

Marine Safety Newsletter

US Coast Guard Marine Safety and Environmental Protection Directorate

Marine Safety Lab: Forensic Detectives of the Coast Guard

Cutters and helicopters were not the only Coast Guard resources needed in the search for John F. Kennedy Jr.'s missing airplane in July, even though they received most of the media attention. When investigators needed technical help unraveling the mystery, they turned to the Marine Safety Laboratory (MSL), a unit of the National Maritime Center.

MSL, in Groton, Connecticut, which has been in existence in one form or another for over 20 years, is the Coast Guard's forensic laboratory for oil pollution. The lab provides forensic oil analysis and expert testimony in support of the oil pollution law enforcement efforts for field investigators, districts, hearing officers, the National Pollution Fund Center, Department of Justice, and other federal agencies. Forensic oil analysis is the application of specific knowledge of petrochemicals and use of sophisticated analytical equipment and techniques to identify the source of oil pollution.

Professional chemists and technicians at MSL use technology combined with their expertise to build cases of chemical evidence and bring polluting ships to justice. The lab can often get sufficient information from very small samples to positively identify a polluter and match a "fingerprint" of a spill with that of a suspected source. MSL has the ability to determine whether the oil discharged in a spill is identical to oil sampled from a suspected ship, and it can determine whether oil spilled at one location is from the same source as oil spilled at another. No other federal laboratories currently offer this capability.

During the search for Kennedy's airplane, searchers spotted a fuel slick in the ocean off the coast of Martha's Vineyard. They collected a sample and sent it to MSL to determine if it was airplane fuel, which would tell them whether to search for the plane in that area. Within 24 hours, they had their answer: It turned out to be diesel fuel, and the investigators ruled out the area as a possible crash site. Soon after that, the submerged airplane was found in a different location. While this operation was outside MSL's normal realm of operations, "the lab is flexible," said MSL manager Dr. Martha Hendrick-Smith. "We have the capability to respond to different types of analyses."

Inside:

- 3 Coast Guard Revises User Fees
- 4 Coast Guard Seeks Information
- 4 What's New on the World Wide Web
- 5 IMO Corner
- 6 Prevention Through People
- 7 G-M Studies
- 10 G-M Regulatory Projects
- 13 NFPA Fire Safety Standards
- 14 Calendar of Events

Editor

Edward Hardin
(202) 493-1052
ehardin@ballston.uscg.mil

Technical Writer/Designer

Jason Peak
(202) 493-1058
jpeak@ballston.uscg.mil

www.uscg.mil/hq/g-m/gmhome.htm

The *Marine Safety Newsletter* is published by the USCG Marine Safety and Environmental Protection Directorate to collect and disseminate information of general interest to the maritime community. The monthly newsletter prints abstracts of major USCG rulemakings, studies, special projects, and related events. Articles from non-Coast Guard sources may not represent USCG policy or views.

The inclusion of the name of a specific commercial product, commodity, service, training, or company in this publication is for informational purposes only and does not imply endorsement by the United States Coast Guard.

Contents of this publication are not copyrighted unless indicated. If not copyrighted, the material may be reproduced freely; citation of the *Marine Safety Newsletter* as the source is appreciated. Permission to reproduce any copyrighted material must be obtained from the original source.

To receive the Newsletter monthly or to submit material for consideration, address requests to: Marine Safety Newsletter Editor, National Maritime Center, 4200 Wilson Blvd., Suite 510, Arlington, VA 22203-1804, Tel: (202) 493-1056, Fax: (202) 493-1065.

September 1999



In a recent high-profile case, MSL was instrumental in Royal Caribbean's record \$18 million criminal fine and 21 federal felony count plea agreement. The cruise line was punished for illegally dumping waste oil and hazardous chemicals in the waters of Alaska, California, Florida, New York, Puerto Rico, and St. Thomas, Virgin Islands, and for lying to the Coast Guard. The government's case against Royal Caribbean began in 1994, when the Coast Guard caught Royal Caribbean's Sovereign of the Seas dumping waste off the coast of Puerto Rico. Evidence against the company was strong. Conclusive oil fingerprinting by MSL—matching the oil found in the ocean to the oil tank aboard the cruise ship—made the evidence overwhelming. The fines collected in the case will be used to help recover the cost of the public resources used for pollution response.

For the staff of the lab, catching a polluter gives them a great feeling. "That's what keeps you going. That's the thrill of the chase," says Dr. Hendrick-Smith. "When we see a match, there's a real feeling of doing your job." However, she explained that not every case ends successfully. "There are some samples we can't match, but you have to understand the limitations."

For over 100 years, fingerprints have been used in the courtroom to place a suspect at the scene of a crime. Now oil fingerprinting allows prosecutors to place polluters at a specific location and provide concrete evidence in the courtroom. The Marine Safety Laboratory's ability to fingerprint oil will continue to link suspected polluting ships to oil spills for prosecution, allowing the government to hold companies and individuals accountable for their actions.

The Oil Identification Process

Petroleum is a complex mixture of thousands of different organic compounds, which have been transformed from living matter under different conditions. The refining process also changes the chemical composition, and mixing with other chemical products or contaminates during transfer produces even more distinguishing characteristics. Petroleum chemistry is the study of the chemical components of oil and the processes involved in its production. It requires knowledge of the science of organic chemistry. Oil spills result from the release of oil into the environment, and environmental chemists are concerned about the changes which oil undergoes once it is spilled. The science of analytical chemistry studies the techniques and the processes involved in determining just what, and how much, is in a sample. Oil identification is best described as scientific techniques that draw upon knowledge from all these sciences to match spilled oil with its source.

We use a sequence of several chemical analysis techniques for oil identification, sometimes called oil-spill source determination or oil fingerprinting. If two oils are derived from a common source of petroleum, a "match" should result from any technique. This is the basis of the multi-method approach used by the Coast Guard. Matches are confirmed with an independent analytical technique, which looks at different characteristics of the oil.

Instruments and analytical methods are automated with computers and produce data of higher resolution. Two or more analytical methods will be used: infrared spectroscopy (IR), fluorescence spectroscopy (FL), gas chromatography (GC), and the advanced "hyphenated" technique known as GC-MS.

- IR takes only three minutes to produce data for each sample. The transmission of infrared radiation at different wavelengths is measured.

- FL is the most sensitive of the four methods and is used for very small samples, such as those found in oil sheens.

- GC takes about an hour and separates samples into groups of different molecules with different boiling points. Molecules pass through a column at different speeds and are burned in a flame, producing a chart known as a chromatogram. This is the "fingerprint" used to compare samples.

- GC-MS uses gas chromatography, but the mass spectrograph separates and breaks down the effluent of the chromatograph even further into groups of ions. Many different ions, or biomarkers that are characteristic of petroleum are selected for simultaneous detection. The individual ion chromatograms are extracted and are compared to determine if there is a match. Several dozen different fingerprints for each sample may be produced.

The Science of Oil Identification

One of the common misconceptions about petroleum oils is that all oils of the same type have the same chemical composition. This idea probably results from the fact that petroleum products of the same class are refined to meet the same specifications. However, just as when two snowflakes are compared to each other, when petroleum oils from different sources are compared, the differences between them can be observed.

Petroleum is a complex mixture of thousands of different organic compounds. Oils are derived from living matter and are transformed under different conditions. The refining process changes the chemical composition, and mixing with other chemical products or contaminates during transfer produces even more distinguishing characteristics. Petroleum chemistry is the study of the chemical components of oil and the processes involved in its production. It requires knowledge of the science of organic chemistry. Oil spills result from the release of oil into the environment, and environmental chemists are concerned about the changes which oil undergoes once it is spilled. The science of analytical chemistry studies the techniques and the processes involved in determining just what, and how much, is in a sample. Oil identification is best described as scientific techniques that draw upon knowledge from all these sciences to match spilled oil with its source.

Oil identification depends on science, not magic. An oil identification expert can testify about the chemical composition of the samples, not their physical origin. Therefore, a thorough investigation is important. A thorough investigation including the collection of the physical evidence can show the spilled oil linked to the "chemical source" in a physical location, such as a particular vessel.

Dr. Martha Hendrick-Smith, Manager, USCG Marine Safety Laboratory



Coast Guard Revises User Fees

Effective October 4, the Coast Guard revises its user fees for its services relating to the issuance of merchant mariner licenses, certificates of registry, and merchant mariner documents. The revisions were based on the most recent recalculation of program costs.

They are also available on the Internet at http://www.access.gpo.gov/su_docs/fedreg/a990805c.html.

For information or questions concerning the final rule provisions, contact CDR Mark McEwen, Project Manager, U.S. Coast Guard Headquarters, Office of Planning and Resources (G-MRP), (202) 267-0785.

Online Safety Course

The BOAT/U.S. Foundation for Boating Safety offers a free boating safety course on the Internet. More than 35,000 people have registered and taken the test since 1997.

The 55-question teaching test is innovative, in that it gives students the opportunity to study as they go by linking to a comprehensive glossary and library of reference materials. Each test is able to reflect the regulations of the person's home state, thanks to the participation of state boating offices that have supplied state-specific questions. Students who pass the test with a score of at least 80% are awarded a free certificate.

Take the test online at www.boatus.com/onlinecourse.

