

INCH-POUND
MIL-C-23269/9C
4 February 1993
SUPERSEDING
MIL-C-23269/9B
18 September 1989

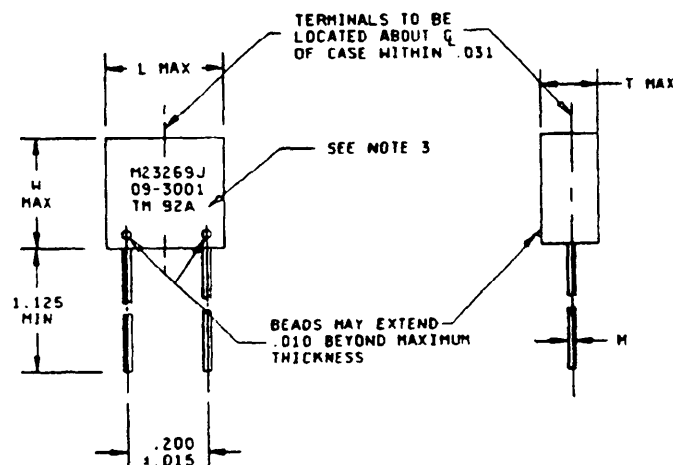
MILITARY SPECIFICATION SHEET

CAPACITORS, FIXED, GLASS DIELECTRIC,
(RADIAL OR AXIAL WIRE-LEAD TERMINALS), ESTABLISHED RELIABILITY,
STYLES CYR41, CYR42, AND CYR43

Inactive for design after 18 September 1989.
For new design use MIL-C-23269/1, /2, 3, /4, or /10.

This specification is approved for use by all Depart-
ments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall
consist of this specification sheet and the issue of the following
specification listed in that issue of the Department of Defense Index
of Specifications and Standards (DODISS) specified in the solicitation:
MIL-C-23269.



STYLE CYR41, SEE TABLE I

Inches	mm	Inches	mm
.001	0.03	.115	2.92
.004	0.10	.165	4.19
.010	0.25	.200	5.08
.015	0.38	.215	5.46
.025	0.64	.315	8.00
.031	0.79	1.125	28.58

Style	Dimensions			
	M	L max	W max	T max
CYR41	.025 +.004 -.001	.315	.315	.115 (0.5 through 470 pF)
				.165 (560 and 680 pF)
				.215 (820 and 1000 pF)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. See marking requirement.

FIGURE 1. Dimensions and configuration for style CYR41.

AMSC N/A

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FSC 5910

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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REQUIREMENTS:

Design and construction:

Dimensions and configurations: See figures 1, 2, and 3 and tables I, II, and III.

Case material: Glass (vitreous enamel).

Terminals: Type C of MIL-STD-1276.

Capacitance (cap.) (nom): See tables I, II, and III.

Capacitance tolerance: See tables I, II, and III.

Rated voltage: See tables I, II, and III.

Failure rate level: M, P, R, or S.

Rated temperature: -55°C to $+125^{\circ}\text{C}$.

Temperature coefficient: 0 ± 25 parts/million/ $^{\circ}\text{C}$.

Capacitance drift: 0.1 percent or 0.1 pF, whichever is greater.

Seal: Hermetic.

Seal: Test II.

