CHAPTER 5
Maintenance Control, Production Control, and Material Control; Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-sets (ALS); and Aircraft Inventory and Readiness Reporting System (AIRRS)

Table of Contents

5.1 Maintenance Control, Production Control, and Material Control 1
5.1.1 Maintenance Control 1
5.1.1.1 System Administrator/Analyst (SA/A) Responsibilities 1
5.1.1.2 Aviation Logistics Information Management and Support (ALIMS) (Marine Corps Only) 3
5.1.1.3 Releasing Aircraft Safe for Flight 4
5.1.1.4 Hot Refueling and Hot Seating 6
5.1.1.5 Functional Check Flights (FCF) 7
5.1.1.6 Aircraft, UAS, and Equipment Inspection Procedures and Responsibilities 9
5.1.1.7 Engine Inspection Procedures and Responsibilities 20
5.1.1.8 Support Equipment (SE) Issue and Receipt Procedures 22
5.1.1.9 Support Equipment (SE) Acceptance and Transfer Procedures 22
5.1.1.10 Aviation Life Support Systems (ALSS) Inspection Procedures and Responsibilities 23
5.1.1.11 Scheduled Removal Components (SRC) and Assemblies 23
5.1.1.12 Aircraft and Equipment Cannibalization Management 23
5.1.1.13 Monthly Maintenance Plan (MMP) 25
5.1.1.14 Phased Depot Maintenance (PDM) Induction Requirements 25
5.1.1.15 Preservation Procedures and Responsibilities 26
5.1.1.16 Additional Maintenance Control Responsibilities 27
5.1.2 Production Control 28
5.1.2.1 Material Management Concepts 28
5.1.2.2 Supply Priorities and Project Codes 29
5.1.2.3 Awaiting Part (AWP) Validation 29
5.1.2.4 Workload Priorities Assignment 30
5.1.2.5 Controlling Awaiting Maintenance (AWM) 31
5.1.2.6 Hold Time for Repairable Components 31
5.1.2.7 Logs and Records Screening Procedures 31
5.1.2.8 Liaison with Quality Assurance (QA) 32
5.1.2.9 Maintenance Database Administrator/Analyst (MDBA/A) Responsibilities 32
5.1.2.10 Cannibalization Reduction 34
5.1.2.11 Broad Arrow (BA) Reporting 34
5.1.2.12 Component Repair 37
5.1.2.13 Preservation Procedures and Responsibilities 42

5.1.2.14 Additional Production Control Responsibilities 43
5.1.3 Material Control 43
5.1.3.1 Functions and Responsibilities 43
5.1.3.2 Ordering Parts and Material 45
5.1.3.3 Receipt and Delivery of Parts and Material 46
5.1.3.4 Turn-in of Defective Components 47
5.1.3.5 Repairables Management 47
5.1.3.6 Source, Maintenance, and Recoverability (SM&R) Codes 48
5.1.3.7 Financial Management 48
5.1.3.8 Aeronautical Material Screening Unit (AMSU) 54
5.1.3.9 Aircraft Maintenance Material Readiness List (AMMRL) Program 55
5.1.3.10 Warranty Program 55
5.1.3.11 Aircraft Inventory Records (AIRs) 55
5.1.3.12 Predeployment Planning 62
5.1.3.13 Supply Related Publications 64
5.1.3.14 Surveys 66
5.1.3.15 Aircraft Battle Damage Repair (ABDR) Supply Procedures 67
5.2 Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-Sets (ALS) 67
5.2.1 Aircraft Logbook 67
5.2.1.1 Logbook Clerk 67
5.2.1.2 General Information 71
5.2.1.3 Aircraft Logbook Description 73
5.2.1.4 Initiation 73
5.2.1.5 Signature Authority 74
5.2.1.6 Corrections 74
5.2.1.7 Dates 75
5.2.1.8 Shipping Information 75
5.2.1.9 Disposition 75
5.2.1.10 Reconstruction 76
5.2.1.11 Logbook Forms and Records 76
5.2.1.12 Structural Life Limits (OPNAV 4790/142) 76
5.2.1.13 Monthly Flight Summary (OPNAV 4790/21A) 78
5.2.1.14 Inspection Record (OPNAV 4790/22A) 80
5.2.1.15 Repair/Rework Record (OPNAV 4790/23A) 82
5.2.1.16 Technical Directives (OPNAV 4790/24A) 83
5.2.1.17 Miscellaneous/History (OPNAV 4790/25A) 90
5.2.1.18 Preservation/Depreservation Record (OPNAV 4790/136A) 92

