

REV SH 1 DWG NO. 7579995	FIRST APPLICATION		REVISIONS			
	NEXT ASSY	USED ON	REV	DESCRIPTION	DATE	APPROVED
FOR PARTS APPLICATION SEE OD 32190						

SOURCE CONTROL DRAWING

CONTR NO. N00024-99-C-5102			DEPARTMENT OF THE NAVY NAVAL SEA SYSTEMS COMMAND WASHINGTON, D.C. 20362		
LOCKHEED MARTIN			ADAPTER, BULKHEAD, BLOWN OPTICAL FIBER		
CAGE CODE 02769 Naval Electronics & Surveillance Systems Moorestown, New Jersey, 08057					
REL	APPROVED				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE THICKNESS OF PLATING					
TOLERANCES ON:					
BASIC DIMENSIONS	2 PLACE DECIMALS	3 PLACE DECIMALS	PREPARED	<i>J. Williams</i>	03/11/20
UP TO 6	±.02	±.010	CHECKED	<i>Michael F. G...</i>	03/11/20
ABOVE 6 TO 24	±.03	±.015	ENGINEER		
ABOVE 24	±.06	±.020	ACCEPTED BY NAVSEA	SIGNATURE DOES NOT DENOTE APPROVAL	
ANGULAR DIMENSIONS			APPROVED FOR NAVSEA	SIGN ONLY IF ENGINEERING HAS BEEN "PROVED" BY MANUFACTURING AND TEST	
DO NOT SCALE THIS DRAWING			SIZE	CAGE CODE	NAVSEA DWG NO.
			A	53711	7579995
			SCALE: NONE		SHEET 1 OF 15

SSA 03.11.20

DWG NO. 7579995

SH 2

REV -

1. SCOPE

1.1 THIS DRAWING DEFINES THE REQUIREMENTS FOR A BLOWN OPTICAL FIBER (BOF) BULKHEAD ADAPTER ASSEMBLY FOR FIBER OPTIC CABLE. THIS BULKHEAD ADAPTER IS DESIGNED TO TRANSITION BOF FIBERS EMANATING FROM SINGLE-TUBE BOF CABLES INTO LOOSE TUBE FURCATION CABLES (SIMILAR IN FUNCTION TO OPTICAL FIBER CABLE COMPONENTS) AT THE EQUIPMENT I/O INTERFACE. THE SINGLE-TUBE BOF CABLE UTILIZED WITH THIS ADAPTER MEETS MIL-PRF-85045/26.

2. APPLICABLE DOCUMENTS: UNLESS OTHERWISE SPECIFIED, THE FOLLOWING DOCUMENTS, OF THE ISSUE IN EFFECT ON THE DATE OF INVITATION TO BID OR REQUEST FOR PROPOSAL, FORM PART OF THIS DRAWING TO THE EXTENT SPECIFIED HEREIN.

2.1 GOVERNMENT DOCUMENTS:

MILITARY SPECIFICATIONS:

MIL-S-901 SHOCK TESTS, H. I. (HIGH-IMPACT) SHIPBOARD MACHINERY, EQUIPMENT, AND SYSTEMS, REQUIREMENTS FOR

MIL-C-28876 CONNECTORS, FIBER OPTIC, CIRCULAR, PLUG AND RECEPTACLE STYLE, MULTIPLE REMOVABLE TERMINI, GENERAL SPECIFICATION FOR

MIL-PRF-85045/26 CABLE, FIBER OPTIC, ONE TUBE, BLOWN OPTICAL FIBER, STANDARD AND ENHANCED PERFORMANCE, CABLE CONFIGURATION TYPE 5 (TUBE), APPLICATION B (SHIPBOARD), CABLE CLASS SM AND MM, (METRIC)

2.2 NON-GOVERNMENT DOCUMENTS:

ELECTRONIC INDUSTRIES ASSOCIATION (CAGE CODE 80131):

EIA/TIA-455-3 FOTP-3 PROCEDURE TO MEASURE TEMPERATURE CYCLING EFFECTS ON OPTICAL FIBERS, OPTICAL CABLE, AND OTHER PASSIVE FIBER OPTIC COMPONENTS

EIA/TIA-455-6 FOTP-6 CABLE RETENTION TEST PROCEDURE FOR FIBER OPTIC CABLE INTERCONNECTING DEVICES

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) (CAGE CODE 1PBS5):

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 2	

DWG NO. 7579995 SH 3 REV -

- TIA/EIA-455-5 FOTP-5 HUMIDITY TEST PROCEDURE FOR FIBER OPTIC COMPONENTS
- TIA/EIA-455-11 FOTP-11 VIBRATION TEST PROCEDURE FOR FIBER OPTIC COMPONENTS AND CABLES
- TIA-455-36 FOTP-36 TWIST TEST FOR FIBER OPTIC CONNECTING DEVICES.
- TIA/EIA-455-71 FOTP-71 PROCEDURE TO MEASURE TEMPERATURE-SHOCK EFFECTS ON FIBER OPTIC COMPONENTS

