Senate Armed Services Committee Russell Senate Office Building Washington D.C. July 29, 2015 R.C. Bagley

Introduction

Good afternoon and thank you. Chairwoman Ayotte, Ranking member Kaine and distinguished members of the subcommittee on Readiness and Management Support. I am delighted to represent Newport News Shipbuilding in today's discussion. I want to thank the subcommittee for the invitation to share my thoughts with you today.

My name is Ray Bagley. I am the Vice President of Trades Operations at Newport News Shipbuilding which is a division of Huntington IngallsIndustries based in Newport News, Virginia. Part of my job is to provide and prepare a capable production and maintenance workforce to perform our work – that includes training them.

General Information about HII/NNS

Huntington Ingalls Industries is an American Fortune 500 company with \$6.8 billion in annual revenues and a work backlog of more than \$24 billion.

We employ almost 38,000 workers at our facilities in Virginia, Mississippi, California, Louisiana, Texas, and Colorado. And among these are more than 15,000 craftsmen. We employ more than 5,500 veterans. Many of our employees are third, fourth, and fifth-generation shipbuilders, and we have more than 1,000 "Master Shipbuilders" employees with 40 or more years of continuous service to the company. Of which I am one.

We also provide a wide variety of products and services to the commercial energy industry and other government customers, including the Department of Energy. And, we continuously grow our business in similar marketplaces.

As you can see, we do difficult work. Our corporate slogan is "Hard Stuff Done Right" – and we're committed to that goal and to our people, our communities and our country.

General information about NNS

Today, Newport News Shipbuilding is the sole designer, builder and refueler of U.S. Navy aircraft carriers and one of two providers of U.S. Navy nuclear powered submarines. The ships we build do some of our country's most important work. Simply put, there is no other place in the world capable of doing the work we do. It is my privilege and honor to call myself a Newport News Shipbuilder and alumnus of the Apprentice School, and to work alongside the finest group of shipbuilders in the world where I still learn something new and exciting every day.

HII/NNS Workforce Development

I want to speak about the importance of a fully developed, productive workforce. We invest heavily in workforce development, expending over \$80 million annually in various types of training, Apprentice School, Night School, and Tuition Reimbursement programs that prepare our workforce to be effective in the important job of building and repairing our Country's Navy ships. We continue to invest precious capital funds to modernize our training facilities with state-of-the-art technology, and with real world, Production mock-ups that allow our workers to learn production crafts in a safe, controlled environment. And especially through The Apprentice School, we partner with State and local officials and education providers to jointly build a workforce and a community. We are actively involved with the Workforce Investment Boards, School Districts and Community

Colleges in our area of Virginia. We are focused on bringing world-class CTE High Schools to the region.

We annually perform 75,000 training events on the waterfront, and that number excludes the Apprentice School. Welding is a critical skill for America and for Shipbuilding. We maintain 130 welding booths that facilitates the instruction of hundreds of Welders on the precise, intricate processes needed for our ships. As ship's Technologies have advanced, as with FORD class aircraft carriers, our internal training has also had to advance. For the FORD, we had to develop over 50 new production training courses to provide the needed skills and knowledge to our workforce. We are up to the tasks and challenges that lie ahead.

As a company we believe so strongly in our technical training strengths and capabilities that we are actively exploring offering these training services to commercial, non-shipbuilding clients to assist with their workforce development.

All of the above is done with safety and safety training in mind. We value our employees above all else and will not compromise on maintaining a safe and healthy work environment for them.

The NNS Apprentice School

I am proud to say that I am also responsible for overseeing The Apprentice School at Newport News Shipbuilding. I'm especially proud given that I graduated from the school some 36 years ago. The Apprentice School provided me an education and opened doors to experiences and opportunities. Today, it serves as an excellent example of

how intense Career and Technical Education can prepare students for highly skilled, in demand careers through a combination of rigorous academics, and real world experiences with a potential to change the course of their lives, as it has done for me.

In less than four years, The Apprentice School will celebrate its Centennial Celebration of 100 years. From the first week as an apprentice, students begin on-the-job training under the watchful eye of a Craft Instructor. Soon thereafter, apprentices also begin a rigorous academic curriculum as well as trade related education related to their specific trade. To round out each apprentice, they are offered additional opportunities to develop and mature their leadership skills through extracurricular activities including intercollegiate athletics, professional societies, and student organizations. Their experiences vary and can take from four to eight years, but during that duration The Apprentice School relentlessly focuses on developing students in "Craftsmanship, Scholarship and Leadership". Those pillars contribute to the success of Newport News Shipbuilding by providing a continuous supply of graduates who are prepared to lead the industry in their chosen field of specialization.

Craftsmanship

In respect to Craftsmanship, we believe this to be a core requirement of every apprentice. At Newport News, all apprentices begin their careers in one of 19 individual trades. Each apprentice follows a specifically designed and pre-approved work rotation plan that ensures experience and competence in relevant aspects of their chosen trade. Apprentices are evaluated monthly by their craft Instructors and receive a shop grade based on their quality of work, safety, work habits, initiative and demonstrated

leadership. As apprentices mature through their apprenticeship, they advance from entry level helper to lead mechanic. It is this journey where apprentices transform from a willing follower to a humble leader.

