

MEMORANDUM CIRCULAR
NO. 04-03-2000

SUBJECT: GUIDELINES ON THE CONFIGURARION OF THE RESERVE SOURCE OR SOURCES OF ENERGY USED TO SUPPLY RADIO INSTALLATIONS ON GMDSS SHIPS

Pursuant to the provisions of R.A. 3346, R.A. 3396 and the requirements set out in Regulation 4/13 of the 1974 Safety of Life at Sea (SOLAS) Convention, as amended, concerning the reserve source or sources of energy used to supply radio installations on GMDSS ships should meet the following requirements.

1. There shall be available at all times, while the ship is at sea, a supply of electrical energy sufficient to operate the radio installations and to charge any batteries used as part of a reserve source or sources of energy for the radio installations.
2. A reserve source or sources of energy shall be provided on every ship, to supply radio installations, for the purpose of conducting distress and safety radiocommunications, in the event of failure of the ship's main and emergency sources of electrical power. The reserve source or sources of energy shall be capable of simultaneously operating the VHF radio installation, either MF radio installation, MF/HF radio installation, or the INMARSAT ship earth station for a period of at least;
 - a. One (1) hour, on ships constructed on after 1 February 1995;
 - b. One (1) hour, on ships constructed before February 1995, if a self-contained emergency source of electrical power is provided; and
 - c. Six (6) hours, on ships constructed before 1 February 1995, if a self-contained emergency of source of electrical power is not provided.

The reserve source or sources of energy need not supply independent HF and MF radio installations at the same time.

3. The reserve source or sources of energy shall be independent of the propelling power of the ship and the ship's electrical system.
4. The reserve source or sources of energy may be used to supply the electrical lighting required to illuminate the radio controls for operating all the radio installations.



5. Where a reserve source of energy consists of a rechargeable accumulator battery or batteries (ANNEX-A):
 - a) a means of automatically charging such batteries shall be provided which shall be capable of recharging them to minimum capacity requirements within 10 hours; and
 - b) the capacity of the battery or batteries shall be checked by fully discharging and recharging for a period of 10 hours, at intervals not exceeding 12 months, when the ship is not at sea.
6. The siting and installation of accumulator batteries, which provide a reserve source of energy, shall be such as to ensure:
 - a) the highest degree of service;
 - b) a reasonable lifetime;
 - c) reasonable safety;
 - d) that battery temperatures remain within the manufacturer's specifications whether under charge or idle; and
 - e) that when fully charged, the batteries will provide at least the minimum required hours of operation under all weather conditions.
7. If an uninterrupted input of information from the ship's navigational or other equipment to a radio installation required in radiocommunication is needed to ensure its proper performance, means shall be provided to ensure the continuous supply of such information in the event of failure of the ship's main or emergency source of electrical power.

This Circular takes effect immediately and supersedes any existing NTC order, circular, instruction or memorandum or part thereof which is inconsistent herewith.

Quezon City, Philippines 01 March 2000

(SGD.) AURELIO M. UMALI
Deputy Commissioner

(SGD.) NESTOR C. DACANAY
Deputy Commissioner

(SGD.) JOSEPH A. SANTIAGO



Commissioner



ANNEX – A

BATTERY CALCULATION SHEET

CURRENT RATING FOR EACH EQUIPMENT:

A	MF/HF RADIO EQUIPMENT (BASIC EQUIPMENT) MODEL: <div style="text-align: right;"> TX CURRENT (T) _____ A RX CURRENT (R) _____ A TOTAL CURRENT CAPACITY 0.5 T + R _____ A </div>
B	VHF RADIO EQUIPMENT (BASIC EQUIPMENT) MODEL: (BUILT-IN DSC & CH 70) <div style="text-align: right;"> TX CURRENT (T) _____ A RX CURRENT (R) _____ A TOTAL CURRENT CAPACITY 0.5 T + R _____ A </div>
C	EMERGENCY LIGHT _____ WATT (EACH) TOTAL CURRENT CAPACITY _____ A
D	GPS NAVIGATOR TOTAL CURRENT CAPACITY _____ A
	REQUIRED CAPACITY FOR 6 HRS OPERATION = <div style="text-align: right;"> K (A + B + C + D) x N _____ AH DE-RATING FACTOR K = 1.4 NO. OF HOURS N = 6 BATTERY CAPACITY FOR RADIO EQUIPMENT IN USE _____ AH </div>

