

PROJECT TITLE: Repairs to Shipways 10 & 11 CONTRACT NO.: POP-70355-R LOCATION: Northrop Grumman Newport News, Newport News, Virginia AWARD DATE: November 1982 **COMPLETION DATE:** March 1984 □ \$0-1 Mil FINAL VALUE: \$1-5 Mil **≫** \$5-10 Mil \$10-20 Mil \$20-30 Mil \$30-40 Mil \$40-50 Mil [□ \$50+ Mil TYPE OF CONTRACT: X Fixed Price Cost Reimbursable

PROJECT DESCRIPTION:

Our contract consisted of the demolition and installation of a new crane rail system, extensive underground mechanical and electrical distribution systems, and the construction of a pit in the dry dock floor to accommodate the sonar instrumentation on the bottom of the submarines.

For the first aspect of this project, the existing crane rail system had to be demolished and new crane rail base plates, rail clips, and rail had to be installed. Tight gage and level tolerances were required and maintained. For the second aspect of this project, the mechanical and electrical distribution systems were installed to fully support the operations of the dry dock. This required close coordination with the facility to minimize the impact of tie-in operations.

The third aspect of this project involved the installation of a concrete sonar pit in the dry dock floor. To begin, we had to demolish approximately 1,000 cubic yards of the dry dock floor, covering a section 42' wide by 110' long. We then installed a steel sheet pile cofferdam to facilitate the removal of fill material and to help eliminate seepage of ground water. With the sheets in place, we began cutting off over 400 existing timber piles to be reused in support of the new dry dock pit floor. Excavation of approximately 1,500 cubic yards of material completed the new pit area. The new concrete pit was constructed using approximately 1,500 cubic yards of concrete. After curing, the pit was outfitted with a structural steel support system and was finished by installing a structural grating surface.

