

CONTRACT DATA REQUIREMENTS LIST

DD FORM 1423 (MECHANIZED)

CATEGORY: MISC SYSTEM/ITEM: PRINTED CIRCUIT BOARD (PCB)

TO CONTRACT/PR: C21AAWXX

1. SEQUENCE NUMBER		14. DRFT/REG/REPRO
		DISTRIBUTION COPIES
2. TITLE OF DATA ITEM		
3. SUBTITLE		
4. DATA ITEM NUMBER		
5. CONTRACT REFERENCE		
6. TECHNICAL OFFICE	7. DD 8. APP 9. DIST STATEMENT	
	250 CODE REQUIRED	
10. FREQUENCY	11. AS OF DATE	15. TOTAL:
12. DATE OF 1ST SUBMISSION	13. DATE OF SUBSEQUENT SUBMISSION	
16. REMARKS		

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1. A001		14. SEE ADDRESS CODE	/	/
2. ENGINEERING CHANGE PROPOSAL (ECP)		DISTRIBUTION	/	/
3. *		ATTACHED	/	/
4. DI-CMAN-80639B				
5. MIL-STD-973				
6. AMSSB-RSO-ADM(RI)	7. LT 8. - 9.**			
10. ASREQ	11. ---	15. TOTAL	0/	0/ 0
12. ASREQ	13.			

16. REMARKS  
 ECP SHORT FORM SHALL BE USED FOR THE SUBMISSION AND PROCESSING OF ALL CLASS II ENGINEERING ACTIONS. \*\*DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.

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1. A002		14. SEE ADDRESS CODE	/	/
2. REQUEST FOR DEVIATION (RFD)		DISTRIBUTION	/	/
3.		ATTACHED	/	/
4. DI-CMAN-80640B				
5. MIL-STD-973				
6. AMSSB-RSO-ADM(RI)	7. LT 8. - 9.**			
10. ASREQ	11. ---	15. TOTAL	0/	0/ 0
12. ASREQ	13.			

16. REMARKS  
 \*\*DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.

1. A003			14.		
			SEE ADDRESS CODE	/	/
2. REQUEST FOR WAIVER (RFW)			DISTRIBUTION	/	/
3.			ATTACHED	/	/
4. DI-CMAN-80641B					
5. MIL-STD-973					
6. AMSSC-HB-ADM(RI)	7. LT	8. -	9.**		
10. ASREQ	11. ---		15. TOTAL	0/	0/ 0
12. ASREQ		13.			

16. REMARKS  
 \*\*DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.

1. A004			14.		
			SEE ADDRESS CODE	/	/
2. NOTICE OF REVISION (NOR)			DISTRIBUTION	/	/
3.			ATTACHED	/	/
4. DI-CMAN-80642B					
5. MIL-STD-973					
6. AMSSB-RSO-ADM(RI)	7. LT	8. -	9.**		
10. ASREQ	11. ---		15. TOTAL	0/	0/ 0
12. ASREQ		13.			

16. REMARKS  
 THE CONTRACTOR SHALL PREPARE AND SUBMIT A NOR FOR EACH DRAWING, ASSOCIATED LIST, OR OTHER REFERENCED DOCUMENT WHICH REQUIRE REVISION AFTER ECP APPROVAL. \*\*DISTRIBUTION STATEMENT WILL BE ASSIGNED AND IMPLEMENTED BY THE DOD CONFIGURATION MANAGER.

ALL THE ABOVE MAY BE SUBMITTED TO:

COMMANDER  
 U.S.ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND (SBCCOM)  
 ATTN: AMSSB-RSO-ADM (CDE QA CELL) BLDG.62,1<sup>st</sup>floor,West Wing  
 ROCK ISLAND,IL 61299-7390

1. A005			14.		
			AMSSB-RSO-ADM (RI)	/	2/
2. SPECIAL INSPECTION EQUIPMENT DESCRIPTIVE DOC.				/	/
3. AIE DESIGN DOCUMENTATION			QAR	/	/
			CO (LT ONLY)	/	/
4. DI-QCIC-81006					
5. SECTION E					
6. AMSSB-RSO-ADM(RI)	7. XX	8. A	9. N/A		
10. ONE/R	11.N/A		15. TOTAL	0/	3/0

12. \*\*

13.WHEN REV.

