[redacted]

616

UNCLASSIFIED

CENTRAL RECORD FILE
ACCOUNTABILITY CARD BB
FILE No. C-10/CF CF-1329 Alpha CF-1330

NOV 8 1961

CF-1329 & 1330, 3-2
T-17667
Completed: 10-6-61
RS-7321(9838)

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
Determination (Circle Numbers):
1. Classification Retained
2. Classification Changed to: U
3. Contains No DOE Classified Information
4. Coordinate With:
5. Contains UCAI
6. Comments: OK for Approval
TCG-NNT-1
1st Review Date: 11/09/98
Authority: ☐ ADC ☒ ADD
Name: WC Layne
2nd Review Date: 11/16/98
Authority: RB
Name: RB Craver

RECEIVED
NOV 9 1961
CENTRAL RECORD FILE

MR. C. L. CARPENTER, 7115
ATTN: MR. J. P. WATTERBERG

Re: Environmental Testing of Six CF-1329 and Nine CF-1330 Cables

Object of Test

The purpose of the test was to determine if rejected units, returned from the field, were electrically acceptable after subjection to humidity and temperature shock. Three of the CF-1329's and three of the CF-1330's were not rejects.

Authorization for Test

This test was requested by Division 7115 in a Work Order Authorization dated 3-17-61. Mr. J. P. Watterberg was the consultant. The material for test was received approximately 8-1-61.

Summary

Six CF-1329 and nine CF-1330 cables were tested in accordance with the consultant's instructions and applicable TR's.

Sequence of testing was: Initial electrical tests, humidity, electrical tests (except VSWR), temperature shock and final electrical tests.

The resistance of the outer conductor of CF-1330 S/N AA-4110-F8 exceeded specifications during all electrical tests.

Insulation resistance of the coax section of some of the cables did not meet the specifications in tests subsequent to the humidity and temperature shock environments.

All VSWR measurements were satisfactory.

INVENTORIED
AUG 6 1964
3427-1

Functional Measurements and Methods

The equipment and instrumentation used in this test are listed in Tables XXI and XXII.

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW
DOWNGRADING OR DECLASSIFICATION STAMP
CLASSIFICATION CHANGED TO: U
AUTHORITY: RB Craver
Carmela Dillyor 12/8/98
PERSON CHANGING MARKING & DATE
RECORD ID: 99SN0364
WC Layne 12/16/98
PERSON VERIFYING MARKING & DATE
DATED: 11/16/98

THIS DOCUMENT CONSISTS OF 25 PAGE(S)

[redacted]

UNCLASSIFIED

INVENTORIED
SEP 14 '65
3428-2

[redacted]

Electrical measurements of the CF-1329 and CF-1330 cables were made in accordance with TR-353587, Issue H, TR-353588, Issue H, and the Work Order Authorization.

Coax Insulation Resistance (Para. 2.1.2) was measured by applying 3000 volts DC between the center conductor and the outer shell of the coax section of the cable. Leakage current was not to exceed 25 microamperes.

Fuse Circuit Insulation Resistance (Para. 2.3) was measured by applying 500±25 volts to each conductor, with the remaining circuits tied to ground. Leakage current was not to exceed 5 microamperes.

Circuit Resistance (Para. 2.1.2, 2.1.3 and 2.4) was measured by the double lead method, using one ampere current flow. Resistance of the coax center conductor was not to exceed 0.02 ohms. Resistance of the outer conductor was not to exceed 0.01 ohms. No specification was given for the contact fuse circuits.

VSWR Measurements (Para. 2.2) were made using a Hewlett Packard slotted line and the associated test equipment. The load for the CF cables during measurements was an MC-807 antenna in conjunction with the Division 2412 space load.

VSWR measurements were in 10-megacycle intervals over the frequency range of the components. The VSWR was not to exceed 1.45.

Procedure and Results

This test was conducted as specified in TR-353587, Issue H, for the CF-1329, TR-3535588, Issue H, for the CF-1330 and the consultant's instructions.

Sequence of testing was: Initial electrical, humidity, temperature shock and final electrical.

