

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. _____ **B. EXHIBIT** _____ **C. CATEGORY:**
TDP _____ TM _____ OTHER MISC

D. SYSTEM/ITEM 1377-01-052-8206ES* **E. CONTRACT/PR NO.** FD2020-16-69031 **F. CONTRACTOR** _____

1. DATA ITEM NO. A001 **2. TITLE OF DATA ITEM** Ammunition Data Card (ADC) **3. SUBTITLE** _____

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80043B **5. CONTRACT REFERENCE** Airmunitions Specification **6. REQUIRING OFFICE** AFLCMC/EBHJ

| | | | | | | |
|-----------------------------------|---|--------------------------------------|--|-------------------------|------------------|-------|
| 7. DD 250 REQ <u>SD</u> | 9. DIST STATEMENT REQUIRED <u>B</u> | 10. FREQUENCY <u>ASREQ</u> | 12. DATE OF FIRST SUBMISSION <u>BLK 16</u> | 14. DISTRIBUTION | | |
| 8. APP CODE <u>A</u> | | 11. AS OF DATE <u>N/A</u> | 13. DATE OF SUBSEQUENT SUBMISSION <u>ASREQ</u> | a. ADDRESSEE | b. COPIES | |
| | | | | | Draft | Final |
| | | | | | Reg | Repro |

16. REMARKS
BLK 7: The electronic receiving report shall be annotated with the Lot Number, National Stock Number and Nomenclature. The electronic receiving report shall also be annotated to reflect if additional submittals are to be furnished or if this is the final submittal of data. The electronic receiving report shall be used only for this data item; do not combine other data item submittals with this requirement. Electronic receiving report required via internet Wide Area Work Flow (WAWF) at: <https://wawf.eb.mil>.

BLK 9: DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government agencies only, (Administrative/Operational Use) (Date of Contract Award). Other requests shall be referred to AFLCMC/EBHJ.

WARNING - This document 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-control laws is subject to severe criminal penalties. Dissemination of this document is controlled under DoD Directives 5230.25.

DESTRUCTION NOTICE - Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

BLK 10,12,13: Submit after successful Lot Acceptance Test and prior to delivery of each production lot.

BLK 14: A sample ADC or "draft" will be generated and submitted for each part number/NSN produced under this contract using the Worldwide Ammunition-data Repository Program (WARP) system to ensure general format and content is acceptable prior to final ADC submittals. Sufficient hard copies of final version ADCs shall be generated for each individual production lot from the Worldwide Ammunition-data Repository Program (WARP) such that at least one hard copy per production lot shall be provided with each individual CLIN shipment/destination. An electronic copy for each production lot shall be submitted/uploaded with the electronic receiving report through WAWF to AFLCMC/EBHJ using DoDAAC FA8213.

*1377-01-368-5411ES.

FOB DESTINATION
EBE 15-177-006
Robert W. Morgan, Jr., AFLCMC/EBHEC, 777-5126

15. TOTAL → 0 3 0

| | | | |
|--|-------------------------------|--|-------------------------------|
| G. PREPARED BY MORGAN.ROBERT.WE SLEY.JR.1158190040 <small>Digitally signed by MORGAN.ROBERT.WESLEY.JR.1158190040 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=MORGAN.ROBERT.WESLEY.JR.1158190040 Date: 2015.06.30 13:54:23 -06'00'</small> | H. DATE 30 JUN 2015 | I. APPROVED BY HARGROVE.ERIC.V.1167 016843 <small>Digitally signed by HARGROVE.ERIC.V.1167016843 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=HARGROVE.ERIC.V.1167016843 Date: 2015.06.30 14:09:06 -06'00'</small> | J. DATE 30 JUN 2015 |
|--|-------------------------------|--|-------------------------------|

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

CONTRACT DATA REQUIREMENTS LIST
(1 Data Item)

Form Approved
OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. Please do not return your form to the above organization. Send completed form to the Government Issuing Contracting Officer for the Contract/PR No. listed in Block E.

