



US MEMA
US MERCHANT MARINE SOCIETY



Global Maritime and Transportation School

**at the United States Merchant Marine
Academy**



*“Hammer Award”
Recipient*

“For Reinventing Government”

Vision

“To be a world leader in providing professional education in maritime activities, intermodal transportation, logistics and security”



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Port Operations and Environmental Efficiency

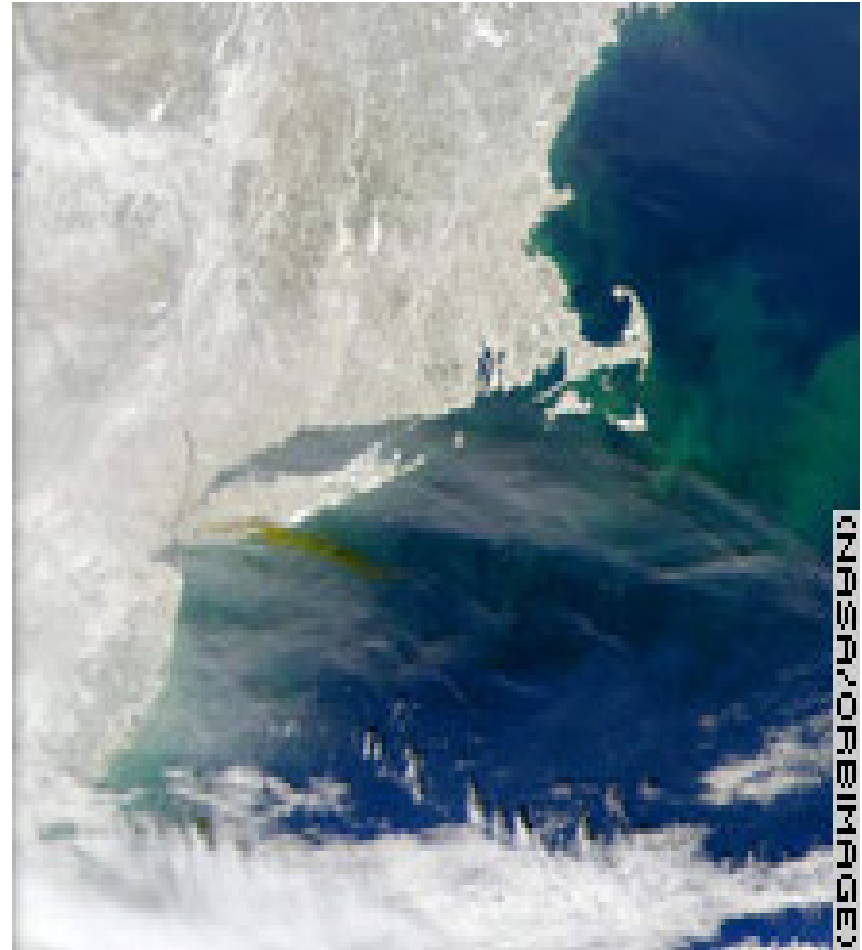
CAPT Fred Evans

USMMA GMATS



Port Ops and the Environment

- Goal of environmentalism as a maritime best business practice
- Maritime cultural perspectives regarding the environment are up
- Bottom line maritime economics are under re-analysis
- East Coast, Gulf Coast and West Coast disparities are closing



Training to Become Operationally and Environmentally Efficient

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Environmental Programs:

- Company Advancement Program (CAP)
- Tanker Man Personnel In Charge (PIC)
- High Voltage
- National Oceanic and Aerospace Administration programs
- Oily water separation research
- Maritime Environmental Program emerging



