

INCH-POUND  
MIL-C-19978/17B  
18 June 2001  
SUPERSEDED  
MIL-C-19978/17A  
19 June 1990

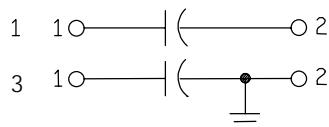
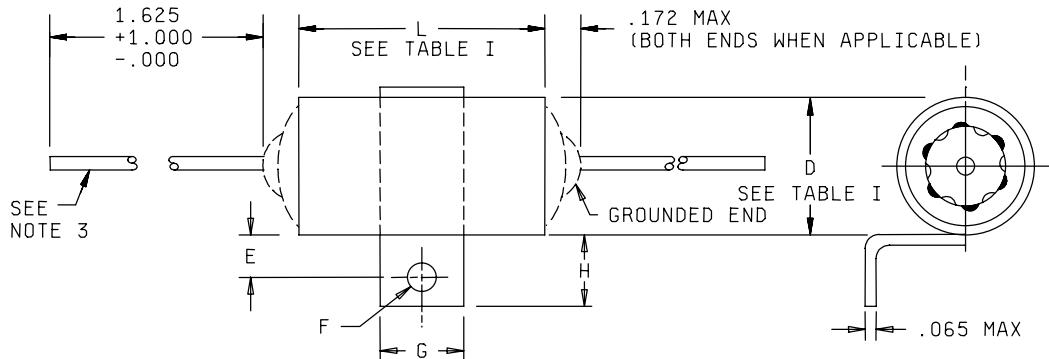
### MILITARY SPECIFICATION SHEET

CAPACITORS, FIXED, PLASTIC (OR PAPER-PLASTIC) DIELECTRIC,  
AXIAL-WIRE TERMINAL, TANGENTIAL RETAINER, TUBULAR (UNINSULATED),  
(HERMETICALLY SEALED IN METAL CASES),  
ESTABLISHED RELIABILITY, STYLE CQR42

INACTIVE FOR NEW DESIGN  
AFTER 20 OCTOBER 1972

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

The requirements for acquiring the product described herein  
shall consist of this specification and MIL-PRF-19978.



Case dimensions D	H ± .062	G ± .062	E ± .031	F ± .005
Less than .500	.312	.250	.188	.144
.500 and up	.438	.500	.250	.156

Inches	mm	Inches	mm
.001	0.03	.172	4.37
.004	0.10	.188	4.78
.005	0.13	.235	5.97
.025	0.64	.250	6.35
.031	0.79	.312	7.92
.032	0.81	.400	10.16
.062	1.57	.438	11.13
.0625	1.59	.500	12.70
.144	3.66	1.000	25.40
.156	3.96	1.625	41.28

#### NOTES:

- Dimensions are in inches.
- Metric equivalents are given for general information only.
- Leads shall be of tinned solid wire, .025 (No. 22 AWG) for cases .235 and .312 in diameter; and .032 (No. 20 AWG) for cases .400 diameter and above. Tolerance on all lead wire diameters shall be + .004, -.001.

FIGURE 1. Style CQR42 capacitors.

## REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

TABLE I. Styles CQR42 capacitors.

