R} CHAPTER 13
Naval Aviation Logistics Command Management Information System (NALCOMIS) and Naval Tactical Command Support System (NTCSS) Optimized Organizational Maintenance Activity (OMA) SPAWAR Systems Center Atlantic (SSCA)

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Naval Aviation Logistics Command Management Information System (NALCOMIS) and Naval Tactical Command Support System (NTCSS) Optimized Organizational Maintenance Activity (OMA) SPAWAR Systems Center Atlantic (SSCA)

R} 13.1 Naval Aviation Logistics Command Management Information System (NALCOMIS)

13.1.1 General Information

13.1.1.1 The purpose of this chapter is to give detailed information on the duties and responsibilities for OMA, IMA, and ASD activities operating NALCOMIS.

13.1.1.2 NALCOMIS provides a modern, real time, responsive, computer based management information system. The three objectives of NALCOMIS are to increase aircraft readiness by providing local maintenance and supply managers with timely and accurate information required in their day-to-day management and decision making process, reduce the administrative burden on the fleet, and improve the quality of upline reported data.

13.1.2 Responsibilities

13.1.2.1 The NALCOMIS functional sponsor is CNO (N98) and the resource sponsor is CNO (N43). COMSPAWARSYSCOM (PMW-151) is the Program Manager and COMNAVAIRSYSCOM (AIR-6.8) is the Functional Manager.

13.1.2.2 SPAWARSYSCEN is the CDA and is responsible for the design, development, implementation, and life cycle support of all NALCOMIS software.

13.1.2.2.1 The CDA maintains all NALCOMIS applications software. User guides and software manuals are available for both system and application software programs. Software problems that cannot be resolved by site personnel will be resolved by direct contact with the SPAWARSYSCEN trouble desk; refer to the applicable NALCOMIS user manual.

13.1.2.2.2 Discrepancies identified by system users will be forwarded to the CDA and a copy to their TYCOM using SMTS or NALCOMIS TR/CP Message Format provided in the OMA-SAM. All supporting TR documentation must be forwarded to the TYCOMs via separate correspondence.

13.1.2.3 The Functional Manager (COMNAVAIRSYSCOM (AIR-6.8)) will establish a NALCOMIS CCB to maintain control of the NALCOMIS baseline through the application of configuration management. The CCB will operate under the authority of the NAMP Policy Committee and will process NALCOMIS hardware and software changes per NAVAIRINST 5230.11.

13.1.2.4 The SA is responsible for establishing and maintaining user accounts.

13.1.2.5 The user maintains passwords.

13.1.3 NALCOMIS Organizational Maintenance Activity (OMA)

a. NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS provide an effective MIS capability to satisfy various functional requirements of the NAMP. It provides Navy and Marine Corps O-level and I-level activities with timely and accurate information for day-to-day management of assigned aircraft and equipment. NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS allow the organization the

capability to manage maintenance and supply processes by allowing systems users to enter, collect, process, store, review, report and interface data required.

b. The major functions required by the O-level are integrated into one system sharing a common database. This approach avoids redundancy of functions and related data within the organization. It also serves to improve the overall communication and response time associated with multiple databases. The major functions of NALCOMIS OMA are divided into nine subsystems and two utilities:

(1) Database Administration Subsystem. This subsystem allows the O-level to establish and maintain system level support tables. These tables provide the baseline data for the O-level, database application security, and data tables.

(2) Maintenance Subsystem. This subsystem collects and processes maintenance related data and provides this data to other subsystems on the database.

(3) Flight Subsystem. This subsystem collects and processes flight related data and provides this data to other subsystems on the database.

(4) Logs and Records Subsystem. This subsystem provides the ability to establish and maintain configuration profiles on aircraft, engines, modules, and components assigned to the O-level.

(5) Personnel Subsystem. Reserved for future use.

(6) Asset Subsystem. This subsystem provides the ability to inventory and process inspection related data on O-level assigned assets, for example, aeronautical equipment, SE, IMRL equipment, and ALSS.

(7) Data Analysis Subsystem. This subsystem provides the O-level aviation 3M analyst with the ability to approve MAF and flight records for upline submission to the SSCA; correct, delete, and reinduct MAFs and flight documents; perform end-of-month MAF close out processing; and generate MAF audit reports.

(8) Technical Publications Subsystem. Reserved for future use.

(9) Reports Subsystem. This subsystem provides the ability to select and produce reports.

(10) Ad Hoc Query Utility. This utility provides the ability to create reports to meet the users specific needs. The reports may be derived from selected database tables allowing the manager to gather data in various areas, for example, aviation 3M reports, flight reports, trend analysis, manpower utilization, user login ID and SMQ assignments, and specific workload reports.

(11) SAMM Utility. SAMM provides the ability to the SA/A to maintain the system configuration. SAMM includes application administration; system utilities; detachment processing; mail/messages facility; printer management; process status; system initialization; operating system security management; and queue management.

NOTE: Additional NALCOMIS OMA specific documentation procedures, input formats, and output formats are contained in the OMA-UM, OMA-SAM, OMA-UG/Online Help, and Security Features User Guide for OMA.

13.1.3.1 Interfaces

a. NALCOMIS OMA interfaces with NALCOMIS IMA for turn-in MAFs and requisitions. Flight and aviation 3M data extracts are created and submitted via electronic medium (LAN or diskette) to the local SSCA for upline submission to NALDA ADW.

b. NTCSS Optimized OMA NALCOMIS interfaces with NALCOMIS IMA and NTCSS Optimized IMA NALCOMIS. The interface consists of the requisition requirements, requisition status, requisition queries, and turn-in WO data. Upline submission to NALDA ADW is accomplished by data replication.

c. NTCSS Optimized OMA NALCOMIS interfaces with aircraft type model unique developed software, when provided. For example, data download from aircraft, automated debrief, electronic technical manuals, engine life usage calculations, and additional functionality that may be developed by a platform.

13.1.3.2 Administrative Organization

13.1.3.2.1 NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS require an administrative structure for operating the system. The basic administrative structure will remain the same even though the number of user will vary between activities.

13.1.3.2.2 There are three primary or collateral duty assignments required to administer the operations of NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS; the SA/A, assistant SA/A, and the DBA. SSCA skills and NAMP knowledge qualify them for the position. The primary SA/A shall be the analyst with a collateral duty of systems administrator. The assistant SA/A's focus is on maintaining NALCOMIS and not the other duties associated with the analyst billet. The assistant SA/A’s presence and use is of the utmost importance since there is usually only one primary SA/A assigned per squadron and several additional work shifts, as well as additional detachments that will be required to be covered. Both shall provide the local expertise necessary to resolve system and functional related problems and ensure smooth operations. Specific duties and responsibilities include the following:

a. The primary SA/A shall:

(1) Provide adequate controls to ensure system security and access granted to users are consistent with their duties.

(2) Identify user problems and submit NALCOMIS TRs/CPs via SMTS or to SPAWARSYSCEN Norfolk, VA, per OMA-SAM and TYCOM directives.

(3) Maintain familiarity with the operation of all NALCOMIS hardware assigned, maintain accurate inventory, ensure hardware is functioning correctly, coordinate and record all scheduled and unscheduled maintenance.

(4) Oversee DBAs, ensuring database integrity and validity is maintained.

(5) Coordinate all MAF delete actions with Maintenance Control to ensure all related actions are accomplished, for example, duplicate MAF.

(6) Perform system and database backups, database restores, and detachment processing functions (as required).

(7) Coordinate and schedule all system nonavailability periods such as aircraft transfers and detachment set-up.

(8) Maintain NALCOMIS security and accreditation by monitoring security subsystems.

(9) Coordinate data transfer requirements between NALCOMIS OMA and all other automated information systems, for example, when transferring an aircraft to another activity, ensure all data stored on electronic media is transferred with the aircraft.

(10) Establish procedures and coordinate all system recovery and contingency processes to include back fit processes.

(11) Coordinate software releases, software changes, and hardware upgrades.

(12) Establish and maintain system log, recording all down time, hardware failures, database saves, and all other system requirements established in the OMA-SAM.

(13) Ensure adequate NALCOMIS consumables, for example, paper, printer ribbons, are on hand at all times.

(14) Provide formal in-service and informal training to maintenance personnel on NALCOMIS operations, MIS security, and aviation 3M documentation.

(15) Perform all duties described in the OMA-SAM and OMA-UM (Legacy), OMA-UG (Optimized), and the System Securities Authorization Agreement.

(16) Update NTCSS Optimized OMA NALCOMIS baseline change reports.

b. Assistant SAs are assigned to assist the SA/A. The assistant SA's presence and use is of the utmost importance since there is usually only one SA/A assigned per squadron and several additional work shifts, as well as additional detachments, that will be required to be covered. The assistant SA's focus is on maintaining NALCOMIS and not the other duties associated with the analyst billet.

c. The DBA has overall responsibility for maintaining the accuracy of NALCOMIS OMA databases. Sites shall have, as a minimum, one or more DBAs, as required, to maintain databases. DBAs shall be the single point of update, modification, correction of assigned databases. No other personnel shall modify the database without prior approval of the assigned DBA(s). The DBA(s) are responsible to the SA/A for overall database integrity and validity as follows:

(1) Assets; includes ALSS, SE, IMRL, aeronautical equipment, for example, drop tanks, aerial refueling stores, pods, and all related inspections.

(2) Maintenance; includes all MAF types and JCN/MCN assignments, aircraft related inspections, and MDPS interfaces.

(3) Material Control; includes all material related functions and NALCOMIS IMA interfaces.

(4) Logs and Records; includes TDs, explosive devices, and all aircraft and engine logbook related databases, for example, AIRS, DECKPLATE, and equipment records.

(5) Flight; includes all flight documents and associated aircrew records, for example, qualification data, aircrew personnel; approval, deletion and upline reporting of all flight documents.

(6) Database System; includes all system specific items, for example, time zones, organization code, unit identification code, personnel access, assigned SMQs, and task control.

(7) Data Analyst; includes all aviation 3M data collection, approval, deletions, upline submissions; MAF audit procedures.

NOTE: O-level activities may further define and subdivide the databases areas as required.

13.1.3.3 Functional User

The functional users are the main data entry personnel for NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS. They must protect their passwords and access to ensure data integrity.

13.1.3.4 Detachment Processing

13.1.3.4.1 Detachment processing consists of two types, same ORG code and different ORG code. Same ORG code processing includes all temporary detachments deployed by the O-level. Different ORG code processing applies to permanent detachment operations, where detachments are assigned different ORG codes and PUCs. Squadrons using NTCSS Optimized OMA NALCOMIS can set up their different ORG codes using either Separate ORG code or Multiple ORG code detachment capability.

NOTE: Refer to NTCSS Optimized NALCOMIS OMA-SAM for set up processes for either Separate ORG or Multiple ORG codes.

13.1.3.4.2 Same Organization Code Detachments. For same organization code detachments, processing AIRS, DECKPLATE, aviation 3M, flight data, and aircrew data documentation is the responsibility of the parent O-level activity.

13.1.3.4.3 Different Organization Code Detachments. Within different organization code detachments, the aircraft, assets and personnel are lost from the parent O-level's custody and gained by the detachment. The parent activity may assign detachment work center codes using the standard maintenance organization work center codes for large detachments or identify a single work center for detachments with four or less aircraft, for example, Det 1 = WC 361, Det 2 = WC 362, Det 10=WC 36A. Different organization code detachments can be further subdivided into two groups:

a. Nonactivated. Nonactivated different organization code detachments will report under the organization code and PUC of the parent O-level activity. The O-level will use standard organization relationships; one Maintenance Control responsible for the efforts of all work centers including detachment work centers. The parent O-level activity will process all AIRS, DECKPLATE, aviation 3M and NAVFLIRS documentation through the local SSCA, including all nonactivated detachment documentation.

b. Activated. Activated different organization code detachments will report under their own ORG and PUC. The detachment will retain the work center code previously assigned by the parent O-level activity. Processing of AIRS, DECKPLATE, aviation 3M, and NAVFLIRS documentation is the responsibility of the activated detachment. Activated detachments will forward documentation to the appropriate SSCA.

