DATA ITEM DESCRIPTION Title: MAINTENANCE AND REPAIR PARTS DATA REPORT

Number: DI-MGMT-82163 AMSC Number: 9869 DTIC Applicable: No Preparing Activity: CAPE Approval Date: 20171116 Limitation: GIDEP Applicable: No Project Number: FNCL-2017-003

USE/RELATIONSHIP: The Maintenance and Repair Parts Data Report is the Department of Defense (DoD) system for collecting actual maintenance event and repair part data as part of the Cost, Software, and Data Report (CSDR). The resulting data repository serves as the primary source for contract cost, software, and technical data for many DoD resource analysis efforts; including cost database development, applied cost estimating, cost research, program reviews, Analysis of Alternatives (AoA), and life cycle cost estimates. The Maintenance and Repair Parts Data Report provides context to cost data to derive accurate sustainment costs.

The Maintenance and Repair Parts Data Report is structured around formats that contain the content and relationships required for the electronic submissions. This Data Item Description summarizes the Maintenance and Repair Parts Data Report and provides instructions to complement the data requirements specified in the contract for CSDR reporting.

The Maintenance and Repair Parts Data Report will be used by DoD Component staff, including program managers, systems engineers, cost estimators, and financial management personnel to: (1) review and evaluate maintenance event and LRU and/or repair part cost and failure data, and (2) determine cost drivers and root cause of comparison differences, and (3) understand reasons for incurred cost and availability performance.

Maintenance and Repair Parts Data is related to other program acquisition requirements, including the Cost Data Summary Report (DI-FNCL-81565C), Functional Cost-Hour Report (DI-FNCL-81566C), Sustainment Functional Cost-Hour Report (DI-FNCL-81992), Cost and Hour Report (FlexFile) (DI-FNCL-82162), Technical Data Report DI-MGMT-82165) and "SRDR Development/Maintenance" (DI-MGMT-82035A).

Reporting is required throughout the complete life cycle to include interim contractor support during the production phase and during the Operating and Support (O&S) phase of the program. Contract reporting is required throughout the life of the contract. Software sustainment activities are captured using the separate SRDR, Software Maintenance and Data Dictionary DID (DI-MGMT-82035).

For background and detailed requirements related to Cost, Software, and Data Reporting (CSDR), refer to DoD 5000.04-M-1 (or latest version), "Cost and Software Data Reporting (CSDR) Manual" (or latest version).

The Maintenance and Repair Parts Data Report Data Item Description (DID) is structured around the four data groups below:

Maintenance and Repair Parts Data Format	Data Group
Report Metadata	А
DD FORM 2794 Data Elements	В
Maintenance Event Data	С
Repair Parts Data	D

- A. Data Group A <u>Report Metadata</u>: Provides metadata on the contract that allows the submitted data to be associated with other Data Groups and program data.
- B. Data Group B <u>DD FORM 2794 Data Elements</u>: Documents WBS Element Codes and Names, End Items, and Order/Lot tags as referenced by the DD FORM 2794.

- C. Data Group C <u>Maintenance Event Data</u>: Used to collect information related to each maintenance event such as the specific system being repaired, location where the repair activity occurred, reason for failure, day failure was identified and day repair activity was completed.
- D. Data Group D <u>Repair Parts Data</u>: Used to identify the repair parts associated with each maintenance event. This level information is similar to what is collected for organically supported programs and is needed to better understand reasons for incurred cost and availability performance.

