MILITARY SPECIFICATION SHEET

CABLES, RADIO FREQUENCY, FLEXIBLE, COAXIAL,
50 OHMS, M17/060-RG142

This amendment forms a part of Military Specification Sheet MIL-C-17/60C, dated 15 March 1977, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

* Title: Delete "M17/060-RG142" and substitute "M17/60-RG142".

PAGE 2

REQUIREMENTS, Stress-crack resistance: Add the following,

"Mandrel size; seven times the jacket diameter".

Dimensional stability, delete and substitute:

Inner conductor from core: 0.250 inch, maximum.

Inner conductor from jacket: 0.312 inch, maximum.

* Delete "Part number: See table II." and substitute "Part number: M17/60-RG142".

* Delete "Supersession data: See table II."

* TABLE II: Delete.

PAGES 3 AND 4

Delete and substitute figures 2 and 3 as printed on pages 2 and 3 of this amendment.

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

Custodians:
Army - CR
Navy - EC
Air Force - 85

Review activities:
Army - AR, MI
Navy - SH
Air Force - 11, 17, 99
DLA - ES, IS

User activities:
Army - AT, ME
Navy - AS, MC, OS
Air Force - 19

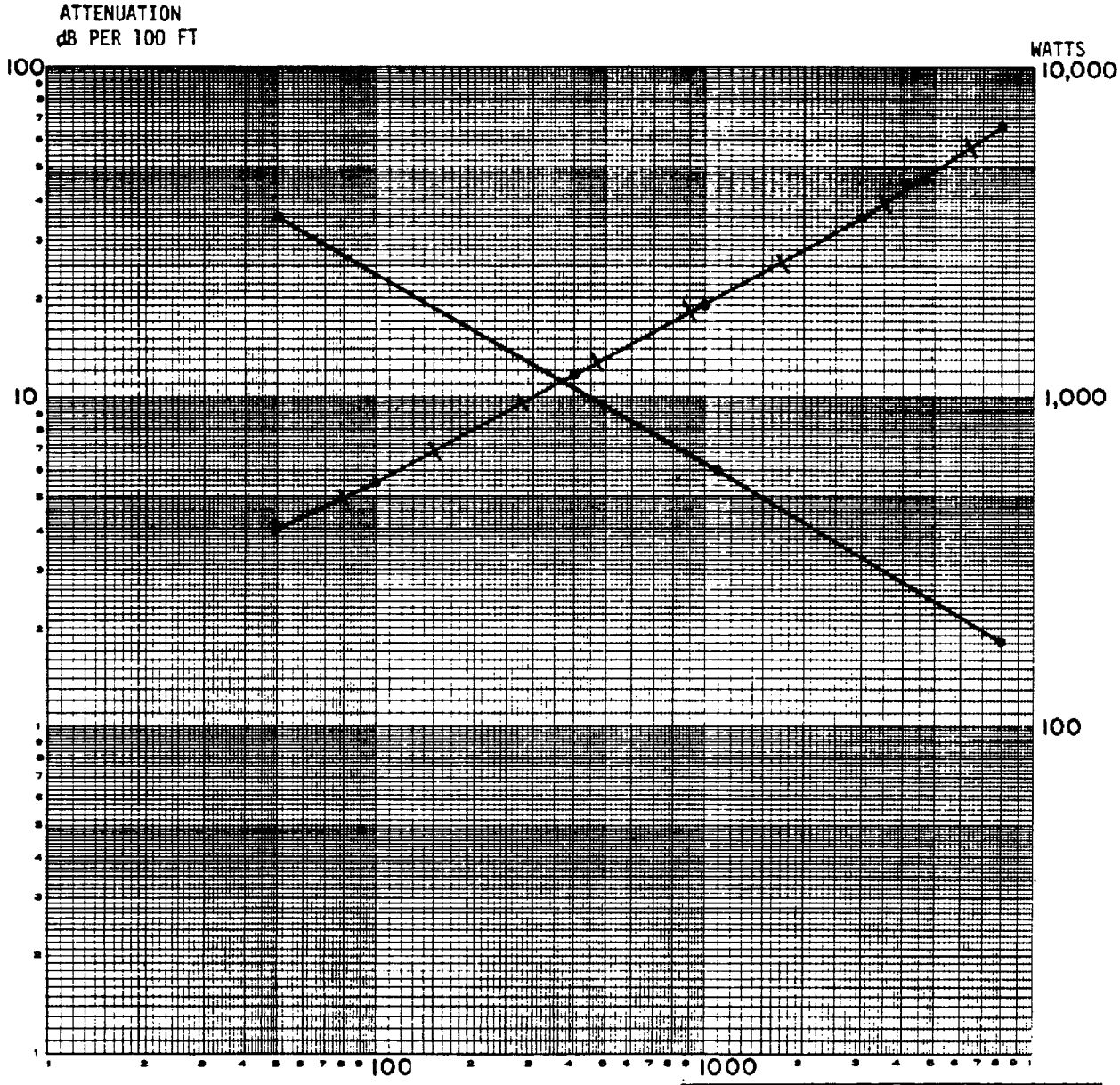
Agent:
DLA - ES

Preparing activity:
Army - CR

(Project 6145-0828-4)