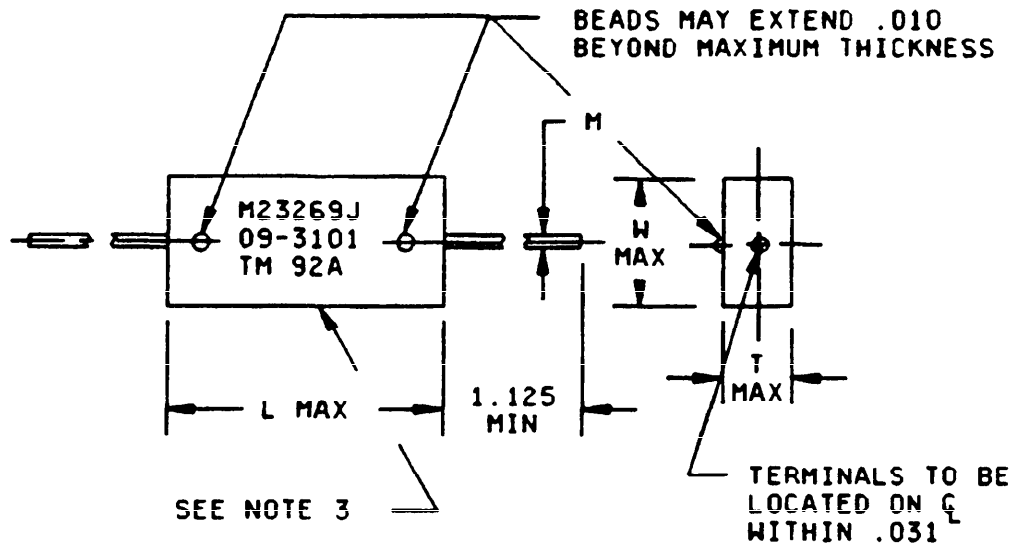
Insulation resistance: 100,000 megohms or 200 ohm-farads minimum (qualification inspection only at $+125^{\circ}\text{C}$). 500,000 megohms minimum (at $+25^{\circ}\text{C}$).

Dissipation factor (DF): 0.7 percent maximum (0.5 through 4.7 pF); 0.3 percent maximum (5.6 through 27 pF); and 0.1 percent maximum (30 pF and up).

Thermal shock and moisture resistance:

DF: Not to exceed initial requirement.

Quality factor (Q): In accordance with MIL-C-23269.



STYLE CYR42 SEE TABLE II

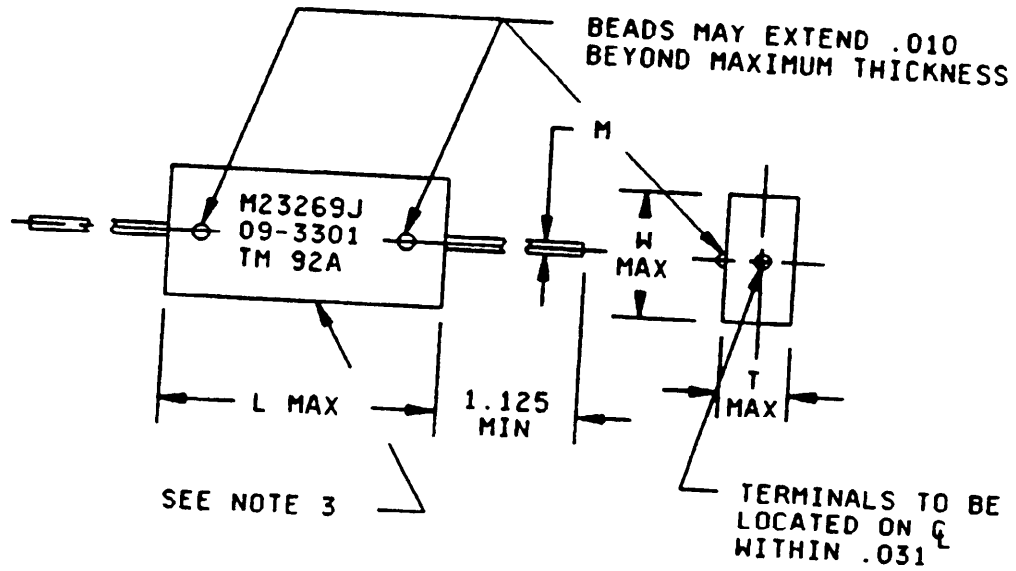
Style	Dimensions			
	M	L max	W max	T max
CYR42	.020 +.002 -.001	.405	.215	.109

Inches	mm	Inches	mm
.001	0.03	.109	2.77
.002	0.05	.215	5.46
.010	0.25	.405	10.29
.020	0.50	1.125	28.58
.031	0.79		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. See marking requirement.

