcare Bluebook. The tool is easy and free for you to use.

### THE TRUTH IS, NO HOSPITAL IS GOOD AT EVERYTHING

Quality varies just as much as price.

Healthcare Bluebook ranks hospitals by clinical service, so you and your doctor can find the right hospital for **your** procedure.

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## Global Reach

While the average daytime temperature in Hawaii in the winter is 78 degrees, that doesn't mean that Bath Iron Works employees **Shawn Colson** and **Noel Gaon** aren't working just as hard on preparing ships for deployment. Colson and Gaon, a team of two, are the liaisons between BIW Planning Yard and local government entities, including Pearl Harbor Naval Shipyard, crew members of homeported ships, Space and Naval Warfare System (SPAWAR) and Naval Sea Systems Command (NAVSEA).

Colson has been with BIW for a little more than 20 years and worked in Bath at the main yard prior to taking on the Home Port Representative job in Hawaii. Gaon retired from the Navy prior to joining BIW more than five years ago.

"I enjoy the appreciation from the sailors assigned to our ships, being able to resolve complicated issues that are facing the government entities who are keeping



**Shawn Colson** (left) and **Noel Gaon** on the flight deck of the Bath-Built Arleigh Burke-Class guided missile destroyer USS Chafee (DDG 90).

our ships 'fit to fight'" said Colson.

If the April 26 snowstorm in Maine had you discouraged, unfortunately, you

just missed the job posting that closed on April 30 for a second designer position in Hawaii.

# Safety—Everyone’s Job

**K**evin Mershon was interviewing a mechanic who had suffered a series of injuries from getting debris in his eyes, when he noticed the man remove his safety glasses to wipe sweat from his forehead with his sleeve - which was covered in metal particles.



**Kevin Mershon**

Mershon, the Director of Steel and Ground Assembly, told the mechanic to try a fresh rag kept in a clean pouch instead. The man avoided future eye injuries.

The after-injury interviews—Mershon and his team do them regularly—drill down into the cause of an injury to prevent them in the future.

“If I can learn what happened to you to help others, and prevent them from getting injured in the same fashion, we’re going to do that,” Mershon said.

The process doesn’t stop there. Mershon continued the interview with the supervisor.

“I said: ‘You’re with him every single day. I would have expected you to solve this problem,’” Mershon said. “It’s about finding root causes to problems of safety.”

In many cases, Mershon’s team turns that same magnifying glass on the area manager and the assistant superintendent for the trade involved.

“Through a process of pushing accountability up the chain to everyone involved, they have been able to improve” injury rates,” said **Vince Dickinson**, Director of Environmental, Health and Safety.

From 2014 to 2015, the pre-outfit area—with historically high injury rates—saw

recordable injuries drop 34 percent. This year they’re down another 12 percent from there.

Now that successful approach to improving safety is being pushed out to other directors.

There are three components to any injury review: behavior, environment and process, Dickinson said.

The employee and the supervisor control behavior—what they should have been doing differently, whether it’s wearing their personal protective equipment (PPE) or taking a minute to think about what could go wrong.

Environmental factors are the domain of the area manager. If the injury was caused or compounded by unsafe conditions, the person in charge of that area needs to anticipate that.

Injuries that involve process—like extensive grinding in the overhead that leads to a shoulder injury—are something the trade superintendent needs to address so it doesn’t happen again.

It’s about everyone taking responsibility for their coworkers’ safety.

“What I like about the process is they’re digging into the recent cases and looking at injury issues within environment, process and behavior and you really can’t solve that unless everyone is involved,” Dickinson said.



L to r: **John Foster**, Section Manager, **Daniel Viens**, Frontline Supervisor, **Kevin Mershon**, Director of Steel and Ground Assembly, and **Ryan Kennett**, Shipfitter, meet at 5 Skids to discuss recent back injuries and ways to prevent them in the future.

## Eisenhower School Visit

Members of the National Defense University’s Eisenhower School visited Bath Iron Works on April 5 and received a tour of the shipyard. The Dwight D. Eisenhower School for National Security and Resource Strategy is located on the university’s campus at Fort Lesley J. McNair in Washington D.C.



# TEAMWORK

## *YIELDS SPEEDY RECOVERY*

**A**round 10:30 p.m. on Saturday, February 27, Bath Iron Works went “silent.” All computer systems (email, inventory, System Application and Products (SAP), etc.) and telephone systems were down.

