



Naval Foundry and Propeller Center (NFPC) Overview for JTEG

26 January 2021



NFPC Overview

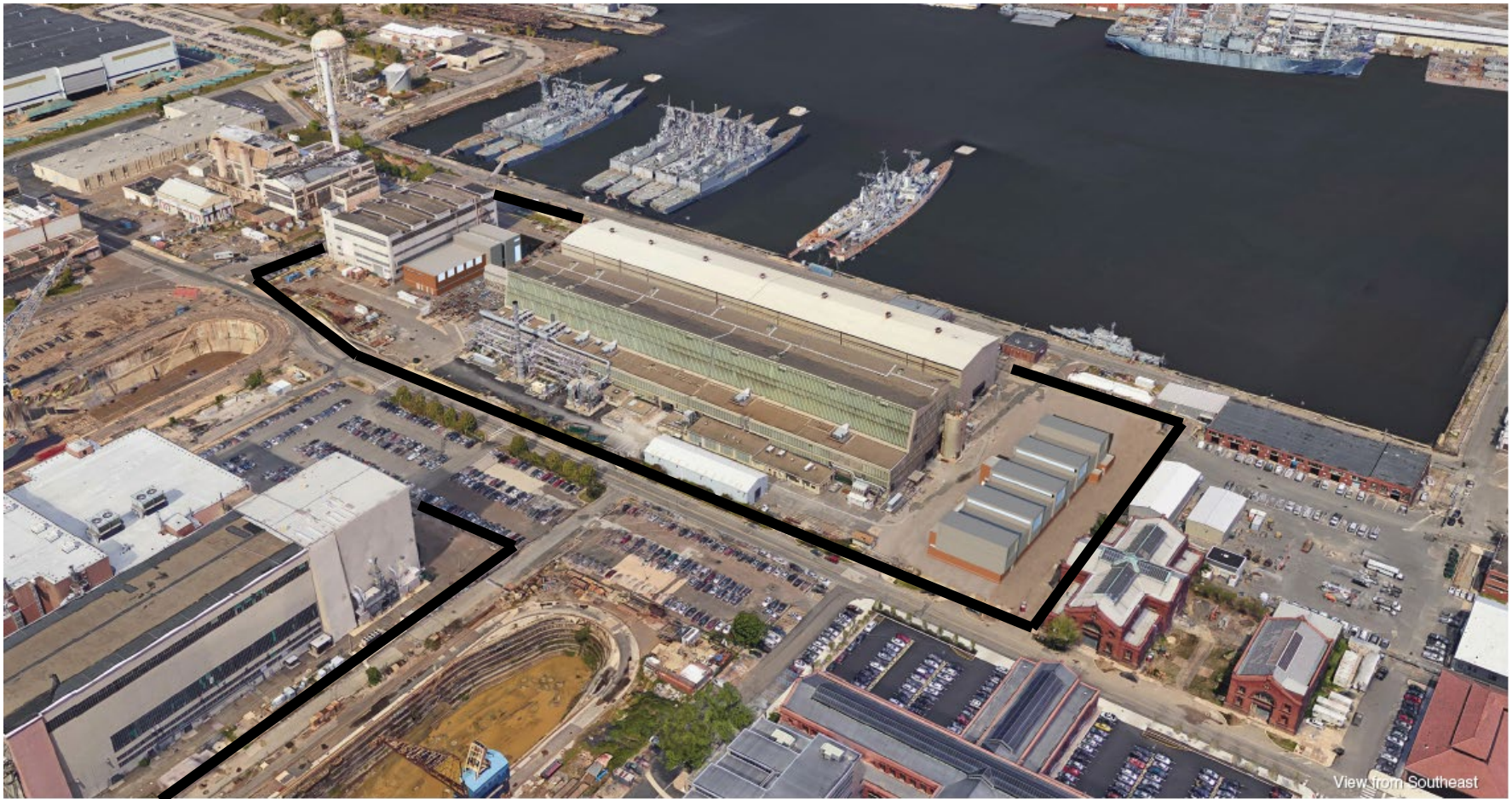
- The NFPC is a detachment of Norfolk Naval Shipyard and is the Navy's foundry and propeller manufacturing facility
- NFPC produces propeller components from castings made in house
- Over 750,000 square feet of production space
- NFPC produces ship and submarine repair components to support the public shipyards





NFPC Location

NFPC is located on the Philadelphia Navy Yard Annex





Capabilities – Foundry Overview

- **Non-ferrous sand cast foundry**
- **Large lift/crane capacity**
- **Furnaces ranging from 50 lbs. to 85 ton capacity**
- **Engineering-driven molding and casting design including simulation analysis**





Capabilities – Machining Overview

- Large scale machining centers
 - (13) five-axis numerically controlled profilers capable of machining up to 31 feet in diameter
 - Engineering-driven machining process allows for minimal hand finishing work



5-Axis Numerically Controlled Machining





Capabilities – Machining Overview





Capabilities – Quality Assurance

- **Precision Laser Measurement**
 - Multiple Faro Laser Trackers
 - Leica T-Scanners to gather point clouds of complex parts and for final certification
- **NAVSEA certified personnel for PT and VT non-destructive testing per Tech Pub 271**
- **Full onsite Metallurgy Lab accredited by NAVSEA**
 - Chemical and mechanical analysis to support foundry operations



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