DATA ITEM DESCRIPTION Title: MATERIAL DATA REPORT

Number: DI-FNCL-82009A AMSC Number: N10025 DTIC Applicable: Preparing Activity: AS Applicable Forms: MDR Report Matrix (MS Excel) Approval Date: 20190522 Limitation: GIDEP Applicable: Project Number: FNCL-2019-001

Use/Relationship: The Material Data Report (MDR) will be used to obtain the essential cost, technical and programmatic data for material items used in the development, procurement and sustainment of the contracted Prime Mission Product. The MDR will support the Acquisition and Sustainment processes by providing DOD analysts the data needed to improve the tools, techniques and methods used in support of cost estimating, program budgeting, operational logistics, operational readiness and overall program life cycle and configuration management.

This Data Item Description (DID) contains the format, content, and intended use information for the data product resulting from the work task described in the contract SOW.

Requirements:

1. Reference Documents.

1.1 DoD Instruction 5000.02, "Operation of the Defense Acquisition System" (current version). This instruction contains mandatory CSDR requirements.

1.2 DoDI 5000.73, "Cost Analysis Guidance and Procedures" (current version).

1.3 DoD 5000.04-M-1, "Cost and Software Data Reporting (CSDR) Manual" (current version).

1.4 MIL-STD-881, "Work Breakdown Structure for Defense Materiel Items" (current version).

1.5 DoD 4120.15-L, "Model Designation of Military Aerospace Vehicles" (current version).

1.6 DD Form 2794 Plan and Process, available at http://cade.osd.mil/policy/co-plan.

1.7 MIL-STD-3000 "Department of Defense Standard Practice Technical Data Packages," (current version).

1.8 SAE 649C "Configuration Management Standard"

1.9 SAE 649-1 "Configuration Management Requirements for Defense Contracts"

1.10 GEIA-HB-649A "Configuration Management Implementation Guide"

1.11 ASTM International Standard F2792-12a, 2013 (current version).

1.12 Society of Allied Weight Engineers (SAWE) Recommended Practice (RP) Number 8/A-7, "Weight and Balance Data Reporting Forms for Aircraft (including Rotorcraft and Air-Breathing Unmanned Aerial Vehicles)" (current version).

1.13 Society of Allied Weight Engineers (SAWE) Handbook (current version).

1.14 International Standards Organization (ISO) alphabetic currency code as defined at (www.iso.org/iso/home/standards/currency_codes.htm).

1.15 DoD approved unit of measure descriptions are listed in the following website: https://wawf.eb.mil/wawf/xhtml/unauth/web/homepage/UnauthUnitsOfMeasureTable.xhtml

1.16 DOD 4100.39-M, Volume 10, Table 181

1.17 MIL-STD-780G, Military Standard, "Work Unit Codes for Aeronautical Equipment" (current version)

1.18 ASME Y14.35-2014, "Revision of Engineering Drawings and Associated Documents" (current version)

1.19 ASME Y14.100-2013, "Engineering Drawing Practices" (current version)

1.20 Consolidated Bill of Material (CBOM) Implementation Guide (current version).

2. Format. The MDR shall be submitted electronically as an Extensible Markup Language (XML) file that will adhere to a XML Schema Definition (XSD) provided by the government and the detailed preparation instructions below. Each XML file should be validated against the XSD using the validity constraints defined in the World Wide Web Consortium (W3C) XML Schema Recommendation (http://www.w3.org/2001/XMLSchema) before submission.

2.1 Extensible Markup Language (XML): A language described in a formal recommendation from W3C designed for the transportation and storage of data in a standard format. XML is a flexible method for creating standard information formats that can be shared while ensuring the data integrity. XML is extensible because there are no limits on the number of self-describing markup symbols used. XML is commonly used for the transmission, validation, and interpretation of data between applications and organizations.

2.2 XML Schema Definition (XSD): A recommendation from W3C for specifying how to describe every element in a XML file and to represent the interrelationship between attributes and elements. A XSD file is used to verify that a XML file adheres to the elements descriptions and relations described by the XSD. The result of a XSD file is a description of a standard format for creating XML files. Using a XML file described by a XSD ensures the integrity of the data when sharing XML between multiple parties.

2.3 The World Wide Web Consortium (W3C): Is an international community that develops open standards to ensure the long-term growth of the Web.

3. Content. Data must be reported for each Data Element for which an "X" is marked on the approved contract MDR Report Matrix (contact the NAVAIR POC to obtain a copy of the MDR Report Matrix Excel file). The report shall contain the following:

Material Data Report (MDR) Data Format	Report
MDR Cost (Initial, Interim, or Final)	1
MDR Configuration Management (CM)	2
Comprehensive Bill of Material (CBOM) (Initial, Interim,	3
or Final)	

3.1 The MDR DID is structured around the eight Extensible Markup Language (XML) Schema data groups below that contain the content and relationships required for the electronic submissions:

XML Schema data group	Data Group
Report Metadata	А
Subcontractor	В
Part Association	С
Part Categorization	D
Part Identification	Е
End Item	F
Reliability	G
Comments	Н

3.1.1 Data Group A – Report Metadata: Provides metadata on the contract that allows the submitted data to be associated with other Data Groups and program data. Includes Program Information, Contract Information, Period of Performance (PoP) Information, Contractor Information, and Location Information.

3.1.2 Data Group B – Subcontractor: Provides data for subcontracts and subcontractors that allows the submitted data to be associated with other Data Groups and program data. Used to collect information related to each manufacturing part supplier, such as supplier CAGE Code, supply tier and procurement lead time. Includes Subcontract Information, Subcontractor/Supplier Information, Subcontractor/Supplier Location Information, Classification Information, and Diminishing Manufacturing Sources.

3.1.3 Data Group C – Part Association: Provides data for parts that allows the submitted data to be associated with other Data Groups and program data. Includes Prime Mission Product (PMP) Series, Work Breakdown Structure (WBS) information, Base Contract Year, Logistic Control Number (LCN) information, Work Unit Code (WUC) information, and other Logistical identification information.

3.1.4 Data Group D – Part Categorization: Provides data for parts that allows the submitted data to be associated with other Data Groups and program data. Includes Government Furnished Property (GFP) or Contractor Furnished Equipment (CFE), Material Category, Equipment/Part

Category information, e.g., COTS, Make/Buy, Additive Manufacturing information, Technical Data Rights information, Warranty, and Raw Material information.

3.1.5 Data Group E – Part Identification: Provides data for parts that allows the submitted data to be associated with other Data Groups and program data. Includes Part Number information, Engineering Change Proposal (ECP) Number, Next Higher Assembly Part Number, OEM Part Number information, and Software version and classification information.

3.1.6 Data Group F – End Item: Provides data for end items that allows the submitted data to be associated with other Data Groups and program data. Includes End Item Data Elements, Repair Cost Data Elements, Raw Material, and Basis of Cost (BOC) Data Elements.

3.1.7 Data Group G – Reliability: Provides Reliability data that allows the submitted data to be associated with other Data Groups and program data. Includes Reliability Data Elements.

3.1.8 Data Group H – Comments: Provides clarifying information for the data associated with other Data Groups and program data.

3.2 General Instructions:

3.2.1 WBS reporting elements shall be in accordance with the current version of MIL-STD-881. If the Program has an approved DD Form 2794, then the WBS reporting elements shall be based on the approved DD Form 2794.

3.2.2 The reporting requirements delineated in this DID shall be flowed down per the Statement of Work provided by the Requiring Office.

3.2.3 All units of currency reported within the MDR shall be reported in U.S. Then-Year dollars, rounded to the nearest dollar.

3.2.4 The MDR is meant for "Unclassified" data use only. Mark the security classification of each report as "Unclassified" in paragraph 3.3.1.7.3 of Data Group A. If classified data needs to be reported, the contractor shall contact the Requiring Office as designated in DD Form 1423-1 Item 6 for special processing instructions.

3.2.5 Ensure proper handling of the Contractor(s) "Proprietary" data, through the use of the attribute field associated with each data element delineated in this DID and the "Proprietary" or "Non-Proprietary" classification agreed to during the post award conference.

3.2.5.1 "Proprietary" for purposes of this MDR means "cost and pricing data" as defined in FAR 2.101(a) that are not publicly available and for which reasonable efforts have been made to maintain their confidentiality. It does not include items, components, or processes-whether commercial or non-commercial commodity designated - nor their associated (a) "technical data", (b) computer data bases, (c) computer programs, (d) computer software documentation, (e) "computer software", (f) detailed manufacturing or process data, (g) form, fit, and function data, (h) operation, maintenance, installation, or training data, or (i) any of the aforementioned usage license rights as those terms are defined in DFARS 252.227-7013, 252.227-7014, and 252.227-7015.

3.2.6 Three types of reports may be prepared under this DID: Initial Reports, Interim Reports, and Final Reports.

3.2.6.1 An Initial Report is a preliminary report used to verify the contractor's capability to prepare and submit the report in accordance with the DID and the approved MDR Report Matrix. Initial reports are only required on an exception basis as determined by the Requiring Office. Typically, reports will only be required when the contractor has not previously demonstrated the capability to produce the required report(s).

3.2.6.2 An Interim Report is any report other than the Initial Report that is prepared before submission of the Final Report.

3.2.6.3 Final Reports are intended to capture all or substantially all actual contract costs.

3.3 Preparation Instructions:

3.3.1 Data Group A – Metadata Data Elements

3.3.1.1 Program Information:

3.3.1.1.1 Program Name: Enter the name given to the Major Defense Acquisition Program (MDAP) as specified on the DoD MDAP list the Under Secretary of Defense, Acquisition, Technology and Logistics publishes annually (e.g., "AESA—Active Electronically Scanned Array Program"). If the Program has an approved DD Form 2794, this shall be the same as the entry in Block 1a of DD 2794.

3.3.1.1.2 WBS System Type: Enter the specific category of the defense material item contained in the appropriate Appendix to MIL-STD-881 (current version) that was used as the basis of the Work Breakdown Structure (WBS) (e.g., Aircraft Systems).

3.3.1.1.3 Prime Mission Product (PMP): Enter the most current official military designation for the end item as specified by the appropriate classification standard. If the Program has an approved DD Form 2794, the defined Prime Mission Product shall be the same as Block 1c of DD 2794.

3.3.1.1.3.1 For Military aircraft DoD 4120.15-L, "Military Designation of Military Aerospace Vehicles," would specify "F-35" for the Joint Strike Fighter

3.3.1.1.3.2 For some Material Data Report (MDR) contracts or subcontracts, the end item being reported may have a different designation than the total program. For example, if the RADAR subcontractor for the F-35 was required to submit an MDR, the preparer would enter "AN/APG-81 Radar".