5.2.1.19 Installed Explosive Device Record (OPNAV 4790/26A) 93
5.2.1.20 Inventory Record (OPNAV 4790/27A) 95
5.2.1.21 Aviation Life Support System (ALSS); Parachute Record (OPNAV 4790/101) 96
5.2.1.22 Aviation Life Support System (ALSS); Seat Survival Kit Record (OPNAV 4790/137) 99
5.2.1.23 Aviation Life Support System (ALSS); Aircrew Systems Record (OPNAV 4790/138) 102
5.2.1.24 Aviation Life Support System (ALSS); Aircrew Personal Equipment Record (OPNAV 4790/159) 105
5.2.1.25 Aeronautical Equipment Service Record (OPNAV 4790/29) 107
5.2.1.26 Equipment Operating Record (OPNAV 4790/31A) 109
5.2.1.27 Module Service Record (OPNAV 4790/135) 110
5.2.1.28 Assembly Service Record (OPNAV 4790/106A) 116
5.2.1.29 Equipment History Record (EHR) Card (OPNAV 4790/113) 121
5.2.1.30 Scheduled Removal Component Card (OPNAV 4790/28A) 126
5.2.2 Aircraft Flight and Summary Reporting Procedures 130
5.2.2.1 Units based in CONUS. 130
5.2.2.2 Units Based or Deployed Outside CONUS or Embarked on Deployed Ships. 130
5.2.2.3 Aviation detachment without a SA/A: 131
5.2.2.4 Disestablished Units 131
5.2.2.5 Corrections 131
5.2.2.6 Transfer of Aircraft Between Reporting Custodians 131
5.2.2.7 Naval Aircraft Flight Record (OPNAV 3710/4) 131
5.2.3 Configuration Management Auto Log-Sets 131
5.2.3.1 Configuration Management Module 131
5.2.3.2 Auto Log-Set (ALS) Management 134
5.2.3.3 Auto Log-Set (ALS) Reporting 135
5.2.3.4 Configuration Management (CM) Auto Log-Set (ALS) Administrator 135
5.2.3.5 General Information 137
5.2.3.6 Initiation 140
5.2.3.7 Signature Authority 140
5.2.3.8 Corrections 141
5.2.3.9 Dates 142
5.2.3.10 CM ALS Transfer and Receipt 142
5.2.3.11 Disposition. 143
5.2.3.12 Reconstruction 143
5.2.3.13 Aircraft/Equipment Auto Log-Set (ALS) and Records 143
5.2.3.14 Flight Summary Record 144
5.2.3.15 Inspection Record 144
5.2.3.16 Repair/Rework Record 145