FIGURE 2. Dimensions and configuration for style CYR42.



STYLE CYR43, SEE TABLE III

Style	Dimensions			
	M	L max	W max	T max
CYR43	.025 +.004 -.001	.530	.310	.155

Inches	mm	Inches	mm
.001	0.03	.155	3.94
.004	0.10	.310	7.87
.010	0.25	.530	13.46
.025	0.64	1.125	28.58
.031	0.79		

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. See marking requirement.

FIGURE 3. Dimensions and configuration for style CYR43.

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TABLE I. Electrical and physical characteristics and dash numbers for style CYR41.

Capacitance (pF)	Rated voltage (volts, dc)	Capacitance tolerance	Dash number M23269/09- FR level in percent/1,000 hours			
			M (1.0)	P (0.1)	R (0.01)	S (0.001)
0.5	100	±0.25 pF	3001	4001	5001	6001
1.0	"	±0.25 pF	3002	4002	5002	6002
2.7	"	±0.25 pF	3003	4003	5003	6003
3.3	"	±0.25 pF	3004	4004	5004	6004
3.9	"	±0.25 pF	3005	4005	5005	6005
4.7	"	±0.25 pF	3006	4006	5006	6006
5.6	"	±0.25 pF	3007	4007	5007	6007
6.8	"	±0.25 pF	3008	4008	5008	6008
6.8	"	±5%	3009	4009	5009	6009
8.2	"	±0.25 pF	3010	4010	5010	6010
8.2	"	±5%	3011	4011	5011	6011
10	"	±0.25 pF	3012	4012	5012	6012
10	"	±5%	3013	4013	5013	6013
12	"	±0.25 pF	3014	4014	5014	6014
12	"	±5%	3015	4015	5015	6015
15	"	±0.25 pF	3016	4016	5016	6016
15	"	±2%	3017	4017	5017	6017
15	"	±5%	3018	4018	5018	6018
18	"	±0.25 pF	3019	4019	5019	6019
18	"	±2%	3020	4020	5020	6020
18	"	±5%	3021	4021	5021	6021
22	"	±0.25 pF	3022	4022	5022	6022
22	"	±2%	3023	4023	5023	6023
22	"	±5%	3024	4024	5024	6024
27	"	±1%	3025	4025	5025	6025
27	"	±2%	3026	4026	5026	6026
27	"	±5%	3027	4027	5027	6027
33	"	±1%	3028	4028	5028	6028
33	"	±2%	3029	4029	5029	6029
33	"	±5%	3030	4030	5030	6030
39	"	±1%	3031	4031	5031	6031
39	"	±2%	3032	4032	5032	6032
39	"	±5%	3033	4033	5033	6033
47	"	±1%	3034	4034	5034	6034
47	"	±2%	3035	4035	5035	6035
47	"	±5%	3036	4036	5036	6036
56	"	±1%	3037	4037	5037	6037
56	"	±2%	3038	4038	5038	6038
56	"	±5%	3039	4039	5039	6039
68	"	±1%	3040	4040	5040	6040
68	"	±2%	3041	4041	5041	6041
68	"	±5%	3042	4042	5042	6042
82	"	±1%	3043	4043	5043	6043
82	"	±2%	3044	4044	5044	6044
82	"	±5%	3045	4045	5045	6045
100	"	±1%	3046	4046	5046	6046
100	"	±2%	3047	4047	5047	6047
100	"	±5%	3048	4048	5048	6048
120	"	±1%	3049	4049	5049	6049
120	"	±2%	3050	4050	5050	6050
120	"	±5%	3051	4051	5051	6051

TABLE I. Electrical and physical characteristics and dash numbers for style CYR41 - Continued.