3.3.1.1.3.3 If the end item does not have a military designation, enter the name of the product being developed or procured. For example, during development many mission system components on an aircraft do not have an official military designation. In these cases, enter the name of the WBS element, such as Communications, Navigation and Identification (CNI).

3.3.1.1.4 Phase or Milestone: Enter the life cycle phase being reported. If the Program has an approved DD Form 2794, the Phase/Milestone shall be the same as Block 1b.

3.3.1.1.4.1 Pre-A (Material Solution Analysis Phase),

3.3.1.1.4.2 A (Technology Maturation and Risk Reduction Phase),

3.3.1.1.4.3 B (Engineering and Manufacturing Development Phase),

3.3.1.1.4.4 C-LRIP (Low-Rate Initial Production),

3.3.1.1.4.5 C-FRP (Full-Rate Production), or

3.3.1.1.4.6 O&S (Operations and Support Phase)

3.3.1.1.5 Fiscal Year Buy: Enter the Government Fiscal Year associated with the purchase of the Prime Mission Product (PMP).

3.3.1.1.5.1 For example, if a PMP end item was bought under a single year contract in FY 2018 then enter 2018.

3.3.1.1.5.2 For PMP end items bought under a multi-year contract covering FY2013 through FY2017, the contractor would enter the year (2013, 2014, 2015, 2016 or 2017) that corresponds to the year the material items were purchased.

3.3.1.1.6 Order/Lot Number: Enter the sequential number of the Fiscal Year Buy (para 3.3.1.1.5). For example, the entry for Lot 1 would be "1".

3.3.1.1.7 PMP Quantity: Enter the Prime Mission Product Quantity proposed in the solicitation or reflected in the contract for the Fiscal Year Buy.

3.3.1.1.8 PMP Serial Number: Enter the unique serial number used to identify the individual PMP. NOTE: MDR-CM only: This data field should only be populated when submitting Report 2 (MDR-CM).

3.3.1.1.8.1 For example, with Military aircraft, the Aircraft Bureau Number (BUNO) is the unique serial number used to identify the individual aircraft.

3.3.1.2 Contract Information:

3.3.1.2.1 Customer: For Direct-Reporting Subcontractor Use Only. Enter Customer name. This applies to direct-reporting subcontractor use only. Customer is the organization name of the prime contractor for whom the work on the subcontract is being performed. Otherwise N/A (for "not applicable").

3.3.1.2.2 Prime Contract Number: Enter 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. If the Program has an approved DD Form 2794, shall be the same as Block 9b of DD 2794.

3.3.1.2.3 Modification Number: Enter the latest contract modification number the prime contractor has with the Government customer. This requirement is identical for both reporting entities and direct-reporting subcontractors.

3.3.1.2.4 Prime Contract Name: Enter the common reference name for the prime contract. For example, the contract for the F/A-18 E/F is referred to as the "Super Hornet" contract and the contract for the E-2D is referred to as the "Advanced Hawkeye" contract. This requirement is identical for all reporting contractors (prime contractor, associate contractor or direct reporting subcontractor).

3.3.1.2.5 Prime Contract Type: Enter the Contract Type Code for the contract for which the data is being reported.

3.3.1.2.5.1 Enter the contract type code for the contract for which data are being reported. If the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004 and the contract type has not been determined yet, enter N/A (for "not applicable"). The codes for the common acquisition contract types included in the Federal Acquisition Regulation (FAR) are listed in the table 1 below. For Time and Material, Labor-Hour, Letter Contracts, Indefinite Delivery, Basic Ordering Agreements, and flexibly priced contracts, select the primary contract type against which the majority of the orders are placed. If the contract type is an Other Contract (OC), enter OC, and then enter the complete name of the contract type in the Comments field (para 3.3.8).

FAR Contract Types	Contract Type Code
Cost Reimbursement Contracts	
Cost Sharing	CS
Cost Plus Award Fee	CPAF

	,
Cost Plus Fixed Fee	CPFF
Cost Plus Incentive Fee	CPIF
Cost Plus Incentive Fee (With Performance Incentives)	CPIF(PI)
Fixed Price Contracts	
Firm Fixed Price	FFP
Fixed Price Incentive, Firm Target	FPIF
Fixed Price Incentive, Successive Targets	FPIST
Fixed Price Incentive, Successive Targets (With	FPIST(PI)
Performance Incentive)	
Fixed Price Incentive Firm Target (With Performance	FPIFT(PI)
Incentive)	
Fixed Price Award Fee	FPAF
Fixed Price with Economic Price Adjustment	FP/EPA
Fixed Price with Prospective Price Redetermination	FP/PPR
Fixed Ceiling Price with Retroactive Price	FCP/RPR
Redetermination	
Firm Fixed Price, Level of Effort Term	FFP/LOET
Indefinite Delivery Indefinite Quantity	IDIQ
Letter Contract and Undefinitized Contractual Action (UCA)	LC
Time and Materials	ТМ
Other Contracts	OC
Contracts with multiple Contract Types by Contract Line Item	MC
Numbers (CLINS)	

Table 1: Contract/Order Type Code

3.3.1.2.6 Prime Contract Classification: Enter SY for Single Year contracts or MY for Multi-Year contracts.

3.3.1.2.7 Solicitation Number: Enter the solicitation number, if the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004, Otherwise enter N/A (for "not applicable").

3.3.1.2.8 Contractor Proposal Number: Enter the reporting entity's proposal number.

3.3.1.2.9 CLIN Number: Enter the four-digit number between "0000" and "9999" that identifies a separate supply or service provided as part of the contract. Do not report the CLIN subline number (SLIN) or Accounting Classification Reference Number (ACRN).

3.3.1.3 Period of Performance (PoP) Information: The dates for the contract period of performance. The format for the date shall be year, month, and day. For example, July 31, 2018, would be shown as 20180731.

3.3.1.3.1 PoP Start Date: Enter the actual contract work start date as referenced in the contract.

3.3.1.3.2 PoP End Date: Enter the latest revised estimate for period of performance end date for all contracted work.

3.3.1.4 Contractor Information:

3.3.1.4.1 Reporting Organization Name: Enter the name of the reporting organization. If the Program has an approved DD Form 2794 this shall match the entry in Block 9a.i of that form.

3.3.1.4.2 Reporting Organization CAGE Code: Enter Commercial and Government Entity Code, or CAGE Code.

3.3.1.4.2.1 Commercial and Government Entity (CAGE) code: a five position alphanumeric code assigned to companies which either fabricate items of production and/or have design control of items procured by the Federal Government. The first and fifth positions will be numeric with the second, third, and fourth positions being alpha or numeric, excluding alpha I and O. If the CAGE is NATO (NCAGE) the first and/or fifth positions will be an alpha. The NCAGE prefix (first position) and suffix (fifth position) character(s) designate a specific country or codification bureau (see FLIS procedures manual, volume 10, table 131).

3.3.1.4.3 Reporting Organization Division Name: Enter name of the division of the organization performing and/or leading the work, or "N/A if not applicable. If the Program has an approved DD Form 2794 this shall match the entry in Block 9a.ii.

3.3.1.4.4 Reporting Organization Type: Enter one of the following four (4) for the appropriate organization type: Prime, Associate, Direct-Reporting Subcontractor, or Government.

3.3.1.4.4.1 Prime/Associate Contractor:

3.3.1.4.4.1.1 Prime Contractor: A prime contractor is any contractor that has a direct contract with the Government. The name and address of the prime contractor is provided in Section A of the contract (Standard Form 26, Item 7). Any other contractor associated with the contract is considered to be an associate or a subcontractor.

3.3.1.4.4.1.2 Associate Contractor: Any prime contractor whose contract with the Government requires joint participation with other prime contractors to accomplish the Government's requirement. Joint participation involves the potential sharing of information, data, technical knowledge, expertise, and resources essential to the integration of the common requirement. Such participation is intended to ensure the greatest degree of cooperation to meet the terms of the contract in satisfying the common requirement.

3.3.1.4.4.2 Direct-Reporting Subcontractor, or

3.3.1.4.4.3 Government.

3.3.1.5 Location Information: Enter the following information for the Reporting Organization, or the Division if applicable.

3.3.1.5.1 Street Address

3.3.1.5.2 City

3.3.1.5.3 State/Province

3.3.1.5.4 Zip Code/Delivery Zone

3.3.1.5.5 Country

3.3.1.6 Point of Contact (POC) Information: Enter the following information for the person to contact for answers to any question about entries on the MDR submission:

3.3.1.6.1 POC Name: Last Name, First name, and Middle Initial

3.3.1.6.2 POC Department: (Department within the contractor business unit)

3.3.1.6.3 POC Telephone Number: (including Country Code and Area Code)

3.3.1.6.4 POC E-mail Address:

3.3.1.7 Classification Information:

3.3.1.7.1 Approved Contract MDR Report Matrix Number: Enter the approved contract MDR Report Matrix number that authorized the collection of data for this report.

3.3.1.7.2 Report Type: Enter one of the following: MDR-Cost Initial; MDR-Cost Interim; MDR-Cost Final; MDR-CM; or CBOM Initial; CBOM Interim; CBOM Final.

3.3.1.7.3 Classification: Enter "Unclassified" for this data element. In accordance with this DID, only Unclassified documents should be submitted to the Requiring Office. If classified data needs to be reported, the contractor shall contact the Requiring Office as designated in DD Form 1423-1 Item 6 for special processing instructions.

3.3.1.7.4 Report As Of Date: Enter the "Report As Of Date", which is defined as the day of the month reflected by the reporting entity's internal financial reporting calendar. The format for the date shall be year, month, and day. For example, July 31, 2018, would be shown as 20180731.

3.3.1.7.5 Resubmission Number: Enter the resubmission number, which occurs if prior submission(s) for the submission event were officially rejected with a memo signed by the Requiring Office as designated in DD Form 1423-1 Item 6. 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.

3.3.1.7.6 Report Preparation Date: Enter the date of report preparation. The format for the date shall be year, month, and day. For example, July 31, 2018, would be shown as 20180731.

3.3.1.7.7 Report Preparation Hours: Enter the number of person hours required to prepare the MDR for submittal to the Government.

3.3.1.8 DD Form 2794 Plan Number: If the Program has an approved DD Form 2794, or a DD Form 2794 Revision Number, then enter the Approved DD 2794 Number or the Revision Number, which shall be the same as Block 10a/b of the DD 2794.

