

CHAPTER 14
Introduction to the Maintenance Data System (MDS), MDS Reports,
MDS Analysis, and Decision Knowledge Programming for Logistics Analysis
and Technical Evaluation (DECKPLATE)

Table of Contents

14.1 Introduction to the Maintenance Data System (MDS)	1
14.1.1 Purpose.....	1
14.1.2 Scope.....	1
14.1.3 General Description of the Maintenance Data System (MDS).....	2
14.1.4 Central Design Activity (CDA) and NALCOMIS Functional Manager.....	4
14.1.5 Maintenance Data System (MDS) Flexibility.....	5
14.1.6 Central Data Repository.....	5
14.1.7 Data Submission to Central Data Bank.....	6
14.1.8 Central Data Bank Correction Procedures	13
14.1.9 NALCOMIS Data Collection.....	14
14.1.10 Failure Contingencies	14
14.1.11 Data Security.....	14
14.1.12 Mathematical Calculations.....	14
14.1.13 Data Codes	15
14.1.14 Document Control Form	15
14.1.15 Data Transfer.....	16
14.1.16 Data Extraction	17
14.1.17 Data Analysis	17
14.1.18 Data Accuracy.....	17
14.1.19 Local Database Correction and Deletion Procedures.....	18
14.1.20 Source Document Pickup and Delivery	18
14.1.21 Monthly Reports Request.....	19
14.2 Maintenance Data System (MDS) Reports	19
14.2.1 NALCOMIS Production Management Reports	19
14.2.2 Aviation Maintenance Information Summary Reports and Data Extract Products	20
14.2.2.1 Consolidated Performance Metrics (MAINT-1 Report)	20
14.2.2.2 Aircraft Readiness Degradation and Utilization Summary (MAINT-2 Report)	23
14.2.2.3 SCIR by WUC/UNS (MAINT-3 Report).....	23
14.2.2.4 Detailed Mission and Maintenance Data by Aircraft (MAINT-4 Report).....	24

14.2.2.5	Maintenance Man-hour (MAINT-5 Report)	25
14.2.2.6	Detailed Data Extract (MAINT-6 Report)	27
14.2.3	DECKPLATE Flight, Maintenance, Supply and Miscellaneous Ad Hoc Reports	28
14.2.3.1	Command Production Report (DP-0004)	28
14.2.3.2	Items Processed by Bureau/Serial Number (DP-0009)	28
14.2.3.3	Man-Hours by TEC, Work Unit Code, and Transaction Code (DP-0010)	28
14.2.3.4	Man-Hours by TEC, Work Unit Code, and Transaction Code (DP-0011)	29
14.2.3.5	Maintenance Level 1 Repairs (DP-0012)	29
14.2.3.6	Flight Hours by Operation Code (DP-0014)	29
14.2.3.7	Detailed Failed Parts H – Z (DP-0016)	29
14.2.3.8	Detailed Flight and Inventory (DP-0017)	29
14.2.3.9	Org Maintenance Actions/Verified Failures (DP-0020)	29
14.2.3.10	NMC/PMC by Part Number or WUC (DP0021/26)	29
14.2.3.11	Org Removals/IMA Actions (DP-0022)	29
14.2.3.12	IMA Component Action Summary (DP-0023)	29
14.2.3.13	Top Degraded by TEC (DP-0024)	29
14.2.3.14	Serial Number Tracking (DP-0025)	30
14.2.3.15	Degraded Snapshot by HOF NIIN (DP-0027)	30
14.2.3.16	Degraded Snapshot by HOF NIIN , Org and IMA (DP-0028)	30
14.2.3.17	Org Verified Failure/Non-Failure Analysis by TEC/WUC (DP-0029)	30
14.2.3.18	Aircraft Readiness/Tracker Indicator Rates (DP-0032)	30
14.2.3.19	NMC/PMC Reliability by Part Number (DP-0033)	30
14.2.3.20	NMC/PMC Reliability by WUC (DP-0034)	30
14.2.3.21	Part Number NIIN WUC Cross Reference (DP-0035)	30
14.2.3.22	Aircraft Readiness/Tracking Indicators Hours Report (DP-0036)	31
14.2.3.23	Org Verified Failures/Non-Failures Analysis by Part (DP-0037)	31
14.2.3.24	Part Number NIIN Cross Reference (DP-0040)	31
14.2.3.25	Type Mission Requirements Report (DP-0041)	31
14.2.3.26	Technical Directives Report (DP-0042)	31
14.2.3.27	Detailed Consumables Report (DP-0043)	31
14.2.3.28	Top Degraded by Type/Model (DP-0044)	31
14.2.3.29	AV3M AIMD Chronicle Repairable Item Disposition Summary (DP-7096-02)	31
14.2.3.30	AV3M AIMD Chronicle Repairable Item Turn Around Time Summary (DP-7096-03)	31
14.2.3.31	AV3M AIMD Chronicle Repairable Item Turn Around Time Recap (DP-7096-04)	32

- 14.2.3.32 AV3M AIMD Chronicle Productivity (DP-7096-05) 32
- 14.3 Maintenance Data System (MDS) Analysis 32**
 - 14.3.1 Analysis Techniques 32
 - 14.3.2 Analysis Products..... 33
 - 14.3.2.1 DECKPLATE Report Examples 33
 - 14.3.2.2 METCAL Data..... 33
 - 14.3.2.3 Computation of Job Averages 33
 - 14.3.2.4 Identification of High Man-hour, Maintenance Action, and Failure Rate Items 34
 - 14.3.2.5 Component Reliability Trends 35
 - 14.3.2.6 Cannibalization Trend 35
 - 14.3.2.7 Abort Malfunctions 36
 - 14.3.2.8 Maintenance Man-hours by Bureau Number 36
 - 14.3.2.9 Maintenance Man-hour Per Flying Hour and Sortie Chart 37
 - 14.3.2.10 Mission Capabilities 38
 - 14.3.2.11 Awaiting Maintenance (AWM) Reason Code Summary 38
 - 14.3.2.12 Mission Capability Degradation Summary 38
 - 14.3.2.13 Mission Capability Trend..... 39
 - 14.3.2.14 Repair of Removed Components 39
 - 14.3.2.15 High-Five EOC Degradation by Mission Capability Category Chart..... 39
 - 14.3.3 Maintenance Summaries 39
- 14.4 DECKPLATE – NALDA – Aviation Data Warehouse (ADW) 40**
 - Figure 14-1: Elements of the Naval Aviation Maintenance Data System 42
 - Figure 14-2: Program Responsibilities Flow Chart..... 43
 - Figure 14-3: COMNAVAIRSYSCOM (AIR-6.8.4) MDS Data Transmittal Letter 44
 - Figure 14-4: Consolidated Code List 45
 - Figure 14-5: Document Control Form (OPNAV 4790/45) (Sample) 46
 - Figure 14-6: Notification of Transfer (Sample) 47
 - Figure 14-7: Notification of Individual’s Transfer (Sample Format) 48
 - Figure 14-8: Daily Production Report - Part 1 49
 - Figure 14-9: Daily Production Report - Part 2..... 50
 - Figure 14-10: Work Center Work Load Report 51
 - Figure 14-11: Equipment Discrepancy Report 52
 - Figure 14-12: SQD EXREP Status Report..... 53
 - Figure 14-13: SQD EXREP Status Summary By Organization Report..... 54

Figure 14-14: DIFM Status Report 55

Figure 14-15: Consolidated Performance Metrics (MAINT-1 Report) (Sample)..... 56

Figure 14-16: Aircraft Readiness Degradation and Utilization Summary (MAINT-2 Report) (Sample)
..... 57

Figure 14-17: Subsystem Capability and Impact Reporting by WUC/UNS (MAINT-3 Report)
(Sample) 58

Figure 14-18: Detailed Mission and Maintenance Data by Aircraft (MAINT-4 Report) (Sample).... 59

Figure 14-19: Maintenance Manhour (MAINT-5 Report) (Sample) 60

Figure 14-20: Detailed Data Extract (MAINT-6 Report) (Sample)..... 61

Figure 14-21: DECKPLATE Flow Process 62

CHAPTER 14
Introduction to the Maintenance Data System (MDS), MDS Reports,
MDS Analysis, and Decision Knowledge Programming for Logistics Analysis
and Technical Evaluation (DECKPLATE)

14.1 Introduction to the Maintenance Data System (MDS)

14.1.1 Purpose

The MDS was developed as an integral part of the naval aviation maintenance and material management (3M) System and provides data input to the NAMP. The MDS furnishes data products that provide management tools for the efficient and economical management of maintenance organizations.

14.1.2 Scope

14.1.2.1 The aviation 3M System is sponsored by the Chief of Naval Operations (CNO) and administered through the operating chain of command. Technical support is provided by SPAWARSCEN Norfolk, VA, and COMNAVAIRSYSCOM (AIR-6.8.4). [Figure 14-1](#) is a graphic display of the elements that make up the aviation 3M System.

14.1.2.2 The MDS is a management information system designed to provide statistical data for use at all management levels relative to:

- a. Equipment maintainability and reliability.
- b. Equipment configuration, including alteration and technical directive (TD) status.
- c. Equipment mission capability and utilization.
- d. Material usage.
- e. Material nonavailability.
- f. Maintenance and material processing times.
- g. Weapon system and maintenance material cost expenditures.

14.1.2.3 It is CNO policy that data users will collect data at the source, only once. Further, the MDS described in this chapter will be used as the principal means of collecting source data in support of the information areas outlined above.

14.1.2.4 Unless specifically directed otherwise by CNO or Commander Naval Air Forces (CNAF), compliance with procedures contained in this chapter is mandatory for all Navy and Marine Corps aviation activities and Cognizance Symbol 2O aviation training devices activities.

14.1.2.5 Subordinate operating or systems commands are not authorized to impose additional maintenance data collection requirements on fleet activities or to modify the procedures contained in this chapter without the prior approval of CNAF.

14.1.2.6 Command Responsibility:

- a. The system administrator/analyst (SA/A) is responsible for monitoring, controlling, and administering MDS. This includes:

(1) Screening, distribution, and analytical examination of reports.

(2) Preparation of graphic and narrative summaries. As a minimum, the SA/A will produce a monthly report and 12 month (minimum) trend charts with the following data elements:

(a) A799 rate by work unit code (WUC), work center, and aircraft.

(b) Cannibalization (part number, total actions, total man-hours, rate per flight hour).

(c) Direct maintenance man-hours per flight hour.

(d) Aircraft utilization rate, by BUNO to include number of hours In Reporting and Out of Reporting material condition reporting status (MCRS).

(e) Corrosion prevention man-hours (total and average per aircraft).

(f) Corrosion treatment man-hours (total and average per aircraft).

(g) Top five man-hour consuming repair actions, by WUC and part number.

(h) Top five non-mission capable (NMC) component failures, by national stock number (NSN).

(i) Top five partial maintenance capable (PMC) component failures, by NSN.

(j) Aircraft NMC for over 30 days, by BUNO with non-mission capable supply (NMCS) and non-mission capable maintenance (NMCM) discrepancies.

(k) Top five work order (WO) documentation errors, by field and work center.

(3) Training personnel in MDS documentation procedures. The SA/A shall conduct refresher training on WO documentation annually, at a minimum. Training for specific work centers or personnel shall be performed whenever error rates indicate the need.

(4) Coordination with work centers, Operations Department, and SPAWAR Systems Center Atlantic (SSCA) to resolve problems.

b. Work Center Supervisors are responsible for the accuracy of the WOs generated by their work center.

c. Maintenance Control is responsible for validating data on WOs with emphasis on correct equipment operational capability (EOC) coding and Up/Partial/Down (U/P/D) status.

d. The Maintenance Material Control Officer (MMCO) is responsible for the accuracy of all data regarding maintenance of aircraft, engines, and equipment. MMCOs will trend MDS errors and will direct SA/A training in areas of deficiency.

14.1.3 General Description of the Maintenance Data System (MDS)

14.1.3.1 The MDS embraces four separate but interrelated subsystems: Maintenance Data Report (MDR), subsystem capability impact reporting (SCIR), material reporting (MR), and Utilization Reporting (Figure 14-1).

14.1.3.2 The documentation procedures for each of these subsystems are detailed in Chapter 15 (O-level) and Chapter 16 (I-level) and discussed briefly in the following paragraphs.

a. MDR involves the most complex and the widest range of data in the MDS. MDR is designed so each worker or group of workers, upon completion of a job, converts a narrative description of the job into codes and enters the coded information on standard source documents. These documents are replicated to the naval aviation logistics command management information system (NALCOMIS) top-tier and to decision knowledge programming for logistics analysis and technical evaluation (DECKPLATE) to produce a variety of machine reports. Through careful analysis of these reports, maintenance managers may be kept continually advised of the nature, quantity, and quality of maintenance work performed. The only source document authorized for use with MDR is the maintenance action form (MAF) or work order (WO).

(1) MAF or WO. The MAF or WO, originated by personnel at both O-level and I-level maintenance, provides the documentation for all maintenance action with the exception of those documented on the metrology equipment recall (METER) Card (OPNAV 4790/58). The MAF or WO allows for more than one type of maintenance action to be documented. A transaction code is used to identify the type of maintenance action being documented. The portion of the maintenance organization's workload devoted to repair, TD compliance, and periodic and conditional inspections is the area in which there is the greatest requirement for in-depth data. The MAF or WO also serves as a suspense document for repairable component pool management while the defective component is being processed by the IMA or FRC. Upon completion of the I-level maintenance activities (IMA) or Fleet Readiness Center (FRC) action the component is returned to the supply organization, and at this point Material Data fields are completed by the SSC and automatically processed up-line. The record type code entered indicates whether the component was returned to ready for issue (RFI) status or beyond capability of maintenance (BCM) at the IMA or FRC. This data is required for the immediate management needs of the local command and for higher management.

(2) The MAF or WO is used for recording data to meet these requirements and provides for recording the following types of data:

- (a) Job Control Number (JCN).
- (b) Organization and work center where the work is being performed.
- (c) Type equipment, system, subsystem, and component being worked on.
- (d) How the malfunction, discrepancy, or failure occurred, when it was discovered, and the action taken to correct it.
- (e) Identification of parts and components removed and replaced.
- (f) Cause and duration of work stoppages.
- (g) Man-hours and elapsed maintenance time (EMT) expended on the job.
- (h) Signatures of individuals performing, inspecting, and supervising the maintenance.
- (i) TD identification and compliance.

b. Subsystem Capability and Impact Reporting (SCIR). SCIR is generated from the MAF or WO. The SCIR reports, which include the equipment's utilization, use the Naval Aircraft Flight Record as the primary source of data. SCIR provides factual information, generated at the lowest level of maintenance, as to aircraft or equipment inventory and actual subsystem performance. It provides specific aircraft or equipment mission capability and uniquely defines the categories of FMC, PMC, and NMC for a specific type and model aircraft or equipment. The degradation of equipment mission capability is reported by recording EOC codes in the Repair Cycle and Maintenance or Supply Record sections of the MAF or WO. EOC codes are documented when a specific system or subsystem impacts the mission capability of that equipment. The

EOC code is a three position code. The first position is derived from the mission essential subsystems matrix or matrices (MESM) (provided on [CNAP Share portal](#)). Only the first position is documented on the MAF or WO. The second and third positions are computer generated using the first two positions of the documented WUC. SCIR provides data to determine mission capability, system or subsystem reliability, and serves as a management tool. SCIR data may be used at any level of management.

NOTE: Procedures for reporting support equipment (SE) inventory are defined in Chapter 16.

c. **Material Reporting.** Repairable component control and usage data are submitted to the SSCA by the local supply organization using 60 series data from the daily extract and material requisitions (DD 1348) as source documents. Machine reports produced from these documents merge key data elements of maintenance and supply and are provided to the local supply (and IMAs or FRCs if requested) for monitoring the flow of repairable components. The information permits management to:

(1) Relate material issues or turn-ins to weapon systems and components by activities and maintenance level.

(2) Advise higher commands of material expenditures in support of maintenance.

(3) Determine weapon systems expenses at the O-level and I-level.

d. **Utilization Reporting.** Utilization of aircraft is reported by submission of Naval Aircraft Flight Records (NAVFLIR)(OPNAV 3710/4). NAVFLIRs are completed by the pilot in command or aircraft mission commander upon termination of simulator training or flight, an aircraft flight, series of flights or cancellation of a flight. This form also allows for documenting aircrew (officer and enlisted gain, loss, and revision).

14.1.4 Central Design Activity (CDA) and NALCOMIS Functional Manager

14.1.4.1 SPAWARSYSCEN Norfolk, VA, as the CDA, is responsible for generating source and object programs and QA testing of programs prior to fleet release. Programs and operating instructions, tailored to the capabilities of the individual hardware suites, are issued to the SSCA, squadrons, FRCs, and aviation intermediate maintenance department or detachments (AIMD). [Figure 14-2 Program Responsibilities Flow Chart](#), shows these relationships.

14.1.4.2 COMNAVAIRSYSCOM Functional Manager

a. The SPAWARSYSCEN naval tactical command support system (NTCSS) Program Manager will coordinate with the NALCOMIS Functional Manager to ensure aviation functional requirements are incorporated into the NTCSS system requirements. Existing NALCOMIS functional specifications and requirements will remain valid until the COMNAVAIRSYSCOM Functional Manager approves the appropriate NTCSS changes. All approved NALCOMIS functional specifications and requirements will remain in effect until superseded by NTCSS documentation.

b. COMNAVAIRSYSCOM (AIR-6.8.4) is the Functional Manager for aviation maintenance and logistics information systems. The Functional Manager will:

(1) Prepare the system and subsystem specifications for Optimized NALCOMIS.

(2) Establish and maintain organizational structures and procedures, such as user group and Fleet Design Team conferences to ensure full and active user community participation in the definition, review, and certification of functional requirements in all aspects of module development and maintenance.