2.3 **ORDER OF PRECEDENCE:** IN THE EVENT OF A CONFLICT BETWEEN THE CONTENTS OF THIS DRAWING AND THE REFERENCES CITED HEREIN, THE ORDER OF PRECEDENCE SHALL BE AS FOLLOWS:

- A. THIS DRAWING
- B. MIL-C-28876
- C. OTHER DOCUMENTS REFERENCED

3. **REQUIREMENTS**

3.1 **GENERAL:** THE UNIT SHALL BE DESIGNED, MANUFACTURED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED HEREIN.

3.2 **QUALIFICATION:** UNITS DELIVERED TO THIS DRAWING SHALL COMPLY WITH THE QUALIFICATION REQUIREMENTS SPECIFIED IN PARAGRAPH 4.3 HEREIN.

3.3 **QUALITY CONFORMANCE:** UNITS DELIVERED TO THIS DRAWING SHALL COMPLY WITH THE QUALITY CONFORMANCE INSPECTION (QCI) REQUIREMENTS SPECIFIED IN 4.4 HEREIN.

3.4 **DESIGN, CONSTRUCTION AND PHYSICAL DIMENSIONS**

3.4.1 **PHYSICAL CHARACTERISTICS:** THE PHYSICAL CHARACTERISTICS OF THE BULK-HEAD ADAPTER SHALL BE AS SHOWN IN FIGURE 1 OR FIGURE 2 AS DEFINED IN TABLE III.

3.4.2 **MATERIALS, PARTS AND PROCESSES:** UNLESS OTHERWISE SPECIFIED, MATERIALS, PARTS AND PROCESSES SHALL BE SELECTED OR DEVELOPED IN ACCORDANCE WITH THE SUPPLIER'S STANDARD PRACTICES AND SHALL ALLOW THE RESULTANT PRODUCT TO MEET THE REQUIREMENTS OF THIS SPECIFICATION.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 3	

DWG NO. 7579995 SH 4 REV -

3.4.3 **FINISH:** EXTERNAL SURFACES OF THE BULKHEAD ADAPTERS SHALL BE FINISHED IN ACCORDANCE WITH THE SUPPLIER'S STANDARD PRACTICES AND SHALL ALLOW THE RESULTANT PRODUCT TO MEET THE REQUIREMENTS OF THIS SPECIFICATION.

3.4.4 **PART IDENTIFICATION:** BULKHEAD ADAPTERS SHALL BE IDENTIFIED OR BAGGED AND TAGGED WITH 53711SOCN7579995-(APPROPRIATE DASH NUMBER) MFR (MANUFACTURER'S CAGE CODE). MARKING SHALL BE LEGIBLE AND PERMANENT. CHARACTERS SHALL BE .040 HIGH MINIMUM. YELLOW BANDING OR THE TERM "FIBER OPTICS" SHALL BE MARKED ON THE ADAPTER.

3.4.5 **MOUNTING PROVISIONS:** THE BULKHEAD ADAPTERS SHALL INSTALL INTO THE MOUNTING HOLES SHOWN IN FIGURES 3 AND 4 AS SPECIFIED FOR THE APPLICABLE DASH NUMBERS DELINEATED IN TABLE III.

3.5 **ENVIRONMENTAL**

3.5.1 **TWIST:** BULKHEAD ADAPTERS SHALL SURVIVE THE TWIST TEST DESCRIBED IN PARAGRAPH 4.7.2 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.2 **CABLE SEAL FLEXING:** BULKHEAD ADAPTERS SHALL SURVIVE THE CABLE SEAL FLEXING TEST DESCRIBED IN PARAGRAPH 4.7.3 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.3 **EXTERNAL BENDING MOMENT:** BULKHEAD ADAPTERS SHALL SURVIVE THE EXTERNAL BENDING MOMENT TEST DESCRIBED IN PARAGRAPH 4.7.4 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.4 **HUMIDITY:** BULKHEAD ADAPTERS SHALL SURVIVE THE HUMIDITY TEST DESCRIBED IN PARAGRAPH 4.7.5 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.5 **TEMPERATURE-LIFE:** BULKHEAD ADAPTERS SHALL SURVIVE THE TEMPERATURE-LIFE TEST DESCRIBED IN PARAGRAPH 4.7.6 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.6 **VIBRATION:** BULKHEAD ADAPTERS SHALL SURVIVE THE VIBRATION TEST DESCRIBED IN PARAGRAPH 4.7.7 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.7 **SHOCK:** BULKHEAD ADAPTERS SHALL SURVIVE THE SHOCK TEST DESCRIBED IN PARAGRAPH 4.7.8 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 4	

DWG NO. 7579995 SH 5 REV -

3.5.8 **TEMPERATURE-STORAGE:** BULKHEAD ADAPTERS SHALL SURVIVE STORAGE TEMPERATURES BETWEEN THE EXTREMES OF -40C AND +70C WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE. VERIFICATION SHALL BE IN ACCORDANCE WITH 4.7.12.