3.3.2 Data Group B – Subcontractor/Supplier Data Elements

3.3.2.1 Subcontractor/Supplier Contract Information:

3.3.2.1.1 Subcontractor/Supplier Contract Number: Enter the assigned contract number the subcontractor/supplier has with the Prime Contractor (aka subcontract).

3.3.2.1.2 contractor/Supplier Contract Type: Enter the Contract Type Code for the contract with the subcontractor/supplier (aka subcontract).

3.3.2.1.2.1 Enter the contract type code for the contract with subcontractor/supplier (aka subcontract) for which data are being reported. If the data are in response to a solicitation in accordance with DFARS sections 234.7101, 252.234-7003, and 252.234-7004 and the contract type has not been determined yet, enter N/A (for "not applicable"). The codes for the common acquisition contract types included in the Federal Acquisition Regulation (FAR) are listed in the table 1 above (paragraph 13). For Time and Material, Labor-Hour, Letter Contracts, Indefinite Delivery, Basic Ordering Agreements, and flexibly priced contracts, select the primary contract type against which the majority of the orders are placed. If the contract type is an Other Contract (OC), enter OC, and then enter the complete name of the contract type in the Comments field (para 3.3.8)

3.3.2.1.3 Subcontract Fiscal Year/Multi-Year Start: Enter the Government Fiscal Year as referenced in the solicitation or contract. If this is a Multi-Year enter the first Fiscal Year covered under the solicitation or contract. The year should be entered in the numerical format such as 2018 not as FY18.

3.3.2.1.4 Subcontract Multi-Year End: Enter the last Fiscal Year covered under the solicitation or Multi-Year contract. The year should be entered in the numerical format such as 2018 not as FY18.

3.3.2.1.5 Subcontract Long Term Agreement First Year: If this purchase is covered under an established Long Term Agreement, then enter the first Government Fiscal Year that would be subject to this Long Term Agreement. The year should be entered in the numerical format such as 2018 not as FY18. If not applicable, enter "N/A".

3.3.2.1.6 Subcontract Long Term Agreement Last Year: If this purchase is covered under an established Long Term Agreement then enter the last Government Fiscal Year that would be subject to this Long Term Agreement. The year should be entered in the numerical format such as 2018 not as FY18. If not applicable, enter "N/A".

3.3.2.2 Subcontractor/Supplier Information:

3.3.2.2.1 Subcontractor/Supplier Name: Enter the name of the subcontractor organization actually performing the work.

3.3.2.2.2 Subcontractor/Supplier CAGE Code: Enter the Commercial and Government Entity Code, or CAGE Code.

3.3.2.2.2.1 Commercial and Government Entity (CAGE) code: a five position alphanumeric code assigned to companies which either fabricate items of production and/or have design control of items procured by the Federal Government. The first and fifth positions will be numeric with the second, third, and fourth positions being alpha or numeric, excluding alpha I and O. If the CAGE is NATO (NCAGE) the first and/or fifth positions will be an alpha. The NCAGE prefix (first position) and suffix (fifth position) character(s) designate a specific country or codification bureau (see FLIS Procedures Manual, Volume 10, Table 131).

3.3.2.2.3 North American Industry Classification System (NAICS) Code: Enter the NAICS code for each part. The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The NAICS codes are found at web address: https://classcodes.com/naics-code-list/. If known enter the subcontractor's North American Industry Classification System (NAICS) Code for the item being supplied, otherwise enter U for unknown.

3.3.2.3 Subcontractor/Supplier Location Information: Enter the following information for the Subcontractor Organization, or the Division if applicable.

3.3.2.3.1 SubK/Supplier Street Address

3.3.2.3.2 SubK/Supplier City

3.3.2.3.3 SubK/Supplier State/Provence

3.3.2.3.4 SubK/Supplier Zip Code/Delivery Zone

3.3.2.3.5 SubK/Supplier Country

3.3.2.4 Subcontractor/Supplier Classification Information:

3.3.2.4.1 Subcontractor/Supplier Tier Level: Enter a number corresponding to the subcontractor's/suppliers' tier level.

3.3.2.4.1.1 Tiered supply chains are common in industries where the final product consists of many complex components and sub-assemblies that must comply with stringent quality, manufacturing and business standards.

3.3.2.4.1.2 Tier 1 Subcontractors/Suppliers supply components directly to the Prime/Associate Contractors. Tier 2 Subcontractors/Suppliers supply components to Tier 1 Subcontractors/Suppliers. Tier 3 Subcontractors/Suppliers supply components to Tier 2 Subcontractors/Suppliers and so on.

3.3.2.4.2 Small Business: Identify if this subcontractor is a small business by entering "Y" for yes or "N" for no.

3.3.2.4.2.1 Federal Acquisition Regulation (FAR) Part 19, and Defense Federal Acquisition Regulation Supplement (DFARS) Part 219 address small businesses.

3.3.2.4.2.2 Small Business Administration Size Standard Table provides NAICS codes, and is found at the following website: https://www.sba.gov/document/support--table-size-standards

3.3.2.4.2.3 The System for Award Management (SAM) is the primary vendor database for the U.S. Federal Government. SAM collects, validates, stores, and disseminates data in support of agency acquisition missions. Both current and potential federal government vendors are required to register in SAM in order to be awarded contracts by the federal government. SAM is found at the following website: www.sam.gov

3.3.2.4.3 Small Business Classification: Enter the classification of the Small Business or "N/A". For example, Woman Owned Small Business, or Service Disabled Veteran Owned, etc.

3.3.2.4.4 Publically Held Company: Is this subcontractor a publically held company? Enter "Y" for yes or "N" for no, otherwise enter "U" for unknown

3.3.2.4.5 Single Source: Is this subcontractor the single source supplier for the end item? Enter "Y" for yes or "N" for no, otherwise enter "U" for unknown.

3.3.2.5 Diminishing Manufacturing Sources: Enter data for identified alternative manufacturing sources.

3.3.2.5.1 Alternative 1 Subcontractor/Supplier Name: If an alternative subcontractor has been identified then enter the name of the subcontractor, otherwise enter "U" for unknown or "N/A" for not applicable.

3.3.2.5.2 Alternative 1 Subcontractor/Supplier CAGE Code: If an alternative subcontractor has been identified then enter the Commercial and Government Entity (CAGE) code of the subcontractor, otherwise enter "U" for unknown or "N/A" for not applicable.

3.3.2.5.3 Alternative 2 Subcontractor/Supplier Name: If an alternative subcontractor has been identified then enter the name of the subcontractor, otherwise enter "U" for unknown or "N/A" for not applicable.

3.3.2.5.4 Alternative 2 Subcontractor/Supplier CAGE Code: If an alternative subcontractor has been identified then enter the Commercial and Government Entity (CAGE) code of the subcontractor, otherwise enter "U" for unknown or "N/A" for not applicable.

3.3.3 Data Group C – Part Association

3.3.3.1 Prime Mission Product Series: Enter the series symbol that is applicable to the particular design number for the system. See the military designation directive appropriate for the specified end item.

3.3.3.1.1 For a military aircraft system, reference DoD 4120.15-L, "Model Designation of Military Aerospace Vehicles". For example, F/A-18 aircraft have the following applicable series symbols A, B, C, D, E, F or G.

3.3.3.2 Work Breakdown Structure (WBS) Element Code: Enter the applicable WBS element codes in numeric decimals (e.g., 1.0 for parent, 1.1 for child of 1.0, 1.1.1 for child of 1.1). See MIL-STD-881 (current version) for standard WBS policy. If there is an approved DD Form 2794, then the WBS element code shall be the same as Block 11.

3.3.3.3 WBS Element Level: Enter the WBS Element level consistent with the WBS Element Code (para 3.3.3.2) for each reporting WBS Element. If there is an approved DD Form 2794, then the WBS Element Level shall match the approved DD Form 2794.

3.3.3.4 WBS Element Name: Enter the name of the applicable WBS reporting elements. See MIL-STD-881 (current version) for standard WBS policy.

3.3.3.4.1 For example, for an aircraft system, enter Aircraft System for WBS element code 1.0, Air Vehicle for WBS element code 1.1, Airframe for WBS element code 1.1.1, etc.

3.3.3.5 Contractor WBS Element Code: If the contractor has unique internal WBS element codes then enter the applicable Contractor WBS element code. If not applicable, enter "N/A".

3.3.3.6 Contractor WBS Element Name: If the contractor has unique internal WBS reporting elements then enter the applicable Contractor Work Breakdown Structure (WBS) Element name. If not applicable, enter "N/A".

3.3.3.7 Base Contract Year: Enter the Government fiscal year in which the part was procured under the contract for the program.

3.3.3.8 Logistic Control Number (LCN) Code: If the Reporting Organization (para 3.3.1.4.1) uses a separate logistics structure, enter the LCN code associated with the Prime Contractor's Part Number or National Stock Number in the LCN table. For parts that belong to more than one LCN Code, make multiple entries, listing all associated LCN Codes. Enter "N/A" if not applicable.

3.3.3.9 LCN Nomenclature/Description: Enter the LCN Nomenclature or a brief description of the LCN element. Enter "N/A" if not applicable.

3.3.3.10 Reliability Analysis Structure (RAS) Code: If the contractor uses a separate reliability structure other than WUC or LCN, enter the RAS Code associated with the Prime Contractor Part Number or National Stock Number in the RAS table. For parts that belong to more than one RAS Code, list all associated RAS Codes, make multiple entries, listing all associated RAS Codes. Enter "N/A" if not applicable.

3.3.3.11 RAS Nomenclature/Description: Enter The RAS Nomenclature or a brief description of the RAS element. Enter "N/A" if not applicable.

3.3.3.12 Work Unit Code (WUC): Enter the WUC code associated with the Prime Contractor Part Number or National Stock Number in the WUC table. For parts that belong to more than one WUC, make multiple entries, listing all associated WUCs. Enter "U" for unknown or "N/A" if not applicable.

3.3.3.12.1Work Unit Code (WUC): See NAVAIR 00-25-8, Business Rules for the Assignment and Management of Work Unit Codes (WUC) And Type Equipment Codes (TEC). WUCs are unique identifiers of the hierarchical structure of assemblies, systems, sets, groups, installations, repairable components, life limited or high profile consumable parts or areas/zones of a weapons system that will be utilized for documentation of maintenance tasks. WUCs may be five, seven, or up to thirty-two numeric or alpha-numeric characters in length. WUCs are assigned and controlled by the by the Naval Aviation Logistics Command Management Information System (NALCOMIS) Optimized Organizational Maintenance Activity (OOMA) Baseline Manager (BLM) with concurrence of the NAVAIR WUC Policy Manager by direction of COMNAVAIRSYSCOM. The NALCOMIS OOMA baseline for each Type/Model/Series (TMS) is designated as the authoritative data source for WUCs. DECKPLATE, which is the Naval Aviation Enterprise (NAE) authorized data warehouse, stores all approved WUC data which can be extracted by authorized activities/personnel.