Part or Identifying Number (PIN) <u>1/</u>	DC voltage rating (volts)	Capacitance ( $\mu\text{F}$ )	Failure rate level	Case dimensions (inches) <u>2/</u>			
				Circuit 1		Circuit 3	
				L $\pm .031$	D $+0.015$ -.005	L $\pm .031$	D $+0.015$ -.005
CQR42A-KB822K3-	100	.0082	M, P, R, S	.750	.235	.688	.235
CQR42A-KB103K3-	100	.010	M, P, R, S	.750	.235	.688	.235
CQR42A-KB123K3-	100	.012	M, P, R, S	.750	.235	.688	.235
CQR42A-KB153K3-	100	.015	M, P, R, S	.750	.235	.688	.235
CQR42A-KB393K3-	100	.039	M, P, R, S	.875	.312	.812	.312
CQR42A-KB473K3-	100	.047	M, P, R, S	.875	.312	.812	.312
CQR42A-KB823K3-	100	.082	M, P, R, S	.875	.400	.812	.400
CQR42A-KB104K3-	100	.10	M, P, R, S	.875	.400	.812	.400
CQR42A-KB124K3-	100	.12	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KB154K3-	100	.15	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KB184K3-	100	.18	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KB224K3-	100	.22	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KB274K3-	100	.27	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KB334K3-	100	.33	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KB394K3-	100	.39	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KB474K3-	100	.47	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KB564K3-	100	.56	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KB684K3-	100	.68	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KB824K3-	100	.82	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KB105K3-	100	1.0	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KC392K3-	200	.0039	M, P, R, S	.750	.235	.688	.235
CQR42A-KC472K3-	200	.0047	M, P, R, S	.750	.235	.688	.235
CQR42A-KC562K3-	200	.0056	M, P, R, S	.750	.235	.688	.235
CQR42A-KC682K3-	200	.0068	M, P, R, S	.750	.235	.688	.235
CQR42A-KC183K3-	200	.018	M, P, R, S	.875	.312	.812	.312
CQR42A-KC223K3-	200	.022	M, P, R, S	.875	.312	.812	.312
CQR42A-KC273K3-	200	.027	M, P, R, S	.875	.312	.812	.312
CQR42A-KC333K3-	200	.033	M, P, R, S	.875	.312	.812	.312
CQR42A-KC393K3-	200	.039	M, P, R, S	.875	.400	.812	.400
CQR42A-KC473K3-	200	.047	M, P, R, S	.875	.400	.812	.400
CQR42A-KC563K3-	200	.056	M, P, R, S	.875	.400	.812	.400
CQR42A-KC683K3-	200	.068	M, P, R, S	.875	.400	.812	.400
CQR42A-KC823K3-	200	.082	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KC104K3-	200	.10	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KC124K3-	200	.12	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KC154K3-	200	.15	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KC184K3-	200	.18	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KC224K3-	200	.22	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KC274K3-	200	.27	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KC334K3-	200	.33	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KC394K3-	200	.39	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KC474K3-	200	.47	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KC564K3-	200	.56	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KC684K3-	200	.68	M, P, R, S	1.625	.670	1.562	.670

See footnotes at end of table.

TABLE I. Styles CQR42 capacitors - Continued.

Part or Identifying Number (PIN) 1/	DC voltage rating (volts)	Capacitance ( $\mu\text{F}$ )	Failure rate level	Case dimensions (inches) 2/			
				Circuit 1		Circuit 3	
				L ± .031	D+.015 -.005	L ± .031	D+.015 -.005
CQR42A-KC824K3-	200	.82	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KC105K3-	200	1.0	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KE272K3-	400	.0027	M, P, R, S	.750	.235	.688	.235
CQR42A-KE332K3-	400	.0033	M, P, R, S	.750	.235	.688	.235
CQR42A-KE123K3-	400	.012	M, P, R, S	.875	.312	.812	.312
CQR42A-KE153K3-	400	.015	M, P, R, S	.875	.312	.812	.312
CQR42A-KE273K3-	400	.027	M, P, R, S	.875	.400	.812	.400
CQR42A-KE333K3-	400	.033	M, P, R, S	.875	.400	.812	.400
CQR42A-KE393K3-	400	.039	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KE473K3-	400	.047	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KE563K3-	400	.056	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KE683K3-	400	.068	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KE823K3-	400	.082	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KE104K3-	400	.10	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KE124K3-	400	.12	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KE154K3-	400	.15	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KE184K3-	400	.18	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KE224K3-	400	.22	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KE274K3-	400	.27	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KE334K3-	400	.33	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KE394K3-	400	.39	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KE474K3-	400	.47	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KF102K3-	600	.0010	M, P, R, S	.750	.235	.688	.235
CQR42A-KF122K3-	600	.0012	M, P, R, S	.750	.235	.688	.235
CQR42A-KF152K3-	600	.0015	M, P, R, S	.750	.235	.688	.235
CQR42A-KF182K3-	600	.0018	M, P, R, S	.750	.235	.688	.235
CQR42A-KF222K3-	600	.0022	M, P, R, S	.750	.235	.688	.235
CQR42A-KF272K3-	600	.0027	M, P, R, S	.875	.312	.812	.312
CQR42A-KF332K3-	600	.0033	M, P, R, S	.875	.312	.812	.312
CQR42A-KF392K3-	600	.0039	M, P, R, S	.875	.312	.812	.312
CQR42A-KF472K3-	600	.0047	M, P, R, S	.875	.312	.812	.312
CQR42A-KF562K3-	600	.0056	M, P, R, S	.875	.312	.812	.312
CQR42A-KF682K3-	600	.0068	M, P, R, S	.875	.312	.812	.312
CQR42A-KF822K3-	600	.0082	M, P, R, S	.875	.312	.812	.312
CQR42A-KF103K3-	600	.010	M, P, R, S	.875	.312	.812	.312
CQR42A-KF123K3-	600	.012	M, P, R, S	.875	.400	.812	.400
CQR42A-KF153K3-	600	.015	M, P, R, S	.875	.400	.812	.400
CQR42A-KF183K3-	600	.018	M, P, R, S	.875	.400	.812	.400
CQR42A-KF223K3-	600	.022	M, P, R, S	.875	.400	.812	.400
CQR42A-KF273K3-	600	.027	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KF333K3-	600	.033	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KF393K3-	600	.039	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KF473K3-	600	.047	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KF563K3-	600	.056	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KF683K3-	600	.068	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KF823K3-	600	.082	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KF104K3-	600	.10	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KF124K3-	600	.12	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KF154K3-	600	.15	M, P, R, S	1.625	.562	1.562	.562