Category	Evaluation fee	Examination fee	Issuance fee
License:			
Original upper level	\$115	\$110	\$45
Original lower level	115	95	45
Raise of grade	100	45	45
Modification or removal of limitation or scope	50	45	45
Endorsement	50	45	45
Renewal	50	45	45
Renewal for continuity purposes	n/a	n/a	45
Reissue, Replacement, and Duplicate	n/a	n/a	45*
Radio Officer License:			
Original	65	n/a	45
Endorsement	50	45	45
Renewal	50	n/a	45
Renewal for continuity purposes	n/a	n/a	45
Reissue, Replacement, and Duplicate	n/a	n/a	45*
Certificate of Registry:			
Original (MMD holder)	105	n/a	45
Original (MMD applicant)	120	n/a	45
Renewal	50	n/a	45
Renewal for continuity purposes	n/a	n/a	45
Endorsement	n/a	n/a	45
Reissue, Replacement, and Duplicate	n/a	n/a	45*
STCW Certification:			
Original	No fee	No fee	No fee
Renewal	No fee	No fee	No fee
Merchant Mariner Document:			
Original without endorsement	110	n/a	45
Original with endorsement	110	140	45
Endorsement for qualified rating	95	140	45
Upgrade or Raise in Grade	95	140	45
Renewal without endorsement for qualified rating	50	n/a	45
Renewal with endorsement for qualified rating	50	45	45
Renewal for continuity purposes	n/a	n/a	45
Reissue, Replacement, and Duplicate	n/a	n/a	45*
Other Transactions:			
Duplicate Continuous Discharge Book	n/a	n/a	10
Duplicate record of sea service	n/a	n/a	10
Copy of certificate of discharge	n/a	n/a	10

*Duplicate for document lost as a result of marine casualty—no fee.



Coast Guard seeks Information on GPS Interference

The Coast Guard requests comments regarding actual or potential interference to Global Positioning System (GPS)-based maritime navigation systems caused by mobile satellite service telephones and other electronic devices on vessels.

Telephones using satellites for transmission (not land-based cellular telephones) and other electronic devices may block or interfere with radio wave signals provided to GPS and Differential GPS (DGPS) receivers. This interference has the potential to adversely affect the safe navigation and operation of vessels that use GPS (including DGPS) for positioning, autopilot input, or Automatic Identification System (AIS) transponders that communicate ship position and navigation information to other AIS-equipped vessels or to shore-based Vessel Traffic Services.

Comments must reach the Docket Management Facility, U.S. Department of Transportation, 400 Seventh St. SW, Washington, DC 20590-0001, by November 15.

For general questions on this notice, contact LT Terry Johns, Office of Aids to Navigation, (202) 366-9329.

New Publications in Marine Safety

Water Wise

By Jerry Dzigan and Susan Clark Jensen
200 pages, illustrated

Each year, thousands of recreational boaters take to the nation's waters. Some of these excursions end in tragedy because many people don't have enough experience to be completely safe.

This book from the U.S. Marine Safety Association and Alaska Sea Grant Program aims to solve that problem. The book takes a comprehensive look at all aspects of boating safety and presents it in a straightforward style with dozens of informative graphics.

Chapters cover preparations for a safe trip, reading the weather, survival on the water, first aid, fire fighting and prevention, personal flotation devices, rescue signals and communication electronics, safe seamanship, and more. It aims to teach boaters how to safely bring another vessel under tow; choose, operate, and maintain EPIRBs; administer CPR; build a shelter, signal for help, and avoid dehydration and other dangers; and select the right PFDs for themselves and passengers.

Water Wise will be able to teach even the most experienced boater a lesson or two. It should soon be the most-referenced book in any mariner's library. To order the book, which retails for \$19.95, call Sherri Pristash at (907) 474-6707.

WWW.



What's New on the
World Wide Web

<http://www.uscg.mil/hq/g-m/gmhome.htm>

Updated Licensing User Fee Schedule

<http://www.uscg.mil/STCW/fees.htm>

Deck Guide—This manual provides guidance for examination room proctors and other personnel who actively monitor merchant marine applicants in the exam room.

<http://www.uscg.mil/hq/g-m/marpers/examques/deckguide.pdf>

Approved Courses

<http://www.uscg.mil/hq/g-m/marpers/examques/achome.htm>

Vessel Response Plan—(VRP)/Shipboard Oil Pollution Emergency Plan (SOPEP) Home Page.

<http://www.uscg.mil/vrp/>

Investigations and Analysis

<http://www.uscg.mil/hq/g-m/moa/filter.htm>



Report of IMO COMSAR Meeting

The International Maritime Organization (IMO) Radiocommunications and Search and Rescue Subcommittee (COMSAR) met July 12–16. It consisted of 59 Administrations and 24 observer organizations that worked together and adopted positions to ITU World Radio Conference 2000; agreed to criteria for mobile satellite systems participating in GMDSS; hosted AMVER award ceremony; adopted circulars on operation of DSC and RCC responses to GMDSS alerts; addressed locating requirements for survival craft; considered use of cellphones for SAR; and addressed technical requirements for a possible international search and rescue fund.

NAVTEX. Simplified display proposal for non-SOLAS vessels rejected. Manual updated. Recommended port state inspectors check NAVTEX/safetynet receiver settings. Recommended administrations bring B1 identity characters in line with NAVTEX manual.

DSC procedures. Adopted new flow diagrams and circular for ships for using VHF, MF, and HF DSC radios.

Criteria for mobile satellite systems participating in the GMDSS. IMO strongly supported adoption of these criteria, which establish procedures for new satellite systems to meet IMO's GMDSS carriage requirements.

Ro-ro survival craft homing requirements. Supported use of SAR Radar Transponders (SART) for

short-range homing, rejecting U.S. position in Support of 121.5 MHz.

DSC statistics. Supported Japanese proposal recommending Administrations collect statistics, but deferred specific recommendation until next session.

Thirty-three states and 7 international organizations participated in the search and rescue (SAR) working group. Due to completion, after 18 years of IMO effort of the provisional global SAR plan, the group began assessing where effective SAR services were still unavailable, and what is still needed to implement the global plan. The group specifically addressed the Committee's request for advice on the need to establish a potential International SAR fund to assist certain states where SAR and communication services are particularly inadequate.

IMO Secretary General O'Neil presented the 1998 AMVER awards to UK flag shipping companies, and Lloyd's of London presented the prestigious rescue-at-sea award, during a COMSAR break. This successful event was attended by the U.S. embassy, many honorary guests, and the majority of delegates to COMSAR. (AMVER is a worldwide ship reporting system for SAR operated by the Coast Guard.)

General communications. France noted some inconsistencies in the IMO definitions of general communications (COMSAR 4/3/1). The SC reaffirmed the SOLAS text which excludes safety from definition of general communications, and reaffirmed that ITU radio reg articles s32 and s33 Sufficiently defined safety communications. A circular clarifying safety and general communications is needed.

UPCOMING IMO MEETINGS

September 6-10	Facilitation Committee—27th session
September 20-24	Subcommittee on Safety of Navigation (NAV)—45th session
October 4-8	21st Consultative Meeting of Contracting Parties to the London Convention 1972
October 11-15	Legal Committee—80th session
October 18-22	IOPC Funds—92 Fund Assembly, 71 Fund Assembly, 92 Fund Executive Committee, 71 Fund Executive Committee
November 12*	Council—20th extraordinary session
November 15-26*	Assembly—21st session
November 26*	Council—83rd session
December 6-10*	21st Consultative Meeting of Contracting Parties to the London Convention 1972

* Tentative

The International Maritime Organization Corner better informs the maritime community about the vital work conducted through this international organization. The IMO Corner will present highlights of recently completed meetings, a calendar of IMO meetings, as well as a listing of supporting U.S. SOLAS Working Group meetings.

Prevention Through People



Alaska Small Passenger Vessel Task Force—PTP in Action

A series of three small passenger vessel groundings this summer in Alaska provided the impetus to find ways of better managing the risk of operating these vessels in the remote waters of Alaska. One of these vessels ran hard aground at high water in an area where there was a 20-foot tidal range. Hours later, the vessel was perched on a rock at a 40-degree list, requiring the evacuation of the more than 100 crew and passengers on board. The other grounding led to the uncontrolled flooding of the engine room requiring all passengers to evacuate the vessel to another passenger vessel in the area. The Alaska Small Passenger Vessel Task Force was chartered to set in motion deliberations with other agencies and the marine community to identify initiatives that are likely to reduce the potential for future accidents. The task force is comprised of representatives from state and federal agencies who have met with and will continue to seek input from the affected marine community.

The objective of this task force is to identify any safety initiatives and “Lessons Learned” that can be implemented this tourist season and distribute them in a preliminary report to be released on August 24 (as of this writing). A more comprehensive report will be developed over the fall and be released by December, allowing implementation of any identified safety initiatives for the 2000 tourist season.

The task force is committed to applying Coast Guard PTP principles of “Honor the Mariner,” “Shared Commitment,” “Manage Risk,” and “Seek Non-Regulatory Solutions.” All Coast Guard task force members have embarked on various small passenger vessels sailing from Seward, Valdez, Whittier, and Juneau prior to the first task force meeting to develop an appreciation for the current state of

operations and to benchmark and promote the “best practices” followed by experienced operators.

This summer’s small passenger vessel incidents also highlighted the response challenges in Alaska presented by the remoteness of the waters transited by these vessels, the poor—and in some cases non-existent—emergency communications, and the harsh operating environment. Accordingly, the task force is also looking at ways of improving our response posture so that we can minimize the consequences of maritime accidents.

Of note is that while the recent accidents were costly with respect to property damage, environmental impact was minimal and evacuation of passengers and crew was done safely, professionally, and efficiently. The very active and robust small passenger vessel industry in Alaska has an excellent track record. Several hundred thousand passengers are safely transported throughout Alaska each tourist season on these class vessels. The number of accidents is very small in comparison to the number of voyages. However, these incidents also provide a leading indicator of risk and problems that we’re likely to face in the future if we maintain “status quo.” These accidents also provide some valuable “Lessons Learned” that should be shared with other mariners in a timely way to minimize the opportunity for similar accidents.