5.2.3.17 Technical Directives (TD) Record 146
5.2.3.18 Miscellaneous History Record 147
5.2.3.19 Preservation/Depreservation Record 149
5.2.3.20 Explosive Record 149
5.2.3.21 Component Record 150
5.2.3.22 Aeronautical Equipment Service Record (AESR) Auto Log-Set (ALS) Records 150
5.2.3.23 Equipment Operating Record (EOR) 151
5.2.3.24 Module Service Record (MSR) 151
5.2.3.25 Aircrew Equipment Auto Logset (ALS) Records 152
5.2.3.26 Component Auto Log-Set (ALS) Record 153
5.2.3.27 Life Limited Component Record 153
5.2.3.28 Tracked Component Record (TCR) 154
5.2.3.29 Untracked Record 155
5.2.3.30 Archiving Configuration Management (CM) Auto Log-Set (ALS) Historical Data 155
5.2.3.31 Contingency Operations 155
5.3 DECKPLATE - Aircraft Inventory and Readiness Reporting System (DECKPLATE - AIRRS) 156
5.3.1 Reportable Inventory 156
5.3.2 Function of the XRAY (Aircraft Custody and Status Change) 156
5.3.3 XRAY Deadlines 156
5.3.4 XRAY Submission Procedures 157
5.3.5 Reporting Policies 157
5.3.6 Service Age of Aircraft 157
5.3.7 Security Classification 158
5.3.8 Aircraft Controlling Custodians 158
5.3.8.1 Designation of Aircraft Controlling Custodians (ACC) 158
5.3.8.2 Aircraft Controlling Custodian (ACC) Reporting Responsibilities 159
5.3.8.3 Contractor Held Aircraft (COMNAVAIRSYSCOM) 159
5.3.9 Wing and Aircraft Reporting Custodians 160
5.3.9.1 Type Wings and MAWs 160
5.3.9.2 Reporting Custodians 160
5.3.10 Aircraft Inventory Reporting Situations 160
5.3.10.1 Addition of Aircraft to the Naval Inventory 160
5.3.10.2 Aircraft Ferry Movement for Custody Change 161
5.3.10.3 Loan of Aircraft to the DON and Loan of DON Aircraft to Non-Naval Activities 161
5.3.11 Strike from Inventory 162
5.3.11.1 DON Aircraft 162
5.3.11.2 Categories of Strike and Damage 162

5.3.11.3 Selection of Strike Category 162
5.3.11.4 Category 1 (Strike Damage) Procedures 163
5.3.11.5 Category 2 Strike (Depreciation) Procedures 163
5.3.11.6 Category 3 Strike (Administrative) Procedure 163
5.3.11.7 Category 4 Strike (Completed Service Life) Procedure 164
5.3.11.8 Strike XRAY Reporting 164
5.3.12 XRAY Data Description 164
5.3.13 OPNAV XRAY Action Code 168
5.3.14 OPNAV XRAY Content for Unmanned Aircraft Systems (UAS) 168
5.3.15 XRAY Reporting Custodian Change of Location 169
5.3.15.1 Organization Status Change Report 169
5.3.15.2 Aircraft Location Change (Action Code–L) 169
5.3.16 Quarterly Hours in Life 169
5.3.17 OPNAV XRAY Content by Action Code 169
5.3.18 XRAY Reporting Custodian Change of Location 175
5.3.18.1 Part I XRAY 175
5.3.18.2 Part II XRAY (Aircraft Location Change) 176
Figure 5-1: Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Sample) 177
Figure 5-2: Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Front) (Sample) 178
Figure 5-3: Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Back) (Sample) 179
Figure 5-4: Daily Inspection Requirements 180
Figure 5-5: Monthly Flight Summary (OPNAV 4790/21A) (Sample) 181
Figure 5-6: Equipment Operating Record (OPNAV 4790/31A) (Sample) 182
Figure 5-7: SE Preoperational Record (OPNAV 4790/52) 183
Figure 5-8: Broad Arrow Report (Message Format) 184
Figure 5-9: Broad Arrow Report (Sample Message) 185
Figure 5-10: Broad Arrow Addendum (Message Format) 186
Figure 5-11: Broad Arrow Addendum (Sample Message) 187
Figure 5-12: Broad Arrow Support Equipment In-Service Report (Message Format) 188
Figure 5-13: Broad Arrow Support Equipment In-Service Report (Sample Message) 189
Figure 5-14: Broad Arrow Requisition Completion Report (Message Format) 190
Figure 5-15: Flow of Accounting Data 191
Figure 5-16: Aircraft Inventory Record Equipment List (OPNAV 4790/111) 192
Figure 5-17: Aircraft Inventory Record Shortages (OPNAV 4790/112) 193
Figure 5-18: Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104) 194
Figure 5-19: Aircraft Inventory Record (OPNAV 4790/110) (Front) 195
Figure 5-20: Aircraft Inventory Record (OPNAV 4790/110) (Back) 196

