

X3D Model Exchange: 3D Printing Archives for Navy + Marine Makers



Naval Postgraduate School

Who We Are

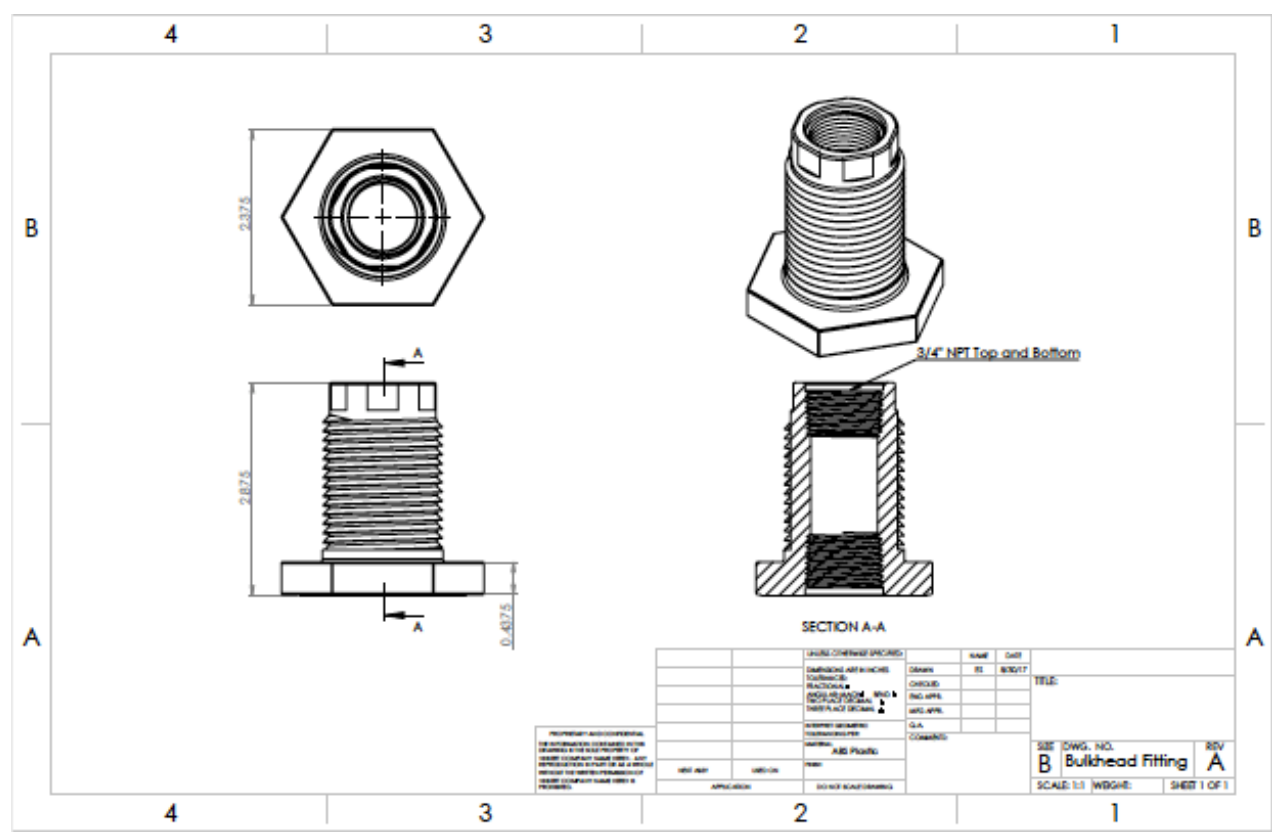
X3D Model Exchange shares models in formats compatible with 3D printers. Partner commands offer unique capabilities for Navy, Marine Makers to share, view and print 3D models. Supporting Fab Labs and training facilities helps new Makers learn how to apply this powerful technology.



X3D Model Exchange
Welcome Navy and Marine Makers!
<https://ModelExchange.nps.edu>



Naval Additive Manufacturing Tech Interchange (NAMTI) 2017, Quantico Virginia: NPS faculty and students with full 3D-printed prototype US Navy submersible.



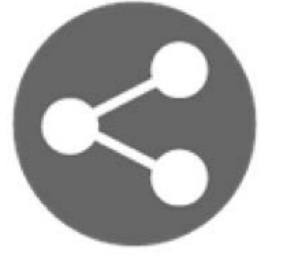
3D Print, Bulkhead Fitting 3D Print, 81mm Mortar Wrench



Create & Share



CREATE



SHARE

- Expeditionary Manufacturing capabilities enable Sailor and Marines to innovate, design and build what they need, when and where they need it.
- Search metadata, examples, and tool workflows help create of downloadable models relevant for today's fighting forces, optimized for 3D printing.
- Open Source licenses (such as Creative Commons) for permitted 3D models, noncommercial use only.
- CAC card identification required for submissions ensuring that all Maker contributions are authentic.