If you would like more information on the work of the task force, visit our Web site at <http://www.akrrt.org/spvtaskforce/>. We seek your input and ideas on how the industry, Coast Guard, and other agencies can best ensure safe, efficient, and environmentally sound passenger vessel operations in Alaska. If you are interested in taking part in this process, please fill out the online submission form on the Web page, or call me at (907) 463-2199.

*Captain Edward E. Page,
Chief of Marine Safety Division,
17th Coast Guard District*

PRINCIPLES

- Take a Quality Approach
- Honor the Mariner
- Seek Non-Regulatory Solutions
- Share Commitment
- Manage Risk

VISION

To achieve the world’s safest, most environmentally sound and cost-effective marine operations by emphasizing the role of people in preventing casualties and pollution.

GOALS

- Know More
- Train More
- Do More
- Offer More
- Cooperate More

Contact us directly with your PTP story:

Commandant (G-MSE-1), U.S. Coast Guard Headquarters, 2100 Second Street, SW, Washington, DC 20593-0001; (202) 267-2997; (202) 267-4816 Fax; e-mail: fldr-he@comdt.uscg.mil





G-M Studies

The following is a list of G-M studies and reports under development, including their status and contact person. The *Marine Safety Newsletter* will update this listing as new information is received. Small business interests needing assistance in understanding the information may telephone the contacts identified for the study or report.

Research in Tanker Groundings

This non-mandated study is being conducted by the Coast Guard to study the structural behavior of tankers during groundings.

STATUS: Research is being conducted at MIT. The first phase of the study is complete, and the second phase is underway. Availability of the study report will be announced through the *Marine Safety Newsletter*.

CONTACT: Mr. Sirkar, Tel.: (202) 267-6925

Port Access Routes Study; Strait of Juan de Fuca and Adjacent Waters

The Coast Guard is conducting a study of port-access routes to evaluate the continued applicability of and the need for modifications to current vessel routing measures in and around the Strait of Juan de Fuca and adjacent waters, including Admiralty Inlet, Rosario Strait, Haro Strait, Boundary Pass, and the Strait of Georgia. The goal of the study is to help reduce the risk of marine casualties and increase vessel traffic management efficiency in the study area. The recommendations of the study may lead to future rulemaking or appropriate international agreements.

STATUS: Notice; request for comments (USCG-1999-4974) published on January 20, 1999 (64 FR 3145). Notice of meeting; extension of comment period published on April 15, 1999 (64 FR 18651). Comment period closed on May 31, 1999. Public meeting was held on May 12, 1999 in Seattle.

CONTACT: John Mikesell, Tel.: (206) 220-7272 or Barbara Marx, Tel.: (202) 267-0574

Prince William Sound Notice of Study Results

The Port Access Route Study looked into vessel transit safety and recommended some changes to the traffic lane separation scheme (TSS) in the vicinity of Prince William Sound (PWS), AK. The changes were recommended only to the approach routes used by vessels in the voluntary TSS. This study was conducted as a result of a PWS Risk Assessment Steering Committee report regarding oil shipping risk within the sound. USCG MSO Valdez completed the study on March 4, 1999. The Notice of Study was released in the Federal Register on February 9, 1998 (63 FR 6502).

STATUS: Drafting the Federal Register notice.

CONTACT: LT Michael Dreier, Tel.: (202) 267-6490

Crew Size Evaluation Model

The Crew Size Evaluation Model (CSEM) was developed for Coast Guard proprietary use by a research team including the Coast Guard Research & Development Center (R&DC), Battelle Seattle Research Center, and Rensselaer Polytechnic Institute. The application will facilitate an understanding of how changes in operational factors (such as port call frequency or shoreside maintenance) can affect the number of crew needed aboard the ship. It can also be used to evaluate crew proposals for merchant vessels. CSEM has been developed over several years based on the premise that technological change and economic pressure are forcing the Coast Guard to take a new look at determining minimum crew complements. It uses crew tasking and work hours as objective measures to help determine appropriate manning. CSEM has been designed as an analysis tool that will support policy decisions related to the determination and evaluation of vessel manning. Initially sponsored by G-MSO, CSEM will be implemented in G-MOC as the Office responsible for vessel manning compliance.

STATUS: A "Beta" version delivered to G-MOC and user training provided December 1998. After obtaining input from users, a final version will be delivered in FY99.

G-M Studies



Port Access Routes Study for Approaches to Los Angeles and Long Beach

The Coast Guard is conducting a study of port-access routes for the approaches to Los Angeles and Long Beach. The study will evaluate potential effects of recent port improvement projects on navigational safety and vessel traffic management efficiency in the study area and may recommend changes to existing vessel routing measures. The recommendations of the study may lead to future rulemaking.

STATUS: Request for comments (USCG-1999-5198) published on March 11, 1999 (64 FR 12139). Comment period closed on May 10, 1999.

CONTACT: Mike VanHouten, Tel.: (510) 437-2968

Shipboard Fatigue Countermeasures Analysis

This project is designed to tie the previous fatigue projects together. Project deliverables include lists of fatigue reducing countermeasures prioritized by effectiveness to ease implementation.

Status: This project will start in 2000, and will conclude at the end of 2001.

Contact: Dr. Carlos Comperatore, Tel.: (860) 441-2751

Watchkeeping Alertness in Towing Operations

Conducted by Battelle Seattle Research Center under contract to R&DC. Objectives for this include understanding factors which affect alertness in towing vessel crews. The research team has collected data on line boats and harbor tugs in the lower Mississippi and Ohio Rivers. Companies have participated in the study by offering their crews as test subjects on a voluntary basis. Voluntary participation has been outstanding, approaching 100 percent of solicited crewmembers.

STATUS: The analysis of data is nearly complete. The next phase of the project, development and testing of fatigue countermeasures, should be completed near the end of 2001.

CONTACT: Dr. Carlos Comperatore, Tel.: (860) 441-2751

Improving Crew Alertness on Commercial Vessels

This project will identify the incidence of fatigue in deep draft vessel crews and develop crew endurance plans to mitigate fatigue. Data has been collected from the crew of a tank vessel, and will be used to develop fatigue countermeasures. The deliverable for this project will be a Professional Mariner's Crew Endurance Handbook.

STATUS: Data has been collected, and analysis is in progress. The project is planned to conclude in early 2000 following development and testing of fatigue countermeasures.

CONTACT: Dr. Carlos Comperatore, Tel.: (860) 441-2751



G-M Regulatory Projects

The following is a list of select G-M regulatory projects including their status and point of contact information. For more information on these and other marine safety rulemaking projects, visit the G-M Regulations home page at <http://www.uscg.mil/hq/g-m/regs/reghome.html>.

If you are a small business interest needing assistance in understanding and complying with the regulatory requirements, please telephone the applicable contact listed below. The Small Business and Agriculture Regulatory Enforcement Ombudsman and ten Regional Fairness Boards were established to receive comments from small businesses about federal agency enforcement actions. The Ombudsman will annually evaluate the enforcement activities and rate each agency's responsiveness to small business. If you wish to comment on the enforcement actions of the Coast Guard, call (888) REG-FAIR (734-3247).

ANPRM-Advance Notice of Proposed Rulemaking • **NPRM**-Notice of Proposed Rulemaking • **IR**-Interim Rule • **DFR**-Direct Final Rule

**CDG 89-050
Vessel
Identification
System**

This rulemaking establishes a Vessel Identification System (VIS) and will prescribe the manner and form for participating States to make information available for VIS; establish guidelines for State vessel titling systems; and establish procedures for certifying compliance with those guidelines. On April 19, 1999 (64 FR 19039), the Coast Guard published a notice delaying the effective date of subpart D until October 24, 1999.

STATUS: IFR published on April 25, 1995 (60 FR 20310). SNPRM being drafted.

CONTACT: LCDR Nancy Goodridge, Tel.: (202) 267-0254

**USCG 1999-5705
Marine Transportation
Related
Facility Response
Plans for Hazardous
Substances**

This rulemaking would require owners or operators of onshore marine transportation-related facilities to submit a response plan for worst case discharges of hazardous substances.

STATUS: ANPRM published in 61 FR 20084. Comment period closed September 3, 1996. Proposed regulations are in clearance.

CONTACT: LT Michael Roldan, Tel.: (202) 267-0106

**CDG 94-055
Licensing and
Manning for
Operators of
Towing Vessels**

This rulemaking would revise the requirements for licensing those individuals operating towing vessels. It would institute new licenses with levels of qualification and with enhanced training and operating experience. Further, it would require all towing vessels to be manned by officers holding licenses specifically authorizing such service. It is based on the investigation of a collision of a tug and barge with a railroad bridge, near Mobile, AL, in September 1993, which caused 47 deaths. The casualty prompted the Coast Guard's report, "Review of Marine Safety Issues Related to Uninspected Towing Vessels." Some of the recommendations contained in the review are incorporated into this rulemaking.

STATUS: NPRM was published on June 19, 1996 (61 FR 31332). SNPRM was published on October 27, 1997 (61 FR 31332). Four public meetings were held in February 1998. The comment period closed February 24, 1998. Interim Rule is in clearance.

CONTACT: LCDR Luke Harden, Tel.: (202) 267-0229

**USCG 1997-2799
User Fees for
Licenses, Certificates
of Registry,
and Merchant
Mariner
Documents**

This project would revise user fees for Coast Guard services relating to the issuance of merchant mariner licenses, certificates of registry, and merchant mariner documents. The proposed revisions are based on the most recent recalculation of program costs associated with mariner documentation services. This is the first proposed revision of these user fees since they were established in the final rule published on March 19, 1993 (59 FR 15228). That final rule became effective on April 19, 1993. The Coast Guard is also proposing to reformat the two CFR sections in which the fees are published from narrative text into a more user-friendly table.

