



Maritime Administration's Safety Corner



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The Maritime Administrator

Recently, there has been grave concern regarding vessels operating in the Red Sea. To assist U.S. mariners and vessels who may operate in the region, Maritime Security Communications with Industry (MSCI) Alerts and Advisories are transmitted by the National Geospatial-Intelligence Agency, emailed to U.S. maritime industry stakeholders, and posted to a web portal ([MSCI web portal](#)) to inform U.S. mariners of potential maritime security threats. U.S. flag vessel masters, company security officers, ship operators, U.S. mariners, U.S. maritime unions and professional associations, and U.S. mariner related non-governmental organizations are the intended recipients of these messages. Maritime industry stakeholders who wish to be added to the email distribution list for U.S. Maritime Alerts and Advisories should follow the instructions in the [Alerts/Advisories Subscriptions](#).

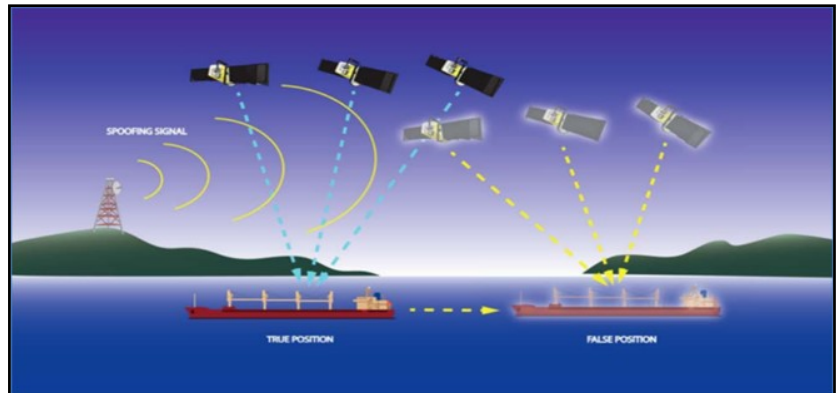


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Additionally, the new Red Sea/Gulf of Aden Joint Maritime Information Center (JMIC), a collaborative effort between Combined Maritime Forces, the Singapore Navy's Information Fusion Center, the Royal Netherlands Navy's Naval Coordination and Guidance for Shipping (NCAGS), the U.S. Navy Fifth Fleet's NCAGS, and others, is now providing a Weekly Dashboard and incident specific Info Notes regarding threats and incidents in this region at [Partner Products \(ukmto.org\)](#). These documents are for you— please use them to Stay Safe!

Preventing GPS Interference

The Department of Transportation, the Maritime Administration and the Volpe Center have been working on solutions to prevent jamming and spoofing of the Global Positioning System (GPS) signal. The GPS signal is a weak signal which can be easily jammed, meaning no signal is received on the vessel. Spoofing is manipulating the signal so you appear to be in one position, while really you are somewhere else. Spoofing the GPS signal is more sophisticated but is occurring in certain parts of the world. Live testing was performed on a MARAD vessel during underway operations. Several types of GPS equipment that are designed to prevent GPS interference, were installed on the vessel to record performance of the GPS equipment during actual events of interference. The goal is to give vessels options of equipment they can use to prevent interference (whether accidental or intentional) of the GPS signal. Several months of data from the MARAD vessel are being evaluated to see how different pieces of equipment designed to prevent interference performed. A report is expected in June 2024.



From: DOT.gov

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Stored Energy

Stored energy is energy that resides or remains in a system. Stored energy can take several forms on a vessel: electrical, mechanical, hydraulic, pneumatic and kinetic (gravitational).

Electrical energy is contained in electrical wiring and circuitry but can be found in anything that conducts electricity.

Mechanical energy is contained in an item under tension. A coiled or compressed spring will release stored energy in the form of fast movement when the spring expands.

Hydraulic energy is stored within liquid that is pressurized by an outside source. When under pressure, the fluid can be used to move heavy objects, machinery, or equipment. Examples: power presses, braking systems, or a winch (High-pressure fluid injection injuries are serious and require immediate medical attention even if they appear minor on the outside).

Pneumatic energy is stored within pressurized air. Air under pressure, can be used to move heavy objects and power equipment. Examples: spraying devices, air hoses, air compressors, or air cylinders (Pneumatic (air) pressure tests typically contain more stored energy when compared to hydrostatic (liquid) testing because gases are compressible, and liquids are not).

Gravitational energy related to the mass of an object and its distance from the ground when it is put in motion. The heavier the object, and the further it is from the ground, the greater its gravitational energy. For example, a ten-pound load falling from a crane 20 feet above the ground has greater gravitational energy than the same load falling from 12 feet high.

To avoid these hazards, take steps before work begins. One way to avoid a hazardous energy release is releasing or dissipating the stored energy and verify that the energy has been released or dissipated. Another is to isolate the stored energy and maintain the isolation throughout the work with an effective lockout/tagout system. This is not limited to electricity only. Other forms of stored energy can be avoided by lockout/tagout procedures. All employees who are authorized to lock out machines or equipment and perform the service and maintenance operations need to be trained in recognition of applicable hazardous energy sources in the workplace, the type and magnitude of energy found in the workplace, and the means and methods of isolating and/or controlling the energy.