Figure 5-21: Aircraft Transfer Report 197
Figure 5-22: Logbook Construction and Sequence 198
Figure 5-23: Structural Life Limits (OPNAV 4790/142) 199
Figure 5-24: Inspection Record (OPNAV 4790/22A) (Sample) 200
Figure 5-25: Repair/Rework Record (OPNAV 4790/23A) (Sample) 201
Figure 5-26: Technical Directives (OPNAV 4790/24A) (Sample) 202
Figure 5-27: Miscellaneous/History (OPNAV 4790/25A) (Sample) 203
Figure 5-28: Preservation/Depreservation Record (OPNAV 4790/136A) (Sample) 204
Figure 5-29: Installed Explosive Device Record (OPNAV 4790/26A) 205
Figure 5-30: Inventory Record (OPNAV 4790/27A) (Sample) 206
Figure 5-31: Parachute Record (OPNAV 4790/101) 207
Figure 5-32: Seat Survival Kit Record (OPNAV 4790/137) 208
Figure 5-33: Aircrew Systems Record (OPNAV 4790/138) 209
Figure 5-34: Aircrew Personal Equipment Record (OPNAV 4790/159) 210
Figure 5-35: Aeronautical Equipment Service Record (OPNAV 4790/29) (Sample)Aeronautical Equipment Service Record (OPNAV 4790/29) 211
Figure 5-36: AESR Construction and Sequence 212
Figure 5-37: AESR Forms Matrix 213
Figure 5-38: Module Service Record (OPNAV 4790/135) (Page 1) (Sample) 214
Figure 5-39: Module Service Record (OPNAV 4790/135) (Page 2) (Sample) 215
Figure 5-40: Module Service Record (OPNAV 4790/135) (Page 3) (Sample) 216
Figure 5-41: Module Service Record (OPNAV 4790/135) (Page 4) (Sample) 217
Figure 5-42: Assembly Service Record (OPNAV 4790/106A) (Front) (Sample) 218
Figure 5-43: Assembly Service Record (OPNAV 4790/106A) (Back) (Sample) 219
Figure 5-44: Assembly Service Record Entries (Sample) 220
Figure 5-45: Equipment History Record (EHR) Card (OPNAV 4790/113) (Front) (Sample) 221
Figure 5-46: Equipment History Record (EHR) Card (OPNAV 4790/113) (Back) (Sample) 222
Figure 5-47: Scheduled Removal Component Card (OPNAV 4790/28A) (Front) (Sample) 223
Figure 5-48: Scheduled Removal Component Card (OPNAV 4790/28A) (Back) (Sample) 224
Figure 5-49: Aircraft Summary Data Message Format (Sample) 225
Figure 5-50: Aircraft Summary Data Correction Message Format (Sample) 226
Figure 5-51: Flight Data Submission Message Format 227
Figure 5-52: Aircraft Arrival Message Format 228
Figure 5-53: Quarterly Hours in Life (Sample) 229
Figure 5-54: XRAY Action Codes 230

CHAPTER 5
Maintenance Control, Production Control, and Material Control; Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-sets (ALS); and Aircraft Inventory and Readiness Reporting System (AIRRS)

5.1 Maintenance Control, Production Control, and Material Control

5.1.1 Maintenance Control

Maintenance Control is responsible for the efficient attainment of aircraft and equipment readiness in support of operational objectives. Maintenance Control will manage all action required to retain or restore material or equipment to a serviceable condition with a minimum expenditure of resources.

