

JOHN CHEN

**ONE KBR Tech Fellow, KBR
ASNT President (2023-2024)**

HOUSTON, TX

HOW DID YOU FIRST BECOME INVOLVED IN NDT?

I started my graduate research project in 1995. It had to do with ultrasonic testing. Since then, I have been more or less working in NDT, mostly within the materials engineering field.

CAN YOU TELL US ABOUT YOUR CERTIFICATION AND TRAINING?

I have six ASNT NDT Level III certificates, a CWI from AWS, and a Professional Engineer license from six states. Every job I've had has provided training opportunities for me, on average a full week (maybe more) of away-from-your-job-type training each year for the past 20 years. A lot of this training has been directly in NDT techniques; others are attending seminars to learn new things.

WHAT'S YOUR EDUCATIONAL BACKGROUND?

I received a BE in 1995, a PhD in 1999, and another PhD in 2005. They are all in materials engineering and welding engineering. I grew up in an atmosphere where my mother and father had always emphasized the necessity of college and graduate studies. So, I always thought a college degree is a must-have for all.

IS YOUR WORK FOCUSED ON A PARTICULAR FIELD?

My day-to-day work focuses on routine NDT methods and procedures that have already matured and need be codified into industry standards. I review a lot of NDT procedures. The part of KBR I'm involved in encompasses engineering, procurement, and construction work. The company bids on large projects and after winning the projects—usually whole industry plants—the plants get designed and built. When the equipment, pressure vessels, piping, and so on, are being built in the shop and erected in the field, I make sure that the NDT procedures used meet construction code requirements.

DESCRIBE YOUR WORKING ENVIRONMENT.

I work in an office most of time but there are occasions I need to visit shops or construction sites. Sometimes I work alone; other times I am a member of a larger team.

ARE YOU INVOLVED IN YOUR SECTION?

I've served in officer, director, committee chair, and committee member

positions for the Greater Houston Section. I've been serving at the national level for ASNT for awhile. I have served in officer, director, committee member, and committee chair positions (including Technical Editor of *Materials Evaluation*), and I start my term as President this July. I have come to know many, many individuals in the industry, who I would have never come to know if I had not been volunteering for ASNT.

HOW HAS NDT CHANGED DURING YOUR CAREER? WHAT TRENDS DO YOU SEE?

Digitalization. This will continue and is an enabling technology for artificial intelligence.

WHAT'S BEEN YOUR GREATEST CHALLENGE ON THIS JOURNEY?

There are so many things to learn, at the same time new technologies are constantly coming out. It is overwhelming at times to keep pace with the new developments and frustrating at times to realize that I have never really understood anything. One of the challenges is to get used to that, yet not give up learning.

WOULD YOU SHARE WITH US A PERSONAL OR PROFESSIONAL BUCKET LIST ITEM?

Once I had a wish to get a Level III in all the methods that ASNT offers a Level III certificate. Now I know how hard it really is to be truly qualified and certified in all methods.

DO YOU HAVE A FAVORITE QUOTE THAT INSPIRES YOUR WORK OR PERSONAL LIFE?

Treat everyone the same way you want them to treat you.



NAVY SHIPBUILDERS NDT LEVEL III SPECIFIC EXAM

This month's Q&A focuses on the Navy Shipbuilders NDT Level III Specific Exam, now administered by ASNT. This article is adapted from a recent episode of *Chat NDT with ASNT* featuring Gary Zimak, Director of Quality Supply at Newport News Shipbuilding, and Brian Frye, ISQ Program Manager at ASNT. For more details on these and more topics, listen to the full episode at asnt.org > Publications > Podcast.

Q: What is NAVSEA?

A: NAVSEA stands for the Naval Sea Systems Command, an organization that is an arm of the United States Navy. NAVSEA engineers, builds, buys, and maintains ships, submarines, and combat systems. It provides the requirements for shipbuilders to follow, which includes an NDT program.

Q: What is the Navy Shipbuilders NDT Level III Specific Exam?

A: This is a Newport News Shipbuilding and General Dynamics Electric Boat project, working together with NAVSEA and the US Navy. These organizations have been looking for ways to improve how the shipbuilder suppliers administer the examiner-specific examination to NDT Level IIIs. Currently, all examiner personnel are required to pass an examiner-specific examination in accordance with NAVSEA Technical Publication T9074-AS-GIB-010/271, also referred to as NAVSEA 271. This is a technical publication generated by the Navy that shipbuilders follow to manage their NDT programs.

After evaluating the benefits of using a third party, such as ASNT, the group implemented a detailed strategy working with ASNT to develop and administer the Specific Exams. These exams will be administered through ASNT using Pearson VUE.

Q: What are the benefits of the new Navy Shipbuilders NDT Level III Specific Exam to the industry?

A: Previously, NAVSEA 271 required that the Specific Exams be administered by the employer. Just like any other program or any other process, there's always some inherent variability in the quality of the exams when they're administered by every organization throughout the supply base. Working with ASNT ensures that the exams achieve the highest standards in accordance with the Navy as well as ASNT. This adds consistency and rigor to the examination process and provides a centralized database that can be searched to find certified Level IIIs. It will also eliminate the need for suppliers to administer their own Specific Exam.

Q: What are the benefits of the new Navy Shipbuilders NDT Level III Specific Exam to individuals working in this industry?

A: With this new exam, inspectors will no longer have to continually take multiple Specific Exams for each company they work for. If they have ASNT certification along with this new Specific Exam, one Specific Exam will cover all the work.

Q: Who can take the Navy Shipbuilders NDT Level III Specific Exam?

A: Anyone who performs work in accordance with Newport News Shipbuilding or General Dynamics Electric Boat where a contract invokes NAVSEA 271 can take this exam. That is, if you are a supplier of either Newport News Shipbuilding or Electric Boat and you are performing work in accordance with those requirements, you will be able to take that exam. However, if you're an individual who does not currently have a contract either through one of Newport News Shipbuilding's or General Dynamics Electric Boat's primes or sub tiers, we will not allow you to take the exam at this time.

The individuals who will be taking this exam have either been previously certified through the company they work for—so that company would have previously administered their Specific Exam—or they could be a brand-new Level III just starting for a company, and this might be the first time they're taking this exam.

Q: Will there be training material available to prepare for this NDT Level III Specific Exam?

A: Electric Boat and Newport News Shipbuilding are working together to develop training material that will be available to the NDT Level III Examiner candidates prior to taking the exam.

For more information, visit ASNT Certification Services LLC's website at asntcertification.org or email certification@asnt.org. **ME**