# **DATA ITEM DESCRIPTION**

Title: Comprehensive Engine Management System (CEMS) Reporting

Number: DI-MGMT-81324B

**AMSC Number:** F9476 **DTIC Applicable:** No Approval Date: 20140610 Limitation: GIDEP Applicable: No

Office of Primary Responsibility: 71 (AFLCMC/LPZC)

**Applicable Forms:** AF Form 1534, DD Form 2875 (GCSS), DD Form 2875 (CEMS), and Non-Disclosure Statement.

**Use/relationship:** CEMS reporting is used by all organization possessing and/or maintaining Air Force (AF) engines or components on behalf of the AF to maintain a complete and accurate worldwide inventory of AF Force engines, installed assemblies and components. The CEMS reporting data consists of aircraft engine and maintenance status information as directed by the AF propulsion community.

a. This Data Item Description (DID) contains the requirements, to include access to the Internet, Air Force Portal, and CEMS for the purpose of reporting to CEMS for engines, assemblies and components. It also contains the format and content preparation instructions for the data reporting generated by the specific and discrete task requirement as delineated in the contract.

b. This DID is applicable when contractors report engine or parts-life and/or status tracking data to CEMS as designated by the AF propulsion community.

c. Publications referenced below are available on the CEMS web site, <u>https://www.my.af.mil/gimmsprod/cpmo/</u>, at CEMS Program Management Office (PMO), Tinker AFB, OK.

d. This DID supersedes DI-MGMT-81324A.

## **Requirements:**

1. Reference documents: The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract. Definitions and/or descriptions of the various data codes authorized for entry in the specified blocks of the Air Force Form 1534 are contained in United States Air Force Technical Order (T.O.) 00-25-254-1.

2. Format. Unless an agreed upon approved interface exists, all required input is via the reporting process known as CEMS.

- 3. Content.
- 3.1 Access to CEMS: In order to accomplish the required access to government computer systems for the purpose of reporting as referenced above, the following is required:

a. A minimum of a favorable National Agency Check with Inquiries (NACI) is required for any contractor accessing a Department of Defense (DoD) Information System. Procedures concerning Industrial Security Clearances and Investigations can be found at <u>http://www.dss.mil/isp/index.html</u>.

b. An DD FM 2875 must be completed and sent by fax or signed email to the AF

Portal Program Office: gcssaf.opsandsupport@gunter.af.mil, or faxed to the AF Portal Program Office (DSN 596-5771, Commercial 334 416-5771; Option 7) to obtain an AF Portal account. DD FM 2875, as well as additional information may be obtained at https://www.my.af.mil, by accessing "View Account Requirements & Benefits."

c. After AF Portal access is obtained, a DD Form 2875, a copy of the DoD Information Assurance Awareness Training Certificate (Course: ZZ133098) and a Nondisclosure Statement must be completed requesting access to CEMS and emailed to <u>CEMS.PMO.Security@us.af.mil</u>. The form and Nondisclosure Statement may be downloaded from <u>https://www.my.af.mil/gimmsprod/cpmo/</u>, by clicking on the "Forms" folder and clicking "System Access." Instructions are included with the form. The DoD CyberAwareness Challenge (Course: ZZ133098) may be completed: <u>https://golearn.csd.disa.mil/kc/login/login.asp?kc\_ident=kc0001&blnAccess=TRUE</u> for Dot-Mil Users and <u>http://iase.disa.mil/eta/cyberchallenge/launchPage.htm</u> for Dot-Com users.

d. You can only access CEMS via the AF Portal. The CEMS PMO, (405)734-7874, DSN: 884-7874, or Toll Free: 1-800-956-7351, should be contacted for further information.

3.2 Inputs to CEMS: Description of Entries on AF Form 1534, CEMS CDB Report.

**Block 1** - Place an X in appropriate block if additional forms are attached for engine recorder device reports.

**Block 2** - Subsystem Identifier. Enter S for status reporting or C for configuration reporting. S will be used on all non-TCTO transactions for non-parts tracked engines and for parts tracked engines other than those specified in the following paragraph. C will be used on all 6-transaction codes and all parts tracked engine component installations and removals except intransit installations.

Block 3 - CII Designation. Direct reporting and mail-in enter CII.

**Block 4** - S/N (10 Max Alpha Numeric characters). Enter the S/N as express below for position 1 thru 4 and using the last 6 characters listed on the data plate. CEMS does not recognize a dash (-). If dashes (-) are encountered on the engine, assembly or part data plate, the dash will be replaced with a zero for reporting purposes. If data plate contains any other special character, contact the CEMS PMO for instructions.