NOTE: Prior to being designated to certify aircraft Safe for Flight in activities that use Naval Aviation Logistics Command Management Information System (NALCOMIS) Optimized Organization Maintenance Activity (OOMA), personnel must complete the Naval Aviation Maintenance Control Management course (Course C-555-0053). Personnel previously designated to certify aircraft Safe for Flight that have completed both the Naval Aviation Maintenance Control Management course (Course D/E-555-0040) and the Naval Aviation Officer and Senior Supervisor NALCOMIS OOMA Familiarization course (Course D/E-555-0054) are not required to complete the Naval Aviation Maintenance Control Management course (Course C-555-0053) course.

5.1.1.1 System Administrator/Analyst (SA/A) Responsibilities

a. The SA/A shall provide qualitative and quantitative analytical information to the Maintenance Officer (MO) allowing a continuous review of the management practices within the activity/department. A system administrator/analyst (SA/A) billet will be established in O-level and I-level activities to monitor, control, and apply the maintenance data system (MDS) or configuration management (CM) within the activity. The SA/A will serve as a contact point between work centers and the SPAWAR Systems Center Atlantic (SSCA) and is responsible for the management of all aspects of the MDS to include NALCOMIS reports/inquiries at the activity level. Additionally, the SA/A shall have a full working knowledge of the principles of foundation, mid, and top tier data replication and information available in the aviation data warehouse (ADW).

b. The SA/A must be a senior petty officer or Non-Commissioned Officer (NCO) formally trained in MDS procedures to include NALCOMIS, data processing capabilities, data replication between the foundation, mid tiers, top tiers, and ADW and the techniques of statistical analysis. It is imperative the SA/A receive the complete support of the MO, division officers, and work center supervisors.

NOTES: 1. Within the scope of manpower management, the NALCOMIS SA/A is a significant activity information resource. In the areas of accurate MDS and flight data, the analyst is the one individual within the activity who can either prove or disprove the justification for manpower increases and decreases. A complete understanding of Naval Aviation Maintenance Program (NAMP) policies and procedures, accurate documentation procedures, meticulous attention to detail, a viable aviation maintenance and material management (3M) and Naval Flight Record Subsystems (NAVFLIR) Naval Flight Documents training program, and close communication between analysts at similar activities should be foremost in the primary and technical responsibilities of the data analyst.

2. Organizational maintenance activity (OMA) NALCOMIS Optimized squadrons will have two System Administrators (SA) attend the NALCOMIS OOMA system analyst course (Course C-555-0049).

3. OMA NALCOMIS Optimized squadrons that operate from a detachment based concept for 90 days or longer periods of time shall have one SA per detachment attend the NALCOMIS OOMA system analyst course (Course C-555-0049).

4. All Squadrons, Intermediate Maintenance Activities (IMA) and Marine Aviation Logistics Squadrons (MALS) shall have all AZs with NEC 6303, 6304, or MOS 6049 attend the NALCOMIS System Analyst Refresher course (Course C-555-0055).

c. The primary analyst responsibilities of the SA/A include the following:

(1) Provide management with data, in graphic and narrative form, necessary to make qualitative decisions about aircraft, equipment, test bench, support equipment (SE), material condition, readiness, utilization, maintenance workload, or failure trends.

(2) Screen decision knowledge programming for logistics analysis and technical evaluation (DECKPLATE) maintenance reports.

(3) Operations Clerks and Logs and Records Clerks shall validate flight hours and landings weekly (Marine Corps only).

(4) For Naval Tactical Command Support System (NTCSS) Optimized OMA NALCOMIS, flight hours and landings shall be entered in NALCOMIS prior to Marine Sierra Hotel Aviation Readiness Program (MSHARP) processing (Marine Corps only).

(5) Review data products for accuracy, completeness, and content.

(6) Conduct and coordinate NALCOMIS training of Maintenance Department personnel in all facets of documentation and in the content and use of available data products.

(7) Maintain MDS/NALCOMIS report files for the department per Appendix B.

(8) Ensure an adequate supply of source documents is on hand to support the MDS and NALCOMIS during system downtime contingency procedures.

(9) Assist squadron personnel in developing and using statistical tools and graphics aids needed for statistical process control techniques required by the AIRSpeed approach to process and performance improvement.

