

**MIL-C-7078/6**

12 August 1970

SUPERSEDING

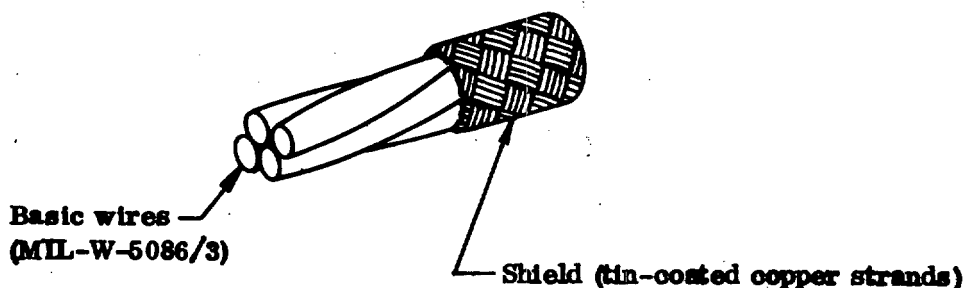
MILITARY SPECIFICATION SHEET See "Supersession Data"

**CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-5086/3 BASIC WIRES,  
COPPER SHIELD, 600-VOLT, 105° C**

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

The complete requirements for procuring the cable described herein shall consist of this document and the issues in effect of Specification MIL-C-7078 and Specification Sheet MIL-W-5086/3.

**INACTIVE FOR NEW DESIGN IN AIRCRAFT  
APPLICATIONS AFTER DATE OF ISSUE**

**SHIELDED CABLE****REQUIREMENTS:****CONSTRUCTION DETAILS:** See above Figure and Table I**VOLTAGE RATING:** 600 Volts (rms)**TEMPERATURE RATING:** 105° C (221° F) max conductor temperature**COLD BEND:** Not applicable**THERMAL SHOCK TEST:** Not applicable**HEAT RESISTANCE:** Not applicable**JACKET FLAWS (SPARK TEST):** Not applicable**DRY DIELECTRIC:** 1500 volts (rms)

**PART NUMBER:** Part numbers in this specification sheet are coded as in the following example:

<u>M7078/6</u>	-	<u>22</u>	-	<u>1</u>
specification sheet number		size number of basic wires		quantity of conductors (basic wires) in cable

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TABLE I

Cable part no.	Gage of shield strands (AWG)	Major diameter of shielded cable (in.)(max)	Weight of shielded cable (lb/1000 ft)	
			(nom.) 1/	(max)
M7078/6-22-1	36 ↓	.112	12.1	12.6
M7078/6-22-2		.202	21.5	22.4
M7078/6-22-3		.216	29.2	30.4
M7078/6-22-4		.239	36.7	38.2
M7078/6-22-5		.265	44.2	46.0
M7078/6-22-6		.292	51.7	53.9
M7078/6-22-7		.292	57.7	60.1
M7078/6-20-1	36 ↓	.122	14.2	15.1
M7078/6-20-2		.222	25.8	27.4
M7078/6-20-3		.237	35.3	37.6
M7078/6-20-4		.263	44.7	47.5
M7078/6-20-5		.292	54.1	57.6
M7078/6-20-6		.322	63.7	67.8
M7078/6-20-7		.322	71.3	75.9
M7078/6-18-1	36 ↓	.137	18.4	19.6
M7078/6-18-2		.252	33.8	36.0
M7078/6-18-3		.270	47.1	50.1
M7078/6-18-4		.300	60.1	63.9
M7078/6-18-5		.333	73.0	77.7
M7078/6-18-6		.367	86.4	91.9
M7078/6-18-7		.367	97.5	103.7
M7078/6-16-1	36 ↓	.152	22.2	23.6
M7078/6-16-2		.282	41.2	43.8
M7078/6-16-3		.302	57.6	61.3
M7078/6-16-4		.336	73.9	78.6
M7078/6-16-5		.373	90.1	95.9
M7078/6-16-6		.412	106.8	113.6
M7078/6-16-7		.412	120.8	128.5
M7078/6-14-1	36 ↓	.172	29.1	31.0
M7078/6-14-2		.322	54.8	58.3
M7078/6-14-3		.345	77.6	82.6
M7078/6-14-4		.384	100.0	106.4
M7078/6-14-5		.427	122.5	130.3
M7078/6-14-6		.472	145.7	155.0
M7078/6-14-7		.472	165.6	176.2

TABLE I (Continued)