3.3.3.13 Work Unit Code (WUC) Element: Enter a brief description of the WUC element.

3.3.3.14 Type of Change Code (TOCC): Enter TOCC (listed below), "Initial", or "N/A" in accordance with GEIA-STD-0007-B. For example, enter "D" for "Code D" provided in list below. TOCC is blank for initial submissions of provisioning data, therefore, enter "Initial" as the input for this item. TOCC is used as a type of change code to indicate deletions, modifications, typographical errors, quantity changes (increase, decrease), and limited part applications as follows:

3.3.3.14.1 Code D: Is used to indicate a deleted item

3.3.3.14.2 Code G: Is used to indicate deletion of a data element

3.3.3.14.3 Code L: Is used to indicate an item is replaced during production and support of the old part may be required for prior production quantities

3.3.3.14.4 Code M: Is used to indicate a modified item and is required to identify entries for those items changed as a result of either administrative or engineering requirements (not for initial entry of NSN) before or during production. Examples of administrative or engineering requirements changes follow:

3.3.3.14.4.1 Prime contractor's reference number

3.3.3.14.4.2 Commercial and government entity code

3.3.3.14.4.3 Manufacturer's reference number

3.3.3.14.4.4 Item name.

3.3.3.14.4.5 Other data elements as may be subsequently defined wherein the hardware is not affected.

3.3.3.14.5 Code Q: Is used to indicate a quantity field change.

3.3.3.14.6 Code T: Is used to indicate a typographical error correction (not automatically assigned.

3.3.3.14.7 SYSTEM/EI TYPE OF CHANGE CODE. The TOCC of the system/end item as a model (An indenture code) item.

3.3.3.15 Indenture Code: Enter the Indenture Code or "N/A" in accordance with GEIA-STD-0007-B. Indenture code illustrates a lateral and descending "family tree" relationship of each line item to and within the system or end item and its discrete components (units), assemblies and subassemblies beginning with "A" for the system, "B" for the system components, "C" for assemblies, "D" for subassemblies, etc.

3.3.3.15.1 Attaching Part/Hardware: Attaching part hardware shall be listed according to the following options as specified by the requiring authority.

3.3.3.15.1.1 Option 1. Indentured with a "Z" below the item it attaches.

3.3.3.15.1.2 Option 2. Indentured with a "Z" and listed as a bulk item within each appropriate level component where it appears.

3.3.3.15.1.3 Option 3. Indentured with a "Z" and listed as a bulk item at the end of the

provisioning list.

3.3.3.15.1.4 Option 4. All parts indicated on drawing will be listed in the breakdown in proper indenture without specific identification that the parts are utilized as "attaching parts".

3.3.3.15.1.5 Option 5. Attaching hardware need not be listed.

3.3.3.15.2 Indenture for kits: Whether or not kits will be included in the provisioning parts list (PPL) will be indicated on the LSAR Data Requirements Form (DD Form 1949-3). When maintenance plans/ practices require that a group of parts be replaced in one maintenance or overhaul operation, these items shall be listed as a kit IAW with one of the following options:

3.3.3.15.2.1 Option 1. Kits shall be assigned an indenture lower than the subassembly/assembly/component/end item for which it is used and parts of the kit shall be identified by entering an asterisk.

3.3.3.15.2.2 Option 2. The kit reference number shall be listed at the end of the subassembly/assembly/component/end item breakdown.

3.3.3.15.2.3 Option 3. All kit parts shall be listed in the PPL in proper indenture without specific identification that the parts are kit components. The kit part number is to be listed as the last item of the applicable next higher assembly, end item/assembly/subassembly breakdown.

3.3.3.16 Alternative LCN Code (ALC): Enter ALC or "N/A" in accordance with GEIA-STD-0007-B. ALC is a code used to allow documentation of multiple models of a system/equipment, or alternate design considerations of an item, using the same Logistic Support Analysis Control Number (LCN) breakdown. NOTE: ALC of zero zero "00" will always be used as the basic system. There are no blanks allowed. ALC's will be assigned from 01 to ZZ in ascending order. ALC equates to S1000D Disassembly Code Variant, which is a constituent element of the Data Module Code.

3.3.3.17 End Item Acronym Code (EIAC): Enter EIAC or "N/A" in accordance with GEIA-STD-0007-B. EIAC is a code which uniquely identifies the system/equipment end item. This code will be assigned by the requiring authority. It will remain constant throughout the item's life cycle (e.g., TOW, PATRIOT, Tomahawk, Sparrow, and ALCM). Referenced End Item Acronym Code: An EIAC that contains referenced task information. Referenced Subtask End Item Acronym Code: An EIAC that contains referenced subtask information.

3.3.3.18 Provisioning List Item Sequence Number (PLISN): Enter PLISN or "N/A" in accordance with GEIA-STD-0007-B. PLISN is a sequentially assigned value for all items contained in the system/ equipment breakdown. The codes are as follows: AAAA through 9999 (less I and O). The numbering of line items shall begin with AAAA and progress through 9999, or as specified by the requiring authority.

3.3.3.18.1 When an item is contained in both a common and bulk items list (CBIL) and a provisioning parts list (PPL), it may be assigned the same PLISN on both lists. When an item appears on a CBIL only, the PLISN may be unique (i.e., will not duplicate any PLISN in the PPL).

3.3.3.18.2 The fifth position of the PLISN shall be used to indicate additions to the breakdown. For this purpose, the letters A through Z, inclusive (except I and O) and the numbers 0 through 9, inclusive, shall be used starting with the letter A for the first addition and continuing sequentially through the alphabet and then through the numeric characters. An add entry, identified by the letters A, B, C, etc., in the fifth position of the PLISN, is sequenced for inserting new items in the provisioning list either as a first or subsequent (same as) item entry, which will be used for either regular additions or replacement items. If the item listed is not an addition, the fifth position shall be left blank.

3.3.3.19 Provisioning Contract Control Number (PCCN): Enter PCCN or "N/A" in accordance with GEIA-STD-0007-B. A number assigned by the requiring authority to identify a specific contract or a group of end items/components that can have many configurations/models. NOTE: The first position shall be alphabetic and will identify the applicable military service/agency provisioning designator having responsibility for the item(s) being processed. First position codes are as follows:

3.3.3.19.1 Army	A-I
3.3.3.19.2 National Security Agency	J
3.3.3.19.3 Federal Aviation Administration	Κ
3.3.3.19.4 Marine Corps	L&M
3.3.3.19.5 Navy	N-R
3.3.3.19.6 Air Force	S-X
3.3.3.19.7 Coast Guard	Y
3.3.3.19.8 Defense Logistics Agency	Ζ

3.3.4 Data Group D - Part Categorization

3.3.4.1 CFE or GFP: Enter CFE for Contractor Furnished Equipment, GFP for Government Furnished Property.

3.3.4.1.1 Contractor Furnished Equipment (CFE): Standard items of hardware, electrical equipment, and other standard production or commercial items furnished by a prime contractor as part of a larger assembly.

3.3.4.1.2 Government Furnished Property (GFP): Property in the possession of or acquired directly by the government, and subsequently delivered to or otherwise made available to the contractor.

3.3.4.2 Material Category: Enter "PE" for Purchased Equipment, "PP" for Purchased Parts, or "RM" for Raw Material. NOTE: Inter-company Work Orders (IWO). dollars are classified into one of the other Material categories (PE, or PP) based upon the nature or characteristics of the products or services provided.

3.3.4.2.1 Inter-company Work Order (IWO): A contractual arrangement between a parent company and a related entity or wholly owned subsidiary to provide supplies or services. For MDR reporting purposes, IWO's are classified based on the characteristics of the supplies or services rendered. For example, if a company placed a purchase order/subcontract with a separate division within the parent company that manufactured avionics equipment, this effort would then be classified as "Purchased Equipment." If instead a company placed a purchase order/subcontract with a separate division within the parent company that manufactured fasteners, then the effort would be classified as "Purchased Parts." Alternatively, if a company manufactured an item of equipment and placed a purchase order/subcontract with a separate division within the parent company to provide training services on how to use and maintain that equipment, then that effort would not be reported in the MDR.

3.3.4.2.2 Purchased Equipment (PE): A cost element of the Materials functional category that includes assembled items and subassemblies designed to be incorporated with other components into a finished product. Purchased equipment is distinguished from purchased parts by its relatively higher cost and complexity. Examples include structural components such as wings, horizontal and vertical tails, and fuselage; avionics equipment such as radios, inertial navigation systems, radar systems, and electronic countermeasures; and hydraulic, pneumatic, and electrical subassemblies such as landing gear, canopy actuation systems, and wire harnesses.

3.3.4.2.3 Purchased Parts: A cost element of the Materials functional category that includes items that are discrete components used in an upper-level assembly. Purchased Parts (PP): are distinguished from purchased equipment by their relatively lower cost and complexity. Examples include fasteners, clips, clamps, nuts, bolts, washers, nails, screws, valves, and plumbing and electrical fittings and fixtures.

3.3.4.2.4 Raw Materials (RM): A cost element of the Materials functional category that includes items that are crude, semi-fabricated, or partially processed materials or components that have not yet been made into a definite functional item or configuration. Examples include consumable items for fabrication, castings, forgings, pressings, sheet metal, plate, tubing, bars, rebar, rods, wires, cables, fabrics, and conduits.

3.3.4.3 Equipment/Part Category: Enter COTS for Commercially available Off-The-Shelf, MCOTS for Modified Commercial available Off-The-Shelf, MOTS for Military available Off-The-Shelf, MMOTS for Modified Military available Off-The-Shelf, or DI for Developmental Item.

3.3.4.3.1 Commercially available Off-The-Shelf (COTS): Any item of supply (including construction material) that is: (i) A commercial item as defined in FAR subpart 2.1 definitions; (ii) Sold in substantial quantities in the commercial marketplace; and (iii) Offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold in the commercial marketplace. Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum.

3.3.4.3.2 Modified Commercially available Off-The-Shelf (MCOTS): Any COTS item that has been modified to satisfy a requirement under a Government solicitation. The modification must be of the type that is not customarily available in the commercial market place.

3.3.4.3.3 Military available Off-The-Shelf (MOTS): Any item that has been developed or produced to meet a previous Military requirement that is being offered to the Government, under a contract or subcontract at any tier, without modification, in the same form in which it is sold under previous Military contracts to meet the current Military requirement.

