

SECTION C:

TDPL: 442-032 DATED: 27 JAN 00 END ITEM: Chemical Agent Monitor
 NSN: 4320-01-382-3205 PART: 442-032 (EA-PRF-1576)
 NOMEN: Pump, Rotary PRON(s): C10AAJ01

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

The following engineering exceptions apply to TDPL 442-032, which is for reference only:

1. On the TDPL, make the following changes:

a. Add the following specifications:

PD EA-C-1579
 QQ-A-250
 QQ-A-250/8
 QQ-A-250/11
 PPP-C-76
 PPP-C-1752
 MIL-B-117
 MIL-C-5541
 MIL-P-116
 MIL-STD-129
 MIL-STD-252
 MIL-STD-2073-1
 ASTM B209
 ASTM D3951

b. Add SPI P442-032, Rev B

c. Delete the following drawings:

442-021
 442-031
 442-070
 442-1901
 442-301
 442-307
 442-377
 442-654
 442-656
 442-666
 442-667

NAME (POC): Dennis Morrow OFFICE: AMSSB-RSO-MAD (RI)

PHONE: DSN 793-7154 MYLARS REQUIRED: N

DATE: 16 Apr 00

RESUBMITTAL: N RATIONALE:

AMC CODE: 1G

SECTION C:

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NOMEN: Pump, Rotary PRON(s): C10AAJ01

2. On 5-15-17057 and 5-15-17136:
Add 442-678 in next assembly block.
3. On SPI 442-032, pages 3 and 4:
Change NSN to 4320-01-382-3205
4. On 442-030, Zone C2-3, change:
From: 442-032
To: EA-PRF-1576
5. Government Furnished Equipment. The Government shall furnish one (1) Chemical Agent Monitor and its associated technical manuals as required by EA-PRF-1576.

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6. The following warning statement applies to all drawings, parts lists listed on TDPL 442-032 and EA-PRF-1576:

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.

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PHONE: DSN 793-7154 MYLARS REQUIRED: N

DATE: 16 Apr 00

RESUBMITTAL: N RATIONALE:

Statement of Work

Rotary Pump f/ Chemical Agent Monitor (CAM)

C.1.0 Scope

The contractor shall manufacture the Rotary Pump in strict compliance with Performance Purchase Description EA-PRF-1576.

C.2.0 Applicable Documents

EA-PRF-1576
EA-C-1793
5-15-19256
TDP 442-032 (reference only)
442-1033
ASTM D3953
MIL-P-116
MIL-P-117
MIL-STD-129
MIL-STD-461
MIL-STD-462
MIL-STD-810E
MIL-STD-2073-1
MIL-B-81705
PPP-B-1672
SD-14
ANSI/ASQC Q90 (ISO 9000)
ANSI/ASQC Q91 (ISO 9001)
ANSI/ASQC Q94 (ISO 9004)
FED-STD-313

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 Rotary Pump. The contractor shall manufacture rotary pumps (including First Article) in strict compliance with Performance Specification EA-PRF-1576, 5-15-19256, 442-1033, 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 one (1) Chemical Agent Monitor and its associated technical manuals as required by EA-PRF-1576 if the successful bidder has or can obtain the required NRC license. The Government shall provide the CAM(s) for FAT if the successful bidder can not 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 rotary pump.

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 rotary pump.

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 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 rotary pumps 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. The contractor shall mark the rotary pumps with a sequential serial number. Serial numbers will be provided by the Government upon contractor award.

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 rotary pump 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:

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:

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 rotary pump and its components.

C.3.5.4 First Article Testing (FAT). The contractor shall conduct FAT of the rotary pump, 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) rotary pumps. The contractor shall perform FAT in accordance with EA-PRF-1576.

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.3.5.4.1 The contractor shall prepare and submit a FAT Report.

C.3.5.4.2 The contractor shall include all test data to include but not limited to actual dimensional, physical, and electrical test results.

C.3.5.4.3 The contractor shall provide certification of materials and components as an appendix to the FAT Test Report.

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