See footnotes at end of table.

TABLE I. Styles CQR42 capacitors - Continued.

Part or Identifying Number (PIN) <u>1/</u>	DC voltage rating (volts)	Capacitance ( $\mu\text{F}$ )	Failure rate level	Case dimensions (inches) <u>2/</u>			
				Circuit 1		Circuit 3	
				L ± .031	D+.015 -.005	L ± .031	D+.015 -.005
CQR42A-KF184K3-	600	.18	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KF224K3-	600	.22	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KF274K3-	600	.27	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KF334K3-	600	.33	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KF394K3-	600	.39	M, P, R, S	2.375	.750	2.312	.750
CQR42A-KF474K3-	600	.47	M, P, R, S	2.375	.750	2.312	.750
CQR42A-KG102K3-	1000	.0010	M, P, R, S	.875	.400	.812	.400
CQR42A-KG122K3-	1000	.0012	M, P, R, S	.875	.400	.812	.400
CQR42A-KG152K3-	1000	.0015	M, P, R, S	.875	.400	.812	.400
CQR42A-KG182K3-	1000	.0018	M, P, R, S	.875	.400	.812	.400
CQR42A-KG222K3-	1000	.0022	M, P, R, S	.875	.400	.812	.400
CQR42A-KG272K3-	1000	.0027	M, P, R, S	.875	.400	.812	.400
CQR42A-KG332K3-	1000	.0033	M, P, R, S	.875	.400	.812	.400
CQR42A-KG392K3-	1000	.0039	M, P, R, S	.875	.400	.812	.400
CQR42A-KG472K3-	1000	.0047	M, P, R, S	.875	.400	.812	.400
CQR42A-KG562K3-	1000	.0056	M, P, R, S	.875	.400	.812	.400
CQR42A-KG682K3-	1000	.0068	M, P, R, S	.875	.400	.812	.400
CQR42A-KG822K3-	1000	.0082	M, P, R, S	.875	.400	.812	.400
CQR42A-KG103K3-	1000	.010	M, P, R, S	.875	.400	.812	.400
CQR42A-KG123K3-	1000	.012	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KG153K3-	1000	.015	M, P, R, S	1.125	.400	1.062	.400
CQR42A-KG183K3-	1000	.018	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KG223K3-	1000	.022	M, P, R, S	1.375	.400	1.312	.400
CQR42A-KG273K3-	1000	.027	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KG333K3-	1000	.033	M, P, R, S	1.125	.562	1.062	.562
CQR42A-KG393K3-	1000	.039	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KG473K3-	1000	.047	M, P, R, S	1.375	.562	1.312	.562
CQR42A-KG563K3-	1000	.056	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KG683K3-	1000	.068	M, P, R, S	1.625	.562	1.562	.562
CQR42A-KG823K3-	1000	.082	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KG104K3-	1000	.10	M, P, R, S	1.625	.670	1.562	.670
CQR42A-KG124K3-	1000	.12	M, P, R, S	1.875	.670	1.812	.670
CQR42A-KG154K3-	1000	.15	M, P, R, S	1.875	.670	1.812	.670
CQR42A-KG184K3-	1000	.18	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KG224K3-	1000	.22	M, P, R, S	2.125	.750	2.062	.750
CQR42A-KG274K3-	1000	.27	M, P, R, S	2.125	1.000	2.062	1.000
CQR42A-KG334K3-	1000	.33	M, P, R, S	2.125	1.000	2.062	1.000
CQR42A-KG394K3-	1000	.39	M, P, R, S	2.375	1.000	2.312	1.000
CQR42A-KG474K3-	1000	.47	M, P, R, S	2.375	1.000	2.312	1.000