**Example:** 629-1234 will be input to CEMS as "0062901234." The standard method of structuring serial numbers in CEMS is as follows:

MM = Manufacturer's Code (two position) Z = Zero (0) C = Engine module symbol as follows: Basic Engine E Augmentor A Fan F Compressor C Turbine (LPT) L

Turbine (HPT) H Gearbox G Turbine T X = An alpha or numeric character

## NOTE

- With the exception of the F107 engine, all century series engines (i.e. F100, F101, etc.) and T56 engines use structure MMZCXXXXX, where column 5 through 10 are the values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.
- **Examples:** F100-100 Engine "PW0E680092." "T56 engine S/Ns prior to 113432 will reflect the old S/N structure in CEMS of MMZZXXXXXX. T56 gearbox S/Ns prior to S/N 33641 will reflect the old S/N structure in CEMS of ZZMCXXXXX. T56 engine 113432 and beyond will use MMZCXXXXXX"
- **Example:** (AD0E113432), Gearbox 33641 and beyond will use MMZCXXXXX
- **Example:** (AD0G33641), All other aircraft engines use structure MMZZXXXXX, where column 5 through 10 are values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.
- **Example:** J75-17 Engine "PW00611438." All tracked assemblies and parts and all non-F100 modules use structure 10 positions. All 10 positions are values obtained from the data plate. The field will be moved to the right and zero filled on the left. The alpha O will be converted to numeric 0 and the alpha I will be converted to numeric 1 for reporting purposes.

**Block 5** - Occurrence Date and/or Hour. Enter the actual Julian date and time the status change occurred.

Block 6 - SRAN. Enter SRAN of the activity preparing report.

Block 7 - Command. Enter the applicable major and subcommand codes.

**Block 8** - Organization Code. Alpha characters for local use and is one position alpha, excluding "X" or a numeric "1" to indicate engine(s) in a deployed status.

**Block 9** - Engine Ownership Account. Enter the one position engine ownership account code. Account codes A, B, C, E, G, K, L, N, P, R, S, and Z are Air Force engines. Transfers between these accounts will be made on routine reports (code R, block 10). Account codes D, F, H, J, T, and W are other than Air Force engines. Transfer between Air Force and other than Air Force accounts will be made on K type report (block 10). All uninstalled engine transfers on K type reports must be documented and a copy of the document maintained as prescribed in this TO. If account code J is reported, see instructions for block 21. Engines transferred to classified project (L account, routine report) will not be reported thereafter until returned or until the classified project is canceled. Returns from a classified project will be reported as a receipt to the A-account on a routine report. Engines assigned to ground training (S account) require no subsequent reporting except when engines are installed, removed, or transferred, or when assignment to S account terminates. Engines

received from other than Air Force activities for repair and return are to be retained in the activity's account while on hand. If an exchange of engines with the Air Force is to be accomplished, the transfers between accounts will be made on K reports.

Block 10 - Engine Type Report.

Block 11 - Part Number. Enter the part number from the data plate.

Block 12 - Transaction Code. Circle the appropriate transaction code.

Block 13 - Condition Code. Circle the appropriate engine condition code.

**Block 14** - To-From Command and/or SRAN. Enter the shipped to-from SRAN. Report the owning command code for tenant shipments and receipts. Block will be blank for reports of transfer to or from classified projects.

Block 15 - Type of Shipping Device. Optional.

**Block 16** - Sequence Control Number. Enter the sequence control number assigned to the report being prepared. CEMS uses sequence numbers to ensure receipt and processing of all CEMS reports. The sequence number is seven positions long. The first part is a number from 01-12 to designate the month of the reporting period. The code for the reporting period changes on the first of each month. The second part of the sequence number is composed of five numbers. These numbers start with 00001 for the first report submitted each monthly reporting period. Sequence numbers are assigned in ascending order.

**Block 17** - Engine Related How Mal Codes. Enter the engine related How Mal Code that best identifies the symptom that is causing the removal.

**Block 18** - Reason for Return to Overhaul. Enter appropriate reason for return to overhaul code.

**Block 19** - Reparable Engine S/N. Optional or enter the S/N of the reparable engine being replaced by the serviceable shipment. This number or the word stock will be furnished by the EIM. If a number or the word stock is not furnished by the EIM, enter "Not Furn."

Block 20 - Blank

**Block 21** - SAP number. On K reports for engines gained to or from a SAP country, enter the six position SAP ID number contained in the supplementary address field, card columns 45 through 50, of the DD Form 1348-1A. If the SAP number is not listed in the supplementary address field, contact the prime EIM.