16. REMARKS

\*BLOCK 4: DO NOT ADDRESS PARAGRAPHS 10.1, 10.2,10.4.1(f) AND 10.4.2. IGNORE ALL REFERENCE TO THE WORD "SPECIAL" IN DID.SUBMIT FOR ALL TESTS AND ALL CRITICAL, SPECIAL AND MAJOR CHARACTERISTICS IN SPECIFICATION OR QAP. UNLESS OTHERWISE SPECIFIED, INSPECTION EQUIPMENT INCLUDES STANDARD MEASURING AND TEST EQUIPMENT AND/OR COMMERCIAL OFF THE INSPECTION/TEST EQUIPMENT. \*\*BLOCK 12:SUBMIT 45 DAYS PRIOR TO FA,OR PRODUCTION,IF FA IS WAIVED. THE GOVERNMENT WILL RESPOND WITHIN 45 DAYS OF RECEIPT OF ORIGINALS AND REVISIONS. REVISIONS ARE TO BE SUBMITTED WITHIN 10 DAYS OF RECEIPT OF GOVERNMENT RESPONSE. IF DOCUMENTATION WAS APPROVED ON PRIOR CONTRACT AND NO CHANGES WERE MADE, SUBMIT ONLY EVIDENCE OF PRIOR APPROVALS.

All submissions should be presented in the following formats via e-mail or on PC compatible CD-ROM,100MB Iomega ZIP disks, or 3.5"high density floppy discs

Textual Information	MS Office compatible (i.e. doc.xls,rtf)
Technical Drawings	Windows Metafile,Bitmap,JPEG, DesignCAD 2D or AutoCAD formats
Illustrations/Photos	Windows Metafile,Bitmax,JPEG (i.e.WMF,BMP,JPG,GIF)

Files may be compressed using ZIP program.

WARNING: Large packages may cause delays in delivery using mail internet.

Email subject line must contain end item nomenclature.

Email [cromerf@ria.army.mil](mailto:cromerf@ria.army.mil) and [jennings@ria.army.mil](mailto:jennings@ria.army.mil)

Postal:US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND(SBCCOM)

ATTN:AMSSB-RSO-ADM(RI), CDE QA CELL,BLDG.62,ROCK ISLAND,IL 61299-7390

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APPROVED BY: STEPHEN J HANSEN, SDMO, AMSTA-AR-QAD

DATE: 08/02/2001

## SECTION C:

TDPL: EA-PRF-2168 DATED: 06 Mar 01 END ITEM: Improved Chemical Agent Monitor

NSN: 5998-01-383-4219

PART: EA-PRF-2168

NOMEN: Printed Circuit Board

PRON(s): C21AAWXX

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See attached Statement of Work (SOW) for performance requirements.

The following engineering exceptions apply to this TDPL, and shall be incorporated into solicitations/contracts for the above listed PRON(s):

I. Unless otherwise specified, the issues of the specifications and standards which are DOD adopted shall be those listed in the issue of the DODISS which is dated (6 Mar 01) with no supplements. Unless otherwise specified, the issues of specifications and standards not listed in the DODISS shall be the issue of the non-government specifications and standards which is current on (6 Mar 01).

II. The following engineering exceptions apply to TDPL EA-PRF-2168:

1. Add Amendment 1 to EA-PRF-2168.
2. Add drawings:

PEA-PRF-2168

III. Government Furnished Equipment:

1. Three (3) Improved Chemical Agent Monitor (NSN 6665-01-357-8502) and associated TM (TM 3-6665-343-10).

IV. The following distribution and warning statements applies to all drawings, parts lists listed on TDPL EA-PRF-2168:

Note: Distribution Statement C. Distribution authorized to U.S. Government agencies and their contractors to protect technical data. This determination was made on 18 July 2001. The controlling DOD office is: Commander, U.S. Army Soldier Biological Chemical Command, ATTN: AMSSB-RSO(RI), Rock Island, IL 61299-7390.

Warning - This TDP contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C. sec 2751, et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C., App 2401 et seq. Violation of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DOD Directive 5230.25.

**NOTICE TO ACCOMPANY THE DISSEMINATION OF EXPORT-CONTROLLED TECHNICAL DATA**

1. Export of information contained herein, which includes, in some circumstances, release to foreign nationals within the United States, without first obtaining approval or license from the Department of State for items controlled by the International Traffic in Arms Regulation (ITAR), or the Department of Commerce for items controlled by the Export Administration Regulations (EAR), may constitute a violation of law.
2. Under 22 U.S.C. 2778 the penalty for unlawful export of items or information controlled under the ITAR is up to 2 years imprisonment, or a fine of \$100,000, or both. Under 50 U.S.C., Appendix 2401, the penalty for unlawful export of items or information controlled under the EAR is a fine of up to \$1,000,000, or five times the value of the exports, whichever is greater; or for an individual, imprisonment of up to 10 years, or a fine of up to \$250,000, or both.

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3. In accordance with your certification that establishes you as a "certified US contractor, unauthorized dissemination of this information is prohibited and may result in disqualification as a certified US contractor, and may be considered in determining your eligibility for future contracts with the Department of Defense.
  4. The US Government assumes no liability for direct patent infringement, or contributory patent infringement or misuse of technical data.
  5. The US Government does not warrant the adequacy, accuracy, currency, or completeness of the technical data.
  6. The US Government assumes no liability for loss, damage, or injury resulting from manufacture or use for any purpose of any product, article, system, or material involving reliance upon any or all technical data furnished in response to the request for technical data.
  7. If the technical data furnished by the Government will be used for commercial manufacturing or other profit potential, a license for such use may be necessary. Any payments made in support of the request for data do not include or involve any license rights.
  8. A copy of this notice shall be provided with any partial or complete reproduction of these data that are provided to qualified US contractors.