R} 13.1.4 NALCOMIS Intermediate Maintenance Activity (IMA)

a. NTCSS Optimized IMA NALCOMIS provides the capability to manage maintenance and supply functions and processes by allowing system users to enter, collect, process, store, review, and report information required by the organization. These processes include engine and SE repair, material requisitions, repairables management, AWP management, personnel assignment and deployment, subcustody of equipment, use of resources, and additional miscellaneous functions at the IMA and ASD. The functions required by the IMA and ASD are integrated into one system sharing a common database. This approach avoids duplication of functions and related data between the organizations. The common database also serves to improve the overall communication and response time associated with material readiness in support of aircraft maintenance activities. Internal communications among users in the IMA and ASD are accom-

plished through on-line mailbox and hard copy report notices, which are printed on preassigned work center printers.

b. NTCSS Optimized IMA NALCOMIS specific documentation procedures, input formats, and output formats are in NALCOMIS IMA Desk Top Reference Guides.

NOTES: 1. IMAs will perform Configuration Status Accounting, for aircraft engines, SE for OMA peculiar SE, personnel management baselines, perform TD documentation in NTCSS Optimized OMA NALCOMIS.

2. The IMA NTCSS Optimized OMA NALCOMIS Server can be configured to Multiple ORG codes to allow other departments to use the server.

13.1.4.1 Interfaces

13.1.4.1.1 NTCSS Optimized IMA NALCOMIS interfaces with NALCOMIS OMA and NTCSS Optimized OMA NALCOMIS. The interface establishes a link between the IMA and the O-level Material Control and the supporting ASD. This interface provides the O-level the limited ability to query supply related functions.

13.1.4.1.2 NALCOMIS IMA interfaces with the SSCA for upline submission of aviation 3M data. The IMA submits data for submission via electronic medium.

13.1.4.1.3 NTCSS Optimized IMA NALCOMIS interfaces with supported Navy supply MIS information management systems. It exchanges required maintenance and supply data, via real time electronic data exchange or batch processing.

13.1.4.1.4 NTCSS Optimized IMA NALCOMIS interfaces with maintenance resource management systems to exchange maintenance data used to process work requests.

13.1.4.2 Administrative Organization

13.1.4.2.1 NTCSS Optimized IMA NALCOMIS installed at shore activities and aboard ships require an administrative organization for operating the system. The basic organizational structure of the system will remain the same even though the number of users may vary from activity to activity. Generally, three or four individuals are required, on a primary or collateral basis, to administer the operations of NTCSS Optimized IMA NALCOMIS.

NOTE: Depending on the organization and size of the NALCOMIS site, the SA and the DBA may be the same individual. For Marine Corps activities, the A} ALIMS Department supports NTCSS Optimized IMA NALCOMIS hardware, network, connectivity, and user rights and privileges up to and including workstation operating system login. The maintenance NALCOMIS Application Administrator/Analyst (MOS 6049) supports the NALCOMIS application including SMQs and ensures database integrity.

13.1.4.2.2 The SA is responsible for the overall management of NTCSS Optimized IMA NALCOMIS at each site. SAs must have extensive knowledge and experience in MIS operations, aviation maintenance and supply support functions.

13.1.4.2.3 The DBA is responsible for the overall administration of the database in the NTCSS Optimized IMA NALCOMIS system and is assigned to coordinate the operation and maintenance of the database. The functional DBAs assist the DBA in managing the NTCSS Optimized IMA NALCOMIS database and performs the DBA duties in their absence. The DBA is recommended to be the MIS or Operations Supervisor.

13.1.4.2.4 The DBAs for Maintenance and Supply are the principal advisors to the SA and DBA on NTCSS Optimized IMA NALCOMIS matters pertaining to their functional area. Additionally, the Maintenance DBA is responsible for performing the duties of analyst (MDBA/A) per Chapter 5. The Maintenance MDBA/A works in Production Control. The Supply DBA works in ASD. Responsibilities include but are not limited to the following:

a. Ensure database integrity, system security, and that access granted to each user is consistent with their duties:

(1) Assign, modify, or delete user access privileges, passwords and SMQs.

(2) Add, modify, and delete SMQ requirements to the transaction security file. Ensure all Inquiry Functions are not SMQ restricted.

b. Ensure the validity and reliability of the database files:

(1) Run NTCSS Optimized IMA NALCOMIS dumper programs and system table reports to check the maintenance database.

(2) Maintain table data by system table addition, update/delete.

c. Update table files to redirect HCNs to a different printer if hardware problems occur.

d. Monitor and control the use of on-line batch reports, and release user requested on-line batch reports (as required).

e. Troubleshoot user problems and submit TRs/CPs (as required).

f. Keep the system and DBAs informed of the status and processing requirements for their functional area.

g. Have a working knowledge of the software configurations and capabilities for their functional area.

h. Maintain familiarity with the NTCSS Optimized IMA NALCOMIS equipment assigned in their functional area.

i. Ensure utility programs that pertain to both functional areas are coordinated to ensure the utilities are executed in both maintenance and supply areas.

j. Periodically hold formal in-service and informal training on NTCSS Optimized IMA NALCOMIS for functional users.

k. Develop and coordinate a contingency plan using SPAWARSYSCEN Contingency Manual as a guide, for NTCSS Optimized OMA NALCOMIS and NTCSS Optimized IMA NALCOMIS to be used in the event of a system failure or down time.

NOTE: Specific Supply Functions: Monitor supply interface processing to ensure the accuracy of the NTCSS Optimized IMA database as reflected against the local supply systems, for example, Rsupply. Perform utility programs (as required).

13.1.4.3 Functional User

The functional users are the main key entry personnel for data usage in NTCSS Optimized IMA NALCOMIS. They must protect their passwords/access to ensure data integrity.

R} 13.2 NTCSS Optimized OMA NALCOMIS SPAWAR Systems Center Atlantic (SSCA)

13.2.1 Introduction

13.2.1.1 Purpose. NTCSS Optimized OMA NALCOMIS was developed as part of ADW and provides data input through local data collection and the ability to extract data for the efficient and economical maintenance management.

13.2.1.2 Scope. ADW is sponsored by the CNO (N98), administered through the operating chain of command, and provides global distribution of information throughout DOD. Technical support is provided by SPAWARSYSCEN Norfolk, VA and COMNAVAIRSYSCOM (AIR-6.8.4).

13.2.1.2.1 ADW is a MIS designed to provide statistical data for use at all management levels relative to:

a. Equipment maintainability and reliability.

b. Equipment configuration, including alteration and TD status.

c. Equipment mission capability and use.

d. Material usage.

e. Material non-availability.

f. Maintenance and material processing times.

g. Weapon system and maintenance material costing.

13.2.1.2.2 It is CNO policy that data users will collect data at the source, only once. Redundant data collection and reporting will be eliminated. NTCSS Optimized OMA NALCOMIS shall be used as the only means of collecting source data in support of the information areas outlined above.

13.2.1.2.3 Unless specifically directed by COMNAVAIRFOR, compliance with procedures in this chapter is mandatory for all Navy and Marine Corps aviation activities and Cognizance Symbol 2O aviation training device activities.

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

13.2.1.2.5 Command Responsibility. NTCSS Optimized OMA NALCOMIS provides a valuable tool for use by maintenance management. To achieve its designed purpose, NTCSS Optimized OMA NALCOMIS requires command attention, support, and use. The Work Center Supervisor and CDI must understand proper procedures for using NTCSS Optimized OMA NALCOMIS and information obtained from electronic reports. The Work Center Supervisor must assure complete and accurate documentation and ensure work center personnel are properly trained. The input will be used to provide management products for use by the highest levels of Navy and Marine Corps management.

13.2.2 Program Manager

The SPAWARSYSCEN (PMW-151) NTCSS Program Manager will coordinate with the Functional Manager, COMNAVAIRSYSCOM (AIR-6.8.4), to ensure aviation functional requirements are incorporated into the NTCSS system requirements. Functional specifications and requirements will remain valid until

COMNAVAIRSYSCOM (AIR-6.8.4) functional manager approves appropriate changes. The Program Manager:

a. Reviews functional course curricula for incorporation in NTCSS technical training and prepares a functional annex inclusion in the NTCSS SNTP.

b. Develops detailed functional descriptions and solutions to requirements with the assistance of user groups or Fleet Design Team.

c. Coordinates change proposals with the TYCOMs for submission to the NTCSS Requirements Integrated Product Team.

13.2.3 Functional Manager

COMNAVAIRSYSCOM (AIR-6.8.4), the Functional Manager for aviation maintenance and logistics information systems, performs the following in relation to NTCSS Optimized OMA NALCOMIS:

a. Prepares system and subsystem specifications for NTCSS Optimized OMA NALCOMIS.

b. Establishes and maintains 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.

c. Prepares test plans and test analysis reports to support the functional certification of the NTCSS functional software modules and certifies functional adequacy of cognizant modules in acceptance tests.

d. Ensures the NTCSS Optimized OMA NALCOMIS maintenance systems requirement documents are kept current and reflect proper justification for policies and improved business procedures and tracks changes to ensure benefits are achieved.

e. Coordinates with the Office of the CMC to ensure Marine Corps peculiar expeditionary/operational functional requirements are met.

f. Acts as voting member of the NTCSS requirements integrated product team.

g. Standardizes NALCOMIS functionality for both O-level and I-level maintenance activities.

h. Establishes criteria to ensure data validity is achieved at initial data entry and maintained throughout the system.

13.2.4 Central Design Activity (CDA)

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, AIMDs, and FRCs.

13.2.5 Aviation Data Warehouse (ADW)

13.2.5.1 ADW is maintained by COMNAVAIRSYSCOM (AIR-6.8.4) and receives data from the NALCOMIS Data Collection System.

13.2.5.2 NALCOMIS Data Collection System consists of the Foundation Tier, Mid Tier, Top Tier, and Wholesale Foundation Tier (Figure 13-1).

13.2.5.2.1 Foundation Tier. This tier is located at O-level, I-level, and D-level maintenance activities and consists of the following modules:

a. Maintenance Subsystem. This subsystem enables authorized maintenance personnel to document scheduled and unscheduled maintenance against aircraft and other end items assigned to the activity. The maintenance subsystem provides a list of parts and enables personnel to issue WOs to fix discrepancies. It provides the capability to track tools and personnel. It also enables personnel to update or query WOs, to requisition parts, and to sign off scheduled and unscheduled maintenance and material requirements.

b. Material Subsystem. This subsystem enables authorized maintenance personnel to track components on order against an activity's aircraft or other end items. It provides material control processing interface between NTCSS Optimized OMA NALCOMIS and supply centers (NTCSS Optimized IMA NALCOMIS). The information enables management to:

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

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

(3) Determine weapon system support costs at O-level, I-level, and D-level.

c. Flight Subsystem. This subsystem enables authorized users to collect and process flight-related data. This includes export and import of aircrew personnel flight data interface with Sierra Hotel Advanced Readiness Program/Flight Information Schedule and Tracking capable activities. The flight hours annotated on a flight document directly affect the Maintenance Subsystem and the Configuration Management Subsystem. It is important authorized users enter correct flight data in a timely manner.

d. Platform software interface (SMART Aircraft Module). This module permits transfer of information from systems onboard SMART aircraft directly into NTCSS Optimized OMA NALCOMIS. It has the capability to strip data from SMART aircraft and separate it by flight. The Flight Module processes this information before up-line submission. This data includes structure fatigue information, strain gauge data, engine LUI and diagnostics data, engine management system data, flight control system data, position data, avionics system data, fault codes, and component life time/cycle data. The module provides a pilot/maintainer debrief capability with fully integrated IETM, an engine/aircraft diagnostics/prognostics capability, PEDD support, and automatic identification technologies.

e. CM/Logs and Records Subsystem. Enables authorized users to maintain configuration profiles for aircraft, engines, propellers, modules, and components assigned to the maintenance activity. Configuration profiles are found in the following explorers or catalogs:

(1) WAN Explorer.

(2) Group Explorer.

(3) Inventory Explorer.

(4) Log-set Retrieval.

(5) Assembly Catalog and Assembly Explorer (accessed from the Assembly Catalog).

(6) Parts Catalog.

(7) DODIC Catalog.

(8) Reference Term Editor.

(9) Maintenance Plan Catalog.

(10) Configuration Management Report Generator.

(11) XRAY Explorer.

NOTE: The OMA-UG/Online Help provides detailed information of the records and hot link definitions functionality.

f. AD HOC Subsystem. Enables authorized users to create customized queries from the application database tables. The user can establish criteria for the data elements, perform calculations, sort and group items, manually create graphs, specify print formats, and perform analysis on data currently maintained in the database. This utility assists maintenance managers in asset management and helps reduce man-hours expended in the manual processing of available data.

