## MIL-STD-188-216A

NOT MEASUREMENT SENSITIVE

NOTICE OF CHANGE

MIL-STD-188-216A NOTICE 1 6 September 1993

MILITARY STANDARD INTEROPERABILITY STANDARDS FOR DATA ADAPTER CONTROL MODE

TO ALL HOLDERS OF MIL-STD-188-216A:

1. THE FOLLOWING PAGES OF MIL-STD-188-216A HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE SUPERSEDE	D PAGE	DATE
	6 September 1993 129 6 September 1993 129		20 February 1993 20 February 1993

- 2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.
- 3. Holders of MIL-STD-188-216A will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military standard is completely revised or canceled.

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(Project TCTS-2161)

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## MIL-STD-188-216A

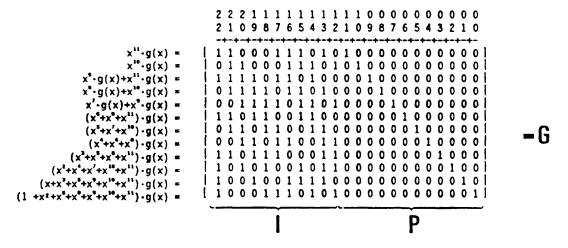
40.1.1.1 Check bits derivation. The transmitting DA/MS shall generate the check bits using the following generator polynomial:

$$g(x) = x^{11} + x^{10} + x^6 + x^5 + x^4 + x^2 + 1$$

as specified herein. Note, that, using modulo 2 addition,

$$x^{23}+1-\underbrace{(x^{1}+x^{0}+x^{2}+x^{2}+x^{2}+x^{2}+1)}_{g(x)}(x+1)$$

the eleven check bits shall be as derived from the following generator matrix G:



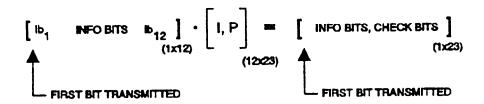
New page

## MIL-STD-188-216A

where the matrix contains the coefficients of the polynomials on the left. By interchanging the I and P columns to obtain matrix T; i.e.

$$G = [P, I]_{(12x23)} = > [I, P]_{(12x23)} = T$$

the transmission order and value of the code word bits can be obtained by matrix multiplication (modulo 2 addition without carry) as follows:



- 40.1.2 <u>Double code word transmission</u>. Double code word transmission (1/4 rate Golay) is the transmission of a 1/2 rate Golay code word twice contiguously (see figure 31).
- 40.1.3 <u>Quadruple code word transmission</u>. Quadruple code word transmission (1/8 rate Golay) is the transmission of a 1/2 rate Golay code word four times contiguously (see figure 31).

New page