NEW Man Overboard Notification (MOB) Sentence

An amendment is a technical specification that is publically available and applies to the current version as specified. The content of the amendment will be incorporated into the next released version of the NMEA 0183 standard.

This document contains the final approved NMEA 0183 Man Overboard Notification (MOB) sentence. This sentence was completed with assistance from the USCG, Inmarsat, NMEA, IEC, and additional maritime industry partners.
MOB – Man Over Board notification
This sentence provides notification from a MOB monitoring system.

The “MMSI of vessel” field is an optional field that may be preconfigured within the MOB device to indicate the ship of origin. The included position information may be that of the vessel or the MOB device itself as identified in field 4, “MOB position source”. Additional information may include the current state of the MOB device, time of activation, and MOB device battery status. This sentence may be used to set a MOB waypoint, or to initiate an alert process.

When additional information such as bearing and distance to a waypoint is applicable to a MOB event the MOB and BWR sentences may be transmitted together using NMEA 0183 Section 7 TAG Block sentence grouping (“g” parameter code). Other sentences that are related to an MOB event may be similarly grouped using TAG Block.

This sentence may be queried. If query support is provided, devices that generate this sentence shall respond with a MOB sentence for each known MOB emitter ID, such that a single query may result in multiple MOB sentence responses.

$--MOB,hhhhh,a,hhmms.ss,x,xxxxx,hhmms.ss,lli.lli,la,yyyy.yy,la,x.x,xx,xxxxxx,x*hh<CR><LF>

Battery status\textsuperscript{11}
MMSI of vessel\textsuperscript{10}
Speed over ground\textsuperscript{9}
Course over ground, degrees true\textsuperscript{8}
Longitude, E/W\textsuperscript{7}
Latitude, N/S\textsuperscript{7}
UTC of position\textsuperscript{6}
Date of position (ddmmyy)\textsuperscript{5}
UTC of MOB position source\textsuperscript{4}
MOB status\textsuperscript{2}
MOB emitter ID\textsuperscript{1}

Notes:
1) The MOB emitter ID is a 5-digit fixed length field of hexadecimal characters. This provides a unique Identifier for each MOB emitter. Values that do not require five hexadecimal numbers must be preceded by “0” zeros, i.e. “FF” must be represented as “000FF”. If the emitter ID is not known this field can be null.
2) The MOB status field provides information which can be used to evaluate the current state of the MOB.
   \texttt{A} = MOB Activated
   \texttt{T} = Test mode
   \texttt{M} = Manual Button
   \texttt{V} = MOB Not in Use
   \texttt{E} = Error
3) The UTC of MOB activation provides the time (hhmmss) of the initial MOB device activation. The decimal point and associated decimal-fraction of seconds shall not be used.
4) MOB Position Source identifies the source of the position information reported by this sentence.
   0 = MOB Position estimated by the Vessel
   1 = MOB position reported by MOB emitter
   2-5 = Reserved
   6 = Error

5) The Date of position provides the day, month, and two digit year (ddmmyy).

6) The UTC time of position provides the time (hhmmss) of the position information. The decimal point and associated decimal-fraction of seconds shall not be used.

7) The latitude and longitude position fields are limited to a maximum of 3 decimal digits of minutes. This provides a position resolution of approximately 2 meters.

8) The Course over ground field is an integer field with no decimal point or decimal digits in units of degrees.

9) The Speed over ground field is an integer field with no decimal point or decimal digits in units of knots.

10) The MMSI number of the ship of origin may be set to null if unknown.

11) The Battery status field indicates the status of the MOB’s internal power source. This field may be null if the MOB is unable to report the battery status. The valid states area:
   0 = Good
   1 = Low
   2-5 = Reserved
   6 = Error