Docks Piers & Wharfs

Marine Insurance Day 2013

Presented by
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on behalf of the AIMU Technical Services Committee
Usage Impact

- Yacht Storage
- Buildings
- Fuel Services
- Launching
- Ancillary Services
Pier Construction

- Component Types
- Shore Protection
- Bulkheads
- Support Systems – Anchoring
- Floating Systems
- Anchoring Systems
Bulkheads / Launching Wells -

- Construction & Tie Gear & Anchors
- Box Piles
- Soldier Beam & Lagging
- Steel Sheet
- Precast Concrete
- Vinyl / Plastic & Composite
- Whaler
- Engineering Considerations
Fire & Safety Equipment

- Portable Extinguisher Stands
- Stand Pipe / Hose Systems
- Alarm Systems
- Communication Protocol
- Life Ring & Throwing Line
- Ladders
Pier Maintenance

• Walking the Piers
• Inspection Process
• What about Underwater Structures
• Manufacturer’s Recommendations
• Fueling, Pump Out, Telephone, Cable
• Safety / Fire Equipment
• Security
Anchoring / Marine Borers/ Piling/ Flotation / Land Fill

- Inspection process
- Maintenance records
- Wood Pilings and Life Span
- Flotation Inspection
- Underwater Inspection
- Signs of Land or Fill Regression
Electrical Systems

- Electric feed
- Line protection
- Pedestals
- Over Head Wiring
- Shore Connections
EMP

- Why Yearly Review
- Qualified Electrician
- Pedestal Maintenance / Breaker Inspection
- Cable Runs & Supports / Floating Piers
- Shore Connections
- Yacht Shore Connections
- Record Keeping
Valuation

• Replacement Cost
• Market Value
• Condition
• Age
• Manufacturer
• Maintenance Practices
Pier Horror Stories

- Impact by surge, wind, current
- Maintenance Impact on Survival
- Collapse Prevention
- The Power of Ice
- Impact of low or no water on floating piers
- Bulkhead Erosion
SHIP WORMS
May have danced on this pier?
Size of Pilings
Post Sandy Destruction – Untested Infrastructure systems
Takeaways

• Today’s Marine Docks, Bulkheads and Wharfs are complex systems.
• Understanding the technology of today is needed to understand the exposures.
• Valuing these structures must take into account: Construction Methods, Age, Manufacturer and Maintenance practices.
• There is no database to provide a rule of thumb for valuation. Each dock must be evaluated on its own.
• Experienced Marine Contractors and Design Engineers should be consulted for repairs, maintenance and replacement.
• Good maintenance practices are key to dock longevity and safety.
• There are different “hidden” costs involved in the replacement or repair of different types and aging docks. (utility codes, environmental issues, etc.)
• There is a need for continuing and frequent facility inspections
• Verify the method used for valuation and understand the requested coverage and how it relates to replacement components.
• Never underestimate the value of a good survey of the docks, bulkheads and wharfs.

Look at the AIMU website for the newly completed Technical Committee Paper on Docks, Bulkheads and Wharfs.

www.aimu.org
Questions
This presentation is the work of the AIMU Technical Services Committee

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