REQUIREMENTS:

- 1. *References*. All references below will be made available at http://cade.osd.mil/policy_
 - a. DoD Instruction 5000.02, "Operation of the Defense Acquisition System," (current version). This instruction contains mandatory CSDR requirements.
 - b. DoDI 5000.73, "Cost Analysis Guidance and Procedures," (current version).
 - c. DoD 5000.04-M-1, "Cost and Software Data Reporting (CSDR) Manual," (current version).
 - d. "Operating and Support Cost-Estimating Guide", (current version).
 - e. MIL-STD-881, "Work Breakdown Structure for Defense Materiel Items", (current version).
 - f. DD Form 2794 Template and Process (current publication date).
 - g. Department of the Army Pamphlet 750-8, Army Maintenance Management System (TAMMS) User's Manual.
 - h. Naval Aviation Maintenance Program (NAMP) CNAFINST 4790.2C.
 - i. Air Force Instruction AFI 63-101/20-101, Integrated Life Cycle Management.
 - j. Maintenance/Repair Data Exchange Instructions (DEI) (current version).
 - k. Maintenance/Repair Data File Format Specifications (FFS) (current version).
 - 1. Maintenance/Repair Data Implementation Guide (current version).
 - m. USMC Ground Equipment Maintenance Policy (GEMP), MCO 4790.25, dated 12 Jan 2014.
- 2. *Implementation*. The Maintenance and Repair Parts Data Report requirement applies to program contracts and subcontracts regardless of contract type based on the dollar thresholds specified in DODI 5000.02 (Reference a above).
- 3. *Format.* Provide Data Groups A through D using the electronic preparation instructions below. Data must be reported for each Work Breakdown Structure (WBS) Element for which an "X" is marked in Block 14d from the approved DD FORM 2794.
- 4. The Data Groups A through D of the Maintenance and Repair Parts Data Report, must be submitted electronically in accordance with a CAPE-approved Maintenance/Repair Data DEI/FFS, unless an alternative format has been specified in the contract requirements. The specific definition of the Maintenance/Repair Data DEI/FFS are provided under separate covers, (References j and k above). Electronic submittals shall be delivered to the OSD CAPE Defense Cost and Resource Center's (DCARC's) secure web-site using the Cost Assessment Data Enterprise (CADE) CSDR Submit-Review (CSDR-SR) system.
- 5. Uploading data to the DCARC requires use of either a DoD Common Access Card (CAC) or a DoDapproved External Certification Authority (ECA) certificate. For portal registration instructions, see <u>http://cade.osd mil/Files/DCARC Portal Registration Instructions.pdf</u>.

GENERAL INSTRUCTIONS:

- 1. All reporting under this Maintenance and Repair Parts Data DID will be in accordance with the approved CSDR DD FORM 2794.
- 2. Security Requirements. Maintenance and Repair Parts Data Reports shall be submitted to DCARC in accordance with this DID. Files shall be marked with the appropriate security classifications in Item 1 of Data Group A and proprietary/distribution statement in Item 2 of Data Group A. Only Unclassified documents should be submitted to the DCARC. Contact DCARC for special processing instructions for classified submissions, security concerns and/or other limited distribution requirements.
- 3. All reporting must be based on the approved DD FORM 2794. The submission frequency and required formats will be defined in Block 15 (Submission Events) of the approved DD FORM 2794.

PREPARATION INSTRUCTIONS:

