

# Advanced Shipbuilding & Carrier Integration Center

Newport News, VA

**John Boyle**  
**Structural**



## Building Statistics

- Function Type: Office/Research/Shipbuilding Facility
- Size: 241,000 Square Feet
- Dates of Construction: Dec. 1999—Feb. 2002
- Project Delivery: Design - Bid - Build
- Project Cost: \$58 million

## Architecture

The office building is 8 stories enclosed by a curtain wall, curved into the shape of a bow, giving it the appearance of a large ship looming over the James

## MEP

- 480V - 208y/120V power distribution system
- 100KW and 28.5 tons required air cooling
- 125 KW and 125 GPM required for water cooling

## Project Team

All Architecture/Landscape Architecture and Engineering were completed by Clark Nexsen

## Structure

- Bulkheads were designed as an anchored bulkhead which consisted of a protective coating on hot-rolled Z-shaped steel sheet piles with continuous, reinforced cast-in-place concrete cap.
- 12"x12" precast, prestressed concrete piles
- K braced frame with columns ranging from W14x82 to W14x159 with diagonal bracing ranging from H SS8x8x1/4 to HSS 12x12x1/2
- Steel girders range from W 12x14 to W 24x55
- 8" precast wall panels and 6" slab on grade with w/ 6x6 w2.9xw2.9 WWF used in laboratory wing