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NAME (POC): Phillip Thompson OFFICE: AMSSB-RSO-MAD (RI)

PHONE: DSN 793-1933 MYLARS REQUIRED: N

DATE: 18 July 01

RESUBMITTAL:   N   RATIONALE:

# **Statement of Work**

## **Printed Circuit Board f/ Improved Chemical Agent Monitor (ICAM)**

### **C.1.0 Scope**

The contractor shall manufacture the Printed Circuit Board in strict compliance with Performance Purchase Description EA-PRF-2168.

### **C.2.0 Applicable Documents**

EA-PRF-2168  
PEA-PRF-2168 (reference only)  
MIL-STD-129  
MIL-STD-461  
MIL-STD-810E  
MIL-STD-2073-1  
ANSI/ASQC Q90 (ISO 9000)  
ANSI/ASQC Q91 (ISO 9001)  
ANSI/ASQC Q94 (ISO 9004)  
MIL-HDBK-304  
ASTM D 4919  
EA-C-1793  
5-15-19251  
5-15-17020  
442-484  
442-485  
442-486  
442-493  
442-559  
MIL-STD-973 (reference only)

### **C.3.0 Requirements**

The contractor, as an independent contractor and not as an agent of the Government, shall provide the necessary services, personnel, labor, facilities, materials, supplies, and equipment (except those specifically designated as Government furnished equipment/material) to perform the following:

#### **C.3.1 Manufacturing**

**C.3.1.1 Printed Circuit Board.** The contractor shall manufacture Printed Circuit Boards (including First Article) in strict compliance with Performance Specification EA-PRF-2168 and all of the documents cited therein, respectively. The contractor shall manufacture all items using the same manufacturing methods, materials, tooling, test equipment, test procedures and facilities planned for use in production.

C.3.1.2 Government Furnished Equipment. The Government shall furnish three (3) Improved Chemical Agent Monitors and its associated technical manuals as required by EA-PRF-2168 if the successful bidder has or can obtain the required NRC license.

### C.3.2 Engineering Management

C.3.2.1 Engineering Data and Specifications. The contractor shall establish, maintain, and make available for Government review at the contractor's facility all engineering drawings, parts lists, product specifications, manufacturing process procedures, unique quality control procedures, packaging instructions, and lists of suppliers and manufacturers used by the contractor to manufacture the Printed Circuit Board.

C.3.2.2 Final TDP Delivery. The contractor shall copy and submit all engineering drawings, parts lists, product specifications, manufacturing process procedures, unique quality control procedures, packaging instructions, and lists of suppliers and manufacturers used by the contractor to manufacture the Printed Circuit Board.

### C.3.2.3 Configuration Management.

C.3.2.3.1 Configuration Management Plan (CMP). The contractor shall implement and maintain a configuration management plan throughout the life of the contract. MIL-STD-973 contains relevant configuration management information that may be useful to the contractor. The contractor shall obtain the written approval of the PCO prior to the implementation of the CMP and any subsequent changes.

C.3.2.3.2 Requests for Deviation, Requests for Waiver, Engineering Change Proposal and Notice of Revision.

C.3.2.3.2.1 The contractor shall prepare and submit Requests for Deviation and Requests for Waiver for any performance requirements.

C.3.2.3.2.2 The Government will maintain formal configuration control of all performance specifications and configuration drawings referenced in Section C.3.1.

C.3.2.3.2.3 All engineering changes against items under Government Configuration Control shall be documented on an engineering change proposal and notice of revision, in Government or contractor format, and submitted to the Government for approval in accordance with the approved CMP.

### C.3.2.3.3 Configuration Control Board (CCB).

C.3.2.3.3.1 The contractor shall establish and implement the use of a CCB to review engineering changes and recommend appropriate action prior to implementation.

C.3.2.3.3.2 The contractor shall provide the Government at least ten (10) days notice prior to convening the CCB so that if the Government chooses, a representative may participate. The contractor shall provide the Government with the engineering change proposal and a notice of revision at least ten (10) days prior to convening the CCB.

C.3.2.3.3.3 If the contractor generates a change against an item that is under Government Configuration Control, the contractor shall provide an engineering change proposal and notice of revision, in Government or contractor format, at least ten (10) days prior to the Government convening the CCB. No engineering changes shall be implemented without Government approval.

C.3.2.3.4 Material Review Board (MRB).

C.3.2.3.4.1 The contractor shall establish and implement the use of a MRB to determine the acceptance status of nonconforming parts and material used in fabrication of the Printed Circuit Boards throughout the life of the contract.

C.3.2.3.4.2 The contractor shall provide the Government at least ten (10) days notice prior to convening the MRBs so if the Government chooses, a representative may participate.

