IHB File N° S3/3084

CIRCULAR LETTER 30/2000 11 July 2000

VANDALISM ON OCEAN DATA BUOYS

Dear Sir,

During its 5th Meeting (IHB, Monaco, 27-29 June 2000) the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW) was informed by the representative of the World Meteorological Organization (WMO) that vandalism on ocean data buoys, both deliberate and accidental, has been and remains a significant problem in many ocean areas.

As you may already know, the Data Buoy Cooperation Panel (DBCP), working under the auspices of WMO and IOC, maintains arrays of moored and drifting buoys to collect data which are used to provide a variety of services beneficial to the mariner and fisherman.

The DBCP considers that it would be valuable if IHO Member States could assist in efforts to inform mariners of the importance of these buoys by promulgating the attached note through the appropriate channels such as, for example, annual or regular Notices to Mariners.

Your comments, if any, on this proposal and your kind assistance in this matter would be much appreciated.

On behalf of the Directing Committee Yours sincerely,

Rear Admiral Giuseppe ANGRISANO President

Encl.: Note

Copy to WMO, IOC, IALA

NOTE

PROPOSED TEXT FOR PROMULGATION TO MARINERS

Meteorological and oceanographic data buoys

The Data Buoy Cooperation Panel working under the auspices of the World Meteorological Organization and the Intergovernmental Oceanographic Commission maintains arrays of instrumented drifting and moored buoys in the world oceans. These automated buoys make routine measurements and transmit their data in real-time through satellites. Such measurements include wind speed and direction, air temperature, air humidity, atmospheric pressure, currents, sea surface temperature, but also water temperatures at various depths to 500 meters. All buoys transmit their positions along with the data.

Both drifting and moored buoys provide valuable information to many communities, including fishermen and mariners.

What are the buoys used for?

- Weather forecasts. Meteorological models routinely assimilate observations from various sources (including satellites, weather balloons, land stations, ships, and data buoys) around the planet to make their national forecasts. Buoy data are crucial because deployed in ocean areas where no other source of valuable data is available.
- Marine forecast. For similar reasons, buoy data are essential for producing improved marine forecasts.
- Assistance to fisheries. Sea surface temperature is an important tool to find many different species of fish. The buoys provide this information to weather centres which produce charts of sea surface temperature and distribute them to fishermen. Knowing where to look for fish saves both fuel and time. Using data buoys and other instruments such as sub-surface floats, oceanographic models now permit to predict the impact of El Niño events and other signals on the ocean environment; these predictions can help fishermen to plan their operations in advance.
- **Safety at sea**. Several nations have successfully used surface wind and ocean current information from the buoys to help locating missing or overdue boats.
- Climate prediction, meteorological and oceanographic research. Researchers use the data from the buoys to learn how to predict future changes in the world's climate. For example, buoys were deployed to learn how to predict the El Niño / Southern Oscillation phenomenon which causes disruptions in the ocean surface winds and the upper ocean temperature pattern and leads to seasonal climate variations and changes in fish migration patterns in many areas of the world oceans.

Advice to fishermen and mariners

DO NOT pick up drifting buoys. Buoy operators do not refurbish the drifting buoys once deployed. They would continue to transmit their position along with erroneous meteorological and oceanographic data from the deck of the ship.

DO keep watch for the moored buoys at sea; they should be visible on radar and can be avoided.

Always keep off your fishing operations well clear of the buoys in order to avoid entanglement of your net with the buoy moorings.

DO NOT moor to, damage, or destroy any part of the buoys.

DO educate your fellow community about the use of data buoys.