3.5.9 **TEMPERATURE-SHOCK:** BULKHEAD ADAPTERS SHALL SURVIVE THE TEMPERATURE SHOCK TEST DESCRIBED IN PARAGRAPH 4.7.10 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.10 **TEMPERATURE-OPERATIONAL:** BULKHEAD ADAPTERS SHALL SURVIVE THE OPERATIONAL TEMPERATURE TEST DESCRIBED IN PARAGRAPH 4.7.11. WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.5.11 **CABLE RETENTION:** BULKHEAD ADAPTERS SHALL SURVIVE AN AXIAL LOAD OF 100 POUNDS MINIMUM FOR 10 MINUTES MINIMUM WHEN TESTED IN ACCORDANCE WITH PARAGRAPH 4.7.9 WITHOUT DAMAGE OR DEGRADATION AFFECTING THEIR SERVICEABILITY OR OPTICAL PERFORMANCE.

3.6 **WORKMANSHIP:** WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF MIL-PRF-28876.

3.7 **NOTIFICATION OF CHANGE:** ANY PROPOSED CHANGES TO THE QUALIFIED PRODUCT AS DEFINED HEREIN SHALL BE SUBMITTED TO THE PROCURING ACTIVITY FOR REVIEW AND WRITTEN APPROVAL PRIOR TO IMPLEMENTATION.

4. **QUALITY ASSURANCE PROVISIONS**

4.1 **RESPONSIBILITY FOR INSPECTION:** THE MANUFACTURER SHALL BE RESPONSIBLE FOR PERFORMANCE OF ALL SPECIFIED TESTS AND INSPECTIONS. TESTS SHALL BE PERFORMED AT THE MANUFACTURER'S FACILITY OR AT A FACILITY APPROVED BY THE PROCURING ACTIVITY. THE PROCURING ACTIVITY RESERVES THE RIGHT TO WITNESS ALL TESTS. FAILED UNITS SHALL NOT BE SHIPPED.

4.2 **INSPECTION:** THE INSPECTIONS SPECIFIED HEREIN ARE CLASSIFIED AS FOLLOWS:

A. QUALIFICATION: QUALIFICATION IS A SINGLE-EVENT INSPECTION INVOKED BY PURCHASE ORDER UPON INITIAL QUALIFICATION OR UPON A MAJOR DESIGN OR PROCESS CHANGE.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 5	

DWG NO. 7579995 SH 6 REV -

B. QUALITY CONFORMANCE INSPECTION: QUALITY CONFORMANCE INSPECTIONS OCCUR WITH EACH LOT PRESENTED FOR ACCEPTANCE AND ARE ONGOING EVENTS.

4.3 **QUALIFICATION:** QUALIFICATION, DIRECTED ONLY BY PURCHASE ORDER BY THE PROCURING ACTIVITY, SHALL BE PERFORMED AT A FACILITY DEEMED ACCEPTABLE BY THE PROCURING ACTIVITY ON QUALIFICATION SAMPLE UNITS THAT HAVE BEEN DESIGNED TO MEET ALL THE REQUIREMENTS OF THIS SPECIFICATION. A QUALIFICATION STATUS OF "COMPLETE" SHALL BE ESTABLISHED FOR A PART BY:

1. SUBMISSION OF A QUALIFICATION TEST PROCEDURE (4.3.3),
2. PERFORMANCE OF QUALIFICATION INSPECTION (4.3.4),
3. SATISFACTORY COMPLETION OF TESTING,
4. SUBMISSION OF A QUALIFICATION TEST REPORT (4.3.5) AND
5. MAINTENANCE OF THE QUALIFIED BASELINE (4.3.6).

4.3.1 **QUALIFICATION SAMPLE:** QUALIFICATION SAMPLE UNITS SHALL BE OF THE SAME DESIGN AND SHALL BE PRODUCED WITH THE SAME EQUIPMENT AND PROCESSES AS THOSE USED IN PRODUCTION.

4.3.2 **QUALIFICATION SAMPLE SIZE:** THE MANUFACTURER SHALL PRODUCE AT LEAST ONE SAMPLE OF EACH SHELL SIZE FOR QUALIFICATION TESTING.