C.3.2.3.4.3 If as a result of the MRB a change is generated against an item that is under Government Configuration Control, the contractor shall provide an engineering change proposal and notice of revision, in Government or contractor format, at least ten (10) days prior to the Government convening the CCB. The contractor shall participate on the Government CCB. No engineering changes shall be implemented without Government approval.

C.3.3 Serialization and Markings.

C.3.3.1 Serial Numbers. None.

C.3.3.2 Markings, Tags and Identification Plates.

C.3.3.2.1 The contractor shall insure that markings, tags or identification plates on the systems are consistently located on the exterior of the systems, securely attached or marked, uniform in shape and size, legible, and visible to the naked eye.

C.3.3.2.2. The contractor shall ensure that the information placed on the systems does not degrade systems performance.

C.3.4 Packaging

C.3.4.1 Special Packaging Instructions (SPIs).

C.3.4.1.1. The contractor shall package all parts entering the military distribution system in accordance with SPIs.

C.3.4.1.1.1 The contractor may utilize the Government SPIs provided for information purposes, modify the Government SPIs, or develop and use contractor SPIs for military packaging.

C.3.4.1.1.1.1 If the contractor elects to use the Government furnished SPIs, packaging validation testing is not required.

C.3.4.1.1.1.2 If the contractor elects to develop and use contractor SPIs, or if the Government furnished SPIs are modified, the contractor shall perform packaging validation testing to ensure that the packaging meets or exceeds the requirements cited on the Government furnished SPIs.

C.3.4.1.1.1.3 All changes shall be documented on an Engineering Change Proposal (ECP) and Notice of Revision (NOR) in contractor's format, and submitted to the Government for approval in accordance with C.3.3 Configuration Management.

C.3.4.1.1.1.3.1 If packaging validation testing is required, the contractor shall prepare and submit a Packaging Test Plan. The contractor shall conduct packaging testing in accordance with this contract.

C.3.4.1.1.1.3.2 The contractor shall submit copies of the modified Government SPIs or contractor developed SPIs to the Government within 30 days of the completion of the packaging testing.

C.3.4.2 Preservation, Unit Packing, Packing, Unitization and Marking.

C.3.4.2.1 The generic term packaging, shall include preservation, unit packing, packing, unitization, and marking. All items going into the military distribution system (as set forth in Section F, Deliveries) require military packaging, as defined in MIL-STD-2073-1. Items not going into military stock shall be packaged in accordance with standard commercial practices and shall be received at the final destination undamaged and in useable condition.

C.3.4.2.2 The packaging for the Printed Circuit Board shall be military packaging, in accordance with the detailed requirements of MIL-STD-2073-1.

C.3.4.2.3 The contractor shall use, where practicable, advanced technology or innovative methods and materials for shipment and storage, for the purpose of effecting packaging economies. As a reference, the contractor may use MIL-STD-2073-1 – Standard Practice for Military Packaging; MIL-STD-129-Standard Practice, Marking for Shipment and Storage; and MIL-HDBK-304 – Packaging Cushioning Design, in the development of acceptable materials, containers, and processes for packaging. These documents may also be used for determining methods for preservation, unit packing, packing, unitization, and marking; procedures required to select packaging materials for packaging designs; and guidance in the preparation of packaging requirements expressed in the SPIs, and packaging drawings.

C.3.4.2.4 Protection. The contractor shall design all military packaging to provide unit protection in the Level A shipping configuration during shipment, handling and storage in accordance with the above work definition and MIL-STD-2073-1. The following storage and packaging rough handling conditions shall be met:

C.3.4.2.4.1 Storage. The contractor shall provide packaging capable of providing environmental protection to its contents for a period of 9 weeks under the following conditions:

<b>Condition</b>	<b>Parameters</b>
Desert	+160°F ± 2°F
Tropic	+113°F + 2°F 85 + 5% RH
Arctic	-50°F + 2°F
Cyclic	Three cycles, each cycle consisting of 1 week under each of the preceding conditions in sequence

C.3.4.2.4.2 Rough Handling. The contractor shall provide packaging capable of providing protection to its contents under the following rough handling conditions as specified in MIL-STD-810E, conducted sequentially:

<b>Condition</b>	<b>Purpose</b>
Secured Cargo Vibration	Test to simulate transport by truck, rail, aircraft, and ocean
Loose Cargo Vibration	Test to simulate field (off road) transports
Shock (drop)	Test to simulate packaging rough handling

C.3.4.3 Fabrication. The contractor shall fabricate prototypes of the packaging designs and conduct (1) packaging validation testing if required; and (2) packaging first article testing in accordance with the first article packaging inspection requirements as found in Section E of the contract (FAR Clause 52.209-3 Alt. I).

C.3.4.4 Hazardous Material Identification.