Capacitance (pF)	Rated voltage (volts, dc)	Capacitance tolerance	Dash number M23269/09- FR Level in percent/1,000 hours			
			M (1.0)	P (0.1)	R (0.01)	S (0.001)
150	100	±1%	3052	4052	5052	6052
150	"	±2%	3053	4053	5053	6053
150	"	±5%	3054	4054	5054	6054
180	"	±1%	3055	4055	5055	6055
180	"	±2%	3056	4056	5056	6056
180	"	±5%	3057	4057	5057	6057
220	"	±1%	3058	4058	5058	6058
220	"	±2%	3059	4059	5059	6059
220	"	±5%	3060	4060	5060	6060
270	"	±1%	3061	4061	5061	6061
270	"	±2%	3062	4062	5062	6062
270	"	±5%	3063	4063	5063	6063
330	"	±1%	3064	4064	5064	6064
330	"	±2%	3065	4065	5065	6065
330	"	±5%	3066	4066	5066	6066
390	"	±1%	3067	4067	5067	6067
390	"	±2%	3068	4068	5068	6068
390	"	±5%	3069	4069	5069	6069
470	"	±1%	3070	4070	5070	6070
470	"	±2%	3071	4071	5071	6071
470	"	±5%	3072	4072	5072	6072
560	"	±1%	3073	4073	5073	6073
560	"	±2%	3074	4074	5074	6074
560	"	±5%	3075	4075	5075	6075
680	"	±1%	3076	4076	5076	6076
680	"	±2%	3077	4077	5077	6077
680	"	±5%	3078	4078	5078	6078
820	"	±1%	3079	4079	5079	6079
820	"	±2%	3080	4080	5080	6080
820	"	±5%	3081	4081	5081	6081
1,000	"	±1%	3082	4082	5082	6082
1,000	"	±2%	3083	4083	5083	6083
1,000	"	±5%	3084	4084	5084	6084

TABLE II. Electrical and physical characteristics and dash numbers for style CYR42.

Capacitance (pF)	Rated voltage (volts, dc)	Capacitance tolerance	Dash number M23269/09- FR level in percent/1,000 hours			
			M (1.0)	P (0.1)	R (0.01)	S (0.001)
0.5	500	±0.25 pF	3101	4101	5101	6101
1.5	"	±0.25 pF	3102	4102	5102	6102
2.7	"	±0.25 pF	3103	4103	5103	6103
3.3	"	±0.25 pF	3104	4104	5104	6104
3.9	"	±0.25 pF	3105	4105	5105	6105
4.7	"	±0.25 pF	3106	4106	5106	6106
5.6	"	±0.25 pF	3107	4107	5107	6107
6.8	"	±0.25 pF	3108	4108	5108	6108
6.8	"	±5%	3109	4109	5109	6109
8.2	"	±0.25 pF	3110	4110	5110	6110
8.2	"	±5%	3111	4111	5111	6111
10	"	±0.25 pF	3112	4112	5112	6112
10	"	±5%	3113	4113	5113	6113
12	"	±0.25 pF	3114	4114	5114	6114
12	"	±5%	3115	4115	5115	6115
15	"	±0.25 pF	3116	4116	5116	6116
15	"	±2%	3117	4117	5117	6117
15	"	±5%	3118	4118	5118	6118
18	"	±0.25 pF	3119	4119	5119	6119
18	"	±2%	3120	4120	5120	6120
18	"	±5%	3121	4121	5121	6121
22	"	±0.25 pF	3122	4122	5122	6122
22	"	±2%	3123	4123	5123	6123
22	"	±5%	3124	4124	5124	6124
27	"	±1%	3125	4125	5125	6125
27	"	±2%	3126	4126	5126	6126
27	"	±5%	3127	4127	5127	6127
33	"	±1%	3128	4128	5128	6128
33	"	±2%	3129	4129	5129	6129
33	"	±5%	3130	4130	5130	6130
39	"	±1%	3131	4131	5131	6131
39	"	±2%	3132	4132	5132	6132
39	"	±5%	3133	4133	5133	6133
47	"	±1%	3134	4134	5134	6134
47	"	±2%	3135	4135	5135	6135
47	"	±5%	3136	4136	5136	6136
56	"	±1%	3137	4137	5137	6137
56	"	±2%	3138	4138	5138	6138
56	"	±5%	3139	4139	5139	6139
68	300	±1%	3140	4140	5140	6140
68	"	±2%	3141	4141	5141	6141
68	"	±5%	3142	4142	5142	6142
82	"	±1%	3143	4143	5143	6143
82	"	±2%	3144	4144	5144	6144
82	"	±5%	3145	4145	5145	6145
100	100	±1%	3146	4146	5146	6146
100	"	±2%	3147	4147	5147	6147
100	"	±5%	3148	4148	5148	6148
120	"	±1%	3149	4149	5149	6149
120	"	±2%	3150	4150	5150	6150
120	"	±5%	3151	4151	5151	6151