A significant water main break underneath North Stores had flooded the ground beneath the building and caused the water table to rise up into the building itself. The water then filled the false decks beneath BIW’s main data center and shorted out power to the entire system. To make matters worse, this also shorted the uninterruptible power supply (UPS), which then began to smoke and smolder, ultimately triggering the fixed fire suppression system.

In short order, the company’s data center was a mess.

That night, it was clear that North Stores was flooded and it would be virtually impossible to conduct business on Monday without the computer systems working.

“On Saturday night, I didn’t think a Monday morning recovery was possible,” said **Tim Glinatsis**, BIW’s Chief Infor-

mation Officer. “There were six inches of water in Fitzgerald Conference Room, and our main power supply was toast.”

The BIW Facilities team responded quickly. Within a couple of hours they had isolated the water main and had all water pumped out of the false floor and the conference rooms. They set up blowers to dry affected areas, conducted continuity checks on the cabling that had been submerged, and rerouted electricity for the data center around the failed UPS.

Facilities workers established safety barriers around the front of North Stores to prevent anyone from stepping into the sinkhole created by the water line rupture. With help from the BIW Fire Department, they rigged up an alternate source of water for fire suppression.

By 3:00 am on Sunday, the Facilities team had stabilized the building and the power. By then, Computer Sciences Corp. (CSC) had more than a dozen people onsite and they began the delicate and tricky process of restarting the BIW systems.

There are more than 600 servers and more than 70 business applications at

BIW. Each one of those servers was essentially “unplugged” when the UPS failed – an event that can often cause hardware failures and data corruption. Because of that, each one needed to be individually started and verified for availability; fortunately very few had been damaged or corrupted. The phone system had to be restarted and verified. The email servers, WiFi, Virtual Private Network (VPN), Intranet and Time Accounting System (TAS) each had to be individually started and checked for functionality.

Over the next couple of hours, more CSC personnel would join the onsite efforts and would be complemented remotely by personnel working throughout the country. Many CSC personnel worked 36 hours straight, restoring functionality to the business.

“The rest of us showed up on Monday morning, booted up our computers, made our phone calls and went about doing our jobs - just like nothing had happened,” said Glinatsis with a smile. “What these guys did was nothing short of incredible.”



*The crackerjack team that successfully brought BIW back online.*

# DDG 1001 Christening Set for June 18



*Petty Officer Monsoor*



*Ship's sponsor, Sally Monsoor.*



*Matrons of Honor; Martha, Sara and Naomi.*

**B**ath Iron Works has begun preparing for the June 18 christening of *Michael Monsoor* (DDG 1001).

The ship is named for Petty Officer Second Class (SEAL) **Michael A. Monsoor**, who was killed at the age of 25 while he was conducting operations in enemy-held territory at Ar Ramadi, Iraq for Operation Iraqi Freedom on September 29, 2006. Petty Officer Monsoor received the Medal of Honor posthumously for his courageous and selfless actions while sacrificing his life to save the lives of his comrades. His mother and father, **Sally** and **George Monsoor**, accepted the medal in early 2008.

Sally Monsoor is the ship's sponsor and will break a bottle of champagne over the vessel's bow in the important Navy ceremony. Her daughter **Sara Monsoor** and two daughters-in-law **Naomi**

and **Martha Monsoor**, will assist her.