- (3) Review functional course curricula for incorporation in NTCSS technical training and prepare a functional annex for inclusion in the NTCSS NTP.
- (4) Prepare test plans and test analysis reports to support the functional certification of the NTCSS functional software modules.
- (5) Certify functional adequacy of cognizant modules in acceptance tests.
- (6) Develop detailed functional descriptions and solutions to requirements with the assistance of user groups or Fleet Design Teams.
- (7) Ensure Optimized NALCOMIS maintenance systems requirement documents are kept current and reflect proper justification for policies and improved business procedures and track the changes to ensure benefits were achieved.
- (8) Coordinate with Commandant of the Marine Corps (CMC) to ensure Marine Corps peculiar expeditionary or operational functional requirements are met.
- (9) Serve as a voting member of the NTCSS requirement integrated program team (IPT).
- (10) Coordinate change proposals with the TYCOMs for submission to the NTCSS requirements IPT.
- (11) Standardize NALCOMIS functionality for both O-level and I-level maintenance activities.
- (12) Establish criteria to ensure data validity is achieved at initial data entry and maintained throughout the system.

14.1.5 Maintenance Data System (MDS) Flexibility

The MDS will be subject to frequent changes, especially in the area of validation. The CDA should maintain the capability of responding to changes of this nature within a maximum of 90 days from implementation notification. Response time will be established by SPAWARSYSCEN Norfolk, VA as circumstances dictate for changes of greater magnitude.

14.1.6 Central Data Repository

14.1.6.1 A central data repository facility is maintained by COMNAVAIRSYSCOM (AIR-6.8). This facility receives MDS data in the form of reproduced machine records from reporting activities through their SSCA and Optimized NALCOMIS. COMNAVAIRSYSCOM (AIR-6.8) prepares standard reports from these data. Management at any level of command may extract data pertaining to any attribute of the maintenance effort or material usage via DECKPLATE (<http://www.navair.navy.mil/logistics/deckplate/>), the authoritative Naval Aviation Active Data Warehouse. Customer Support is available via the National Help Desk (888-292-5919 or 301-342-3104).

14.1.6.2 Aviation 3M data for all aircraft flight and readiness, for example, RECTYP 79 and the aircraft portion of the Naval Aircraft Flight Record form shall be retained indefinitely.

14.1.6.3 Aviation 3M data for the following shall be retained for 12 years:

- a. Aviation 3M data other than flight and readiness data.
- b. Non-aircraft data.

- c. D-level maintenance data.

14.1.7 Data Submission to Central Data Bank

14.1.7.1 Micro aviation 3M and NAVFLIRS sites with access to e-mail or streamlined automated transmission system (SALTS) capability will forward MDS data upline daily. SALTS Transmission Procedures are defined in the SALTS Program Operations Manual. Monthly MDS data from micro sites will be forwarded via e-mail or SALTS. The MDS record formats required to be forwarded are defined in [Appendix F](#).

14.1.7.2 Method of Forwarding. MDS data will be forwarded to the central data facility or the SSCA not later than the fifth calendar day of the month. The data may be forwarded by first class mail or, for those activities so authorized, via automatic digital network (AUTODIN). When forwarded after the tenth calendar day of the month, MDS data will be shipped via the most expeditious means available including commercial express delivery services, which guarantee delivery within a specified time. In all cases, the magnetic media to be shipped will be securely packaged with each package labeled and series numbered (1 of 3, 2 of 3, etc.). A transmittal letter, in the format of [Figure 14-3](#), will be included in the shipment. Activities forwarding MDS data shall notify COMNAVAIRSYSCOM (AIR-6.8.4) (info the appropriate ACC), via naval message, of the date and method of shipment and any other related information. Where AUTODIN is used, cite the date time group (DTG) of the AUTODIN transmission. Above messages will contain the notation MIN: CONSIDERED in the subject line to permit transmission when MINIMIZE is imposed.

14.1.7.3 Data Processing Code. The data processing code is a three character code that identifies the source of the data by location. The organization code of the local supply department, such as station, carrier, or Marine Air Group (MAG), where the data originated will be entered as the data processing code. This code is required at the central data bank for identification of data sources by location and for grouping of data by activity. For example, data from North Island, San Diego will have a supply organization code of P8A and GFZ for MALS-11, MCAS Miramar. The NAVAL AVIATION LOGISTICS DATA ANALYSIS (NALDA) Organization Code Translator (<http://www.navair.navy.mil/logistics/orgtranslator>) provides for the identification of all organization codes. Requests for additions/changes/deletions to the codes listed in the NALDA Organization Code Translator should be addressed through the cognizant chain of command per [Appendix E](#).

14.1.7.4 Magnetic Media Specifications and Format. When data is forwarded by magnetic media, such transmission shall be per the following standards:

- a. Media Type, Track Size, and Density. Data shall be written in EBCDIC or ASCII. Media type is limited to 3 1/2" diskette or cartridge tape. When forwarding data via diskette, the external label must reflect the series number (1 of 3, 2 of 3, etc.).

- b. Internal Header Label. Internal header labels are not to be written on the magnetic media.

- c. Record Length. Ten 80-character records.

- d. End of Reel Indicator. Data recorded on magnetic tape must be terminated by at least one tape mark. If a trailer label is used, it shall be preceded by a tape mark.

- e. Control Record. A control record must be the first and last data records placed on the data submission. The control record identifies the Navy or Marine Corps activity submitting the MDS data to COMNAVAIRSYSCOM (AIR-6.8.4). The control record shall be prepared according to the following criteria:

- Positions 1-3. The literal CT* (asterisk) will be present in positions 1-3.

Positions 4-25 - Data Processing Activity. The name of the activity placing the aviation 3M data on magnetic tape. The first character of activity name should be in position 4, for example, NAS Pensacola, Kitty Hawk (CV-63).

Positions 26-28 - Type of Data. The literal MDS shall always be placed in positions 26-28.

Positions 31-33 - Data Processing Activity Code. The aviation 3M organization code of the data processing activity as contained in the Organization Code Cross-Reference Master List at web site <http://www.navair.navy.mil/logistics/orgtranslator>.

Position 34 - Blank.

Positions 35-40 - Date of Transmittal Letter. The information in this field reflects the date the letter of transmittal was prepared. The field will reflect six numeric characters defining the date YYMMDD format, for example, 20 October 1996 shall be entered 961020.

Positions 41-46 - Serial Number of Letter. This field should reflect the serial number assigned to the transmittal letter. The serial number must be right justified in the field and, if necessary, must be preceded with zeros to completely fill the field. If the serial number is not present on the transmittal letter, fill the field with literal Xs.

Positions 47-52 - Record Count. The record count will be zero filled in the first control record. This field in the last control record will reflect a count of the total number of maintenance data records submitted. This count should be accurate since it is used by COMNAVAIRSYSCOM (AIR-6.8.4) to verify the number of records processed.

Positions 53-62 - Do not use this field except as specifically authorized by COMNAVAIRSYSCOM (AIR-6.8.4).

Positions 63-68 - Report Ending Date. This field contains a numeric date reflecting the ending date of the reporting time period. The date shall be in YYMMDD format, for example, 30 September 1996 cutoff date shall be displayed as 960930.

Positions 69-70 - The numeric number 01 shall be present in positions 69-70.

Positions 71-76 - Submission Creation Date. This field reflects the date submission was created. The date is structured in YYMMDD format.

Positions 77-78 - Run Number. The numeric number 01 shall always be present in position 77-78.

Positions 79-80 - Control Card Serial Number. The numeric number 01 shall always be present in positions 79-80.

14.1.7.5 Submission Sequence. Data records can be submitted in any sequence, except for control records described in [paragraph 14.1.7.4e](#).

14.1.7.6 External Labels. Each submission of MDS data or magnetic media shall be externally labeled to reflect the following information:

- a. The file identification Aviation MDS Data.
- b. When using magnetic tape, the track size and recording density, for example, 9TR/1600 and TR/6250. This information is necessary for expeditious entry of data into the aviation 3M Central Data Bank.
- c. The total number of records. This record count indicates the number of individual data records.

- d. The reel, CD, or box number within submittal, for example, 1 of 2, 2 of 2.
- e. Date of machine run (YYMMDD).
- f. The name and address to be used by COMNAVIAIRSYSCOM (AIR-6.8.4) when returning the magnetic media to the originator.
- g. Other optional information (as deemed appropriate).

14.1.7.7 Transmittal Letter. Each submittal shall be accompanied by a letter of transmittal per [paragraph 14.1.16](#). For the magnetic media, the characteristics (media type, track size, and recording density) shall also be indicated on the transmittal letter. When a submittal is comprised of more than one carton, a copy of the transmittal letter shall be placed in each carton. One or more reels or boxes in a shipping container is considered to be a carton. The transmittal letter for COMNAVIAIRSYSCOM (AIR-6.8.4) submittals shall be computer generated and prepared as described in the following paragraphs:

- a. Title line will be printed in two lines at the top of the page as follows:

(1) Line 1.

DATA ELEMENT	PRINT POSITION	NOTES
NAVAL	1-5	1
AIR	7-9	1
SYSTEMS	11-19	1
COMMAND	21-26	1

(2) Line 2.

DATA ELEMENT	PRINT POSITION	NOTES
MDS	1-3	1
DATA	5-8	1
TRANSMITTAL LETTER	10-20 22-27	1 1
DAY	56-57	2, 5
MONTH	59-61	2
YEAR	63-64	2

- b. From Address will require up to three lines of print and will be printed beginning two lines below the title line as follows:

(1) Line 1

DATA ELEMENT	PRINT POSITION	NOTES
FROM:	1-5	1
ADDRESS	8-54	3

(2) Lines 2 and 3

DATA ELEMENT	PRINT POSITION	NOTES
ADDRESS	8-54	3

- c. To Address will require four lines of print and will be printed beginning two lines below the last line of the From Address as follows:

(1) Line 1.

DATA ELEMENT	PRINT POSITION	NOTES
TO:	1-3	1
COMMANDER	8-16	1

(2) Line 2

DATA ELEMENT	PRINT POSITION	NOTES
NAVAL	8-12	1
AIR	14-16	1
SYSTEMS	18-24	1
COMMAND	26-32	1
(AIR-6.8.4)	34-44	1

(3) Line 3.

DATA ELEMENT	PRINT POSITION	NOTES
47060	8-12	1
MCLEOD	14-19	1
RD	21-22	1

(4) Line 4.

DATA ELEMENT	PRINT POSITION	NOTES
PATUXENT	8-15	1
RIVER	17-21	1
MD	23-24	1
20670-1626	26-35	1

d. SUBJ line will be printed two lines below the last To Address line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
SUBJ:	1-5	1
SUBMISSION	8-17	1
OF	19-20	1
AVIATION	22-29	1
3M	31-32	1
DATA	34-37	1

e. REF line will be printed two lines below the SUBJ line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
REF:	1-4	1
(A)	8-10	1
COMNAVAIRFORINST	13-21	1
4790.2	23-29	1

f. ENCL line will be printed two lines below the REF line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
ENCL:	1-5	1
(1)	8-10	1
3M	13-14	1
DATA	16-19	1

g. PARA 1 will require three lines of print beginning two lines below the ENCL line as follows:

(1) Line 1

DATA ELEMENT	PRINT POSITION	NOTES
1.	1-2	1
ENCLOSURE	5-13	1
(1)	15-17	1
IS	19-20	1
FORWARDED	22-30	1
TO	32-33	1
YOUR	35-38	1
ACTIVITY	40-47	1
THIS	49-52	1
DATE	54-57	1
IN	59-60	1

(2) Line 2.

DATA ELEMENT	PRINT POSITION	NOTES
ACCORDANCE	1-10	1
WITH	12-15	1
REFERENCE	17-25	1
(A).	27-30	1
THE	33-35	1
RECORDS	37-43	1
REFLECT	45-51	1
TRANSACTIONS	53-64	1

(3) PARA 1 line 3.

DATA ELEMENT	PRINT POSITION	NOTES
WHICH OCCURRED DURING THE REPORTING PERIOD ENDING DAY MONTH YEAR .	1-5 7-14 16-21 23-25 27-35 37-42 44-49 51-52 54-56 58-59 60	1 1 1 1 1 1 1 4, 5 4 4 1

h. PARA 2 line will be printed two lines below the last PARA 1 line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
2. RECORD COUNTS ARE AS FOLLOWS:	1-2 5-10 12-17 19-21 23-24 26-33	1 1 1 1 1 1

i. Record count header will be printed three lines below the PARA 2 line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
TYPE COUNT	9-12 18-22	1 1

j. 60 thru 67 record count line will be printed two lines below the record count leader line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
60-67 60-67 COUNT MEDIA TYPE:	9-13 17-21 31-35 37-41	1 5, 6 1 1

- k. 70 record count line will be printed immediately below the 60-67 record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
70	9-10	1
70 COUNT	17-21	5, 6

- l. A thru Z record count line will be printed immediately below the 70 record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
A-Z	9-11	1
A-Z COUNT	17-21	5, 6
TRACK	31-35	1
SIZE:	37-41	1

- m. 7B thru 7G record count line will be printed immediately below the A-Z record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
7B-7G	9-13	1
7B-7G COUNT	17-21	5, 6

- n. 7Z record count line will be printed immediately below the 7B-7G record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
7Z	9-10	1
7Z COUNT	17-21	5, 6
DENSITY	31-38	1

- o. CORR record count line will be printed immediately below the 7Z record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
CORR	9-12	1
CORR COUNT	17-21	5, 6

- p. Total record count line will be printed two lines below the CORR count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
TOTAL	9-13	1
TOTAL COUNT	16-21	5, 7

- q. Signature line will be printed five lines below the total record count line as follows:

DATA ELEMENT	PRINT POSITION	NOTES
SIGNATURE	31-39	1

- r. Notes. Used in the preparation of the MDS Data Transmittal Letter are as follows:

1 - Machine generated literal.

- 2 - Day, month and year report is printed.
- 3 - Up to three lines to print address of SSCA preparing report.
- 4 - Day, month and year of last day of accounting period.
- 5 - Right justify, suppress printing of leading zeros.
- 6 - The number of applicable records contained on the submission file. Records pertain to COMNAVAIRSYSCOM (AIR 6.8.4) corrections only.
- 7 - Total number of records on the submission file should equal the accumulation of all individual record counts.

14.1.7.8 Submission Dates. MDS data will be forwarded directly to COMNAVAIRSYSCOM (AIR-6.8.4) in time to ensure receipt by the 15th of the month following the end of the accounting period. Record type 79 records will be forwarded to the Aircraft Controlling Custodian (ACC) not later than 2400 hours on the tenth calendar day of the month following the report month. In the event this deadline cannot be met, the SA/A must notify via message to the supporting TYPE WING with an info copy to the appropriate ACC.

14.1.7.9 Data Exchange. Magnetic media sent to COMNAVAIRSYSCOM (AIR-6.8.4) are retained for 30 days and then returned to the originator. The submitting activity is required to provide the media for submission. Magnetic media distributed should be of certified quality and reliability to ensure reliable transmission of data. Procedures should be established at each SSCA to permit expeditious resubmission of data previously submitted to COMNAVAIRSYSCOM (AIR-6.8.4) in the event of data loss or damage.

14.1.7.10 Point of Contact. All Navy and Marine Corps activities submitting MDS data should notify COMNAVAIRSYSCOM of a point of contact within their activity to permit expeditious resolution of any problems that may arise in data exchange and discussion of other matters of mutual interest. The contact point should be designated by code, telephone extension, and, if desired, the individual's name. COMNAVAIRSYSCOM (AIR-6.8.4) NALDA Users Support is available at 301-757-8884 or 301-995-4306.

14.1.8 Central Data Bank Correction Procedures

Effect of Local Correction Procedures. Local correction procedures are not effective to correct records already received in the Central Data Bank at COMNAVAIRSYSCOM (AIR-6.8.4) for the MAF or WO Copy 1 Material Reporting Data (RECTYPs 60, 61, 63, 64, 65, 66, or 67); and Inventory, SCIR, Utilization and Individual Master Roster data (RECTYPs 52, 53, 70, 79, and 7Z). Local correction procedures are effective with NAVFLIRS data RECTYPs 7B, 7C, 7D, 7E, 7F, and 7G.

14.1.8.2 Correction of MAF or WO Copy 1

a. Submit an exact duplicate (original document number (DOCNUM) including errors) of the A record from the erroneous source document with a 1 in position 78 (not applicable for TR codes 00, 02, or 03). Only the A record will be submitted. **DO NOT SUBMIT B-Z RECORDS.** This will delete all corresponding A-Z records previously submitted for the erroneous MAF or WO Copy 1. These documents will be sent to the master file without validation applied except for DOCNUM and organization (ORG).

b. The corrected A record, if applicable (with a new DOCNUM) must be resubmitted with a 2 in position 78 (not applicable for TR codes 00, 02, or 03). Additionally, all applicable B-Z records associated with the corrected source document must also be resubmitted with a 2 in position 78. These documents will be sent to the master file after all validation (except for COMDAT) has been applied.

c. Correction of Material Reporting Data, RECTYPs 60, 61, 63, 64, 65, 66, or 67. Submit an exact duplicate (including errors) of the erroneous record with a 1 in position 78. This will delete the erroneous record originally submitted. These documents will be sent to the master file without validation applied. A corrected record, if applicable, will be submitted with a 2 in position 78. These documents will be sent to the master file after all validation has been applied. RECTYP 60 can also be corrected using an alternate

method; submit an exact duplicate (including errors) of the erroneous data with 62 in positions 79-80. This will delete the erroneous RECTYP 60 originally submitted. A corrected record, if applicable, will be submitted with a 2 in position 78 and 60 in positions 79-80.

d. Correction of Inventory, SCIR, and Utilization Data, RECTYPs 70 and 79. Submit an exact duplicate (including errors) of the erroneous record with a 1 in position 74. This will delete the erroneous record originally submitted. A corrected record, if applicable, will be submitted with a 2 in position 74. Corrected RECTYPs 70 and 79 must not be submitted to the local SSCA for processing. RECTYP 70 corrections should be submitted directly to COMNAVAIRSYSCOM (AIR-6.8.4) using SALTS or magnetic media. RECTYP 79 corrections must be submitted directly to the appropriate controlling custodian. Corrections to RECTYPs 70 or 79 require corresponding corrections or additions to inventory and SCIR or Utilization Data.

e. Correction of Individual Master Roster (IMR) Data, RECTYP 7Z. Submit an exact duplicate (including errors) of the erroneous record with a 1 in position 78. This will delete the erroneous record originally submitted. A corrected record, if applicable, will be submitted with a 2 in position 78. RECTYP 7Z corrections should be submitted directly to COMNAVAIRSYSCOM (AIR-6.8.4) and must not be submitted to the local SSCA for processing. RECTYP 7Z corrections should be sent to COMNAVAIRSYSCOM (AIR-6.8.4) using SALTS or magnetic media.

f. Correction of NAVFLIRS Data, RECTYPs 7B, 7C, 7D, 7E, 7F, and 7G. This data is corrected and deleted using the local data base correction procedures in [paragraph 14.1.20](#). These corrections must be submitted to the local SSCA for processing. The local SSCA will subsequently forward them to COMNAVAIRSYSCOM (AIR-6.8.4). Do not submit these corrections directly to COMNAVAIRSYSCOM (AIR-6.8.4).

