

MARINE DESIGN CENTER

Presentation for

WEDA

Marine Design Center, Philadelphia, Pa.

October 28, 2015



®

US Army Corps of Engineers
BUILDING STRONG®

USACE Navigation Mission

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.



USACE Operations & Maintenance

- Nearly 12,000 miles of inland and Intracoastal shallow-draft waterways (9-14 foot draft)
- 13,000 miles of greater than 14-foot deep channels
- Total of 25,000 miles are operated and maintained
- 238 lock chambers at 192 lock sites on 41 waterways serve commerce



Lock and Dam 15
Navigation / Mississippi River



Chesapeake & Delaware Canal
Navigation

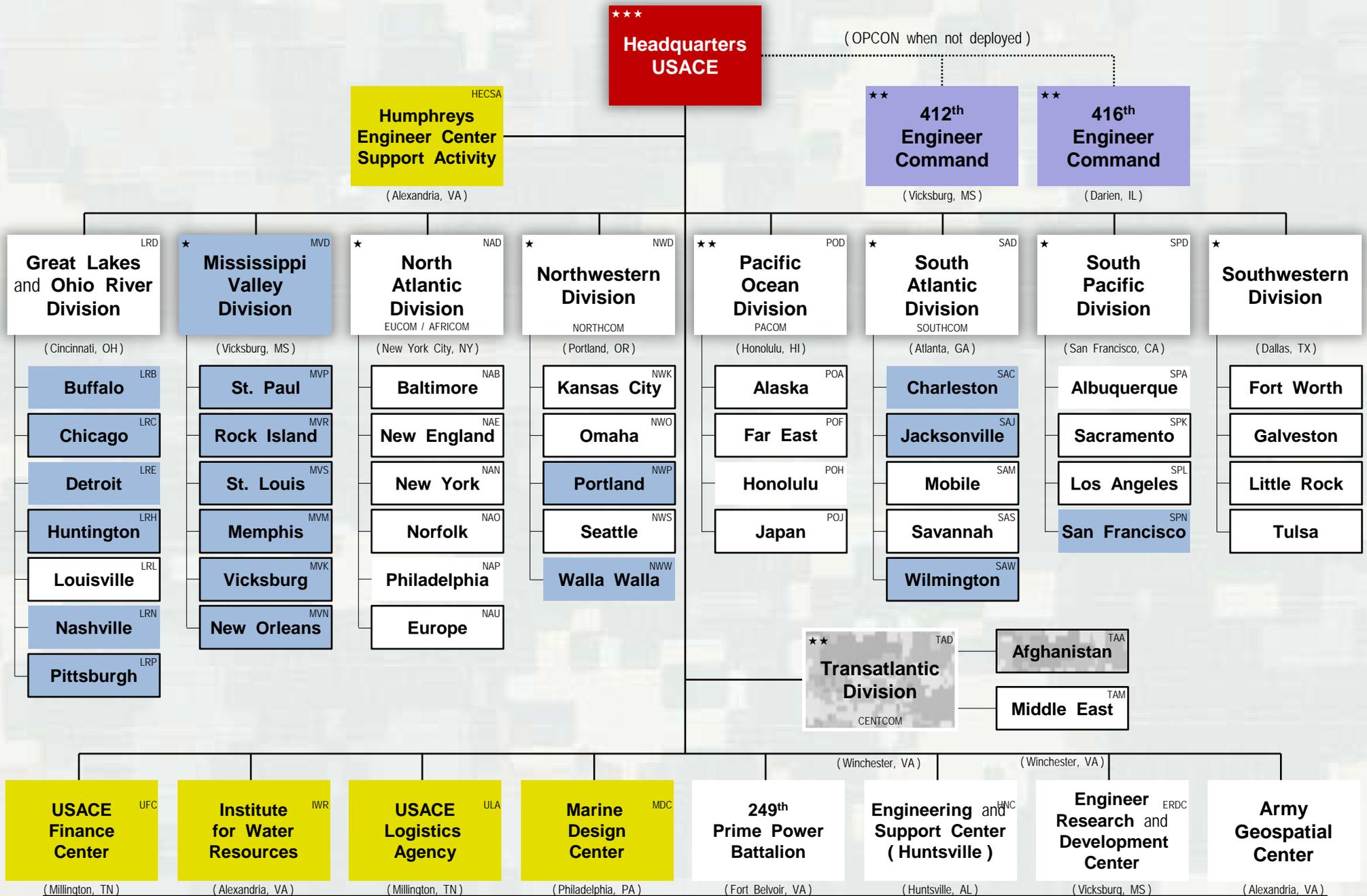


U.S. Inland & Intracoastal Waterways

U.S. Inland & Intracoastal Waterways



Organizational Structure



Field Operating Activity

Organization with ONLY a CIVIL WORKS Mission

O-6 District Commands (33 of 42)