STATUS: NPRM published on April 1, 1998 (63 FR 16024). Final Rule published on August 5, 1999.

CONTACT: CDR David Skewes, Tel.: (202) 267-6888

G-M Regulatory Projects



USCG 1997-3198 Alternate Convention Tonnage

The Coast Guard is considering developing alternate tonnage thresholds for certain vessels based on the measurement system established under the International Convention on Tonnage Measurement of Ships, 1969. Existing tonnage thresholds in domestic laws and regulations are based on the U.S. regulatory measurement system. Establishing the international convention tonnage as an option for applying domestic regulations may result in the building of safer, more efficient vessels and may enable designers and operators of U.S. vessels to be more competitive in the international market. The Coast Guard asks for comments on related issues and questions.

STATUS: Notice and request for comments published on February 4, 1998 (63 FR 5767). Comment period closed October 15, 1998. Preparing proposed rule.

CONTACT: Mr. Peter Eareckson, Tel.: (202) 366-6502

USCG 1998-3798 Numbering of Undocumented Barges

The Coast Guard is establishing a statutorily required numbering system for operating undocumented barges over 100 gross tons. The numbering of these barges would increase owner accountability and deter their abandonment, making fewer barges available for disposal of hazardous substances.

STATUS: ANPRM published on July 6, 1998 (63 FR 36384). Comment period closed on November 3, 1998.

CONTACT: Mr. Thomas Willis, Director, National Vessel Documentation Center, Tel.: (304) 271-2506

USCG 1999-5004 Alternate Compliance Program; Incorporations by Reference

This direct final rule (DFR) amends part 8 of Title 46, Code of Federal Regulations, to add recently approved incorporations by reference. Adding several recently approved sets of classification society rules and supplements through incorporation by reference is essential for the continued viability and validity of the Alternate Compliance Program (ACP) regulations. This rule also inserts the address and telephone numbers of the Coast Guard office identified in several parts as the source for additional information to facilitate our ACP. This rule makes no substantive changes to current regulations. It enables continuation of the ACP, which was developed to reduce redundant vessel inspections without jeopardizing safety. The final rule on the ACP was published in the Federal Register (62 FR 67526) on December 24, 1997.

STATUS: DFR was published on June 8, 1999 (64 FR 30437). Comment period open until August 9, 1999. Effective date is September 7, 1999.

CONTACT: Mr. Jaideep Sirkar, Tel.: (202) 267-6925

USCG 1999-6098 Great Lakes Pilotage Rates

This project will allow annual adjustments to rates that Great Lakes registered pilots will charge for their services based on a review of actual expenses. This will keep pilot compensation comparable to the "target pilot compensation" specified in Appendix A to 46 CFR part 404, Ratemaking Analyses and Methodology, and to set the rate at the lowest possible level. Additionally, by making annual adjustments, large rate changes seen in the past can be avoided.

STATUS: Workplan in Clearance.

CONTACT: Mr. Frank J. Flyntz, Tel.: (202)366-8981

USCG 1998-4501 Improvements to Marine Safety in Puget Sound-Area Waters

The Coast Guard seeks public comment on potential rules that would improve marine safety in Puget Sound-area waters including Puget Sound, the Strait of Juan de Fuca, passages around and through the San Juan Islands, and the Olympic Coast National Marine Sanctuary. Based on a recent determination by the Secretary of Transportation regarding the status of marine safety in the Puget Sound-area, the Coast Guard has begun a comprehensive cost-benefit analysis to study the feasibility of implementing new safety measures, including extended tug escort requirements for certain vessels and a dedicated pre-positioned rescue vessel. Public input will help focus the cost-benefit analysis and help us develop any future proposed rules that may be necessary.

STATUS: ANPRM was published November 24, 1998 (63 FR 64937). Comment period closed on May 24, 1999.



G-M Regulatory Projects

**USCG 1998-4302
Handling of Class I (Explosive) Material or Other Dangerous Cargoes within or Contiguous to Waterfront Facilities**

This rulemaking will revise the regulations covering waterfront facilities handling dangerous cargoes. Current regulations would be updated to reflect improved safety procedures and modern transportation methods, such as the use of containers. This proposed rule would also update the requirements for the handling of these dangerous cargoes and incorporate industry standards.

STATUS: NPRM published on October 29, 1998 (63 FR 57964). Comment period closed March 1, 1999. Final Rule being drafted.

CONTACT: LT Charles Srioudom, Tel.: (202) 267-2498

**USCG 1998-4354
Tank Vessel Response Plans for Hazardous Substances**

The Coast Guard proposes regulations that would require response plans for certain tank vessels operating on the navigable waters of the United States that could reasonably be expected to cause substantial or significant and substantial harm to the environment by discharging a hazardous substance. These regulations are mandated by the Oil Pollution Act of 1990 (OPA 90), which requires the President to issue regulations requiring the preparation of hazardous substance response plans. The primary purpose of requiring response plans is to minimize the impact of a discharge of hazardous substances into the navigable waters of the United States.

STATUS: NPRM published March 22, 1999 (64 FR 13734). Comments due Aug. 30, 1999. Public meeting to be held Aug. 12 and 13 in Houston (64 FR 31994).

CONTACT: LT Michael Roldan, Tel.: (202) 267-0106

**USCG 1998-4399
Automatic Identification System Carriage Requirement; Vessel Traffic Service Lower Mississippi River**

The Coast Guard held a public meeting in New Orleans to solicit comments on the establishment of a new Vessel Traffic Service (VTS) in the Lower Mississippi River area and a potential Automatic Identification System (AIS) carriage requirement for certain vessels operating in the new VTS area. We are currently reviewing public input to help develop a proposed rule.

STATUS: NPRM being drafted.

CONTACT: Mr. Jorge Arroyo, Tel.: (202) 267-0407

**USCG 1998-4443
Emergency Control Measures for Tank Barges**

This interim rule implements measures for maintaining or regaining control of a tank barge that will reduce the likelihood of a tank barge's grounding and spilling its cargo. These measures are necessary because without them a tug that loses its tow lacks ready means for regaining control of it.

STATUS: Interim rule (IR) with request for comment published on December 30, 1998 (63 FR 71754). The IR is effective March 30, 1999 except for 33 CFR 155.230(b)(1) and 46 CFR 32.15-15(e), which are effective on December 11, 2000. Notice of meeting; reopening of comment period published on April 15, 1999 (64 FR 18576). Public meeting held in Washington, DC on May 12, 1999. Comment period closed on June 10, 1999.

CONTACT: Mr. Robert Spears, Tel.: (202) 267-1099; or Mr. Allen Penn, Tel.: (202) 267-2997

**USCG 1999-5040
Safety of Uninspected Passenger Vessels under the Passenger Vessel Safety Act of 1993**

The Coast Guard will propose regulations that implement safety measures for uninspected passenger vessels under the Passenger Vessel Safety Act of 1993 (PVSA). These regulations will implement the new class of uninspected passenger vessel of at least 100 gross tons, address the confusion regarding bareboat charters, provide for the issuance of special permits to certain uninspected passenger vessels, and develop specific manning, structural fire protection, operating, and equipment requirements for a limited fleet of PVSA exempted vessels.

STATUS: ANPRM published on April 1, 1999 (64 FR 15709). Comment period closed on June 30, 1999. Proposed rule being drafted.

CONTACT: Mr. James Cratty, Tel.: (202) 267-6742.

G-M Regulatory Projects



**USCG 1998-4623
Limited Service
Domestic Load
Lines for River
Barges on Lake
Michigan**

This rulemaking incorporates into 46 CFR part 45 the present load line exemption routes that have been announced in Federal Register notices for unmanned dry cargo barges carrying nonhazardous cargoes on river barges operating on Lake Michigan between Chicago, IL and Milwaukee, WI; and Chicago and Muskegon, MI.

STATUS: The notices were published on September 21, 1992 (57 FR 43479), March 31, 1995 (60 FR 16693), September 28, 1995 (60 FR 50234), and August 26, 1996 (61 FR 43804). NPRM was published on November 2, 1998 (63 FR 58679). Comment period extended on December 28, 1998 (63 FR 71411). Comment period closed on March 4, 1999. Interim rule being drafted.

CONTACT: Mr. Thomas Jordan, Project Manager, Tel.: (202) 267-0142

**USCG-1999-5700
Traffic Separation
Schemes: Off San
Francisco, in the
Santa Barbara
Channel, in the
Approaches to Los
Angeles-Long
Beach, California**

The Coast Guard proposes amending the existing Traffic Separation Scheme (TSS) off San Francisco and the TSS in the Santa Barbara Channel. The proposed amendments are adopted by the International Maritime Organization and have been validated by several recent vessel routing studies. Once implemented, the amended TSSs would route commercial vessels farther offshore, providing an extra margin of safety and environmental protection in the Monterey Bay National Marine Sanctuary and adjacent waters. Additionally, this proposed rule would incorporate descriptions of these TSSs, as well as a description of the existing TSS in the approaches to Los Angeles-Long Beach, into the Code of Federal Regulations.

STATUS: NPRM published on June 17, 1999. Submit comments on or before August 16, 1999.