NOTE: Data retrieved only reflects information applicable to equipment in physical custody of the reporting custodian.

g. Personnel Subsystem. This subsystem enables authorized users to access personnel information, SMQs and task tables. Users can add or remove personnel, assign or remove SMQs, and make work center personnel assignments. It also provides the capability to view aircrew data.

13.2.5.2.2 Mid Tier. This tier provides the link for passing data from the Foundation Tier to the Top Tier and receives data from baseline servers. It also provides temporary storage for data when connectivity to the Top Tier is lost.

NOTE: When an activity is required to shift from one Mid Tier to another, the relocating activity shall change Internet Protocol address. The Optimized OMA System and Database Administration Guide contains detailed information.

13.2.5.2.3 Top Tier. This tier provides intermediate storage for data and the up-line link to the COMNAVAIRSYSCOM (AIR-6.8.4) ADW repository.

13.2.5.2.4 Wholesale Foundation Tier. This tier provides a storage database and query capability to support movement of components from I-level to D-level or to vendors and their return to the retail system. It also provides data storage for stricken sircraft and NALCOMIS aircraft transferred to non-NALCOMIS activities.

13.2.6 Data Accuracy

13.2.6.1 Accurate documentation must be a continuous concern throughout NTCSS Optimized OMA NALCOMIS. The SA/A must ensure discrepancies are documented via SMTS, BTR, or a change proposal to the aviation 3M MDS VALSPEC Guide (http://www.navair.navy.mil/logistics/valspec).

13.2.6.1.1 Higher level Navy managers use this data to:

a. Analyze high system failures and high man-hour consumers by specific weapon system.

b. Identify desirable product improvements.

c. Analyze inspection requirements as a basis for adjusting inspection criteria and intervals.

d. Adjust component scheduled removal intervals.

e. Improve I-level repair capabilities.

f. Identify failed items under warranty.

g. Establish realistic manning factors.

h. Determine and justify the need for modifications and engineering changes.

i. Establish equipment reliability factors.

j. Determine tooling and equipment requirements.

k. Predict probable failures through trend analysis.

l. Determine the status of compliance with mission readiness type TDs.

m. Monitor aircraft readiness trends in support of Congressional and Joint Service initiatives.

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

a. High man-hour per operating hour equipment (by SERNO or type equipment).

b. Man-hours lost to cannibalization and removal of items to FOM.

c. Areas with skill or training deficiencies.

d. Efficient or inefficient use of available manpower.

e. Items with high failure rates.

f. Inadequate troubleshooting.

g. Reasons for ground and in-flight aborts.

h. High usage items.

i. Status of TD compliance.

j. Warranted item failure and subsequent repair.

13.2.6.2 Data Validation. The aviation 3M MDS VALSPEC Guide is the CDA's software development document for ensuring valid data (http://www.navair.navy.mil/logistics/valspec). Entries are validated against these specifications at point of entry.

13.2.7 Data Codes

13.2.7.1 Codes already available, both within the Navy or in other services, have been adopted and used in NTCSS Optimized OMA NALCOMIS (as applicable). Some codes prescribed, such as work center codes, have been given limited structuring and have flexibility to allow 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, Julian date, and a nonsignificant locally assigned sequence number is used to generate a JCN. A list of NTCSS Optimized OMA NALCOMIS codes is in Chapter 14.

13.2.7.2 Stability and Control of Codes. Codes contained in this instruction are for Navy-wide use and may not be altered locally. COMNAVAIRFOR (N422B), controls the codes used in NTCSS Optimized OMA NALCOMIS, with the exception of aircraft status codes (Appendix E), TMR codes (OPNAVINST 3710.7), EOC codes (MESM (provided on COMNAVAIRFOR's web portal)), and WUCs. Requests for additions, changes, or deletions to these codes can be submitted to cnaf.av3m@navy.mil. WUCs are managed by COMNAVAIRSYSCOM (AIR-6.8.5) and policy is delineated in NAVAIR 00-25-8.

13.2.7.3 SMART Aircraft Codes. These codes, normally known as usage parameters, are generated and controlled by COMNAVAIRSYSCOM PMAs for downloading from an MU to NTCSS Optimized OMA NALCOMIS.

13.2.8 Maintenance Information System (MIS) Queries and Reports

The aircraft VED is the starting point for all aircraft maintenance related reports/queries. This screen is displayed when users are in the maintenance module within the NTCSS Optimized OMA NALCOMIS application.

13.2.8.1 Active Work Order Query

13.2.8.1.1 The Active Work Order Query will display a list of all WOs retrieved against an aircraft, SE, ALSS, MME, or uninstalled equipment item selected from a VED window. WOs listed on this window have MCNs and JCNs assigned, with the exception of the ORG, the user can clear the fields and select criteria to retrieve specific WOs. The user may select WOs to view; update; order material; assign aircraft, SE, ALSS, or MME items for cannibalization authority; or complete.

13.2.8.1.2 The following VED entries are color-coded to easily identify status:

a. Red - NMC.

b. Blue - PMC.

c. Black - FMC.

NOTE: OMA-UG/Online Help provides additional information.

13.2.8.2 Historical Work Order Query

Historical WOs are completed maintenance actions that are part of the history files. They enable the user to enter criteria and view details on selected historical WOs.

NOTE: OMA-UG/Online Help provides additional information.

13.2.8.3 Aircraft Daily Status Report

13.2.8.3.1 Selecting the Aircraft Daily Status Report enables the user to generate reports containing data on each BUNO assigned to the organization. The date defaults to the current date to ensure that users are viewing or generating the current data. The dates can be modified to view the number of flight hours and number of sorties completed during a specified date range.

13.2.8.3.2 This report displays data on the current status of aircraft assigned to the activity. It contains the dates of last flights, total outstanding NMC/PMC WOs with their status, assigned work centers, and material requisitions (with assigned DDSNs).

13.2.8.4 Work Center Workload Report

13.2.8.4.1 The Work Center Workload Report can be generated from any VED and reflects all outstanding WOs, based on criteria the user selects, against aircraft or nonaircraft. Outstanding WOs include those with JC status awaiting Maintenance Control approval.

13.2.8.4.2 This report is an excellent tool for the Work Center Supervisor to manage work center workload and should be printed prior to each shift for contingency operation. By keeping notes, updating status, and annotating this report, the Work Center Supervisor has the ability to set work load priorities should the system experience a down period.

13.2.8.5 Aircraft/Equipment Workload Report

The Aircraft/Equipment Workload Report can be generated from any VED and should be printed prior to each shift for contingency operation. The Aircraft/Equipment Workload dialog box enables the user to generate a listing of all active WOs for all or a specific aircraft, SE, ALSS, or MME.

13.2.8.6 Aircraft Material Status Report

The Aircraft Material Status Report is only generated from the Aircraft VED. The Aircraft Material Status dialog box enables the user to generate a listing for all or specific aircraft material requisitions, their types, status, sort, and application. The report may include all or a selected work center.

13.2.8.7 Inspection by Assembly Code Report

The Inspection by Assy Cd Report can be generated from any VED. The Inspections by Assy Cd dialog box enables the user to generate a list of inspections that have been established for a specific aircraft, SE, ALSS, or MME Assy Cd. It shows the interval codes, inspection names, and intervals derived from the aircraft's MRCs.

13.2.8.8 Scheduled Inspections Report

The Scheduled Inspections Report can be generated from any VED. The Scheduled Inspections dialog box enables the user to generate a list of scheduled inspections for all or specific aircraft, SE, ALSS, or MME. The report displays information on the inspection, its interval code, interval, description, due time/date, and how much time remains on a given inspection.

13.2.8.9 Work Order Audit Trail Report

The Work Order Audit Trail Report can be generated from any VED. The Work Order Audit Trail dialog box enables the user to generate an audit report containing a list of WOs that were deleted from the database. It also enables the user to print the WO for a specific MCN that belongs to a specific VED. It contains the MCNs and reasons for deletion.

13.2.8.10 MAINT Reports

The following MAINT Reports are described in Chapter 14:

a. Consolidated Performance Metrics (MAINT-1 Report).

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

c. Subsystem Capability Impact Reporting by WUC/UNS (MAINT-3 Report).

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

e. Maintenance Manhour (MAINT-5 Report).

f. Detailed Data Extract (MAINT-6 Report).

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

13.2.8.11 Maintenance History Report

The Maintenance History window enables selection of one or more MODEX(es) to generate the NALCOMIS OMA Maintenance History Report. The report reflects all WOs (active and historical) that can be retrieved to readily create special reports, for example, trend analysis, discrepancy, and corrective actions, on a given date/time frame.

13.2.9 Data Analysis

13.2.9.1 Purpose. Allows extraction, organization, and analysis of events requiring corrective action or merit command management attention. By this process, management is provided with facts as a basis for decision making. 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.

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

13.2.9.3 Analysis Initiation. 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 and logistics, for example, manpower, productivity, reliability, maintainability, and readiness. An analysis based on clear, concise requirements is more likely to be meaningful and useful to the maintenance manager than one based on generalities.

13.2.9.4 Data Selection. Once the subject of the analysis has been identified, the analyst must determine the data needed to fulfill the requirement. Standard rules can not be applied to this phase of analysis. The analyst must choose intelligently, ensuring all facts that have a bearing on the subject are included in the analysis. The analyst must also know the data source that will best provide the required data.

NOTE: Data retrieved from the Foundation Tier only reflects information applicable to equipment in physical custody of the reporting custodian, therefore, care must be taken to ensure all records pertinent to the scope of analysis are selected.

13.2.9.5 Data Examination. This process involves the detailed study, or examination, of the accumulated data. There is no restriction as to who may conduct 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 selecting the parameters of the desired report. Regardless of who accomplishes the examination, the intent of the detailed study of the accumulated data is the same: (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.

R} 13.2.10 Maintenance Control Operating NTCSS Optimized OMA NALCOMIS

NOTE: Both paper logs and records and ALSs will be documented until NTCSS Optimized OMA NALCOMIS activities receive written direction from COMNAVAIRSYSCOM (AIR-6.8), and approval from the ACC/TYCOM. Such direction and approvals shall be on an individual command basis.

a. NTCSS Optimized OMA NALCOMIS significantly reduces the administrative burden and produces up-to-date status information necessary for the control of maintenance. Communication between Maintenance Control, work centers, Quality Assurance, and Material Control is essential to ensure successful operation. Each time a change of job status occurs, the Work Center Supervisor shall immediately update the WO.

b. The maintenance manager is concerned with aircraft status, operational commitments, ALSS status, SE status, MME status, workload requirements, and personnel assets. Efficient operation requires a centralized control point through which all information concerning these areas must pass. In an O-level activity this central point is Maintenance Control.

c. NTCSS Optimized OMA NALCOMIS is a management tool that provides essential, real-time information on a continuing basis through online VED and reports. The system correlates aircraft status information, particularly NMCS/PMCS, flyable discrepancies, nonaircraft-related discrepancies, for example, ALSS status, SE status, MME status, and assigns a relative importance to each item. The ability to review the overall situation and determine the resources available enables maintenance managers to carry out their duties more effectively and efficiently.

R} 13.2.10.1 Operating Procedures

13.2.10.1.1 Maintenance Control must be in control of maintenance to ensure successful operation. Information shall flow expeditiously among Maintenance Control, Material Control, QA, and the work center.

13.2.10.1.2 Maintenance Control shall:

a. Monitor current aircraft/equipment status within NTCSS Optimized OMA NALCOMIS.

b. Maintain cognizance of incomplete maintenance actions.

c. Take actions necessary for reporting configuration, material readiness, and flight data.

d. Brief pilots and aircrew prior to an FCF through the use of appropriate QA and work center personnel. The briefing shall describe the maintenance performed, the requirements for that particular flight, and the expected results.

13.2.10.1.3 Upon completion of the flight, the pilot/aircrew initiates a WO for each discrepancy. For discrepancies discovered by other than pilot or aircrew, the person who discovered the discrepancy will initiate the WO. In the case of WD Code O, Maintenance Control will initiate the WO. Corrosion Prevention MAF/WOs may be initiated by any pilot, aircrew, or maintenance personnel. NTCSS Optimized OMA NALCOMIS prompts the user to complete required data fields during WO initiation. The JCN is automatically assigned when the WO is approved by Maintenance Control. The Type WO Code, Assy Cd, BUNO, T/M, MODEX, received date, and received time are prefilled. The received date and time can be changed. Work center, discrepancy, initiator, WD code, and up/partial/down status field shall be filled in

prior to saving to the database. Maintenance Control will use the applicable MESM to screen each discrepancy for impact on the affected aircraft system/subsystem. A MESM is essential to perform specific missions and achieve required material condition readiness, maintenance standards, supply system effectiveness, and safety requirements of OPNAVINST 3710.7. All other fields are optional.