TABLE II. Electrical and physical characteristics and dash numbers for style CYR42 - Continued.

Capacitance (pF)	Rated voltage (volts, dc)	Capacitance tolerance	Dash number M23269/09- FR Level in percent/1,000 hours			
			M (1.0)	P (0.1)	R (0.01)	S (0.001)
150	100	±1%	3152	4152	5152	6152
150	"	±2%	3153	4153	5153	6153
150	"	±5%	3154	4154	5154	6154
180	"	±1%	3155	4155	5155	6155
180	"	±2%	3156	4156	5156	6156
180	"	±5%	3157	4157	5157	6157
220	"	±1%	3158	4158	5158	6158
220	"	±2%	3159	4159	5159	6159
220	"	±5%	3160	4160	5160	6160
270	50	±1%	3161	4161	5161	6161
270	"	±2%	3162	4162	5162	6162
270	"	±5%	3163	4163	5163	6163
300	"	±1%	3164	4164	5164	6164
300	"	±2%	3165	4165	5165	6165
300	"	±5%	3166	4166	5166	6166

TABLE III. Electrical and physical characteristics and dash numbers for style CYR43.

Capacitance (pF)	Rated voltage (volts, dc)	Capacitance tolerance	Dash number M23269/09- FR Level in percent/1,000 hours			
			M (1.0)	P (0.1)	R (0.01)	S (0.001)
330	300	±1%	3301	4301	5301	6301
330	"	±2%	3302	4302	5302	6302
330	"	±5%	3303	4303	5303	6303
390	"	±1%	3304	4304	5304	6304
390	"	±2%	3305	4305	5305	6305
390	"	±5%	3306	4306	5306	6306
470	100	±1%	3307	4307	5307	6307
470	"	±2%	3308	4308	5308	6308
470	"	±5%	3309	4309	5309	6309
560	"	±1%	3310	4310	5310	6310
560	"	±2%	3311	4311	5311	6311
560	"	±5%	3312	4312	5312	6312
680	"	±1%	3313	4313	5313	6313
680	"	±2%	3314	4314	5314	6314
680	"	±5%	3315	4315	5315	6315
820	50	±1%	3316	4316	5316	6316
820	"	±2%	3317	4317	5317	6317
820	"	±5%	3318	4318	5318	6318
1,000	"	±1%	3319	4319	5319	6319
1,000	"	±2%	3320	4320	5320	6320
1,000	"	±5%	3321	4321	5321	6321
1,200	"	±1%	3322	4322	5322	6322
1,200	"	±2%	3323	4323	5323	6323
1,200	"	±5%	3324	4324	5324	6324

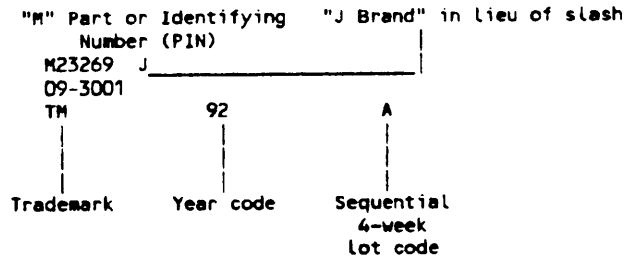
MIL-C-23269/9C

Life:

ΔCap. (240 hours and 2,000 hours): 1.0 percent or 0.5 pF, maximum.

DF (240 hours and 2,000 hours): Not to exceed initial requirement.