CONTACT: LCDR Brian Tetreault, Tel.: (510) 437-2951

**USCG 1998-4445
Fire Protection
Measures for
Towing Vessels**

With this Interim Rule, the Coast Guard plans to implement measures for the early detection and control of fires on towing vessels. It will require the lower cost, noncontroversial fire protection measures introduced in the Notice of Proposed Rulemaking entitled, Towing Vessel Safety (62 FR 52057), that was published on October 6, 1997. They include: general alarms; engine-room fire detection systems; internal communication systems; and remote fuel-shutoff valves. Furthermore, fire-fighting drills will need to be conducted and training requirements established for crews on towing vessels. These measures should decrease the number and severity of injuries to vessels' crews, prevent damage to vessels, structures and other property, and reduce the likelihood of a tank barge's drifting, grounding, and ultimately spilling its cargo. A separate supplemental notice of proposed rulemaking on Fire Suppression and Other Measures for Towing Vessels (CGD 97-064) will contain the two issues not addressed in either of the IRs that came from the Towing Vessel Safety NPRM—fixed fire-suppression systems for towing vessels, and proper voyage planning for masters and operators of towing vessels.

STATUS: Fire Protection Measures IR in final clearance; Fire Suppression Systems and Other Measures SNPRM being drafted.

CONTACT: Mr. Robert Spears, Tel.: (202) 267-1099



The following is a list of National Fire Protection Association Safety Standards affecting the maritime community. Each Standard listed includes news and points of contact. This list will be updated as new information becomes available.

NFPA 12 Carbon Dioxide (CO₂)

The Coast Guard asked the National Fire Protection Association (NFPA) to develop a section within NFPA 12 to address marine CO₂ systems. The committee has drafted a marine chapter (6), which is contained in the 1999 Request of Proposals (ROP), to be considered at the November 1999 annual meeting in New Orleans.

NFPA POINT OF CONTACT: Mark Conroy, (617) 984-7403

USCG POINT OF CONTACT: Klaus Wahle, G-MSE-4, (202) 267-0256

e-mail: kwahle@comdt.uscg.mil

NFPA 13 Automatic Sprinklers

The NFPA has completely revised NFPA 13 to address all aspects of automatic sprinkler system design. At their July 1997 meeting, NFPA Standards Council approved a new project to centralize all requirements pertaining to the design and installation of automatic sprinkler systems into NFPA 13. The new project called for the relocation of those portions of NFPA 24, NFPA 231, and NFPA 231C pertaining to sprinkler systems and fire mains into NFPA 13. Additionally, the project called for the review of all NFPA standards containing sprinkler system requirements to determine how they can best be centralized. The new 1999 edition of NFPA 13 should be available shortly.

NFPA POINT OF CONTACT: Milosh Puchovsky, (617) 984-7408

USCG POINT OF CONTACT: Randall Eberly, G-MSE-4, (202) 267-1444

e-mail: reberly@comdt.uscg.mil

NFPA 750 Standards on Water Mist Fire Protection Systems

The committee responsible for writing NFPA 750 met in May 1999 to take action on the previously submitted proposals for changes to the standard. The final list of amendments is currently being circulated among the committee members for balloting. Final consideration of the modified standard will occur at the Fall 1999 meeting in New Orleans.

NFPA POINT OF CONTACT: Christian Dubay, (617) 984-7435

USCG POINT OF CONTACT: Randall Eberly, G-MSE-4, (202) 267-1444

e-mail: reberly@comdt.uscg.mil

NFPA 1123 Code for Fireworks Display

The Coast Guard is working with the NFPA 1123 committee to develop a chapter addressing the safe conduct of outdoor fireworks aboard vessels and floating platforms. The committee met in March to discuss and respond to the public proposals including a draft chapter. The committee's responses to the public proposals were published in the May edition of the NFPA Report on Proposals (ROP). Members of the public, the marine community, the fire service, and the US Coast Guard are encouraged to submit comments on the committee's responses by October 8, 1999. The form is provided on the back of the standard or using NFPA's "Proposals On-Line" at www.nfpa.org under the Codes and Standards menu item. Within the ROP, a Tentative Interim Amendment (TIA) based on the draft marine chapter has been submitted. If passed, the TIA will establish a new marine chapter in the existing NFPA 1123 to provide guidance for both operators and enforcers of these types of fireworks displays. The Coast Guard is concurrently composing a Navigation and Vessel Inspection Circular (NVIC) to incorporate the TIA with other Coast Guard specific requirements. The committee will meet again in late fall.

NFPA POINT OF CONTACT: Guy Colonna, (617) 984-7435

USCG POINT OF CONTACT: Suzette Hartmann, G-MSE-4, (202) 267-0138

e-mail: shartmann@comdt.uscg.mil

NFPA 2001 Standards on Clean Agent Extinguishing Systems

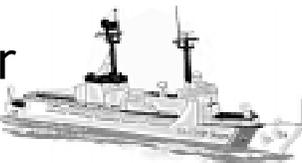
The Coast Guard asked NFPA to develop a section within NFPA 2001 to address marine clean agent systems. At the December 1998 meeting the committee drafted a revised marine chapter (5) which incorporates recent ROP and Report on Comments (ROC) changes. The changes will be discussed at the July 1999 meeting in Halifax, Canada.

NFPA POINT OF CONTACT: Mark Conroy, (617) 984-7403

USCG POINT OF CONTACT: Klaus Wahle, G-MSE-4, (202) 267-0256

e-mail: kwahle@comdt.uscg.mil

Calendar of Events



Please note: Events without dates will no longer be published. To see which courses are Coast Guard-approved, visit <http://www.uscg.mil/hq/g-m/marpers/examques/achome.htm>
Course information is listed in the following order: Sponsor • Dates • Location • Contact
**Conference or Meeting

BASIC PRINCIPLES OF CHARTERING (HOME STUDY COURSE)

Sponsored by Association of Ship Brokers and Agents • Tel.: (973) 376-4144, Fax: (973) 376-4145, e-mail: asba@asba.org, Web site: www.asba.org

OUPV AND MASTER NOT MORE THAN 100 GROSS TONS

Sponsored by Northeast Maritime Institute • Sept. 13–Nov. 11, 1999 (three evenings per week) • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767-4025, Fax: (508) 992-9184, e-mail: carpentr@northeastmaritime.com

TOWING SAFETY ADVISORY COMMITTEE (TSAC)**

Working group meetings Sept. 15, 1999, 8:00 am–3:30 pm. Fall Public Meeting Sept. 16, 1999, 8:00 am–12:30 pm. Public participation is welcomed at all meetings • Coast Guard Headquarters, Washington, DC, rm. 2415 • Jerry Miente, Tel.: (202) 267-0221, Fax: (202) 267-4570, e-mail: gmiante@comdt.uscg.mil

ABLE SEAMAN/LIFEBOATMAN (PREREQUISITE: STCW BASIC SAFETY TRAINING)

Sponsored by Northeast Maritime Institute • Sept. 20–Oct. 8; Nov. 1–19, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767-4025, Fax: (508) 992-9184, e-mail: carpentr@northeastmaritime.com

INTERNAL SAFETY AUDITOR COURSE

Sponsored by Bureau Veritas • Sept. 23–24, 1999 • Fort Lauderdale, FL • Jake DesVergers, Tel.: (954) 525-4114, Fax: (954) 763-9718, e-mail: jake.desvergers@us.bureauveritas.com

ADVANCED FIRE FIGHTING

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 1; Oct. 11–15; Nov. 15–19; Dec. 6–10, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859-5700, Fax: (410) 859-5181, e-mail: admissions@mitags.org

BASIC SAFETY TRAINING

Sponsored by Resolve Fire & Hazard Response, Inc. • Sept. 27–Oct. 1; Oct. 25–29; Nov. 15–19; Dec. 6–10, 1999; Jan. 24–28, 2000 • Resolve Fire & Hazard Response, 3305 SE 19th Ave., Fort Lauderdale, FL 33316 • Todd Duke, Tel.: (888) 886-FIRE, Fax: (954) 356-5898, e-mail: resolvfire@aol.com

COASTAL OIL SPILL CONTROL

Sponsored by Texas A&M Center for Marine Training and Safety • Sept. 27–Oct. 1, 1999 • Galveston, TX • Cherry Young, Tel.: (409) 740-4893, Fax: (409) 744-2890

OSHA GENERAL INDUSTRY TRAIN THE TRAINER

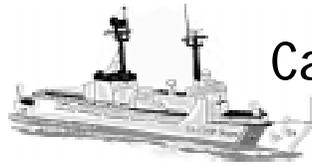
Sponsored by Environmental & Safety Services, Inc. • Sept. 27–Oct. 1, Cincinnati, OH; Oct. 25–29, Atlanta, GA; Nov. 15–19, 1999, Houston, TX • Eric Gislason, P.O. Box 3394, Wilmington, NC 28406, Tel.: (910) 763-6999, Fax: (910) 763-8709

PETROLEUM TANKER SAFETY

Sponsored by Tecslut Eduplus, Inc., Marine Safety and Environmental Protection Training • Sept. 27–Oct. 1; Nov. 15–19, 1999 • Metropolitan Place, 99 Wyse Road, Dartmouth, Nova Scotia B3A 4S5, Canada • Captain Roger Day, Tel.: (902) 461 6600, Fax: (902) 461 6601, e-mail: rday@eduplus.ca

COASTAL OIL SPILL RESPONSE AND SAFETY

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Sept. 27–Oct. 1, 1999 • Texas A&M University Corpus Christi • Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs



Calendar of Events

HEAVY WEATHER AVOIDANCE COURSE

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 1, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

SHIPBOARD MEDICAL CARE

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 22; 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