C.3.4.4.1 The contractor shall assure that the shipping configuration or container, as applicable, complies with Performance Oriented Packaging (POP), in accordance with Annex 1 Part 7 of the International Maritime Organization – International Maritime Dangerous Goods Code (IMO – IMDGC); Chapter 7 of the International Civil Aviation Organization – Technical Instructions for Safe Transportation of Dangerous Goods by Air (ICAO-TDGA); and 49 Code of Federal Regulation (CFR) Transportation, Parts 107-178 if the end item is or contains a regulated hazardous material.

C.3.4.4.2 The contractor shall design, mark, and certify the packaging in accordance with these documents. The contractor shall conduct all testing in accordance with ASTM D 4919 Testing of Hazardous Materials Packaging.

## C.3.5 QUALITY ASSURANCE SYSTEM

### C.3.5.1 Quality System.

C.3.5.1.1 The contractor shall implement, execute, and maintain a Quality System in accordance with International Standard Operation 9002 (ISO 9002) for the life of this contract.

C.3.5.1.2 The contractor may use an existing Quality System provided it meets acquisition needs and is acceptable to the Government. Registrars Accreditation Board (RAB) certification is not required for the performance of this contract.

C.3.5.2 Quality System Plan (QSP). The contractor shall utilize the QSP submitted in response to this solicitation and approved by the Government at contract award as the baseline for all quality program activities. The contractor shall update the QSP with all comments identified by the Government. The contractor shall make the approved plan available to the Government 30 days after contract award. The contractor shall obtain the written approval of the PCO prior to the implementation of the QSP and any subsequent changes. The contractor shall implement and maintain the QSP throughout the life of this contract.

C.3.5.3 Reduction of Latent or Incipient Defects. The contractor shall implement a process for the reduction of latent or incipient defects in the Printed Circuit Board and its components.

C.3.5.4 First Article Testing (FAT). The contractor shall conduct FAT of the Printed Circuit Board, and applicable military packaging, as defined in Section E of this contract.

C.3.5.4.1 FAT Test Plan. The contractor shall prepare and submit a detailed FAT test plan.

C.3.5.4.2 The contractor shall conduct FAT on twenty-one (21) Printed Circuit Boards. The contractor shall perform FAT in accordance with EA-PRF-2168.

C.3.5.4.3 The contractor shall ensure that all test personnel including subcontractors are knowledgeable on the operation of the CAM and be capable of properly performing the necessary operational checks as required during the conduct of the test.

C.3.5.4.4 The contractor shall package and transport all test hardware to and from all test sites.

C.3.5.4.5 FAT Report

C.3.5.4.5.1 The contractor shall prepare and submit a FAT Report.

C.3.5.4.5.2 The contractor shall include all test data to include but not limited to actual dimensional, physical, and electrical test results.

C.3.5.4.5.3 The contractor shall provide certification of materials and components as an appendix to the FAT Test Report.

C.3.5.5 Production of Printed Circuit Board. The contractor shall not initiate production or fabrication of hardware until all FAT test results have been approved by the Government.

**NOT APPLICABLE TO INTERPLANT SHIPMENTS (A)**

<b>SPECIAL PACKAGING INSTRUCTION(SPI) (A)</b>						NATIONAL STOCK NUMBER 5998-01-383-4219	
NOMENCLATURE <b>PRINTED CIRCUIT BOARD</b>					UI EA	QUP 1	SPI NUMBER (PN) PEA-PRF-2168
Cleaning & Drying shall be in accordance with MIL-STD-2073-1							
UNIT PACK LEVEL A REQUIREMENTS (MIL-STD-2073-1, Method 41)	STEPS	DRAWING OR SPECIFICATION	STYLE	TYPE	GRADE	CLASS	SIZE AND REMARKS (INCHES)
Intimate Wrap	(C)1	MIL-PRF-81705		II		E	12 x 18
Barrier Bag	(D)2	MIL-B-117	I	I		E	6 x 12
Closure	(E)(H)(I)3						Heat Seal
Container	(G)4	PPP-B-1672	D	II	W6c	WR	8 X 12 X 2 1/2
							NSN 8115-00-787-2146
Closure	(G)5	PPP-B-1672					Appendix
INTERMEDIATE PACKAGING AND PACKING <input checked="" type="checkbox"/> In accordance with MIL-STD-2073-1 <input type="checkbox"/> As specified hereon.				MARKING <input checked="" type="checkbox"/> In accordance with MIL-STD-129 (G) <input type="checkbox"/> As specified hereon.			
QUALITY PERFORMANCE AND TESTING REQUIREMENTS <input checked="" type="checkbox"/> In accordance with MIL-STD-2073-1 <input checked="" type="checkbox"/> As specified hereon. <b>SEE NOTE (B)</b>							
Unless otherwise specified, materials shall be minimum size in accordance with MIL-STD-2073-1. Tolerances shall be in accordance with material specifications.							
<b>UNIT PACK LOGISTICS DATA</b> (Weights and Sizes Approximate)							
LEVEL		UNIT PACK WEIGHT	UNIT PACK CUBE	UNIT PACK SIZE (EXTERIOR) FEET			
A		.58 lbs.	.176 cu. ft.	.69 x 1.02 x .25			
REMARKS/ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.							
<p><b>(A) – This SPI is not applicable for Interplant shipments.</b> Packaging and marking for interplant shipment is for supplies and materials that do not directly enter the military supply system. Typical interplant shipments are shipments from a vendor to a subcontractor or a prime contractor, or between contractors and subcontractors, or from a vendor or contractor to a military arsenal, plant, or other activity for evaluation, immediate use, or further processing as specified in the applicable contract.</p> <p><b>(B) – SAMPLING FOR PACKAGING QUALITY PERFORMANCE AND TESTING</b>  <u>First Article</u> – First Article packaging sample shall consist of three unit pack containers and their contents for non-destructive testing and inspection; and three empty unit pack containers for destructive testing, when applicable. The packaging sample shall be taken from the First Article quantity specified in the Quality Assurance Provision (QAP) or Specification.</p> <p><u>Conformance Inspection</u> – Sampling size shall be in accordance with Table II, Attributes Sampling Plans of MIL-STD-1916. For examination and non-destructive tests, Verification level II shall be used. Verification level I shall be used for destructive tests when they are required.</p>							
<b>ITEM DATA</b> (APPROX)		Original Preparer: W.E.Smith		Revised by: R.POOLE		23 APRIL 01	
ITEM SIZE – 10 1/2 x 5 x 3/4 inches.		SBCCOM 81361					
ITEM CODE – Z16, Z47		AMSSB-REN-SS					
ITEM WEIGHT – .28 lbs.		PAGE NUMBER	NUMBER OF PAGES	RP	Z47-0262-002	Z47-114 (B)	17 MAY 01
		1	2	LPK	S4C0708-0079	Z16-060 (A)	7 MAR 94
				APPROVAL	REVISION	DATE	