4.3.3 **QUALIFICATION TEST PROCEDURE (QTP):** WHEN QUALIFICATION IS SPECIFIED BY THE PROCURING ACTIVITY, THE MANUFACTURER, OR THE ACTIVITY DESIGNATED WITH THE RESPONSIBILITY FOR PERFORMING QUALIFICATION TESTING, SHALL SUBMIT A QTP TO THE PROCURING ACTIVITY OR ITS AGENT, FOR WRITTEN APPROVAL, NO LATER THAN 60 CALENDAR DAYS PRIOR TO START OF TEST. THE QTP SHALL STATE IN DETAIL THE PROCEDURES THAT WILL BE USED TO ASSURE THAT THE QUALIFICATION SAMPLES COMPLY WITH THE REQUIREMENTS SPECIFIED HEREIN.

4.3.4 **QUALIFICATION INSPECTION:** THIS INSPECTION SHALL CONSIST OF PERFORMING THE QUALIFICATION TESTING DESCRIBED IN TABLE I, VERIFICATION MATRIX, IN THE ORDER SHOWN, ON THE TEST SAMPLES SPECIFIED IN 4.3.1. SAMPLES THAT ARE SUBJECTED TO DESTRUCTIVE TESTING SHALL NOT BE SHIPPED, BUT SHALL BE RETAINED BY THE MANUFACTURER FOR A MINIMUM OF THREE YEARS.

4.3.5 **QUALIFICATION TEST REPORT:** THE MANUFACTURER, OR THE ACTIVITY DESIGNATED WITH THE RESPONSIBILITY FOR PERFORMING QUALIFICATION TESTING, SHALL SUBMIT A QUALIFICATION TEST REPORT TO THE PROCURING ACTIVITY OR ITS AGENT NO LATER THAN 30 DAYS AFTER COMPLETION OF QUALIFICATION INSPECTIONS (PAR. 4.3.4). THE QUALIFICATION REPORT SHALL PROVIDE DETAILED RESULTS OF THE TESTS AND SHALL BE RETAINED BY THE MANUFACTURER FOR A MINIMUM OF THREE YEARS.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 6	

DWG NO. 7579995 SH 7 REV -

4.3.6 **CHANGES TO QUALIFIED BASELINE:** THE MANUFACTURER SHALL NOT CHANGE THE QUALIFIED BASELINE WITHOUT THE NOTIFICATION OF AND SUBSEQUENT WRITTEN APPROVAL OF THE PROCURING ACTIVITY. THE PROCURING ACTIVITY RESERVES THE RIGHT TO REQUIRE REQUALIFICATION AS A RESULT OF APPROVED CHANGES AS SPECIFIED IN PARAGRAPH 3.7 HEREIN.

4.4 **QUALITY CONFORMANCE INSPECTION:** QUALITY CONFORMANCE INSPECTION SHALL CONSIST OF PERFORMING THE QUALITY CONFORMANCE INSPECTIONS DESCRIBED IN TABLE I, VERIFICATION MATRIX, FOR EACH LOT SHIPPED, INCLUDING THE GENERATION OF APPLICABLE ACCEPTANCE TEST DATA AND A CERTIFICATE OF CONFORMANCE PER PARAGRAPH 4.6.2.

4.4.1 **SAMPLING:** ALL (100%) OF THE CONTENTS OF EACH LOT SHALL BE INSPECTED.

4.4.1.1 **INSPECTION LOT:** A LOT IS DEFINED AS ALL THE ADAPTERS OF SIMILAR DASH NUMBERS OFFERED FOR INSPECTION AT ONE TIME.

4.5 **VERIFICATION AND REVIEW:** THE PROCURING ACTIVITY OR ITS AGENT RETAIN THE RIGHT TO REVIEW THE MANUFACTURER'S FACILITY AND APPLICABLE DOCUMENTS. DOCUMENTS SHALL BE MADE AVAILABLE WHEN REQUESTED BY THE PROCURING ACTIVITY.

4.5.1 **VERIFICATION METHODS:** VERIFICATION METHODS SHALL UTILIZE SIMILARITY, INSPECTION, TEST AND ANALYSIS AS DEFINED IN THE FOLLOWING PARAGRAPHS.

4.5.1.1 **SIMILARITY:** WHEN APPROVED BY THE PROCURING ACTIVITY, ANY OF THE VERIFICATION METHODS SPECIFIED HEREIN MAY BE SATISFIED BY SUBMITTAL OF DATA PERTAINING TO SIMILAR, PREVIOUSLY-QUALIFIED UNITS. SIMILAR UNITS SHALL BE UNITS OF THE SAME TYPE, CONSTRUCTION, SHAPE, MATERIALS OR FINISHES, THAT HAVE BEEN MANUFACTURED ON THE SAME PRODUCTION LINE USING THE SAME MANUFACTURING PROCESSES AND THAT HAVE BEEN SUBJECTED TO THE SAME OR EQUIVALENT ENVIRONMENTAL TESTS.

