

MARINE INFORMATION

ARCTIC MARITIME SAFETY INFORMATION (AMSI)

The Arctic Maritime Safety Information (AMSI) database for the Arctic Ocean and other high-latitude waters is now established.

The purpose of this database is for reporting and sharing information about maritime hazards to both surface ships and submarines (military and commercial) in the international waters of the Arctic Ocean and adjacent northern seas.

This information is applicable to any person who physically collects data from, or works in the Arctic Ocean.

BACKGROUND: The Maritime Safety Information Division of the (United States) National Imagery and Mapping Agency (NIMA) provides maritime safety information to mariners worldwide.

The various types of information provided by the Maritime Safety Information Division alert mariners to military operations, major navigational aid failures and changes, large drifting navigational hazards, cable laying, scientific and survey operations, search and rescue activities, and any other event or situation deemed a serious hazard to navigation. This information is distributed to mariners worldwide by several different methods.

At the present time, there is no centralized system for collecting or distributing maritime safety information in the Arctic Ocean. The northern limits for existing reports on maritime safety information around the world are:

- At 67°N just north of the Bering Strait;
- At 67°N across the Davis Strait between Greenland and Canada; and
- At 71°N across the Norwegian and East Greenland Seas from the Norwegian North Cape to the Greenland Coast.

The region north of these limits will be covered by the new Arctic Maritime Safety Information database.

There is now growing evidence that the ice cover in the Arctic Ocean and northern seas is decreasing, both in mass and in extent. Such changes in the Arctic environment logically inspire concepts for commercial maritime exploitation of the area, and concurrently motivate increased research in the ocean. Because greater use of the Arctic is being realized by many elements of society - commercial, military and scientific - it is appropriate that the Arctic Ocean be as respected as the other temperate oceans and navigated with concern for the presence of maritime hazards.

APPLICABILITY: This announcement is intended for those who deploy structures in the Arctic Ocean, conduct Arctic Ocean based activities, or deploy scientific remote sensing systems in the Arctic Ocean – similar to activities and objects that are now considered hazards and are reported as such in the temperate oceans. Similarly, those mariners who use the high-latitude waters (military and civilian) should become familiar with the new database to enable them to obtain maritime hazard information previously unavailable.

The hazards considered appropriate for reporting include, but are not limited to: rock dredges, grab samplers, piston corers, Niskin bottle rosettes, sediment traps, current meters, geophysical operations, any bottom moored buoy or bottom mounted structure, and unmanned or autonomous underwater vehicles (UUV/AUV). Objects suspended through the ice to a depth of 30 meters or greater should also be reported.

PROCEDURE: At present, for the Arctic Ocean, there is no internationally defined navigation safety area, no area control authority, nor any broad-area-capable radio broadcast by which maritime warnings, hazards to navigation, or Notices to Mariners (NtM's) can be collected and distributed to vessels at sea. The database described here is intended to fill this void with a simple internet-based system predicated on timely reporting and posting of hazards. Mariners anticipating their voyage to the Arctic should consult the NIMA web site (<http://pollux.nss.nima.mil>) in advance to obtain a list of all submitted hazards. Concurrent with the posting of hazards, NIMA has established the Arctic Maritime Safety Information (AMSI) database.

The NIMA Maritime Safety Division will:

1. Manage a database of information that will support the safety of vessels of all nations at sea in the international waters of Arctic Ocean and adjacent seas outside (north) of all current maritime safety information systems.
2. Prepare and make available a form for reporting all maritime hazards in the Arctic Region. This form is available on the website and in Section III of the weekly Notice to Mariners.
3. Maintain a "Arctic Maritime Safety Information" query page on the NIMA Maritime Safety Information Division Web site (<http://pollux.nss.nima.mil>) under the "Broadcast Messages" menu item. All maritime hazards and warnings reported to NIMA in the international waters of the Arctic Ocean and adjacent seas will be posted to this query page.

Procedures to report a maritime hazard in the Arctic:

Individuals or organizations creating, placing or observing a maritime hazard in the Arctic area defined above are requested to do the following (Refer to AMSI Reporting Sheet in the back of this Notice to Mariners):

1. Document the hazard.
 - a. Include the reporting individual/organization (with point of contact), voice telephone number and/or email address.
 - b. Describe the hazard – What is it? (e.g. dredge, buoy, current meter); How much of the water column is occupied? (e.g. “bottom to surface”, “surface to 500m”).
 - c. Where is the hazard located? Use Mercator coordinates. If drifting or moving in or outside of pack ice, provide insertion location. Provide set and drift and/or removal location, if known.
 - d. Date of insertion in the water.
 - e. Date of removal and/or cancellation of the hazard.
 - f. Indicate if the position of the hazard will be remotely monitored.
2. Submit report to NIMA by email at navsafety@nima.mil, by telephone to the watch desk at 1-301-227-3147 or 1-800-362-6289, or by telefax at 1-301-227-3731.
3. Individuals and organizations monitoring drifting hazards in the water for indefinite periods or longer than three weeks should provide a weekly updated position and current point of contact as in step 1 above.
4. Individuals and organizations with existing hazards now implanted in the Arctic Ocean are requested to submit Arctic Maritime Safety Information Report Sheets to ensure that the database is up-to-date.