13.2.10.1.4 Upon reviewing WOs, Maintenance Control has the option to modify all fields of the WO except BUNO, Assy Cd, and TM. Upon approval, the WO is automatically populated into the AADB and Work Center Workload Report.

13.2.10.1.5 When corrective action has been completed, Maintenance Control reviews, approves, or rejects the corrective action block of the WO. Upon approval of the completed WO, NTCSS Optimized OMA NALCOMIS automatically updates the AADB, where it shall remain for 10 subsequent flights following the completion date. The ALS administrator will review completed WOs to ensure ALS entries are complete.

13.2.10.1.6 When parts or materials are required, the Maintenance Control Supervisor will assign the appropriate project code and priority designator on the WO using the project/priority assignment online process. The Material Request is electronically forwarded to Material Control's online DDSN assignment process. The DOD 4140.1-R provides proper application of priority designators and NAVSUP Publication 485 for project codes.

13.2.10.1.7 Repair documentation.

13.2.10.1.7.1 Received. System automatically defaults to system date/time upon initiation. The initiator has the capability to modify prefilled date/time prior to Maintenance Control approval.

13.2.10.1.7.2 In Work. System assigns prefilled date/time upon assignment of worker. This field is modifiable.

13.2.10.1.7.3 Awaiting parts. AWP status requires an open supply requisition and the absence of In Work status. Once a part is received the default job status will be M3.

13.2.10.1.7.4 Completed. The job status code of JC and date/time are automatically applied when the CDI/QA signs the Inspected by block. This field is modifiable. The computer displays the current system time as the completion date/time, but also provides a pop-up window that advises the CDI as to the earliest completion date/time that the WO can be modified to. The date and time will not be able to be backdated prior to the last job status on the WO or the date/time on the Removed/Installed records, whichever is later.

13.2.10.1.8 Maintain an AADB for each aircraft assigned. The AADB is designed to provide maintenance and aircrew personnel with an accurate, comprehensive, and chronological record of flights and maintenance performed on a specific aircraft by BUNO for 10 flights. Aircrew, ground crew, and fix phase discrepancies shall be displayed in the AADB. For phase or special inspections only the control document, representing look phase actions, are displayed in the AADB. The AADB shall accurately reflect the status of pending maintenance requirements as displayed in the NTCSS Optimized OMA NALCOMIS database. The AADB for each specific BUNO shall be screened for accuracy of completed and outstanding WOs before Maintenance Control certifies the aircraft Safe for Flight.

NOTES: 1. When a special inspection is completed, the control document will be retained in the AADB until completion of the next like special inspection.

2. Equipment Discrepancy Books for AMCM equipment will be maintained by the AMCM Systems Maintenance Department Maintenance Control using the instructions for AADBs.

3. WOs will be separated by flights.

4. Activities using NTCSS Optimized OMA NALCOMIS shall use and upkeep the AADB in the system. Additionally, with the NTCSS Optimized OMA NALCOMIS release 831-01.05.00 or greater, the SA/DBA shall perform a backup of all Aircraft AADB Summary pages in R} MDI format on an external media source, for example, floppy disk, CD, or external hard drive. At a minimum, AADB summary page backups shall be performed prior to the first event of the flight schedule and at the end of each shift. Refer to https://webnet.scn.spawar.navy.mil FAQ section or COMNAVAIRFOR's web portal for instructions on how to save AADB Summary pages using MDI format.

13.2.10.2 Phase Maintenance Procedures

13.2.10.2.1 When an aircraft is inducted into a phase inspection, Maintenance Control and the inspection supervisor shall ensure all WOs are properly entered into NTCSS Optimized OMA NALCOMIS, for example, work center change, FCF compliance, and QA required.

13.2.10.2.2 Cannibalization actions will be authorized and directed by Maintenance Control.

13.2.10.3 Work Order (WO) History

Completed historical WOs will be stored in the local database for a minimum of 12 months from completion date. Users have the ability to view ADW data for up to 5 years. Historical WOs are attached to aircraft/equipment by BUNO/SERNO and are automatically transferred with aircraft database.

13.2.11 Work Order (WO) Documentation Procedures

The purpose of this section is to provide detailed procedures to be used in documenting maintenance actions on WOs. The WO is used to document, in addition to on-equipment maintenance actions, the removal and subsequent processing of a repairable component or item to an IMA/FRC.

13.2.11.1 Types of Maintenance Actions

WOs will be used to document the following types of maintenance actions:

a. On-equipment work not involving removal of defective or suspected defective repairable.

b. Look phase of acceptance, transfer, special, conditional, major aircraft and special inspections and corrosion, preservation and depreservation.

c. Fix phase actions discovered during inspection.

d. Removal of components for check/test/service actions.

e. Removal and replacement actions for cannibalization.

f. Accumulated man-hours as a result of work stoppage for parts or maintenance.

g. Maintenance actions and man-hours by the assisting work center in support of a primary work center.

h. Support of a repairable item processing through the IMA/FRC.

i. Incorporation of TDs and associated maintenance actions.

j. Collection of SCIR data.

k. Removal and replacement of repairable components in end items.

l. Removal or installation of components for mission configuration changes.

m. Record of ordering and issue of repairable components, subassemblies, and parts.

n. Troubleshooting man-hours.

o. Accumulated man-hours on jobs not completed due to an aircraft mishap.

p. Documentation of preservation and depreservation.

q. Documentation of O-level and I-level functions supporting D-level maintenance actions.

R} 13.2.11.2 Data Field Dictionary

This section describes the data elements used in documenting maintenance actions on the WO. The codes used to describe the data on this record are found in Appendix E. Specific data blocks to be used and data block requirements are controlled by the aviation 3M MDS VALSPEC Guide (http://www.navair.navy.mil/logistics/valspec). Paragraphs 13.2.13 through 13.2.17 provide specific data element application and requirements.

Action Taken. Enter the one-character alpha or numeric code that describes the action taken. This code describes the action performed on the item identified by the WUC/UNS. AT codes are in Appendix E.

NOTE: The TD status code is a single-character alpha code used to indicate the compliance status of a TD. This code is entered in the action taken field of the WO when reporting TD status. These codes are in Appendix E.

Assy Cd. Enter or select the four-character Assy Cd that describes the end item on which work is being performed.

BUNO/SERNO. Prefilled or enter for hosting activity. It is the BUNO/SERNO of the equipment or end item on which work is being performed. If more than six digits, enter the last six. If less than six digits, prefix with sufficient zeros to total six characters. In cases of on-equipment work at the O-level for personal survival equipment, enter the first letter of the aircrewman's first and last name and the last four digits of the SSN.

CF Req. The O-level activity will select if a check flight is required after completion of the maintenance action.

Completed Date/Time. Day (DD) Month (MMM) Year (YYYY) Time (TTTT).

Corrected By. The name and rate of the worker assigned to the maintenance action.

Corrective Action. Enter a narrative description of the action taken to correct the discrepancy.

Current Job Status. A two-character code used to describe the status of a specific task (Appendix E).

Disc Code. Prefilled based on Type WO Code or select from the drop down menu. The WD code is a plain language or single alpha-character that identifies when the need for maintenance was discovered. The three sets of WD codes that cover the equipment categories are (1) aircraft and engines; (2) SE, PME, and expeditionary airfield; and (3) missiles/missile targets. Definitions and explanations of these codes are in Appendix E.

Discrepancy. Enter a narrative description of the reported discrepancy.

Elapsed Hrs. Auto calculated on the WO, the number of clock hours involved in making the repair (in hours and tenths).

EOC. Prefilled based on the U/P/D indicator and WUC/UNS selection. An EOC code describes the degradation of the aircraft's mission capability.

Fid. Leave blank, reserved for future use.

H-Z Failed/Required Material. This section will be used to document a failed part without an AWP situation, a failed part and an AWP situation occurring simultaneously, an AWP situation without a failed part, and a supply request only with no failed part or AWP situation. A failed part and an AWP situation occurring simultaneously and an AWP situation without a failed part will only be documented at IMAs/FRCs. A supply request will not have an index letter. This section will also be used for engine identification and subsequent failed parts reported against the identified engine, for example, repairable components that are an integral part of the basic engine (excluding propellers but including the T56/T76 gear box) or receive their primary source of power from the basic engine.

Index. Letters H - Z. The letters represent a specific record type to be extracted from the WO for failed parts, AWP, and engine identification reporting. Index letters H - Z shall be assigned automatically in alphabetical order. This allows the 19 most significant failed parts to be reported against a specific maintenance action, for example, assignment of index H indicates the first failed part record, Z indicates the last and 19th failed parts record against the maintenance action. The purpose of this block is to flag engineering data items only, not supply usage data. Therefore, only significant failed parts will be annotated in this block, such as those items which are known or suspected to have contributed to the discrepancy reported in the discrepancy block of the WO. There is no limit to requisitioning parts.

Failed/Part. Enter a Yes (Y) or No (N) to denote a failed part if the failed material or parts replaced during the repair are piece parts that have failed in a major component. Common hardware, nuts, screws, safety wire, seals, gaskets, washers, fittings, etc., routinely replaced during a maintenance action will be documented only if their failure is known or suspected to have contributed to the discrepancy.

NOTE: PEB items, such as common hardware, nuts, bolts, screws, safety wire, seals, gaskets, fittings, and washers, routinely replaced during a maintenance action that DID NOT contribute to the discrepancy, will be listed for material ordering purposes only. Data blocks Index, Failed Part AT Code, and MAL Code will be left blank. Do not document items available in the PEB, only those items that are not in stock for material ordering purposes, unless PEB items caused the failure or were suspected of contributing to the discrepancy.

Action Taken. Enter the one-character alpha or numeric code or select the plain language AT code description, which describes the action taken against the removed module, subassemblies, or significant failed parts required. AT codes are listed in Appendix E. For engine identification, enter O for installed, P for uninstalled, or S for removal and reinstallation.

MAL Code. Enter or select the three-character alphanumeric code used to describe the malfunction that caused the maintenance action on the item described by the WUC/UNS. MAL description codes are contained in Appendix E:

CAGE. Enter or select the CAGE of failed part or required material. For engine identification, enter the engine Assy Cd followed by the numeric digit indicating the engine position.

Part Number. Enter or select the manufacturer's P/N of the failed or required material. For engine identification, the engine SERNO and the engine time (prefixed with an E) are auto prefilled based upon selection of the WUC/UNS. Use time since overhaul (if known) otherwise use time since new (whole hours only).

Quantity. Enter the quantity of failed or required material (1 to 99). For engine identification, enter 0.

Proj. Enter or select project code (as applicable).

Pri. MILSTRIP priority assigned to the material requisition. This field is linked to project code.

Rpr Ind. This is automated based on WUC/UNS CM baseline. Y indicates a repairable.

Order Date. The Day (DD) Month (MMM) Year (YYYY) Time (TTTT) the material was requisitioned. This is auto-filled upon Material Control approval.

DDSN. MILSTRIP requisition number of the material required completing the maintenance action. This is auto-filled upon Material Control approval.

Received Date. The Day (DD) Month (MMM) Year (YYYY) and Time (TTTT) that requisitioned material is received.

Status. An eight-position alphanumeric field consisting of a three-position Julian date and a five-position status.

Reference. Enter the supply reference to aid the Material Control Division in requisitioning the failed or required material.

In process. Documented in-process inspections are indicated with a Y.

In Work Date/Time. Day (DD) Month (MMM) Year (YYYY) Time (TTTT).

Initiated By. System prefilled by log-in identification, field is modifiable. The name and rank/rate of originator of the discrepancy is printed in this block.

Inspected By. The name and rate of the QAR or CDI who inspects the job for proper standards and certifies the accuracy of the WO is entered in this block. Maintenance Control can sign off inspection control documents.

NOTE: No further WO modification is allowed after CDI signature is applied to the inspected by field.

Items Process. Enter the number of times that an action, indicated by an AT code, is applied to the item identified by the WUC/UNS recorded on a WO. Items processed will be 0 for any look phase inspection WO.