1/ Complete PIN shall include additional symbols to indicate circuit and failure rate level, as applicable. The term Part or Identifying Number (PIN) is equivalent to the term part number which was previously used in the specification.

2/ See table II for metric equivalents.

TABLE II. Millimeter equivalent of decimal inches.

Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.005	.13	.400	10.16	.812	20.62	1.312	33.32	2.062	52.37
.015	.38	.562	14.27	.875	22.23	1.375	34.93	2.125	53.98
.031	.79	.670	17.02	1.000	25.40	1.562	39.67	2.312	58.72
.235	5.97	.688	17.48	1.062	26.97	1.625	41.28	2.375	60.33
.312	7.92	.750	19.05	1.125	28.58	1.812	46.02		

Case material: Nonmagnetic (end seal may be of magnetic material).

Dielectric material: Paper and polyethelene terephthalate (K).

Terminals: Axial-wire lead (see figure 1).

Rated voltage: See table I.

Rated temperature: -65° to +125°C.

Capacitance (nominal): See table I.

Capacitance tolerance: ±10 percent (symbol K).

Dissipation factor (DF) (max): 1.0 percent.

Failure rate level: M, P, R or S in accordance with MIL-PRF-19978.

Burn-in: In accordance with MIL-PRF-19978.

Radiographic inspection: In accordance with MIL-PRF-19978.

Seal: Method 112 of MIL-STD-202, test condition letter A.

Barometric pressure, qualification only: In accordance with MIL-PRF-19978.

Test points (see figure 1, circuit diagram):

Circuit diagram 1: Between terminals and case.

Circuit diagram 3: Between ungrounded terminal and case.

Insulation resistance (IR):

Terminal to terminal: See table III.

TABLE III. Terminal-to-terminal insulation resistance.

Capacitance rating	Minimum insulation resistance
0 to 0.6 microfarad	<u>At 25°C</u>
Greater than 0.6 microfarad	25,000 megohms
	15,000 megohm-microfarads <u>1/</u>
0 to 0.08 microfarad	<u>At 125°C</u>
Greater than 0.08 microfarad	250 megohms
	20 megohm-microfarads <u>1/</u>

1/ Product obtained by multiplying the capacitance in microfarads by the insulation resistance in megohms.

Terminal to case: Greater than 10,000 megohms.

Vibration, high frequency: Method 204 of MIL-STD-202, test condition B, with the following exception:

Direction and duration of motion - 4 hours in each of two mutually perpendicular directions (total of 8 hours), one parallel and the other perpendicular to the cylindrical axis.

Salt spray: In accordance with MIL-PRF-19978.

Solderability: In accordance with MIL-PRF-19978.

Terminal strength: Method 211 of MIL-STD-202, test condition letter D.

Stability at low and high temperature:

Low temperature:

Test temperature: -65°C +0°, -5°C.

Capacitance change (max): -10 percent.

High temperature:

Test temperature: +125°C +5°, -0°C.

Capacitance change (max): +10 percent.

Life:

Capacitance change (max): ±5 percent.

Resistance to soldering heat: In accordance with MIL-PRF-19978.

NOTE: Style CQR42 capacitors are substitutable for style CP12 capacitors formerly covered in MIL-C-25/1K as shown in table IV.

TABLE IV. Substitutability data.