CF-1329's S/N AA-5359-J8, AA-5861-D9, AA-5112-F8, and CF-1330's S/N AA-4142-68, AA-4349-J8, AA-4494-L8, AA-4514-L8, AA-4110-F8 and AA-4711-B9 were field rejects.

CF-1329's S/N AA-1028-F7, AA-1037-G7, AA-1031-F7, and CF-1330's S/N AA-1028-F7, AA-1034-G7, and AA-1036-G7 had not been in the field. They were tested to obtain comparative data which the consultant will use in evaluating the field-rejected units.

Initial electrical tests were satisfactory except for the coax outer conductor resistance of the field-rejected CF-1330 S/N AA-4110-F8 (Table XIV).

Humidity (Para. 2.5.2.2) was accomplished in the Hieatt humidity chamber. It consisted of 20 days of the humidity-temperature environment as specified by the TR's.

Electrical tests made the 20th day of the environment showed a leakage of 40 to 80 microamperes between the center and outer conductor of the coax of the CF-1329 field-rejected unit S/N AA-5112-F8 (Table III). Some leakage was also noted on the field rejected CF-1330 S/N AA-1028-F7 (Table XV).

The outer conductor resistance of CF-1330 S/N AA-4110-F8 again exceeded specifications. This discrepancy was noted during initial tests.

Temperature Shock (Para. 2.5.1) was accomplished in Environmental Chamber No. 18 and consisted of three cycles of 4 hours at +160°F and 4 hours at -65°F, with a maximum of 5 minutes transfer time between temperatures.

Final electrical tests showed excessive leakage between the center and outer conductor of the coax in CF-1330, S/N AA-1028-F7 (Table XV), and CF-1330, S/N AA-1036-G7 (Table XVII).

As in previous measurements, the outer conductor resistance of CF-1330, S/N AA-4110-F8 exceeded specifications.

VSWR measurements made initially and after completion of the tests were within specifications.

H. W. Gilbert
BJ H. W. GILBERT - 7321-3

R. G. Hamilton
TEST PROJECT ENGINEER: R. G. HAMILTON - 7321-5

HWG:7321-3:mep

Distribution:
1-2/7A - C. L. Carpenter, 7115 Attn: J. P. Watterberg
3/7A - J. M. Wiesen, 1442
4/7A - D. S. Bliss, 2344
5/7A - E. H. Copeland, 7321
6/7A - C. L. Johnson, 7523
7/7A - R. K. Smeltzer, 3421-3

UNCLASSIFIED TABLE I [redacted]

-4-

RS-7321(9838)

Field Reject

Unit Ser. No. AA-5359-J8 CF 1329 Circuit and Insulation Resistance T-17667

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th Day RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
							Unable to make tests		
5-6	P1C	P2C	not	.038		.036			.037
7-8	P1D	P2D	specified	.086		.088			.085
9-10	P1E	P2E	"	.087		.089			.089
11-12	P1F	P2F	"	.088		.090			.089
13-14	P3 cent	P4 cent	.02	.010		.010			.010
35-36	P3 outer	P4 outer	.01	.003		.0031			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV				<1 μa		<2 μa			<1 μa
Fusing Res			5 μa						
@ 500 VDC									
7	P1	D	"	<1 μa		<1 μa			<1 μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

TABLE II [redacted]

UNCLASSIFIED

RS-7321(9838)

Field Reject

Unit Ser. No. AA-5861-D9 CF 1329 Circuit and Insulation Resistance T- 17667

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
			not				Unable to		
5-6	P1C	P2C	specified	.037		.038	make	tests	.037
7-8	P1D	P2D	"	.094		.096			.095
9-10	P1E	P2E	"	.095		.096			.096
11-12	P1F	P2F	"	.095		.096			.096
13-14	P3 cent	P4 cent	.02	.0097		.0098			.0098
35-36	P3 outer	P4 outer	.01	.0033		.0031			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV				<1μa		<2μa			<1μa
Fusing Res			5 ua						
@ 500 VDC									
7	P1	D	"	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