GMDSS

Sponsored by Tecslut Eduplus, Inc., Marine Safety and Environmental Protection Training • Sept. 27–Oct. 8; Oct. 18–29; Nov. 22–Dec. 3; Dec. 6–17, 1999 • Metropolitan Place, 99 Wyse Road, Dartmouth, Nova Scotia B3A 4S5, Canada • Captain Roger Day, Tel.: (902) 461 6600, Fax: (902) 461 6601, e-mail: rday@eduplus.ca

FAST RESCUE BOAT PROFICIENCY COURSE

Sponsored by RTM Star Center • Sept. 27–Oct. 1; 25–29; Nov. 29–Dec. 3, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445–4522, Fax: (954) 920–4268, Web site: www.star-center.com

1999 INTERNATIONAL MARITIME EXPOSITION**

Sponsored by The Society of Naval Architects and Marine Engineers' Annual Meeting • Sept. 30–Oct. 1, 1999 • Baltimore, MD • Meeting information, Tel.: (207) 842–5508, Web site: www.sname.org

HAZWOPER

Sponsored by TOPS in Emergency Response, Inc. • Oct. 2–3; 9–10; Nov. 1–5, 1999 • Rahway, NJ/ Stanhope, NJ • Philip E. Solomon, Tel.: (732) 340–0044, Fax: (732) 388–1691, e-mail: response@compuserve.com

BRIDGE RESOURCE MANAGEMENT

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 1; Oct. 4–8; 11–15; 18–22; 25–29, Nov. 1–5; 8–12, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

AUTOMATIC RADAR PLOTTING AIDS (ARPA)

Sponsored by Pacific Northwest Maritime Institute • Sept. 27–Oct. 1; Oct. 18–22; Nov. 15–19; Dec. 6–10; 13–17, 1999 • Seattle, WA • Gregg Trunnell, Tel.: (206) 441–2880, Fax: (206) 441–2995, e-mail: pnwradar@mates.org

FAST RESCUE BOAT

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 1, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

TEXAS A&M COASTAL OIL SPILL CONTROL COURSE

Sponsored by Texas A&M Center for Marine Training and Safety • Sept. 27–Oct. 1; Oct. 18–22, 1999 • Galveston, TX • Cherry Young, Tel.: (409) 740–4893, Fax: (409) 744–2890

GLOBAL MARITIME DISTRESS & SAFETY SYSTEM (GMDSS)

Sponsored by RTM Star Center • Sept. 27–Oct. 8; Nov. 1–12; Dec. 6–17, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445–4522, Fax: (954) 920–4268, Web site: www.star-center.com

Calendar of Events



GMDSS

Sponsored by Maritime Institute of Technology and Graduate Studies • Sept. 27–Oct. 8; Oct. 11–22; Oct. 25–Nov. 5; Nov. 8–19; Dec. 6–17, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

MERCHANT MARINE SAFETY ADVISORY COMMITTEE (MERPAC)**

Working group meetings Sept. 28, 1999. Fall Public Meeting Sept. 29, 1999. Public participation is welcomed at all meetings, including working group meetings • MEBA School, Easton, MD • Mark Gould, Tel.: (202) 267–6890, Fax: (202) 267–4570, e-mail: mgould@comdt.uscg.mil

RADAR OBSERVER, UNLIMITED

Sponsored by Northeast Maritime Institute • Oct. 4–8; Nov. 1–5; Dec. 6–10, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767–4025, Fax: (508) 992–9184, e-mail: carpentr@northeastmaritime.com

BRIDGE RESOURCE MANAGEMENT

Sponsored by Pacific Northwest Maritime Institute • Oct. 4–6; Nov. 1–3; Nov. 29–Dec. 3, 1999 • Seattle, WA • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, Gregg Trunnell, (206) 441–2880, (206) 441–2995 Fax, e-mail: pnwradar@mates.org

TANKSHIP DANGEROUS LIQUIDS

Sponsored by Training Resources, Ltd. • Oct. 4–8; Nov. 1–5; Nov. 29–Dec. 3; 6–10, San Diego, CA; Aug. 23–27; Nov. 15–19, Long Beach, CA; Oct. 18–22, Anchorage, AK; Sept. 27– Oct. 1, Portland, OR • Ray Addicott, Training Resources, Tel.: (510) 704–8978, Fax: (510) 704–8975

STCW BASIC SAFETY TRAINING

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 4–8; 18–22; Oct. 25–29; Nov. 15–19, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

ARPA & RADAR RECERTIFICATION

Sponsored by RTM Star Center • Oct. 4–8; Nov. 9–12; Dec. 13–17, 1999; Jan. 10–14, 2000 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445–4522, Fax: (954) 920–4268, Web site: www.star-center.com

AUTOMATIC RADAR PLOTTING AIDS (ARPA)

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 4–8; 13–19; 25–29; Nov. 8–12; Nov. 29–Dec. 3, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

COMPUTER OPERATING SYSTEMS

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 4–8; Nov. 1–5; Nov. 29–Dec. 3, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

TRAIN THE TRAINER

Sponsored by RTM Star Center • Oct. 4–8; 25–29; Dec. 6–10, 1999; Jan. 24–28, 2000 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445–4522, Fax: (954) 920–4268, Web site: www.star-center.com

CHEMICAL TANKER SAFETY

Sponsored by Maine Maritime Academy • Oct. 4–8, 1999 • Castine, ME • Verge Forbes/Virginia Comiciotto, Tel.: (207) 326–2211, Fax: (207) 326–2218, e-mail: vcomo@bell.mma.edu



Calendar of Events

TEXAS A&M FRESHWATER/INLAND OIL SPILL CONTROL COURSE

Sponsored by Texas A&M Freshwater/Inland Oil Spill Control Course • Oct. 4–8, 1999 • Galveston, TX • Cherry Young, Tel.: (409) 740–4893, Fax: (409) 744–2890

MEDICAL EMERGENCIES AT SEA

Sponsored by NPFVOA Vessel Safety Program • Oct. 5; Nov. 3; Dec. 8, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285–3383, Fax: (206) 286–9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

HAZARDOUS MATERIALS TRAINING (TRANSPORTATION BY VESSEL)

Sponsored by National Cargo Bureau, Inc. • Call each location for dates: Charleston, SC, (843) 884–1884; Honolulu, HI, (808) 836–7799; Houston, TX, (713) 451–4303; New York, NY, (212) 571–5000; New Orleans, LA, (504) 837–1647; San Francisco, CA, (510) 635–4298; Seattle, WA, (206) 285–5250

FIRE PREVENTION AND CONTROL

Sponsored by NPFVOA Vessel Safety Program • Oct. 6; Nov. 4; Dec. 7, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285–3383, Fax: (206) 286–9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

HAZWOPER REFRESHER

Sponsored by Miller Environmental Group • Oct. 6; Nov. 10; Dec. 15, 1999 • 588 Edwards Avenue, Calverton, NY 11933 • George Wallace III, Tel.: (516) 727–2662, Fax: (516) 727–2776, e-mail: gwallace@nrcxchange.nrc.com

FLASHING LIGHT

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 6; Dec. 15, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

POLLUTION LIABILITY WORKSHOP**

Sponsored by American Petroleum Institute • Oct. 6–7, 1999 • San Francisco, CA • Bob Greco, Tel.: (202) 682–8167

PIC DANGEROUS LIQUIDS

Sponsored by Two Rivers Marine Training & Consulting, Inc. • Oct. 6–10; 13–17, 1999 • Port Arthur, TX • Yvonne Bigler, Tel.: (409) 736–2993, Fax: (409) 736–1628

FISHING VESSEL STABILITY & DAMAGE CONTROL

Sponsored by NPFVOA Vessel Safety Program • Oct. 8; Nov. 12; Dec. 10, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285–3383, Fax: (206) 286–9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

SAFETY EQUIPMENT & SURVIVAL PROCEDURES

Sponsored by NPFVOA Vessel Safety Program • Oct. 9; Nov. 6; Dec. 4, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285–3383, Fax: (206) 286–9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

SHIPS MEDICINE—PERSON IN CHARGE

Sponsored by Maine Maritime Academy • Oct. 10–16, 1999 • Castine, ME 04420 • Verge Forbes/Virginia Comiciotto, Tel.: (207) 326–2211, Fax: (207) 326–2218, e-mail: vcomo@bell.mma.edu

OSHA HAZWOPER

Sponsored by Massachusetts Maritime Academy, Center for Marine Environmental Protection and Safety • Oct. 11; Nov. 8, 1999 • MMA Campus, 101 Academy Drive, Buzzards Bay, MA 02532 • Jane Joska, Tel.: (508) 830–5098, Fax: (508) 830–5018, e-mail: jjoska@mma.mass.edu

Calendar of Events



TANK BARGE FIRE FIGHTING

Sponsored by Two Rivers Marine Training & Consulting, Inc. • Oct. 11-12; 21-22, 1999 • Port Arthur, TX • Yvonne Bigler, Tel.: (409) 736-2993, Fax: (409) 736-1628

OIL SPILL CONTROL AND RECOVERY (OSCAR)—LAND BASED SPILLS

Sponsored by IMS Environmental Services • Oct. 11-13, 1999 • IMS Environmental Services Training Center, Chesapeake, VA • Phil Biedenbender or Steve May, Tel.: (757) 436-3000, Fax: (757) 549-0990, e-mail: IMStrain@aol.com

OSHA HAZWOPER

Sponsored by Massachusetts Maritime Academy, Center for Marine Environmental Protection and Safety • Oct. 11-15; Nov. 18-19, 1999 • MMA Campus, 101 Academy Drive, Buzzards Bay, MA 02532 • Jane Joska, Tel.: (508) 830-5098, Fax: (508) 830-5018, e-mail: jjoska@mma.mass.edu