4.5.1.2 **INSPECTION:** INSPECTION SHALL BE VISUAL EXAMINATION OF THE UNIT, INCLUDING REVIEW OF DESCRIPTIVE DOCUMENTATION AND COMPARISON OF APPROPRIATE CHARACTERISTICS, WITH A REFERENCED STANDARD OR REQUIREMENT.

4.5.1.3 **TEST:** TESTS SHALL BE SYSTEMATIC EXERCISING OF THE UNIT UNDER SPECIFIC CONDITIONS UTILIZING TEST FIXTURING AND THE COLLECTION, EVALUATION AND ANALYSIS OF QUANTITATIVE DATA. ACCEPTABILITY OF THE UNIT SHALL BE DETERMINED BY COMPARISON OF ACQUIRED DATA TO THE SPECIFIED REQUIREMENTS.

4.5.1.4 **ANALYSIS:** ANALYSIS SHALL BE TECHNICAL OR MATHEMATICAL EVALUATION OR SIMULATION USING REPRESENTATIONS, SUCH AS MATHEMATICAL MODELS, ALGORITHMS,

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 7	

DWG NO. 7579995 SH 8 REV -

EQUATIONS, CHARTS, GRAPHS, CIRCUIT DIAGRAMS, DATA REDUCTION OR REPRESENTATIVE DATA. REPRESENTATIVE DATA MAY INCLUDE THAT RESULTING FROM PREVIOUS VERIFICATIONS.

TABLE I VERIFICATION MATRIX

<p>LEGEND: Q = QUALIFICATION (PER PAR. 4.3) QCI = QUALITY CONFORMANCE INSPECTION (PER PAR. 4.4) VERIFICATION METHOD (PER PAR. 4.5.1): I = INSPECTION AT ROOM AMBIENT (PER PAR. 4.5.1.2) T = TEST AT ROOM AMBIENT (PER PAR. 4.5.1.3) A = ANALYSIS (PER PAR. 4.5.1.4) N/A = NOT APPLICABLE - = NOT PERFORMED</p>				
REQUIREMENT REFERENCE	TITLE	Q	QCI	METHOD OF INSPECTION (PARAGRAPH)
3.	REQUIREMENTS	-	-	N/A
3.1	GENERAL	-	-	N/A
3.2	QUALIFICATION	-	-	N/A
3.3	QUALITY CONFORMANCE	-	-	N/A
3.4	DESIGN, CONSTRUCTION AND PHYSICAL DIMENSIONS	-	-	N/A
3.4.1	PHYSICAL CHARACTERISTICS	I	I	4.7.1, FIGURES 1 AND 2
3.4.2	MATERIALS, PARTS AND PROCESSES	I	I	4.7.1
3.4.3	FINISH	I	I	4.7.1
3.4.4	PART IDENTIFICATION	I	I	4.7.1
3.4.5	MOUNTING PROVISIONS	I	-	FIGURES 3 AND 4
3.5	ENVIRONMENTAL	-	-	N/A
3.5.1	TWIST	T	-	4.7.2
3.5.2	CABLE SEAL FLEXING	T	-	4.7.3
3.5.3	EXTERNAL BENDING MOMENT	T	-	4.7.4
3.5.4	HUMIDITY	T	-	4.7.5
3.5.5	TEMPERATURE - LIFE	T	-	4.7.6
3.5.6	VIBRATION	T	-	4.7.7

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 8	

<p>LEGEND: Q = QUALIFICATION (PER PAR. 4.3) QCI = QUALITY CONFORMANCE INSPECTION (PER PAR. 4.4) VERIFICATION METHOD (PER PAR. 4.5.1): I = INSPECTION AT ROOM AMBIENT (PER PAR. 4.5.1.2) T = TEST AT ROOM AMBIENT (PER PAR. 4.5.1.3) A = ANALYSIS (PER PAR. 4.5.1.4) N/A = NOT APPLICABLE - = NOT PERFORMED</p>				
REQUIREMENT REFERENCE	TITLE	Q	QCI	METHOD OF INSPECTION (PARAGRAPH)
3.5.7	SHOCK	T	-	4.7.8
3.5.8	TEMPERATURE-STORAGE	A	-	4.7.12
3.5.9	TEMPERATURE-SHOCK	T	-	4.7.10
3.5.10	TEMPERATURE-OPERATIONAL	T	-	4.7.11
3.5.11	CABLE RETENTION	T	-	4.7.9
3.6	WORKMANSHIP	I	I	4.7.1
3.7	NOTIFICATION OF CHANGE	-	-	4.3.6

4.6 **QUALITY CONFORMANCE INSPECTION (QCI) ACCEPTANCE TESTING**

4.6.1 **ACCEPTANCE TEST DATA:** THE SUPPLIER SHALL PERFORM THE INSPECTIONS AS SPECIFIED IN TABLE I. THE INSPECTION DATA FOR EACH UNIT SHALL BE RECORDED AND SHIPPED WITH EACH UNIT.