3.3.4.3.4 Modified Military available Off-The-Shelf (MMOTS): Any MOTS item that has been modified to satisfy a requirement under a Government solicitation. The modifications must be of the type that significantly alter the function or essential physical characteristics of an item or component, or change the purpose of a process. Factors to be considered in determining whether a modification is significant include the value and size of the modification and the comparative value and size of the final product. Dollar values and percentages may be used as guideposts, but are not conclusive evidence that a modification is significant.

3.3.4.3.5 Developmental Item (DI): Any item that was developed and produced to satisfy a requirement under a Government contract.

3.3.4.4 Make or Buy: Enter M for Make (if the part was built in-house), or B for Buy (if the part was bought).

3.3.4.4.1 Make items: Items produce within the contractor's facility. Where the contractor transforms raw materials into a finished end item through the use of a manufacturing processes.

3.3.4.4.2 Buy items: Items that the contractor outsources to a subcontractor/supplier.

3.3.4.5 Additive Manufacturing (AM): Enter "AM" if the end item was produced using Additive Manufacturing. Enter "N/A" if not applicable.

3.3.4.6 Additive Manufacturing Technology: Enter the Additive Manufacturing Technology using the following ASTM Lexicon (ASTM International Standard F2792-12a, 2013) codes, or enter "N/A" if not applicable:

3.3.4.6.1 VP - Vat Photopolymerisation

3.3.4.6.2 MJ – Material Jetting

3.3.4.6.3 BJ – Binder Jetting

3.3.4.6.4 ME – Material Extrusion

3.3.4.6.5 PBF – Powder Bed Fusion

3.3.4.6.6 SL – Sheet Lamination

3.3.4.6.7 DED – Directed-Energy Deposition

3.3.4.7 Aircraft Structural Item: Enter "S" for all items that are classified as structure in accordance with the appropriate Society of Allied Weight Engineers (SAWE) Recommended Practice (RP) Number 8/A-7. Enter "N/A" for all other items.

3.3.4.8 Technical Data Rights: Enter the technical data rights associated with the End Item. See Table 2 below. The items in Table 2 are in accordance with the Department of Defense Federal Acquisition Regulations Supplement (DFARS).

Rights Category	TD or S/W Applicable	Criteria for Applying Rights Category	Permitted Uses Within Government	Permitted Uses Outside Government
Commercial/Commercial Off The Shelf (COTS)	Both TD & S/W	Developed ¹ exclusively at private expense	As defined by COTS license and only used as negotiated by the parties, however, usages outside of COTS license restrictions require modification via Special License Rights and annotated with an "H" clause in the contract	As defined by COTS license and only used as negotiated by the parties, however, usages outside of COTS license restrictions require modification via Special License Rights and annotated with an "H" clause in the contract
Unlimited Rights (UR)	Both TD & S/W	Developed exclusively at Government expense; also any deliverable of certain types- regardless of funding	Unlimited; NO restrictions	Unlimited; NO restrictions
Government Purpose License Rights (GPLR)	Both TD & S/W	Developed with mixed funding.	Unlimited; NO restrictions	Only for "Government purposes" no commercial use *(H/W >S/W)
Limited Rights (LR)	TD only	Developed ¹ exclusively at private expense.	Unlimited, except may not be used for manufacture	Emergency repair/overhaul; evaluation by foreign government

Rights Category	TD or S/W Applicable	Criteria for Applying Rights Category	Permitted Uses Within Government	Permitted Uses Outside Government
Restricted Rights (RR)	S/W only	Developed ¹ exclusively at private expense	Only one computer at a time; minimum backup copies; modification	Emergency repair/overhaul; certain service/maintenance contracts
Prior Government Rights	Both TD & S/W	Whenever Government has previously acquired rights in the deliverable TD/SW	Same as under previous contract	Same as under previous contract
Specifically Negotiated License Rights (SNLR)	Both TD & S/W	Mutual agreement of the parties and CLEARLY documented in PID/Contract; use whenever the standard rights categories do not meet both parties needs	As negotiated by the parties, however must not be less than LR in TD and must not be less than RR in S/W. (*also referred to as Special License Rights)	As negotiated by the parties, however must not be less than LR in TD and must not be less than RR in S/W. (*also referred to as Special License Rights)
SBIR Data Rights	Both TD & S/W	All TD or CS generated under an SBIR contract	All uses; no restrictions	Cannot release or disclose except to Government support contractors

3.3.4.8.1 Critical Need to Specify Deliverables. The standard clauses address rights but do not include delivery requirements. The contract must explicitly specify the content, format and delivery for all IP deliverables that are necessary to meet DoD's needs. For S/W it is critical to specify requirements for executable code and source code, as well as full business rule set and documentation (about 10 different types).

3.3.4.9 Technical Data Delivery: Enter the CDRL number associated with the delivery of the End Item's Technical Data. Enter "N/A" if Technical Data is not being delivered.

3.3.4.10 CMP End Assembly Pegging: Enter "HP" for Hard Peg, and "SP" for Soft Peg, to identify if an end item is a Hard or Soft Peg component. Enter "N/A" if not applicable.

3.3.4.11 Warranty (Yes/No): Enter "Y" for yes or "N" for no to identify any written guarantee, issued by its manufacturer to the purchaser, promising to repair or replace items if necessary within a specified period of time. If "Y", the Reporting Organization (para 3.3.1.4.1) will provide warranty terms in the Comments field (para 3.3.8).

3.3.4.12 Raw Material Information: If the End Item was identified as a "Make Item" (para 3.3.4.4) and a "Aircraft Structural Item" (para 3.3.4.7) above then provide the following Raw Material data elements.

3.3.4.12.1 Raw Material Type: If the item is classified as a Make item (para 3.3.4.4) and an Aircraft Structural Item (para 3.3.4.7), then enter the raw material type as defined in the Society of Allied Weight Engineers (SAWE) Handbook. Aluminum, Aluminum-Lithium, Titanium, Steel, Carbon epoxy, Carbon BMI, Carbon thermo-plastic are examples of Raw Material Types.

3.3.4.12.2 Raw Material Form: If the item is classified as a Make item (para 3.3.4.4) and an Aircraft Structural Item (para 3.3.4.7) then enter the form in which the Raw Material Type was bought as defined in the Society of Allied Weight Engineers (SAWE) Handbook. Sheet, plate, billet, bar, casting, forging, extrusion, and powder are examples of Metal/Alloy Material Forms.

3.3.5 Data Group E – Part Identification

3.3.5.1 Reporting Contractor's Part Number: Enter the reporting contractor's part number. The number entered is the part number established and used by the reporting entity.

3.3.5.2 Engineering Change Proposal Number: Enter the ECP number, if the end item has been added or modified as a result of an Engineering Change Proposal (ECP), then. Enter "N/A" if not applicable.

3.3.5.3 Next Higher Assembly Part Number: Enter the reporting organization's part number for the next higher assembly.

3.3.5.4 Prime Contractor's Part Number: For Direct-Reporting Subcontractor Use Only. Enter the Prime Contractor's part number. For items that are delivered as a piece of Purchased Equipment to the Prime Contractor the direct-reporting subcontractors shall enter the Prime Contractor's part number for all items used in the manufacturing of the Purchased Equipment End item. No entry is necessary for Purchased Parts or Raw Material.

3.3.5.5 OEM Part Number: Enter the OEM's part number.

3.3.5.6 OEM Serial Number: Enter the OEM's serial number. This data field should only be populated when submitting the MDR-CM XML data file.

3.3.5.7 Part or Identifying Number (PIN): The identifier assigned by the original design activity, or by the controlling nationally recognized standard, that uniquely identifies, relative to that design activity, a specific item (ASME Y14.100 – 2017 pg 9 para 3.57)

3.3.5.8 Item Identification: Enter the Item Identification. Item Identification is the combination of the original design activity PIN and Design Activity Identification (DAI) to establish an identification unique to that item. (ASME Y14.100 – 2017 pg 22 para 6.8)

3.3.5.9 Part Number Nomenclature: Enter the system nomenclature (e.g. AN/APG-73, AN/ARC-210, etc.) consistent with the government recognized name. If no government nomenclature exists, then enter the name internal to the contractor.

3.3.5.10 Part Description: Enter a brief description of the item being purchased. The description should also be consistent with internally generated systems established to plan, control and account for acquisition, use, and disposition of the material part.

3.3.5.11 Revision Level: Enter Revision Level as required by engineering release standards outlined in MIL-HDBK-61A. The Revision Level indicates the number of times a part drawing, specification, or other document has been changed from the original version, typically shown as number or letter that follows the part number.

3.3.5.12 Part or Identifying Number (PIN) "REVISION": Enter the PIN revision. Changes made to an original drawing or associated document after authorization release which requires the revision level to be advanced. Any change to a drawing after release, including a change to rights in data or security classification, requires the revision level to be advanced and shall be recorded in the Revision History Block. (ASME Y14.35-2014)

3.3.5.13 PIN Commercial and Government Entity (CAGE) Code: Enter the CAGE code for the supplier of the PIN item being purchased. The CAGE code is a five-character code that provides a unique activity identifier used by the Government for activity identification. This method of activity identification has also been widely adopted by industry. CAGE Codes are listed in Cataloging Handbook H4/H8 (ASME Y14.100). (ASME Y14.35-2014 para 3.6)

3.3.5.14 Software Native code PIN version number: Enter the PIN version identification number of the software. Version numbers are usually used to identify changes to software. The first digit of a version number, reading left to right, identifies a major revision of an issue of software, and subsequent numbers, separated from the major revision by a dot, identify minor revisions, e.g., 3.1.1. (ASME Y14.100-2017 pg 23 para 6.11)

3.3.5.15 Software Classification Code: Enter the software classification code, which is a designation assigned to product definition data that defines what data are included within the drawing graphic sheet, data set, or both (see classifications listed below). (ASME Y14.100-2017 Appendix "F") This is Mandatory for NAVAIRSYSCOM. NOTE: A drawing graphic sheet may be in either physical or electronic format.

3.3.5.15.1 F-2.2 Classification Code 1: Drawing Graphic Sheet with Optional Data Set. Classification Code 1: identifies that the data elements are located on the drawing graphic sheet and the drawing graphic sheet is the original.

3.3.5.15.2 F-2.3 Classification Code 2: Data Set with Model and Drawing Graphics Sheet. Classification Code 2: identifies that data elements are located on a drawing graphic sheet and the drawing graphic sheet is the original. A computer is used as a tool to prepare the drawing graphics sheet and model. Data elements are located in the digital data and drawing graphic sheet.