620

[redacted]

SECR

TABLE III

[redacted]

RS-7321(9838)

Field Reject

Unit Ser. No. AA-5112-F8

CF 1329 Circuit and Insulation Resistance

T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
							Unable to		
5-6	P1C	P2C	not	.035		.036	make	tests	.035
7-8	P1D	P2D	Specified	.082		.084			.083
9-10	P1E	P2E	"	.083		.085			.084
11-12	P1F	P2F	"	.083		.083			.083
13-14	P3 cent	P4 cent	.02	.0108		.0108			.0100
35-36	P3 outer	P4 outer	.01	.0031		.0029			.0029
Insulation Res	center	outer	25 μa						
@ 3 KV				<1μa		40-80μa			<1μa
Fusing Res			5 ua						
@ 500 VDC									
7	P1	D	"	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
									✓
33		Shell		✓		✓			✓

UNCLASSIFIED

[redacted]

621

TABLE IV [redacted]

RS-7321 (9838)

Unit Ser. No. (61664) AA-1028-F7 CF 1329 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th Day RH		TS @ -65°F	TS @ +160°F	FINAL 10-6-61
								Unable to		
5-6	P1C	P2C	not	no		.064		make	Tests	.065
7-8	P1D	P2D	Specified	Tests		.088				.090
9-10	P1E	P2E	"	Requested		.088				.089
11-12	P1F	P2F	"			.089				.088
13-14	P3 cent	P4 cent	.02			.0096				.0092
35-36	P3 outer	P4 outer	.01			.0032				.0032
Insulation Res	center	outer	25 μa							
@ 3 KV						<2μa				40na
Fusing Res			5 ua							
@ 500 VDC										
7	P1	D	"			<1μa				<1ua
9		E	"			"				"
11		F	"			"				"
33		Shell				✓				✓

UNCLASSIFIED

[redacted]

622

(61664)

Unit Ser. No. AA-1037-67 CF 1329 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th Day RH	TS @ -65°F	TS @ +160°F	Final 10-6-6
5-6	P1C	P2C	not	no tests		.078	Unable to make tests		.077
7-8	P1D	P2D	Specified	requested		.090			.088
9-10	P1E	P2E	"			.094			.094
11-12	P1F	P2F	"			.089			.090
13-14	P3 cent	P4 cent	.02			.010			.010
35-36	P3 outer	P4 outer	.01			.0030			.0031
Insulation Res @ 3 KV	center	outer	25 μa			<2 μa			<1 μa
Fusing Res @ 500 VDC			5 μa						
7	P1	D	"			<1 μa			<1 μa
9		E	"			"			"
11		F	"			"			"
33		Shell				✓			✓

UNCLASSIFIED

623

[redacted]

Unit Ser. No. (61664) AA-1031-F7 CF 1329 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th Day RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
				no			Unable	to	
5-6	P1C	P2C,	not	Tests		.061	make	tests	.063
7-8	P1D	P2D	Specified	Requested		.093			.092
9-10	P1E	P2E	"			.088			.088
11-12	P1F	P2F	"			.089			.088
13-14	P3 cent	P4 cent	.02			.0010			.010
35-36	P3 outer	P4 outer	.01			.0030			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV						<2μa			<2μa
Fusing Res			5 μa						
@ 500 VDC									
7	P1	D	"			<1μa			<1μa
9		E	"			"			"
11		F	"			"			"
33		Shell				✓			✓

UNCLASSIFIED

[redacted]

UNCLASSIFIED

-10-

[redacted]

RS-7321(9838)