From	To	From	To	From	To
MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)	MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)	MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)
CP12A-KB822K-	CQR42A-KB822K3-	CP12A-KC824K-	CQR42A-KC824K3-	CP12A-KF683K-	CQR42A-KF683K3-
CP12A-KB103K-	CQR42A-KB103K3-	CP12A-KC105K-	CQR42A-KC105K3-	CP12A-KF823K-	CQR42A-KF823K3-
CP12A-KB123K-	CQR42A-KB123K3-	CP12A-KE272K-	CQR42A-KE272K3-	CP12A-KF104K-	CQR42A-KF104K3-
CP12A-KB153K-	CQR42A-KB153K3-	CP12A-KE332K-	CQR42A-KE332K3-	CP12A-KF124K-	CQR42A-KF124K3-
CP12A-KB393K-	CQR42A-KB393K3-	CP12A-KE123K-	CQR42A-KE123K3-	CP12A-KF154K-	CQR42A-KF154K3-
CP12A-KB473K-	CQR42A-KB473K3-	CP12A-KE153K-	CQR42A-KE153K3-	CP12A-KF184K-	CQR42A-KF184K3-
CP12A-KB823K-	CQR42A-KB823K3-	CP12A-KE273K-	CQR42A-KE273K3-	CP12A-KF224K-	CQR42A-KF224K3-
CP12A-KB104K-	CQR42A-KB104K3-	CP12A-KE333K-	CQR42A-KE333K3-	CP12A-KF274K-	CQR42A-KF274K3-
CP12A-KB124K-	CQR42A-KB124K3-	CP12A-KE393K-	CQR42A-KE393K3-	CP12A-KF334K-	CQR42A-KF334K3-
CP12A-KB154K-	CQR42A-KB154K3-	CP12A-KE473K-	CQR42A-KE473K3-	CP12A-KF394K-	CQR42A-KF394K3-
CP12A-KB184K-	CQR42A-KB184K3-	CP12A-KE563K-	CQR42A-KE563K3-	CP12A-KF474K-	CQR42A-KF474K3-
CP12A-KB224K-	CQR42A-KB224K3-	CP12A-KE683K-	CQR42A-KE683K3-	CP12A-KG102K-	CQR42A-KG102K3-
CP12A-KB274K-	CQR42A-KB274K3-	CP12A-KE823K-	CQR42A-KE823K3-	CP12A-KG122K-	CQR42A-KG122K3-
CP12A-KB334K-	CQR42A-KB334K3-	CP12A-KE104K-	CQR42A-KE104K3-	CP12A-KG152K-	CQR42A-KG152K3-
CP12A-KB394K-	CQR42A-KB394K3-	CP12A-KE124K-	CQR42A-KE124K3-	CP12A-KG182K-	CQR42A-KG182K3-

TABLE IV. Substitutability data - Continued.