Discover and Engage

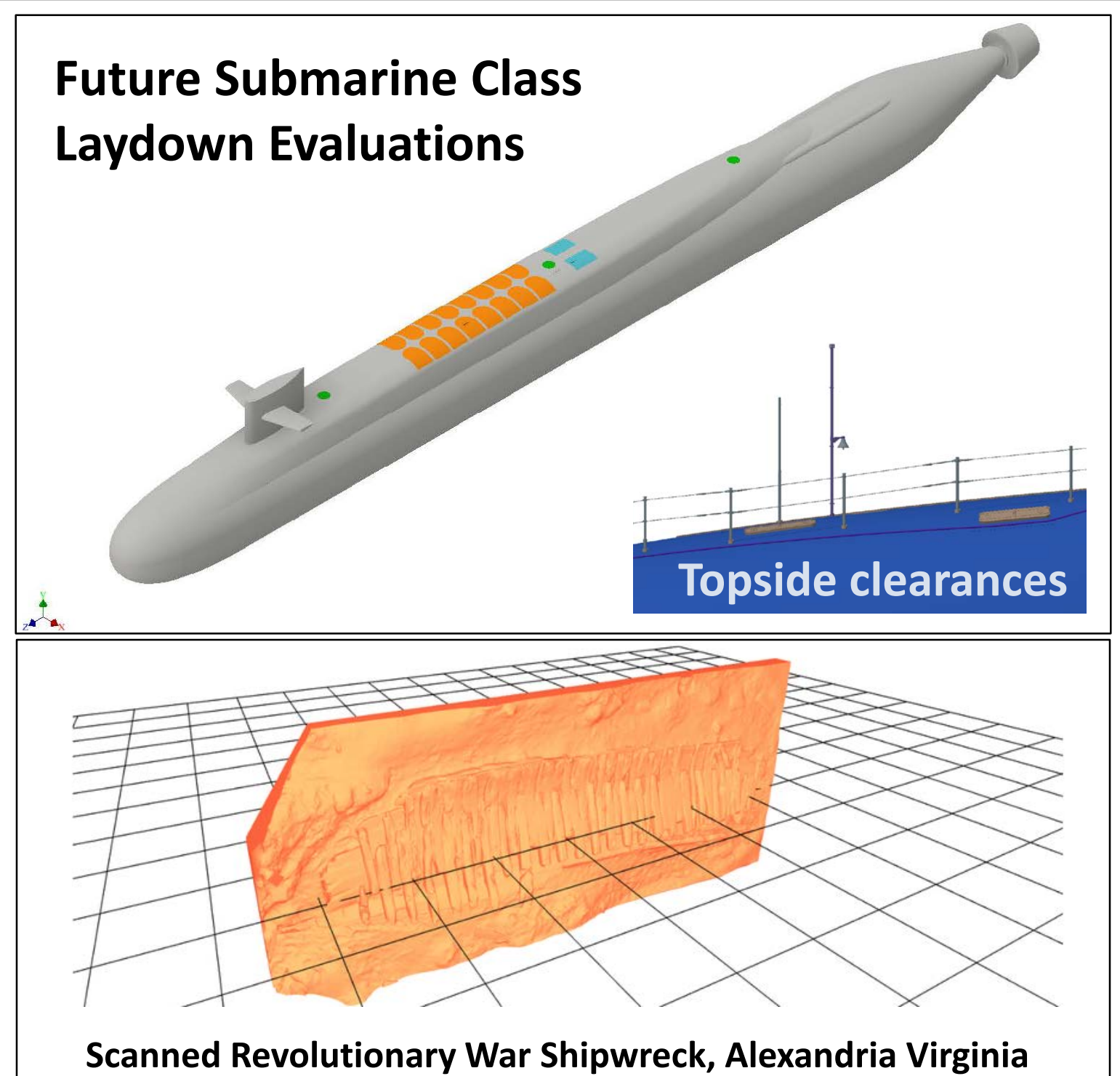


DISCOVER



ENGAGE

- Discover 3D models, view curated collections or find builds of 3D models from our community members.
- Are you interested in creating your own customizable models? The Model Exchange provides detailed guidance on how to design and 3D print accurate models.
- The 3D Model Exchange is a community-driven resource. Share your ideas with fellow Makers, learn 3D printing tips + tricks, discover new models, work together on group projects, and share ideas so everyone can improve.



“Soft Launch” Continues

- Model Exchange “Soft Launch” is ongoing with growing automation to support further capabilities.
- Do you have 3D models? [Sign up and join](#) the first Navy/Marine Makers who discover, share and print diverse 3D model projects in X3D Model Exchange.
- Next: 3D scans and [SPIDERS3D](#) Virtual Environment.

Bootstrap Your Maker Models

Open Standards for Real-Time 3D Communications X3D Graphics Interoperability

- Follow Us! [@NavyMakers](#) [@Web3dConsortium](#)
- Feedback: makers@nps.edu
- Developers: ModelExchange@movesInstitute.org



Dr. Don Brutzman brutzman@nps.edu
Modeling Virtual Environments Simulation (MOVES) Institute
Topic Sponsor OPNAV N415, Additive Manufacturing (AM)
Partner Sponsor USMC Systems Command, Advanced Manufacturing

NRP IREF ID: NPS-18-N380-A