**SPECIAL PACKAGING INSTRUCTION**NATIONAL STOCK NUMBER  
5998-01-383-4219NOMENCLATURE  
**PRINTED CIRCUIT BOARD**PAGE NUMBER  
2 of 2SPI NUMBER (PN)  
PEA-PRF-2168

- (C)– Wrap circuit board carefully and completely, covering all corners of the item.
- (D)– Place item in specified barrier bag. Notch the bag in accordance with the requirements of MIL-B-117 for class E bags.
- (E)– Trapped air shall be kept to a minimum by compressing the bag or by a mechanical evacuation process to the extent practicable, prior to accomplishing the final heat seal. Do not evacuate to the point of damaging or deforming the item.
- (F)– Supplemental container and closure.
- (G)– Additional marking requirements.
- a. Affix a 2 x 5/8 inch "SENSITIVE ELECTRONIC DEVICE" label to the barrier bag (step 2), prior to assembly and heat sealing, in accordance with the applicable requirements of MIL-STD-129.
- b. The following special markings shall be applied to the interior unit bag in accordance with MIL-STD-129, with lettering being 1/4 inch high +/- 1/32 inch.
- "DO NOT OPEN BAG UNTIL READY TO USE"**
- c. The word "ANTISTATIC" in 3/8 inch high letters to be marked on one end of the unit box, in addition to standard PPP-B-1672 markings.
- d. Attach a "SENSITIVE ELECTRONIC DEVICE" Label, 2 x 2 inch, (NSN 7540-01-109-8815) (optional Form 87) or 4 x 4 inch, (NSN 7540-01-110-4906) (optional Form 87A) to the unit box in accordance with applicable requirements of MIL-STD-129.
- (H)– **Unit pack container leakage.** The barrier bag shall show no sign of leakage, when tested in accordance with MIL-STD-2073-1, Appendix G.
- (I)– **Heat seal seam.** The heat seal seam of the barrier bag shall show no sign of separation when tested in accordance with MIL-STD-2073-1, Appendix G.

**ADDRESS CODE DISTRIBUTION – FOR ECPs/RFDs/RFWs/VECPs  
(Configuration Management)**

Concurrent transmittal of Engineering Change Proposals (ECPs), Requests for Deviation (RFDs), Requests for Waivers (RFWs), or Value Engineering Change Proposals (VECPs) shall be submitted by the Contractors by electronic mail in Microsoft Word 97 format to the following addressees:

- a. POC: Kim-Tuyen Le  
EMAIL: [kimtuyen.le@SBCCOM.APGEA.ARMY.MIL](mailto:kimtuyen.le@SBCCOM.APGEA.ARMY.MIL)
  
- b. POC: Louis Kosydar  
EMAIL: [louis.kosydar@SBCCOM.APGEA.ARMY.MIL](mailto:louis.kosydar@SBCCOM.APGEA.ARMY.MIL)
  
- c. POC: Joyce Klein  
EMAIL: [kleinj@ria.army.mil](mailto:kleinj@ria.army.mil)
  
- d. POC: Phillip Thompson  
EMAIL: [Thompsonp@ria.army.mil](mailto:Thompsonp@ria.army.mil)

## DOCUMENT SUMMARY LIST

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Item: PRINTED CIRCUIT BOARD  
NSN: 5998-01-383-4219  
Control Number/PRON: C21AAWXX

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Identifies all first tier documents (cited in SOW) (applicable DIDs). Also included are all referenced documents (2nd, (includes DID block 10 references), 3<sup>rd</sup> and lower tier) which have been tailored.