ORIGINAL RADAR

Sponsored by Pacific Northwest Maritime Institute • Oct. 11-15; Nov. 8-12; 22-26, 1999 • Seattle, WA • Gregg Trunnell, Tel.: (206) 441-2880, (206) 441-2995 Fax, e-mail: pnwradar@mates.org

BASIC/ADVANCED SHIPBOARD FIRE FIGHTING

Sponsored by Resolve Fire & Hazard Response, Inc. • Oct. 11-15; Nov. 8-12; Dec. 13-17, 1999 • Resolve Fire & Hazard Response, 3305 SE 19th Ave., Fort Lauderdale, FL 33316 • Todd Duke, Tel.: (888) 886-FIRE, Fax: (954) 356-5898, e-mail: resolvfire@aol.com

BRIDGE RESOURCE MANAGEMENT FOR PILOTS II

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 11-22; Dec. 6-7, 1999 • MITAGS Campus, Linthicum Heights, MD • Mike Wein, (410) 859-5700, Fax: (410) 859-5181, e-mail: mwein@mitags.org

GMDSS

Sponsored by Pacific Northwest Maritime Institute • Oct. 11-22; Nov. 8-19; Dec. 6-17, 1999 • Seattle, WA • Gregg Trunnell, Tel.: (206) 441-2880, Fax: (206) 441-2995, e-mail: pnwradar@mates.org

INTERNATIONAL MARITIME DANGEROUS GOODS SEMINAR**

Sponsored by Vessel Operators Hazardous Materials Assoc. (VOHMA) • Oct. 12-14, 1999, Long Beach, CA • VOHMA, 1118 Bay Rd., Lake George, NY 12845, Tel.: (518) 761-0263, Fax: (518) 792-7781, e-mail: mail@vohma.com

NAVIGATION: COLLISION AVOIDANCE

Sponsored by NPFVOA Vessel Safety Program • Oct. 13; Nov. 8; Dec. 3, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285-3383, Fax: (206) 286-9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

INTERNATIONAL MARITIME DANGEROUS GOODS RECURRENT TRAINING

Sponsored by Vessel Operators Hazardous Materials Assoc. (VOHMA) • Oct. 15, 1999 • Long Beach, CA • VOHMA, 1118 Bay Rd., Lake George, NY 12845, Tel.: (518) 761-0263, Fax: (518) 792-7781, e-mail: mail@vohma.com

PIC DANGEROUS LIQUIDS—RENEWAL

Sponsored by Two Rivers Marine Training & Consulting, Inc. • Oct. 17-18, 1999 • Port Arthur, TX • Yvonne Bigler, Tel.: (409) 736-2993, Fax: (409) 736-1628

TANKER OPERATIONS I

Sponsored by ABS Group Inc., Government Institutes Division • Oct. 18-19, 1999, Houston, TX; Nov. 1-2, 1999, Oakland, CA; Dec. 6-7, 1999, New Orleans, LA • Helen Goebel, Tel.: (301) 921-2345, Fax: (301) 921-0373, e-mail: BKibler@eagle.org



Calendar of Events

BASIC AND ADVANCED FIREFIGHTING

Sponsored by Northeast Maritime Institute • Oct. 18–22; Dec. 13–17, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767-4025, Fax: (508) 992-9184, e-mail: carpentr@northeastmaritime.com

INLAND OIL SPILL RESPONSE AND SAFETY

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Oct. 18–22, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

OIL SPILL RESPONSE—CONTROL, RECOVERY, AND MANAGEMENT

Sponsored by IMS Environmental Services • Oct. 18–22, 1999 • IMS Environmental Services Training Center, Chesapeake, VA • Phil Biedenbender or Pete Brunk, Tel.: (757) 436-3000, Fax: (757) 549-0990, e-mail: IMStrain@aol.com

MARINE ELECTRICAL BASICS BOOTCAMP

Sponsored by ABS Group Inc., Government Institutes Division • Oct. 18–22, 1999, Houston, TX; Dec. 6–10, 1999, Norfolk, VA • Helen Goebel, Tel.: (301) 921-2345, Fax: (301) 921-0373, e-mail: BKibler@eagle.org

PORT AND TERMINAL OPERATIONS

Sponsored by U.S. Merchant Marine Academy • Oct. 18–29, 1999 • Kings Point, NY • John Hazlett, Tel.: (516) 773-5164, Fax: (516) 773-5353, e-mail: hazlettj@usmma.com

GMDSS

Sponsored by Maine Maritime Academy • Oct. 18–28, 1999 • Castine, ME 04420 • Verge Forbes/Virginia Comiciotto, Tel.: (207) 326-2211, Fax: (207) 326-2218, e-mail: vcomo@bell.mma.edu

GMDSS

Sponsored by Training Resources, Ltd. and Mercomms Unlimited • Oct. 18–29; Nov. 8–19; Dec. 6–17, 1999 • San Diego, CA • Ray Addicott, Training Resources, Tel.: (510) 704-8978, Fax: (510) 704-8975

BASIC SAFETY TRAINING—BASIC FIRE FIGHTING AND FIRE PROTECTION

Sponsored by RTM Star Center • Oct. 19; Nov. 2; Dec. 7, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445-4522, Fax: (954) 920-4268, Web site: www.star-center.com

SAFE CARGO HANDLING

Sponsored by NPFVOA Vessel Safety Program • Oct. 19; Nov. 16; Dec. 14, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285-3383, Fax: (206) 286-9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

TRAWL DECK SAFETY

Sponsored by NPFVOA Vessel Safety Program • Oct. 20; Nov. 17; Dec. 15, 1999 • Fisherman's Terminal, Seattle, WA • Kasi VerBruggen, Tel.: (206) 285-3383, Fax: (206) 286-9332, e-mail: npfvoa@halcyon.com, Web site: www.halcyon.com/npfvoa

LEARNING FROM MARINE INCIDENTS CONFERENCE**

Sponsored by Royal Institution of Naval Architects • Oct. 20–21, 1999 • London, England • Nicola Brotherton, Tel.: 44 (0) 171 201 2401, e-mail: nbrotherton@rina.org.uk, Web site: www.rina.org.uk

TANKER OPERATIONS II

Sponsored by ABS Group Inc., Government Institutes Division • Oct. 20–22, 1999, Houston, TX; Nov. 3–5, 1999, Oakland, CA; Dec. 8–10, 1999, New Orleans, LA • Helen Goebel, Tel.: (301) 921-2345, Fax: (301) 921-0373, e-mail: BKibler@eagle.org

Calendar of Events



BASIC SAFETY TRAINING—PERSONAL SURVIVAL TECHNIQUES REFRESHER

Sponsored by RTM Star Center • Oct. 21; Nov. 4; Dec. 9, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445-4522, Fax: (954) 920-4268, Web site: www.star-center.com

PERMIT-REQUIRED CONFINED SPACE ENTRY

Sponsored by TOPS in Emergency Response, Inc. • Oct. 23, 1999 • Rahway, NJ/ Stanhope, NJ • Philip E. Solomon, Tel.: (732) 340-0044, Fax: (732) 388-1691, e-mail: response@compuserve.com

STCW BASIC SAFETY TRAINING

Sponsored by Northeast Maritime Institute • Oct. 24-30; Nov. 28-Dec. 4, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767-4025, Fax: (508) 992-9184, e-mail: carpentr@northeastmaritime.com

ASTM COMMITTEE F-20 ON HAZARDOUS SUBSTANCES AND OIL RESPONSE

Sponsored by American Society for Testing Materials • Oct. 25-27, 1999 • New Orleans, LA • Robyn Zelno, (610) 832-9717, e-mail: rzelno@astm.org

TANKERMAN FAMILIARIZATION—DANGEROUS LIQUIDS

Sponsored by Northeast Maritime Institute • Oct. 25-28; Nov. 22-25, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767-4025, Fax: (508) 992-9184, e-mail: carpentr@northeastmaritime.com

40 HOUR OSHA/RCRA SAFETY

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Oct. 25-29, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

HAZARDOUS MATERIALS COURSE

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 25-29, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859-5700, Fax: (410) 859-5181, e-mail: admissions@mitags.org

MARITIME AUDITOR/LEAD AUDITOR TRAINING

Sponsored by ABS Group Inc., Government Institutes Division • Oct. 25-29, 1999 • Houston, TX • Helen Goebel, Tel.: (301) 921-2345, Fax: (301) 921-0373, e-mail: BKibler@eagle.org

MEDICAL FIRST AID

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 25-29; Nov. 29-Dec. 3; Dec. 13-17, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859-5700, Fax: (410) 859-5181, e-mail: admissions@mitags.org

TEXAS A&M QUALIFIED INDIVIDUAL/SPILL MANAGEMENT COURSE

Sponsored by Texas A&M Center for Marine Training and Safety • Oct. 25-29, 1999 • Galveston, TX • Cherry Young, Tel.: (409) 740-4893, Fax: (409) 744-2890

ARPA

Sponsored by U.S. Merchant Marine Academy • Oct. 25-29, 1999; March 6-10, 2000 • Kings Point, NY • John Hazlett, Tel.: (516) 773-5164, Fax: (516) 773-5353, e-mail: hazlettj@usmma.com

GMDSS

Sponsored by U.S. Merchant Marine Academy • Oct. 25-Nov. 5; Dec. 6-17, 1999 • Kings Point, NY • John Hazlett, Tel.: (516) 773-5164, Fax: (516) 773-5353, e-mail: hazlettj@usmma.com



Calendar of Events

SHIPHANDLING SIMULATOR COURSE

Sponsored by Maritime Institute of Technology and Graduate Studies • Oct. 25–Nov. 5, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