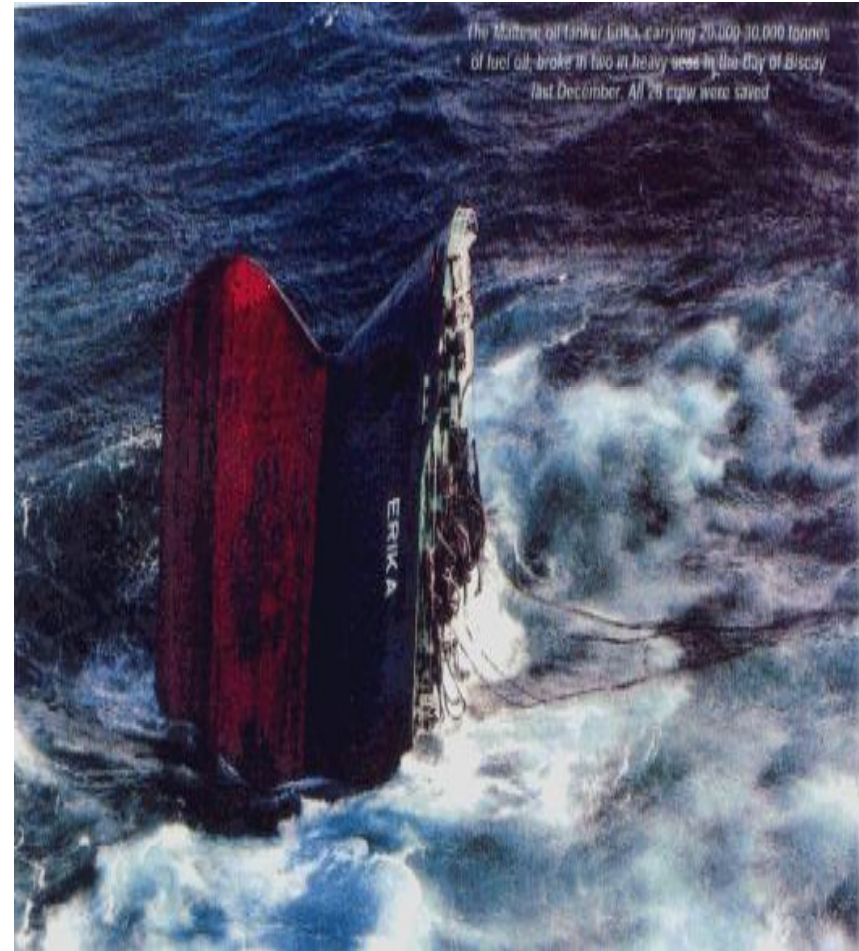
Maritime Environmental Advocates

- EPA
- USCG
- Maritime agencies including MARAD and USMMA
- Federal, State and Local Agencies
- NGOs
- Global government cooperation and standardization critical
- Fair and level field for the commercial global maritime industry and the global environment



Maritime Environmental Regulations

- Pending and existing requirements for air and water
- Advocacy for “equal to” and beyond sustainability environmental levels
- Harmonization of environment with commerce
- Sufficient rate of evolution for future



Environmental Efficiency Impact on Maritime Industry

- Economic impact of fuel efficiency
- Global supply chain cargo safety improvement
- Emerging nations support
- Interagency coordination and maritime operations awareness
- Maritime cultural humanity environmental awareness with training
- Favorable media impact with improved operations



Alternative Maritime Power (AMP) High Voltage Cold Ironing

- High Voltage Shore System
- Minimizes in port emissions
- Short course with focus on personnel safety
- Technological phase-in/retrofit on vessels

