



Ref. T2/8.03

MSC/Circ.1063
19 December 2002

PARTICIPATION OF SHIPS IN WEATHER ROUTEING SERVICES

- 1 The Maritime Safety Committee, at its seventy-sixth session (2 to 13 December 2002), in response to a proposal from the United Kingdom approved an MSC Circular aimed at establishing minimum standards for weather routeing services that are consistent with voyage planning requirements (SOLAS Chapter V, regulation V/34) and load line zone restrictions.
- 2 Presently, weather routeing services remain relatively unregulated and are mainly a commercial service. Improvement in weather routeing services and safety can be achieved only by an increased dialogue between ships' masters and their weather routeing service providers and through a continuous review of the information that is provided by them.
- 3 Member Governments are invited to bring the attached guidance to the attention of shipowners, ship operators, ship managers, ship charterers and masters, and to encourage them to incorporate it into agreements between weather routeing services and their clients.
- 4 This circular complements MSC/Circ.1017, which urges masters of ships to participate in the Voluntary Observing Ships' (VOS) Scheme of the World Meteorological Organization (WMO).

ANNEX

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1 Following the presentation of new evidence from surveys of the wreck of the Oil/Bulk/Ore Carrier **Derbyshire**, which was lost off Okinawa in 1980, the Government of the United Kingdom re-opened the Formal Investigation into the loss of that ship.

2 The Investigation found that **Derbyshire** had been lost in Typhoon ORCHID despite having been supplied with weather routeing advice. The court concluded that the information provided to the master was insufficient to assist him in effectively avoiding the worst weather associated with the typhoon.

3 The quality of weather routeing advice has undoubtedly improved since 1980. Weather routeing services now use much better information from national meteorological services coupled to more powerful computing facilities. The weather routeing services available to mariners however, remain largely unregulated, and in some cases operate as an enhancement for commercial expedience rather than directly as a safety precaution.

4 The revised chapter V of SOLAS, regulation 34, defines the need for the ship's voyage to be subject to a voyage plan. Paragraph 2.3 specifies "all known navigational hazards and adverse weather conditions" as one of the principal considerations that should be used by the master when formulating the voyage plan. This regulation, together with the obligation placed upon owners, charterers and operators in regulation 34.3, safeguards the master's right to deviate from advice given that might conflict with his/her professional judgement. The commercial expedience of the voyage can sometimes place undue pressure on masters to follow routes that introduce risks that may prove unacceptably high.

5 The advice provided by weather routeing services is formulated at a location remote from the ship but may be regarded by some in the ship owning or chartering community as providing better information than the weather forecasts/warnings which are available to a master at the scene. A master's confidence in the advice being offered may be diminished if that advice does not reflect the conditions that are evident at the ship's location. Confidence may be further diminished by weather routeing services that are insufficiently interactive to allow feedback from the master and updating of the initial advice in reaction to feedback.

6 The attached Appendix provides a standard to which weather routeing services should adhere in order that the services they provide take account of internationally agreed measures¹.

¹ SOLAS Chapter V, regulation 34, resolution A.893(21) on Guidelines for voyage planning, the International Convention on Load Lines 1966 regarding Load Line Zones, the MARPOL Convention and the Master's overriding authority referred to in the International Safety Management Code.

Appendix

MINIMUM STANDARDS FOR PROVISION OF WEATHER ROUTEING SERVICES

Any weather routeing service provided for the use of masters should comply with the following minimum requirements:

- 1 The master should be provided with meteorological information for the proposed route. The first information should, when possible, be provided prior to the ship sailing from her port of departure to enable the master to plan the voyage and if necessary, adjust the passage plan accordingly.
- 2 The master should be provided with the source of data, where possible, the level of accuracy of the data and the probability of changes in the weather patterns indicated.
- 3 Information provided should include sea and swell data in the form of significant wave height and, if possible, direction of swells.
- 4 Any weather routeing advice should take full account of the speed and handling characteristics of the ship. Consideration should be given to the ship's ability to avoid weather systems posing a threat that are moving fast in relation to the ship's speed.
- 5 Prior to sailing, clear instructions should be provided to the master for the communication channels available between the ship and the weather routeing service.
- 6 Weather routeing advice should be provided at regular intervals appropriate to the weather conditions at the ship's position and in way of its projected route. The interval should be varied according to the rate of change of conditions.
- 7 The service should enable masters to make requests for advice at interim periods.
- 8 The system used should be interactive. All submissions of advice from the weather routeing service should require a response by the master. The minimum response should include the ship's position, course and speed. The format of the response should also encourage the master to feed back information regarding the weather conditions at the ship's location. Masters should also be encouraged to indicate their preferred route taking into consideration professional judgement with regard to the safety of the ship. In making any response, masters should pay particular attention to the sea-keeping characteristics of the ship.
- 9 Weather routeing service advice should take account of:
 - .1 relevant ships' routeing systems to be encountered during the voyage;
 - .2 sufficient sea room for the ship to make safe passage throughout the voyage;
 - .3 all known navigational hazards and adverse weather conditions;
 - .4 the need for the ship to operate in accordance with constraints imposed in the interests of environmental protection;
 - .5 the need for the ship to operate within constraints resulting from compliance with the International Load Line Convention; and
 - .6 the need for essential maintenance that affects the ship's safe operation that may be compromised by environmental conditions.