TABLE VII

Field Reject

CF-1329 CABLES

T 17667

SER. NO. AA-5112-[illegible] Freq. MC	SPEC. MAX. VSWR 1.4 & 1.45	VSWR Max.	VSWR Min.	INITIAL 8-9-61 Ratio* Max/Min	FINAL FXR Freq. meter	SER. NO. AA-5861-D9 Freq. MC	VSWR Max.	VSWR Min.	INITIAL 8-9-61 Ratio Max/min	FINAL FXR Freq. meter
1160 3.150		1.14	1	1.14	1.11	1160			1.19	1.16
70 3.175		etc		1.0	1.05	70			1.04	1.042
80 3.200				1.12	1.11	80			1.12	1.085
90 3.225				1.22	1.23	90			1.2[illegible]	1.20
1200 [illegible]				1.18	1.25	1200			1.1[illegible]	1.22
10 3.275				[illegible]	1.20	10			1.2[illegible]	1.15
20 3.295				1.24	1.25	20			1.22	1.29
30 3.320				1.36	1.39	30			1.39	1.45
SER. NO. AA-5359-38						SER. NO.				
1160				1.09	1.12	1160				
70				1.05	1.02	70				
80				1.16	1.09	80				
90				1.20	1.07	90				
1200				1.35	1.09	1200				
10				1.26	1.15	10				
20				1.22	1.20	20				
30				1.34	1.36	30				

* All initial frequencies measured using the Sperry microline frequency meter (Tables VII & VIII)

UNCLASSIFIED

625

[redacted]

RS-7321(9838)

TABLE VIII UNCLASSIFIED CF-1329 CABLES T 17[illegible]

SER. NO. AA-1028-F7 Freq. MC		SPEC. MAX. VSWR 1.4 & 1.45	VSWR Max.	VSWR Min.	INITIAL 8-31 Ratio Max/Min	FINAL	SER. NO. AA-1031-G7 Freq. MC	VSWR Max.	VSWR Min.	INITIAL Ratio Max/min	FINAL 10-6-61
1160	3.[illegible]0		1.02	1	1.08	1.14	1160			1.10	1.15
70	3.[illegible]		etc		1.07	1.03	70			1.08	1.08
80	3.200				1.16	1.12	80			1.14	1.10
90	3.225				1.33	1.26	90			1.21	1.24
1200	3.250				1.28	1.27	1200			1.26	1.30
10	3.275				1.21	1.18	10			1.27	1.26
20	3.295				1.34	1.27	20			1.26	1.26
30	3.320				1.30	1.45	30			1.34	1.42
SER. NO. AA-1031-F7							SER. NO.				
1160					1.12	1.11	1160				
70					1.21	1.11	70				
80					1.12	1.10	80				
90					1.18	1.16	90				
1200					1.14	1.24	1200				
10					1.24	1.28	10				
20					1.31	1.30	20				
30					1.21	1.34	30				

UNCLASSIFIED

[redacted]

626

TABLE IX

[redacted]

RS-7321(9838)

Unit Ser. No. AA-4142-G8 (Field Reject) CF 1330 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	~~RH~~	20th DAY 9-28-61 RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	.038		.039	Unable to Make		.038
7-8	P1D	P2D	Specified	.088		.090	Test		.089
9-10	P1E	P2E	"	.086		.087			.087
11-12	P1F	P2F	"	.086		.086			.087
13-14	P3 cent	P4 cent	.02	.010		.010			.010
35-36	P3 outer	P4 outer	.01	.0030		.0030			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV				<1 μa		<2 μa			<1 μa
Fusing Res									
@ 500 VDC									
7	P1	D	5 μa	<1 μa		<1 μa			<1 μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

[redacted]

TABLE X [redacted]

RS-7321(9838)

(Field Reject)

Unit Ser. No. AA-4711-B9

CF 1330 Circuit and Insulation Resistance

T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20 Da DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
							Unable to		
5-6	P1C	P2C	not	.035		.035	make	Test	.034
7-8	P1D	P2D	specified	.086		.086			.085
9-10	P1E	P2E	"	.086		.087			.085
11-12	P1F	P2F	"	.086		.087			.085
13-14	P3 cent	P4 cent	.02	.010		.010			.010
35-36	P3 outer	P4 outer	.01	.0035		.0034			.0034
Insulation Res	center	outer	25 μa						
@ 3 KV				<1μa		<1μa			<1μa
Fusing Res									
@ 500 VDC									
7	P1	D	5 μa	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

628

[redacted]

TABLE XI [redacted]

RS-7321 (9838)