14.1.9 NALCOMIS Data Collection

Data collection from activities is accomplished through the network, by a process called data replication. It is imperative that each activity verifies and ensures connectivity to the network is maintained. Data is stored locally and globally at DECKPLATE. This data can be retrieved by the reporting organization's utilization of Ad Hoc capabilities on their local system or by using the standardized reports available at DECKPLATE. Information and a list of these reports are available in [paragraphs 14.2.3.1](#) through [14.2.3.32](#).

14.1.10 Failure Contingencies

In the event of machine or software failure at the SSCA, it is expected that transactions will be backlogged until service is restored. Accordingly, no special consideration, such as backup modes, is necessary. Programs should contain adequate safeguards against accidental file destruction because no redundant or backup base is employed.

14.1.11 Data Security

MDS data collected and processed at the local SSCA is unclassified.

14.1.12 Mathematical Calculations

Quantitative data, which occurs in fractional amounts, will be carried to the nearest tenth in all calculations unless otherwise specified. Rounding to the nearest tenth may be necessary when computing certain ratios and averages and rounding to the nearest whole number will be necessary for some local output products. In these cases, 5 or greater will be rounded up and 4 or less will be rounded down. When the final result is to be rounded to the nearest whole number, all data will be in one decimal place during calculations, and the result

rounded after it is obtained. For example: $2.6 + 2.6 = 5.2 = 5$ not $2.6 + 2.6 = 3 + 3 = 6$. Quantitative data occurring only in unit amounts will be accurate to the nearest whole number.

14.1.13 Data Codes

14.1.13.1 Machine oriented data processing operation requires a certain amount of data to be in code form before it is recorded on machine records. Certain data, such as man-hours expressed numerically in hours and tenths of hours, is directly machine readable and need not be encoded before data entry. Other data, however, must be reduced to code for machine processing.

14.1.13.2 Code Structures. Codes used in machine data processing may consist of one or more letters, numbers, or a combination of both. Codes composed entirely of letters are referred to as alpha codes, those composed of all numbers as numeric, and a combination letter and number code is referred to as alphanumeric. Codes in which the letters or numbers are arranged in a systematic, orderly pattern, conforming to the organizational pattern of the information to be encoded, are referred to as structured codes. Structured codes have been prescribed for much of the data to be processed by ships and stations for local use.

14.1.13.3 Codes Used in This System. Existing codes already available, either within the Navy or in other services, have been adopted and used in this system (as applicable). Some codes prescribed, such as work center codes, have been given limited structuring and have the flexibility of allowing for additional structuring to meet local management needs. Additional codes used in combination with other information form identifiers for control and other purposes. For example, a combination of the organization code, the Julian date, and a nonsignificant locally assigned sequence number is used in the system to generate a JCN. A list of the various codes peculiar to this system is in [Figure 14-4](#).

14.1.13.4 WUC Manuals/IETMS. To make certain that codes are conveniently available to all personnel actually performing and recording maintenance actions using the Legacy NALCOMIS application, WUCs have been published in manual form and can be obtained on the Naval Aviation Technical And Engineering Service(s) (NATEC) web site (<https://mynatec.navair.navy.mil>). Current listings of codes, other than WUCs, are in [Appendix E](#).

14.1.13.5 Stability and Control of Codes. The codes contained herein are for Navy-wide use and may not be altered locally. COMNAVAIRFOR (N422B) controls the codes used in this system, with the exception of aircraft status codes, Total Mission Requirements (TMR) codes, WUCs, and EOC codes. Aircraft status codes are listed in this instruction ([Appendix E](#)), TMR codes are listed in OPNAVINST 3710.7, and EOC codes are listed in the MESM (provided on [CNAP Share portal](#)). WUCs are managed by COMNAVAIRSYSCOM (AIR-6.8.5) and policy is delineated in NAVAIR 00-25-8.

14.1.14 Document Control Form

14.1.14.1 Activities using R-Supply and NALCOMIS do not need to use the MR document control form. Activities submitting source documents via electronic media shall use locally developed procedures for tracking document submission. The aviation 3M System will automatically generate a Document Control Form (DCF) (OPNAV 4790/45) ([Figure 14-5](#)) and return it to the originating activity via e-mail from the SSCA.

14.1.14.2 The documents to be submitted are separated, grouped, and counted by document type. The number of documents submitted by type is entered in the appropriate line under forms count column 1. The SSCA will enter Julian date and time received, signature, and verify the number of documents by entering their count of the document category in Forms Count column 2.

14.1.14.3 NAVFLIRS source documents must be batched and submitted on separate DCFs from other MDS source documents.

14.1.14.4 If, during SSCA processing, a document is found to be illegible or otherwise cannot be entered, it is returned to the submitting activity for correction. A total of these rejected documents is entered in the DCF forms reject column. Rejected or late documents submitted after the end of an accounting period must be submitted with a separate DCF. This data will be processed with the next accounting period data. Any such submission requires special coordination with the SSCA, and an away code of Z will be assigned to the DCF.

14.1.14.5 To identify data generated in an away from home situation, a one character code may be entered by the submitting activity in the away from home space at the top of the DCF. Any alphabetic or numeric character may be used except 1, 2, 3, 4 or Z. Z is reserved for late submission from the previous accounting period, and codes 1 and 2 are reserved for making corrections to the COMNAVAIRSYSCOM (AIR-6.8.4) central data bank. Code 3 is reserved for the CDA. Code 4 is reserved for the Naval Aircraft Flight Record (OPNAV 3710/4) submitted by an aircrew to a SSCA that is not the same SSCA supporting the aircraft reporting custodian. All such data will require a separate DCF for each away code used. The code documented on the DCF will be entered into each record produced from that batch of documents. Only the A record (data elements documented in MAF or WO blocks preceded by the alpha character A) in the MAF or WO Copy 1 will contain the away code.

14.1.15 Data Transfer

14.1.15.1 When a situation arises that warrants the transfer of the data processing functions from one SSCA to another, the analyst at the organization to be transferred will notify the SSCA of such transfer by submitting the notification of transfer (sample memorandum format contained in [Figure 14-6](#)). The analyst will notify the SSCA of the cutoff date for transfer at least 5 working days prior to the cutoff date. The SSCA will provide the analyst with all MDS data accumulated for that accounting period through the cutoff date for that organization, on transfer tapes or diskette. These transfer records will be in the format contained in [Appendix F](#). The analyst will deliver the transfer data to the new SSCA as "SUBMISSION AND TRANSFER" appropriate for inclusion into that SSCA data bank. The new SSCA will incorporate the transferred data into its local database in order to provide monthly reports at the end of the accounting period in addition to the submission to COMNAVAIRSYSCOM (AIR-6.8.4).

14.1.15.2 The following criteria will be used when transferring data from one SSCA to another:

a. All 7B-7G records for the ORG being transferred will be forwarded. In addition, all master roster records (EMR or IMR) will be forwarded.

b. All A-Z record families will be transferred based on JCNORG, except those with TRCODE of 00, 02, or 03 which will be selected by ORG. If the JCNORG and the ORG are not equal, in addition to forwarding that family to the receiving SSCA, the family will also be retained at the transferring SSCA to provide data for various monthly reports. These retained records will not be forwarded to COMNAVAIRSYSCOM (AIR-6.8.4) at the end of the accounting period. The receiving SSCA will affect the submission of such records to COMNAVAIRSYSCOM (AIR-6.8.4).

c. The transferring SSCA will maintain a copy of transferred data as history until the transferring organization has given notice that such data has been successfully processed into the receiving SSCAs data bank.

d. All records transferred will not be retained in the transferring SSCAs data bank except as noted in [paragraph 14.1.15.2c](#).

e. All records returned to the SSCA within the same accounting period, which were retained on file per [paragraph 14.1.15.2c](#), will be applied to the receiving SSCAs master files, replacing those records already on file (matching document number) and all records will be forwarded to COMNAVAIRSYSCOM (AIR-6.8.4).

f. Individual's Transfer. When the situation arises where an individual is being transferred to another activity (away from the current SSCAs geographical location), the analyst at the activity where the individual is transferring from will notify the SSCA of such transfer by submitting the notification of transfer (sample memorandum format contained in [Figure 14-7](#)). The analyst will notify the SSCA of the transfer date at least five working days prior to the individual's transfer. Upon the individual's departure, the analyst shall submit a Naval Aircraft Flight Record (OPNAV 3710/4) indicating a personnel loss (RECTYP 7D, EXCD L).

14.1.16 Data Extraction

The extraction of data, the conversion of source documents to machine-readable formats, may be accomplished by the method best suited to the particular hardware application. Data entry procedures are in [Appendix E](#).

14.1.17 Data Analysis

The time and expense required to collect and machine process maintenance data cannot be justified if the data is not continuously and constructively analyzed and used at all levels of command management. In effect, the process of data collection and machine processing provides a mass record of maintenance actions. The process of data analysis sorts from the mass data the significant events that require corrective action or merit command management attention. By this process, management is provided with significant facts as a basis for decision making. [Paragraph 14.3](#) prescribes the analysis techniques, products, and maintenance summaries. The summaries represented in [paragraph 14.3](#) reflect the minimum data that every maintenance activity should require. It is anticipated that some activities, depending on their mission or special circumstances, will require additional analysis or analysis in greater depth. Continuous refinement of the data analysis process is essential to system improvement, and is encouraged at all levels.

14.1.18 Data Accuracy

14.1.18.1 Throughout the MDS, accurate documentation must be a continuous concern. Each uncorrected erroneous document results in a loss of effectiveness of the submitted data and the system in general. Work center supervisors, with the guidance of the analyst, must strive at all times for absolute accuracy. Recurring documentation errors must be recognized and made the subject of the analyst's training program. The importance of accurate and complete data is further emphasized when large scale, Navy wide use of this data is considered.

- a. Higher level Navy managers use this data to:
 - (1) Analyze high system failures and high man-hour consumers by specific weapon system.
 - (2) Identify desirable product improvements.
 - (3) Analyze inspection requirements as a basis for adjusting inspection criteria and intervals.
 - (4) Adjust component scheduled removal intervals.
 - (5) Improve I-level repair capabilities.
 - (6) Identify failed items under warranty.

- (7) Establish realistic manning factors.
- (8) Determine and justify the need for modifications and engineering changes.
- (9) Establish equipment reliability factors.
- (10) Determine tooling and equipment requirements.
- (11) Predict probable failures through trend analysis.
- (12) Determine the status of compliance with mission readiness type TDs.

b. At the local level, summaries of this data will assist in identifying (with documented evidence) the following:

- (1) High man-hour per operating hour equipment (by SERNO or type equipment).
- (2) Man-hours lost to cannibalization and removal of items to FOM.
- (3) Areas with skill or training deficiencies.
- (4) Efficient or inefficient use of available manpower.
- (5) Items with high failure rates.
- (6) Inadequate troubleshooting.
- (7) Reasons for ground and in-flight aborts.
- (8) High usage items.
- (9) Status of TD compliance.
- (10) Warranted item failure and subsequent repair.

14.1.18.2 Validation consists of admissibility tests for logical and legal accuracy. MDS source documents are forwarded on a daily basis from the reporting activity to the SSCA for machine processing. As data from the source documents are extracted and converted to machine sensitive formats, each data element that enters the MDS must be validated to a prescribed set of validation specifications. Validation specifications for data elements in the MDS are detailed by source document type in the Maintenance Data validation specifications (VALSPECS) report in [Appendix F](#).

14.1.19 Local Database Correction and Deletion Procedures

Corrections and deletions to MDS Source Documents is a manual process. The correction or deletion is then automatically replicated to the NALCOMIS top-tier.

14.1.20 Source Document Pickup and Delivery

Source document delivery is accomplished automatically through the network via data replication. The SA/A is responsible for ensuring their organization's system is connected to the network and for verifying that MDS source documents are replicating to the NALCOMIS top-tier and DECKPLATE.

14.1.21 Monthly Reports Request

MDS monthly reports are prepared at the end of each monthly accounting period. These reports reflect the transactions submitted during the accounting period. Each reporting organization has the capability to select the reports it requires to be produced. Anyone with DECKPLATE access may run reports defined in [paragraphs 14.2.3.1 through 14.2.3.32](#) at any time.

14.2 Maintenance Data System (MDS) Reports

This paragraph describes the content and use of Maintenance Data Reports/DECKPLATE Reports available at DECKPLATE (<http://www.navair.navy.mil/logistics/deckplate>).

NOTES: 1. Where report examples are used for both O-level and I-level, the work center codes in the report examples will commence with an "X". The actual work center codes will print on the actual report.

2. Reports can be built using Ad Hoc capabilities on the local system or use the standardized reports available in DECKPLATE listed in [paragraphs 14.2.3.1 through 14.2.3.32](#).

3. The reports listed in [paragraphs 14.2.3.1 through 14.2.3.32](#) may be used by Legacy NALCOMIS activities as an analysis tool until upgraded to OOMA or OIMA software.

14.2.1 NALCOMIS Production Management Reports

14.2.1.1 NALCOMIS Production Management Reports reflect specific management tools to assist in the daily production effort within the IMA or FRC.

14.2.1.2 A selected set of NALCOMIS Production Management Reports is as follows:

a. Daily Production Report - Part 1. This report lists all completed maintenance actions being signed off by Production Control within the user entered begin and end date range within a work center. The maintenance actions are totaled by priority, transaction codes, and action taken codes ([Figure 14-8](#)).

b. Daily Production Report - Part 2. This report should be run and distributed on a daily basis. The Daily Production Report Part 2 provides a count of all maintenance actions accomplished from the begin date and time to the end date and time as selected by the user ([Figure 14-9](#)).

c. Production - Part 3. This report provides a snapshot of each work center's production with the number of components and status in the maintenance cycle (including OH, AWP, RFI, BCM, and backlog) within a specified begin and end date. A percentage of RFI or BCM rate is computed, showing workload production by work center. Report should be run on a daily basis by production Control.

d. Work Center Work Load Report. This report should be run and distributed on a daily basis. The work center workload report is the NALCOMIS visual information display (VIDS) board. The report is a valuable validation tool. The report lists all outstanding discrepancies not signed off by Production Control for each work center as of the selected end date and time of the report ([Figure 14-10](#)).

e. Equipment Discrepancy Report. This report should be run and distributed on a daily basis. The sort option for this report is normally by work center, type equipment code (TEC), and series (SER). The report lists the serial number and the TEC of all pieces of SE, engines, or both that currently have outstanding MAF or WOs ([Figure 14-11](#)).

f. SQD EXREP Status Report. This report is used for monitoring and expediting squadron EXREP requirements ([Figure 14-12](#)).

g. SQD EXREP Status Summary By Organization Report. This report is used for monitoring and expediting squadron EXREP requirements ([Figure 14-13](#)).

h. Due in from maintenance (DIFM) Status Report. This report is used to validate components in the repair cycle, monitor job status, explore cannibalization and transpose possibilities, monitor supply status for AWP requirements, and monitor repair and return assets, both incoming and outgoing (Figure 14-14).

14.2.2 Aviation Maintenance Information Summary Reports and Data Extract Products

Aviation summary and data extract products provide a standardized, readily available source of information that users can refer to when gathering statistical naval aviation information. The products show aggregated and detailed databased on user input parameters, and are prepared from active and completed documents. All reports are prepared from MAFs or WOs and Naval Aircraft Flight Record (OPNAV 3710/4), and flight documents submitted by organizational units. SCIR related reports show the mission capability for an organization's assigned equipment.

NOTE: Local reports from Foundation Tier may not include detachment data or inventory corrections incorporated in up-line reporting.

14.2.2.1 Consolidated Performance Metrics (MAINT-1 Report)

a. The MAINT-1 report (Figure 14-15) provides aviation supervisory personnel with a single source of information from which organizational and equipment capabilities and resource expenditures can be measured. All TRCODEs are candidates for generating this report except TRCODEs 30, 31, 32, or 39 and all TM codes that are equal to F, but are not equal to TRCODE 72. Data to create this report is extracted from MAFs or WOs and Naval Aircraft Flight Record (OPNAV 3710/4) and flight documents submitted during the reporting period.

b. The MAINT-1 report may be used to determine:

- (1) Aircraft assigned and available to an organization and its mission.
- (2) Readiness for each T/M/S maintained by an organization, as well as an overall unit assessment.
- (3) Impact of maintenance and supply on equipment mission capability.
- (4) Resources expended in maintaining a particular level of readiness or use of assets.
- (5) The extent of manpower expenditure beyond direct support of aircraft.
- (6) A general indication of where mission aborts occur.
- (7) The effort necessary to prevent and treat corrosion.
- (8) The responsiveness of the aviation supply system.
- (9) Shipboard flight operations.

c. The MAINT-1 report is produced for each Assembly Cd when more than one type/model/series, (T/M/S) is assigned to an organization to provide separation among type aircraft maintained during the reporting period.

d. An overall organizational report is produced to reveal aggregated squadron metrics.

e. Field calculations are accomplished as follows:

(1) TOTAL EIS: Sum total EIS hours for each aircraft maintained during the reporting period. For the purpose of this calculation the count begins on the date and time an aircraft is gained and the count ends at 2400 on the last day of each report or on the date and time an aircraft is transferred or lost.

