

標 題：

GMDSS 無線設備の搭載期限について

NKテクニカル インフォメーション

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関係船主・造船所各位

GMDSS に関する 1988 年改正 SOLAS により、1995 年 2 月 1 日前に建造された船舶には、1999 年 2 月 1 日までに GMDSS 無線設備を搭載するよう要求されております。

搭載期限まで残すところ 1 ヶ月あまりとなりましたが、弊会の記録によると、該当船舶で GMDSS 搭載のための必要な措置（弊会による関連の図面・資料の事前審査及び船舶の安全無線検査を含む。）が講じられていない船舶が少なからずあります。同記録に基づく推計によると、搭載期限までに GMDSS 無線設備が搭載されず、その結果、航行に支障を来す船舶が存在することも予測されます。

もし、弊会による関連の図面・資料の事前審査或いは安全無線検査が終了していない場合、至急、必要な措置を講じるよう推奨申し上げます。なお、図面・資料の事前審査が終了していない場合は、テクニカルインフォメーション No.249 添付のリストに示す図面・資料を弊会に提出するようお願い申し上げます。参考までに、ここに同リストを添付いたします。

以 上

添付：提出図面・資料リスト

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List of Drawings and Documents to be Submitted for Examination/Approval

1. Specifications

A list of specifications should include the following:-

- (1) Ship's flag, gross tons and date of keel laid;
- (2) Ship's navigating sea area planned;
Either A1, A1+A2, A1+A2+A3 or A1+A2+A3+A4
- (3) Maintenance methods selected;
Maintenance methods required vary according, amongst others, to the ship's navigating sea areas. In case where the navigating sea area is A1+A2+A3, it should be a combination of at least two methods such as "duplication of equipment", "shore-based maintenance" or "at-sea electronic maintenance".
- (4) Availability of emergency sources of power for GMDSS radio equipment;
- (5) Periods during which GMDSS radio equipment can be supplied from reserve sources of energy;
The required period varies from 1 hour to 6 hours, depending upon whether emergency sources of energy are available.

2. List of Equipment

A list should include kinds, types, number and manufacturers names of GMDSS radio equipment to be installed, and names of governments/organizations who have approved for the equipment

3. Arrangement of Radio Equipment

Drawings should indicate the arrangement of GMDSS radio equipment installed at the position from which the ship is normally navigated (normally, the ship's navigating bridge) or details of GMDSS communication functions available at the position. It should also indicate the locations of lighting for controllers of GMDSS radio equipment, to which the power is supplied from the emergency/reserve sources of energy.

4. Connecting Diagram of Radio Equipment

5. Arrangement of Antennas

Drawings should indicate the arrangement of all antennas viewed from the front, side and plan if possible. When an INMARSAT SES is installed as a compulsory unit for GMDSS radio equipment and part of the ship's hull structure becomes an obstacle to the line of sight between the INMARSAT antenna and the satellite, a drawing of blind sector should be included.

6. Calculation of Battery Capacity for Reserve Source of Energy

It should be clearly indicated to which GMDSS radio equipment power is supplied from the reserve source of energy and how. For determination of the required battery capacity, reference should be made to 4.9 of the NK Guidance for Radio Installations*.

*: 4.9 Sources of Energy

4.9.3 Reserve Sources of Energy

- 1 The capacity of the reserve source of energy is to be determined in accordance with the following formula with specified load conditions to the required radio installations fed from the reserve sources.

$$C = K \times I$$

where C: Required capacity (AH)

K: Capacity conversion factor (H)

(corresponding to ambient temperature of +5°C and end voltage of 1.8V)

I: Total consumption current (A)

- 2 The capacity conversion factor K is to be determined in accordance with the following:
 - (1) For lead accumulator batteries of a clud or pasted vent type, $K=3.2$ in the case of a 1 hour discharging rate and $K=7.2$ in the case of a 6 hour discharging rates, respectively. For lead accumulator batteries of a sealed type, $K=2.0$ and $K=7.1$ in the case of 1 hour and 6 hour discharging rates, respectively.
 - (2) For lead accumulator batteries of other types and alkali accumulator batteries, K may be determined by referring to the value recommended by the manufacturer.