A. Data Group A - Metadata Information:

- 1. <u>Classification</u>: If unclassified, mark "Unclassified" in the security classification field. Contact DCARC for special processing instructions for classified submissions, security concerns and/or other limited distribution requirements. Only Unclassified documents should be submitted to the DCARC in accordance with this DID.
- 2. Proprietary/Distribution Statement: The reporting entity's distribution statement for this data submission.
- 3. <u>Program Name</u>: The name given to the program. The Program Name shall be the same as Block 1a of the DD FORM 2794.
- 4. <u>Phase/Milestone</u>: The life cycle phase being reported. The Phase/Milestone shall be the same as Block 1b of the DD FORM 2794. Report all that apply:
 - a. Pre-A (Material Solution Analysis Phase),
 - b. A (Technology Maturation and Risk Reduction Phase),
 - c. B (Engineering and Manufacturing Development Phase),
 - d. C-LRIP (Low-Rate Initial Production),
 - e. C-FRP (Full-Rate Production), or
 - f. O&S (Operations and Support Phase).
- 5. <u>Prime Mission Product</u>: The most current official military designation for the reported product as specified by the appropriate classification standard (e.g., DoD 4120.15-L, "Military Designation of Military Aerospace Vehicles," would specify "F-35" for the Joint Strike Fighter). The defined Prime Mission Product shall be the same as Block 1c of the DD FORM 2794.
 - a. For contract (or subcontract) DD FORMS 2794 plans, the product being reported may have a different designation than the total program (e.g., the preparer would enter "AN/APG-81 Radar" for the F-35 Radar contract DD FORM 2794).
 - b. If the reported product does not have a military designation, enter the type of product being developed or procured, for example, radar.
- 6. <u>Reporting Organization Type</u>: Select one of the following for the appropriate organization type:
 - a. Prime/Associate Contractor,
 - b. Direct-Reporting Subcontractor, or
 - c. Government.
- 7. <u>Performing Organization</u>: Information for the organization actually performing and/or leading the work:

- a. <u>Organization Name</u>: Name of the organization. This shall be the same as Block 9a.i of the DD FORM 2794.
- b. <u>Division Name</u>: Name of the division of the organization performing and/or leading the work, if applicable. This shall be the same as Block 9a.ii of the DD FORM 2794.
- c. <u>CAGE Code</u>: Commercial and Government Entity Code, or CAGE Code, is a unique identifier assigned to suppliers, to various government or defense agencies, as well as to government agencies themselves and also various organizations.
- d. <u>Location</u>: The location of the organization, or the division of the organization, if applicable. Include the following information:
- e. Street Address
- f. City
- g. State
- h. Zip Code
- 8. <u>Approved DD FORM 2794 Number</u>: The approved number of the current DD FORM 2794 that authorized the collection of data for this report (which may have been updated since contract start).
 - a. <u>DD FORM 2794 Number</u>: The Approved Plan Number shall be the same as Block 10a of the current DD FORM 2794.
 - b. <u>Revision Number</u>: The Revision number shall be the same as Block 10b of the current DD FORM 2794.
- 9. <u>Customer Name (Direct-Reporting Subcontractor Use Only)</u>: Applies to direct-reporting subcontractor use only. Customer is the organization name of the prime reporting entity for whom the work on the subcontract is being performed. Otherwise NA (for "not applicable").
- 10. <u>Contract Number</u>: The assigned prime contract number the prime contractor has with the government customer. This requirement is identical for both reporting entities and direct-reporting subcontractors. The Approved Contract Number shall be the same as Block 9b of the DD FORM 2794.
- 11. <u>Period of Performance:</u> The dates for the data being reported (contract, lot, delivery order, or task). Enter the appropriate numeric data for the year, month, and day.
 - a. <u>Start Date</u>: The actual contract work start date.
 - b. End Date: The latest revised estimate for period of performance end date for all contracted work.
- 12. <u>Submission Event</u>: Information for the report submission event:
 - a. <u>Event ID</u>: The submission event number for the report provided. This shall match Block 15a of the current DD FORM 2794.
 - b. <u>Submission Event Name</u>: The submission event name for the report provided. This shall match Block 15c of the current DD FORM 2794.
 - c. <u>Event Type(s)</u>: This shall indicate whether the event type is a "Wildcard" as denoted by an "X" in Block 15d of the current DD FORM 2794.
 - d. <u>Report Type</u>: Report Type is one of the following: Initial; Interim; or Final. This shall match Block 15e of the current DD FORM 2794
 - e. <u>Report As Of</u>: The report as of date is defined as the day of the month reflected by the reporting entity's internal financial reporting calendar that comes closest in terms of absolute value to the Report As Of Date provided by Block 15f of the DD FORM 2794. The format for the date shall be year, month, and day.
 - f. <u>Resubmission Number</u>: A resubmission occurs if prior submission(s) for the submission event were officially rejected with a memo signed by the DCARC. Enter "0" (zero) for original submission. If the report is a resubmission, enter the resubmission number, starting with "1" for the first resubmission, "2"

for the second resubmission, and so on.