3.3.5.15.3 F-2.4 Classification Code 3: Data Set with Model and Simplified Drawing Graphics Sheet. Classification Code 3: identifies a model with a simplified drawing graphic sheet used to expedite communication of common part features and to define non-geometric part definitions.

3.3.5.15.4 F-2.5 Classification Code 4: Data Set with Model and Drawing Graphics Sheet. Classification Code 4: identifies that all data elements are located in both the digital data and drawing graphic sheet. The data set is the original.

3.3.5.15.5 F-2.6 Classification Code 5: Data Set with Model and No Drawing Graphic Sheet. Classification Code 5: identifies that all data elements are located in the data set. No drawing graphic sheet exists.

3.3.5.16 National Stock Number (NSN): Enter the National Stock Number associated with the part. If no NSN exists at the time of the report, then enter N/A.

3.3.5.17 National Item Identification Number (NIIN): If there is no NSN, enter the National Item Identification Number (NIIN). The NIIN is contained in the last 9 digits of the NSN.

3.3.5.18 Serviceable Y/N: Choose "Y" for yes if the item is designed to be repairable and "N" for no if it is not.

3.3.5.19 Initial Effectivity (IEFF): Enter the unit number of the next higher assembly where the End Item is first used.

3.3.5.20 Ending Effectivity (EEFF): Enter the unit number of the next higher assembly where the End Item is last used.

3.3.5.21 Source Maintenance & Recovery (SM&R) Code: Enter the SM&R code associated with the end item in accordance with GEIA-STD-0007B. GEIA-STD-0007B defines SM&R codes as a series of alpha or alphanumeric symbols used at the time of provisioning to indicate the source of supply of an item, its maintenance implications, and recoverability characteristics. Applicable codes are specified in the joint regulation AR 700-82, OPNAVINST 4410.2, AFR 66-45, MCO 4400.120, DSAR 4100.6 publication. Detailed SM&R guidance can also be found within NAVSUP PUB719 (NSN 0530-LP-011-2960).

3.3.6 Data Group F – End Item

3.3.6.1 End Item Data Elements:

3.3.6.1.1 End Item Unit Cost: Enter the Recurring Cost (in accordance with the definition below) in Then-Year dollars (U.S. \$) for a single end item. Recurring Costs: Repetitive elements of development and investment costs that may vary with the quantity being produced, irrespective of system life cycle phase and appropriation. Recurring cost categories include procurement and production activities; acceptance testing; maintenance and support equipment, training, and data; 5337test articles built to an operational configuration; and certain elements of Systems Engineering and Program Management (SE/PM). Examples of procurement and production activities include fabrication; assembly; procurement of raw materials, purchased parts and equipment, and major and minor subcontracts; integration; installation and checkout; and quality control/assurance (inspection efforts). Examples of recurring maintenance and support activities include product and tooling maintenance (to restore a product/tool to its original condition); production of support and training equipment, initial spares, and simulators; reproduction of maintenance/technical data; and courseware updates. Recurring test articles are only those units built to a completed operational configuration, including full-scale, fatigue/static, and avionics equipment test articles. SE/PM activities occur throughout the system life cycle and are supportive in nature; as such, these costs take on the characteristics of the underlying activities being performed. Examples of recurring SE/PM activities include sustaining engineering, logistics support, planning, organizing, monitoring, and reporting activities. (DCARC 1921-1 Instructions)

3.3.6.1.2 End Item Ship Set Cost: Enter the Recurring Cost (see definition in para 3.3.6.1.1) in Then-Year dollars (U.S. \$) for the quantity of end items required to form a ship set for a single unit of the "Prime Mission Product" (para 3.3.1.1.3).

3.3.6.1.3 End Item Prime Mission Product (PMP) Cost: Enter the Recurring Cost (see definition in para 3.3.6.1.1) in Then-Year dollars (US \$) required for the "Prime Mission Product Quantity" (para 3.3.1.1.7) under contract. The cost entered should be the product of the "Prime Mission Product Quantity" (para 3.3.1.1.7) multiplied by the "End Item Ship Set Cost" (para 3.3.6.1.2).

3.3.6.1.4 End Item Spare Cost: Enter the Recurring Cost (see definition in para 3.3.6.1.1) in Then-Year dollars (U.S. \$) required for any initial spare end items bought to support the Program that are not included in the "Prime Mission Product Quantity" (para 3.3.1.1.7) delivered under the contract.

3.3.6.1.5 End Item Additional Cost: Enter the Recurring Cost (see definition in para 3.3.6.1.1) in Then-Year dollars (U.S. \$) required for any additional end items bought to support the Program that do not make up any part of the "Prime Mission Product Quantity" (para 3.3.1.1.7) delivered under the contract.

3.3.6.1.6 End Item Non-Recurring Cost: Enter the Non-Recurring Cost (in accordance with the definition below) associated with the end item in Then-Year dollars (U.S. \$). Provide explanation of Non-Recurring Costs in the Comments field (para 3.3.8). Nonrecurring Cost: Non-repetitive

elements of development and investment costs that generally do not vary with the quantity being produced, irrespective of system life cycle phase and the appropriation. Nonrecurring cost categories include Product Design and Development (PD&D) activities; System Test and Evaluation (ST&E); tooling; pre-production activities; design and development of support equipment, training, and data; and certain elements of Systems Engineering and Program Management (SE/PM). Examples of PD&D activities include preliminary, critical, prototype and test article design activities, and software design and maintenance, regardless of whether the purpose is to correct deficiencies or add capabilities. (Note, however, that the Cost Workinggroup Integrated Product Team can require the contractor to classify software maintenance costs as recurring if a determination is made that such costs are significant for cost-estimating purposes and can reasonably be accounted for by the contractor). Examples of ST&E activities include test articles built for testing purposes only (i.e., units that are not productionrepresentative) such as test stands, wind tunnel models, and bench and coupon test articles; structural development, static, fatigue, software, and ballistics testing; stress analysis; flight, ground, or sea testing of system properties; redesign as a result of testing; and retesting efforts. Examples of nonrecurring tooling activities include special test equipment, special tooling, procurement of initial and rate tooling, tool replacement (with the exact same tool), and tool modification (to accommodate product configuration changes). Examples of pre-production activities include production planning and line set-up. Examples of nonrecurring support equipment, training, and data activities include initial equipment design and test efforts, test program sets, initial courseware development, and simulator development. SE/PM activities occur throughout the system life cycle and are supportive in nature; as such, these costs take on the characteristics of the underlying activities being performed. Examples of nonrecurring SE/PM activities include system development and design, testing, planning, organizing, and monitoring activities. (DCARC 1921-1 Instructions)

3.3.6.1.7 End Item Total Cost: Enter the sum of the "End Item Prime Mission Product Cost" (para 3.3.6.1.3), End Item Spares Cost" (para 3.3.6.1.4), "End Item Additional Item Cost" (para 3.3.6.1.5) and "End Item Non-Recurring Cost" (para 3.3.6.1.6). Enter the "End Item Total Cost" in Then-Year dollars (U.S. \$).

3.3.6.1.8 End Item Profit/Loss or Fee: Enter the amount of the subcontractor's Profit/Loss or Fee according to the terms of the contract (e.g., incentive formula) included in the reported "End Item Prime Mission Product Cost" (para 3.3.6.1.3). Profit is the excess of revenues over expenses in fixed-price contracts. Loss is the excess of expenses over revenue in contracts that contain limited Government liability such as fixed-price contracts and cost plus contracts with cost ceilings. In special cost-reimbursement pricing arrangements, fee is a form of profit representing an agreed-to amount beyond the initial estimate of costs that reflects a variety of factors, including risk, and is subject to statutory limitations. Fee may be fixed at the outset of performance, as in a cost-plus-fixed-fee arrangement, or may vary (within a contractually specified minimum-maximum range) during performance, as in a cost-plus-incentive-fee arrangement.

3.3.6.1.9 End Item Cost Year: Enter the Government fiscal year for which the costs are based.

3.3.6.1.10 End Item Currency: If the cost was converted to U.S. dollars from a foreign currency, then enter the International Standards Organization (ISO) alphabetic currency code as defined at (www.iso.org/iso/home/standards/currency_codes.htm).

3.3.6.1.11 End Item Exchange Rate: Enter the exchange rate used to convert the foreign currency into U.S. dollars.

3.3.6.1.12 End Item Exchange Rate as of Date: Enter the appropriate 8-digit numeric data for the year, month, and day (yyyymmdd) for the exchange rate being reported. For example, December 31, 2017, would be shown as 20171231.

3.3.6.1.13 Burden Code: Enter a description of all indirect rates that will be applied to the reported costs. The information provided should be consistent with the Cost Accounting Standards Disclosure Statement (CAS D/S) and should be traceable to contractor established forward pricing rate proposals and forward pricing rate agreements. The reference should include all overhead, indirect material handling, Fringe Benefit Rates, General and Administrative rates and special or abated allocations.

3.3.6.1.14 Step Pricing (Yes/No): Enter "Y" for yes, or "N" for no. Identify if pricing steps or increments providing different unit prices for different quantity ranges of an item are applicable. The reporting entity will define step quantity discounts in the Remarks field.

3.3.6.1.14.1 Enter "Y" for yes when the purchase agreement generating the costs reported establishes different unit costs for different quantity points. For example, the reported cost might reflect a price of \$1,000 for 100 items procured or \$100,000. If the same purchase order established a unit price of \$90 for a quantity of 10,000 items and a unit price of \$110 for a quantity of 90 items – the reporting contractor would enter "Y" in this field.

3.3.6.1.15 Factor Buy: Enter "Y" for yes, or "N" for no. Enter a "Y" in this field when the cost reported is the result of an allocation from a pool of costs. This would occur when costs for the identified part are accumulated in an intermediate pool and then assigned to multiple final contracts on an established measurement of usage (e.g. hours incurred, parts processed, paint and fasteners procured in bulk). Otherwise, enter "N" for no.

3.3.6.1.16 Manufacturing Set-up Labor Hours: For items that have been identified as Make (para 3.3.4.4) enter the total set-up hours for the End Item Total Quantity (para 3.3.6.1.25).

3.3.6.1.17 Manufacturing Fabrication Labor Hours: For items that have been identified as Make (para 3.3.4.4) enter the total fabrication hours for the End Item Total Quantity (para 3.3.6.1.25).

3.3.6.1.18 Total Manufacturing Labor Hours: For items that have been identified as Make (para 3.3.4.4) enter the total manufacturing hours for the End Item Total Quantity (para 3.3.6.1.25).

3.3.6.1.19 Advanced Procurement/Long Lead Item: If this item has been identified as an Advanced Procurement item, then enter the number of months required prior to the prime contract

award date that a purchase order must be placed with the subcontractor. Enter N/A for all other items.