**Block 22** - Document Number-NSN. Enter the debit or credit number from the document covering gain and loss transactions. For all shipments and receipts of uninstalled engines to-from a different SRAN reporting activity, enter the TCN from card columns 30 through 43 of the DD Form 1348-1A or block six of DD Form 1149, REQUISITION AND

INVOICE/SHIPPING DOCUMENT. If not received with the engine, contact the previous SRAN EM for the TCN the engine was shipped with. Also, if the shipment has been reported to CEMS, the TCN will appear on part 2of the EMDL. For uninstalled reimbursable account transfer (K type report), to a non-Air Force account (SAP, Navy, Army, FAA, etc), report the requesting activities requisition number obtained from the prime EIM.

**Document numbers** are constructed following the guidance in DOD 4000 25-1-M, Military Standard Requisitioning and Issue Procedures (MILSTRIP), or per instructions in AFM 23-110 and/or applicable Supply Local Operating Instructions.

Position 1-6 DOD Activity Address - Code of Activity assigning the number e.g. FJ2039 (FJ suffix is used for Air Force reporting and EJ suffix is used for Contractor)
Position 7 Last digit of the calendar year
Position 8-10 Julian day of document assignment
Position 11-12 S/N assigned by activity
Position 13-14 Two digit alpha engine ID code

**NSN** is constructed as follows:

Position 1-4 Federal Stock Class, e.g., 2840
Position 5-6 Country Code, e.g., 01 (USA)
Position 7-13 National Item Identifier Number (NIIN) e.g., 5869746
Position 14-15 Material Management Code (MMC), e.g., RU, if applicable.

**Block 23** - Engine Flying Time. For non-parts tracked (status) engines, enter TSO. Time is recorded in days, hours, or minutes as required by engine TMSM. The number is right justified with a single decimal place. The fraction of hours are rounded (up or down) to the nearest tenth of an hour. Time will be reported in whole minutes for the J69-406 engines. Time will be recorded in whole calendar days on the F107 and F112 engines.

Block 24 - Cycle Sortie Count. Enter cycle sortie count.

Block 25 - Error Sequence Number. Enter the sequence number from the transaction.

**Block 26** - TMSM. Enter the TMSM for the engine that is being reported. TMSM is defined as a 12 position field for TMS and Modification of a given engine family.

**TMSM** will be structured as follows:

Position 1-3 Type (alphanumeric, right justified, prefix with spaces)
Position 4-7 Model (alphanumeric, right justified, prefix with zeros)
Position 8-10 Series (alphanumeric, right justified, prefix with zeros)
Position 11-12 Modification (alphanumeric, left justified, suffix with spaces) Reference TMSM table.

**Block 27** - NHA Designation. When entry is required and the NHA is an aircraft, enter the seven position alphanumeric MDS; or enter the NHA seven position alphanumeric CII

code. When entry is required and the report initialized (TCC 6N) an uninstalled tracked item, fill all seven positions with nines.

## Standard MDS structure is as follows:

Position 1-3	Mission (alphanumeric, right justified, prefix with spaces)
Position 4-6	Design (alphanumeric, right justified, prefix with zeros)
Position 7	Series (alphanumeric)

**Block 28** - NHA S/N Structure. For aircraft S/N use YYNNNNNNN where YY is year of manufacture and NNNNNNN is the tail number prefixed with zeros. When an initialization entry (TCC 6N) is required on an uninstalled tracked item, fill all 10 positions with nines.

**Block 29** - Position Number. If the engine being reported is applicable to a single QPA, enter the digit one. For multiple engine aircraft, engines will be numbered from left to right from pilot's position. Missiles and tracked assemblies/parts are exempt from this entry.

**Block 30** - Is used when additional information is required on AF Form 1534 i.e., Reason for Delay Codes.

CEMS CDB REPORT				1. REPOR	1. REPORT CONTROL SYMBOL			FORM APPROVED OMB NO. 0704-0188			
Ablic reporting burden for this collection of Information is estimated to overage must be response, including the time for reviewing instructions, exacting estilling additionable distingtionable distances and completing and reviewing the collecting of information. Send completing burden attracts are response, including the distingtion and completing that distingtion and reviewing instructions. Exactly additionable distingtion and reviewing the collecting of information. Send completing burden attracts are reviewing instruction attracts and reports. To additionable distingtion and reviewing instructions are additionable attracts and reviewing instructions. Exactly additionable distingtion and reviewing the collection of information. To additionable distingtion and reviewing the collection of the additionable distingtion. Development for additionable distingtion, Va 2202-302, and to the Office of Managementand Budget, Poperwork Reduction Pojection (07044)880, Washington, DC 20533, Reade DO NOT RETURN your form to either of these addresses. Send your completed on the badduarter, unted States Ar Force, Attin: AFLGMW washington, DC 20533.											
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AF FORM 1534, OCT 91 PREVIOUS EDITIONS ARE OBSOLETE

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# 4. End of DI-MGMT-81324B.