Here are some dos and don'ts when working with stored energy:

- Regularly check connections and hoses on pneumatic equipment and other pressurized systems.
- Never strike pressurized blasting equipment with hammers or other objects to try to unclog the system.
- Air hoses must have whip checks installed at each end to prevent hose whipping in case of accidental hose disconnection.
- Always maintain situational awareness: start every shift by surveying the work area to identify changes or risks. Remain aware of changes and activity happening around you.
- Always consider others in the area or passing through. Go out of your way to warn and protect others.



From: OSHA.gov

EMBARC– Sexual Misconduct Prevention and Response

The Every Mariner Builds a Respectful Culture (EMBARC) Standards program was released by the U.S. Department of Transportation (D.O.T.) Maritime Administration (MARAD) in December 2021 to introduce new safety standards pursuant to 46 U.S.C. §51322 - *Protection of cadets from sexual assault onboard vessels*.

EMBARC has now been in place for over two years and became law in 2023. There are 20 vessel operators enrolled representing nearly all U.S. commercial operators who operate SOLAS-compliant vessels. These operators include all carriers statutorily required to comply and all MARAD RRF Ship Managers who carry U.S. Merchant Marine Academy and State Maritime Academy cadets year-round, providing invaluable training and required sea time to the next generation of U.S. Merchant Marine Officers.

EMBARC enumerates approximately 30 standards/provisions for sexual misconduct prevention, training, response, investigation, and victim assistance that vessel operators must adopt and implement into their Safety Management System (SMS) before they may carry cadets. The key to prevention and proper response is training. The EMBARC standards require training as follows:

Quarterly

Safety Management Systems shall establish quarterly training requirements for all shipboard personnel (regardless of whether cadets are onboard) on:

- SASH Prevention
- Bystander Intervention
- Reporting
- Response Procedures

Cadets shall participate in, but shall not have any role in managing this training.

Annually

All officers and crew shall be required to complete the SOCP *Maritime Sexual Assault and Sexual Harassment assessment Prevention Training* before a cadet is embarked and to repeat the training annually. Anyone can download this training for free here: <https://www.socp.us/sash-prevention> .

Periodically

Incorporate SASH discussions* in periodic Vessel Safety Meetings using materials similar to those in the Facilitator’s Guide and Student Workbook in the SOCP SASH Tool Kit; <https://www.socp.us/sash-prevention> .

*How these discussions are conducted is not prescribed further, so vessel operators and management may determine the best way to carry out these discussions. All training should always be appropriately documented and recorded in detail and retained following company procedure.

These required trainings provide the foundation for all Merchant Mariners to understand, identify, prevent, and respond to sexual misconduct. If an incident occurs, mariners will rely on this training to conduct or initiate investigations properly, care for victims, and get the required support and assistance. As prohibited behaviors are minimized in our industry, we will continue to improve the safety and security of all mariners and ensure our next generation will be willing and eager to go to Sea for this great career so many of us have been fortunate to enjoy and benefit from personally.

If you want to know more about EMBARC or have other questions as they pertain to the training discussed, please feel free to contact the Office of Cadet Training At-Sea Safety (OCTAS) at EMBARC@dot.gov, or visit our website here: <https://www.maritime.dot.gov/education/sea-year-training-program-criteria>.



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Safety Always!

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Maritime Safety Meetings

- April 18-19, 2024: **Waterborne Transport Group** meeting in Chicago, IL ([Waterborne Transports Group - National Safety Council \(nsc.org\)](https://www.nsc.org))
- May 13-24, 2024: **IMO Maritime Safety Committee** in London U.K. ([PROG-132-Preliminary-Rev.1 - Preliminary Programme Of Meetings For 2024 \(Secretariat\) final.pdf \(imo.org\)](https://www.imo.org))
- June 12, 2024: **ASTM F25 Committee on Ships and Marine Technology** in Philadelphia, PA ([ASTM International](https://www.astm.org))
- September 30– October 4, 2024: **IMO Marine Environmental Protection Committee** in London, U.K. ([PROG-132-Preliminary-Rev.1 - Preliminary Programme Of Meetings For 2024 \(Secretariat\) final.pdf \(imo.org\)](https://www.imo.org))
- November 12-15, 2024: **International Workboat Show** in New Orleans, LA ([International WorkBoat Show | Conference and Expo for Commercial Vessels](https://www.internationalworkboatshow.com))
- December 11-12, 2024: **ASTM F25 Committee on Ships and Marine Technology** in Orlando FL ([ASTM International](https://www.astm.org))
- January, 2025: **Passenger Vessel Association (PVA) Annual Convention** in Savannah, GA ([Meetings and Events Calendar | Passenger Vessel Association](https://www.pva.org))

Safety Tip: See the list below for “Nevers” and “Always” when using a compressed air hose.

- NEVER POINT IT AT YOURSELF OR ANOTHER PERSON! Even low-pressure air can cause injuries.
- NEVER USE IT TO CLEAN CLOTHING OR HAIR! Don't use pressurized air to clean particles off your body or head area.
- ALWAYS CHECK THE CONDITION OF HOSES AND LINES BEFORE USE! Make sure all equipment is working correctly before use.
- ALWAYS WEAR PROPER PPE! This includes everything from safety glasses w/ side shields, full-face shields, face masks, hearing protection, and sometimes even respiratory protection.
- ALWAYS WEAR PROPER PROTECTIVE CLOTHING. Normal work clothing may not be sufficient protection against pressurized air.

Disclaimer: Any references to non-Federal entities herein are for illustrative and educational purposes only and should not be construed as an endorsement of, or preference for, any product, service, or enterprise by the Maritime Administration, U.S. Department of Transportation, or U.S. Government.