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USACE FLEET

- Approximately 2,500 pieces of floating plant (1,000 significant), majority inland & coastal
- No vessel “classes”
- Dredges
 - Oceangoing Hopper
 - Dustpan
 - Cutter Suction
 - Special Purpose
- Towboats
- Survey Boats
- Special Purpose Barges
- Floating Cranes & Crane Barges
- Flat Deck Barges/Floating pontoons

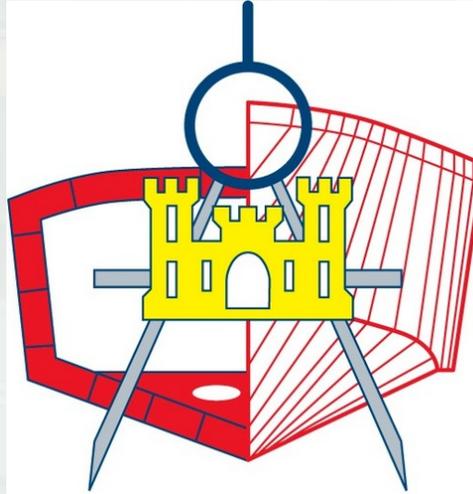


USACE MISSION SUPPORT

- USACE is a large fleet operator
- Many USACE civil works projects have marine-related aspects
- USACE conducts or manages a large number of operations on the water
- Need for marine expertise



MARINE DESIGN CENTER



MISSION:

Maintain a full service Naval Architectural, Marine Engineering, Electrical Engineering, and Vessel Acquisition capability to support the U.S. Army Corps of Engineer Fleet. Support other Federal customers in areas of Expertise