4.6.2 **CERTIFICATE OF CONFORMANCE (C OF C):** A C OF C CERTIFYING THAT THE REQUIREMENTS SPECIFIED HEREIN HAVE BEEN COMPLIED WITH, SIGNED BY A RESPONSIBLE OFFICIAL IN THE MANUFACTURER'S ORGANIZATION, SHALL BE PROVIDED WITH EACH LOT DELIVERED TO THIS DRAWING.

4.7 **METHODS OF INSPECTION AND TEST**

4.7.1 **VISUAL AND MECHANICAL INSPECTION:** BULKHEAD ADAPTERS SHALL BE VISUALLY AND MECHANICALLY INSPECTED TO VERIFY THAT THE MATERIALS, FINISH, DESIGN, CONSTRUCTION, PHYSICAL CHARACTERISTICS, MARKING AND WORKMANSHIP ARE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS SPECIFIED HEREIN.

4.7.2 **TWIST:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH TIA-455-36, USING THE TEST CONDITIONS SPECIFIED IN MIL-C-28876.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 9	

DWG NO. 7579995 SH 10 REV -

- 4.7.3 **CABLE SEAL FLEXING:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF MIL-C-28876.
- 4.7.4 **EXTERNAL BENDING MOMENT:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURE DEFINED IN MIL-C-28876.
- 4.7.5 **HUMIDITY:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH TIA/EIA-455-5, TEST CONDITION B, (SUBCYCLE TO BE INCLUDED).
- 4.7.6 **TEMPERATURE--LIFE:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH MIL-C-28876.
- 4.7.7 **VIBRATION:** BULKHEAD ADAPTERS SHALL BE TESTED PER TIA/EIA-455-11. TEST CONDITION II SHALL BE USED EXCEPT THAT THE LOWER FREQUENCY THRESHOLD SHALL BE 5 Hz INSTEAD OF THE STATED 10 Hz VALUE.
- 4.7.8 **SHOCK:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH MIL-S-901, GRADE A, TYPE A, CLASS I.
- 4.7.9 **CABLE RETENTION:** BULKHEAD ADAPTERS SHALL BE TESTED IN ACCORDANCE WITH EIA/TIA-455-6.
- 4.7.10 **TEMPERATURE SHOCK:** TIA/EIA-455-71 TEST CONDITION C SHALL BE USED. TEST STRUCTURE SHALL BE AS FOLLOWS: TEST CONDITION C-0 BETWEEN THE LIMITS OF -40 C AND +70 C.
- 4.7.11 **TEMPERATURE- OPERATIONAL:** EIA/TIA-455-3 TEST CONDITION C-2 SHALL BE USED AS A TEST METHOD. TEST LIMITS ARE -28 C THROUGH +65 C.
- 4.7.12 **TEMPERATURE-STORAGE:** THE REQUIREMENTS OF SECTION 3.5.8 SHALL BE VERIFIED BY ANALYSIS.

5. **PREPARATION FOR DELIVERY**

- 5.1 **PACKAGING AND PACKING:** THE MANUFACTURER SHALL BE RESPONSIBLE FOR PACKAGING AND PACKING TO ASSURE THAT THE BULKHEAD ADAPTERS, WHEN SHIPPED USING A DOMESTIC COMMON CARRIER, ARE RECEIVED IN AN UNDAMAGED CONDITION.
- 5.1.1 ESD PROTECTION AND MARKING ARE NOT APPLICABLE TO THESE PARTS.

6. **NOTES:**

- 6.1 **APPROVED SOURCES OF SUPPLY:** IDENTIFICATION OF APPROVED SOURCES OF SUPPLY HEREIN IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT OR CONTIN-

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 10	

DWG NO. 7579995 SH 11 REV -

UED AVAILABILITY AS A SOURCE OF SUPPLY FOR THE UNITS DESCRIBED IN THIS DRAWING.

6.2 ONLY THE ITEMS DESCRIBED ON THIS DRAWING, WHEN PROCURED FROM THE SUPPLIER LISTED HEREIN, ARE APPROVED BY LOCKHEED MARTIN NAVAL ELECTRONICS & SURVEILLANCE SYSTEMS - SURFACE SYSTEMS (NE&SS-SS) FOR USE IN THE APPLICATION SPECIFIED HEREIN. A SUBSTITUTE ITEM SHALL NOT BE USED WITHOUT PRIOR APPROVAL BY LOCKHEED MARTIN NE&SS-SS OR NAVAL SEA SYSTEMS COMMAND.