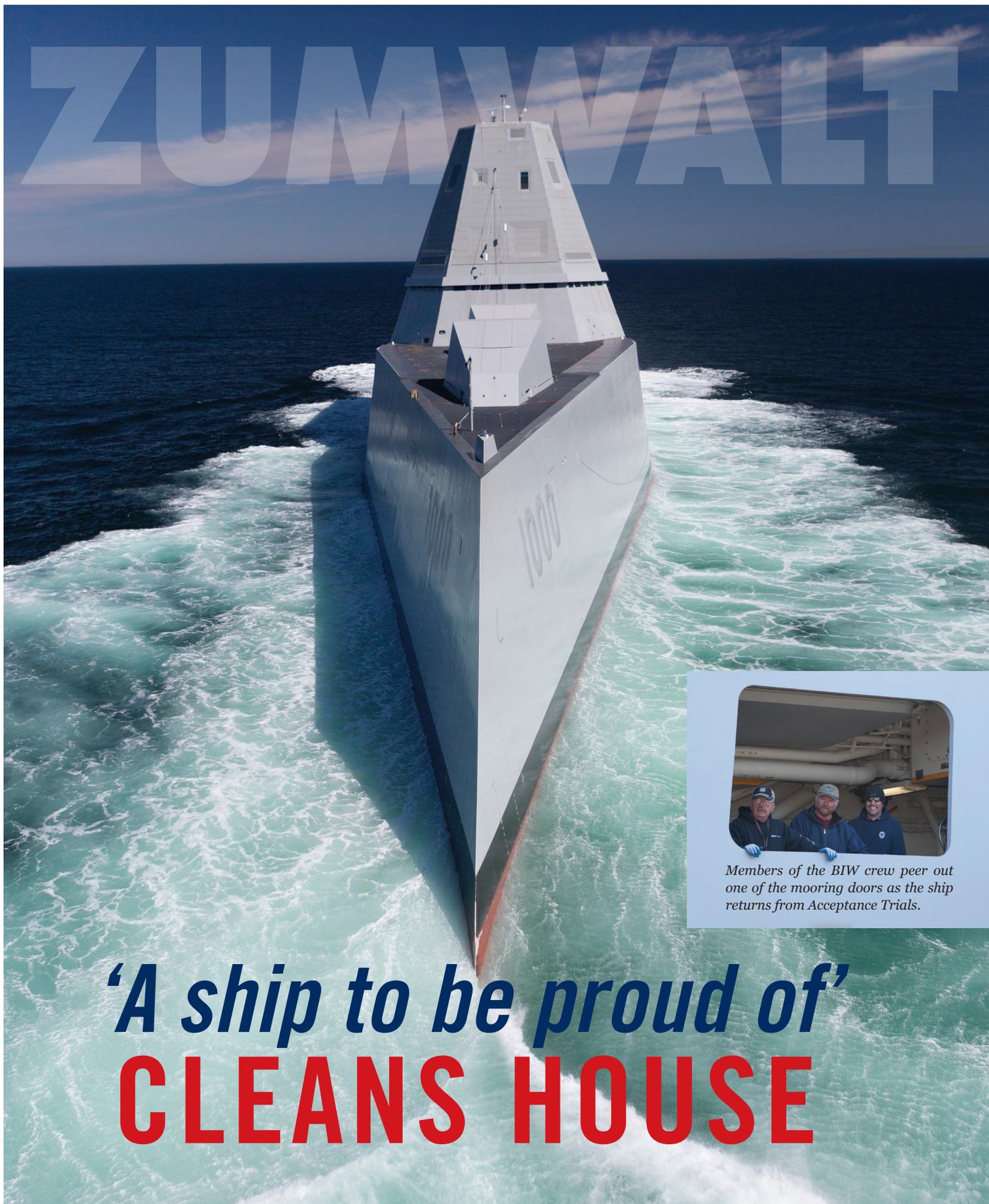
George and Sally, Sara and her husband Richard, and Michael's other siblings—**Joseph** with his wife **Naomi** and **James** with his wife **Martha**, visited Bath Iron Works last September for a St. Michael's Day blessing on the flight deck of DDG 1001. In early March of 2013, Sally and George authenticated the ship's keel by striking welding arcs onto a steel plate containing their initials.

Following the christening ceremony, DDG 1001 will be translated into the drydock, floated and brought to Pier 4 for the next phase of construction. This christening will be the second of the *Zumwalt*-Class; DDG 1000 was christened in April 2014.

The christening of DDG 1001 will be open to the public.



# ZUMWALT



Members of the BIW crew peer out one of the mooring doors as the ship returns from Acceptance Trials.

*'A ship to be proud of'*  
**CLEANS HOUSE**

As the haze-gray hull of *Zumwalt* glided silently up the Kennebec River, there was an air of nervous anticipation among Bath Iron Works employees lining the waterfront.

The first-in-class ship, the most complex surface combatant in the history of naval shipbuilding, had been tested under intense scrutiny from INSURV, the Navy examiners who would rate the ship's performance and determine whether to recommend the Navy accept her.

The 610-foot long hull, designed for maximum stealth, approached, and there was no sign of brooms, traditionally hung from the mast yardarm as a sign of a successful Acceptance Trial.

As the ship slipped past the Bath Iron Works dry dock and neared its new home on Pier 3, the silhouette of a broom could be seen against an aquamarine sky.

Then another...and another.

As tugboats spun the ship so her bow faced downriver, **four** brooms hung beneath the blue and white BIW flag in front of the massive deckhouse.