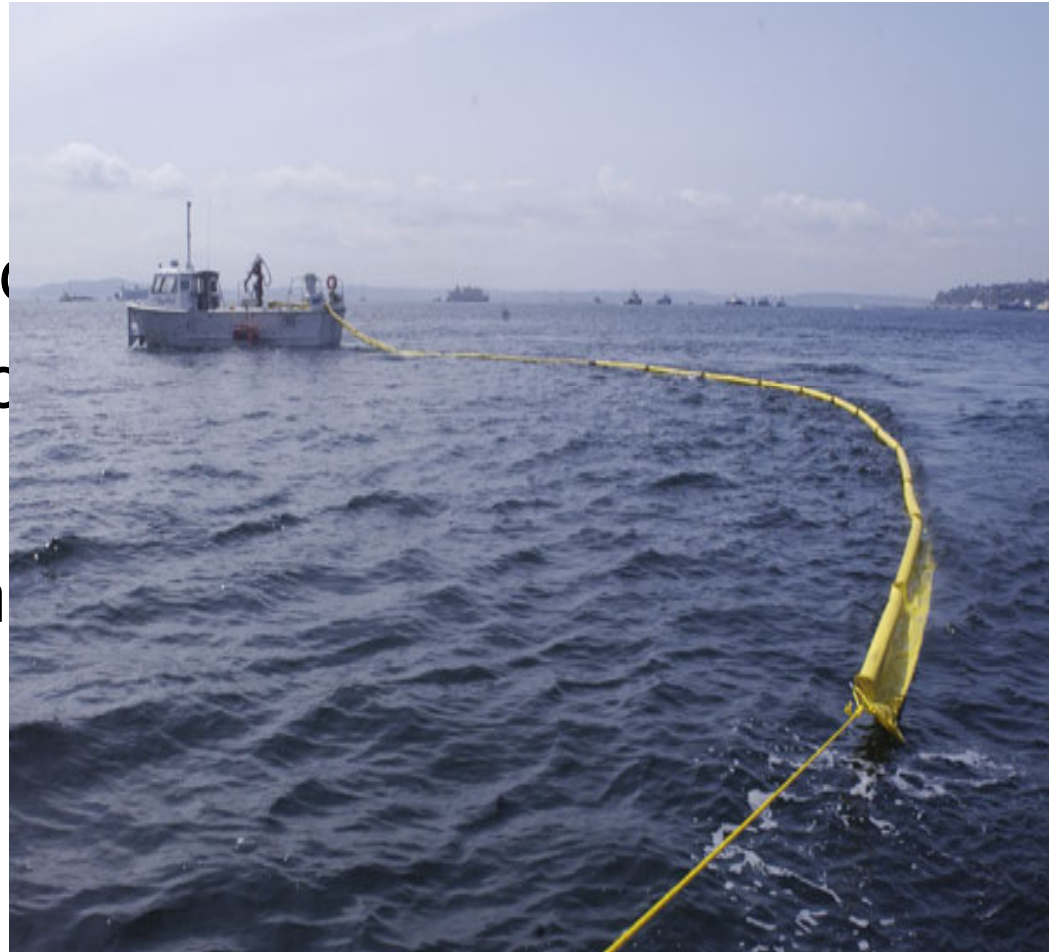


Company Advancement Program (CAP)

CAP empowers
mariners

CAP provides strategic
environmental basis for
tugboat operations

CAP demonstrates and
ingrains proper
response procedures



Tankerman Personnel-in-Charge (PIC)

- Tanker cargo loading and discharge operations
- PIC presents best practice safety and environmental procedure
- Required certification for mariners
- In accordance with MARPOL and other international maritime conventions and directives



Maritime Environmental Program

Maritime Environmental Program:

EPA coordination and representation
MARPOL/IMO considerations
HAZMAT and IMDG cargo handling procedures
Clean air and water
Equipment systems regulations and procedures



The hybrid tug will look and perform like its Dolphin class sisters (shown here) but with a different power set-up.

USMMA GMATS Environmental Research

- Alternative energy research
- Oily water separator research
- Marine engineering systems design prep
- Marine terminal and facility systems design and operation



National Oceanic and Aerospace Administration (NOAA) Schoolhouse

- USMMA GMATS is commissioning and refresher training site for NOAA Corps
- USMMA GMATS role as maritime industry indoctrinator
- Advocacy for pragmatic integrated industry and environmental program
- Global commercial scenario systems solutions



Other Approaches

- Greenpeace vessel Esperanza
- Environmental spotlight sought
- High risk operations need channeling
- Rule of law more appropriate approach
- Socio-Political solutions longer lasting and much less hazardous to safe navigation



Integrating Maritime Operations with the Environment

Where maritime should be moving:

- Environmental and commercial maritime operating cost effectiveness
- Standardized, unified and multilateral global requirements
- Government grants for technology
- Government grants for training programs
- Harmonization of commerce and the environment paramount to success of both

