AIMU AND MICA Education Seminar

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“THE WORLD OF DREDGES AND DREDGING”

LOSSES AND LOSS PREVENTION

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LOSSES BY CATEGORY

- Operations during Heavy Weather
- Suicides, Self-Inflicted Damages
- Mechanical Failures
- Spoil Line Tows
- Fires
- Cranes
- Hazards To Navigation
- General Liabilities
- Personal Injury
OPERATIONS DURING HEAVY WEATHER

- Continues operations while danger is eminent
- Lack of preparation for heavy weather operations
- Lack of a heavy weather protocol for operations
- Failure to follow proper procedures
- Loss Prevention:
  - Advance monitoring of weather conditions with a three day window for operations
  - Maintain vessels in a seaworthy condition
  - Must have a written hurricane or storm action plan
  - Proper and continuous crew training
WHILE IN TOW OR IN TRANSIT

- Lack of monitoring weather forecasts
- Tows too far off shore
- Tow caught in storm while at sea
- Tow not properly assembled
- Tow not prepared for sea
- Gear not properly secured

Loss Prevention:
- Sufficient weather window
- Monitoring of the route
- Properly prepare the vessels and cargo for the sea voyage
- Require a trip and tow survey by an underwriter approved surveyor
SUICIDES OR SELF-INFLICTED DAMAGE

- Holing with cutter head or excavation bucket
- Holing atop spoils line
- Improper docking procedure
- Improper loading of the spoil barge
- Loss Prevention:
  - Proper training of crew
  - Limit switched on excavator
  - Have the repairs closely monitored by a qualified surveyor, on time and material repairs
MECHANICAL FAILURE

- Not Believing Alarms
- Lack of Maintenance
- Lack of Machinery Logs
- Repairer Errors
- Loss Prevention:
  - Proper training of crew
  - Preventive maintenance program
How Not Effect A Proper Tow

How To Assemble a Proper Tow

Loss prevention:
- Tow pipe with one end on barge, well secured
- Cut pipe into smaller sections for carriage on barge
- Set strict towing procedures
- Survey
Spoil Line Tows
FIRES

- Fire hazards are allowed to develop. Oil saturated rags and paper products not removed to a safe receptacle
- Drip pans not cleaned
- Lack of a sufficient number of hand held fire extinguishers
- Fire extinguishers not properly maintained
- Crew not properly trained in fire prevention skills
- Events beyond the dredge operator’s control

Loss Prevention:
- Keep vessel clean and free of flammable debris
- Keep bilges, decks, & drip pans free of oils and fuels
- Maintain proper firefighting system
- Proper training of crew and periodic drills
CRANES

- Overloading due to inexperienced operator
- Intentional overloading
- Towing with the crane boom in the up position

**Loss Prevention:**

- Use only trained and experienced operators
- Diligent oversight in following the manufacturer’s load and radius guidelines for the cranes
- Proper securing of the cranes for voyages between work sites
- Arrange for a lashing and securing survey prior to the commencement of the repositioning to the new site
HAZARDS TO NAVIGATION

- Spoil lines
- Positioning anchor lines
- Operations in channels

Loss Prevention:
- Properly mark spoil lines for daytime and night time navigation
- Monitor marine traffic closely
- Communicate with approaching vessels
GENERAL LIABILITIES

Damages to:

- Bridges
- Docks
- Pipelines
- Submerged Cables
- Spoil Lines
- Environment
PERSONAL INJURY

- Slip and Falls
- Tripping Hazards
- Rigging Errors
- Mechanical Failures

Loss Prevention:
- Keep work area policed
- Paint steps, coamings, and raised surfaces with yellow danger markings
- Teach proper rigging procedures
- Prepare, issue and comply with a safety manual
- Have frequent safety meetings
- Indoctrinate new hires