



National Marine Electronics Association

International Marine Electronics Alliance

Technical Bulletin

**Amendment to NMEA0183 Version 4.10
AT 0183 20160520Command**

NMEA 0183 Amendment

An amendment is a technical specification that is publically available.

This amendment applies to the NMEA Version 4.10 that was published June 2012.

This amendment will remain in force until the contents are incorporated into the next version of the NMEA 0183 standard.

This amendment provides further clarification of the use of Command Sentences.

New text is identified in **red bold**.

This Amendment had been reviewed and approved by NMEA.

5.3.7 Command Sentences

Command sentences are those that provide an ability to alter or change the configuration or operation of a device. Examples of legacy command sentences are the “HTC - Heading/Track Control Command” and the “ACA - AIS Regional Channel Assignment Message” sentences. When a command sentence is generated in response to a Query sentence, a means to identify that sentence as only a status report of current settings is required.

Some command sentences cannot be queried and provide a different sentence formatter for status information, so they should not be misinterpreted. This is the case with the HTC sentence. The HTD sentence is provided to determine the status of a heading control system’s settings. There is a high possibility of misinterpretation if a device receives a query sentence for a HTC sentence, and erroneously provides the HTC sentence.

The ACA sentence is an example of a command sentence that can also be queried to determine the status of the current settings. The ACA sentence definition provides a field that when set to any valid value, identifies the sentence as a status of current settings and not a command to change

settings. There is a high probability of misinterpreting this sentence because the field is used for two distinct purposes at the same time.

The use of free-form sentences is not suitable for performing command and configuration functions. The nature of free-form sentences can lead to ambiguities, incorrect implementations and misinterpretations. The TUT and TXT sentences are examples of free-form sentences intended for providing textual information for display purposes. To avoid any possibility of misinterpretation, free-form sentences (TUT and TXT) shall not be used as a command sentence.

To avoid any possibility of misinterpretation and to satisfy the requirements of the Voyage Data Recorder required to be carried on ship under the SOLAS Convention, a clear and unambiguous means to identify that a command sentence is to be interpreted as a command or that it contains status information only and is not a command shall be provided.

Any sentence that contains one or more command fields shall be identified as a “command sentence”. Command sentences shall contain the “Sentence Status Flag” field as identified in Table 8.