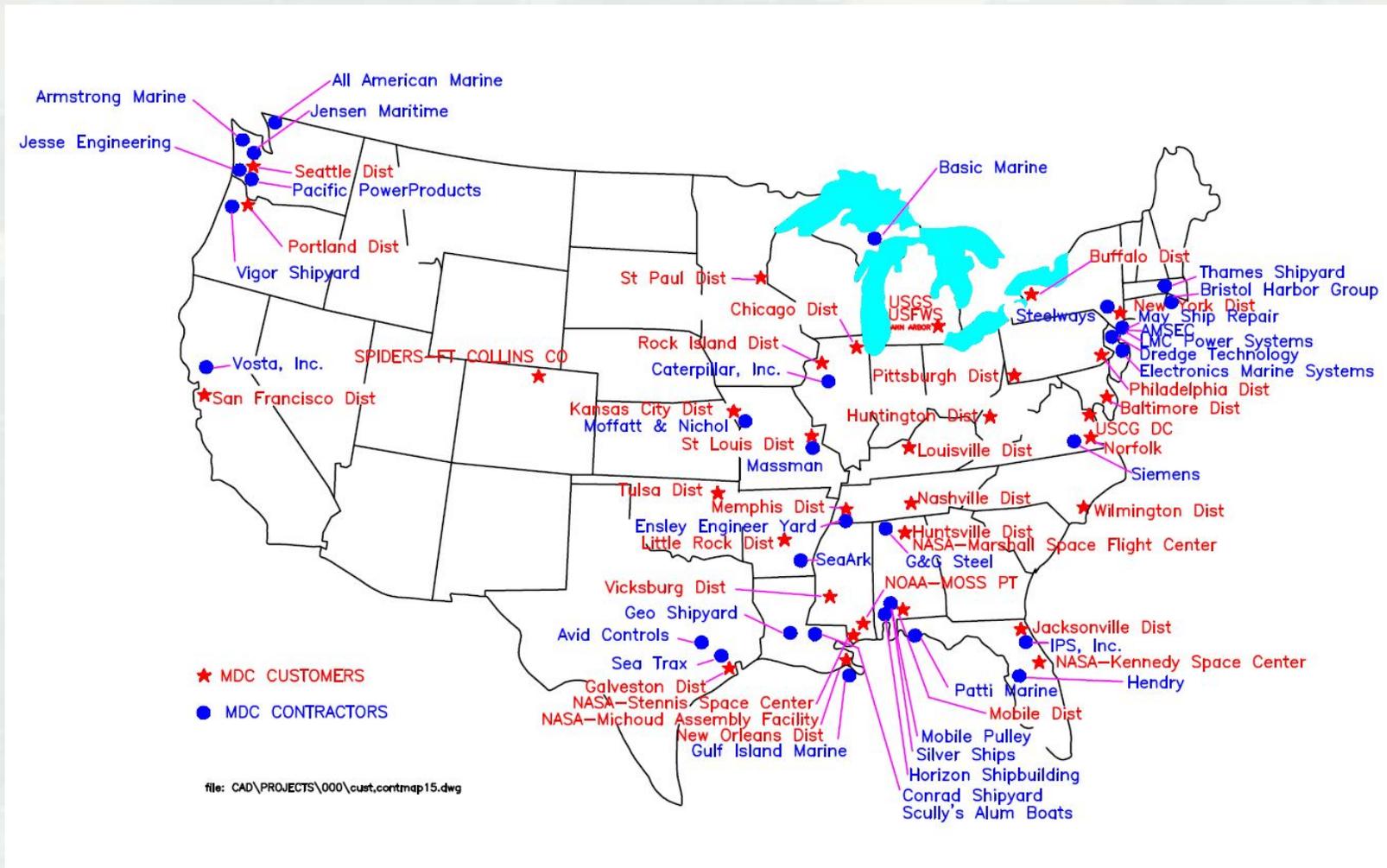


MDC APPROACH TO PROGRAM

- Projects are “Guided Interactive”
- Core Work performed by Staff:
 - Scopes of Work
 - Contract Management/Administration
 - Quality Assurance
 - Concepts
 - Design
 - Source Selection
- Work ranges from consulting to turnkey project delivery
- Overall engineering accomplished via project delivery teams, headed jointly by MDC and Customers with support from A/Es and Contractors
- Formal acquisition provided by the Philadelphia District
- Fully Cost Reimbursable
- Do not perform operational fleet management



GEOGRAPHIC DISTRIBUTION OF MDC CUSTOMERS & CONTRACTORS



NAVIGATION MISSION



BUILDING STRONG[®]

TOWBOATS



SPECIAL PURPOSE BARGES



BUILDING STRONG[®]