### DOCUMENT CATEGORY:

**CATEGORY 0** - Unless otherwise specified in the solicitation, contract, or contract modifications, all documents are for guidance and information only.

**CATEGORY 1** - The requirements contained in the directly cited document are contractually applicable to the extent specified. All referenced documents are for guidance and information only.

**CATEGORY 2** - The requirements contained in the directly cited document and the reference documents identified in the directly cited document are contractually applicable to the extent specified. All subsequently referenced documents are for guidance and information only.

**CATEGORY 3** - Unless otherwise specified in the solicitation, contract or contract modification, all requirements contained in the directly cited document and all reference and subsequently referenced documents are contractually applicable to the extent specified.

Document Number (Contract Reference) Applicable Tailoring	Document Title	Document Date/ Document Category
1a. MIL-STD-973	Configuration Management	17 Apr 92 Cat 2

See section C clause(s) titled: Value Engineering Change Proposals, Engineering Change Proposals, Deviation and/or Ozone-Depleting Substances.

In the application of MIL-STD-973 Paragraphs 5.4.3, 5.4.4 and 5.4.8 apply, and are tailored as follows:

- (1) Page 53, para 5.4.3.4., Delete "a contractor designed form, or a letter" in the first sentence.
- (2) Page 53, para 5.4.3.3.2a., Line 5, add "or size" after "weight".
- (3) Page 53, Delete para 5.4.3.5., and replace by, "Unless otherwise specified in the contract, requests for critical deviations should be approved or disapproved within 30 calendar days of receipt by the Government and for all other deviations within 60 calendar days of receipt by the Government."
- (4) Para 5.4.3.5.1. Minor deviations.  
Line 3. Delete "...by the activity...Class II change" and insert "by the Contracting Officer."
- (5) Page 55, para 5.4.4.3.2a., Line 7, add "or size" after "weight".

(6) Page 56. Delete paragraph 5.4.4.5 and replace by "Unless otherwise specified in the contract requests for critical waivers should be approved or disapproved within 30 calendar days of receipt by the Government and for all other RFWs within 60 calendar days of receipt by the Government."

(7) Para 5.4.4.5.1. Minor waivers.  
 Lines 4 and 5. Delete "...Contract Administration Office (CAO)." Insert "...Configuration Manager and a Government Contracting Officer."

(8) Page 61, para 5.4.8.3.4., in line 6 add "or size" after "weight".

(9) Page 61, Add new para 5.4.8.3.4.1., "An RFD shall be supported by test data and analysis, where appropriate, and provided to support the decision regarding acceptance of the nonconformance."

(10) Page 61, Delete para 5.4.8.3.5. and replace by, "Unless otherwise specified in the contract, deviations are approved and authorized only by the Contracting Officer. Critical deviations should be processed within 30 calendar days of receipt by the Government and all other RFDs processed within 60 calendar days of receipt by the Government."

(11) Page 62, para 5.4.8.4, Delete lines 7 thru 10 and replace with "standard. All RFWs shall be submitted as specified in the contract for approval or disapproval and acceptance or rejection by the authorized Contracting Officer."

(12) Page 62, para 5.4.8.4.4., on line 6 add "or size" after "weight".

(13) Page 62, Add new para 5.4.8.4.4.1., "an RFW shall be supported by test data and analysis, where appropriate, and provided to support the decision regarding acceptance of the nonconformance."

1b. Interim Notice 3 (DO)	Configuration Management	13 Jan 95 Cat 2
1c. DI-CMAN-80639B (seq A001)	Engineering Change Proposal	13 Jan 95 Cat 2
1d. DI-CMAN-80640B (seq A002)	Request for Deviation	13 Jan 95 Cat 2
1e. DI-CMAN-80641B (seq A003)	Request for Waiver	13 Jan 95 Cat 2
1f. DI-CMAN-80642B (seq A004)	Notice of Revision	13 Jan 95 Cat 2

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2. ANSI/ISO/ASQC Q9002	Model for Quality Assurance in Production, Installation & Servicing	18 Jul 94
	OR	
ANSI/ISO/ASQC Q9001-2000	American National Standard Quality management systems- Requirements	13 Dec 00

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3a. NCSL Z540-1 (ES7010)	General Requirements for Calibration Laboratories and Measuring and Test Equipment OR	30 Aug 94
ISO 10012-1 (ES7010)	Quality Assurance Requirements for Measuring Equipment, Part 1: Metrological Confirmation System	1992
3b. DI-QCIC-81006 (DD Form 1423)	Special Inspection Equipment Descriptive Documentation	11 Sep 89 Cat 1

