National Marine Electronics Association

International Marine Electronics Association

Technical Bulletin

Technical Corrigendum   TC# 0183 201312172

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CPN Sentence

Introduction:

This Technical Corrigendum includes several clarifications to the CPN sentence.

The CPN sentence configures and controls the addition of a line-count parameter to a talker TAG Block or its use as a listener.

Change summary

CPN Sentence
Notes 5, 8, and 9 have been expanded to clarify application of the "Reset event", "Line-count limit", and "Event offset" data fields with respect to resetting the Group-code value when certain limits are reached.

Text that no longer applies in **bold red** font highlighted and has a ~~**red strike thru**~~.
The complete notes text are provided for context, with the changes highlighted and in a **bold font**.

CPN Sentence Notes (5, 8, and 9):

Note 5)   The "Reset event" field defines the event that causes the "line-count" **value of the TAG Block's sentence-grouping Parameter-code** to return **("reset")** to the "Initial line-count" value.

For a "Reset event" > 0, the event is a time that utilizes the equipment's time reference. The event time needs to include the information from the "Event offset" field. Applying the "Event offset" value changes the time of the event by the sign of the "Event offset" (i.e. A negative offset moves the event to an earlier time, and a positive offset moves the event to a later time.). Default value of 1.

If the "Reset event" is set to a value from 1 through 6, and the "Line-count limit" contains a value of 0 or greater, then arriving at either the "Line-count limit" value or the defined time event (see below) causes the "Line-count" portion of the TAG Block's line-count Parameter-code to return to the "Initial line-count" value. That means, if either the "Line-count limit" is exceeded or the "Reset event" time is reached, the reset of the "line-count" is performed.

If the "Reset event" is a value from 1 to 6 (see below) and the "Line-count limit" contains a value of -1 (negative one), the Line-count limit is set to 0 for a negative "Line-count increment" (decrementing) and to 999 999 999 for a positive " Line-count increment".

0 = using the line-count limit. The "Event offset" data field does not apply.
1 = daily (beginning next day)
2 = hourly (beginning of hour)
3 = every minute (beginning of minute)
4 = weekly (beginning of Sunday)
5 = monthly (beginning of month)
6 = yearly (beginning of year)

Note 8)   This data field may contain a floating numeric or integer value. The current line-count value ~~(see n:)~~ **(see section "Line-count Parameter – "n"")** is compared to the line-count limit and is used to reset the line-count to the value of the Initial line-count. If the Count Increment is positive, the line-count is reset to the Initial line-count when the line-count is greater than this value. If the Count Increment is negative, the line-count is reset when the line-count is less than this value. This test is done before the line-count is output in the TAG Block. The line-count is incremented after it is output. The line-count limit may be a real number with a fractional part to ensure there is no ambiguity during the limit test. **A value of -1 (negative one) for the "Line-count limit" sets the "Line-count limit" to 0 for a negative "Line-count increment" and to 999 999 999 for a positive "Line-count increment".**

Note 9)   This is the offset in (+/-) seconds (See Note 5). **Default value of 0.** Null value indicates no change