JCN. The JCN is a nine-character alphanumeric code that serves as the basis for NALCOMIS Data Collection System and Maintenance Control procedures. The JCN allows identification of each maintenance action and provides a link with the maintenance actions performed by the IMA in support of an activity or an O-level maintenance discrepancy. The JCN is composed of three parts:

ORG. This is a three-character alphanumeric code that identifies an organization. It is used in the JCN to identify the organization that originally assigned the JCN to a maintenance action, except that in the case of transient aircraft maintenance, the JCN will contain the organization code of the aircraft-reporting custodian. The general format and structure of ORG codes is described in Appendix E. A complete listing of ORG codes may be found in the NALDA Organization Code Translator (http://www.navair.navy.mil/logistics/orgtranslator).

DAY. This the three-character part of the Julian date specifying the day of the year. This is the date the JCN was assigned to a maintenance action and does not necessarily reflect the date on which work was actually started.

SER. The SERNO is either a three-character numeric number that runs sequentially or a three-character alphanumeric number. The three-character numeric number is normally assigned in sequence as new jobs are initiated, for example, 001 and 002. After 599, the next number in sequence will be 001. Alphanumeric serial numbers are used only when documenting inspections other than turnaround, daily, special, conditional, corrosion, and acceptance/transfers. Alphanumeric JCN structure for phase, IMC/P, **A}** EPM, or SDLM inspections will be assigned as follows:

LOOK	FIX
A00 through Z00 to AA0 through ZZ0	A01 through A99 Z01 through Z99 AA1 through AA9 through AAA through AAZ ZZ1 through ZZ9 through ZZA through ZZZ.

NOTE: For sub-custody SE in the custody of another department that requires repair by the AIMD, the JCN will be assigned by the AIMD Production Control, reflecting the AIMD ORG code.

Local Use. This block may be used as desired.

Log-set:

Maintenance Control may select ALS block required.

The entry is automated for items that have tasks in CM.

Maint Control. The name and rate of the individual approving the corrective action.

MAL Code. Select the plain language description or enter the three-digit code that best describes the malfunction occurring on or in an item identified by a WUC. MAL codes are listed in Appendix E. For engine identification, enter 000. MAL code will be blank for TD documentation.

Man-Hrs. Auto calculated on the WO, the number of man-hours that were expended to correct the discrepancy (in hours and tenths).

MCN. The MCN is a seven-character alphanumeric code assigned by the system that is the basis for NALCOMIS Data Collection System Maintenance Control procedures. The MCN is used in NTCSS Optimized OMA NALCOMIS while querying the database and tracking the WO through the maintenance process.

Meter. This block is mandatory when Assy Cd for on-equipment work is G, H, or S and maintenance level is 1.

M/L. Select or enter the level of maintenance (1 through 6) which is performed (not necessarily the level assigned to the activity).

Modex. (Prefilled). Enter or select the side number (Modex) of aircraft or leave blank for SE.

Org Code. (Prefilled). The organization accomplishing the work. ORG codes are listed in the NALDA Organization Code Translator (http://www.navair.navy.mil/logistics/orgtranslator).

Posit. Auto-filled based on the WUC/UNS selected.

QA Req. The O-level activity will select if a maintenance action requires a QAR inspection. (Not applicable to CDI inspections.)

Received Date/Time. Prefilled or enter the Day (DD) Month (MMM) Year (YYYY) Time (TTTT).

Removed/Old Item or Installed/New Item. CAGE, SERNO, P/N, Date Removed or Installed, CDI Signature. These blocks are completed on the WO when a repairable component is removed or installed from/on the end item or major component on which work is being performed. Enter or select the CAGE code, SERNO, and P/N or lot number for the CARTs, CADs, or Aircrew Escape Propulsion System device. DATE Removed or Installed block enter Day (DD) Month (MMM) Year (YYYY) the repairable component is removed or installed from/on the equipment. CDI verifies the accuracy of the fields prior to signing.

Safety EI. Enter the locally assigned four-digit control number from the JDRS DR (RCN).

System Reason. Enter short description of the discrepancy or two-digit system code.

Tech. Enter an N for all maintenance actions involving ETS support.

TD Identification. All TD information is input via the baseline manager and, upon initiation of a TD WO, all TD information is auto-filled from the CM/Baseline tables. TD Identification is divided into seven sections as follows:

Interim Cd. X indicates an interim TD; otherwise blank.

Code. A two-character numeric code that denotes the type of directive being incorporated. TD codes are in Appendix E.

Basic No. A four-character numeric code identifying the basic TD proceeded by zero(s) to complete the field.

Rev ltr. A one-character alpha code that denotes the specific revision of the basic TD. Blank if not applicable.

Amend. A one-character numeric amendment number of the basic TD. Blank if not applicable.

Part. A two-character numeric part number listed in the TD. Blank if not applicable.

Kit No. A two-character alphanumeric number of the specific TD kit incorporated. If no kit is required, 00 will be in this section.

Trans code. Plain language description of the code or a two-character numeric TRCODE used to identify the type of data being reported (Appendix E).

Turn-In MCN. Prefilled MCN on specific item removed for processing to the IMA/FRC. Used to assist local supply control.

Type Maintenance. Prefilled based on Type WO Code selected. Plain language or a one-character alpha or numeric code used to describe the type of work being accomplished. For example, scheduled, unscheduled, and supply support actions (Appendix E).

Type WO. Enter or select, from the drop down, a two-character code that describes the type of work/task to be performed (Appendix E).

U/D/P. Select as appropriate (Up, Down, Partial) to indicate end item status.

WO Update Job Status/Worker Hours:

Accumulated AWM Hours. The calculation of AWM hours is automated. There is no AWM Block.

Job Status History. JS history of the WO from start to finish. STATUS – A two-character code used to determine the status of a specific task. DATE (DD) MONTH (MMM) YEAR (YYYY) TIME (TTTT).

Worker Hours. Enter last name of worker and tool box assigned to the task. Upon return to the work center the CDI/Supervisor/QA shall conduct a sight inventory of the tool container(s) and verify Tool Control Program requirements have been complied with. If no tools are required enter NTR. Start date/time - enter the beginning of the worker start date/time. Day (DD) Month (MMM) Year (YYYY) Time (TTTT) and end date/time - enter the end date time of the worker end task Day (DD) Month (MMM) Year (YYYY) Time (TTTT). CDI/Supervisor/QA BLOCK initials are entered here.

NOTES:
1. A worker can not be in work on more than one WO at a time.
2. CDIs may account for man-hours expended while performing on equipment inspections. If no tools were used to perform inspection, the CDI will enter CDISUP in the toolbox block. CDI initials are not required. Work center supervisors may also account for man-hour expenditure involving research and ordering parts, using the same procedures as above.

Current Job Status – Displays the current job status of the WO in the following format: status, date, time, and EOC code.

Inspection SCIR Impact. If an inspection is initiated in an Up status and then reaches its maximum allowable deviation (drop dead date), the NALCOMIS system has an auto-down program which will automatically change the status of the inspection WOs to a Down status. Until such time as Maintenance Control decides to SCIR Impact the inspection by selecting the SCIR Impacted Insp option from the Aircraft VED, the aircraft inspection WOs will not have an EOC displayed. Once SCIR Impacted, an EOC of "Y" is placed on the Control WO, and an EOC of "Z" is placed on the Look Phase WOs. This action cannot be reversed. The EOC Start Date/Time field will be displayed on the Job Status/Worker Hours screen with the date/time of when the SCIR Impact option was initiated and display the EOC of "Z". This field will be used to start the SCIR clock, and the MAINT-1, MAINT-2, and MAINT-3 reports will calculate the aircraft readiness using this field.

Work Center. Defaults to the work center of the initiator, but is modifiable. If needed, select from the drop down the applicable work center the discrepancy is assigned to (Appendix E).

WUC/UNS. Select or enter the WUC/UNS that identifies the system, subsystem, or component on which work is being performed.

13.2.12 Aircraft Inventory and Readiness Reporting System (AIRRS)

CM ALS and DBAs will read and become familiar with the contents of this section, Chapter 5, and the MESM (provided on COMNAVAIRFOR's web portal). Inventory accountability is accomplished through XRAY reporting in the CM module. XRAY date/time will reflect 1 minute later than transfer date/time.

13.2.12.1 Subsystem Capability and Impact Reporting (SCIR) System

The SCIR System is used to monitor mission capability of selected systems/subsystems. SCIR will be documented on the WO concurrently with the maintenance action that caused the reduction of the equipment's mission capability. This system provides managers with the degree of mission impairment, the length of time the equipment's capability was reduced, the system/subsystem that caused mission impairment, and maintenance/supply impact on equipment capability.

13.2.12.2 Equipment Operational Capability (EOC) Codes

13.2.12.2.1 An EOC code is a one alpha-character code designed to describe the severity level of SCIR maintenance actions. The EOC code is linked to the WUC in the CM baseline. EOC is prefilled based on the U/P/D indicator and WUC selection. Only one EOC can be documented on a WO. When required, the EOC is documented on the Single Work Center Inspection WO or the Look Phase WOs for inspections requiring more than one work center.

13.2.12.2.2 Each T/M/S aircraft under SCIR has an EOC code list, called a MESM. MESMs are published by CNO.

13.2.12.3 Mission Capability

Maintenance actions impacting mission capability of the end item are considered to be SCIR related. Mission capability is impacted whenever a system or subsystem listed in the MESM cannot be used for its intended function. Sometimes only the function is listed in the MESM. A subsystem is considered nonfunctional even though the final disposition may be no defect (A-799). Sometimes a discrepancy report will imply the subsystem is functional but troubleshooting proves it was not. In these cases, mission capability is considered impacted from the time the discrepancy was reported.

13.2.12.4 Subsystem Capability and Impact Reporting (SCIR) Application

13.2.12.4.1 SCIR is applicable to all on-equipment work on end items having a MESM and is documented automatically based upon the U/D/P status indicator and the user selected WUC/UNS in NTCSS Optimized OMA NALCOMIS whenever mission capability is impacted.

13.2.12.4.2 SCIR is applicable when mission capability is impaired while:

a. Repairing an end item.

b. Inspecting an end item.

c. Installing a TD on an end item.

d. Removing a component from an end item for repair, modification, or calibration.

13.2.12.4.3 SCIR is not documented:

a. On end items not having a MESM.

b. When performing off-equipment work.

c. When the maintenance action or discrepancy does not impair mission capability of the aircraft.

13.2.12.5 Change of Equipment Operational Capability (EOC) Code

The decision to change a SCIR status shall be made by Maintenance Control. To change an EOC code, use the SCIR change function within the WO. The SCIR change function is used for those non-SCIR discrepancies that increase in severity. When executing the SCIR Change Option, the computer will closeout the original WO and creates a new WO with the appropriate EOC. The original WO must contain sufficient information to pass the OOMA on-line validations prior to the SCIR change. The new WO will have the same JCN as the original WO, but it will have a new MCN along with the new EOC code. The date/time received will be computer generated at the time of the SCIR change and is not modifiable. This option will

be used to change a discrepancy from Up to Partial or Down, and to change Partial to Down. This feature is not used to change the SCIR status for Look Phase Inspection WOs.

NOTES: 1. This procedure replaces EOC Code A functionality.

2. EOC Codes A and B are not used in NTCSS Optimized OMA NALCOMIS.

13.2.12.6 Subsystem Capability and Impact Reporting (SCIR) Corrections

13.2.12.6.1 Maintenance Control can make SCIR corrections to most WOs.

NOTES: All SCIR corrections change the new SCIR status back to the received date/time of the WO.

13.2.12.6.2 A SCIR correction to a Down status is prohibited if an M7 job status exists or if the aircraft has flown since the received date/time.

13.2.12.6.3 If the WO is being corrected to an Up or Partial status and parts have been ordered, the user is stopped if the project code is not valid for the new status.

13.2.12.6.4 If the WO is corrected to Partial status, the WUC/UNS must be selected from the MESM table. If there is more than one EOC Code for that WUC, the user is prompted to select one.

13.2.12.6.5 Inspection WOs cannot be changed from down to up status. Look phase inspection WOs cannot be changed from an up to down status (it must be done on the inspection control WO).

13.2.13 Aircraft Maintenance Documentation

The following paragraphs provide definitions of the various maintenance actions that shall be documented. Each maintenance action described below is initiated using a specific type WO code. Type WO codes are designed to auto-fill WO data fields with the correct information per NAMP policy and aviation 3M MDS VALSPEC Guide (http://www.navair.navy.mil/logistics/valspec). If an improper code is selected for a field not auto-filled, the on-line validation specifications pop-up window appears with the proper code(s) for that data field or reference to the appropriate appendix.