(2) AVG Aircraft: Depicts the average number of aircraft available to a unit, based on total accumulated EIS hours during the reporting period.

$$\text{AVG Aircraft} = \frac{\text{TOTAL EIS HRS}}{\# \text{ DAYS IN MONTH} \times 24}$$

NOTE: The following readiness percentages are computed using accumulated hours during the desired reporting period.

(3) MC%: Reflects the percentage of all aircraft assigned to a unit, based on total accumulated EIS hours during the selected reporting period which are capable of performing at least one, but not all missions. Computation of this data element is as follows:

$$\text{MC\%} = \frac{\text{TOTAL EIS HRS} - (\text{NMCS} + \text{NMCM}) \text{ HRS}}{\text{TOTAL EIS HRS}} \times 100$$

(4) FMC%: Reflects the percentage of all aircraft assigned to a unit which were capable of performing all missions during the selected reporting period. Computation of this data element is as follows:

$$\text{FMC\%} = \frac{\text{TOTAL EIS HRS} - (\text{NMCS} + \text{NMCM} + \text{PMC}) \text{ HRS}}{\text{TOTAL EIS HRS}} \times 100$$

(5) NMCM%, NMCS%, PMCM%, PMCS%: Reflects aircraft system degradation, as a percentage of time impacted in any of the listed categories, during the selected reporting period. By using substitution for the selected category, computation of this data element is as follows:

$$\text{SELECTED CATEGORY\%} = \frac{\text{TOTAL (SELECTED CATEGORY) HRS}}{\text{TOTAL EIS HRS}} \times 100$$

(6) FLTHRS: Displays total number of flight hours accumulated from Naval Aircraft Flight Record (OPNAV 3710/4) and flight documents submitted during the selected reporting period.

(7) FLTS: Displays total number of flight accumulated from Naval Aircraft Flight Record (OPNAV 3710/4) and flight documents submitted during the selected reporting period.

(8) AVG UTIL: Reports the average number of flight hours expended, per aircraft, during the selected reporting period. Computation of this data element is as follows:

$$\text{AVG UTIL} = \frac{\text{TOTAL FLTHRS}}{\text{AVG Aircraft}}$$

(9) AVG FLT DURATION: Computed by dividing total flight hours by total flights.

(10) TOTAL CANN Items/P and TOTAL CANN MHRS: Displays the accumulated cannibalization items processed and man-hours during the selected reporting period. Selection criteria for this data element is based on maintenance level one MAFs or WOs containing the following:

- (a) Assembly Cd beginning with A.
- (b) TRANS Code 18 or 19.

- (c) AT Code T.
- (d) MAL Codes 812 through 820.
- (e) TM Code B.

(11) CANNNS/100 FLTHRS: Measures the number of cannibalization actions necessary to support 100 flight hours. This use of 100 flight hours, as a standard divisor, is to normalize comparisons and maintain statistical consistency. Computation of this data element is as follows:

$$\text{CANNNS} / 100 \text{ FLTHRS} = \frac{\text{TOTAL CANN ITEMS}}{(\text{TOTAL FLTHRS} / 100)}$$

(12) A-799 Items/P and A-799 MHRS: Displays accumulated no-defect items processed and man-hours during the selected reporting period. Selection criteria for this data element is based on maintenance level one MAFs or WOs containing the following:

- (a) Assembly Cd beginning with A.
- (b) AT Code A.
- (d) MAL Code 799.

(13) TOTAL W/D 'Y'. Displays accumulated number of parts, components, or assemblies received or withdrawn from supply and found to be discrepant upon installation.

(14) TOTAL Aircraft DMMH: Reflects accumulated man-hours directly attributed to maintenance of aircraft during the selected reporting period. In particular, those maintenance level one MAFs or WOs with an Assembly Cd beginning with A.

(15) Aircraft DMMH/FLTHR: Computed by dividing Total Aircraft DMMH by Total FLTHRS.

(16) TOT MAINT MHRS: Total man-hours attributed to the maintenance of the aircraft.

(17) CORR Prevention HRS: Reflects the accumulated man-hours expended in the prevention of aircraft corrosion during the selected reporting period. Selection for this data element is based on maintenance level one MAFs or WOs containing the following:

- (a) Assembly Cd beginning with A.
- (b) WUC equals 04.
- (c) AT Code 0.
- (d) MAL Code 000.

(18) Corrosion (CORR) Treatment HRS: Reflects the accumulated man-hours expended in the treatment of aircraft corrosion during the selected reporting period. Selection for this data element is based on maintenance level one MAFs or WOs containing the following:

- (a) Assembly Cd beginning with A.
- (b) WUC not beginning with 04.

(c) AT Code Z.

(d) MAL Code 170.

(19) FLTHRS-SHIP: Displays total number of shipboard flight hours accumulated from Naval Aircraft Flight Record (OPNAV 3710/4) or flight documents submitted during the selected reporting period. Selection for this data element is based on Naval Aircraft Flight Record (OPNAV 3710/4) or flight documents with operations Code of A, B, or C.

(20) FLTS - SHIP: Displays total number of shipboard flights accumulated from Naval Aircraft Flight Record (OPNAV 3710/4) and flight documents submitted during the selected reporting period. Selection for this data element is based on Naval Aircraft Flight Record (OPNAV 3710/4) and flight documents with an operations Code of A, B, or C.

(21) BEFORE FLT ABORTS Items/P: Reflects the number of flights that were aborted before flight during the selected reporting period. Selections for this data element is based on maintenance level one MAFs or WOs having WD Code A.

(22) IN-FLT ABORTS Items/P: Reflects the number of flights that were aborted in-flight during the selected reporting period. Selections for this data element is based on maintenance level one MAFs or WOs having WD Code C.

14.2.2.2 Aircraft Readiness Degradation and Utilization Summary (MAINT-2 Report)

a. The MAINT-2 report ([figure 14-16](#)) shows, by aircraft BUNO, the total number of discrepancy hours limiting the equipment from performing its mission or function during the reporting period. This report also denotes equipment utilization. All TRCODEs are candidates for generating this report except TRCODEs 30, 31, 32, or 39, and all TM codes that are equal to F but are not equal to TRCODE 72. The report is used to determine the impact of maintenance and supply on the mission capability of the equipment. EIS hours, flight hours, and number of flights are also portrayed. Total SCIR hours are the accumulation of all SCIR related gripe life hours extracted from the MAFs or WOs by aircraft BUNO.

b. The MAINT 2 is sorted as follows:

(1) ORG code.

(2) Assembly Cd.

(3) Aircraft BUNO.

c. All lines are a summation of aircraft BUNO within Assembly Cd and ORG.

d. An Assembly Cd TOTAL is entered upon a change in Assembly Cd.

e. An ORG TOTAL is entered upon a change in ORG code.

14.2.2.3 SCIR by WUC/UNS (MAINT-3 Report)

a. The MAINT-3 report ([Figure 14-17](#)) displays SCIR hours by mission category and AWM hours by reason codes, summarized for a given EOC code and associated WUC during a reporting period. The MAINT-3 is prepared from MAFs or WOs that have an EOC code. All TRCODEs are considered candidates for generating this report except TRCODEs 00, 02, 03, 30, 31, 32, or 39 and all TM codes that are equal to F but are not equal to TRCODE 72.

b. The MAINT-3 is sorted as follows:

- (1) ORG code (major sort).
- (2) Assembly Cd.
- (3) EOC code.
- (4) WUC or UNS.

c. All lines represent summations of maintenance actions by WUC to a specific EOC code within an Assembly Cd and ORG code. It will show total SCIR hours and distribution of those hours by the degradation PMCM, PMCS, NMCMS, NMCMU, NMCS, and total AWM hours. A decimal is assumed on all entries on detail lines.

d. A CAT TOTAL line is printed upon change of EOC code mission capability category (PMC and NMC). Total SCIR hours and AWM hours (as applicable) are depicted as 100.0 percent for mission capability category (PMCM, PMCS, NMCMS, NMCMU, NMCS, and Assembly Cd). Total SCIR hours, PMC, and NMC hours are a summation of the SCIR category totals. Total AWM hours and individual reason code totals are a summation of the SCIR category totals. Percentages are based on total SCIR hours and AWM hours for the individual Assembly Codes. A decimal is assumed on all entries except percentages.

e. An ORG TOTAL is printed upon change of ORG code. Total SCIR, PMC, and NMC hours are a summation of the Assembly Cd TOTAL. Total AWM hours and individual reason code totals are a summation of (Assembly Cd TOTAL) totals. Percentages are based on total SCIR hours and AWM hours for Assembly Cd within the ORG. A decimal is assumed on all entries except percentages.

14.2.2.4 Detailed Mission and Maintenance Data by Aircraft (MAINT-4 Report)

a. The MAINT-4 report ([Figure 14-18](#)) shows mission capability and maintenance data for each MAF or WO submitted for a given EOC code and associated WUC by aircraft BUNO within Assembly Cd and ORG code. All TRCODEs are considered candidates for generating this report except TRCODEs 00, 02, 03, 30, 31, 32, or 39 and all TM codes that are equal to F but are not equal to TRCODE 72.

b. The MAINT-4 is sorted as follows:

- (1) ORG code (major sort).
- (2) Assembly Cd.
- (3) Aircraft BUNO.
- (4) EOC code.
- (5) WUC or UNS.
- (6) MCN.

c. All lines show total SCIR hours and distribution of hours by type degradation (PMCM, PMCS, NMCMS, NMCMU, NMCS) and JCN, WC, TR, WD, TM, AT, MAL, IP, MHRS, EMT, and MCN documented on the MAFs or WOs. A decimal is assumed on mission capability data entries.

d. A CAT TOTAL is printed upon change of EOC code mission capability category (PMC and, NMC). Total SCIR hours are depicted as 100.0 percent for mission capability category (PMCM, PMCS, NMCMS, NMCMU, NMCS, and aircraft BUNO). Total aircraft BUNO TOTAL SCIR hours are a summation of the CAT TOTAL for PMC, and NMC. Percentages are based on total SCIR hours for that aircraft BUNO. A decimal is assumed on mission capability data entries except percentages.

e. An Assembly Cd TOTAL is printed upon change of Assembly Cd A decimal is assumed on mission capability data entries except percentages.

f. An ORG TOTAL is printed upon change of ORG code. A decimal is assumed on mission capability data entries except percentages.

14.2.2.5 Maintenance Man-hour (MAINT-5 Report)

a. The MAINT-5 Report (Figure 14-19) provides data on DMMH or FLTHR for aircraft assigned to a unit during the selected reporting period. All TRCODEs are candidates for generating this report except TRCODEs 30, 31, 32, or 39, and all TM codes that are equal to F, but are not equal to TRCODE 72. Data to create this report is extracted from MAFs or WOs submitted during the reporting period.

b. The DMMH or FLTHR figure is generally employed as an index of cost, in terms of maintenance, of supporting an hour of aircraft flight (the lower the index, the lower the cost). Following the same line of reasoning, the lower the cost, the more flight hours that can be bought with a given amount of maintenance. It is essential that a lower index not be attained at the expense of omitting required maintenance.

c. The MAINT-5 report may be used to determine:

(1) Which aircraft required a large amount of direct maintenance man-hours, and what type of maintenance was performed.

(2) The maintenance man-hours spent per aircraft as opposed to the number of hours flown.

(3) The ratio of look phase man-hours to fix phase man-hours per type of inspection.

(4) The ratio of unscheduled to scheduled man-hours.

(5) In conjunction with past data, it can be determined which aircraft are continually high man-hour consumers.

d. Typical factors that may cause fluctuations in the maintenance man-hour per flying hour figure are:

(1) A reduction of programmed flying hours will not always be accompanied by an immediate and corresponding drop in maintenance (a high index may result).

(2) Shortening the sortie length can materially reduce the total hours flown while maintenance remains stable (a high index may result).

(3) Unforeseen maintenance, such as airframe or engine modification, can ground the aircraft and at the same time cause increased maintenance (a high index may result).

(4) Decreased maintenance may occur as the result of reduced inspection requirements, improvements in work methods or facilities, etc., while flying hours remain stable (a lower index may result).

(5) An increase in total flying hours will not always necessitate additional maintenance (a lower index may result).

e. All lines are sorted as follows:

(1) ORG code (major sort).

(2) Assembly Cd.

(3) Aircraft BUNO.

f. A MAINT-5 report is produced for each Assembly Cd when more than one T/M/S is assigned to an organization to provide separation among type aircraft maintained during the reporting period.

g. An overall organizational report is produced to reveal aggregated squadron metrics.

h. Field calculations are accomplished as follows:

(1) UNSCH MAINT: Unscheduled aircraft maintenance man-hours reported on level one MAFs or WOs where the Assembly Cd begins with A and TM is equal to B.

(2) PHASE or PDM LOOK: Reflects total man-hours expended in performing look portion of phase or PDM, or IMC/P inspections. Level one MAFs or WOs with a TM Code of G and a WUC beginning with 03 will be selected.

(3) PHASE/PDM FIX: Depicts total man-hours expended in repairing discrepancies that were discovered during look portion of phase, PDM, or IMC/P inspections. Level one MAFs or WOs with a WD Code of M, TM Code of G, and a WUC not beginning with 03 will be selected.

(4) ACPT/XFER INSP: Denotes all man-hours consumed in performing acceptance or transfer inspections. This field contains look and fix man-hours from level one MAFs or WOs, where TM Code equals E.

(5) COND INSP: Displays all man-hours consumed in performing conditional inspections. This field contains combined look and fix man-hours from level one MAFs or WOs, where TM Code equals S.

(6) SPECIAL INSP LOOK: Indicates, by aircraft BUNO, total man-hours expended in performing look portion of special inspections. Level one MAFs or WOs with a W/D Code of 0, TM Code containing D, K, M, or N, and a WUC beginning with 03, 04, or 05 will be selected.

(7) SPECIAL INSP FIX: Shows, by aircraft BUNO, total man-hours expended in repairing discrepancies that were discovered during look portion of special inspections. Level one MAFs or WOs with a TM Code containing D, K, M, or N and a WUC not beginning with 03 or 04 will be selected.

(8) TDC: Indicates, by aircraft BUNO, the total man-hours documented on level one MAFs or WOs where TRCODE is 41 or 47.

(9) TOT MHRS: This field reflects, by aircraft BUNO, the sum of all man-hours from previous fields on this report.

(10) Aircraft FLTHRS: This field depicts the total flight hours by, aircraft BUNO, from Naval Aircraft Flight Record (OPNAV 3710/4)/flight documents submitted during the selected reporting period.

(11) DMMH/FLTHR: Computed by dividing TOTAL MHRS by Aircraft FLTHRS.

$$\text{DMMH / FLTHR} = \frac{\text{TOTAL MHRS}}{\text{Aircraft FLTHRS}}$$

14.2.2.6 Detailed Data Extract (MAINT-6 Report)

a. The MAINT-6 report (Figure 14-20) provides key detailed data from MAFs or WOs completed by a unit during the selected reporting period. Aviation managers or supervisors can use this data product to analyze equipment capability, reliability, and maintainability. All maintenance level one documents for all Assembly Codes assigned to an organization are candidates for generating this extract.

b. This data product is provided in electronic format. It is intended to make available to users the capability to perform queries based on specific criteria established by supervisory and management personnel. Through the use of available third-party software, data analysts will have the tools necessary to provide statistical analysis or data mining services for internal and external inquiries.

c. All lines are sorted as follows:

- (1) ORG code (major sort).
- (2) Assembly Cd.
- (3) Aircraft BUNO.
- (4) Work Center.
- (5) WUC/UNS.

d. The MAINT-6 report may be used to:

(1) Identify troublesome systems or subsystems that require disproportionate maintenance actions or man-hours. (Example: Total man-hours by WUC, Assembly Cd, aircraft BUNO, MAL code, etc.)

(2) Determine recurring problems against various systems or subsystems as indicated by a large number of repeat discrepancies. Selection of repeat failure items can be used to establish the cause of the failures, for example, structural design or improper maintenance.

(3) Compare man-hours used in the upkeep of each specific type of equipment to determine the cost in man-hours of maintaining a particular type equipment, system, or subsystem, or of isolating components that might be causing the entire system to consume high man-hours.

(4) Rank maintenance actions by any category. (Example: High man-hour consumers or high failure items, by WUC, Assembly Cd, aircraft BUNO, etc.)

(5) Measure the maintenance effort attributable to FOD.

(6) Measure the maintenance effort attributable to the prevention and treatment of corrosion, and determine whether any specific section of an aircraft needs additional attention.

(7) Track removal and replacement of items and the P/Ns of repairable parts and assemblies.

(8) Determine the amount of time and effort expended on maintenance where there is no malfunction or alleged malfunction. Some examples are cannibalization actions, matched set removals, FOM actions, or items removed/installed due to forced removal or scheduled maintenance.

(9) Indicate lack of training or test equipment by number of no defects or CANN actions.

(10) Identify TD actions for a particular WUC, Assembly Cd, aircraft BUNO, etc.

(11) Determine the number of abort malfunctions caused by mechanical failures, what caused them, whether these malfunctions were discovered before flight or while in flight, and whether they could have been eliminated by better inspections.

(12) Identify the number of items processed or man-hours expended, as a result of discrepancies discovered during acceptance checks on recently assigned aircraft, and whether it appears that there was an abnormal amount of work required.

(13) Identify the number of malfunctions discovered during functional check flights (FCF). (A large number may indicate improper maintenance procedures or poorly trained personnel.)

14.2.3 DECKPLATE Flight, Maintenance, Supply and Miscellaneous Ad Hoc Reports

DECKPLATE is a data warehouse and reporting system that is incrementally replacing NALDA systems. DECKPLATE sources flight, maintenance and engine management data to provide standardized reporting, On-Line Analytical Processing Cubes, and Ad Hoc query access. Standardized reports include Flight, Maintenance and Engine Management reports. DECKPLATE Ad Hoc and On-Line Analytical Processing Cubes functionality allows users to create, store and share reports with other users.

NOTES: 1. For activities operating NALCOMIS OOMA or OIMA “Viking” versions - MDR, SCIR, NAVFLIRS and MR reports are no longer produced. These activities can use ad hoc capabilities on their local system or the standardized reports available in DECKPLATE.