-14-

(Field Reject)

Unit Ser. No. AA-4349-J8 CF 1330 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	.037		.037	Unable to make test		.037
7-8	P1D	P2D	Specified	.087		.089			.087
9-10	P1E	P2E	"	.088		.089			.088
11-12	P1F	P2F	"	.089		.090			.090
13-14	P3 cent	P4 cent	.02	.0099		.010			.010
35-36	P3 outer	P4 outer	.01	.0028		.0028			.0028
Insulation Res @ 3 KV	center	outer	25 μa	<1μa		<1μa			<1μa
Fusing Res @ 500 VDC									
7	P1	D	5 μa	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

[redacted] SECRET

629

TABLE XII [redacted]

RS-7321 (9838)

(Field Reject)

Unit Ser. No. AA-4494-L8

CF 1330 Circuit and Insulation Resistance

T- 17647

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	.035		.035	Unable to make test		.035
7-8	P1D	P2D	specified	.086		.089			.088
9-10	P1E	P2E	"	.085		.087			.088
11-12	P1F	P2F	"	.086		.087			.088
13-14	P3 cent	P4 cent	.02	.010		.010			.010
35-36	P3 outer	P4 outer	.01	.0028		.0027			.0028
Insulation Res	center	outer	25 μa						
@ 3 KV				<1μa		<1μa			<1μa
Fusing Res									
@ 500 VDC									
7	P1	D	5 μa	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

[redacted]

630

(Field Reject)

Unit Ser. No. AA4514-L8 CF 1330 Circuit and Insulation Resistance T-17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	FINAL 10-6-61
							Unable to		
5-6	P1C	P2C	not	.034		.034	make Tests		.034
7-8	P1D	P2D	Specified	.087		.088			.087
9-10	P1E	P2E	"	.084		.085			.084
11-12	P1F	P2F	"	.084		.083			.085
13-14	P3 cent	P4 cent	.02	.010		.010			.010
35-36	P3 outer	P4 outer	.01	.0031		.031			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV				<1μa		Kicks 0-20μa			<1μa
Fusing Res									
@ 500 VDC									
7	P1	D	5 μa	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

UNCLASSIFIED

[redacted] [redacted]

[redacted]

TABLE XIII

RS-7321 (9838)

T- 17667

(Field Reject)

Unit Ser. No. AA-4110-F8

CF 1330 Circuit and Insulation Resistance

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	.035		.035	Unable To make test		.035
7-8	P1D	P2D	Specified	.081		.083			.082
9-10	P1E	P2E	"	.081		.082			.083
11-12	P1F	P2F	"	.082		.083			.083
13-14	P3 cent	P4 cent	.02	.011		.011			.011
35-36	P3 outer	P4 outer	.01	.170 (*)		.61 (*)			.22 (*)
Insulation Res @ 3 KV	center	outer	25 μa	<1μa		<1μa			<1μa
Fusing Res @ 500 VDC			5 μa						
7	P1	D	"	<1μa		<1μa			<1μa
9		E	"	"		"			"
11		F	"	"		"			"
33		Shell		✓		✓			✓

(*) changing

UNCLASSIFIED

632

[redacted]

SECRET

TABLE XV [redacted]

RS-7321(9838).

Unit Ser. No. (61665) AA1028-F7 CF 1330 Circuit and Insulation Resistance

T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	FINAL 10-6-6
5-6	P1C	P2C	not	No-Test		.078	unable to make Test		.078
7-8	P1D	P2D	specified	Requested		.094			.089
9-10	P1E	P2E	"			.089			.095
11-12	P1F	P2F	"			.089			.090
13-14	P3 cent	P4 cent	.02			.010			.010
35-36	P3 outer	P4 outer	.01			.003			.0031
Insulation Res	center	outer	25 μa						
@ 3 KV						6 μa			34 μa
Fusing Res									
@ 500 VDC									
7	P1	D	5 μa			<1 μa			<1 μa
9		E	"			"			"
11		F	"			"			"
33		Shell				✓			✓

UNCLASSIFIED

633

[redacted] [redacted]

