

Subject :

Method for calculating capacity of accumulating
batteries used for a reserve source or sources of
energy of radio installation on board
the Philippine flag GMDSS ships

NKTECHNICAL INFORMATION

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To shipowners and shipbuilders concerned,

Every GMDSS ship should be provided with a reserve source or sources of energy with power supplying capacity specified in Regulation 13.2 of Chapter IV of 1988 Amendments to the 1974 SOLAS Convention.

The Philippine Government has instructed the Society how to calculate the capacity of the accumulated batteries used for a reserve source or sources of energy on board the Philippine flag GMDSS ships.

Hereinafter, the capacity of the batteries should be calculated in accordance with the method prescribed in "BATTERY CALCULATION SHEET" attached hereto, when you calculate the capacity of the batteries used for a reserve source or sources of energy of radio installation on board the Philippine flag GMDSS ships.

Attachment : BATTERY CALCULATION SHEET

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BATTERY CALCULATION SHEET**CURRENT RATING FOR EACH EQUIPMENT:**

A	MF/HF RADIO EQUIPMENT(BASIC EQUIPMENT) MODEL TX CURRENT (T) RX CURRENT (R) TOTAL CURRENT CAPACITY 0.5T + R	A A A
B	VHF RADIO EQUIPMENT(BASIC EQUIPMENT) (BUILT-IN DSC & CH70) MODEL: TX CURRENT (T) RX CURRENT (R) TOTAL CURRENT CAPACITY 0.5T + R	A A A
C	EMERGENCY LIGHT WATT(EACH) TOTAL CURRENT CAPACITY	W A
D (*)	GPS NAVIGATOR TOTAL CURRENT CAPACITY	A
E	REQUIRED CAPACITY FOR OPERATION = $K \times (A + B + C + D) \times N$ DE-RATING FACTOR : K (**) NO. OF HOURS : N BATTERY CAPACITY FOR RADIO EQUIPMENT IN USE	AH

(*) Total Current Capacity for item D should be included in required capacity for operation (item E), when an uninterrupted input of information from a GPS receiver is needed to ensure proper performance of GMDSS radio equipment, and electrical power shall be provided from the reserve source or sources of energy to the GPS receiver to ensure the continuous supply of such information in the event of failure of the ship's main or emergency source of electrical power.

(**) De-Rating factor K=3.2 in case of N=1 for lead accumulator batteries of a clud or pasted vent type,
De-Rating factor K=2.0 in case of N=1 for lead accumulator batteries of a sealed type, and
De-Rating factor K=1.4 in case of N=6 for lead accumulator batteries of above two types.