- g. <u>Submission Lot/Order</u>: The lot/order, consistent with 17b of the current DD FORM 2794, associated with the reported technical data.
- 13. <u>Point of Contact</u>: Information for the person to contact for answers to any questions about entries on the submission:
 - a. <u>Name</u>: Last Name, First Name, and Middle Initial
 - b. <u>Department</u>: (Department within the reporting entity business unit)
 - c. <u>Telephone Number</u>: (including Area Code)
 - d. E-mail Address
- 14. <u>Date Prepared</u>: The date of report preparation. The format for the date shall be year, month, and day.

B. Data Group B – DD FORM 2794 Data Elements:

- 1. <u>Work Breakdown Structure (WBS) Element Code</u>: The WBS Element Code reflective of the DD FORM 2794 WBS Element Code for each reporting WBS element. The WBS Element Code shall be the same as Block 11b of the DD FORM 2794.
- 2. <u>WBS Element Level</u>: The WBS level consistent with the WBS Element Code for each reporting WBS Element. The WBS Element Level shall be the same as Block 11c of the DD FORM 2794.
- <u>WBS Element Name</u>: The WBS element name reflective of the DD FORM 2794 WBS element name for each reporting WBS element. The WBS Element Name shall be the same as Block 11d of the DD FORM 2794. There will be no space indentations before the WBS Element Name representing indenture of the WBS Element Level.
- 4. <u>Order/Lot</u>: The Order/Lot as identified in Block 17 of DD FORM 2794. When appropriate, the Order/Lot will have sequence or fiscal year buy information associated with it.

Examples include Technology Development (TD), Engineering and Manufacturing Development (EMD), Low Rate Initial Production (LRIP) #3, Full Rate Production (FRP) #5, and Operations and Support (O&S) FY17. Examples of Order/Lot Names on the same contract DD FORM 2794 plan include Lot 1, Lot 2, Lot 3, etc., or, Construction Preparation, Detailed Design & Construction, etc.

5. End Item: Uniquely identify a Platform, Model, Version, Flight, Variant, Kit or equivalent grouping or variant of a reported unit or system. The End Items shall be the same as Block 18 of the DD FORM 2794. There will always be at least one End Item on a Maintenance and Repair Parts submission, which may be the same as the Program Name reported in Block 1a of the DD FORM 2794. Instead of naming each variant into elements of the WBS, the common WBS (provided in DD 2794 Block 11) will be reported to each End Item (tagged per DD FORM 2794 Block 18).

For example, a family of vehicles may have unique End Items for each variant bought, such as Cargo, Van, Tractor, Wrecker, Dump Truck, and Load Handling. Common material or software costs that span across End Items, if applicable, may also be given their own End Item.

C. Data Group C – Maintenance Event Data

- 1. Maintenance Event Number: The event number associated with the maintenance activity.
- 2. <u>System/End Item or Depot Level Repair (DLR) NIIN</u>: The National Item Identification Number (NIIN) of the system or end item (i.e., aircraft, tank, ship, etc.). Also used for the DLR NIIN for depot work on DLRs (e.g., overhaul of engines, transmissions).
- 3. <u>System/End Item Serial Number</u>: The reporting entity's issued serial number of the end item or system receiving maintenance.