"Awesome... A clean sweep!" proclaimed **Rich Bonang**, a maintenance pipefitter who had paused to watch the arrival. "It looks great!"

Naval vessels have for generations hung brooms from their rigging to indicate a "clean sweep." In wartime, that could mean sweeping the enemy from the battlefield.

"There definitely is a Navy tradition of flying a broom for a 'clean sweep' on a mission," said **Robert Percy Jr.**, Supervisor and Trial Coordinator. "For BIW, a broom signifies a clean sweep on trials."

Brooms sometimes correspond to specific areas tested, such as habitability, mechanical and electrical systems.



Workers untie *Zumwalt* from the pier as it readies to leave for Acceptance trials.



*Zumwalt* returns from Acceptance Trials flying four brooms: mission accomplished.

A broom also can denote a special recognition when a first-in-its-class ship—one that has never been built before—still dazzles during Acceptance Trials. In this case, there also was recognition for the ability of the BIW supervision and mechanics to identify problems on the world's most technically advanced warship and to rectify them, said **Phil Kinney**, Director of Ships Completion for the DDG 1000 Class.

"Our employees accomplished an incredibly difficult task building this ship even as its design was evolving. This is a ship that everyone at the shipyard should be proud of," Kinney said.

Acceptance Trials were a success, though they are never flawless.

"Sea trials on an advanced destroyer is a major event and thousands of things are demonstrated. We often have pick up items to complete when we return," said **Clint Robbins**, Director. The Navy and BIW crew generally confer on whether the performance warrants a broom.

These trials were more grueling than for previous ships.

"The level of inspections by INSURV on DDG 1000 took weeks instead of days as it would on a DDG 51," said Steve Colfer, Director of Test and Trials. "Mechanics and technicians worked a lot of overtime and weekends to make the trials a success and my hat goes off to them for their dedication."

After 27 hours of sea trials, *Zumwalt* was moved to Pier 3—the first ship to tie up there since *Michael Murphy*—to open up Pier 4 for *Michael Monsoor*, which is being Christened June 18.

Once any outstanding issues have been addressed, the *Zumwalt* will be turned over to the Navy. Later this year, the Navy crew will depart the Kennebec River one last time, heading to Baltimore for commissioning on Oct. 15. It then heads to San Diego for mission systems activation and will join the fleet in 2019.



BIW employees, Navy personnel and members of INSURV await a presentation in the helo hangar prior to departure.

## From the Fleet *USS Donald Cook* (DDG 75)

BALTIC SEA —The *USS Donald Cook* (DDG 75) is underway on April 12 conducting a routine patrol in the U.S. 6<sup>th</sup> Fleet area of operations in support of U.S. national security interests in Europe. *Donald Cook*, a Bath-built *Arleigh Burke*-class guided-missile destroyer, was delivered to the Navy on August 21, 1998. Photo and text courtesy of the U.S. Navy.



## NEWS FROM OTHER GENERAL DYNAMICS COMPANIES *GENERAL DYNAMICS SATCOM TECHNOLOGIES, WORTHAM, TEXAS*

General Dynamics SATCOM Technologies recently completed construction of a 7,000-square-foot radar receive array structure that is part of the Space Fence radar system being developed for the U.S. Air Force. The Space Fence radar system is an advanced ground-based system that will help the Air Force detect, identify and track more than 100,000 objects orbiting in space, helping to protect commercial and government satellites, the Hubble Space Telescope, International Space Station and other space-based assets.

“The ground-based receive array is an elegant merger of a huge physical structure built with the precision of a complex scientific or medical instrument,” said **Mike DiBiase**, Vice President and General Manager of General Dynamics Mission Systems. “The SATCOM Technologies-built array has the sensitivity to locate, identify and track objects as small as a softball, hundreds of miles above the Earth’s surface.”

The structure stands a little more than 39 feet tall and is about the size of two regulation NBA basketball courts placed side-by-side. It is designed to withstand earthquakes, hurricane-force winds and extremes in temperature and humidity while maintaining a consistent surface flatness that varies less than one millimeter from one end of the structure to the other and from side-to-side.

General Dynamics SATCOM Technolo-

gies, a subsidiary of Mission Systems, is a global leader in satellite and wireless communications for video, voice and data. In 2014, Lockheed Martin awarded a contract for Space Fence ground structures to SATCOM.

