

3D Printing at Newport News Shipbuilding Video

Charles Southall, Newport News Shipbuilding:

“After just a couple years of really hard engineering work and development work in the labs and the use of machines like the one behind me, we are going to be in a position to put the very first piece of metallic hardware—a valve, this particular valve—on a Navy nuclear aircraft carrier that was 3-D printed for the first time.

“That particular technology is one that I’ll give credit to some of our engineers—in particular, Dr. John Ralls—who approached myself and a few others just a couple years ago with a thought that if we worked hard enough at it that additive manufacturing might become something really important for us from a transformation perspective.”

John Ralls, Newport News Shipbuilding:

“To be part of something that’s really changing to how we do business has been excellent. If you asked me 10 years ago, would I be working on taking powderized metal and lasers to make a part in three-dimensional shapes, I don’t think I could have envisioned that at all. It wasn’t ’til, I’d say, five or six years ago that I got more involved in the metal and the plastics, and it wasn’t until a few years ago, like Charles mentioned, that I actually got immersed in actually going through all the steps, the rigor, to advance the state of the art and go qualify a part for actual application use.”

Charles Southall, Newport News Shipbuilding:

“Today, it’s the time of the engineers and craftsmen that have ownership of these very perishable skill-sets and the opportunity to defend our nation—it’s *their* time to do what their predecessors did 70 years ago, but to do that with a new set of tools, with new technologies. If you can’t get excited about that, you just can’t get excited.”