Marking:



Substitutability data: See table IV.

Style	Permissible +85°C voltage (volts, dc)	Rated +125°C voltage (volts, dc)	Capacitance (pF)
CYR41	200	100	All values
CYR42	500 500 200 100	500 300 100 50	0.5 through 56 68 and 82 100 through 220 270 and 300
CYR43	500 200 100	300 100 50	330 and 390 470 through 680 820 through 1,200

MIL-C-23269/9C

TABLE IV. Substitutability data.

Superseded type designation in MIL-C-23269/9	Use dash number M23269/09- in MIL-C-23269/9A thru /9C		Superseded type designation in MIL-C-23269/9	Use dash number M23269/09- in MIL-C-23269/9A thru /9C	
	FR Level in %/1,000 hours			FR Level in %/1,000 hours	
	L (2.0)	M (1.0)		L (2.0)	M (1.0)
CYR41E0R5C	2001	3001	CYR41E151F	2052	3052
CYR41E1R5C	2002	3002	CYR41E151G	2053	3053
CYR41E2R7C	2003	3003	CYR41E151J	2054	3054
CYR41E3R3C	2004	3004	CYR41E181F	2055	3055
CYR41E3R9C	2005	3005	CYR41E181G	2056	3056
CYR41E4R7C	2006	3006	CYR41E181J	2057	3057
CYR41E5R6C	2007	3007	CYR41E221F	2058	3058
CYR41E6R8C	2008	3008	CYR41E221G	2059	3059
CYR41E6R8J	2009	3009	CYR41E221J	2060	3060
CYR41E8R2C	2010	3010	CYR41E271F	2061	3061
CYR41E8R2J	2011	3011	CYR41E271G	2062	3062
CYR41E100C	2012	3012	CYR41E271J	2063	3063
CYR41E100J	2013	3013	CYR41E331F	2064	3064
CYR41E120C	2014	3014	CYR41E331G	2065	3065
CYR41E120J	2015	3015	CYR41E331J	2066	3066
CYR41E150C	2016	3016	CYR41E391F	2067	3067
CYR41E150G	2017	3017	CYR41E391G	2068	3068
CYR41E150J	2018	3018	CYR41E391J	2069	3069
CYR41E180C	2019	3019	CYR41E471F	2070	3070
CYR41E180G	2020	3020	CYR41E471G	2071	3071
CYR41E180J	2021	3021	CYR41E471J	2072	3072
CYR41E200C	2022	3022	CYR41E561F	2073	3073
CYR41E200G	2023	3023	CYR41E561G	2074	3074
CYR41E200J	2024	3024	CYR41E561J	2075	3075
CYR41E270F	2025	3025	CYR41E681F	2076	3076
CYR41E270G	2026	3026	CYR41E681G	2077	3077
CYR41E270J	2027	3027	CYR41E681J	2078	3078
CYR41E330F	2028	3028	CYR41E821F	2079	3079
CYR41E330G	2029	3029	CYR41E821G	2080	3080
CYR41E330J	2030	3030	CYR41E821J	2081	3081
CYR41E390F	2031	3031	CYR41E102F	2082	3082
CYR41E390G	2032	3032	CYR41E102G	2083	3083
CYR41E390J	2033	3033	CYR41E102J	2084	3084
CYR41E470F	2034	3034	CYR42E0R5C	2101	3101
CYR42E470G	2035	3035	CYR42E1R5C	2102	3102
CYR41E470J	2036	3036	CYR42E2R7C	2103	3103
CYR41E560F	2037	3037	CYR42E3R3C	2104	3104
CYR41E560G	2038	3038	CYR41E3R9C	2105	3105
CYR41E560J	2039	3039	CYR41E4R7C	2106	3106
CYR41E680F	2040	3040	CYR41E5R6C	2107	3107
CYR41E680G	2041	3041	CYR41E6R8C	2108	3108
CYR41E680J	2042	3042	CYR41E6R8J	2109	3109
CYR41E820F	2043	3043	CYR41E8R2C	2110	3110
CYR41E820G	2044	3044	CYR41E8R2J	2111	3111
CYR41E820J	2045	3045	CYR41E100C	2112	3112
CYR41E101F	2046	3046	CYR41E100J	2113	3113
CYR41E101G	2047	3047	CYR41E120C	2114	3114
CYR41E101J	2048	3048	CYR41E120J	2115	3115
CYR41E121F	2049	3049	CYR41E150C	2116	3116
CYR41E121G	2050	3050	CYR41E150J	2117	3117
CYR41E121J	2051	3051	CYR41E150J	2118	3118