DREDGES



BUILDING STRONG®

SMALL SUPPORT CRAFT



RETROFITS



BUILDING STRONG®

VESSEL INSPECTIONS & CONDITION REPORTS



BUILDING STRONG®

VESSEL REPAIRS



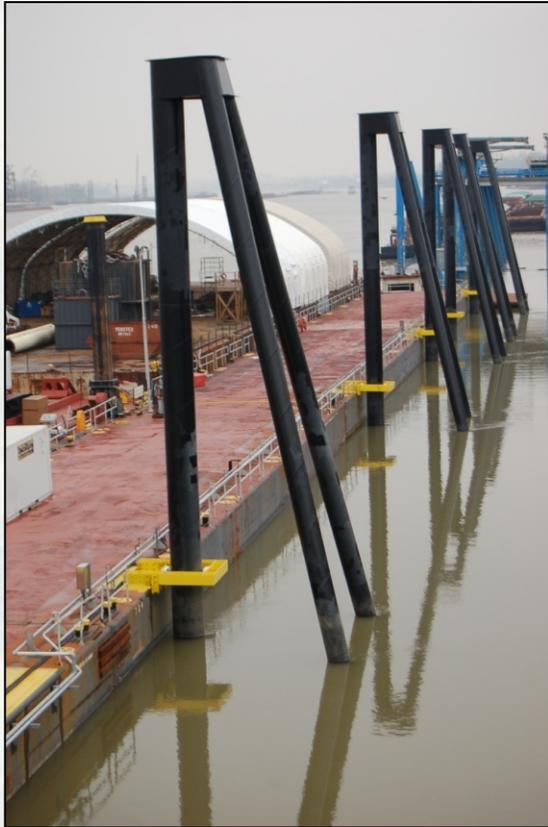
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MAINTENANCE SUPPORT

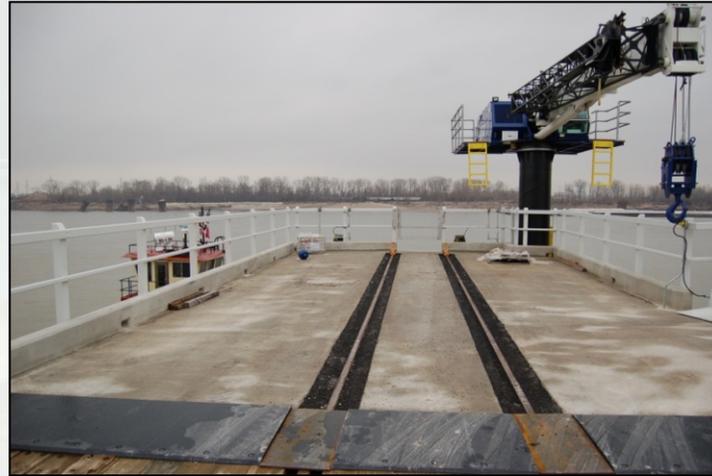


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SHORE-SIDE MARINE FACILITIES



MVS Fleet Moorings



NAB Timber Dolphins



DREDGE MURDEN



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MONTGOMERY POINT

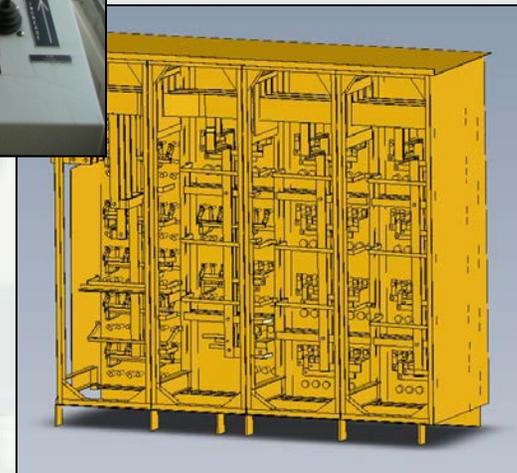


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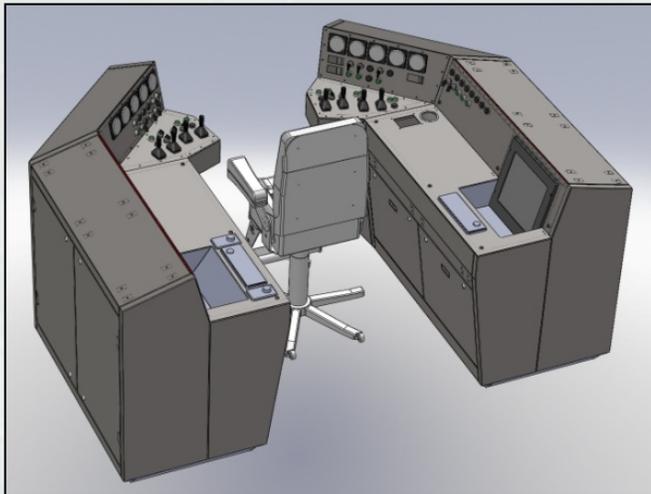
DREDGE WHEELER REPOWERING



