

## DATA ITEM DESCRIPTION

**Title:** Traceability Data

**Number:** DI-SESS-81731

**AMSC Number:** 7686

**DTIC Applicable:** No

**Office of Primary Responsibility:** NS/IIS4

**Applicable Forms:** N/A

**Approval Date:** 20 DEC 2006

**Limitation:** N/A

**GIDEP Applicable:** No

### Use/Relationship:

This report provides traceability of high reliability components (including parts, modules, elements, subassemblies, and assemblies) for the purpose of locating known faulty items for replacement.

This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract. This DID is applicable to Communications Security/Aerospace Vehicular Equipment related to Air Force Satellite Programs.

This Data Package is associated with the following Data Item Descriptions (DIDs):

Equipment History Data Package, DI-SESS-81730

Failure Analysis and Corrective Action Report, DI-SESS-81315A

### Requirements:

1. Reference Documents. None
2. Format and Content. Report shall include the following data, current and complete database, which has been prepared from the information contained in source documents, used in the contractor's Traceability Program.
  - 2.1 Report shall include one record for each traceable item in accordance with the following instructions:
    - 2.1.1 Recorded data shall be left justified unless stated otherwise. (Note: In part or drawing numbers beginning with "0N1", etc. the 0's represent the number zero and shall be recorded.
      - a. Columns 1-24 Identification Number and columns 25-26 Revision Letter: columns 1-24; record the identification number of the part, module, element, subassembly, or assembly to be traced. Columns 25-26; record the revision letter of the line item identified in columns 1-24.

## DI-SESS-81731

- b. Column 27, Level Code: Record the alphabetic code shown which corresponds to the item identified in Columns 1-26:
1. Write “A” if the item is a part for which no further disassembly is possible (i.e., resistor, capacitor, inductor, translator, diode, integrated circuit, hybrid circuit, filter, connector, transformer, bare printed wiring board, etc.).
  2. Write “C” if the item is an element that is assigned a tri-graph nomenclature (e.g., E-ABC or Z\_ABC).
  3. Write “D” if the item is an assembly that is assigned a tri-graph TSEC assembly nomenclature (e.g., KI-23 or KGX-28A).
  4. Write “E” if the item is an assembly that is assigned di-graph TSEC assembly nomenclature (e.g., KI-24 or KI-37).
  5. Write “B” if the item does not fit the description identified by level codes A, C, D, or E (i.e., an assemblage or parts that is not nomenclatured, or welded module composed of discrete parts).
- c. Columns 28-35, Reference Designation, Nomenclature, or Noun Description: Record the Reference Designation or Nomenclature of the item identified in column 1-26 as follows:
1. If column 27 equals “A”, record the specific reference designation (e.g., MD13). Write a descriptive word or abbreviation that may be easily recognized if the item has not reference designation.
  2. If column 27 equals “C”, record the specific elements or subassembly nomenclature, omitting hyphens (e.g., EABC/1, ZABC).
  3. If column 27 equals “D”, write the assembly trigraph nomenclature, omitting hyphens (e.g., KIR23).
  4. If column 27 equals “E”, write the assembly digraph nomenclature, omitting hyphens (e.g., KG46 or K137).
  5. If column 27 equals “B”, follow the instructions of paragraph c.1 above.

## DI-SESS-81731

6. If column 71 equals “Z”, and columns 41-47 are all blanks or zeros, record in columns 28-30 “QTY” and record in columns 31-35 the number representing the quantity of spares on hand of the item identified in columns 1-26.
- d. Columns 36-40, CAGE Code: Record the five digit CAGE Code of the item identified in columns 1-26. This code shall always reflect the true manufacturer of the item in its original configuration.
- e. Columns 41-47, Serial Number: Record the serial number of the item identified in columns 1-26. The serial number is composed of a contract code letter (provided by the Government; this letter “A” for the first production, “B” for the second, etc.) to be recorded in column 41 followed by a six-digit alpha/numeric number in columns 42-47. Right justify the number in columns 42-47 using zeros for fill. Omit the contract code letter in column 41 and replace with zero if column 27 is equal to “D” or “E”. Leave blank or enter zero if the part is lot traceable only.
- f. Columns 48-55, Traceability Code: Record the Traceability Code. This code will normally be the date code stamped on the item identified in columns 1-26 by the original manufacturer. Where the manufacturer does not provide a date code, the batch/lot code shall be used. Where the original the original manufacturer does not provide a date, batch or lot code, the prime contractor shall assign traceability code, which will allow the item to be traced through its manufacturing history. Right justify and fill with zeros.
- g. Columns 56-58, Next assembly Identification Number and columns 69-70 Revision Letter: Columns 56-68; record the drawing number which identified the next higher assembly to the item that is identified in columns 1-26. Columns 69-70; record the revision letter of the item identified in columns 56-68. Leave this field blank if the item is a spare individual piece part (column 27 equals “A” and column 71 equals “Z”). If the item is a spare end item assembly item (column 27 equals “B” or “C” and the column 71 equals “Z”) or column 27 equals “D” or “E” enter the total number of trace records for the assembly. Enter “RECORDS=” in columns 56-63 followed by the quantity of records in column 64-68.
- h. Column 71, Next Assembly Level Code: Record the alphabetic code shown below which corresponds to the item identified in column 56-70:

## DI-SESS-81731

1. Write "B", "C", "D", or "E" in accordance with the line instructions in paragraphs b.2 through b.5.
  2. Write "Z" if the item identified in column 1-26 is a spare end item (part or assembly).
    - i. Columns 72-76, Next Assembly Serial Number: Record the serial number of the item identified in columns 56-70 according to the instructions provided in paragraph e. Omit the contract code letter and replace with a zero when "D" or "E" is written in column 71. If column 71 equals "Z", write the word "SPARE" in columns 72-76.
    - j. Column 77, End Item Code: Record "E" if the item identified in columns 1-26 or columns 56-70 is an end item (i.e., a top assembly or equipment) otherwise, leave blank.
    - k. Columns 78-83, Top Assembly Nomenclature: Record the TSEC nomenclature to which the traceability record applied, omitting hyphens (e.g., KIR23, KI24). If column 27 equals "A" and column 71 equals "Z", columns 78-83 shall be blank. If a spare top assembly or a part of spare assembly (not TESC), record the top assembly trigraph omitting hyphens and slashes (i.e., EABC, ZDEF3).
    - l. Columns 84-85, Model Designator: Record the letter or letter and number representing the model designator of the item identified in columns 78-83, as applicable. If model designator is a letter only, write the letter in column 84. If item in column 78-83 is not TSEC nomenclature, leave blank.
    - m. Columns 86-90, Top Assembly Serial Number: Record the serial number of the top assembly identified in columns 78-83. Omit contract letter code for TSEC assemblies. Right justify and fill with zero. Include special codes (i.e., (NI)). If column 27 equals "D" or "E" repeat the serial number in column 41-47.
    - n. Columns 91-93, Calendar date: Record the date of the final change before submittal in 6-digit format of year, month, day (i.e., 930109 on January 9, 1993). For subsequent submittals (i.e. revisions, modifications or corrections) change only the dates of the affected records.
- 2.2 Each classified and unclassified traceability record shall be verified and recorded on floppy disks.

## DI-SESS-81731

1. Floppy disks for delivery to the addressee, shall conform to the recorded on floppy disks.
  - a. The floppy disks shall be 3 ½ inch, double-sided, high density.
  - b. The disk shall be formatted IBM compatible, 1.44 M bit.
  - c. The data shall be recorded in ASCII character.
  - d. The data may be recorded as:
    - (A) 96-position detail records followed by a carriage return. The record must be exactly as specified in paragraph 10.2. The data shall not contain page breaks.
    - (B) The data may be recorded in the comma delimited form (comma separated values-CSV), with quotes optional, followed by a carriage return. The data may not contain page breaks. The 16 Field shall be as detailed above.

2.3 Corrections or additions to the traceability data subsequent to initial delivery shall include:

- a. Report shall include recorded and corrected data in accordance with paragraph 3.1 and 3.2 above, and integrated into the database maintained by the contractor.
- b. If the volume of corrected and additional data does not exceed 10,000, the corrected or new data may be submitted to the addressee. All submissions shall be in the floppy disk form.
- c. Alternatively, submissions where the volume of errors is less than 10,000 may also be made by copying the entire updated database to the floppy disk and sending the new media to the addressee.

2.4 In the event the Government inspects the floppy disks and they do not meet the applicable criteria, they shall be returned to the contractor who shall eliminate the discrepancies and resubmit them to the designated addressee.

2.5 Definition:

- a. Element – the term “element” as used in this description refers to items that are nomenclatured as E tri-graph (e.g., E-ABC) in the TSEC nomenclature system.

## DI-SESS-81731

- b. Subassembly – the term “subassembly” as used in this description refers to items that are nomenclatured as a Z tri-graph (e.g., Z-ABC) in the TSEC nomenclature system.
- c. Spare end item – the term “spare end item” used in this description refers to items that have a level code of “A”, “B”, or “C” and do not have a next higher assembly.

The Fields (Columns) shall be as follows:

<u>Field No.</u>	<u>Para. 3.1 Positions</u>	<u>Field Contents</u>
1.	1-24	Part I.D. No
2.	25-26	Rev. of item identified in 1-24
3.	27	Level code of part identified in 1-24
4.	28-35	Ref. design Nomen., or Noun description of item 1-24
5.	36-40	CAGE Code of Mfg. of item identified in 1-24
6.	41-47	Serial number of item identified in 1-24
7.	48-55	Trace code of item identified in 1-24
8.	56-68	NHA of item identified in 1-24
9.	69-70	Rev. of item identified 56-68
10.	71	NHA level code
11.	72-76	NHA serial No.
12.	77	End of item code
13.	78-83	Top Assy. Nomen.
14.	84-85	Model Designator
15.	86-90	End item
16.	91-96	Year/Month/Day (Yr/Mo/Dy)

3. END OF DI-SESS-81731