3.3.6.1.20 Minimum Quantity Buy: A minimum quantity buy is reflected in the agreement between the supplier and the higher tier contractor. If there is no minimum quantity buy, then enter N/A. The supplier has agreed to provide the required part only if the reporting contractor agrees to a minimum number of items with each order. For example, the supplier agrees to provide up to 100 units of a given part at \$1,000 per part for total cost of \$100,000, there is a minimum quantity buy of 50 parts. The reporting entity will enter the minimum buy requirement of 50 units even if the actual procurement was greater than the minimum. This information should be entered for each purchase estimated or actually contributing to the costs being reported.

3.3.6.1.21 End Item Ship Set Quantity: Enter the quantity of end items required to form a ship set for a single unit of the "Prime Mission Product" (para 3.3.1.1.3).

3.3.6.1.22 End Item Prime Mission Product (PMP) Quantity: Enter the quantity required to support the production of the "Prime Mission Product Quantity" proposed or reflected in the contract. The quantity entered should be the product of the "Prime Mission Product Quantity" (para 3.3.1.1.7) multiplied by the "End Item Ship Set Quantity" (para 3.3.6.1.21).

3.3.6.1.23 End Item Spare Quantity: Enter the part quantity that is required over and above the "Prime Mission Product Quantity" (para 3.3.1.1.7), e.g., two spare tires are required per PMP.

3.3.6.1.24 End Item Additional Quantity: Enter the quantity of any additional items bought to support the Program but are not used in the "Prime Mission Product Quantity" (para 3.3.1.1.7) reflected in the contract. This includes items procured through Foreign Military Sales (FMS) or developmental/demonstration units.

3.3.6.1.25 End Item Total Quantity: Enter the sum of the "End Item Prime Mission Product (PMP) Quantity" (para 3.3.6.1.22), "End Item Spare Quantity" (para 3.3.6.1.23) and "End Item Additional Item Quantity" (para 3.3.6.1.24).

3.3.6.1.26 End Item Unitizing Quantity: Enter the quantity that the unit cost was based upon. The unitizing quantity might differ from the total required either because it includes or considers concurrent units, or because the contractual requirement is split amongst several purchase orders (see DID – DI-FNCL-81567 for definition of a concurrent unit). The reporting entity will use the Comments field (para 3.3.8) to define the method for determining any unitized quantities. For example, program 'A' requires 50 units and program 'B' requires 50 units; if one of the unit costs reported for program 'A' was based on a joint buy or production run of program 'A' and 'B' requirements then the unitizing quantity resulting in that unit cost would be 100.

3.3.6.1.27 End Item Weight: Enter the finished weight in pounds for the end item.

3.3.6.1.28 End Item Weight Type: Enter the basis of the finished weight provided. Enter "S" for Specification Weight, "E" for Estimate of Weight, or "A" for Actual Weight.

3.3.6.2 Repair Cost Data Elements:

3.3.6.2.1 Average Repair Cost: Enter the repair cost in Then-Year dollars (U.S. \$) for a single end item.

3.3.6.2.2 Repair Cost Year: Enter the Government fiscal year for which the costs are based.

3.3.6.3 Raw Material Data Elements: If the End Item was identified as a "Make Item" (para 3.3.4.4) and a "Aircraft Structural Item" (para 3.3.4.7) above then provide the following Raw Material data elements.

3.3.6.3.1 Raw Material Unit Cost: Enter the Recurring Cost in Then-Year dollars (U.S. \$) for the material purchased to produce a single end item.

3.3.6.3.2 Raw Material Ship Set Cost: Enter the Recurring Cost in Then-Year dollars (U.S. \$) for the material purchased to produce a ship set for a single unit of the "Prime Mission Product" (para 3.3.1.1.3).

3.3.6.3.3 Raw Material Prime Mission Product Cost: Enter the Recurring Cost in Then-Year dollars (US \$) for the material purchased to produce the Prime Mission Product Quantity under contract. The cost entered should be the product of the "Prime Mission Product Quantity" (para 3.3.1.1.7) multiplied by the "Raw Material Ship Set Cost" (para 3.3.6.3.2).

3.3.6.3.4 Raw Material Additional Cost: Enter the Recurring Cost in Then-Year dollars (U.S. \$) required for any additional raw material bought to support the Program but is not used in the production of any parts of the Prime Mission Product Quantity (para 3.3.1.1.7) delivered under the contract.

3.3.6.3.5 Raw Material Non-Recurring Cost: Enter the Non-Recurring Cost associated with the raw material in Then-Year dollars (U.S. \$). Provide explanation of Non-Recurring Costs in the Comments field (para 3.3.8).

3.3.6.3.6 Raw Material Total Cost: Enter the sum of the "Raw Material Prime Mission Product Cost" (para 3.3.6.3.3), "Raw Material Additional Cost" (para 3.3.6.3.4) and "Raw Material Non-Recurring Cost" (para 3.3.6.3.5) in Then-Year dollars (U.S. \$).

3.3.6.3.7 Raw Material; Material Handling Fee: Enter the Material Handling Fee in Then-Year dollars (U.S. \$) associated with the purchase of the Raw Material.

3.3.6.3.8 Raw Material Cost Year: Enter the Government fiscal year for which the costs are based.

3.3.6.3.9 Raw Material Currency: If the cost was converted to U.S. dollars from a foreign currency, then enter the International Standards Organization (ISO) alphabetic currency code as defined at www.iso.org/iso/home/standards/currency_codes.htm.

3.3.6.3.10 Raw Material Exchange Rate: Enter the exchange rate used to convert the foreign currency into U.S. dollars.

3.3.6.3.11 Raw Material Exchange Rate as of Date: Enter the appropriate 8-digit numeric data for the year, month, and day (yyyymmdd) for the exchange rate being reported. For example, December 31, 2017, would be shown as 20171231.

3.3.6.3.12 Raw Material Ship Set Quantity: Enter the amount of raw material purchased to produce a ship set for a single unit of the "Prime Mission Product" (para 3.3.1.1.3). For example, if a single ship set of the "Prime Mission Product" required two 750-pound aluminum bulkheads to be built and the manufacturing process required 1,000 pounds of aluminum plate to be bought to produce each bulkhead then enter 2,000 (2 * 1,000 = 2,000). NOTE: Remember to fill out the "Raw Material Unit of Measure" (para 3.3.6.3.17) data field.

3.3.6.3.13 Raw Material Prime Mission Product Quantity: Enter the amount of raw material purchased to support the production of the "Prime Mission Product Quantity" reflected in the contract. The quantity entered should be the product of the "Prime Mission Product Quantity" (para 3.3.1.1.7) multiplied by the "Raw Material Ship Set Quantity" (para 3.3.6.3.12). NOTE: Remember to fill out the "Raw Material Unit of Measure" (para 3.3.6.3.17) data field.

3.3.6.3.14 Raw Material Additional Quantity: Enter the quantity of any additional items bought to support the Program but are not used in the "Prime Mission Product Quantity" (para 3.3.1.1.7) proposed or reflected in the contract. For Raw Material items, please enter the amount purchased. NOTE: Remember to fill out the Raw Material Unit of Measure (para 3.3.6.3.17) data field.

3.3.6.3.15 Raw Material Total Quantity: Enter the sum of the "Raw Material Prime Mission Product Quantity" (para 3.3.6.3.13) and "Raw Material Additional Quantity" (para 3.3.6.3.14). NOTE: Remember to fill out the "Raw Material Unit of Measure" (para 3.3.6.3.17) data field.

3.3.6.3.16 Raw Material Unitizing Quantity: Enter the quantity that the "Raw Material Unit Cost" (para 3.3.6.3.1) was based upon. For example, program 'A' requires 5000 lbs of aluminum plate and program 'B' requires 5000 lbs of aluminum plate. If the unit cost reported for program 'A' was based on a joint buy or production run of program 'A' and 'B' requirements, then the unitizing quantity would be 10,000 lbs of aluminum plate. NOTE: Remember to fill out the Raw Material Unit of Measure data field (para 3.3.6.3.17).

3.3.6.3.17 Raw Material Unit of Measure: Enter the unit of measure description for each part or raw material item. Units of measure are terms that give meaning to quantities. Consistent use of this is required to eliminate any confusion across the supply chain. Units of measure should be consistent with the purchase order. DoD approved unit of measure descriptions are listed in the following website address:

https://wawf.eb.mil/wawf/xhtml/unauth/web/homepage/UnauthUnitsOfMeasureTable.xhtml For example, if the "Raw Material Ship Set Quantity" (para 3.3.6.3.12) and "Raw Material Prime Mission Product Quantity" (159) fields above, used aluminum plate and was bought by the pound, then enter the DOD Unit of Measure code 01.

3.3.6.3.18 Buy to Fly Ratio: Enter the Buy-to-Fly Ratio. For example, if 1000 lbs of material is required to make a 750 lb part then the Buy-to-Fly ratio would be 1.333. The number format shall be to three decimal places.

3.3.6.4 Basis of Cost (BOC) Data Elements: Enter the code (see list below) indicating History, Market Analysis, Engineering Estimate, Competitive Vendor Quote, Sole Source Vendor Quote, Long Term Pricing Agreement, Actual Cost Paid on Long Term Purchase Agreement, or Actual Cost Paid on Discrete Purchase Agreement (see definitions below). For example, "H" indicates "History".

3.3.6.4.1 Code H: History. This reflects a cost estimate that is based on historical prices paid for the same or similar parts.

3.3.6.4.2 Code MA: Market Analysis. This is a cost estimate that is obtained through market research of published prices for the same or similar item.

3.3.6.4.3 Code EE: Engineering Estimate. This is a cost estimate for a newly designed part that is derived by the reporting contractor based on engineering analysis of the anticipated requirements to build the identified part.

3.3.6.4.4 Code CQ; Competitive vendor quotes. This is a cost estimate that is based on multiple quotes received in response to the reporting contractor's solicitation.

3.3.6.4.5 Code SQ: Sole Source vendor quotes. This is a cost estimate that is based on an individual vendor's response to the reporting entities solicitation; the reported amounts will reflect all adjustments resulting from the cost or price analysis performed by the reporting contractor to establish the reasonableness of the proposed costs.

3.3.6.4.6 Code L: Long Term Pricing Agreement.: This is a cost estimate that is based on the terms spelled out in an executed long term agreement between the reporting contractor and vendor that establishes pre-determined prices for items (may reflect escalation of prices over time and reflect quantity discounts).

3.3.6.4.7 Code AL: Actual Cost Paid on Long Term Pricing Agreement. This is the actual cost paid for items received that were procured under the terms of a long term agreement.

