

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.

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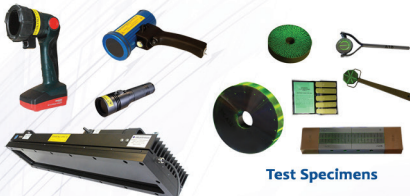


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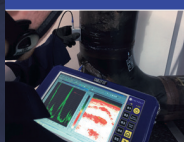
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Recently, artificial intelligence (AI) tools have been developed to produce digital images from text-based descriptions. These tools use generative AI models that learn to represent complex objects and scenes by training on a large dataset of image-text pairs, and leverage diffusion-based models to merge the components. For this technical focus issue on AI/machine learning, Microsoft Bing Image Creator (powered by DALL-E) was used to explore the potential of generating images related to nondestructive testing. The cover art of this issue was generated using the prompt: "ultrasonic inspection of automotive welds, high resolution with dramatic backlighting." By just adding "cat" in front of "inspector performing phased array inspection of an aircraft structure, in high resolution," a seemingly realistic image of a cat inspecting an aircraft was created. While detailed (and humorous) images such as these can be generated in seconds, users should be aware of potential quality issues (like handling text in images) and inherent biases (from the large datasets used for training) when using these tools.

SUBMITTED BY JOHN ALDRIN, COMPUTATIONAL TOOLS, GURNEE, IL

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