2. The reports listed in paragraphs 14.2.3.1 through 14.2.3.32 can be substituted for MDR, SCIR, NAVFLIRS and MR Reports.

3. MAINT-1 through MAINT-6 Reports are also available in DECKPLATE, however they may not match Foundation Tier reports due to detachment data or inventory corrections incorporated in up-line reporting.

14.2.3.1 Command Production Report (DP-0004)

The DP-0004 report displays all completed Maintenance data for a selected period.

14.2.3.2 Items Processed by Bureau/Serial Number (DP-0009)

The DP-0009 report displays, by aircraft BUNO, the total number of items processed, and the corresponding MAL Code limiting the equipment from performing its assigned mission or function during the reporting period.

14.2.3.3 Man-Hours by TEC, Work Unit Code, and Transaction Code (DP-0010)

The DP-0010 report displays the Man-Hours in relationship to the ORG Code, TEC, WUC, and Transaction Code.

14.2.3.4 Man-Hours by TEC, Work Unit Code, and Transaction Code (DP-0011)

The DP-0011 report displays the Maintenance Level 1 Man-Hours by WUC, then by ORG Code from the JCN.

14.2.3.5 Maintenance Level 1 Repairs (DP-0012)

The DP-0012 report displays a Maintenance Level 1 summarization of maintenance actions, associated with a WUC, which required repairs to be done on an aircraft.

14.2.3.6 Flight Hours by Operation Code (DP-0014)

The DP-0014 report displays the total number of flight hours by Operation Code, grouped by Owner ORG Code, depart date, and TEC

14.2.3.7 Detailed Failed Parts H – Z (DP-0016)

The DP-0016 report displays the total failures by WUC and P/N from the failed material section (blocks H through Z) of the MAF or WO. Further details are provided by MAL Description and AT codes.

14.2.3.8 Detailed Flight and Inventory (DP-0017)

The DP-0017 report provides totals of aircraft inventory, aircraft utilization activity levels, aircraft flight hours, and readiness information. All report data comes from RT79 data with the exception of Landings, Arrested Landings, and Catapult/JATO counts, which come from individual flight records.

14.2.3.9 Org Maintenance Actions/Verified Failures (DP-0020)

The DP-0020 report isolates and identifies equipment problems defined in terms of verified failures, total man-hours, total elapsed Maintenance time, NMC hours, (PMC hours, and aborts at the O-level.

14.2.3.10 NMC/PMC by Part Number or WUC (DP0021/26)

The DP-0021/26 report isolates and identifies equipment problems defined in terms of total NMC hours, NMCM hours, Component NMCS hours, total Component PMC hours, Component PMCM hours and Component PMCS hours by P/N or WUC.

14.2.3.11 Org Removals/IMA Actions (DP-0022)

The DP-0022 report displays the removed P/N from the O-level, and the AT and MAL Code done at the I-level. Detailed qualitative definitions are provided by MAL Description and AT codes from the I-level. The report provides a close look at component repair actions taken on removed items and facilitates examination of component failure history.

14.2.3.12 IMA Component Action Summary (DP-0023)

The DP-0023 report gives a snapshot by Action Org and head of family (HOF) national item identification number (NIIN) of all IMA ATs. The report provides a comparison of all organizations for a particular TEC/HOF NIIN.

14.2.3.13 Top Degraded by TEC (DP-0024)

The DP-0024 report is a ranked and weighted report based on Total Degradation. The report assigns a weighted value to aviation depot level reparable (AVDLR) Cost, Component NMC Hours, and Total

Maintenance Man-Hours, and then adds up the weighted values to assign an overall total Degradation Value. The report is based on the user-selected HOF NIIN. Each line of the report will reflect information for a single CAGE/P/N.

14.2.3.14 Serial Number Tracking (DP-0025)

The DP-0025 report displays the Removed/Installed Serial Number for both O-level and I-level, and the P/N from the O-level and what AT and MAL Description Code was done at the I-level. The report provides a close look at component repair actions taken on removed items and facilitates examination of component failure history.

14.2.3.15 Degraded Snapshot by HOF NIIN (DP-0027)

The DP-0027 report and the DP-0028 report provide an all-encompassing look at a degrader by HOF NIIN. The DP-0027 provides summary data about the HOF NIIN and, combined with the DP-0028 report, provides a detailed snapshot of one item from the Top Degraded Report.

14.2.3.16 Degraded Snapshot by HOF NIIN , Org and IMA (DP-0028)

The DP-0028 report and the DP-0027 report provide an all-encompassing look at a degrader by HOF NIIN. The DP-0028 report allows the user to see specific ORG and IMA information rolled up to a HOF NIIN. Combined with the DP-0027 report, DP-0028 provides a detailed snapshot of one item from the Top Degraded Report.

14.2.3.17 Org Verified Failure/Non-Failure Analysis by TEC/WUC (DP-0029)

The DP-0029 report isolates each maintenance action and NMC action by selected TEC/WUC into a unique AT/MAL Description Code combination providing analysis by "verified failures" and "non-failures".

14.2.3.18 Aircraft Readiness/Tracker Indicator Rates (DP-0032)

The DP-0032 report provides monthly aircraft inventory and readiness levels in terms of flight hours, average number of aircraft in the reporting inventory, and percentages of EIS hours reported. Also displayed are utilization rate, organizational direct maintenance man-hours, and I-level RFI and BCM rates.

14.2.3.19 NMC/PMC Reliability by Part Number (DP-0033)

The DP-0033 report examines underlying Maintenance actions, man-hours, and EMT for NMC problem equipment and PMC problem equipment by P/N.

14.2.3.20 NMC/PMC Reliability by WUC (DP-0034)

The DP-0034 report examines underlying Maintenance actions, man-hours, and EMT for NMC problem equipment and PMC problem equipment by WUC.

14.2.3.21 Part Number NIIN WUC Cross Reference (DP-0035)

The DP-0035 report will identify the NIIN to P/N/Cage to WUC combinations that have reported for maintenance actions. Each line represents a single combination and the number of times it occurs within the filtered parameters.

14.2.3.22 Aircraft Readiness/Tracking Indicators Hours Report (DP-0036)

The DP-0036 report provides monthly aircraft inventory and readiness levels in terms of flight hours, average number of aircraft, and EIS hours report for: NMCM, NMCS, MC, PMC, PMCS, FMC. Also displayed are utilization rate, organizational Direct Maintenance Manhours, and I-level RFI and BCM.

14.2.3.23 Org Verified Failures/Non-Failures Analysis by Part (DP-0037)

The DP-0037 report isolates each OMA Maintenance action and NMC action by selected Part into a unique AT, MAL Code combination providing analysis by verified failures and non-failures.

14.2.3.24 Part Number NIIN Cross Reference (DP-0040)

The DP-0040 report serves as a cross-reference from a P/N to a NIIN for Removed Parts reported in Maintenance Tasks having TEC beginning with A, B, K, or N and displays the HOF NIIN, FGC, COG, and related cost information.

14.2.3.25 Type Mission Requirements Report (DP-0041)

The DP-0041 report provides number of flights, flight hours, number of ship flights, and ship flight hours, and the TMR codes and associated TMR flight hours by date, owner ORG code, TEC, and BUNO for the time frame of interest. Values for catapult shots, arrested landings, and ship operations are from the raw flight data. The DP-0041 report should not be used for time frames prior to 1985.

14.2.3.26 Technical Directives Report (DP-0042)

The DP-0042 report displays all completed TDs completed by a unit during the selected reporting period.

14.2.3.27 Detailed Consumables Report (DP-0043)

The DP-0043 report displays all H - Z consumable data during the selected reporting period.

14.2.3.28 Top Degraded by Type/Model (DP-0044)

The DP-0044 report is a ranked and weighted report based on Total Degradation. The report assigns weighted value to AVDLR Cost, Component NMC Hours, Total Maintenance Man-Hours and then adds up the weighted values to assign an overall total Degradation Value. The report is based on the user selected HOF NIIN. Each line of the report reflects information for a single CAGE/P/N.

14.2.3.29 AV3M AIMD Chronicle Repairable Item Disposition Summary (DP-7096-02)

The DP-7096-02 report displays 12 months of summary information on the IMAs repair action to highlight areas requiring additional investigation or corrective action and to provide a measurement of IMA production.

14.2.3.30 AV3M AIMD Chronicle Repairable Item Turn Around Time Summary (DP-7096-03)

The DP-7096-03 report displays 12 months of summary information on an IMAs TAT to highlight areas requiring additional investigation or corrective action and to provide a measurement of IMA production.

14.2.3.31 AV3M AIMD Chronicle Repairable Item Turn Around Time Recap (DP-7096-04)

The DP-7096-04 report displays 12 months of summary information on the IMAs productivity. Its purpose is to highlight areas requiring additional investigation or corrective action and to provide a measurement of IMA production.

14.2.3.32 AV3M AIMD Chronicle Productivity (DP-7096-05)

The DP-7096-05 report displays 12 months of summary information on the IMAs productivity. Its purpose is to highlight areas requiring additional investigation or corrective action and to provide a measurement of IMA production.

14.3 Maintenance Data System (MDS) Analysis

14.3.1 Analysis Techniques

14.3.1.1 Purpose. This section provides general guidance for basic analysis techniques that can be applied to SCIR reports, DECKPLATE, and utilization reports. Analysis techniques include the extraction, examination, and presentation of pertinent data. The resulting analysis products will assist management in attaining effective and economical use of personnel and material resources. The MDS is designed to accumulate factual data pertaining to all phases of maintenance. Those activities using NALCOMIS have additional database resources that may be used to support the analyst effort. These data are made available to management in the form of standard MDS reports at DECKPLATE. The function of analysis is to examine the data contained in these reports and determine what affect the conditions indicated may have on the maintenance effort. Analysis will show favorable and unfavorable conditions in the maintenance scheme. The MDS will be of little value if its data is not used to the fullest extent. Action taken to resolve any disparities revealed by these analyses is a responsibility of command. The NALCOMIS ad hoc query utility provides for analysis of active and historical MAF or WO data without mechanical extraction.

14.3.1.2 General Analysis Techniques. The various MDS reports consist of coded elements of data listed or summarized in logical arrangements. To be of practical use to management, selected data elements must be assembled, studied, and suitably presented. The performance of these functions is called analysis.

14.3.1.3 Initiation of Analysis. The requirements for analysis may stem from various sources and apply to a wide range of maintenance subjects. Analysis may be initiated to provide an answer to a specific problem or to study selected areas of maintenance, for example, personnel utilization and productivity of work centers. Requirement for analysis should be the result of a "need to know" situation imposed by management. An analysis based on clear, concise requirements is more likely to be meaningful and useful to the maintenance manager than one based on generalities.

14.3.1.4 Data Selection. Once the subject of the analysis has been identified, the analyst must determine what data will be needed to fulfill the requirement. No standard rules can be applied to this phase of analysis. The analyst must choose wisely, ensuring all facts that have a bearing on the subject are included in the analysis. The analyst must also know which report, or combination of reports, will best provide the needed data.

14.3.1.5 Data Extraction. The extraction of data is usually a mechanical process; certain columns or lines of the report are screened to identify and select the desired data. Selected data are transposed to some type of work sheet to facilitate subsequent steps of the analysis. Design of the work sheet should be simple, allow posting of the extracted data in methodical sequence, and provide space for computation of totals and subtotals as needed.

14.3.1.6 Translation of Data. The major portion of the extracted data consists of coded entries which must be translated into meaningful terms before being analyzed. The design of the work sheet should incorporate translation provisions, for example, columnar headings can contain both coded and descriptive terminology.

14.3.1.7 Examination of Data. This process involves the detailed study or examination of the accumulated data. There is no restriction as to who may do an analysis. In many instances it is desirable that an analysis be completed in its entirety by a person technically qualified in the subject being analyzed, although this is not always possible. Identical results may often be obtained through teamwork. For example, personnel assigned to analysis may accumulate the required data, call in a representative from a work center to examine the data, and jointly prepare a commentary pertinent to the analysis. Likewise, a work center could accomplish many phases of the analysis, calling on the analyst only for assistance in selecting and extracting the desired data. Regardless of who accomplished the examination, the intent of the detailed study of the accumulated data is the same, that is, (1) to determine if a problem actually exists, (2) to identify the factors contributing to the problem, (3) to list possible conclusions, and (4) to suggest possible alternative courses of action. Any decision or action based on the detailed study is the responsibility of maintenance managers. During the course of the examination, certain standards or other measuring criteria may be employed. Statistical formulas may also be used. The measuring criteria contained in this chapter are for illustration purposes only. It is not the intent of this section to establish standards for analysis.

14.3.2 Analysis Products

14.3.2.1 DECKPLATE Report Examples

This section provides examples that may be derived from data available in the MDS or DECKPLATE reports. These examples represent typical analysis applications. The accompanying text provides sample extraction procedures, examination methods, and other analysis techniques.

14.3.2.2 METCAL Data

METCAL data is no longer generated through MDS data collection. The METER Card (OPNAV 4790/58) is no longer used as an MDS source document. METCAL data for analysis applications is available using the MEASURE software. This software can be accessed through the TMDE Lab's MEASURE terminal. A detailed list of computer-generated reports is available in the MEASURE Software User's Manual. These reports are similar to MDS generated reports and can be used for analysis applications and aviation 3M Monthly Summary Report preparations.

14.3.2.3 Computation of Job Averages

a. The average number of man-hours required to accomplish a specific job (job average) is often used in conjunction with manning studies, workload scheduling, and similar managerial applications. Job averages may pertain to a simple remove and replace action or encompass the entire look phase of an inspection. Job averages may be limited to the man-hours contributed by a single work center or include the man-hours documented by all work centers. Local needs will dictate the actual extent of a particular job. A typical method of computing a job average when only one work center and one maintenance action are involved is provided in the following paragraphs.

b. Sources of Data: DP-0033/DP-0034.

(1) The WUC, AT code, and MAL code defining the job will be determined locally.

(2) Using the DP-0033/DP-0034, extract the items processed and man-hours shown on all lines listed for the specific job (Columns WUC, AT, MAL, IP, and MHRS). DP-0033 and DEP-0034 provides

actual man-hours, items processed and many other data points for analysis. Further data extraction should not be required.

(3) To compute job average, divide the total man-hours by the total items processed. The reliability of the computed average is influenced by the amount of data used in the computation. To ensure best results, statistics for an extended period should be used.

14.3.2.4 Identification of High Man-hour, Maintenance Action, and Failure Rate Items

a. Using data available in standardized DECKPLATE reports, it is possible to identify items or components that consume most man-hours, account for the highest number of maintenance actions (items processed), or have highest failure rate. Analysis of facts pertaining to these items may reveal existence of improper maintenance practices, material deficiencies, lack of technical proficiency, or similar conditions. Such conditions would be cause for training.

b. Sources of Data: DP-0033/DP-0034.

c. Extraction of Data.

(1) High Man-hour Consumers. Select the five systems that consumed the highest number of man-hours. To do this, compare each total for subsystem line on the DP-0033/DP-0034. The DP-0034 report sorts by WUC in rank order from highest man-hours to lowest man-hours.

(2) High Maintenance Action Items. Select the five systems with the highest number of items processed. From each of these systems, select the five WUCs with the highest number of IP.

(3) High Failure Rate Items. To identify the high failure rate items, it is first necessary to purify the data listed in the report. This is done by lining out nonfailure entries as indicated by the AT and MAL codes. After the data has been purified, a revised items processed total can be obtained for each system. Select the five high systems by comparing the revised system totals. From these five systems, select the five high WUCs (items) by comparing the revised items processed totals obtained for each WUC (Columns WUC, AT, MAL, and IP). The DP-0033 report sorts by part number in rank order from highest NMC and PMC impact to lowest NMC and PMC impact

d. Special Instructions:

(1) The actual number of systems and items to be extracted will be governed by the needs of management. The high-five selection outlined in this manual is only one of the many combinations that may be used.

(2) All duplicate entries for the same failure must be lined out.

(3) A list of nonfailure codes is as follows ([Appendix E](#) contains the complete code lists):

(a) AT Code A, D, J, L, N, P, Q, S, T, and Y.

(b) MAL Code 799, 800, 801, 804, 805, 806, 807, 811, 812, 813, 814, 815, 816, 817, and 818.

(4) Extracted data are normally provided to management in a tabular format. Items may be sequenced by magnitude of man-hours or items processed within their respective system. Descriptive terminology, part numbers or CAGE may be used in lieu of the WUC.

14.3.2.5 Component Reliability Trends

a. The reliability of components and parts of components can be determined by the use of DECKPLATE reports. Using the reports and analyzing the data contained within, it is possible to compare the number of failures documented for a specific component or its parts to a computed control limit and thus identify items having an excessive rate of failure. Corrective measures to lower the failure rate for these items should then be started by management.

b. Sources of Data. DP-0033/DP-0034.

c. Further purification of data contained in the DP-0033 or DP-0034 should not be required. Items Processed is used in the report and includes verified failure information by either P/N or WUC respectively.

14.3.2.6 Cannibalization Trend

a. Under ideal conditions there would be little need for cannibalization. However, cannibalization may be necessary to support mission requirements. Cannibalization Trending informs the MO of the extent of cannibalization, identifies the aircraft or equipment or parts involved, and provides detail on man-hours expended for cannibalization actions. The cannibalization man-hours per flight hour figure, when compared to the direct maintenance man-hour per flight hour figure, indicates the additional cost in man-hours attributed to cannibalization.

b. Sources of Data: MAINT-6/DP-0017/DP-0041

(1) Cannibalization Trend:

(a) To obtain the total items cannibalized, select the total items processed for AT Code T or select MAL Codes 812, 813, 814, 815, 816, 817 and 818 (MAINT-6).

(b) To obtain the total man-hours spent in cannibalization, select total man-hours listed for AT Code T (Columns AT and MHRS, on MAINT-6).

(c) To obtain cannibalization man-hours per flight hour divide total man-hours expended due to cannibalization by TOTAL FLIGHT HOUR (BUNO total hours on DP-0017/DP-0041).

c. Cannibalization Summary. To identify items cannibalized, extract WUC, TEC, BU/SERNO, items processed, man-hours, CAGE, and part number for all lines containing AT Code T (Columns WUC, TEC, BU/SERNO, AT, Items/P, MHRS, MFG, and part on the DP-0017/DP-0041).

d. Examination of Data.