APPROVED SOURCE(S) OF SUPPLY	
SUPPLIER NAME	H4/H8 CAGE CODE
SOURCE 1 FIBER SYSTEMS INTERNATIONAL ALLEN, TX 75013	0YPM2

6.3 **QUALIFICATION STATUS:** UNITS DELIVERED TO THIS DRAWING ARE FOR PRODUCTION USE, HOWEVER, ANY UNITS FROM ANY SOURCE OF SUPPLY HAVING A QUALIFICATION STATUS "INCOMPLETE" SHALL ONLY BE USED ON DEVELOPMENT PROGRAMS. UNITS HAVING A QUALIFICATION STATUS "COMPLETE" ARE QUALIFIED FOR USE IN THE PRODUCTION PROGRAM FOR WHICH THEY WERE ORIGINALLY INTENDED OR ANY PROGRAM HAVING EQUAL OR LESS STRINGENT REQUIREMENTS.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 11	

DWG NO. 7579995 SH 12 REV -

TABLE II PART TABULATION

NAVSEA PART NUMBER	SOURCE 1 PART NUMBER	SOURCE 1 QUALIFICATION STATUS (PARA 6.3)
7579995-1	FS11B104-13-S	COMPLETE
7579995-2	FS11B104-25-S	COMPLETE
7579995-3	FS11B104-37-S	COMPLETE
7579995-4	FS11B108-13-S	COMPLETE
7579995-5	FS11B108-25-S	COMPLETE
7579995-6	FS11B108-37-S	COMPLETE
7579995-7	FS11B112-13-S	COMPLETE
7579995-8	FS11B112-25-S	COMPLETE
7579995-9	FS11B112-37-S	COMPLETE
7579995-10	FS11F112-13-S	COMPLETE
7579995-11	FS11F112-25-S	COMPLETE
7579995-12	FS11F112-37-S	COMPLETE
7579995-13	FS11F224-13-S	COMPLETE
7579995-14	FS11F224-25-S	COMPLETE
7579995-15	FS11F224-37-S	COMPLETE
7579995-16	FS11F336-13-S	COMPLETE
7579995-17	FS11F336-25-S	COMPLETE
7579995-18	FS11F336-37-S	COMPLETE

NOTE: (-S) IN SOURCE 1 PART NUMBER DESIGNATES SLATE COLOR FURCATION CABLE USED WITH MULTIMODE FIBER.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 12	

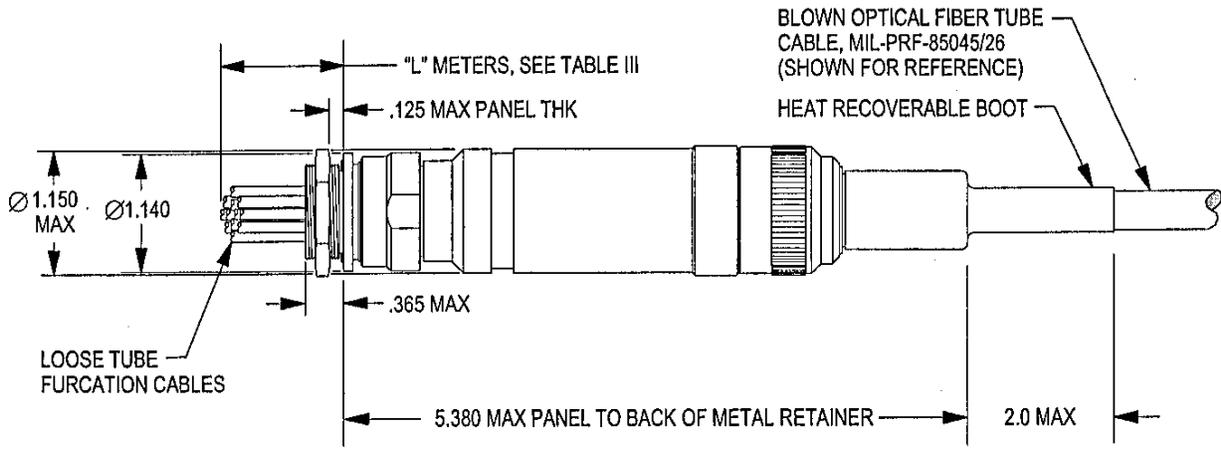


FIGURE 1. ADAPTER, BULKHEAD, BLOWN OPTICAL FIBER, SHELL SIZE 13.