13.2.13.1 Aircraft Repair

13.2.13.1.1 Troubleshooting:

a. Type WO code: TS - Troubleshooting.

b. This time will be documented separately when the time expended in isolating a discrepancy is considered to be great enough to warrant separating the troubleshooting time from the repair time. Separating troubleshooting time requires completion of two WOs, one for the troubleshooting phase and one for the repair phase. When recording the troubleshooting time separately from the repair time, the total time taken to isolate the primary cause of the discrepancy is recorded on a separate WO using the system, subsystem, or assembly WUC (as appropriate).

13.2.13.1.2 On-equipment Removal and Replacement of Repairable Components:

a. Type WO code: DM - Discrepancy Maintenance.

b. A WO is used to document the removal and replacement of repairable components while performing on-equipment repair.

13.2.13.1.3 On-equipment Repair with no Replacement of a Repairable Component:

a. Type WO code: DM - Discrepancy Maintenance.

b. Completed per paragraph 13.2.11.2.

13.2.13.1.4 Turn-In of a Repairable and Locally Repaired Consumable:

a. No Type WO code assigned.

b. A WO is used to document the removal and subsequent IMA processing of a repairable component. These procedures will also apply to consumable components that are inducted into an IMA for repair. The WO will be completed per paragraph 13.2.11.2 except as noted below, even though the removal, repair and reinstallation of a component occurs within a single work center.

(1) If an item is still under warranty at the time of failure, ensure that CM ALS records indicate removal of a warranty item and the contract number.

(2) All ALSS turn-ins will be delivered directly to the ALSS pool. Requisition and turn-in procedures for ALSS assemblies and repair parts shall be as established in this instruction, the OMA-UG, or Online Help.

13.2.13.1.5 Receipt of Unsatisfactory Material from Supply:

a. Type WO code: DM - Discrepancy Maintenance.

b. Components Received Non-RFI and Not Installed or Improper Replacement Received. If non-RFI before installation or an improper replacement is received, notify Material Control. The original WO remains outstanding and the non-RFI component will be turned in on a DOD Single Line Item Release Receipt Document (DD 1348-1) prepared by Material Control. Ensure all accompanying documentation, for example, RFI tag, CM ALS record, and WO, are returned with all items. CM ALS records will be returned to Supply via the CM Group Explorer.

c. Components Received Non-RFI and Installed. Complete the original WO. Initiate a new WO with a new JCN. A replacement component is requisitioned using the new WO and a new WO turn-in document will be automatically created to accompany the non-RFI component to the IMA/FRC.

d. The WO will be completed per paragraph 13.2.11.2 except WD must be Y.

13.2.13.1.6 Component Received Missing Records:

a. Type WO code: DM - Discrepancy Maintenance.

b. Components, assemblies, or equipment received from supply missing CM ALS MSRs, AESRs, or component life limited record shall be considered as non-RFI and turned in on a DOD Single Line Item Release Receipt Document (DD 1348-1) prepared by Material Control. If the component is installed and cannot be determined to be new or newly overhauled, it shall be considered faulty.

NOTES: 1. If it can be determined that the component is in fact new or newly overhauled, a CM ALS record will be created upon receipt by the requisitioning activity prior to installation.

2. If a record is missing or not received, contact the COMNAVAIRSYSCOM Wholesale Foundation Tier for reconstruction of information/data or to have the latest record sent to the activity.

3. For missing paper records refer to procedures in this instruction.

13.2.13.1.7 Cannibalization:

a. Type WO code: CM - Cannibalization Maintenance.

b. Cannibalize order must come from Maintenance Control. Maintenance Control will authorize the aircraft, engine, or SE to be cannibalized and generate a MCN for the removal and replacement of the component being cannibalized. The procedures listed in this paragraph apply to all cannibalizations from end items, for example, aircraft, engine, and SE. Egress system related cartridges, CADs, and Aircrew Escape Propulsion Systems will not be cannibalized without prior cognizant Type Wing (ashore) or CVW (afloat) approval. Personnel parachutes, drogue parachutes, and RSSKs are excluded from this policy. The removal/installation of items for cannibalization will be documented on one WO. Cannibalization of consumable parts using the Consumable Cannibalization Wizard shall not require the documenting of the removal/installation blocks.

NOTE: Maintenance Control directs the cannibalization action using the automated cannibalization wizard.

13.2.13.1.8 Matched Set:

a. Type WO code: DM - Discrepancy Maintenance.

b. Document maintenance actions on components removed as a matched set, for processing at the IMA/FRC, for example, ASA-13A and APN-22/117, as follows:

(1) Each component is removed on a separate WO.

(2) Each component must have a separate JCN assigned by Maintenance Control.

(3) Each component within a matched set that must be removed during a maintenance action will be assigned the same MAL code that describes the system defect.

(4) In addition to the brief narrative, a statement will be added to the Discrepancy block, such as, "Matched Set, See JCN ___".

(5) An additional WO turn-in control document is initiated for each component. The turn-in document accompanies the component for processing.

c. The Matched Set (Component 1) and (Component 2) WO is completed per paragraph 13.2.11.2 except as noted below:

(1) Enter or select the failed parts and record supply requisitions (if applicable) in Material Required.

(2) The MAL code must be the same for all components of a matched set at the O-level.

(3) Enter or select from CM the appropriate data for the removed and the installed item.

13.2.13.1.9 Assisting Work Center:

(1) Type WO code: AD - Assist Maintenance.

(2) When it is necessary for another work center to assist the primary work center assigned to a maintenance action, an assist WO will be approved by Maintenance Control. These procedures do not apply to look phase inspections, the removal and reinstallation to FOM, or cannibalization.

13.2.13.1.10 FOM Action:

a. Type WO code: FO - Facilitate Other Maintenance.

b. A FOM action is the removal and subsequent reinstallation of an RFI engine or component from an end item in support of, or to permit access to, another maintenance action on the same end item. The component removed is not identified in the Removed or Installed item block of the FOM WO. When a component has been removed, note the serial number (if any) in the "local use" block for reference when the item is reinstalled. This notation will provide positive accountability of serialized RFI components removed to FOM.

13.2.13.1.11 Aircraft Transfer or Strike:

a. Type WO code: Use existing WO code assigned.

b. When an aircraft is involved in a strike, all outstanding maintenance actions for the affected aircraft will be closed out. For transfer aircraft, all outstanding maintenance actions will be closed out by the system and reinitiated by the receiving activity using the date and time recorded on the aircraft acceptance XRAY.

NOTE: Activities with CM ALS records must coordinate with the Supply Department and AIMD to ensure integrity of CM ALS records.

13.2.13.1.12 Hosting Activity/Transient Maintenance:

a. Type WO codes: HA - Hosting Activity and TM - Transient Maintenance.

b. Maintenance actions completed on transient aircraft are documented using the hosting activity WO code by the activity actually performing the transient maintenance. The activity performing transient maintenance shall provide the aircraft reporting custodian with documentation necessary to report all maintenance actions and to update CM ALS records.

c. The reporting custodian of an aircraft receiving transient maintenance shall, upon receipt of applicable records, update CM ALS records, report maintenance actions, and submit the completed maintenance action using the Transient Maintenance WO code.

NOTE: In the absence of designated QA expertise during transient maintenance, the pilot in command is authorized to either sign as inspector or designate a qualified member of the aircrew to function in this capacity. The pilot or designee will inspect the work performed from a technical standpoint to the best of their ability to ensure sound maintenance procedures were followed and areas where maintenance was performed are free from foreign objects. In the event the discrepancy involves flight safety, a QAR shall re-inspect the repairs upon return to home base. For Maintenance Control Signature, enter the appropriate signature and rate/rank of the Maintenance Control supervisor or designated representative.

d. The host activity will not document SCIR on transient aircraft.

13.2.13.1.13 In-Flight Maintenance:

a. Type WO code: DM - Discrepancy Maintenance.

b. In-flight maintenance is documented on a WO. In the absence of designated QA personnel during in-flight maintenance, the senior aircrew maintenance person is authorized to sign as inspector. This person shall inspect the work performed from a technical standpoint, to the best of their ability, to ensure sound maintenance procedures and practices were followed and areas where maintenance was performed are free of foreign objects.

c. The WO will be completed per paragraph 13.2.11.2 except work center must be X20.

NOTE: In the event a flight safety discrepancy is repaired while airborne, a designated QAR shall inspect the repairs after return to home base. This is in addition to the above inspection requirement.

13.2.13.1.14 Away From Home Maintenance:

a. Multi-Type WO codes can apply.

b. Most organizations occasionally deploy single aircraft or small units away from the parent organization for short periods of time, for example, hurricane evacuation, cross-country flight, and rocket and gunnery training. If maintenance personnel are deployed with the aircraft, all maintenance actions accomplished while deployed are documented against Work Center X30 (Appendix E) or the parent work center.

13.2.13.1.15 Components Authorized to be Removed Prior to Induction into Standard Rework:

a. Type WO code: DM - Discrepancy Maintenance.

b. Components authorized to be removed and retained by the squadron will be documented on a WO using TR Code 16, Malfunction Code 805, and AT Code P. Prior to reinstallation, those components should be inducted into IMA/FRC for check, test, or service using a work request per paragraph 13.2.16. Components authorized to be removed from aircraft for pool stock will be processed to the IMA/FRC using AT Code P and Malfunction Code 805. Components, when reinstalled, will be documented on a WO using TR Code 17, Malfunction Code 805, and AT Code Q.

13.2.13.1.16 Aircraft CARTs, CADs, and Aircrew Escape Propulsion System:

a. Type WO code: DM - Discrepancy Maintenance.

b. Replacement of aircraft installed explosive devices requires an individual WO for removal and replacement of each device.

c. The WO will be completed per paragraph 13.2.11.2. For scheduled removals, use Transaction Code 18, AT Code R, and Malfunction Code 804.

13.2.13.1.17 Intra-Activity Support WO:

a. Type WO code: IA - Intra-Activity Support.

b. This procedure allows documentation for local manufacture of material to support ALSS equipment, nonaeronautical equipment, or aircraft equipment not currently identified by a WUC. It does not replace assist WO procedures, which assist a primary repair action or work request for work that is beyond an activity's capabilities.

13.2.13.1.18 Corrosion (Aircraft and Aeronautical Equipment):

a. Type WO codes: CP - Corrosion Prevention and CT - Corrosion Treatment.

b. Corrosion prevention and treatment of aircraft and aeronautical equipment is performed as part of a scheduled maintenance requirement or as an unscheduled maintenance action.

c. Corrosion prevention requirements found while complying with MRCs (scheduled maintenance) will be documented on the inspection look phase WO. This includes aircraft washing performed as part of a scheduled inspection.

d. Corrosion treatment requirements found during the look phase of an inspection will be documented on a fix phase WO. The treatment of bare metal is included in this category.

e. Unscheduled corrosion prevention is documented on the WO, only when the elapsed maintenance time exceeds one-half man-hour. Unscheduled aircraft cleaning and temporary repairs of bare metal are included in this category. Multiple items processed may be documented.

f. Unscheduled corrosion treatment actions are documented on the WO.

13.2.13.1.19 Reconfiguration (Aircraft and SE):

a. Type WO code: DM - Discrepancy Maintenance.

b. The installation or removal of equipment required to reconfigure an aircraft or item of SE to perform a new or different mission tasking than last performed shall be documented on a WO. It includes, but is not limited to, equipment identified as mission mounted equipment in Appendix E. It does not include materials which are consumed, expended, or undergo changes in their physical properties during use. Mission mounted equipment may exhibit one or more of the following characteristics:

(1) Installation or removal generally takes longer than a typical turnaround cycle.

(2) Installation requires electrical, electronic, hydraulic, or mechanical checks to ensure functionality.

(3) Classified as repairable or contains repairable components.

(4) Requires supplemental records, such as CM ALS records.

(5) Periodic maintenance intervals have been established.

(6) Once installed, equipment is likely to remain installed for extended periods of time.

13.2.13.2 Aircraft Inspections

13.2.13.2.1 Acceptance/Post D-level or Transfer/Pre D-level Inspection.

13.2.13.2.1.1 Type WO codes:

a. AC - Acceptance/Post D-level Inspection Control.

b. AF - Acceptance/Post D-level Inspection Fix Phase.

c. AL - Acceptance/Post D-level Inspection Look Phase.

d. AX - Acceptance/Post D-level Inspection Single Work Center.

e. TC - Transfer/Pre D-level Inspection Control.

f. TF - Transfer/ Pre D-level Inspection Fix Phase.

g. TL - Transfer/ Pre D-level Inspection Look Phase.

h. TX - Transfer/ Pre D-level Inspection Single Work Center.