A. CONTRACT LINE ITEM NO. _____ **B. EXHIBIT** _____ **C. CATEGORY:**
TDP _____ TM _____ OTHER NDTI

D. SYSTEM/ITEM 1377-01-052-8206ES* **E. CONTRACT/PR NO.** FD2020-16-69031 **F. CONTRACTOR** _____

1. DATA ITEM NO. A005 **2. TITLE OF DATA ITEM** Test/Inspection Report **3. SUBTITLE** Lot Acceptance Test

4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-80809B **5. CONTRACT REFERENCE** Airmunitions Specification **6. REQUIRING OFFICE** AFLCMC/EBHJ

| | | | | | | |
|----------------------------|-----------------------------------|-------------------------------|---|-------------------------|-----------|-------|
| 7. DD 250 REQ DD | 9. DIST STATEMENT REQUIRED | 10. FREQUENCY ASREQ | 12. DATE OF FIRST SUBMISSION BLK 16 | 14. DISTRIBUTION | | |
| 8. APP CODE N/A | B | 11. AS OF DATE N/A | 13. DATE OF SUBSEQUENT SUBMISSION ASREQ | a. ADDRESSEE | b. COPIES | |
| | | | | | Draft | Final |
| | | | | | Reg | Repro |

16. REMARKS

BLK 4: Contractor format is acceptable.

BLK 7: The electronic receiving report shall be annotated with the Lot Number, National Stock Number and Nomenclature. Electronic receiving report required via internet Wide Area Work Flow (WAWF) at: <https://wawf.eb.mil>. The electronic receiving report shall be used only for that data item; do not combine other data item submittals with this requirement.

BLK 9: DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government agencies only, (Administrative/Operational Use) (Date of Contract Award). Other requests shall be referred to AFLCMC/EBHJ.

WARNING - This document 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-control laws is subject to severe criminal penalties. Dissemination of this document is controlled under DoD Directive 5230.25.

DESTRUCTION NOTICE - Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

BLK 10,12,13: Submit within 30 calendar days after completion of each Lot Acceptance Test.

BLK 14: Report shall be in Microsoft Office software or PDF format. Submit through WAWF, DoDAAC, FA8213 as well as the Worldwide Ammunition-Data Repository Program (WARP) system. Submit hard copy via regular mail to:

Indian Head Division, NSWC
CAD/PAD Department
4393 Benson Road - Suite 120
Indian Head, MD 20640-5092

*1377-01-368-5411ES.

FOB DESTINATION
EBE 15-177-006
Robert W. Morgan, Jr., AFLCMC/EBHEC, 777-5126

| | | | |
|------------------|---|---|---|
| 15. TOTAL | 0 | 3 | 0 |
|------------------|---|---|---|

17. PRICE GROUP

18. ESTIMATED TOTAL PRICE

G. PREPARED BY MORGAN.ROBERT.WE SLEY.JR.1158190040 Digitally signed by MORGAN.ROBERT.WESLEY.JR.1158190040 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=MORGAN.ROBERT.WESLEY.JR.1158190040 Date: 2015.07.07 08:39:04 -0600

H. DATE 30 JUN 2015

I. APPROVED BY HARGROVE.ERIC.V.1167016843 Digitally signed by HARGROVE.ERIC.V.1167016843 DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=HARGROVE.ERIC.V.1167016843 Date: 2015.07.07 08:55:51 -0600

J. DATE 30 JUN 2015

INSTRUCTIONS FOR COMPLETING DD FORM 1423

(See DoD 5010.12-M for detailed instructions.)

FOR GOVERNMENT PERSONNEL

Item A. Self-explanatory.

Item B. Self-explanatory.

Item C. Mark (X) appropriate category: TDP - Technical Data Package; TM - Technical Manual; Other - other category of data, such as "Provisioning," "Configuration Management," etc.

Item D. Enter name of system/item being acquired that data will support.

Item E. Self-explanatory (to be filled in after contract award).

Item F. Self-explanatory (to be filled in after contract award).

Item G. Signature of preparer of CDRL.

Item H. Date CDRL was prepared.

Item I. Signature of CDRL approval authority.

Item J. Date CDRL was approved.

Item 1. See DoD FAR Supplement Subpart 4.71 for proper numbering.

Item 2. Enter title as it appears on data acquisition document cited in Item 4.

Item 3. Enter subtitle of data item for further definition of data item (optional entry).

Item 4. Enter Data Item Description (DID) number, military specification number, or military standard number listed in DoD 5010.12-L (AMSDL), or one-time DID number, that defines data content and format requirements.

Item 5. Enter reference to tasking in contract that generates requirement for the data item (e.g., Statement of Work paragraph number).

Item 6. Enter technical office responsible for ensuring adequacy of the data item.

Item 7. Specify requirement for inspection/acceptance of the data item by the Government.

Item 8. Specify requirement for approval of a draft before preparation of the final data item.