TABLE XVI [redacted]

RS-7321 (9838)

Unit Ser. No. (61665) AA-1034-67 CF 1330 Circuit and Insulation Resistance T- 17667

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th DAY RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	No		.078	Unable To make	test	.077
7-8	P1D	P2D	specified	Test		.088			.088
9-10	P1E	P2E	"	Requested		.098			.098
11-12	P1F	P2F	"			.089			.089
13-14	P3 cent	P4 cent	.02			.010			.010
35-36	P3 outer	P4 outer	.01			.003			.003
Insulation Res @ 3 KV	center	outer	25 μa			<2μa			<1μa
Fusing Res @ 500 VDC									
7	P1	D	5 μa			<1μa			<1μa
9		E	"			"			"
11		F	"			"			"
33		Shell				✓			✓

UNCLASSIFIED

[redacted]

634

[redacted]

RS-7321(9838).

Unit Ser. No. (61665) AA-1036-67 CF 1330 Circuit and Insulation Resistance

T- 17467

UNCLASSIFIED

Test Cable	Circuit		Spec. Max Volts @ 1 amp	Initial	RH	20th Day RH	TS @ -65°F	TS @ +160°F	Final 10-6-61
5-6	P1C	P2C	not	No		.078	Unable to make test		.078
7-8	P1D	P2D	specified	Test		.089			.082
9-10	P1E	P2E	"	Request		.095			.095
11-12	P1F	P2F	"			.090			.089
13-14	P3 cent	P4 cent	.02			.010			.010
35-36	P3 outer	P4 outer	.01			0032			.0031
Insulation Res @ 3 KV	center	outer	25 μa			<1μa			37μa
Fusing Res @ 500 VDC									
7	P1	D	5 μa			<1μa			<1μa
9		E	"			"			"
11		F	"			"			"
33		Shell				✓			✓

635

UNCLASSIFIED

[redacted]

TABLE XVIII — CP-1330 CABLES — Field Rejects — T-17667

SER. NO. AA-4142-C2	SPEC. MAX. VSWR 1.4 & 1.45	VSWR Max.	VSWR Min.	INITIAL * Max/Min	FINAL 10-4-61	FINAL SPECIAL MATCHED CABLE 10-4-61	SER. NO. AA-4711-B7	VSWR Max.	VSWR Min.	INITIAL * Ratio Max/min	FINAL 10-6-61
FREQUENCY MC.							FREQUENCY MC.				
1070 2.826		1.31	1	1.31	1.24	1.22	1070	1.14	1	1.14	1.17
80 2.926				1.14	1.23	1.22	80			1.10	1.11
90 2.956				1.09	1.10	1.12	90			1.05	1.10
1100 2.986				1.10	1.10	1.10	1100			1.11	1.14
10 3.016				1.14	1.25	1.24	10			1.16	1.17
20 3.045				1.14	1.24	1.24	20			1.13	1.14
30 3.075				1.08	1.14	1.13	30			1.09	1.14
40 3.105				1.12	1.12	1.14	40			1.16	1.22
SER. NO. AA-4349-J8							SER. NO. AA-4497-L8				
1070 2.856		1.12	1	1.12	1.18		1070	1.14	1	1.14	1.18
80 2.926				1.09	1.12		80			1.09	1.14
90 2.956				1.09	1.11		90			1.09	1.13
1100 2.986				1.11	1.17		1100			1.13	1.17
10 3.016				1.15	1.22		10			1.14	1.23
20 3.045				1.12	1.18		20			1.11	1.18
30 3.075				1.09	1.12		30			1.10	1.10
40 3.100				1.14	1.18		40			1.01	1.17

* All initial frequencies measured using the Sperry microline frequency meter. Cables XVIII thru XX

636

RS-7321(7838)