13.2.13.2.1.2 These conditional inspections are documented using control, look, and fix phase WOs. Maintenance Control will generate a numeric JCN using a WO as a control document and each participating work center will be issued a look phase WO. Upon completion of the inspection, the control document will be completed by Maintenance Control with 1 item processed. Discrepancies discovered are reported to Maintenance Control and assigned JCNs.

13.2.13.2.2 Major Inspection of Aircraft.

13.2.13.2.2.1 Type WO codes:

a. PC - Phase Control.

b. PF - Phase Fix Phase.

c. PL - Phase Look Phase.

d. PX - Phase/PM Inspection Single Work Center.

13.2.13.2.2.2 Aircraft inspections except repetitive inspections, such as daily/turnaround, are documented on WOs using a unique coding system to identify the total effort as a continuous maintenance event. The principal documents involved are control, look, and fix phase WOs (as necessary).

NOTE: Phase, special, and hourly aircraft or engine inspections cannot be combined into one Control WO. They must be issued separately to satisfy CM requirements.

13.2.13.2.2.3 WUC. NTCSS Optimized OMA NALCOMIS will auto-assign the WUC upon initiation of the inspection WO. This WUC will be used for both control and look phase WOs related to the inspection. It is constructed as follows:

a. The first two positions will be 03. The third through seventh positions will be constructed to identify the specific type of inspection(s) being performed.

b. Position 3. For aircraft under phase maintenance, indicate with the appropriate alpha-character the aircraft inspection phase being performed, as listed in the applicable MRC deck, for example, 03A0000 (Phase Inspection).

c. Positions 4 – 7 for major aircraft inspections are zeros (0).

13.2.13.2.2.4 Discrepancy. Enter a description of the aircraft inspection due.

13.2.13.2.2.5 Corrective Action. At the completion of the inspection, enter "inspection completed."

13.2.13.2.2.6 Control Document. Maintenance Control issues a separate WO indicating all requirements for each aircraft inspection. These control documents will be held open until the inspection is completed and the aircraft is ready for a FCF (if required).

13.2.13.2.2.7 Aircraft Phase Inspection (Check Crew Not Integrated) Control Document. Documentation procedures will be per paragraph 3.2.11.2 except; work center code must be 020 (Appendix E).

13.2.13.2.2.8 Look Phase Documents. Look phase man-hours are documented on WOs by work centers participating in the inspection. SCIR is automatically documented on look phase documents for those inspections that the aircraft has been put into a down status due to the inspection. This is done so that accurate AWM can be accounted for by use of the WO job status. SCIR will not be documented on controlling WOs.

13.2.13.2.2.9 Fix Phase Documents. Discrepancies discovered during the look phase of the inspection shall be documented on separate WOs.

13.2.13.2.3 Special Inspections.

13.2.13.2.3.1 Type WO codes:

a. SC - Special Inspection Control.

b. SF - Special Inspection Fix Phase.

c. SL - Special Inspection Look Phase.

d. SX - Special Inspection Single Work Center.

13.2.13.2.3.2 These inspections are documented using control, look, and fix phase WOs. SCIR is automatically calculated based on Type WO code and Up/Down status. If an aircraft is downed for a special inspection, SCIR will be documented on the look phase WOs during the down portion of the inspection. Any fix phase discrepancies, discovered as a result of the special inspection, will be SCIR related if they affect the capability of the aircraft.

13.2.13.2.3.3 Aircraft Special Inspection Control Document. Documentation procedures will be per paragraph 13.2.11.2.

13.2.13.2.3.4 Aircraft Special Inspection Fix Phase. Fix phase actions on special inspections are documented using fix phase WOs. These JCNs are auto assigned by Maintenance Control when approved.

13.2.13.2.3.5 WUC. Special inspections will be documented using an appropriate alpha-character to indicate the level of special inspection being performed. A WUC seventh position matrix is contained in Appendix E. Example:

a. 7 & 14 Day Special controlling document: 030000A.

b. 28-Day Special controlling document: 030000B.

c. 56-Day Special controlling document: 030000E.

13.2.13.2.4 Conditional Inspections.

13.2.13.2.4.1 Type WO codes:

a. CC - Conditional Inspection Control.

b. CF - Conditional Inspection Fix Phase.

c. CL - Conditional Inspection Look Phase.

d. CX - Conditional Inspection Single Work Center.

e. OC - One-time Inspection Control.

f. OF - One-time Inspection Fix Phase.

g. OL - One-time Inspection Look.

h. OX - One-time Inspection Single Work Center.

13.2.13.2.4.2 Maintenance Control will issue all conditional inspections. If more than one work center is involved in the inspection, a controlling WO will automatically be issued. These inspections are documented using the special inspection procedures. Document SCIR only if (1) an over-limit condition exists, for example, hard landing, bolter, over-speed, or over-temp, which restricts the aircraft from further flight until the inspection is completed, or (2) higher authority directs a one-time inspection, not ordered in a TD, that restricts the aircraft from flight.

NOTE: Hosting activity TD documentation for transient aircraft will be documented as a one-time inspection.

13.2.13.2.4.3 Aircraft Conditional Inspection Control Document.

13.2.13.2.4.4 Documentation procedures will be per paragraph 13.2.11.2 except:

a. WUC must be 030.

b. For aircraft undergoing an ASPA inspection, enter WUC 030ASP0 and for aircraft undergoing a PACE inspection, enter WUC 030PAC0.

13.2.13.2.4.5 Aircraft Conditional Inspection Look Phase. Documentation procedures will be per paragraph 13.2.13.2.

13.2.13.2.4.6 Aircraft Conditional Inspection Fix Phase. Discrepancies are reported to Maintenance Control and assigned a numeric JCN.

13.2.13.2.5 Preservation.

13.2.13.2.5.1 Type WO codes:

a. FC - Preservation Control.

b. FF - Preservation Fix Phase.

c. FX - Preservation Single Work Center.

d. SP - Preservation Work Center Action.

e. BC - Depreservation Control.

f. BF - Depreservation Fix Phase.

g. BX - Depreservation Single Work Center.

h. SD - Depreservation Work Center Action.

13.2.13.2.5.2 Applicable publications used in support of the aircraft preservation process include the NAVAIR 15-01-500 and the daily, special, preservation, conditional, and ASPA MRCs. Not all aircraft have

MRCs revised to include preservation requirements. For those aircraft, NAVAIR 15-01-500 procedures will be followed. This instruction also provides additional information on the preservation process. Maintenance Control will issue all preservation, represervation and depreservation WOs. If more than one work center is involved in the preservation, represervation or depreservation, a controlling WO will automatically be issued. Documentation procedures for all preservation processes are the same.

13.2.13.2.5.3 Maintenance actions in support of the aircraft preservation process fall into four general categories:

a. Initial Preservation. Initial preservation is applied within the time frames listed in NAVAIR 15-01-500 or the applicable MRCs. It includes requirements that are intended to prevent deterioration of the aircraft while in a non-operating status.

b. Maintenance While Preserved. Maintenance while preserved includes periodic maintenance requirements that are done after initial preservation is applied. It includes time sensitive requirements that must be done to maintain the initial preservation. Specific intervals are in NAVAIR 15-01-500 or applicable MRCs.

c. Represervation. Represervation is a complete renewal of the initial preservation and is done when a specified length of time has elapsed from the initial preservation date.

d. Depreservation. Depreservation is done at the time an aircraft is returned to operating status. It includes removal of protective materials and equipment and servicing of the aircraft systems.

13.2.13.2.5.4 Maintenance Control issues a WO control document and supporting look phase documents to the work centers involved. The same numeric serial number JCN will be assigned to all documents, control and look phase.

13.2.13.2.5.5 Discrepancies discovered during the preservation process look phase will be documented on separate WOs.

13.2.13.2.6 Daily and Turnaround Inspections.

a. Type WO code: DF - Daily/Turnaround Discrepancy.

b. The look phase and required servicing actions are not documented on a WO. Discrepancies requiring work center repair actions will be reported to Maintenance Control.

13.2.13.3 Aircraft Technical Directive (TD) Compliance

13.2.13.3.1 TD Compliance Procedures (On-Equipment).

13.2.13.3.1.1 Type WO codes:

a. TD - Technical Directive.

b. AT - Technical Directive Assist.

c. ET - Technical Directive (Engine) SCIR.

d. QT - TD removal.

13.2.13.3.1.2 The WO is used to document TD compliance. The TD compliance WO is also used by reporting custodians for planning workload and material requirements, and for configuration accounting.

Maintenance Control originates the TD compliance WO. If more than one work center is involved, Maintenance Control must initiate a separate TD compliance WO for each work center to document their portion of the TD. TD removals will be documented in the same manner as TD incorporations except for Action Taken and the Material required record. TD Status Code Q will be entered in Action Taken and the material required record would be left blank.

NOTE: QECK bulletins/changes and propeller bulletins/changes are documented in the CM ALS AESR, CM ALS SRC, or CM ALS EHR as identified by the TD. The Assy Cd consists of type/model of the aircraft followed by a 9 in the fourth position, for example, APB9. The BU/SERNO will identify the QECK.

13.2.13.3.2 TD Compliance Procedures (Off-Equipment):

a. Type WO code: WR - Work Request.

b. TDs will frequently require off-equipment work and specify accomplishment at I-level. The activity will use the one-character code that describes the maintenance level actually performed.

c. If the TD compliance is directly applicable to a component, the removal and replacement of the component will be documented on a WO. The O-level activity will originate a TD compliance work request for the component being forwarded to the IMA/FRC. This TD compliance Work Request will accompany the component to the IMA/FRC for documenting the accomplishment of the TD compliance action and processing. The CM ALS records will be transferred to the incorporating IMA/FRC for documentation of the TD compliance. Once the removal is completed, the maintenance action remains outstanding until the reinstallation has been accomplished. If a component is not ordered, IMA/FRC will sign the TD Work Request indicating receipt of the component, and return a copy to the O-level activity as an IOU receipt.

d. The IMA/FRC will complete the remainder of the TD compliance Work Request.

e. If the IMA/FRC informs the O-level activity that the component requires repair, the O-level activity must initiate another WO for turn-in and requisitioning purposes using the original JCN.

13.2.13.3.3 TD Compliance Aircraft, Engines, Components, and Equipment Turn-In Document (IMA Assist):

a. Type WO code: TD - Technical Directive.

b. If a TD is complied with at the O-level (on-equipment work), all maintenance actions will be documented using the WO. If during compliance with a TD it becomes necessary to forward a component to the IMA/FRC for modification or inspection and return, the following procedures will be used. If the TD is applicable to the aircraft, the man-hours required to remove and reinstall the component will be documented on a TD compliance WO. The O-level activity will then originate a TD compliance WO for each component forwarded to the IMA/FRC. The IMA will sign the WO, indicating receipt of the component and return a copy to the O-level activity as an IOU receipt. The IMA/FRC will complete the remainder of the TD compliance WO as an "assist" work center.

13.2.13.3.4 Transient TD Compliance (Aircraft, Engines, Components, and Equipment):

a. Type WO code: HA - Hosting Activity.

b. Only immediate action type TDs are complied with for transient aircraft. All TD information will be provided in the Corrective Action and provided to the transient organization for CM ALS entries and processing of the TD WO.

13.2.13.4 Aircraft Engine and Airborne Auxiliary Power Unit (APU) Maintenance Documentation

13.2.13.4.1 General Information. The aircraft is considered to be the end item when work is performed on engines, except for TD compliance at the O-level maintenance activity. Engines sent to IMA/FRC for any reason will be considered the end item and the turn-in document will list the engine Assy Cd and the engine PSSN or the module SERNO. When documentation requires an engine or APU to be identified in the Removed or Installed Item, the CAGE will reflect the engine/APU Assy Cd and position number, for example, JHD1. The Part Number will be left blank when Assy Cd are used in the CAGE to identify engines/APUs. Documentation procedures for an aircraft engine or airborne APU are the same with the following exceptions:

a. CAGE for Material Required. When identifying an APU, enter numeric 1 for engine position; for example, PHA1.

b. CAGE for Removed or Installed Item. When identifying an APU, enter numeric 1 for engine position; for example, PHA1.

c. When documenting APU enter the engine hour meter or start counter reading (as applicable) in CM Current Usage Records.