BRIDGE RESOURCE MANAGEMENT

Sponsored by RTM Star Center • Oct. 26–28; Nov. 16–18; Dec. 7–9, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445–4522, Fax: (954) 920–4268, Web site:

www.star-center.com

PRACTICAL RESPONSE TO OIL SPILLS: A “REAL WORLD” MANAGEMENT APPROACH

Sponsored by Miller Environmental Group • Oct. 26–28; Nov. 30–Dec. 2, 1999 • 588 Edwards Avenue, Calverton, NY 11933 • George Wallace III, Tel.: (516) 727–2662, Fax: (516) 727–2776, e-mail: gwallace@nrcxchange.nrc.com

OSHA/RCRA SUPERVISOR

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Oct. 30, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980–3333, Fax: (512) 980–3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

INDUSTRIAL FIRE BRIGADE LEADERSHIP (INCIDENT COMMAND SYSTEM)

Sponsored by Lamar University–The Center for Industrial Fire and Hazardous Materials Training • Nov. 1–5; 15–19, 1999 • Beaumont, TX • Lamar University–Industrial Fire Training, P.O. Box 10008, Beaumont, TX 77701, Tel.: (409) 832–5881, Fax: (409) 838–7029, e-mail: hubacjc@lub002.lamar.edu

CHEMICAL TANKER SAFETY

Sponsored by TecSult Eduplus, Inc., Marine Safety and Environmental Protection Training • Nov. 1–5, 1999 • Metropolitan Place, 99 Wyse Road, Dartmouth, Nova Scotia B3A 4S5, Canada • Captain Roger Day, Tel.: (902) 461–6600, Fax: (902) 461–6601, e-mail: rday@eduplus.ca

STCW SAFETY MODULES

Sponsored by U.S. Merchant Marine Academy • Nov. 1–5, 1999; Jan. 31–Feb. 4, 2000 • Kings Point, NY • John Hazlett, Tel.: (516) 773–5164, Fax: (516) 773–5353, e-mail: hazlettj@usmma.com

LAND BASED FIREFIGHTING

Sponsored by Maritime Institute of Technology and Graduate Studies • Nov. 1–11, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

HAZMAT TRANSPORTATION

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Nov. 5, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980–3333, Fax: (512) 980–3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

TANKSHIP/BARGE DANGEROUS LIQUID CARGO

Sponsored by U.S. Merchant Marine Academy • Nov. 8–12, 1999; Jan. 24–28, 2000 • Kings Point, NY • John Hazlett, Tel.: (516) 773–5164, Fax: (516) 773–5353, e-mail: hazlettj@usmma.com

MEDICAL PERSON IN CHARGE

Sponsored by Maritime Institute of Technology and Graduate Studies • Nov. 8–19, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859–5700, Fax: (410) 859–5181, e-mail: admissions@mitags.org

Calendar of Events



FERRIES '99**

Sponsored by Marine Log • Nov. 14-16, 1999 • Fort Lauderdale, FL • Jane Poterala, Director, Tel.: (212) 620-7209; Stacey O'Connor, Tel.: (212) 620-7208, Fax: (212) 633-1165

OIL SPILL MANAGEMENT

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Nov. 15-19, 1999 • Texas A&M University Corpus Christi • Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

RADAR OBSERVER RENEWAL, RIVERS, INLAND, AND UNLIMITED ORIGINAL COURSES

Sponsored by Maritime Institute of Technology and Graduate Studies • Nov. 15-19; Dec. 6-10, 1999 • MITAGS Campus, Linthicum Heights, MD • Mary Matlock, Tel.: (410) 859-5700, Fax: (410) 859-5181, e-mail: admissions@mitags.org

OPA 90 QUALIFIED INDIVIDUAL TRAINING PROGRAM

Sponsored by Massachusetts Maritime Academy, Center for Marine Environmental Protection and Safety • Nov. 15-19, 1999 • MMA Campus, 101 Academy Drive, Buzzards Bay, MA 02532 • Jane Joska, Tel.: (508) 830-5098, Fax: (508) 830-5018, e-mail: jjoska@mma.mass.edu

OPA-90 QUALIFIED INDIVIDUAL ANNUAL REFRESHER

Sponsored by Massachusetts Maritime Academy, Center for Marine Environmental Protection and Safety • Nov. 18-19, 1999 • MMA Campus, 101 Academy Drive, Buzzards Bay, MA 02532 • Jane Joska, Tel.: (508) 830-5098, Fax: (508) 830-5018, e-mail: jjoska@mma.mass.edu

1999 NATIONAL DREDGING CONFERENCE**

Sponsored by The Maritime Association of the Port of New York/New Jersey • Nov. 18-19, 1999 • New York, NY • Web site: www.nymaritime.org

HAZMAT REFRESHER

Sponsored by Miller Environmental Group • Nov. 19, 1999 • 588 Edwards Avenue, Calverton, NY 11933 • Tel.: (516) 727-2662, Fax: (516) 727-2776, e-mail: gwallace@nrcxchange.nrcc.com

OILED WILDLIFE REHABILITATION

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Nov. 19-20, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

CRUDE OIL WASHING AND INERT GAS SYSTEMS

Sponsored by Tecslut Eduplus, Inc., Marine Safety and Environmental Protection Training • Nov. 22-25, 1999 • Metropolitan Place, 99 Wyse Road, Dartmouth, Nova Scotia B3A 4S5, Canada • Captain Roger Day, Tel.: (902) 461-6600, Fax: (902) 461-6601, e-mail: rday@eduplus.ca

MARICHEM 99 EXHIBITION**

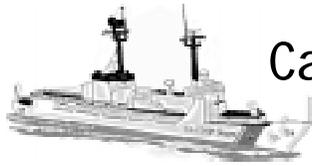
Sponsored by Turret RAI • Nov. 28-Dec. 1, 1999 • Amsterdam, The Netherlands • www.marichem.com

TANKERMAN PIC

Sponsored by RTM Star Center • Nov. 29-Dec. 3, 1999 • RTM Star Center, 2 W. Dixie Hwy., Dania, FL 33004 • RTM Star Center, Tel.: (800) 445-4522, Fax: (954) 920-4268, Web site: www.star-center.com

24 HOUR OSHA/RCRA SAFETY

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Nov. 30-Dec. 2, 1999 • Texas A&M University Corpus Christi • Tel.: (512) 980-3333, Fax: (512) 980-3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs



Calendar of Events

UNITED STATES MARINE SAFETY ASSOCIATION

Sponsored by USMSA • Dec. 1–3, 1999 • New Orleans, LA • Tel.: (215) 564–3484, Fax: (215) 564–2175, e-mail: usmsa@fernley.com

SHIPBUILDING DECISIONS

Sponsored by Marine Log • Dec. 7–8, 1999 • Washington, DC • Jane Poterala, Director, Tel.: (212) 620–7209, Stacey O'Connor, Tel.: (212) 620–7208, Fax: (212) 633–1165

INTRODUCTION TO GIS–ARCVIEW

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Dec. 13–14, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980–3333, Fax: (512) 980–3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

DAMAGE CONTROL

Sponsored by Northeast Maritime Institute • Dec. 13–17, 1999 • Northeast Maritime Institute, 66 Spring St., New Bedford, MA 02740 • Kendall Carpenter, Tel.: (800) 767–4025, Fax: (508) 992–9184, e-mail: carpentr@northeastmaritime.com

SPILL MANAGEMENT SYSTEMS WITH GIS–GPS

Sponsored by Texas A&M University Corpus Christi National Spill Control School • Dec. 15–16, 1999 • Texas A&M University Corpus Christi • Ms. Fran Trevino, Tel.: (512) 980–3333, Fax: (512) 980–3337, e-mail: nscs@tamucc.edu, Web site: www.sci.tamucc.edu/nscs

SHIP STRUCTURES FOR THE NEW MILLENNIUM**

Sponsored by American Society of Naval Engineers, Society of Naval Architects and Marine Engineers, and Interagency Ship Structure Committee • June 13–14, 2000 • Arlington, VA • Bill Vorus, Tel.: (504) 280–3871, Fax: (504) 280–3898, e-mail: wvorus@uno.edu

Contributions

Marine Safety Newsletter and *Proceedings* magazine welcome manuscript and photo submissions for publication. No payment can be made for manuscripts or photos submitted for publication. However, an author or photo credit byline will be given. The Editor reserves the right to make any editorial changes in manuscripts which he believes will improve the material without altering the intended meaning. All correspondence should be addressed to: Editor, U.S. Coast Guard, National Maritime Center, 4200 Wilson Boulevard, Suite 510, Arlington, VA 22203-1804.

Calendar of Events Submissions

Due to the large number of submissions for the Calendar of Events Section, we will list all events that occur the month after publication and later in chronological order. Other events will be included, if space permits.

Deadlines

- The *Marine Safety Newsletter* is published monthly on the 5th of each month.
- The deadline for articles, calendar events, and regulatory information is on the 25th of the previous month.
- Readers receive their copy of the *Marine Safety Newsletter* around the 15th of each month.

Up to the Minute News

Items missing the deadline for the *Marine Safety Newsletter* are posted on the World Wide Web at:

<https://www.uscg.mil/hq/g-m/gmhome.htm>.

Address Changes

If you would like to receive the *Marine Safety Newsletter* or change your address (be sure to send label or include code number), please call (202) 493-1056 or fax (202) 493-1065.

MARINE SAFETY NEWSLETTER EDITOR
US COAST GUARD
NATIONAL MARITIME CENTER
4200 WILSON BLVD., SUITE 510
ARLINGTON, VA 22203-1804

**FORWARDING AND ADDRESS
CORRECTION REQUESTED**