(10) If operating Legacy or NTCSS Optimized NALCOMIS, the SA/A is responsible for maintaining the NALCOMIS system. The SA/A is the key to the success of Legacy or NTCSS Optimized NALCOMIS. The SA/A shall provide the local expertise necessary to resolve system/functional related problems and ensure smooth operations related to the O-level or I-level activity. The SA/A shall update NTCSS Optimized Organizational Maintenance Activity (OMA) NALCOMIS baseline change reports. In addition to analyst responsibilities, specific duties and responsibilities are in Chapter 13.

(11) The establishment and monitoring of Detachment processing (for more specific guidance see OMA-SAM).

(12) If operating NTCSS Optimized OMA NALCOMIS, the SA/A shall ensure joint deficiency reporting system (JDRS), baseline trouble shooting report (BTR), baseline change report (BCR) and daily summary of changes reports (located under the TMAPS menu at https://mynatec.navair.navy.mil/) are reviewed and appropriate changes are made to ensure the unit's database is kept current. Additionally, the SA/A shall maintain all current Optimized OMA technical advisories on file until canceled.

(13) Ensure local data is reported up-line to the top-tier and central repository (DECKPLATE).

(14) Keep informed of current efforts and issues with the MDS by referencing the SSCA customer support site (https://sailor.nmci.navy.mil).

(15) Initiate trouble calls with SSCA. Trouble calls can be submitted via the SSCA Web site.

(16) Conduct a daily review of active work orders (WO) for correct equipment operational capability Code (EOC).

d. The technical functions of the SA/A include the following:

(1) Coordinate and monitor the MDS and NALCOMIS for the department.

(2) Review maintenance reports and workload reports to identify trends.

(3) Use the MDS and NALCOMIS to assist in identifying possible deficiencies in technical training or documentation procedures.

(4) Monitor the assignment of the third position of work center codes.

(5) Collect, maintain, and distribute in narrative, tabular, chart, or graph form the data required to monitor, plan, schedule, and control the maintenance effort.

(6) Develop charts, graphs, and displays for command presentation.

(7) Assist the Maintenance Officer (MO) and other supervisory personnel in determining the specific goals for new types of data reports required for managing the maintenance effort.

(8) Identify and apply analytical techniques to areas of material deficiencies, high man-hour consumption, or other pertinent trends.

(9) Provide assistance to Production Control or Maintenance/Material Control in determining material consumption and projected usage based on MDS/NALCOMIS reports/inquiries.

(10) Screen and validate NALCOMIS Exception Report (Marine Corps only).

(11) Provide NALCOMIS MAINT-2 report with aircraft transfer requirements.

(12) Use Marine Sierra Hotel Aviation Readiness Program (MSHARP) to assist in logbook reconstruction (Marine Corps only).

(13) Verify local data is reported up-line to the top-tier and central repository (DECKPLATE).

(14) Stay abreast of current efforts and issues with the MDS system by referencing the SSCA customer support site (https://sailor.nmci.navy.mil).

(15) Initiate trouble calls with SSCA. Trouble calls can be submitted via the SSCA Web site.

5.1.1.2 Aviation Logistics Information Management and Support (ALIMS) (Marine Corps Only)

The ALIMS specialists assigned to O-level activities will provide direct maintenance, system administration, and installation support for all AIS assigned. ALIMS specialist duties include installing, implementing, managing, monitoring, and sustaining AIS. The ALIMS Department will support deployed network installation and configuration in direct support of NALCOMIS and associated systems. MCO 2020.1 provides the standardized policy and procedures for ALIMS operations.

5.1.1.3 Releasing Aircraft Safe for Flight

NOTES: 1. Newly established squadrons and squadrons transitioning from one type, model, and series (T/M/S) aircraft to another assigned to COMNAVAIRSYSCOM Aircraft Reporting Custodian/ACC (RTD&E), must comply with Safe for Flight Operations Certification per NAVAIRINST 3700.4.