(1) A review of trend chart will show overall status of cannibalization within activity.

(2) Data in the summary are used to identify specific items cannibalized, quantity of each type item involved, which type items are repeats, and equipment from which items were removed.

(3) Any increase in rate of cannibalization should be of immediate concern to management. Those items that are frequently cannibalized merit special investigation to determine the cause.

(4) Special Instructions.

(a) The cannibalization summary may be modified to include additional data.

(b) Include comments on significant problem areas discovered during analysis.

14.3.2.7 Abort Malfunctions

a. This chart is designed to show which aircraft failed to fulfill their scheduled mission (abort) because of malfunctioning equipment. It identifies, for management, aircraft systems/components causing aborts, number of items involved, and when abort malfunctions occurred (before or in flight).

b. Sources of Data: MAINT-6.

c. Extraction of Data.

(1) Select WD Codes A and C from the MAINT-6 query menu.

(2) Use only those lines containing the applicable TEC.

(3) Section I - When Malfunctions Occurred:

(a) Total abort malfunctions. Sum of items processed with WD Codes A and C.

(b) Before flight-abort. The sum of IP with WD Code A.

(c) In flight-abort. The sum of IP with WD Code C.

(4) Section II - Malfunction by System. To obtain these figures, determine number of IP with WD Codes A and C within each system. The system is identified by first two positions of the WUC.

(5) Section III - Maintenance Required.

(a) Required maintenance. The sum of IP with WD Codes A and C except those listed in conjunction with AT Code A.

(b) Required no maintenance. The sum of IP with WD Codes A and C listed in conjunction with AT Code A.

d. Examination of Data.

(1) This summary does not identify the number of aircraft aborts occurring during the reporting period. The figures represent only the reported number of items (or malfunctions) involved in aborts. In some cases, more than one item or malfunction will be attributed to the same abort. Weather and other factors may also cause aborts, hence, the apparent inconsistency.

(2) Possible trouble areas may be revealed by study of the data. For example, a high number of malfunctions discovered before flight may indicate inadequate turnaround inspections; numerous defects in a certain system may point out a need for engineering changes; and a substantial number of reported malfunctions that require no maintenance may be an indication of poor troubleshooting or improper equipment operation.

14.3.2.8 Maintenance Man-hours by Bureau Number

a. This information enables maintenance managers to determine which aircraft required a large amount of direct maintenance man-hours, and what type of maintenance was performed.

b. Source of Data: MAINT-5.

c. Extraction of Data. Further data extraction is not required when using the MAINT-5 report. This report computes DMMH per flight hour automatically by BUNO.

14.3.2.9 Maintenance Man-hour Per Flying Hour and Sortie Chart

a. In this paragraph are guidelines for computing the number of maintenance man-hours required to produce a single flying hour or sortie for a given type of aircraft. These man-hour figures, or factors, may be developed for individual work centers or an entire squadron maintenance department. The same method of computation will apply to each.

b. Sources of Data: MAINT-5 or MAINT-6

(1) Total hours flown. Total flight hours listed for the selected type aircraft from the FH column on the MAINT-5.

(2) Total sorties flown. Total flights listed for the selected type aircraft from the FLT column on the MAINT-5.

(3) Maintenance Man-Hours Expended.

(a) For a work center, the sum of production man-hours listed for the TEC identifying the selected type of aircraft. The MAINT-6 report can be run for a single work center (if required).

(b) For a squadron maintenance department, the total production man-hours listed for the TEC identifying the selected type of aircraft.

(4) Computation of maintenance man-hours per flying hour and sortie. To obtain the maintenance man-hours per flying hour and sortie, use the following formulas:

$$\frac{\text{Total Maintenance Man-hours}}{\text{Total Hours Flown}} = \text{Maintenance Man-hours Per Flying Hour}$$

$$\frac{\text{Total Maintenance Man-hours}}{\text{Total Sorties Flown}} = \text{Maintenance Man-hours Per Sortie}$$

c. Examination of Data.

(1) Maintenance man-hour per flying hour figure is generally employed as an index of cost, in terms of maintenance, of supporting an hour of aircraft flight (the lower the index, the lower the cost). Following the same line of reasoning, the lower the cost, the more flight hours that can be bought with a given amount of maintenance. It is, of course, essential that the lower index not be attained by omitting required maintenance.

(2) Typical factors that may cause fluctuations in the maintenance man-hour per flying hour figure are:

(a) A reduction of programmed flying hours will not always be accompanied by an immediate and corresponding drop in maintenance (a high index may result).

(b) Shortening the sortie length can materially reduce the total hours flown while maintenance remains stable (a high index may result).

(c) Unforeseen maintenance, such as airframe or engine modification, can ground the aircraft and at the same time cause increased maintenance (a high index may result).

(d) Decreased maintenance may occur as the result of reduced inspection requirements, improvements in work methods or facilities, etc., while flying hours remain stable (a lower index may result).

(e) An increase in total flying hours will not always necessitate additional maintenance (a lower index may result).

(3) The maintenance man-hours per sortie can be used essentially in the same manner as described for flying hours. Fluctuations in this man-hour figure can result from increases or decreases in sorties programmed, changes in sortie length, unforeseen maintenance, and similar factors.

14.3.2.10 Mission Capabilities

a. Mission capability is expressed in sorties, departures, or flying hours. The actual forecasting of capabilities is based on normal work periods and past operating conditions. In some instances the past data may include certain variables, such as, different sortie lengths and accelerated flying schedules. This, however, is a situation where it would be very difficult to go over all the past information and adjust it to the normal work period. The capabilities presented in this chapter are based on the assumption that (1) even though the past data include extras, they will not affect the problem enough to warrant an extensive study, or (2) the past data used for capability computations were collected under similar conditions to those for which the data is being projected.

b. Sources of Data: MAINT-5/DP-0017

c. Aircraft flying hours and sorties are obtained from the MAINT-5/DP-0017.

14.3.2.11 Awaiting Maintenance (AWM) Reason Code Summary

a. An AWM Reason Code Summary is designed to show the various AWM codes by reason. It provides the manager with an overall picture of where and how much time was consumed awaiting maintenance.

b. Source of Data: MAINT-3.

c. Extraction of Data. The MAINT-3 report provides EOC Code, WUC and all associated man-hours including a break-down of each AWM Code and associated man-hours.

d. Special Instructions. The MAINT-3 report displays total hours AWM by EOC and associated WUC, and total number of hours for each AWM Code is displayed.

14.3.2.12 Mission Capability Degradation Summary

a. The Mission Capability Degradation Summary reflects the degradation of mission capability by maintenance condition. This data will provide managers of equipment the reasons equipment was NMC, that is, NMCMS, NMCMU, or NMCS.

b. Sources of Data: MAINT-2 and MAINT-3.

(1) The MAINT-3 shows the maintenance conditions that impaired the mission capability of the equipment for that reporting period, based on the EIS hours.

(2) Total SCIR hours column denotes the total hours documented to a valid EOC by WUC. The SCIR system has the capability to include all discrepancies that impact the mission capability of equipment; therefore, the total SCIR hours column may be greater than the aircraft in service hours column which shows the total EIS hours. Enter appropriate comments, as required, to explain the data.

14.3.2.13 Mission Capability Trend

- a. The Mission Capability Trend may be used to portray equipment mission capabilities.
- b. Source of Data: MAINT-4.

14.3.2.14 Repair of Removed Components

a. This report provides a detailed look at component repair actions taken on removed items and facilitates examination of component failure history and a snapshot by Action Org and Head of Family NIIN of all IMA ATs. A comparison may also be made of all organizations for a particular TEC or Head of Family NIIN.

- b. Sources of Data: DP-0022 and DP-0023.

14.3.2.15 High-Five EOC Degradation by Mission Capability Category Chart

a. The High-Five EOC Degradation by Mission Capability Category Chart may be used to present the high-five EOC degradation by mission capability category (FMC, PMC, NMC).

- b. Source of Data. MAINT-3.

14.3.3 Maintenance Summaries

14.3.3.1 General. The most widely accepted method of publishing the results of maintenance analysis is through the use of monthly maintenance summaries. This paragraph establishes guidelines regarding the content, format, and distribution of those portions of maintenance summaries that are produced to satisfy local requirements.

14.3.3.2 Content and Format. Summary contents and formats should be based on what management wants to know. General guides have been established and are listed as follows.

a. The MO will prescribe the scope of information required to answer the question "What do I need to know?" These requirements will include, but are not limited to, analysis of the following areas:

- (1) Efficiency of the maintenance operation.
- (2) Direct support cost per flying hour, per sortie, or departure (as applicable).
- (3) High man-hour consumers.
- (4) High failure rate components. As soon as possible after the close of each monthly reporting period, the MO should require a briefing on the above subject areas and on mission capability.

b. Examples of the many additional areas that may, at the option of the preparing activity, be included in the summary are as follows:

- (1) Cannibalization of components.

- (2) Malfunctions causing aborts.
- (3) Shop repair capability.
- (4) TD compliance status.
- (5) Distribution of possessed aircraft hours.

c. Figures which are simply a repetition of machine reports should not be included unless there is a significant reason for doing so.

d. The use of complicated charts, graphs, and tables should be avoided.

e. Extensive use should be made of narrative briefs. Charts, graphs, and tables worthy of inclusion in a summary are worthy of comment by the analyst. Briefs should be arranged in such a manner that both the display and the briefs are visible to the reader at the same time.

f. The format selected for maintenance summaries should be tailored to the needs of the activity concerned.

g. A review of the summary, for content, should be done at least every 6 months.

14.4 DECKPLATE – NALDA – Aviation Data Warehouse (ADW)

14.4.1 DECKPLATE is designed to provide a single centralized and consolidated data warehouse for inventory, maintenance, and readiness data for Navy and Marine Corps aircraft. Comprehensive aircraft maintenance and flight information is collected and combined to provide visibility of aircraft engines and aeronautical components across the NAE.

14.4.2 The following interfaces with, and provides data to, DECKPLATE:

14.4.2.1 Aircraft inventory and readiness reporting system (AIRRS). A quarterly data extract from AIRRS histories and a daily extract of XRAY and flight summary (RT-79) data are uploaded for DECKPLATE.

14.4.2.2 Component tracking system for engines (CMIS). Data uploaded to obtain configuration management information by WUC structures (for non-OOMA activities).

14.4.2.3 DLA (federal logistics information system (FLIS) Data). Provides part number cross reference and cost data for consumables and SMICs for NAVAIR modification kits.

14.4.2.4 Naval Supply Weapons System Support (NAVSUP WSS). Uniform inventory control point (UICP) Tier II direct connect for part number cross reference and cost repairable assets are performed monthly. Also performed daily for UICP NAVAIR modification kit requisition sales orders, stock point transactions, and managed inventory.

14.4.2.5 OOMA Top-Tier. Data for maintenance, detailed flight data, and configuration management from OOMA and OIMA Viking is uploaded to DECKPLATE daily.

14.4.2.6 SALTS Processing. Legacy AV-3M data is uploaded for maintenance data from Non-OOMA activities daily and monthly via e-mail (saltmail@logistics.navair.navy.mil).

14.4.2.7 Engine Management. The user transactional piece of DECKPLATE. DECKPLATE automates inventory tracking and management of aircraft engines and engine modules. Also replicates data to the ADW twice daily.

14.4.3 Authoritative Data Sources input by fleet activities include:

14.4.3.1 AIRRS. AIRRS provides the aviation community with up-to-date and consistent aircraft inventory, readiness data, and flight or utilization data for each aircraft in the naval inventory. AIRRS provides the information and tools for OPNAV, COMNAVAIRSYSCOM, TYCOMs, and fleet activities to enhance aircraft inventory management. The AIRRS application takes advantage of automated system investments to eliminate costly message and manual reporting systems by providing on-line access to aircraft inventory, readiness, and flight or utilization data stored in the NALDA IDE.

14.4.3.2 Engine Management. DECKPLATE is the management information system used for engine management. Engine Management is the user transactional piece of DECKPLATE. DECKPLATE enables inventory tracking and management of aircraft engines and engine modules and provides accurate and timely data on EPSM status, location, and condition to all echelons of management within the Navy and Marine Corps. Data provided through DECKPLATE is the basis for supporting requirement computation and budget requests for spare engines and their components.

14.4.3.3 NTCSS OOMA and OIMA. OOMA interfaces with OIMA and this interface consists of the requisition requirements, requisition status, requisition queries, and turn-in WO data. Up-line submission to NALDA ADW is accomplished by data replication. [Figure 14-21](#) provides the flow concept from fleet users to DECKPLATE.

14.4.3.4 Kit Management. DECKPLATE is the management information system used for COMNAVAIR-SYSCOM program funded modification kit management. The TD/KIT Management Module is the user transactional piece of DECKPLATE. Kit Item Managers use the Kit Management section to manage kit issuance, receipt, and tracking.

14.4.3.5 TD Management. DECKPLATE is the management information system used for TDRS. The TD/KIT Management Module is the user transactional piece of DECKPLATE. Users access the TD Management section to add, change, and update TDs.

14.4.4 NALDA/DECKPLATE key products provide the communities of interest the data necessary to perform their duties as they pertain to:

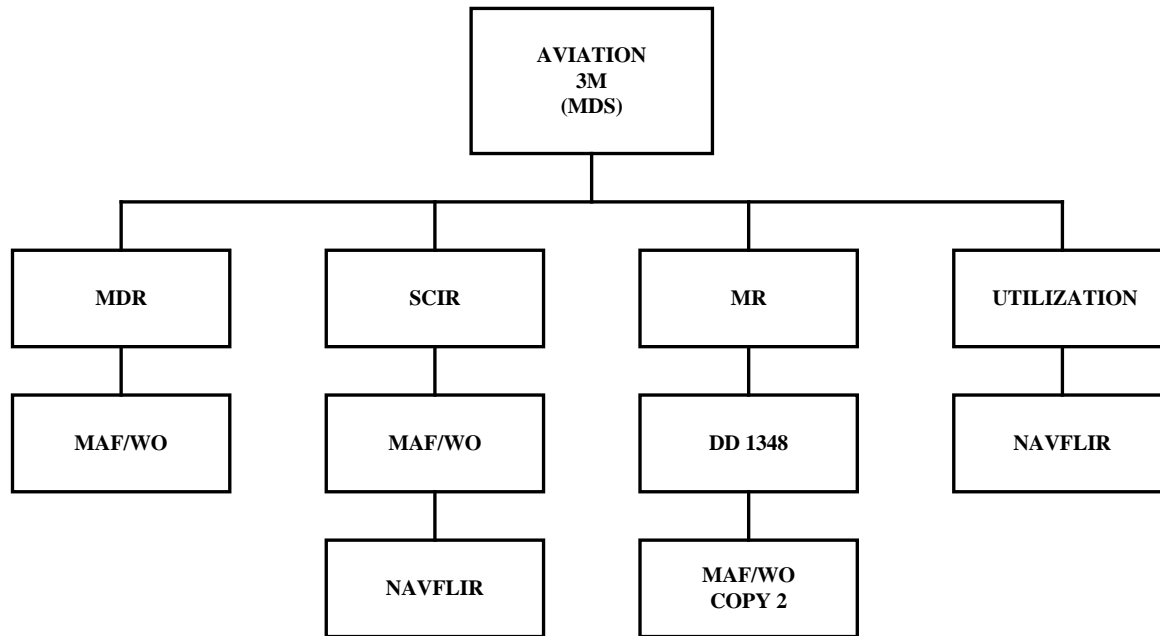
14.4.4.1 Key aviation logistics processes.

14.4.4.2 Aircraft maintenance.

14.4.4.3 Aircraft and Engine Status/Inventory.

14.4.4.4 Flight data.

14.4.5 Data provided allows the communities of interest the ability to create publications, engineering change proposals, design analysis, general analysis pertaining to naval aviation, and acquisition documentation.