TABLE XIX

CF-1330 CABLES

Field Rejects

T-17667

SER. NO. AA4514-L2 FREQUENCY MC.	SPEC. MAX. VSWR 1.4 & 1.45	VSWR Max.	VSWR Min.	INITIAL Max/Min	FINAL	FINAL	SER. NO. FREQUENCY MC	VSWR Max.	VSWR Min.	Ratio Max/min
1070		[illegible]	1	1.22	1.26*	1.18	1070			
80				1.	1.24	1.1[illegible]	80			
90				[illegible]	1.14	1.0[illegible]	90			
1100				1.[illegible]	1.14	1.12	1100			
10				1.[illegible]	1.255	1.19	10			
20				1.20	1.22	1.19	20			
30				1.19	1.12	1.12	30			
40				[illegible]	1.18	1.15	40			

SER. NO. AA-4[illegible]F3							SER. NO.			
1070	2.8[illegible]	1.22	1	1.22	1.13		1070			
80	2.9[illegible]			1.11	1.14		80			
90	2.95[illegible]			1.14	1.12		90			
1100	2.986			1.12	1.14		1100			
10	3.01[illegible]			1.[illegible]	1.20		10			
20	3.045			1.12	1.22		20			
30	3.0025			1.28	1.22		30			
40	3.100			1.16	1.24		40			

* These readings [illegible]

637

[redacted]

RS-7321(2838).

TABLE XX

CE-1330 CABLES

UNCLASSIFIED

T-17667

SER. NO. AA-1028-F7 FREQUENCY MC.	Freq. Meter	SPEC. MAX. VSWR 1.4 & 1.45	VSWR Max.	VSWR Min.	INITIAL Max/Min	FINAL	SER. NO. AA-1034-67 FREQUENCY MC	VSWR Max.	VSWR Min.	INITIAL Ratio Max/min	FINAL EXR FREQUENCY MULTIPLIER
1070	2.896		1.062	1	1.062	1.08	1070	1.18	1	1.18	1.14
80	2.926				1.16	1.17	80			1.20	1.16
90	2.956				1.18	1.14	90			1.12	1.10
1100	2.986				1.14	1.18	1100			1.11	1.12
10	3.016				1.18	1.17	10			1.19	1.18
20	3.0452				1.18	1.17	20			1.12	1.12
30	3.0523				1.14	1.12	30			1.12	1.14
40	3.100				1.15	1.17	40			1.18	1.17
SER. NO. AA1036-67							SER. NO.				
1070			1.22	1	1.22	1.15	1070				
80					1.21	1.16	80				
90					1.16	1.14	90				
1100					1.12	1.14	1100				
10					1.15	1.12	10				
20					1.18	1.17	20				
30					1.16	1.14	30				
40					1.16	1.16	40				

UNCLASSIFIED

638

[redacted]

TABLE XXI

FUNCTIONAL EQUIPMENT LIST

[redacted]

ITEM NO.	NAME	MFG. & MODEL	S-NO./ SER. NO.	DATE OF LAST CAL.	CAL. PER.	ACCURACY	RANGE	REMARKS
1	Signal Generator	Hewlett Packard Mod. 614A	96 S-38624					
2	Square Wave Generator	Tektronix Model 105A	966 S-54416					
3	Slotted Line	Hewlett Packard Model 805A	637 S-80016					
4	Frequency Meter	F.R. Machine Works Model 1410-A	207 S-81202			±.01%		
5	Frequency Meter	Sperry Microline Model 124-C	149 S-71910			±.1%		
6	Space Load	Sandia Corp. Div. 2412	U006					

[redacted]

[redacted]

T - 17667

RS-7321(9838)

TABLE XXII
FUNCTIONAL
EQUIPMENT LIST

[redacted]

ITEM NO.	NAME	MFG. & MODEL	S-NO./ SER. NO.	DATE OF LAST CAL.	CAL. PER.	ACCURACY	RANGE	REMARKS
7	VSWR Meter	Hewlett Packard Model 415-B	Ser. C-9 S-69107					
8	Low Pass filter	Sperry Microline Model 1501	Ser. 1652-2					
9	Attenuator	Polytechnic Research Model 1100-B	Ser. 1665					
10	Universal Tester	Sandia Corp.	Ser. No. 1			±2%		

[redacted]

[redacted]