2. Newly established squadrons and squadrons transitioning from one T/M/S aircraft to another within COMNAVAIRFOR, must comply with Safe for Flight Operations Certification per COMNAVAIRFORINST 5400.1.

a. Two of the most critical aspects in naval aviation are the release of an aircraft Safe for Flight and the acceptance of the aircraft. Both of these functions are essential to the safety of the aircrew and the aircraft.

b. The person certifying a Safe for Flight condition has the overall responsibility to provide the aircrew with a partial mission capable (PMC) or full mission capable (FMC) aircraft configured for the scheduled mission. All personnel authorized to release aircraft Safe for Flight must complete the Type Wing or Marine Air Wing (MAW) mandated job qualification requirement (JQR) for maintenance control and for designation to certify aircraft Safe for Flight, and must be designated in writing by the Commanding Officer (CO). Personnel certifying Safe for Flight must comply with the following requirements at a minimum, prior to releasing the aircraft for flight:

NOTE: For squadron Maintenance Departments that employ contractors, the Contractor Site Manager, when assigned, must designate in writing, the contractor personnel authorized to certify aircraft Safe for Flight.

(1) Review the aircraft discrepancy book (ADB) to verify all discrepancies are accurately EOC coded per the Mission-Essential Subsystem Matrix (MESM), all downing discrepancies and flight safety Quality Assurance (QA) inspections are signed off, and a valid daily/turnaround inspection is completed.

NOTES: 1. Unmanned aircraft systems (UAS) Control Stations are not required to be released Safe for Flight separately from the unmanned aircraft (UA). UAS Naval Air Training and Operating Procedures Standardization (NATOPS) preflight and system check procedures must be performed before the Control Station is utilized. Safe for Flight personnel will verify the Control Station is fully operational to utilize prior to signing off Safe for Flight.

2. Activities operating NTCSS Optimized OMA NALCOMIS (OOMA) must use the electronic automated aircraft discrepancy book (AADB) in OOMA. AADB summary pages will be backed up in XPS format on a CD, DVD, or external hard drive. At a minimum, AADB summary page backups must be performed prior to each flight, after the aircrew signs the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1), and at the end of each shift. Refer to CNAP Share portal for instructions on how to save AADB summary pages using XPS format.

(2) Verify fuel samples have been taken and inspected per T/M/S maintenance technical manuals. Specific intervals for fuel samples are listed in the applicable aircraft maintenance requirement cards (MRC). Unless otherwise specified in aircraft MRCs, fuel samples must be taken within 24 hours preceding the aircraft's initial launch and are valid for no more than 24 hours.

(3) Review Engine/Gearbox Oil Consumption Records and verify each engine or gearbox consumption is within the limit specified in the maintenance technical manuals prior to every flight (as required).

(4) Review BUNO trending and analysis data per paragraph 3.2.3.7 and verify required action was taken per Chapter 3 and T/M/S maintenance technical manuals prior to certifying the aircraft Safe for Flight.

(5) Verify aircraft Weight & Balance (W&B) forms have been updated for each flight.

(6) During hot seating operations, review any new discrepancies with the debarking pilot to verify no flight safety discrepancies were noted, and have the debarking pilot sign block 10 of the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) to certify the aircraft is Safe for Flight.

c. The pilot-in-command must all review the ADB for aircraft discrepancies and corrective actions for at least the 10 previous flights and must sign block 11 of the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1), assuming full responsibility for the safe operation of the aircraft and the safety of the other aircrew and passengers aboard.

d. The Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) provides for:

(1) The pilot's acceptance of the aircraft in its present condition.

(2) Identification of Aircraft by bureau number (BUNO), T/M/S, and reporting custodian.

(3) Fuel, oil, oxygen, expendable ordnance aboard, special equipment, and limitations.

(4) Maintenance Control certification of the aircraft's readiness for flight.

e. The Aircraft Inspection Record (OPNAV 4790/141) (Figure 5-1) will be filled out as follows:

Block 1 - BU/SERNO. Enter the aircraft BUNO.