<u>Scholarship</u>

In respect to Scholarship, it too serves as an important pillar of The Apprentice School. One hundred percent of academic courses of our Core Curriculum, World Class Shipbuilding, are taught by our own faculty members who hold the same academic credentials as those required by colleges and universities. Our academic faculty has graduate degrees including mathematics, physics, naval architecture or marine engineering and currently include four PhD's and three doctoral candidates. They bring a wealth of life experiences coming from various branches of the United States military, the business community or education. We currently have articulation agreements with 10 colleges and universities and regularly work collaboratively with centers of learning including Webb Institute. The College of William and Mary, Old Dominion University, Thomas Nelson Community College located in Hampton Va., and Tidewater Community College located in Virginia Beach Va. We now have Apprenticeships that offer an Associate's degree and now with Old Dominion University, a Bachelor's Degree in Engineering. These relationships ensure that the integrity and quality of education at The Apprentice School remains excellent and provides a seamless transfer of credit and continuing education opportunities for apprentices as they continue to pursue their academic interests.

All graduates will complete with a certificate of apprenticeship in their trade and those who advance to one of eight optional advance programs,

including cost estimator, designer, modeling and simulation and production planning, will graduate with an associate's degree and in some cases, a bachelor degree in Engineering. One hundred percent of our programs are registered with The Virginia Apprenticeship Council and recognized by the US Department of Labor. We are also accredited and have been for the past 32 years by the Accrediting Commission of the Council of Occupational Education, a national accrediting agency based in Atlanta, Georgia.

Leadership

We also hold Leadership as a core competency, a pillar of The Apprentice School. Shipbuilding leadership is learned through increasingly challenging assignments and opportunity. So we create opportunity through leadership development programs, professional societies, student organizations and intercollegiate athletics.

Our premier leadership program is iLead which was benchmarked at the United States Naval Academy. Based on nine leadership principles and highly successful leaders at Newport News, students are challenged academically and vocationally to master those principles. Frontline FAST, short for Foreman Accelerated Skills Training, has also become ingrained in the development of successful leaders at the school. This program develops high performing apprentices for frontline supervisor positions through blended approach of craft competencies, leadership practices and coaching.

Our philosophy at The Apprentice School is we create opportunities for apprentices to grow and polish their leadership skills outside of the

shipbuilding production environment. Student government, professional societies and community service are all important components of growth and maturity. So student chapters of professional societies: Society of Naval Architects and Marine Engineers, Society of Manufacturing Engineers and a student Chapter of Jaycees, the first collegiate chapter formed in the United States, are examples of that investment.

Intercollegiate athletics have been a part of The Apprentice School since it formally began in 1919. Today, we field six varsity programs including golf, football, wrestling, men's and women's basketball and baseball. And by the way, we just won the USCAA National Small College Championship in baseball.

Opportunities

Within the past 10 years, we re-established apprenticeships in patternmaker and molder and introduced new programs in dimensional control or precise measurement, nuclear test, marine engineering and modeling and simulation. The Apprentice School is responsive not only to meet the demands of Newport News Shipbuilding but to anticipate them.

The world is changing and Newport News Shipbuilding is active with other businesses, as supported by the Senate's CTE Caucus in fostering technical education needs for American workers. At Newport News Shipbuilding, some 10,000 graduates of The Apprentice School are a testament to career and technical education. Forty four percent of the entire production management team are graduates of The Apprentice School. Annually, some 4,000 people inquire about attending The Apprentice School and being selected for one of the approximately 230

openings. Of our 800 students, over half of those selected today have attended college. FOX News recently ran a segment about the school titled "Beyond The Dream" and The New York Times also recently highlighted The Apprentice School in an article titled A new Look at Apprenticeships. As Mr. Mike Petters, President of Huntington Ingalls Industries says, "Do you take someone to the end of the pier and push them off to see if they can swim, or do you give them swimming lessons?" We prefer swimming lessons and The Apprentice School is that investment. An investment in our people; an investment in our company; and an investment in our country.

Workload Challenges Ahead

The best way to develop Shipbuilders is continually allow them to build ships, meaning, provide them the workload to continue to learn and exercise their craft. This is also the best and most efficient way to build ships. Unfortunately, we are quickly approaching a multi-year workload gap that will likely impact the continued learning of workers in several crafts. It is important that the potential impacts or workload valleys need to be fully understood, as we communicated to Deputy Assistant Secretary of the Navy for Ship Programs in the November Shipbuilding Industrial Base Report. Perhaps this is a topic at a different hearing or setting. We are committed to keep our Apprentice program strong and develop leaders for the challenges ahead.

Thank you for the opportunity to address you here today and I look forward to any questions you may have.