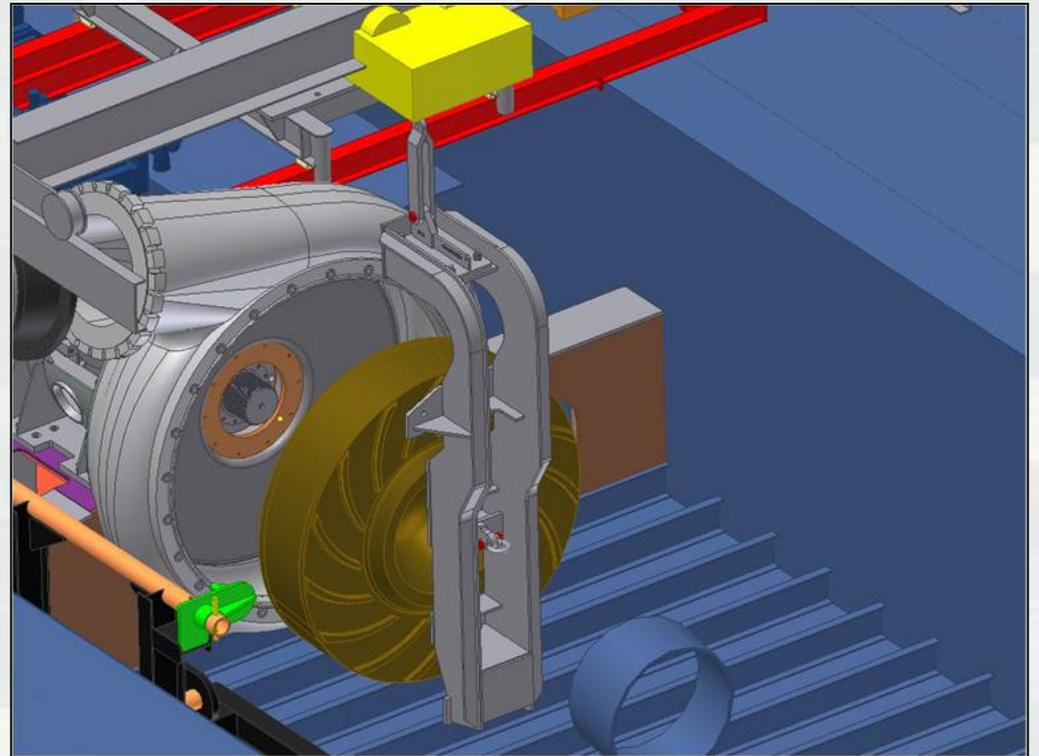
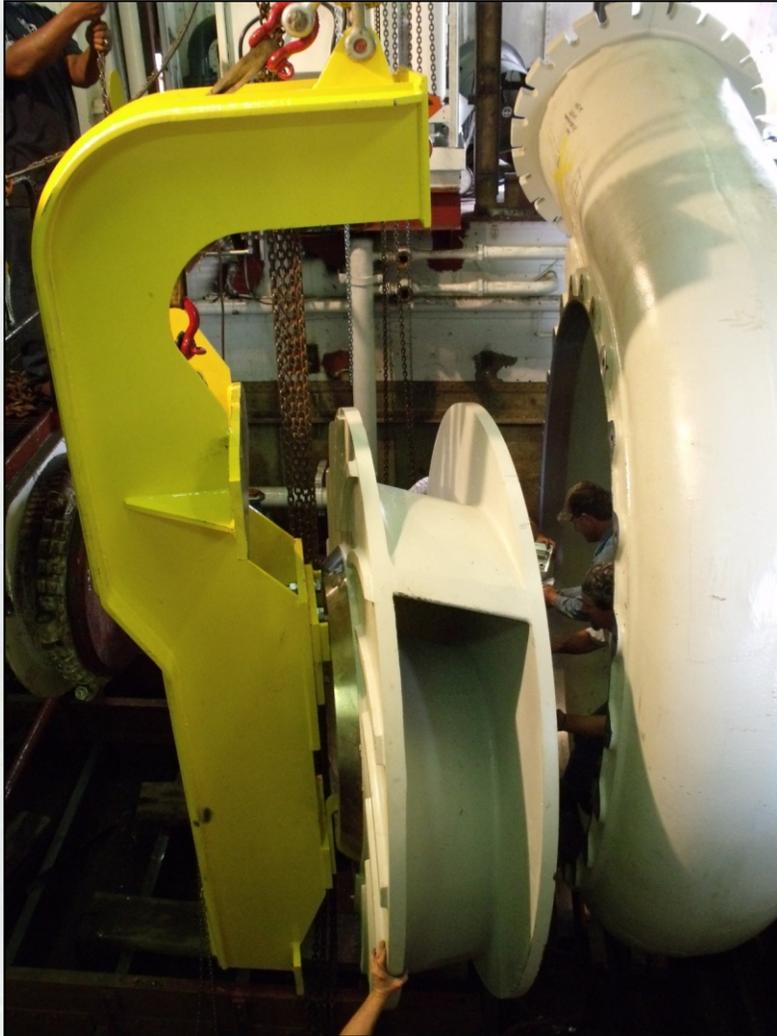
MCFARLAND ELECTRICAL UPGRADE