13.2.13.4.2 Modular Engine TD Compliance:

a. Type WO code: TD – Technical Directive.

b. Maintenance Control will generate the TD compliance WO.

c. If more than one work center is involved, Maintenance Control must initiate a separate TD compliance WO for assist work center to document their portion of the TD.

d. If the TD has multiple parts, a separate WO must be initiated for each part.

e. TDs for modular engines will be issued against the module.

f. The WUC/UNS will be that of the module or component of the module, never the engine.

g. The Assy Cd will reflect the equipment category and model/series of the engine.

h. If the TD applies to more than one module, a separate WO with a unique JCN will be issued for each module.

i. TRCODE 47 will be used for a module regardless of a P/N change or a TD incorporation on a component.

j. The JCN will be that of the activity requesting the TD incorporation.

k. When a complete engine is being turned in for TD compliance, the PSSN will be entered in the Discrepancy block.

13.2.13.4.3 Engine Cannibalization:

a. Type WO code: CM - Cannibalization Maintenance.

b. Documentation procedures will be per paragraph 13.2.11.2.

13.2.13.4.4 Engine Inspections:

a. Multi-Type WO codes.

b. Documentation procedures will be per paragraph 13.2.11.2.

13.2.13.4.5 Unscheduled Engine Maintenance:

a. Type WO code: DM - Discrepancy Maintenance.

b. Documentation procedures will be per paragraph 13.2.11.2.

13.2.13.4.6 Removal and Replacement (solely for AIMD inspection):

a. Type WO code: WR - Work Request.

b. Documentation procedures will be per paragraph 13.2.11.2.

13.2.13.4.7 Turn-In Document (engine inspection). O-level activities will initiate a new WO to serve as the turn-in document that accompanies the engine to IMA/FRC. A printed out WO from the requisitioning activity will be attached and sent with the retrograde.

13.2.14 Support Equipment (SE) Maintenance Documentation

13.2.14.1 SE TD Compliance:

a. Type WO code: TD - Technical Directive.

b. Maintenance Control schedules TD compliance actions and initiates TD compliance WOs. The O-level activity will originate TD compliance work request WOs for each end item being sent to the IMA/FRC. The TD compliance WO accompanies the end item to the IMA for documentation of the TD compliance and for processing. The IMA/FRC will provide a signed copy of the work request WO, indicating receipt of the item and return it to the O-level activity as an IOU receipt.

13.2.14.2 SE Inspections Periodic Maintenance:

a. Multi Type WO codes apply.

b. Inspections (except preoperational and postoperational) and periodic maintenance actions are documented on WOs. The O-level activity will originate a WO for each end item forwarded to the IMA/FRC. This WO will accompany the end item to the IMA for documenting the inspections and for processing. The IMA/FRC will provide a signed copy of the WO, indicating receipt of the item and return it to the O-level activity as an IOU receipt.

13.2.14.3 SE End Item Repair:

a. Type WO code: DM - Discrepancy Maintenance.

b. The O-level activity originates a work request WO for each end item being sent to the IMA/FRC. This WO accompanies the end item to the IMA/FRC for documentation of the repair action. The IMA/FRC will provide a signed copy of the work request WO indicating receipt of the item and return it to the O-level activity as an IOU receipt.

13.2.15 Target Maintenance Documentation

13.2.15.1 Target Postlaunch Rehabilitation Inspection (Look Phase):

a. Type WO code: CL - Conditional Inspection Look Phase.

b. O-level maintenance personnel conduct postlaunch rehabilitation inspections to determine degradation or damage that may have occurred during a mission.

13.2.15.2 Target Postlaunch Rehabilitation Inspection (Fix Phase):

a. Type WO code: CF - Conditional Inspection Fix Phase.

b. Discrepancies discovered during a postlaunch rehabilitation inspection will be documented on the WO. The WUC identifies the failed component/system.

13.2.15.3 Target Configuration Change:

a. Type WO code: TD - Technical Directive.

b. When a component must be installed to support a certain mission a target configuration change WO will be completed.

13.2.16 Work Request

A work request is used by supported Maintenance and Supply activities to request work or assistance from the supporting IMA/FRC that is beyond the requesting activity's capability, and does not involve repair of aeronautical material.

a. Type WO code: WR - Work Request.

b. The WO work request is used for, but is not limited to, the following:

(1) To request check, test, and service of items removed from an aircraft/equipment/SE for scheduled maintenance when requested work is beyond the capability of the requesting activity.

NOTE: Work requests for items removed for check, test, service, and local manufacture or fabrication must be approved and signed by the requesting activity's Maintenance Control Supervisor and the supporting activity's Production Control Supervisor.

(2) To induct items not part of aircraft or SE, for example, pilot's personal equipment, oxygen masks, life preservers, and parachutes that require check, test, and service. In addition to documenting an IMA WO, documentation will be performed in CM ALS record for task completion.

(3) To induct items from Supply for check, test, and service.

(4) To induct items from Supply for build-up, for example, engines, QECKs, and tire and wheel assemblies.

(5) To induct items not having a WUC or not identifiable to a specific type of equipment for check, test, and service or for local manufacture or fabrication.

(6) To request NDIs, either on-site or at IMA/FRC, as required by supported maintenance activities, when a TD is not involved.

(7) To induct items for RFI certification, prior to installation in aircraft upon the return from SDLM.

R} 13.2.17 D-Level Maintenance

13.2.17.1 Standard Rework.

13.2.17.1.1 Type WO codes:

a. IC - PDM, IMC/P, or **A}** EPM Control.

b. IF - PDM, IMC/P, or **A}** EPM Fix Phase.

c. IL - PDM, IMC/P, or **A}** EPM Look Phase.

d. MC - SDLM (MCI/ASPA) Control.

e. MF - SDLM (MCI/ASPA) Fix Phase.

f. ML - SDLM (MCI/ASPA) Look Phase.

g. MX - SDLM (MCI/ASPA) Single Work Center.

13.2.17.1.2 Rework performed on aircraft (on-site and off-site) by naval aircraft industrial establishments, contractor's plants, and such other industrial organizations designated by COMNAVAIRSYSCOM will be documented using control, look, and fix phase documents.

13.2.17.1.3 Communication between the FRC and the squadron is crucial since the squadron is responsible for all aircraft readiness status changes for the FRC.

13.2.17.1.3.1 FRC activities will notify the reporting custodian upon arrival of the aircraft to be inducted into rework. At that time, the squadron will initiate the rework control document.

13.2.17.1.3.2 When the FRC activity is ready to change the status of the aircraft, the FRC will notify the squadron, which will complete the control document to terminate the aircraft standard rework status.

13.2.17.1.4 WUC assigned to PDM or IMC/P are sequential 030IMC1, 030IMC2, etc. WUC assigned to SDLM (MCI/ASPA) is 030SDLM. **A}** WUCs assigned to EPM are matched to LES Specification Numbers 03TKxxx, 03TSxxx, and 03TZxxx.

NOTES: 1. I-level personnel will comply with O-level QA, tool control, and documentation requirements.

2. Look phase documents are not issued for D-level.

3. The rework process encompasses the look phase only.

13.2.17.1.5 Fix phase documents will be issued for repair of discrepancies discovered during the on-site standard rework process. Off-site repair actions are not recorded.

13.2.17.1.5.1 O-level (level 1) discrepancies will be completed by the squadron:

a. Work Center: To provide accurate man-hour accounting by rate, corrective maintenance actions shall be documented against the host work center whenever practical (110, 120, etc.).

b. EOC codes: C through L and Z (MESM (provided on COMNAVAIRFOR's web portal).

13.2.17.1.5.2 I-level (level 2) discrepancies will be completed using the Work Request.

13.2.17.1.5.3 D-level (level 3) discrepancies will be accomplished by an FRC activity using assist work center procedures. If, in the repair process, a repairable is required the repairable will be ordered on the O-level primary WO. **A}** For EPM, D-level (level 3) discrepancies will be accomplished by a D-level activity using X40 work center procedures. If, in the repair process, a repairable is required, the repairable will be ordered on the D-level primary Task WO.

13.2.17.2 In Service Repair:

a. Type WO code: AD - Assist Maintenance.

b. ISR is the repair by COMNAVAIRSYSCOM FS activities of aircraft damaged beyond the repair capability of ACCs' maintenance activities.

c. ISR will be accomplished using assist work center procedures. **A}** For EPM, ISR will be accomplished using X40 work center procedures.

13.2.17.3 Modification.

a. Type WO code: TD - Technical Directive.

b. Modification is rework performed on new production aircraft and aircraft in the controlling custody of the operating commands. It includes only the incorporation of changes and bulletins and the correction of discrepancies as required in the directive authorizing the work to be performed.

c. Modification will be accomplished using TD incorporation procedures.

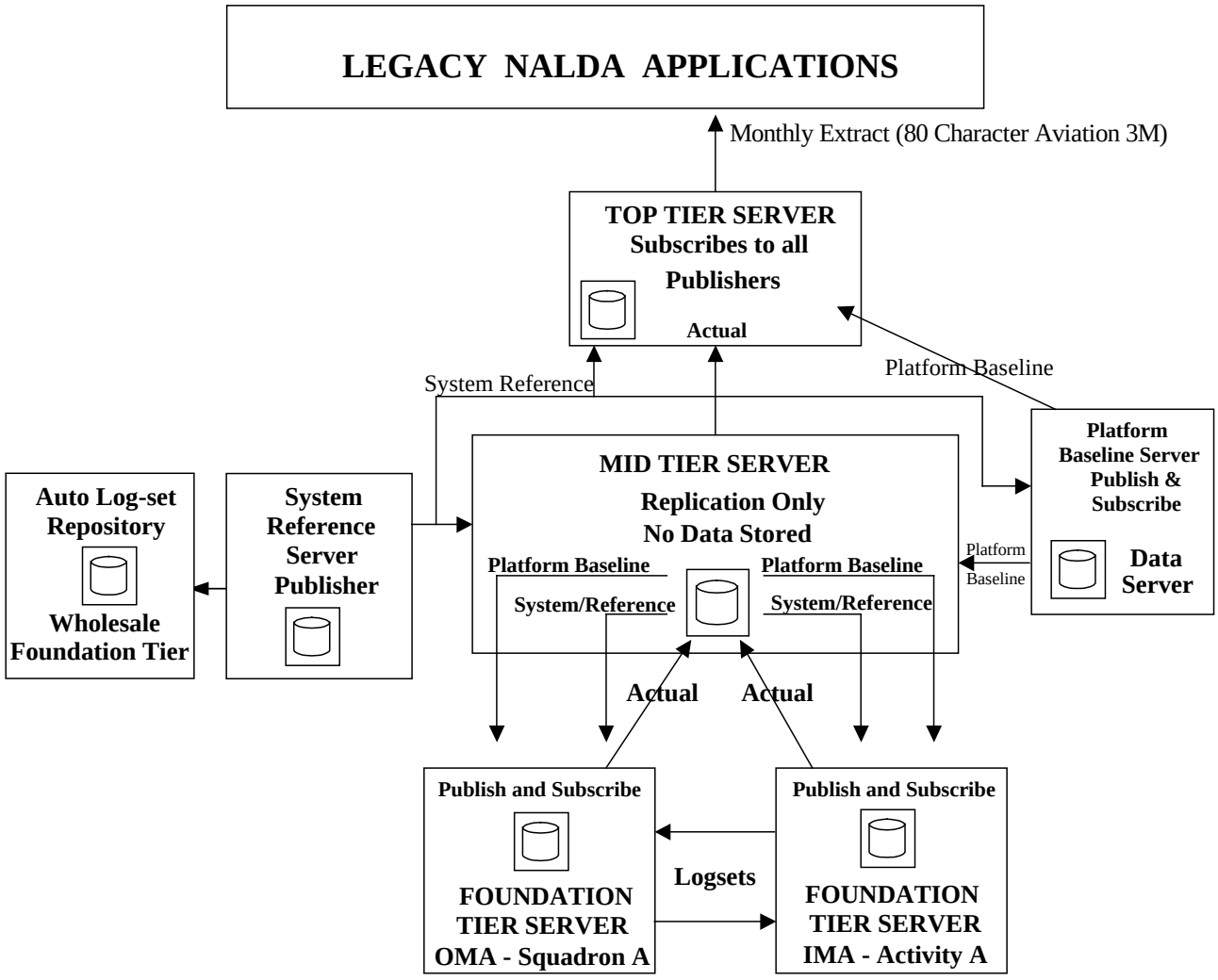

Figure 13-1: NTCSS Optimized OMA NALCOMIS Replication