3.3.6.4.8 Code AD: Actual Cost Paid on Discrete Purchase Agreement. This is the actual cost paid for items received that were procured under the terms of a purchase agreement established for the procurement of a discrete number of items.

3.3.6.4.9 End Item BOC (Recurring): Enter the BOC code for Recurring Basis of Cost for the End Item.

3.3.6.4.10 End Item BOC (Non-Recurring): Enter the BOC code for Non-Recurring Basis of Cost for the End Item

3.3.6.4.11 Raw Material BOC (Recurring): Enter the BOC code for Recurring Basis of Cost for the Raw Material.

3.3.6.4.12 Raw Material BOC (Non-Recurring): Enter the BOC code for Non-Recurring Basis of Cost for the Raw Material.

3.3.6.4.13 Repair BOC: Enter the BOC code for Basis of Cost for the Repair. 3.3.7 Data Group G – Reliability

3.3.7.1 Reliability Data Elements:

3.3.7.1.1 Mean Time Between Unscheduled Removals (MTBUR): Enter the Mean Time Between Unscheduled Removals (MTBUR) reliability information associated with the end item. MTBUR is an end item reliability parameter related to demand for logistics support. MTBUR is the system life unit divided by the total number of end items removed from the Prime Mission Product for repair during a stated period of time. This term is defined to exclude removals performed to facilitate other maintenance or removals for product improvement.

3.3.7.1.2 Mean Time Between Unscheduled Removals (MTBUR) Unit of Measure: Enter the system life unit used for calculating the MTBUR (FH for flight hours, Hour for operating hour(s), C for cycles, Month for month(s) or Year for year(s)).

3.3.7.1.3 Mean Time Between Unscheduled Removals (MTBUR) Type: Enter the basis of the provided MTBUR. Enter S for Specification, P for Design Controllable Prediction, E for Operationally Derated Estimate, A1 for Actual from non-representative operational environment, or A2 for Actual from representative operational environment.

3.3.7.1.4 Mean Time Between Removals - Scheduled (MTBR-S): Enter the MTBR-S reliability information associated with the end item. MTBR-S is an end item reliability parameter related to demand for logistics support resulting from preventative maintenance. MTBR-S is the system life unit divided by the total number of end items scheduled to be removed from the Prime Mission Product during a stated period of time. Scheduled removals are pre-planned equipment removals conducted in an attempt to retain the next higher assembly in a specified condition by providing prevention of incipient failures.

3.3.7.1.5 Mean Time Between Removals - Scheduled (MTBR-S) Unit of Measure: Enter the system life unit used for calculating the MTBR-S (FH for flight hours, Hour for operating hour(s), C for cycles, Month for month(s) or Year for year(s)).

3.3.7.1.6 Mean Time Between Removals - Scheduled (MTBR-S) Type: Enter the basis of the provided MTBR-S. Enter S for Specification, P for Design Controllable Prediction, E for Operationally Derated Estimate, A1 for Actual from non-representative operational environment, or A2 for Actual from representative operational environment.

3.3.7.1.7 Unscheduled Maintenance Action (UMA) Rate: Enter the UMA rate information associated with the end item. UMA Rate is the total number of unscheduled maintenance actions

divided by the number of system life units. Unscheduled maintenance actions are repair actions required by item conditions to restore it to the specified condition. A repair is defined as all actions performed, as the result of a failure, to restore an item to the specified condition. A repair can include any and all of the following: replacement of parts, adjustments, alignments, and calibration. Unscheduled maintenance also includes maintenance caused by BIT false alarms and cannot duplicates.

3.3.7.1.8 Unscheduled Maintenance Action (UMA) Unit of Measure: Enter the system life unit used for the UMA Rate (use FH for flight hours, Hour for operating hour(s), C for cycles, Month for month(s) or Year for year(s)).

3.3.7.1.9 Unscheduled Maintenance Action (UMA) Type: Enter the basis of the provided UMA Rate. Enter S for Specification, P for Design Controllable Prediction, E for Operationally Derated Estimate, A1 for Actual from non-representative operational environment, or A2 for Actual from representative operational environment.

3.3.7.1.10 Scheduled Maintenance Action (SMA) Rate: Enter the scheduled maintenance action rate information associated with the end item. The scheduled maintenance action rate is the total number of scheduled maintenance actions divided by the number of system life units. Scheduled maintenance is preventative maintenance performed at prescribed points in an item's life.

3.3.7.1.11 Scheduled Maintenance Action Unit of Measure: Enter the system life unit used for the scheduled maintenance action rate (FH for flight hours, Hour for operating hour(s), C for cycles, Month for month(s) or Year for year(s).

3.3.7.1.12 Scheduled Maintenance Action Type: Enter the basis of the provided scheduled maintenance action rate. Enter S for Specification, P for Design Controllable Prediction, E for Operationally Derated Estimate, A1 for Actual from non-representative operational environment, or A2 for Actual from representative operational environment.

3.3.7.1.13 Maintenance Replacement Rate I (MRRI): Enter the MMRI for the End Item in accordance with GEIA-STD-0007-B.The MRRI is defined as the peacetime replacement rate factor for the end item indicating the number of expected failures, which will require removal and replacement of the support item below depot level in a given next higher assembly per equipment/end item per year. This factor is to be based on the known/estimated end item usage and mature failure rates.

3.3.7.1.13.1 The MRRI can be calculated using the following formula: For an assembly:

MRR (assembly) = $\sum_{i=1}^{N}$ TFi X Quantity per taski

Where: N = Number of H function tasks for a given LCN/ALC combination (except D O/M levels) TFi = Task frequency

For a repair part:

MRR (repair part) = $\sum_{i=1}^{N} TFi X$ Quantity per taski

Where: N = Number of J function tasks performed against the next higher assembly of the repair part TFi = Task frequency

3.3.7.1.14 Criticality Code: Enter the criticality code associated with the item in accordance with GEIA-STD-0007B and DOD 4100.39-M, Volume 10, Table 181.

3.3.7.1.14.1 Criticality Code: A code which indicates that an item has been assessed and documented in the TDP as being technically critical by reason of tolerance, fit restrictions, application, nuclear hardness properties or characteristics which affects identification of the item.

3.3.7.1.14.2 Code C: The item has critical features such as tolerance fit restrictions or application. Nuclear hardness properties have not been determined.

3.3.7.1.14.3 Code E: The item is a Flight Safety Critical Aircraft Part (FSCAP) and is specifically designed to be or selected as being nuclear hardened.

3.3.7.1.14.4 Code F: The item is a FSCAP.

3.3.7.1.14.5 Code N: The item does not have a critical feature such as tolerance, fit restrictions, or application. Nuclear hardness properties have not been determined.

3.3.7.1.14.6 Code H: The item is specifically designed to be selected as being nuclear hard (i.e., it will continue to perform its designed function in an environment created by nuclear explosion). The item does not have other critical features.

3.3.7.1.14.7 Code M: The item is specifically designed to be selected as being nuclear hard. In addition, the item has other critical features such as tolerance, fit restrictions, or application.

3.3.7.1.14.8 Code X: The item does not have a nuclear hardened feature or any other critical feature such as tolerance, fit restrictions, or application.

3.3.7.1.14.9 Code Y: The item does not have a nuclear hardened feature but does not have other critical feature(s) such as tolerance, fit restrictions, or application.

3.3.7.1.14.10 Other Criticality Codes: (ASME Y14-100-2004 page 12 table 1)

3.3.7.1.14.10.1 CSI - Critical Safety Item

3.3.7.1.14.10.2 CSP - Critical Safety Process

3.3.7.1.14.10.3 ENI - Environmental Impact

3.3.7.1.14.10.4 ESD - Electrostatic Discharge Sensitive Device

3.3.7.1.14.10.5 ESS - Environmental Stress Screening

3.3.7.1.14.10.6 HAZ - Hazardous Conditions, Processes, or Materials

3.3.7.1.14.10.7 HCI - Hardness Critical Item

3.3.7.1.14.10.8 HCP - Hardness Critical Process

3.3.7.1.14.10.9 I/R - Interchangeability/Repairability

3.3.7.1.14.10.10 INT - Interface Control

3.3.7.1.14.10.11 ODC - Ozone-Depleting Chemical

3.3.7.1.14.10.12 ODS - Ozone-Depleting Substance

3.3.7.1.15 Interchangeability/Replaceability (I/R): Enter "I" for Interchangeable parts, "R" for Replaceable parts, or "B" for parts that are Both interchangeable and replaceable.

3.3.7.1.15.1 Interchangeability applies to interchangeable items that are manufactured with the aid of controlled media and require only the application of attaching means for their installation. Interchangeable items shall be capable of being readily installed, removed, or replaced without alteration, misalignment, or damage to items being installed or to adjoining items or structure (ref. MIL-I-8500, Interchangeability and Replacement of Component Parts).

3.3.7.1.15.2 Replaceability applies to replaceable items that are manufactured with the aid of controlled media and the installation of which requires alterations of the items in addition to the normal application and methods of attachment. Such alterations may include drilling, reaming, cutting, filing, trimming, bending, shaping, etc. (reference MIL-I-8500 Interchangeability and Replacement of Component Parts).

3.3.7.1.16 Interchangeability Code: Enter the Interchangeability Code associated with the item in accordance with GEIA-STD-0007B. Enter "OW", "OR", "TW", "NI", "NR", "OM" or "TM". Interchangeability Code indicates relationship of items.

3.3.7.1.16.1 Signifies One-Way (OW) interchangeability as follows:

3.3.7.1.16.1.1 Code OW: When used for a change to the original item, means that the original item may be used until exhausted.

3.3.7.1.16.1.2 Code OR: When used for the replacement item, "OR" means that the new item may be used to replace the original item.

3.3.7.1.16.2 Code TW: Signifies that the original item and replacement item are interchangeable with each other.

3.3.7.1.16.3 Signifies that the item is Not Interchangeable (NI):

3.3.7.1.16.3.1 Code NI: When used for the original item, NI means that the item is not interchangeable with the replacement item.

3.3.7.1.16.3.2 Code NR: When used for the replacement item, NR means that the replacement item is not interchangeable with the original item.

3.3.7.1.16.4 Code OM: Signifies that the original item is interchangeable with the replacement item only if modified to the replacement item configuration and only in the new application.

3.3.7.1.16.5 Code TM: Signifies that the original item is interchangeable in both the old and new application only if the original item is modified to the replacement configuration.

3.3.8 Data Group H – Comments: Enter explanatory comments as needed. Reference the data element with which the comment is associated.

End of DI-FNCL-82009A