Item 9. For technical data, specify requirement for contractor to mark the appropriate distribution statement on the data (ref. DoDD 5230.24).

Item 10. Specify number of times data items are to be delivered.

Item 11. Specify as-of date of data item, when applicable.

Item 12. Specify when first submittal is required.

Item 13. Specify when subsequent submittals are required, when applicable.

Item 14. Enter addressees and number of draft/final copies to be delivered to each addressee. Explain reproducible copies in Item 16.

Item 15. Enter total number of draft/final copies to be delivered.

Item 16. Use for additional/clarifying information for Items 1 through 15. Examples are: Tailoring of documents cited in Item 4; Clarification of submittal dates in Items 12 and 13; Explanation of reproducible copies in Item 14.; Desired medium for delivery of the data item.

FOR THE CONTRACTOR

Item 17. Specify appropriate price group from one of the following groups of effort in developing estimated prices for each data item listed on the DD Form 1423.

a. Group I. Definition - Data which is not otherwise essential to the contractor's performance of the primary contracted effort (production, development, testing, and administration) but which is required by DD Form 1423.

Estimated Price - Costs to be included under Group I are those applicable to preparing and assembling the data item in conformance with Government requirements, and the administration and other expenses related to reproducing and delivering such data items to the Government.

b. Group II. Definition - Data which is essential to the performance of the primary contracted effort but the contractor is required to perform additional work to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, or quality of the data item.

Estimated Price - Costs to be included under Group II are those incurred over and above the cost of the essential data item without conforming to Government requirements, and the administrative and other expenses related to reproducing and delivering such data item to the Government.

c. Group III. Definition - Data which the contractor must develop for his internal use in performance of the primary contracted effort and does not require any substantial change to conform to Government requirements with regard to depth of content, format, frequency of submittal, preparation, control, and quality of the data item.

Estimated Price - Costs to be included under Group III are the administrative and other expenses related to reproducing and delivering such data item to the Government.

d. Group IV. Definition - Data which is developed by the contractor as part of his normal operating procedures and his effort in supplying these data to the Government is minimal.

Estimated Price - Group IV items should normally be shown on the DD Form 1423 at no cost.

Item 18. For each data item, enter an amount equal to that portion of the total price which is estimated to be attributable to the production or development for the Government of that item of data.

These estimated data prices shall be developed only from those costs which will be incurred as a direct result of the requirement to supply the data, over and above those costs which would otherwise be incurred in performance of the contract if no data were required. The estimated data prices shall not include any amount for rights in data. The Government's right to use the data shall be governed by the pertinent provisions of the contract.

CAD/PAD Item Marking Instruction

Prepared By
CAD/PAD Joint Program Office

AFLCMC/EBHJ
Code E211B, NSWC Indian Head

Version 1.2

Dated 4 Nov 2014



Table of Contents

| | |
|----------------------------------|--------|
| 1. Purpose | Page 4 |
| 2. Scope | Page 5 |
| 3. Marking Requirements | Page 6 |
| 4. Placement of UID Markings | Page 8 |
| 5. Items delivered in kit format | Page 9 |
| 6. Waivers | Page 9 |

References

NOTE: Use latest revision of all reference documents.

1. **MIL-STD-130** Department of Defense Standard Practice Identification Marking of U.S. Military Property
2. **MIL- STD-1168 (current revision)** Ammunition Lot Numbering and Ammunition Data Card
(Note section 3.1 for new lot assignment for “remanufactured CAD/PAD Components”)
3. **ISO/IEC 16022** Information technology - International symbology specification - Data Matrix
4. **ISO/IEC 15434** Information technology - International symbology specification - Syntax for high capacity ADC media
5. **ISO/IEC 15418** Information technology - International symbology specification - EAN/UCC Application Identifiers and FACT Data Identifiers and Maintenance (Note: Data Identifier dictionary with technical content is contained in ANS MH10.8.2)
6. **UNDER SECRETARY OF DEFENSE FOR ACQUISITION POLICY AND TECHNOLOGY** Department of Defense Guide to Uniquely Identifying Items version 1.6 (this document is available on line at <http://www.acq.osd.mil/dpap/pdi/uid/index.html> or from Defense Procurement & Acquisition Policy, 3060 Defense Pentagon, Room 3E1044, Washington, DC 20301-3060)
7. **DEFENSE FEDERAL ACQUISITION REGULATION SUPPLEMENT 252.211-7003** Item Identification and Valuation (Copies of this document are available on line at <http://farsite.hill.af.mil/> or from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954)
8. **AFSCM 21-556 Vol. 2** Julian Date format
9. **ANS MH10.8.2 - 2006** Data Identifier and Application Identifier Standard
10. **ANS MH10.8.7 - 2005** Labeling and Direct Product Marking with Linear Bar Code and Two-Dimensional Symbols