FSC 6145



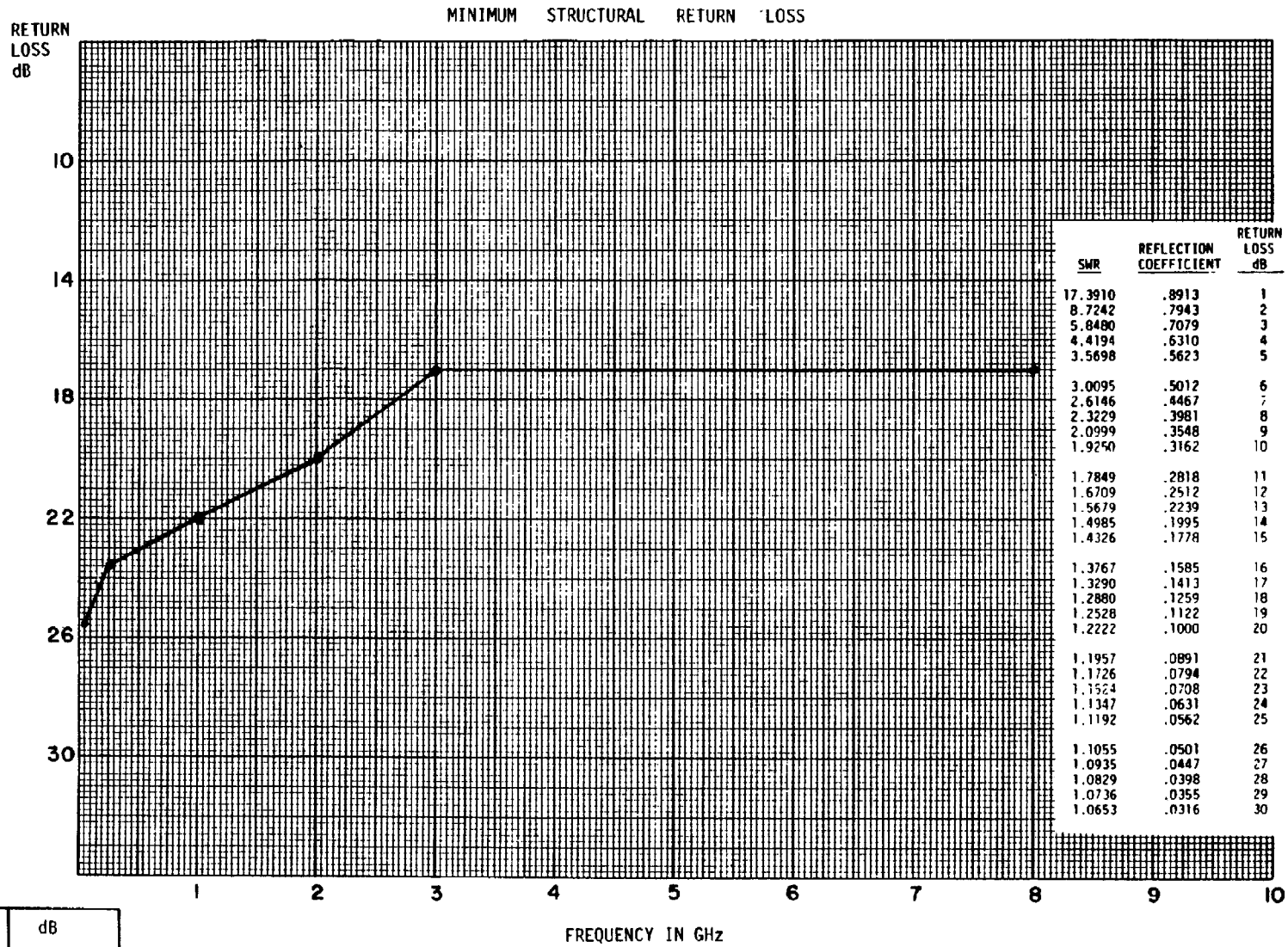

Tabulated values are for reference only.
The values on the chart represent the requirements.

Maximum attenuation at 25°C, sea level

Maximum power at 25°C, sea level

| FREQUENCY MHz | ATTENUATION dB | POWER WATTS |
|---|---|---|
| 50 | 4 | 3500 |
| 100 | 5.5 | 2400 |
| 400 | 11.7 | 1100 |
| 1000 | 19 | 650 |
| 3000 | 35 | 330 |
| 8000 | 66 | 180 |

FIGURE 2. Power rating and attenuation.




| SWR | REFLECTION COEFFICIENT | RETURN LOSS dB |
|---|---|---|
| 17.3910 | .8913 | 1 |
| 8.7242 | .7943 | 2 |
| 5.8480 | .7079 | 3 |
| 4.4194 | .6310 | 4 |
| 3.5698 | .5623 | 5 |
| 3.0095 | .5012 | 6 |
| 2.6146 | .4467 | 7 |
| 2.3229 | .3981 | 8 |
| 2.0999 | .3548 | 9 |
| 1.9250 | .3162 | 10 |
| 1.7849 | .2818 | 11 |
| 1.6709 | .2512 | 12 |
| 1.5679 | .2239 | 13 |
| 1.4985 | .1995 | 14 |
| 1.4326 | .1778 | 15 |
| 1.3767 | .1585 | 16 |
| 1.3290 | .1413 | 17 |
| 1.2880 | .1259 | 18 |
| 1.2528 | .1122 | 19 |
| 1.2222 | .1000 | 20 |
| 1.1957 | .0891 | 21 |
| 1.1726 | .0794 | 22 |
| 1.1524 | .0708 | 23 |
| 1.1347 | .0631 | 24 |
| 1.1192 | .0562 | 25 |
| 1.1055 | .0501 | 26 |
| 1.0935 | .0447 | 27 |
| 1.0829 | .0398 | 28 |
| 1.0736 | .0355 | 29 |
| 1.0653 | .0316 | 30 |

| MHz | dB |
|---|---|
| 50 | 25.5 |
| 400 | 23.8 |
| 1000 | 22 |
| 2000 | 20 |
| 3000 | 17 |
| 8000 | 17 |

Tabulated values are for reference only. The values on the chart represent the requirements.

FIGURE 3. Structural return loss.



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