SOURCE DOCUMENTS

MAF: Maintenance Action Form / WO: Work Order
NAVFLIR: Naval Aircraft Flight Record
DD 1348: DOD Single Line Item Request System Document

Figure 14-1: Elements of the Naval Aviation Maintenance Data System

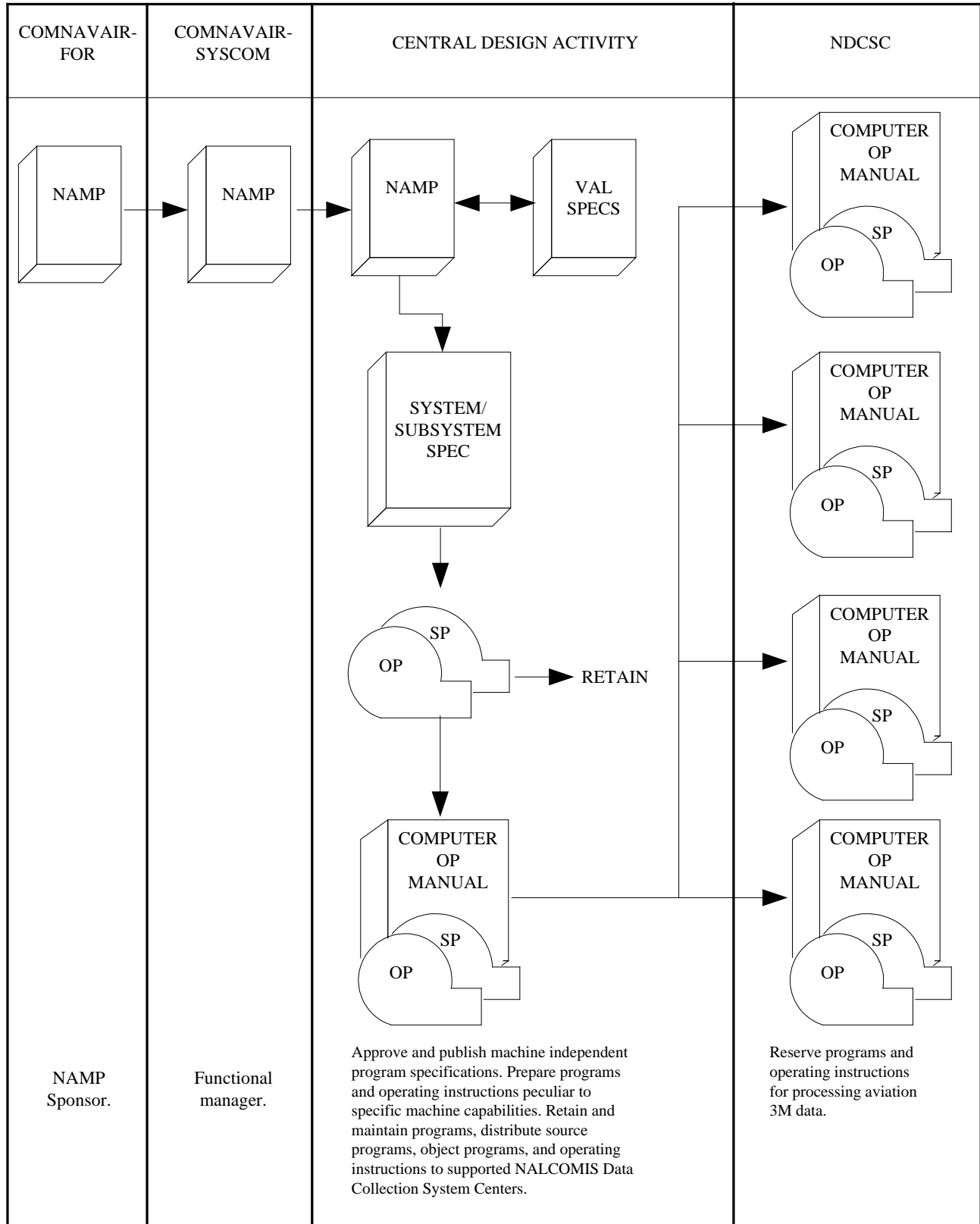


Figure 14-2: Program Responsibilities Flow Chart

5 JUN 04

MEMORANDUM

FROM: USS DWIGHT D. EISENHOWER (CVN-69)
FPO AE 09532-2830
TO: COMMANDER
ATTN AIR-6.8.4
NAVAIRSYSCOMHQ
47060 MCLEOD ROAD BLDG 447 STE 001B
PATUXENT RIVER MD 20670-1626
SUBJ: SUBMISSION OF AVIATION 3M DATA
REF: (a) COMNAVAIRFORINST 4790.2
ENCL: (1) 3M DATA
1. ENCLOSURE (1) IS FORWARDED TO YOUR ACTIVITY THIS DATE PER
REFERENCE (A). THE RECORDS REFLECT TRANSACTIONS WHICH
OCCURED DURING THE REPORTING PERIOD ENDING 30 MAY 04.
2. RECORD COUNTS ARE AS FOLLOWS:

TYPE	COUNT	
60-67	18273	MEDIA TYPE:
70	936	
A-Z	24978	TRACK SIZE:
7B-7G	2337	
7Z	212	DENSITY
CORR	46	
TOTAL	46782	

SIGNATURE

Figure 14-3: COMNAVAIRSYSCOM (AIR-6.8.4) MDS Data Transmittal Letter

CODE	NO. OF CHAR	ALPHA NUMERIC OR ALPHA/ NUMERIC	SOURCE DOCUMENTS USED ON	WHERE LISTED	RESPONSIBLE FOR ASSIGNMENT AND CONTROL
Action Taken Code	1	A/N	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
Technical Directive Code	2	N	MAF or WO	Appendix E	COMNAVAIRFOR (N422B)
Malfunction Description Code	3	A/N	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
Organization Code	3	A/N	All	Appendix E	COMNAVAIRFOR (N422B)
Permanent Unit Code	6	N	MAF or WO	OPNAV Notice	CNO
System Code	2	N	MAF or WO DD 1348	WUC Notice	COMNAVAIRSYS-COM (AIR-6.8.5)
TD Status Code	1	A	MAF or WO	Appendix E	COMNAVAIRFOR (N422B)
Type Equipment Code	4	A/N	All	Appendix E	COMNAVAIRFOR (N422B)
Type Maintenance Code	1	A/N	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
When Discovered Code	1	A	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
Work Center Code	3	A/N	MAF or WO	Appendix E	COMNAVAIRFOR (N422B)
Work Unit Code	1, 3, 5, or 7, 8 thru 32	A/N	MAF or WO DD 1348	Appendix E WUC Manual	COMNAVAIRSYS-COM (AIR-6.8.5)
Time/Cycle Prefix Code	1	A	MAF or WO	Appendix E	COMNAVAIRFOR (N422B)
AWM Reason Code	1	N	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
Transaction Code	2	N	MAF or WO	Appendix E WUC Manual	COMNAVAIRFOR (N422B)
Total Mission Requirement	3	A/N	Naval Aircraft Flight Record	OPNAVINST 3710.7	CNO
Inventory Code	1	A/N	MAF or WO	Appendix E	COMNAVAIRFOR (N422B)
Position Sensitive Indicator	2	A/N	MAF or WO	WUC Manual	COMNAVAIRSYS-COM (AIR-6.8.5)
EOC Code	3 (NOTE 1)	A/N	MAF or WO	MESM (NOTE 2)	CNO
Assembly Code (OOMA NALCOMIS application use only)	4	A/N	WO	OOMA Assembly Catalog	COMNAVAIRSYS-COM (AIR-6.8.5)

NOTES 1. The first character (alpha) is recorded on the MAF or WO. The second and third characters (numeric) are computer generated from the **WUC documented on the MAF or WO.**

2. T/M/S MESMs are **provided on CNAP Share portal.**

Figure 14-4: Consolidated Code List

1 JUN 04

MEMORANDUM

From: (Reporting Organization)
To: (NALCOMIS Data Collection System Center)
Subj: REQUEST FOR DATABASE TRANSFER

Ref: (a) COMNAVAIRFORINST 4790.2

1. Per reference (a), the following information is furnished to effect the transfer of aviation 3M data to another SSCA.

Organization code of activity being transferred: _____

Effective date of transfer: _____

SSCA data will be transferred to: _____

2. Point of contact: _____

Signature

Figure 14-6: Notification of Transfer (Sample)

14 JUN 04

MEMORANDUM

From: (Reporting Organization)
To: (NALCOMIS Data Collection System Center)

Subj: REQUEST FOR INDIVIDUAL'S TRANSFER

Ref: (a) COMNAVAIRFORINST 4790.2

1. Per reference (a), the following information is furnished to effect the individual's transfer from the current geographical area.

Name of individual being transferred: _____
SSN of individual being transferred: _____
Effective date of transfer: _____

Signature

FOR OFFICIAL USE ONLY (When filled in)

Figure 14-7: Notification of Individual's Transfer (Sample Format)

N2R24001		DAILY PRODUCTION REPORT - PART 1							PAGE 0032													
RUN DATE 01/21/97																						
DATE/TIME FROM		: 97020/1700																				
DATE/TIME TO		: 97021/1700																				
WC		: 904																				
MCN	JCN	TRANS CODE	AT	MAL	WORK PRI	WUC	EQUIP STATUS	SYSTEM REASON														
W9HPGC3	W9H014009	23	R	029	2	44FMK00	D	NC8A														
W9HPHQ7	W9H018CX0	11	0	000	3	030000Q	U	JG75/104WK														
W9HPHQ7	W9H019001	23	R	029	2	44FMK00	D	NC8AMOBEELECT														
TOTAL COMPLETED MAFS BY PRIORITY																						
					1.	0																
					2.	2																
					3.	1																
					4.	0																
TR CD 30 ACTIONS		A	F	L	0	TOTAL																
DAILY TOTAL		0	0	0	0	WR																
TOTAL SINCE 97001		0	0	0	0	0																
TR CD 31/32 ACTS		A	B	C	J	K	Z	O	TOTAL													
DAILY TOTAL		0	0	0	0	0	0	0	RFI	1	2	3	4	5	6	7	8	9	TOTAL	D	OTHER	
TOTAL SINCE 97001		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
DAILY RPR%: 0.00%				AVG AIMD TAT: 0				RPR% SINCE 97001: 0.00%				AVG AIMD TAT SINCE 97001: 0										

Figure 14-8: Daily Production Report - Part 1

N2R24002		DAILY PRODUCTION REPORT - PART 2										PAGE 0002			
RUN DATE 01/24/97															
		DATE/TIME FROM : 97023/1700													
		DATE/TIME TO : 97024/1700													
		WC : W9H													
W/C	ON HAND	TOTAL INIT	OFF AWP	ON AWP	RFI	RPT PD RFI	BCM	RPT PD BCM	OTHER COMP	DIFM	TOTAL OUTSTANDING	AWAITING MAINT	AWAITING PARTS	BACKLOG	
670	42	1	4	2	1	100.0%	0	0.0%	1	0	41	4	26	11	
69A	2	2	0	0	0	0.0%	1	100.0%	1	2	2	0	0	2	
69B	13	10	0	0	0	0.0%	0	0.0%	10	0	13	5	2	6	
710	36	4	3	2	1	100.0%	0	0.0%	1	0	38	0	10	28	
81A	21	2	1	0	1	100.0%	0	0.0%	9	0	13	2	5	6	
81B	44	38	1	0	0	0.0%	0	0.0%	16	3	66	16	1	49	
81C	13	8	0	0	0	0.0%	1	100.0%	9	1	11	5	5	1	
904	35	7	2	0	0	0.0%	0	0.0%	9	0	33	0	9	24	
905	39	14	2	0	0	0.0%	0	0.0%	3	0	50	10	15	25	
910	43	6	0	2	0	0.0%	0	0.0%	4	0	45	2	17	26	
920	232	42	6	0	0	0.0%	0	0.0%	27	0	247	56	32	159	
930	84	4	2	4	1	100.0%	0	0.0%	3	1	84	5	32	47	
X59	52	0	2	0	0	0.0%	0	0.0%	3	0	49	3	10	36	
REPORT PERIOD SUB-TOTALS															
	1198	267	51	51	27	61.4%	17	38.6%	166	201	1255	207	424	624	
ACCUM TOTAL SINCE 97001															
		2802			394	59.1%	273	40.9%	2108				424	624	

Figure 14-9: Daily Production Report - Part 2

N2R23800 RUN DATE 01/21/97		EQUIPMENT DISCREPANCY REPORT										PAGE 0001			
		ORG CODE		:										W9H	
		SELECTION		:										SUPPORT EQUIPMENT & ENGINES	
		SORT OPTIONS		:										W/C TEC SERIAL NO.	
TEC	SERIAL NUMBER	MCN	WUC	WORK PRI	WC	E S	SYSTEM REASON	RCVD DATE	JS	JS DATE	JS TIME	DDSN	DDSN STAT/ FSCM	NOMENCALTURE/ PART NUMBER	BC QTY/ ESD
GGPA	000014	W9HLDZ6	34BB800	3	411	U	STAND HANDLE	96253	WP	96253	0930	6253FE51	266CANCL	HANDLE SUB ASSY A	2
													63005	6796987-203	00000
THNB	1TH2931	W9HNHC2	223DU00	1	411	U	-14 A14141	97019	WP	97019	1500	7007FE54	010PARTR	BOLT-MACHIN	40
													73342	6784006	00000

Figure 14-11: Equipment Discrepancy Report

N6R72600		SQD EXREP STATUS REPORT										PAGE 0008			
RUN DATE 01/25/97															
RUN TIME 11:16:22															
		PROJECT CODES SELECTED : ALL PROJECT CODES													
		PURPOSE CODES SELECTED : ALL PURPOSE CODES													
		SORT SEQUENCE SELECTED : WC FGC WUC													
SQD	FGC	EXREP	JCN	COG-MCC-FSC-NIIN-SMIC	PJC	WUC	I	O	OWE	P	P	JS	AWP	AWP	STATUS
DDSN	WC	IND	NOMENCLATURE	PART NO	ADV	MCN	U	ORG	P	L	JSDATE	REQUISITION PART	DDSN	LOCN	
7013GQ24	AH6A 640	E	WRM013454 TRANSMITTER	7R-H-1430-011479168-SF 3525011-140	AK0	742G100 W9HPFX6				W	P	AWM 97014			
	AH6A 640		WN7342762 TRANSMITTER	7R-H-1430-011479168-SF 3525011-140		742G100 W9HPFM8				A	P	AWM 97013			
	AH6A 640		WA5334389 TRANSMITTER	7R-H-1430-011479168-SF 3525011-140		742G100 W9HNEX5				W	P	AWM 97005			
												3688040-10 3688020-15	6336FP03 6335FP07	SHOP SHOP	357COMPL 349COMPL
6348GD15	FXXA 640	E	WA5347473 POWER SUPPL	7R-H-1430-011506753-SF 3525681-140	AK0	742G400 W9HNQ1				W	P	AWM 96351			
	FXXA 640		WA5344439 POWER SUPPL	7R-H-1430-011506753-SF 3525681-140		742G400 W9HNNH7				W	P	AWM 96347			

Figure 14-12: SQD EXREP Status Report

N6R72900
RUN DATE 01/25/97
RUN TIME 11:17:03

SQD EXREP STATUS SUMMARY BY ORGANIZATION REPORT

PAGE 0001

ORG	TOTAL EXREPS	AWP	WIP	AWS	AWM	RFI	BCM	IOU
A21	10	2	0	0	1	1	0	0
WA5	17	4	1	0	2	0	0	0
WA6	8	1	0	1	0	0	0	0
WA7	6	2	0	1	1	0	0	1
WA8	4	0	1	1	0	0	0	0
WAJ	1	0	1	0	0	0	0	0
WRM	1	0	0	0	1	0	0	0
WZK	1	0	0	0	0	1	0	0
TOTALS:	48	9	3	3	5	2	0	1

Figure 14-13: SQD EXREP Status Summary By Organization Report

COMNAVIAIRFORINST 4790.2C
15 Jan 2017

N6R72300		DIFM STATUS REPORT															PAGE 0075	
RUN DATE 12/19/96																		
		INCLUDES : POOL CODES : ALL POOL CODES SELECTED : JOB STATUS CODES : ALL JOB STATUS CODES SELECTED : PURPOSE CODE : ALL PURPOSE CODES SELECTED SORTED BY : WRK-CNTR FGC JCN : WORK CENTER : 64A :																
FGC	NIIN	POOL CD	MCN	JCN	MGMT CD	WC	SERIAL NR	P R I	JS	JS DATE	WUC	PRP CD	OWED ORG	FSCM	PART NO	NOMEN	CRNT/ORIG DDSN	STATUS
														81349	6283	ELECTRON TU	6302ER54	347BBS9E
J8H4	00164643	M	A9BVHA0	Z9C3517391A	ER	64A	461	3	WP	96352	726DY30	W		99971	7590423G1	AMPLIFIER S	6352ER51	352WP
														81349	6283	ELECTRON TU	6352ER52	352BMPVZ
JFC8	004215836	A	A9BNZV7	AJ4194035	OW	64A	HA006	1	WQ	97215	726DU00	R	C9C	81833	101-123-11	PUMP UNIT, R	7194E879	
														08918	4160-2	VALVE, REG	7215ER5J	225BBN32
JFC8	004215836	A	A9BSCY7	AJ4275182	SO	64A	EZ-11	3	WQ	96313	726DU00	W		99971	7591553P1	PUMP UNIT, R	6275GL76	275COMP
														81833	207-245-1	SENSOR, TEMP	6312ER52	275COMP
														08918	4160-2	VALVE, REG	6277ER50	277BBN32
JFC8	004215836	A	A9BNWD4	AJ5207090	SO	64A	HJV04	3	WQ	96344	726DU00	W		81833	101-123-11	PUMP UNIT, R	7207GN03	207COMP
														88044	AN929-6	CAP, TUBE	6344ER52	345COMP
														77308	1235-60-906	PACKING, PRE	6344ER51	345COMP
														88044	AN815-12D	NIPPLE, TUB	6344ER54	345COMP

Figure 14-14: DIFM Status Report

ORG : AP2
ORG Name : VS-24
Assy Cd : AEBC
TMS : E.2C
Modex : 812
BUNO : 165812

DATE : 28 FEB 2007
TIME : 1807
REQ BY : CIV F DOOLEY
PAGE : 1 of 10

NALCOMIS OMA
MAINT - 1 REPORT
(CONSOLIDATED PERFORMANCE METRICS)
01 JAN 2007 0000 – 31 JAN 2007 2359

NOTE: THIS REPORT ONLY REFLECTS DATA THAT IS CURRENTLY RESIDENT ON YOUR ACTIVITY'S FOUNDATION TIER DATABASE. IT WILL NOT REFLECT ANY DATA ASSOCIATED WITH ASSETS THAT ONCE RESIDED BUT ARE NOW TRANSFERRED FROM YOUR ACTIVITY. FOR A MORE COMPREHENSIVE REPORT THAT WILL INCLUDE ADDITIONAL DATA THAT IS NOT AVAILABLE DURING TIME OF REPORT EXECUTION, PLEASE UTILIZE THE 'OFFICIAL' REPORTS THAT ARE AVAILABLE AT THE NAVAIR LOGISTICS WEB SITE.

BUNO Detailed Information

TOTAL EIS:	744	FLTHRS:	0.0	TOTAL W/D "Y"	0
AVG ACFT:	1.0	FLTS:	0	TOTAL ACFT DMMH:	0.0
MC%:	100.0	AVG UTIL:	0.0	ACFT DMMH/FLTHR:	0.0
FMC%:	100.0	AVG FLT DURATION:	0.0	CORR PREV MHRS:	0.0
NMCS%:	0.0	TOTAL CANN I/P:	0	CORR TREAT MHRS:	0.0
NMCM%:	0.0	TOTAL CANN MHRS:	0.0	FLTHRS – SHIP:	0.0
PMCS%:	0.0	CANNS/100 FLTHRS:	0.0	FLTS – SHIP:	0
PMCM%:	0.0	A-799 I/P:	0	BEFORE FLT ABORTS I/P:	0
		A-799 MHRS:	0.0	IN- FLT ABORTS I/P:	0

Figure 14-15: Consolidated Performance Metrics (MAINT-1 Report) (Sample)

COMNAVIAIRFORINST 4790.2C
15 Jan 2017

ORG : KC7
ORG Name: VAW-78
PUC : 001151

NALCOMIS OMA
MAINT-2 REPORT
(AIRCRAFT READINESS DEGRADATION AND UTILIZATION SUMMARY)
01 JUN 2003 0000 - 30 JUN 2003 2359

DATE : 16 JUL 2003
TIME : 0716
REQ BY: CIV A DBADMIN
PAGE : 1 of 1

NOTE: THIS IS A LOCAL REPORT FROM THE FOUNDATION SERVER. IT MAY NOT INCLUDE DETACHMENT DATA OR INVENTORY CORRECTIONS INCORPORATED IN UPLINE REPORTING.