The primary Space Fence system will be located at the Kwajalein Atoll, 2,100 nautical miles from Honolulu, Hawaii. The system is expected to begin service in 2018.



# Snapshot of BIW History by Andy Toppan

## *Modernization and commercial shipbuilding*

*BIW diversifies to survive after loss of a key contract*

In the late 1960s, the Navy adopted a new approach for the DX Program, a large class of destroyers meant to replace aging WWII-era ships in the fleet. Rather than preparing an initial design and seeking bids to build a few ships each year, the Navy planned to award a single contract for design and construction of up to 85 ships. The winner-take-all DX competition would be worth billions of dollars, and attracted interest from the largest aerospace and defense companies.

Faced with this stiff competition and few options for other work, BIW submitted its proposal for the DX program in 1969. The proposal included a vast expansion of the shipyard south along the river, nearly to today's Maine Maritime Museum property. Despite BIW's best efforts, the yard was significantly outbid, and the DX program was awarded to a competitor. This left the company's future in doubt, as by 1970 there were no ships under construction in Bath, and little prospect of future Navy shipbuilding work.

Hope for BIW's survival lay in two directions, both outside the yard's normal work: commercial shipbuilding and



*Construction of the new Assembly Building in the late 1960's, with the old Assembly Building (now Shell Shop) in the background.*

Navy overhaul and repair work. BIW's first postwar commercial contracts, for 610-foot *Sea Witch*-class container ships, came a few years before the DX contract loss. Three of these ships, hulls 354 through 356, were constructed in 1965–1969, alongside the last of the West German destroyers.

Following the DX contract loss, BIW pursued this commercial work more aggressively and received orders for three more of the class, built in 1970–1973. These were followed by four *Sealift*-class tankers and four *Maine*-class roll-on/roll-off car carriers, through the mid-1970s.

Alongside the commercial shipbuilding program, BIW successfully pursued Navy overhaul work. Starting in the late 1960s and running into the 1980s, BIW did overhaul and modernization work on more than 40 Navy and Coast Guard ships. While most were destroyer-type ships, including

some built at BIW just a few years earlier, the 796-foot replenishment tanker *USS Detroit* set a record as the largest ship ever seen on the Kennebec River. This business was valuable in filling gaps in the yard's workload, but came to an end when the Navy decided to perform overhauls in the ships' homeports, to minimize disruption for the crews.

Despite the challenging times, BIW invested heavily in shipyard modernization throughout the 1970s. This expansion allowed construction of much larger commercial ships and pre-outfitted ship units of up to 220 tons, a dramatic increase from 50-ton units in the 1950s. In this era, three of the old wooden shipways were rebuilt with concrete and steel, the fourth set of ways was replaced by the landmark 220-ton capacity #11 crane, and most of the old elevated craneways were removed. The yard modernization also included construction of the first modern blast and paint facilities, the first section of today's Assembly Building, and Pier 3 – originally a finger pier projecting into the river, but now the north face of the Land Level facility. This modernization left the yard well-positioned to win future business, both commercial and naval.

*Next month—Busy times with the FFG Program*



*The November 1, 1975 launch of Arizona, hull 367, a roll-on/roll-off car carrier.*

# PROCESS IMPROVEMENT CORNER

by Tim Glinatsis



More than 1,800 PIIs have been implemented in 2016.

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



*L to r: The team improving how BIW brings contracted employees and consultants into the yard: Nannette Reed (D01), Theresa Clark (D49), Ryan Cunio (D24), Patti Rethi (D49), Nick Favreau (D12), Ashley Douglass (D24), Sarah Nicholson (D4630), Tim Sheldon (D40), Cynthia Lobikis (D49) and not pictured, Doug Munsey (D87).*

The first quarter of the year is in the books, and it's clear we have kept our foot on the gas when it comes to continuous improvement; we already have over 1,800 PIIs implemented in 2016!

In addition to all those small improvements each of us is making to our day-to-day tasks, sometimes a problem is so big we need to get a team together to figure out how to fix it. That's exactly what we did for these Lean projects:

**SERVICES LIKE RIGGING** or stage building support sometimes can be difficult to arrange. This sort of support is in high demand, and we had no good way to schedule and prioritize the requests. So a team in the Assembly Building and Panel Line, led by Black Belt **Mandy Millett**, developed a new process and tool to capture, organize and prioritize requests for carpenter, rigger/crane, inspection, safety, stage building and surveyor support.