Figures

1. Determining IUID requirement
2. Sample UID Data Stream
3. Sample CAD/PAD Data Plate/Label
4. Sample of Etched Data
5. Sample CAD/PAD Small Item Data Plate/Label

1. Purpose.

The Under Secretary of Defense has implemented policy requiring DoD components meeting the requirements identified in Figure 1 to be marked with **Item Unique Identifiers (IUID)**. Cartridge Actuated Devices and Propellant Actuated Devices (CAD/PAD) items, regardless of dollar value, are typically serially managed in aircraft maintenance data systems and therefore are applicable to the IUID requirement.

Additionally, the Air Force Aircrew Escape System Executive Working Group (AESEWG) and the egress system maintenance community has requested that CAD/PAD items be marked with Data Matrix ECC 200 on item data plates or items to enhance accuracy of aircraft maintenance data.

In accordance with MIL-STD-130, this marking instruction identifies marking requirements that meet the above objectives by tailoring Unique Identification (UID) requirements to include aircraft maintenance data requirements for both free text Human Readable Information (HRI) and Machine Readable Information (MRI), which are both mandated requirements for CAD/PAD items.

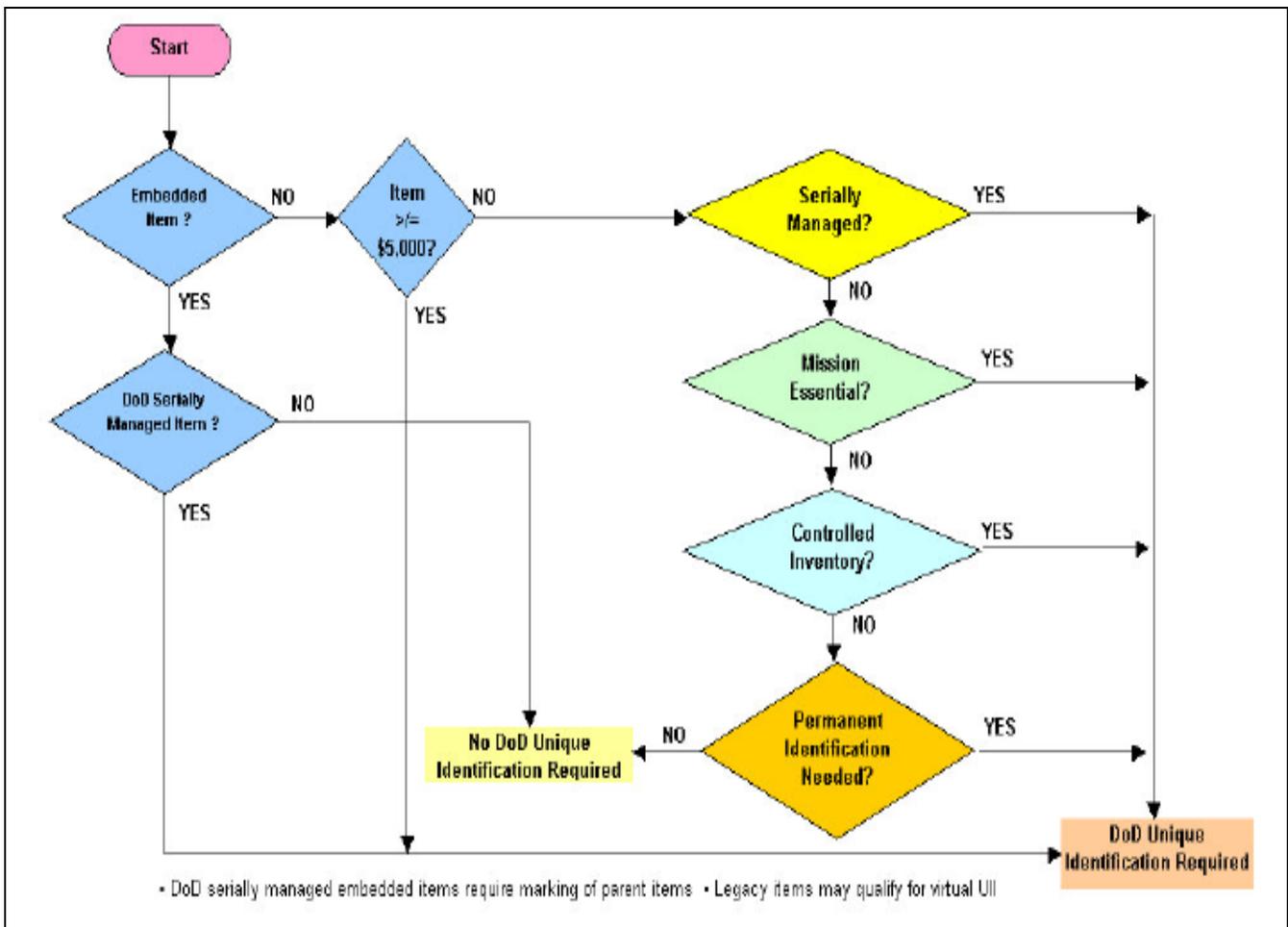


Figure 1. Determining UID Requirement

2. SCOPE.

This instruction identifies marking requirements applicable to suppliers/manufacturers of CAD/PAD components. It is applicable to both production of new CAD/PAD components and remanufacture of service returned, over-aged components. It identifies marking methods applicable to the various sizes and shapes of CAD/PAD components.

As of this writing, guidance regarding mandated transfer of data to the IUID registry can be found at "<http://www.acq.osd.mil/dpap/pdi/uid/index.html>". Go to Training and Communication link, select IUID Toolkit (www.IUIDtoolkit.com), and select "Defense Suppliers", then under "Submit", select subsection "Registration of IUID Data11", under Support Tools select "Data Submission".

3. Marking Requirements.

Both Human Readable Information (HRI) and Machine Readable Information (MRI) are required (see section 4). In accordance with the Defense Federal Acquisition Regulation Supplement (DFARS), DoD has mandated the use of Data Matrix ECC 200 as the standard format for UID MRI markings. Guidance for the construct and application of Data Matrix markings is contained in MIL-STD-130 and the DoD UID Guide located at <http://www.acq.osd.mil/dpap/pdi/uid/index.html>, select Guides link.