Assy Code	MODEX	BUNO	NMC Scheduled	NMC Unscheduled	NMC Supply	NMCD	PMC Maintenance	PMC Supply	FMC	EIS	EOS	Aircraft Status Code	Total Flight Hours	Total Number Flights	Ship Flight Hours	Operation Number Flights	Total SCIR Hours
AEBC	600	161229	14	346	45	0	291	24	0	720	0	A	31.5	9	0	0	8548
	601	162619	44	159	137	0	253	127	0	720	0	A	46.9	16	0	0	3769
	602	162802	14	108	17	0	504	3	74	720	0	A	78.3	25	0	0	1744
	604	163028	115	239	9	0	334	23	0	720	0	A	30.9	10	0	0	7422
	* TOTALS		187	852	208	0	1382	177	74	2880	0		187.6	60	0	0	21483
	** TOTALS		187	852	208	0	1382	177	74	2880	0		187.6	60	0	0	21483

Figure 14-16: Aircraft Readiness Degradation and Utilization Summary (MAINT-2 Report) (Sample)

ORG : WA6
ORG Name : VX-20
Assy Cd : AEBC
TMS : E-2C

NALCOMIS OMA
MAINT-3 REPORT
(SUBSYSTEM CAPABILITY IMPACT REPORTING BY WUC/UNS)
09 JUN 2003 0000 – 30 JUN 2003 2359

DATE : 09 JUL 2003
TIME : 0937
REQ BY : AZ1 R SMITH
PAGE : 4 of 4

NOTE: THIS IS A LOCAL REPORT FROM THE FOUNDATION SERVER. IT MAY NOT INCLUDE DETACHMENT DATA OR INVENTORY CORRECTIONS INCORPORATED IN UPLINE REPORTING.

EOC	WUC/UNS	Total SCIR Hours	PMC Maint Hours	PMC Supply Hours	NMC Schd Hours	NMC Unschd Hours	NMC Supply Hours	NMCD Hours	M1 Hours	M2 Hours	M3 Hours	M4 Hours	M5 Hours	M6 Hours	M7 Hours	M8 Hours	Total AWM Hours
C	56251	528	528								528						528
C	67X2D00	19	19								18						18
D	6361700	528	528								528						528
D	67X2D00	27	27								25						25
E	726DL00	101	1	100													0
E	726E400	109	9	100							5						5
J	4191260	528	528								528						528
L	631U0	71	70	1							68						68
L	734H500	13	13								11						11
* TOTALS		1924	1723	201	0	0	0	0	0	0	1711	0	0	0	0	0	1711
			89.55%	10.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Z	030 Conditional Insp	10				10					2						2
Z	030000A	392			392						383						383
Z	030000B	52			52						48						48
Z	030000E	340			340						326						326
Z	03A0000	304			304						301						301
Z	12220	5				5					4						4
Z	13G1400	16				15	1				11						11
Z	51E2100	17				14	3				7						7
Z	63610	17				17					16						16
Z	6361300	10				10					8						8
Z	6361700	49				49					28						28
* TOTALS		8076	0	0	1088	5808	1180	0	0	0	6652	0	0	0	0	0	6652
			0.00%	0.00%	13.47%	71.92%	14.61%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
** TOTALS		10000	1723	201	1088	5808	1180	0	0	0	8363	0	0	0	0	02	8363
			17.23%	2.01%	10.88%	58.08%	11.80%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
*** TOTALS		15186	5237	1711	1088	5958	1192	0	0	0	11968	0	0	0	0	02	11968
			34.49%	11.27%	7.16%	39.23%	7.85%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Figure 14-17: Subsystem Capability and Impact Reporting by WUC/UNS (MAINT-3 Report)
(Sample)

COMNAVIAIRFORINST 4790.2C
15 Jan 2017

ORG : KC7
ORG Name : VAW-78
Assy Cd : AEBC
TMS : E-2C
BUNO : 163028

NALCOMIS OMA
MAINT - 4 REPORT
(DETAIL MISSION AND MAINTENANCE DATA BY AIRCRAFT)
01 JUN 2003 0000 - 30 JUN 2003 2359

DATE : 16 JUL 2003
TIME : 0718
REQ BY : CIV A DBADMIN
PAGE : 13 of 13

NOTE: THIS IS A LOCAL REPORT FROM THE FOUNDATION SERVER. IT MAY NOT INCLUDE DETACHMENT DATA OR INVENTORY CORRECTIONS INCORPORATED IN UPLINE REPORTING.

EOC	WUC/UNS	Total SCIR Hours	PMC Maint Hours	PMC Supply Hours	NMC Sched Hours	NMC Unsched Hours	N MC Supply Hours	NMCD Hours	JCN	Work Center	TRANS CD	When DISCVD	Type MAINT	Action Taken	MAL CD	Items Prcsd	MHRS	EMT	MCN
C	94192	44	37	7					KC7162181	210	23	B	B	R	374	1	2.3	2.3	0G4VFWN
C	94192	121	118	3					KC7164208	210	23	Y	B	R	374	1	1.5	1.5	0G4VFT
D	728E0	720	720						KC7061496	210	12	H	B	B	160	1	22.6	22.6	0G4VCZJ
E	65320	4	4						KC7167257	210	11	D	B	C	127	1	0.8	0.4	0G4VG0D
E	65Y2700	37	31	6					KC7157067	210	18	O	B	T	815	1	1.0	1.0	0G4VFS1
E	65Y2700	21	21						KC7159103	210	23	Y	B	R	374	1	1.2	1.2	0G4VFTF
E	726D0	36	7	29					KC7168288	210	12	H	B	B	160	1	3.8	3.8	0G4VG11
L	734H500	3	3						KC7167254	220	11	D	B	C	160	1	1.2	1.2	0G4VGDB
L	734H600	34	34						KC7114485	220	11	O	B	S	800	0	2.0	2.0	0G4VEIS
L	734H600	28	27	1					KC7156036	220	18	O	B	T	815	1	0.5	0.5	0G4VFOG
* TOTALS		4607	4006	601	0	0	0	0											
			86.95%	13.05%	0.00%	0.00%	0.00%	0.00%											
Z	030	0							KC7161127	210	11	O	S	0	000	1	0.4	0.4	0G4VFUB
Z	030	1				1			KC7163187	120	11	O	S	0	000	1	0.7	0.7	0G4VFWU
Z	030000A	8			8				KC7138307	120	11	O	D	0	000	0	0.6	0.6	0G4VF4F
Z	1111D00	138			102		36		KC7107341	120	12	H	B	B	381	1	3.5	3.5	0G4VFAZ
Z	12146	223			223				KC7128134	110	23	H	B	R	127	1	0.3	0.3	0G4VEV4
Z	14F2300	1			1				KC7161129	220	12	A	B	B	374	1	2.4	1.2	0G4VFUL
Z	22300	181			181				KC7133D01	110	23	M	G	R	190	1	78.3	62.8	0G4VF10
Z	223D0	39			39				KC7148A02	110	11	M	G	C	127	1	2.8	2.8	0G4VF01
Z	223D1B0	72			72				KC7156023	110	23	H	B	R	314	1	20.2	16.7	0G4VFP1
Z	223D1J0	70			70				KC7155011	110	23	H	B	R	900	1	11.2	11.2	0G4VFO0
Z	223D330	43			43				KC7159102	110	12	H	B	B	127	1	12.9	12.9	0G4VFT1
Z	42518	27			27				KC7175452	220	12	H	B	B	070	1	0.4	0.4	0G4VFG8
Z	45E232A	24			24				KC7163199	120	12	H	B	B	381	1	2.5	2.5	0G4VFXL
Z	49110	19			19				KC7152553	220	11	H	B	C	105	1	0.7	0.7	0G4VFGM
Z	6418K00	54			51		3		KC7164207	210	18	O	B	T	815	1	0.1	0.1	0G4VYZ
Z	726G300	3			3				KC7170341	210	23	D	B	R	374	1	0.8	0.8	0G4VG3K
* TOTALS		2815	0	0	1377	1369	69	0											
			0.00%	0.00%	48.92%	48.63%	2.45%	0.00%											
** TOTALS		7422	4006	601	1377	1369	69	0											
			53.97%	8.10%	18.55%	18.45%	0.93%	0.00%											
*** TOTALS		21506	12183	3947	2013	2875	488	0											
			56.65%	18.35%	9.36%	13.37%	2.27%	0.00%											

Figure 14-18: Detailed Mission and Maintenance Data by Aircraft (MAINT-4 Report) (Sample)

COMNAVIAIRFORINST 4790.2C
15 Jan 2017

ORG : KC7
ORG Name : VAW-78

NALCOMIS OMA
MAINT-5 REPORT
(MAINTENANCE MANHOURS)
01 JUN 2003 0000 – 30 JUN 2003 2359

DATE : 16 JUL 2003
TIME : 0721
REQ BY: CIV A DBADMIN
PAGE : 1 of 1

NOTE: THIS IS A LOCAL REPORT FROM THE FOUNDATION SERVER. IT MAY NOT INCLUDE DETACHMENT DATA OR INVENTORY CORRECTIONS INCORPORATED IN UPLINE REPORTING.

Assy Cd	BUNO	UNSCH MAINT	PHASE/PDM/IMC LOOK	FIX	ACPD/XFER INSP	COND INSP	SPECIAL LOOK	INSP FIX	TDC	TOTAL MHRS	ACFT FLTHRS	DMMH/ FLTHRS
AEBC	161229	206.9	0	0	0	6.4	52.9	28.4	3.6	298.2	31.5	9.5
	162619	120.6	65.9	1.8	0	11.3	90.1	21.1	27.0	337.8	46.9	7.2
	162802	127.1	0	0	0	1.3	34.3	7.6	1.0	171.3	78.3	2.2
	163028	183.3	9.6	22.5	0	5.6	87.3	10.5	1.0	319.8	30.9	10.3
* TOTALS		637.9	75.5	24.3	0	24.6	264.6	67.6	32.6	1127.1	187.6	6
** TOTALS		637.9	75.5	24.3	0	24.6	264.6	67.6	32.6	1127.1	187.6	6

Figure 14-19: Maintenance Manhour (MAINT-5 Report) (Sample)

COMNAVIAIRFORINST 4790.2C
15 Jan 2017

ORG : KC7
 ORG Name : VAW-78

NALCOMIS OMA
 MAINT- 6 REPORT
 (DETAILED DATA EXTRACT)
 01 JUN 2003 0000 – 30 JUN 2003 2359

DATE : 16 JUL 2003
 TIME : 0722
 REQ BY : CIV A DBADMIN
 PAGE : 26 of 26

NOTE: THIS IS A LOCAL REPORT FROM THE FOUNDATION SERVER IT MAY NOT INCLUDE DETACHMENT DATA OR INVENTORY CORRECTIONS INCORPORATED IN UPLINE REPORTING .

Completed Date	WC	Assy			WUC/UNS	ML	TR	AT	MAL	IP	MHRS	EMT	WD	TM	REMOVED			INSTALLED			MCN
		Cd	BUNO												CAGE	Part Number	Serno	CAGE	Part Number	Serno	
24 JUN2003	220	AEBC	163028	44210	1	11	C	105	1	0.2	0.2	J	D								0G4VG86
24 JUN 2003	220	AEBC	163028	44210	1	11	C	105	1	0.3	0.3	D	B								0G4VG7Z
20 JUN 2003	220	AEBC	163028	4422B	1	12	B	080	1	3.6	3.6	J	D								0G4VG46
24 JUN 2003	220	AEBC	163028	4422K	1	12	B	080	1	0.5	0.5	D	B								0G4VG7Y
16 JUN 2003	220	AEBC	163028	47A1140	1	11	C	160	1	0.3	0.3	C	B								0G4VG0F
02 JUN 2003	220	AEBC	163028	49110	1	11	C	105	1	0.7	0.7	H	B								0G4VFG3
11 JUN 2003	220	AEBC	163028	56250	1	11	A	799	1	0.3	0.3	D	B								0G4VFUH
22 JUN 2003	220	AEBC	163028	734H100	1	23	R	374	1	1.0	1.0	H	B	06481	68010020	HHX282	06481	68010020	GUG091		0G4VG3T
13 JUN 2003	220	AEBC	163028	734H100	1	18	T	815	1	4.9	4.9	O	B	06481	68010020	PQB074	06481	68010020	HHX282		0G4VFXG
07 JUN 2003	220	AEBC	163028	734H300	1	18	T	812	1	0.8	0.8	O	B	06481	68050012	SDT005	06481	68050012	SDT005		0G4VFPH
16 JUN 2003	220	AEBC	163028	734H500	1	11	C	160	1	1.2	1.2	D	B								0G4VG0B
02 JUN 2003	220	AEBC	163028	734H600	1	11	S	800	0	2.0	2.0	O	B								0G4VE18
07 JUN 2003	220	AEBC	163028	734H600	1	18	T	815	1	0.5	0.5	O	B	06481	680400-6	MHB004	06481	680400-6	LNE025		0G4VFGQ
08 JUN 2003	310	AEBC	163028	030000A	1	11	0	000	0	2.5	2.5	O	D								0G4VFT1
07 JUN 2003	310	AEBC	163028	030000A	1	11	0	000	0	26.1	2.9	O	D								0G4VFEP
01 JUN 2003	310	AEBC	163028	030000A	1	11	0	000	0	0.3	0.3	O	D								0G4VF41
22 JUN 2003	310	AEBC	163028	030000A	1	11	0	000	0	18.0	3.0	O	D								0G4VG6X
03 JUN 2003	310	AEBC	163028	03A0000	1	11	0	000	0	0.5	0.5	O	G								0G4VEY6

Figure 14-20: Detailed Data Extract (MAINT-6 Report) (Sample)

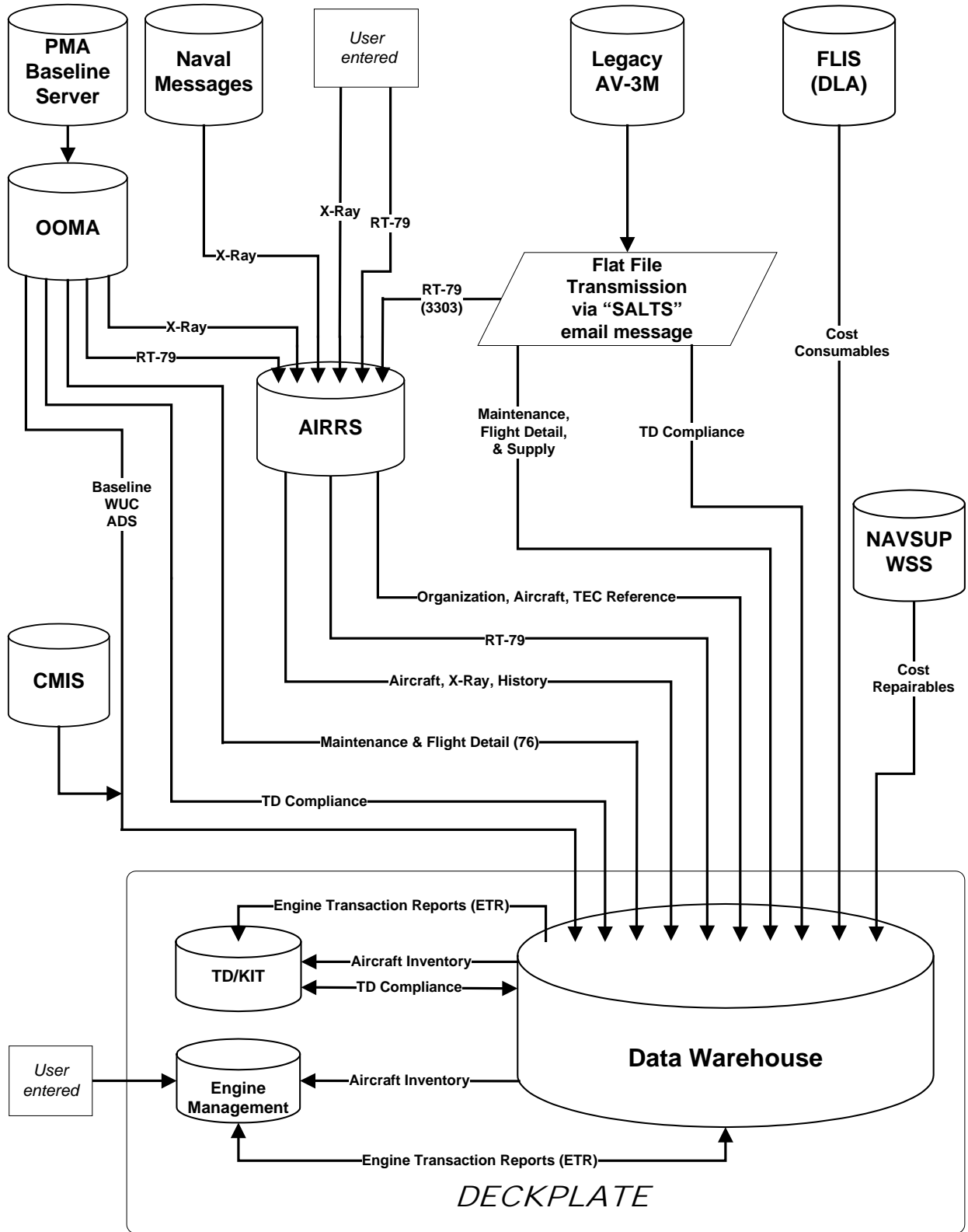


Figure 14-21: DECKPLATE Flow Process