The new process has been rolled out in the AB, Panel Line and on the Land Level, with a near term plan to roll out to PO2 and Ultra Hall as well. A team also is working to expand the process to support requests for paint and insulation removal.

**WELDING WORK** for years has been structured as a support trade. In other words, welding was budgeted based on the work loads of other trades, rather than actual weld scope or weld footage in a job. Since welding budget and jobs aren't aligned with the actual work the welders have to do, it becomes very difficult to manage the budget and make sure we have enough welders in

the right areas to accomplish all the work.

A Lean team, led by Green Belt **Sarah Bramson**, is currently developing a DDG 51 job structure that better aligns with how our welders and their supervisors work best. The team also is leading an effort to count weld footage for each job to make sure that welders have the right amount of budget for the work in front of them.

**NEW FACES IN THE YARD** and a growing employment development program have the Human Resources Department hard at work making improvements. One improvement deals with the way we bring contract employees and consultants on board to fill salaried-type roles or MOA-approved temporary labor positions.

A team in HR, led by Black Belt **Nannette Reed**, is working to develop a new procedure to improve and streamline the process. This will make it easier to comply with employment laws while expediting the process when onboarding future temporary labor and consultants.

This year, the CPI Team is focused on making sure we're doing the right projects in the right order to improve our competitiveness. We've rolled out our new CPI Strategic Project Selection Process, which guides our leaders and management through selecting the projects with the most impact. We're also working on new ways and tools to ensure we sustain project outcomes, rather than falling back into old habits.

We know PIIs can't fix all the big problems, and our Lean Belts are hard at work tackling those big issues. Please keep the ideas coming, and let us know what we can do to help.

# WHO'S VISITING THE SHIPYARD?

Some 40 people participating in the Leadership Maine program toured Bath Iron Works on April 8. The group—drawn from government, industry, health care and education—is learning about Maine's economy and the challenges leaders face. The tour was organized by **James Sawyer** in Estimating, BIW's participant in the program.

"The feedback was very positive," Sawyer said. "The group was impressed with the improvements we are making."

Leadership Maine is a yearlong program sponsored by the Maine Development Foundation aimed at helping to prepare the next generation of the state's leaders.



## Green Belt Graduates Attack Problems

Two groups of BIW employees graduated from Green Belt classroom training in March and April and are now applying the principles of lean manufacturing to projects in their own areas.

The groups were trained in Lean Six Sigma, an approach to eliminating waste and boosting quality.

BIW has used principles of lean manufacturing to improve processes throughout manufacturing.

Green Belt training teaches students to consider problems in light of the overall manufacturing process.

"I was one of those people that would attack a problem head-on, looking to solve the immediate issue," said **Rose Smeltzer**, a manager in Manufacturing Operations and graduate of the two-week class. "Now, I tend to look for the



L to r: **Dan Nadeau (D10)**, **Ryan Cunio (D24)**, **John Janelle (D10)**, **LT Ryan Bohning (SOSB)**, **Nathalie Nepveu (D49)**, **Tim Neagle (D10)**, **Roger Charest (D08)**, **Josh Hill (D87)**, **AJ Buzzell (D10)**, **Sean Fidler (D87)**, **Tim Kelley (D40)**, **Jolene Nickerson (D24)**, **Shon Martin (D10)**, **Jim Burak (D10)**, **Ellen McIver (D40)**, **Dan Howe (D20)** and **Chris Davis (D10)**.

reason behind the problem."

**James Barbour**, also in Manufacturing Operations Management, said a key takeaway was that it takes employee creativity and empowerment to improve a process more than it does capital investment.

Green belts and black belts, terms bor-

rowed from martial arts, designate ability to use Lean Six Sigma skills, including analysis, facilitation and leadership.

"The training provided the group tools for identifying bottlenecks in a process, then bringing a team together to propose and implement logical solutions," said **Mike Chamberland**, who works in Estimating.

Green Belt certified means these individuals will lead Lean Six Sigma initiatives in their own areas along with their other job responsibilities.

**Pat Thomas**, Vice President Programs, told the March graduates: "What you're doing in your Green Belt projects, implementing things that you learn, is really important. How you apply those principles is a big part of what our future can be."



L to r: **Mike Chamberland (D05)**, **Regan Parini (10)**, **Rose Smeltzer (D10)**, **James Barbour (10)**, **Rob Larochelle (D24)**, **Matt Riondet (D40)**, **Dan Scala (87)**, **Patrick Bailey (D20)**, **Erica Scott (D08)**, **Marc Amero (D40)**, **Alicia Meservier (D84)**, **Chris Main (D20)** and **Zach Libby (D87)**.