3. 1. **HRI Marking Requirements.** The following HRI data is required (as a minimum):

- Item Nomenclature; Per applicable manufacturer drawing
- Manufacturer's Commercial and Government Entity (CAGE); Five (5) alpha/numeric characters.
- Item Lot Number; Lot numbers shall be assigned IAW MIL-STD-1168 (current revision), unless otherwise directed.

NOTE: The requirement for unique lot number has been deleted.

- Item Serial Number; Six (6) digit serial numbers (minimum) are required. Serial numbers shall be sequentially assigned and shall not be repeated until serial number 999,999 has been reached.
- Item manufacturer's Part Number

NOTE: The weapon system Specification Number does not meet this requirement

- Date of Manufacture (DOM); Month and Year of manufacture as identified in MIL-STD-1168. DOM shall be the same date that is coded into the lot number. **A new lot number and serial number shall also be assigned for "remanufactured" CAD/PAD components as opposed to adding a suffix to the original lot number for a "rework, overhaul or renovation" effort.**
- Optional markings: Additional markings (such as manufacturer's name, logo, contract number) are acceptable, provided that space is available on the item/data label.

NOTE: Markings and/or attachments shall make no reference to item installation requirements/procedures or shelf/service lives

3.2. MRI Data Construct.

Data Matrix ECC200 markings shall be developed based on UID Data Construct #2 using Data Identifiers (DIs) in accordance with MIL-STD-130 and the DoD UID Guide (see Figure 2). To facilitate durability throughout the scanning life cycle, the largest symbol size, including quiet zone, shall be fitted within the available marking real estate. The symbol's internal module (cell) sizes shall be no smaller than 0.0075 inch (0.19 mm) and no larger than 0.025 inch (0.64 mm). Marks shall contain **only** the data elements identified below:

NOTE: The actual UII will be comprised of CAGE, Part Number, and Serial Number data. The parenthesis surrounding the Data Identifiers are NOT encoded in the 2D symbol

(17V) Manufacturer's Commercial and Government Entity (CAGE) code, 5 alpha/numeric characters

- (1P) Manufacturer's Item Part Number, 18 alpha/numeric characters maximum

NOTE: The weapon system specification numbers do not meet this requirement

- (S) Item Serial Number, IAW HRI requirement, six (6) digits minimum, up to eight (8) alpha/numeric characters maximum