# TECHNICAL STATEMENTS, CERTIFICATIONS & APPROVAL CLASS I OZONE DEPLETING CHEMICALS (ODC)

## PART I

A technical evaluation of Start Number C21AAWXX, P/N EA-PRF-2168, Printed Circuit Board, was performed on 20 July 2001, and I do hereby state to the contracting officer that to the best of my knowledge and belief:

- \_\_\_ 1. The above referenced procurement request is for a commercial item. Therefore, no review for ODC was performed.
- XX 2. Based on a comparison of the specifications and standards contained in this SN and the DOD list of Military specifications and standards that call out the use of Ozone Depleting Chemicals (ODC), I have found no specifications or standards that require the use of a class I Ozone Depleting Chemical (ODC) or a requirement for the use of such a substance or that can be met only through use of such a substance.
- \_\_\_ 3. Replacement substances or alternate technologies have been incorporated where applicable; therefore, this SN no longer contains any class I ODC or contractual requirements that can be met only by use of such a substance. These changes have been identified to the contracting officer in writing for inclusion in the solicitation Section C or the purchase description as changes to the appropriate technical documents. If this action is a modification or extension to an existing contract awarded before 1 June 1993 and meets the ODC review criteria, the ODC substitutes or alternate technology will result in an estimated ODC avoidance of \_\_\_ pounds. (List pounds saved for each substitute used in modifications to existing contracts awarded before 1 June 1993)
- \_\_\_ 4. This SN contains the following specification or standard that require the use of class I ODC or requirements that can only be met by use of such a substance:  
(LIST OF ODC REQUIREMENT(s)) (ESTIMATED POUNDS of ODC)

NAME: Phillip Thompson ORGANIZATION: AMSSB-RSO-MAD (RI) DATE: 20 July 2001  
(Technical Evaluator/Reviewer)

If block 4 is checked, the approval pursuant to Section 326, Public Law 102-484 is provided below.)

I hereby certify to the approving official that a suitable substitute or alternative technology for the class I ODS is not currently available.

NAME \_\_\_\_\_ ORGANIZATION \_\_\_\_\_ DATE \_\_\_\_\_  
(Approved Technical Representative)

## PART II

### APPROVAL:

Based upon the above certification of the appropriate technical representative, I hereby approve the use of specifications and standards that require the use of a class I ozone depleting substance since a suitable substitute is not currently available.

NAME \_\_\_\_\_ TITLE \_\_\_\_\_  
(Senior Approval Official)

ORGANIZATION \_\_\_\_\_ DATE \_\_\_\_\_

## STATEMENT OF WORK - OZONE DEPLETING CHEMICALS

1. a. The following specifications and standards may be listed and included as part of this Technical Data Package (TDP)/Scope of Work (SOW):

MIL-STD-129

MIL-B-117

FED-STD-101

PPP-C-186

MIL-STD-2073-1

- b. Other specifications and standards, which identify ODCs among alternative substances for use, are part of this TDP/SOW as follows:

- c. The above specifications and standards allow the optional use of Ozone Depleting Substances (ODS) or Ozone Depleting Chemicals (ODC). Preference should be given to the Non-ODS/ODC choices in compliance with Executive Order 12843, dated April 21, 1993, "Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances".

2. Other specifications and standards containing ODS/ODC materials and included in this TDP for which a substitute is provided are as follows:

N/A

3. Other specifications and standards included in this TDP that specify use of an ODS/ODC and have been approved for use are as follows:

N/A

4. NOTE: Offerers are requested, although not obligated, to perform their own screening of the TDP specifications and standards or SOW and identify any additional potential ODS/ODC to the contracting officer.

DAAE20-02-R-0010

PRICING EVALUATION SUMMARY

CLIN 0001AA

NSN: 5998-01-383-4219

Printed Circuit Board

Estimated Order Quantity: Requirement

Ordering Period 1

Ordering Period 2

Ordering Period 3

Ordering Period 4

Ordering Period 5

First Article Test \$

Range	Unit Price	Wgt								
100 - 200		10%		10%		70%		70%		10%
201 - 300		70%		70%		10%		10%		70%
301 - 400		10%		10%		10%		10%		10%
401 - 500		10%		10%		10%		10%		10%

Weighted Total:

Weighted Total for the Entire Proposal:

1. This will be an all or none procurement. Contractor's failing to bid on all years, and all ranges may be disqualified.
2. If appropriate, the First Article Test cost will be added to Ordering Period 1 as part of the evaluated price.
3. For evaluation purposes, the Government has weighted the ranges based on the likelihood that if an order is placed, it will be placed in that particular range. An evaluation price for each year will be calculated by multiplying the offered unit prices by their respective weights and minimum quantities for each range and adding them together.
4. A total evaluation price will be determined by adding the adjusted totals on all years.