Cable part no.	Gage of shield strands (AWG)	Major diameter of shielded cable (in.) (max)	Weight of shielded cable (lb/1000 ft)	
			(nom.) <u>1</u> /	(max)
M7078/6-12-1	36 ↓	.192	38.2	40.6
M7078/6-12-2		.362	72.9	77.5
M7078/6-12-3		.388	104.2	110.9
M7078/6-12-4		.432	135.1	143.7
M7078/6-12-5		.481	166.0	176.6
M7078/6-12-6		.532	198.1	210.7
M7078/6-12-7		.532	226.2	240.6
M7078/6-10-1	36 ↓	.222	54.9	58.4
M7078/6-10-2		.422	106.1	112.9
M7078/6-10-3		.453	153.6	163.4
M7078/6-10-4		.505	200.3	213.1
M7078/6-10-5		.562	247.0	262.8
M7078/6-10-6		.622	295.7	314.6
M7078/6-10-7		.622	339.2	360.9
M7078/6-8-1	36 ↓	.277	83.8	88.2
M7078/6-8-2		.532	163.5	172.1
M7078/6-8-3		.571	238.6	251.2
M7078/6-8-4		.638	312.4	328.8
M7078/6-6-1	36 ↓ 34	.332	128.2	134.9
M7078/6-6-2		.642	252.6	265.9
M7078/6-6-3		.690	371.8	391.4
M7078/6-6-4		.775	499.7	526.0
M7078/6-4-1	36 34 ↓	.392	190.1	196.0
M7078/6-4-2		.767	386.9	398.9
M7078/6-4-3		.824	569.7	587.3
M7078/6-4-4		.920	749.1	772.3
M7078/6-2-1	36	.467	275.6	281.2
M7078/6-2-2	34	.917	561.0	572.4
M7078/6-1-1	36	.517	337.7	344.6
M7078/6-1-2	34	1.017	687.7	701.7
M7078/6-01-1	36	.572	429.6	438.4
M7078/6-01-2	34	1.127	875.0	892.9
M7078/6-02-1	36	.632	531.7	542.5
M7078/6-03-1	36	.702	654.0	667.3
M7078/6-04-1	36	.772	820.4	837.1

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1/ Nominal values for weight of shielded cable are given for information only.  
Nominal values are not requirements.

**SUPERSESSION DATA:** This specification sheet includes the requirements for the "C" dash number cables of MS25192. The individual cables of the specification sheet replace and supersede the "C" dash number cables of corresponding basic wire size and number of conductors in MS25192. Examples: Part number M7078/6-22-1 cable of this specification sheet replaces and supersedes dash number -C221 cable of MS25192; part number M7078/6-20-7 cable of the specification sheet replaces and supersedes dash number -C207 cable of MS25192.

**Custodians:**

Navy - AS  
Army - EL

**Preparing activity:**

Navy - AS  
(Project No. 6145-0507)

**Review activities:**

Navy - EC, OS  
Army - EL, MI  
DSA - IS

**User activities:**

Army - AV, MU

Review/user information is current as of the date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current Federal Supply Classification Listing of DOD Standardization Documents.

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No. 22-R255
<p><b>INSTRUCTIONS:</b> This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.</p>		
<p><b>SPECIFICATION</b>      <b>CABLE, ELECTRIC, AEROSPACE VEHICLE, MIL-W-5086/3</b>  <b>MIL-C-7078/6 BASIC WIRES, COPPER SHIELD, 600-VOLT, 105° C</b></p>		
<p><b>ORGANIZATION</b></p>		
<p><b>CITY AND STATE</b></p>		<p><b>CONTRACT NUMBER</b></p>
<p><b>MATERIAL PROCURED UNDER A</b>  <input type="checkbox"/> <b>DIRECT GOVERNMENT CONTRACT</b>      <input type="checkbox"/> <b>SUBCONTRACT</b></p>		
<p><b>1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?</b>  <b>A. GIVE PARAGRAPH NUMBER AND WORDING.</b></p>		
<p><b>B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES</b></p>		
<p><b>2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID</b></p>		
<p><b>3. IS THE SPECIFICATION RESTRICTIVE?</b>  <input type="checkbox"/> <b>YES</b>      <input type="checkbox"/> <b>NO (If "yes", in what way?)</b></p>		
<p><b>4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)</b></p>		
<p><b>SUBMITTED BY (Printed or typed name and activity - Optional)</b></p>		<p><b>DATE</b></p>

**DD FORM 1426**  
1 JAN 56

REPLACES EDITION OF 1 OCT 64 WHICH MAY BE USED.