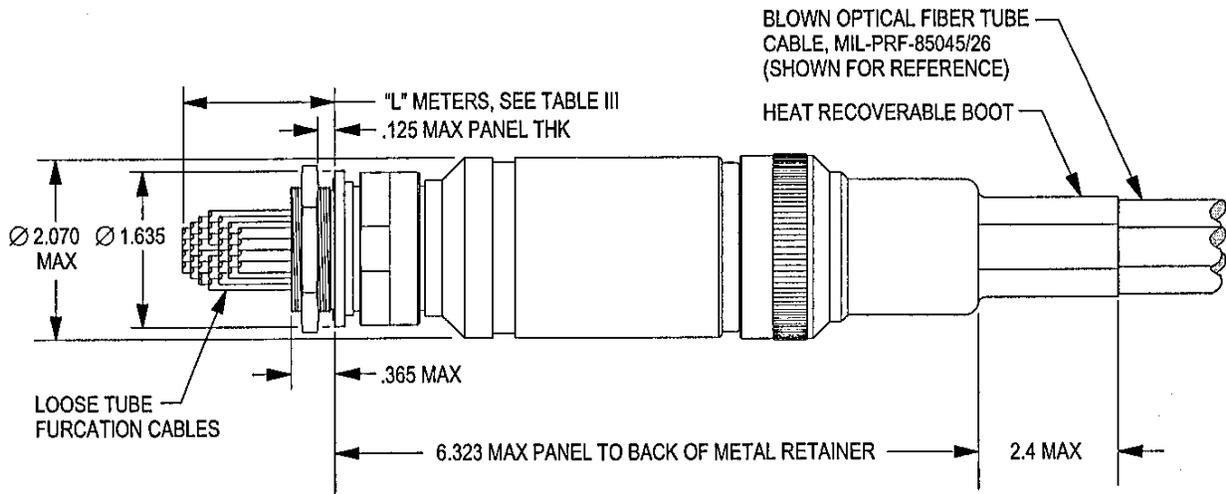


FIGURE 2. ADAPTER, BULKHEAD, BLOWN OPTICAL FIBER, SHELL SIZE 23.

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 13	

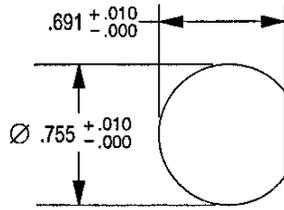


FIGURE 3. MOUNTING HOLE DIMENSIONS, SHELL SIZE 13

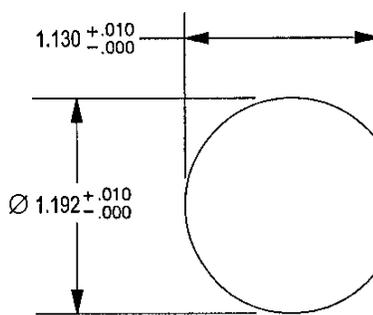


FIGURE 4. MOUNTING HOLE DIMENSIONS, SHELL SIZE 23

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 14	

TABLE III PART CONFIGURATION: 7579995 DASH NUMBERS 1/

NAVSEA DRAWING NUMBER 1/	FURCATION CABLE LENGTH "L" IN METERS, NOMINAL 2/			OUTLINE (SHELL SIZE)	FURCATION CABLE QUANTITY PER ADAPTER	BLOWN OPTICAL FIBER(BOF) SINGLE-TUBE CABLE QUANTITY
	1.3 (4 FT)	2.5 (8 FT)	3.7 (12 FT)			
7579995	-1	-2	-3	FIGURE 1 (13)	04	01
7579995	-4	-5	-6	FIGURE 1 (13)	08	01
7579995	-7	-8	-9	FIGURE 1 (13)	12	01
7579995	-10	-11	-12	FIGURE 2 (23)	12	01
7579995	-13	-14	-15	FIGURE 2 (23)	24	02
7579995	-16	-17	-18	FIGURE 2 (23)	36	03

NOTES FOR TABLE I:

1/ NAVSEA DRAWING NUMBER CONFIGURATION CONSISTS OF DRAWING NUMBER AND DASH NUMBER FROM ABOVE TABLE DEFINING THE APPLICABLE ADAPTER OUTLINE, FURCATION CABLE QUANTITY, FURCATION CABLE LENGTH AND THE NUMBER OF BLOWN OPTICAL FIBER SINGLE-TUBE CABLES ACCEPTED AT THE REAR OF THE ADAPTER. EXAMPLE: 7579995-8 REPRESENTS AN ADAPTER AS DEPICTED IN FIGURE 1 THAT IS COMPOSED OF 12 FURCATION CABLES THAT ARE 2.5 METERS IN LENGTH. THE REAR OF THE ADAPTER ACCEPTS 1 SINGLE-TUBE BOF CABLE.

2/ SEE FIGURE 1 OR FIGURE 2 AS APPLICABLE FOR PHYSICAL REPRESENTATION OF "L".

SIZE	CAGE CODE	NAVSEA DWG NO.	REV
A	53711	7579995	-
SCALE: NONE		SHEET 15	