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TABLE IV. Substitutability data - Continued.

Superseded type designation in MIL-C-23269/9	Use dash number M23269/09- in MIL-C-23269/09A thru/09C		Superseded type designation in MIL-C-23269/9	Use dash number M23269/09- in MIL-C-23269/09A thru /09C	
	FR Level in %/1,000 hours			FR Level in %/1,000 hours	
	L (2.0)	M (1.0)		L (2.0)	M (1.0)
CYR41E180C	2119	3119	CYR42E181F	2155	3155
CYR21E180G	2120	3120	CYR42E181G	2156	3156
CYR42E180J	2121	3121	CYR42E181J	2157	3157
CYR42E220C	2122	3122	CYR42E221F	2158	3158
CYR42E220G	2123	3123	CYR42E221G	2159	3159
CYR42E220J	2124	3124	CYR42E221J	2160	3160
CYR42E270F	2125	3125	CYR42E271F	2161	3161
CYR42E270G	2126	3126	CYR42E271G	2162	3162
CYR42E270J	2127	3127	CYR42E271J	2163	3163
CYR42E330F	2128	3128	CYR42E301F	2164	3164
CYR42E330G	2129	3129	CYR42E301G	2165	3165
CYR42E330J	2130	3130	CYR42E301J	2166	3166
CYR42E390F	2131	3131	CYR43E331F	2301	3301
CYR42E390G	2132	3132	CYR43E331G	2302	3302
CYR42E390J	2133	3133	CYR43E331J	2303	3303
CYR42E470F	2134	3134	CYR43E391F	2304	3304
CYR42E470G	2135	3135	CYR43E391G	2305	3305
CYR42E470J	2136	3136	CYR43E391J	2306	3306
CYR42E560F	2137	3137	CYR43E471F	2307	3307
CYR42E560G	2138	3138	CYR43E471G	2308	3308
CYR42E560J	2139	3139	CYR43E471J	2309	3309
CYR42E680F	2140	3140	CYR43E561F	2310	3310
CYR42E680G	2141	3141	CYR43E561G	2311	3311
CYR42E680J	2142	3142	CYR43E561J	2312	3312
CYR42E820F	2143	3143	CYR43E681F	2313	3313
CYR42E820G	2144	3144	CYR43E681G	2314	3314
CYR42E820J	2145	3145	CYR43E681J	2315	3315
CYR42E101F	2146	3146	CYR43E821F	2316	3316
CYR42E101G	2147	3147	CYR43E821G	2317	3317
CYR42E101J	2148	3148	CYR43E821J	2318	3318
CYR42E121F	2149	3149	CYR43E102F	2319	3319
CYR42E121G	2150	3150	CYR43E102G	2320	3320
CYR42E121J	2151	3151	CYR43E102J	2321	3321
CYR42E151F	2152	3152	CYR43E122F	2322	3322
CYR42E151G	2153	3153	CYR43E122G	2323	3323
CYR42E151J	2154	3154	CYR43E122J	2324	3324

Revision letters are not used to denote changes due to the extensiveness of the changes.

MIL-C-23269/90

CONCLUDING MATERIAL

Custodians:

Army - ER
Navy - EC
Air Force - 85
NASA - NA

Review activities:

Air Force - 17
DLA - ES

User activities:

Navy - AS, CG, MC, OS, SH
Air Force - 19

Preparing activity:

Navy - EC

Agent:

DLA - ES

(Project 5910-1828-09)