- (30T) Item production Lot Number, IAW HRI requirement, 15 alpha/numeric characters maximum

NOTE: The data identifier for Lot Number has been changed from 1T to 30T

- (4D) Date of Manufacture (DOM), IAW HRI requirement, in Julian Date format, five (5) numeric characters:

Example: 08151 = 31 May 2008

The first two positions are the last two digits of the year, the last three positions are the Julian Date (001 through 366)

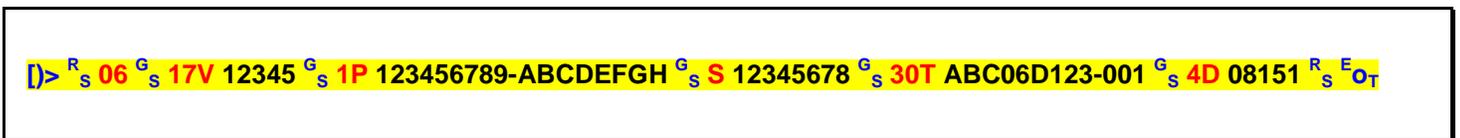


Figure 2. Sample UID Data Stream

4. **Placement of UID Marking.** CAD/PAD items vary considerably in size and shape. A large percentage of these items are currently marked with HRI printed on data plates or labels permanently affixed to the item. The preferred method for incorporating the UID required MRI is to include it on the current data plate/label and, wherever possible, the supplier is to incorporate this concept. The following identifies known variations in marking and preferred MRI incorporation methods.

Note: Unless specifically identified as a requirement in the procurement contract, subcomponents of the End Item Assembly shall not be UID marked.

4.1. **CAD/PAD Items Currently Marked with Data Plates, Labels, or Flag-Tags.** The data plates/labels for these items shall be modified/arranged to allow space for the MRI per paragraph 3.2. Marking shall comply with MIL-STD-130 and the DoD UID Guide (see figure 3).



Figure 3. Sample Data Plate/Label

4.2. **CAD/PAD Items Currently Marked With Ink or Laser Etching Directly on the Item.** Item marking shall be modified/arranged to allow space for the incorporation of ink or laser etched MRI per paragraph 3.2. Marking shall comply with MIL-STD-130 and the DoD UID Guide (see figure 4).

CAD/PAD Builder Inc.
Acft Explosive Component Noun

CAGE: 12345
P/N: 123456789-1234
Ser No: 0001
Lot No: ABC08D001-001
DOM: 31 May 2008

Figure 4. Sample of Etched Data

4.3. **CAD/PAD Items Considered to be Too Small for HRI and MRI.** These items shall be physically marked using currently approved methods for HRI. A self-adhesive label shall be supplied in the item inner packaging that includes the minimum HRI (per paragraph 3.1) and the MRI Data Matrix marking (per paragraph 3.2). The label shall be as small as possible (meeting MIL-STD-130 requirements for HRI) and will include only the minimum required data (see figure 5).

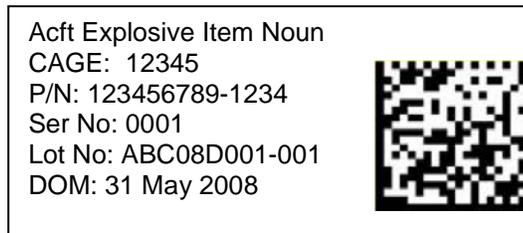


Figure 5. Sample Small Item Data Plate/Label

Note: This will allow the maintainer to scan the MRI from the label and the ability to affix it to the next higher assembly.

5. **Kit Marking Requirements.** Individual components procured and delivered in a “kit” or “ship-set” format shall each be marked with HRI and MRI as identified in sections 3 and 4. The kit containers shall also be marked with HRI and MRI per sections 3 and 4.

Note: Individual components supplied in kits or ship-sets require unique item identifiers. Their markings shall not reflect those identifying the kit or ship-set.

5.1 Only the “kit” or “ship-set” will require data submission into the UID Registry. Data submission for individual components in a kit is not required, as these components were not individually priced as line items when placed on contract.

Note: To meet UID requirements, each kit will be assigned an individual serial number. Kits that are comprised of multiple containers will all be marked with the same serial number.

5.2 “Kits” or “ship sets” will typically be assigned lot numbers coinciding with the oldest individual component in the kit.

6. **Waivers.** Waivers to the UID requirement are not allowed. Requests for waivers to marking methods outlined in this instruction may be considered. Submit requests through appropriate contracting channels.