POTTER DECKHOUSE REPLACEMENT

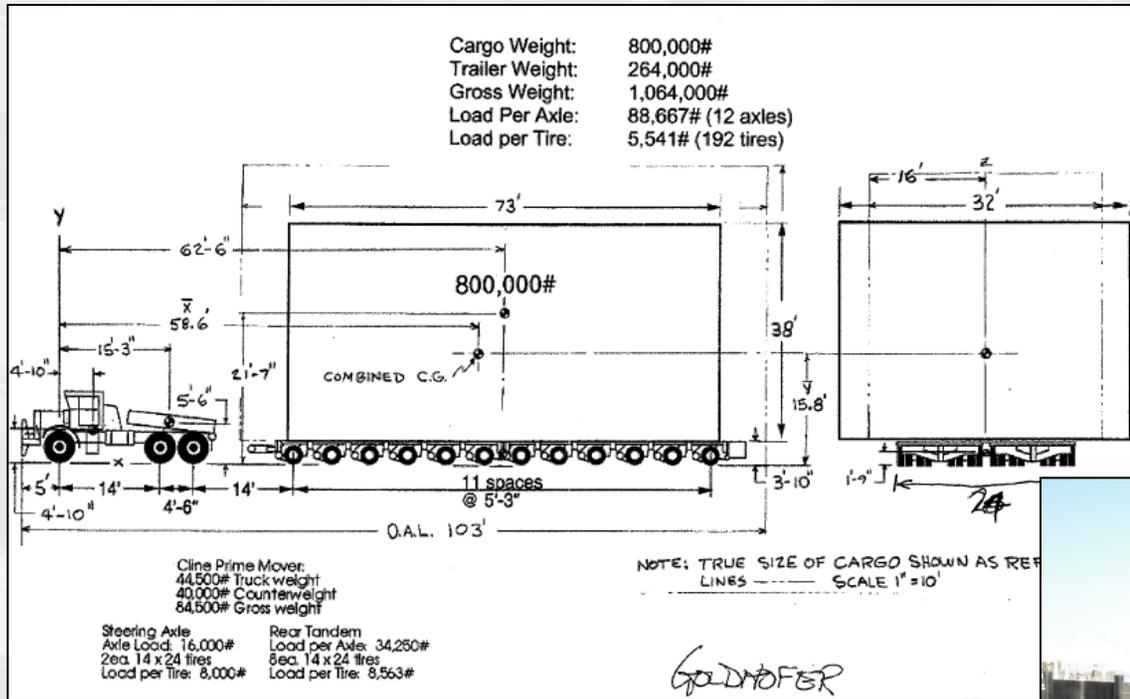


JADWIN PUMP REPLACEMENT



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ARMY DECK CARGO BARGES



NATIONAL PARK SERVICE - VOYAGEUR



BUILDING STRONG®

NASA BARGE PEGASUS



BUILDING STRONG®

NASA BARGE PEGASUS