The following employees recently joined BIW.  
Please welcome them.

## March 2016

| Name                      | Dept | Name                        | Dept |
|---------------------------|------|-----------------------------|------|
| Averill, Dusty Sean*      | 2700 | Moore, Brendan Arden        | 7000 |
| Barrington, Larry Mark*   | 2700 | Moore, Brian Jacob          | 6060 |
| Beaulieu, Kayla Marie     | 2700 | Mullen, Scott Alan          | 4300 |
| Beebe, Jeffrey Ryan*      | 8700 | O'Hara, Ryan Taylor         | 4300 |
| Billing, Mark Richard     | 8700 | Pelletier, Tracey Ann       | 2700 |
| Bryant, Ansel William*    | 8600 | Plumadore, Shane Michael    | 9105 |
| Burton, Andrew Derrick*   | 5000 | Pomerleau, Ann Marie        | 4505 |
| Clark, Daniel James       | 8700 | Schrammeyer, Michael Anton  | 8600 |
| Collins, Alexander James  | 2700 | Sherman, Zebariah           | 4300 |
| Corey, Daniel Allen       | 2700 | Soule, Christopher Dana     | 5000 |
| Correa, Robert Gervacio   | 4300 | Terrell, Kaaleb Michael     | 2700 |
| Cullivan, Brad Allmon     | 5000 | Theriault, Michael Jeffrey* | 5000 |
| Cyr, Melissa Marie        | 9105 | Tobin, Michael Joseph       | 8000 |
| Day, Griffin Thomas       | 8400 | Toothaker, Paul Alan        | 2700 |
| Estes, Shannan Jo         | 9105 | Vallee, Kristyn Cheryl      | 2700 |
| Flagg, Russell Dean       | 2000 | Veilleux, Tracey            | 2700 |
| Godbout, Zachary Laurent  | 4300 | Watson, Landon John         | 4300 |
| Hisler, Jessica Ella      | 2700 | Willoughby, Lisa Janet      | 2000 |
| Humphrey, Michael Wallace | 1000 | Wright, Scott Anthony       | 5000 |
| Kaler, Tanya Lynn         | 9105 | Young, Benjamin James       | 5000 |
| Kidger, Alyssa Michelle   | 8700 |                             |      |
| Lake, James Paul*         | 4000 |                             |      |
| Laroche, Marcel Lucien    | 7000 |                             |      |

\*Returning employee

# Performance Incentive

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

**PERIOD GOALS:** Status as of April 17, 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).



## March 2016

|   |   |
|---|---|
| <b>06-00 Timothy J. Peaslee</b><br>42 Years, 1 Month<br><i>Sr. Supervisor</i>       | <b>43-00 Lee A. Johnson</b><br>11 Years, 3 Months<br><i>Welder III</i>                        |
| <b>10-00 Paul E. Laroche</b><br>42 Years, 11 Months<br><i>Assistant Foreman II</i>  | <b>43-00 Steven N. MacPhee</b><br>41 Years, 6 Months<br><i>Welder III</i>                     |
| <b>11-00 Kim L. Bangs</b><br>36 Years<br><i>Pipecoverer III</i>                     | <b>46-00 Daniel P. Rau</b><br>42 Years<br><i>Sr. Specialist E/D</i>                           |
| <b>19-00 Daniel J. Venuto</b><br>26 Years, 6 Months<br><i>Electrician III</i>       | <b>50-00 Leo Carney Jr.</b><br>35 Years<br><i>Shipfitter III</i>                              |
| <b>19-00 Golden E. Baise Jr</b><br>34 Years<br><i>Electrician III</i>               | <b>86-00 Stewart M. Hanna</b><br>36 Years<br><i>Designer, 1st Class</i>                       |
| <b>27-00 Douglas L. Burch</b><br>28 Years, 4 Months<br><i>Preservation Tech III</i> | <b>90-00 Herman A. Nichols</b><br>29 Years, 2 Months<br><i>Program Manager, Post Delivery</i> |
| <b>30-00 Jeffrey A. Johnson</b><br>21 Years, 6 Months<br><i>Sandblaster III</i>     |   |
| <b>43-00 Wayne D. Elliott</b><br>35 Years, 3 Months<br><i>Welder III</i>            |   |

# BOWL FOR KIDS



**T**eams from Bath Iron Works turned out in force last month for the Star Wars-themed Bowl for Kids event to raise money for Big Brothers Big Sisters of Bath/Brunswick.