From	To	From	To	From	To
MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)	MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)	MIL-C-25/1K (CP12)	MIL-C-19978/17 (CQR42)
CP12A-KB474K-	CQR42A-KB474K3-	CP12A-KE154K-	CQR42A-KE154K3-	CP12A-KG222K-	CQR42A-KG222K3-
CP12A-KB564K-	CQR42A-KB564K3-	CP12A-KE184K-	CQR42A-KE184K3-	CP12A-KG272K-	CQR42A-KG272K3-
CP12A-KB684K-	CQR42A-KB684K3-	CP12A-KE224K-	CQR42A-KE224K3-	CP12A-KG332K-	CQR42A-KG332K3-
CP12A-KB824K-	CQR42A-KB824K3-	CP12A-KE274K-	CQR42A-KE274K3-	CP12A-KG392K-	CQR42A-KG392K3-
CP12A-KB105K-	CQR42A-KB105K3-	CP12A-KE334K-	CQR42A-KE334K3-	CP12A-KG472K-	CQR42A-KG472K3-
CP12A-KC392K-	CQR42A-KC392K3-	CP12A-KE394K-	CQR42A-KE394K3-	CP12A-KG562K-	CQR42A-KG562K3-
CP12A-KC472K-	CQR42A-KC472K3-	CP12A-KE474K-	CQR42A-KE474K3-	CP12A-KG682K-	CQR42A-KG682K3-
CP12A-KC562K-	CQR42A-KC562K3-	CP12A-KF102K-	CQR42A-KF102K3-	CP12A-KG822K-	CQR42A-KG822K3-
CP12A-KC682K-	CQR42A-KC682K3-	CP12A-KF122K-	CQR42A-KF122K3-	CP12A-KG103K-	CQR42A-KG103K3-
CP12A-KC183K-	CQR42A-KC183K3-	CP12A-KF152K-	CQR42A-KF152K3-	CP12A-KG123K-	CQR42A-KG123K3-
CP12A-KC223K-	CQR42A-KC223K3-	CP12A-KF182K-	CQR42A-KF182K3-	CP12A-KG153K-	CQR42A-KG153K3-
CP12A-KC273K-	CQR42A-KC273K3-	CP12A-KF222K-	CQR42A-KF222K3-	CP12A-KG183K-	CQR42A-KG183K3-
CP12A-KC333K-	CQR42A-KC333K3-	CP12A-KF272K-	CQR42A-KF272K3-	CP12A-KG223K-	CQR42A-KG223K3-
CP12A-KC393K-	CQR42A-KC393K3-	CP12A-KF332K-	CQR42A-KF332K3-	CP12A-KG273K-	CQR42A-KG273K3-
CP12A-KC473K-	CQR42A-KC473K3-	CP12A-KF392K-	CQR42A-KF392K3-	CP12A-KG333K-	CQR42A-KG333K3-
CP12A-KC563K-	CQR42A-KC563K3-	CP12A-KF472K-	CQR42A-KF472K3-	CP12A-KG393K-	CQR42A-KG393K3-
CP12A-KC683K-	CQR42A-KC683K3-	CP12A-KF562K-	CQR42A-KF562K3-	CP12A-KG473K-	CQR42A-KG473K3-
CP12A-KC823K-	CQR42A-KC823K3-	CP12A-KF682K-	CQR42A-KF682K3-	CP12A-KG563K-	CQR42A-KG563K3-
CP12A-KC104K-	CQR42A-KC104K3-	CP12A-KF822K-	CQR42A-KF822K3-	CP12A-KG683K-	CQR42A-KG683K3-
CP12A-KC124K-	CQR42A-KC124K3-	CP12A-KF103K-	CQR42A-KF103K3-	CP12A-KG823K-	CQR42A-KG823K3-
CP12A-KC154K-	CQR42A-KC154K3-	CP12A-KF123K-	CQR42A-KF123K3-	CP12A-KG104K-	CQR42A-KG104K3-
CP12A-KC184K-	CQR42A-KC184K3-	CP12A-KF153K-	CQR42A-KF153K3-	CP12A-KG124K-	CQR42A-KG124K3-
CP12A-KC224K-	CQR42A-KC224K3-	CP12A-KF183K-	CQR42A-KF183K3-	CP12A-KG154K-	CQR42A-KG154K3-
CP12A-KC274K-	CQR42A-KC274K3-	CP12A-KF223K-	CQR42A-KF223K3-	CP12A-KG184K-	CQR42A-KG184K3-
CP12A-KC334K-	CQR42A-KC334K3-	CP12A-KF273K-	CQR42A-KF273K3-	CP12A-KG224K-	CQR42A-KG224K3-
CP12A-KC394K-	CQR42A-KC394K3-	CP12A-KF333K-	CQR42A-KF333K3-	CP12A-KG274K-	CQR42A-KG274K3-
CP12A-KC474K-	CQR42A-KC474K3-	CP12A-KF393K-	CQR42A-KF393K3-	CP12A-KG334K-	CQR42A-KG334K3-
CP12A-KC564K-	CQR42A-KC564K3-	CP12A-KF473K-	CQR42A-KF473K3-	CP12A-KG394K-	CQR42A-KG394K3-
CP12A-KC684K-	CQR42A-KC684K3-	CP12A-KF563K-	CQR42A-KF563K3-	CP12A-KG474K-	CQR42A-KG474K3-

## Custodians:

Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

## Preparing activity:

DLA - CC

(Project 5910-2118-03)

## Review activities:

Army - AR, AT, AV, MI  
Navy - AS, MC, OS, SH