- 4. <u>End Item</u>: The End Item or variant, consistent with Data Group B (DD FORM 2794 Data Elements), which applies to the reported maintenance event. The End Item shall be the same as Block 18, referenced from the current DD FORM 2794.
- 5. <u>Order/Lot</u>: Enter the Order/Lot, consistent with Data Group B (DD FORM 2794 Data Elements), which applies to the reported maintenance event. The Order/Lot shall be the same as Block 17b, referenced from the current DD FORM 2794.
- 6. <u>Non-Mission Capable</u>: Enter "Y" if the fault caused the equipment to be Non-Mission Capable or "N" if the fault did not cause the equipment to be Non-Mission Capable.
- 7. <u>Scheduled Event</u>: Enter "Y" if the maintenance was a scheduled event or "N" if the maintenance was an unscheduled event.
- 8. <u>Failure Code:</u> The failure code associated with the maintenance event. See appropriate service reference in References section above.
- 9. <u>Failure Code Description</u>: A brief description of the failure code. See appropriate service reference in References section above.
- 10. Start Date: The date when failure occurred. Enter in YYYYMMDD format.
- 11. <u>Completion Date</u>: The date when the repair was completed and the unit was available for use. Enter in YYYYMMDD format.
- 12. <u>Repair Organization/Location</u>: The location where the repair was performed (use the CAGE code if identified).
- 13. <u>Maintenance Event Type</u>: The type of maintenance event (e.g., Scheduled Maintenance, Unscheduled Maintenance, Engineering Change Order (ECO), Deprocessing, etc.).
- 14. <u>WBS Element Code</u>: The corresponding WBS Element Code related to the maintenance event. The code shall be the same as Block 11, referenced from the current DD FORM 2794.
- 15. Labor Hours: The total labor hours associated with the repair event
- 16. <u>Remarks</u>: Any comments which would clarify or complete the maintenance event data entered.

4. Data Group D – Repair Parts Data

- a. <u>Maintenance Event Number</u>: The event number associated with the maintenance activity.
- b. <u>Repair Action Code</u>: The code identifying the repair action.
- c. <u>Repair Action Description</u>: The description of the repair action.
- d. <u>Repair Part Name</u>: The name of the LRU/WRA (Line Replaceable Unit/Weapons Replaceable Assembly), SRU/SRA (Shop Replaceable Unit/Shop Replaceable Assembly) or part.
- e. <u>881 Reference</u>: The corresponding MIL-STD-881 WBS related to the LRU/WRA, SRU/SRA or part.
- f. <u>Reparable or Consumable:</u> Indicate whether the part is a reparable "R" or consumable "C". If the maintenance event includes repairing (not replacing) a reparable item and it was returned to use put yes (Y) in parenthesis. If the reparable item was not able to be repaired, put no (N) in parenthesis. Additional information can be provided in Comments Column L.
- g. <u>Repair Part Quantity</u>: The quantity of same LRU/WRA, SRU/SRA or part required to complete the

maintenance action.

- h. <u>Part Number</u>: The reporting entity's Part Number. This is a number used to identify an item of production or a range of items of production by the manufacturer controlling the design, characteristics, and production of the item by means of its engineering drawings, specifications, and inspection requirements.
- i. <u>Repair Part Number</u>: National Stock Number (NSN) preferred, and/or, National Item Identification Number (NIIN)
- j. <u>Repair Part WUC/LCN</u>: The repair part Work Unit Code (WUC) or Logistics Control Number (LCN).
- k. <u>Repair Part FWG</u>: The Functional Working Group (FWG) that identifies to which particular system, subsystem, component, or assembly the item belongs to.
- 1. <u>Replacement Cost</u>: The replacement cost associated with the LRU, SRU or Part. Replacement cost should be identified/entered for all items. If cost data represents cost to the reporting entity, please provide a nominal cost to government price cost factor in comments.
- m. <u>Repair Cost</u>: The repair cost associated with the LRU, SRU or Part. Repair cost should be identified/entered for all repairable items. If cost data represents cost to the reporting entity, please provide a nominal cost to government price cost factor in comments.
- n. <u>Remarks</u>: Any relevant information that could be used in the interpretation of the data provided in this report by repair part

END OF DI-MGMT-82163