The annual event was held April 1-2 this year and turned out to be the organization's most successful bowling fundraiser in its 35-year history.

With candlepins, a high school "Galactic Bowl" and the main 10-pin event, the effort drew 140 teams and 600 people to Bowling Bowl and Yankee Lanes, raising \$73,000 to help fund one-on-one youth mentoring programs in Brunswick, Harpswell and the communities of Sagadahoc County. The money raised will help 73 local kids, according to Big Brothers Big Sisters of Bath/Brunswick.

Bath Iron Works bowlers represented the largest business participant, with BIW teams raising \$17,767 as of mid-April with donations still coming in.

"Awesome job!" said organizer Thomas Stevens, a welding superintendent. Because of BIW's role as the major business in the Midcoast, "I feel it is our job to show the local businesses and local community that we care about the community and for us to be the leader in that support."

Our top fundraising teams included BIW Storm Troopers on June Leave, the BIW Big Dogs, BIW-James Building #1 and BIW Morse Alums.



*L to r: Brad Marin (D87), Sean McMullan (D87), Dave Colfer (D87), Donna Matthews (D82), Mark Andrews (D86), Kirk Douglass (D87), Ted Gates (D86), Phil Potvin (D87) and not shown Terry Graviett (D86).*

*Insets above: Brandon Glazier (D10) celebrating a strike.*

*L to r: Jessica Watson (D54), Nathalie Nepveu (D49), Lorraine Cressey (D9105), Tammy Serrano (D05) and Kristen Perkins (D4505) with her two daughters Avery and Viola.*

*L to r: Kevin Mershon (D10), Nick Evans (D10), Mike Duquesnoy (D10) and Steve Nicholson (D40).*



# SAFETY HUB



*By Vince Dickinson*

*Learning about safety is part of the job.*



*John Acker (D50), a shipfitter and member of the union safety committee, leading a group of recent hires on a safety tour of the shipyard.*

## Preparing the Next Generation



*Mike Coombs (D09), teaching a group of new outside machinists about shaft alignment.*

Over the past five years we have hired many new employees at the shipyard. In 2013 we started looking at our injury rate by years of service and realized that our newer employees were experiencing injuries at a much higher rate than our more experienced people. As a result we took several steps to better prepare our new hires. The Training Department ramped up the amount and quality of safety training in New Employee Orientation.

At the Trade Learning Center, the trainers started emphasizing how to do the job SAFELY in addition to just doing the job. Another aspect of the

new hire approach has been the new hire tours. They are guided tours led by mechanics and involve walking the shipyard six to eight weeks after an employee's start date. The leaders describe potential hazards in the shipyard, sprinkling in actual lessons learned from experienced mechanics. The end result is a 38 percent reduction in New Hire Injuries compared to 2013!

### Safety First!

Last month the DDG 1001 Leadership Team made a decision that exemplifies making safety the first and most important thing we do every day. The DDG

1001 team has been working toward a major milestone of Electrical High Voltage (EHV) Light Off for months. This means introducing 4,160 volt power to the ship—a new type of risk. As the scheduled milestone arrived, the leadership team paused and took stock. They recently had a series of potential near-miss incidents on the ship. While very few resulted in actual injury, it was clear to the team that collectively they did not have their head in the game.

The team decided to postpone EHV until they could convince themselves that everyone on the hull was mentally ready to introduce this new level of hazard.

“We just felt that introducing another hazard onto the ship when we were struggling with other safety issues was not something we were willing to do,” **Evan Gilman**, Ship Superintendent, said. Instead they conducted a series of meetings with mechanics, tours on the ship, and additional signage to remind everyone that many systems on the ship are active and can be hazardous.

Even with the delay of high voltage light off, the DDG 1001 Team was able to start activation of the Integrated Fight Through Power system only a few days later; a task that took months to achieve on DDG 1000. Congratulations to the entire team for stopping a situation they felt was unsafe. This leadership exemplifies what we continue to strive towards—A Total “Safety Culture.”

# 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



L to r: **Michael Merrill (D32)**, **Roger Tanguay (D69)** and **Levi Alexander (D69)** remove staging in the helo hanger on DDG 1000.