Block 2 - T/M/S. Enter the aircraft T/M/S.

Block 3 - RPT. CUST. Enter the aircraft reporting custodian.

Block 4 - OXY. Enter total gaseous or liquid oxygen on board. Not applicable to aircraft with an on board oxygen generation system.

Block 5 - FUEL. Enter grade and quantity of fuel.

Block 6 - OIL. Enter grade and quantity of oil added to each engine.

Block 7 - DATE. Enter date of pilot-in-command acceptance.

Block 8 - ORDNANCE/SPECIAL EQUIPMENT/UAS CONTROL STATIONS/UAS LAUNCH AND RECOVERY EQUIPMENT/LIMITATIONS/REMARKS. List Nomenclature and S/N for the UA, UAS Control Stations, launch equipment, and recovery equipment. This section informs the pilot of uncorrected discrepancies or unique characteristics of the aircraft. To certify ordnance and associated AAS are Safe for Flight, enter the aircraft's weapons/store stations, any configured weapons/stores, applicable Weapons Insertion Panel codes, countermeasures information, and gun system information. A Quality Assurance Safety Observer (QASO) must inspect and certify the aircraft configuration using manual or electronic signature in the ADB or AADB. Maintenance Control must verify the QASO inspection has been completed prior to certifying the aircraft safe for flight. After the initial QASO certification, subsequent QASO certification is not required for hot seat crew change or during cross country flights as long as no change in AAS, ordnance, or counter measures configuration occurs.

NOTES: 1. Ordnance capable aircraft with no AAS or countermeasures installed do not require a QASO signature. The person certifying the aircraft safe for flight will enter the statement "No AAE or countermeasures installed." Empty countermeasures containers are considered AAS.

2. T/M/S aircraft that do not have countermeasure systems or ordnance delivery capability are exempt from QASO certifications.

3. Until the Ordnance Safe for Flight Inspection requirement and SMQ are incorporated in OOMA, the QASO will document accomplishment in the AADB by entering the ordnance load

and configuration and signing in the Ordnance block in the Acceptance for Flight tab. The exception to this rule is when the ordnance evolution occurs away from the flight line, such as ordnance loading at the Combat Aircraft Loading Area (CALA). The QASO shall document the ordnance inspection on the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) or the Aircraft Inspection and Acceptance Record generated via NTCSS NALCOMIS OOMA. A locally produced standardized form may be used if approved by the wing.

4. Squadrons and detachments that are unable to meet QASO requirements due to manpower constraints must submit a NAMP deviation request per paragraph 1.1.3.3 to request authorization for an ordnance certified QAR or CDI to sign QASO certification.

Block 9 - SIGNATURE OF PLANE CAPTAIN. Signature and rank or rate of the plane captain who inspected the aircraft.

Block 10 - SIGNATURE. Signature and rank or rate of the person certifying the aircraft Safe for Flight. If the aircraft is away from home and qualified releasing authority is not available, the pilot-in-command must sign the certification in the Safe for Flight block. The debarking pilot of a hot seating crew must sign block 10 to certify the aircraft is safe for flight.

Block 11 - SIGNATURE OF PILOT IN COMMAND. Signature and rank of pilot accepting the aircraft.

f. The Aircraft Inspection and Acceptance Record (OPNAV 4790/141)(Figure 5-1) will remain at the place of first takeoff. If the aircraft is away from home the record will be maintained by the transient host activity until safe completion of the flight.

5.1.1.4 Hot Refueling and Hot Seating

a. Hot Refueling. An operational evolution where an aircraft is refueled while the engine(s) is (are) operating.

b. Hot Seating. An operational evolution where the pilot/crew of manned aircraft is changed while the engine(s) is (are) operating and the aircraft is to be immediately relaunched.

(1) Unmanned Aircraft Hot Seating. An operational evolution where the pilot/crew of a UAS aircraft is changed while the aircraft is still airborne or while on deck with the engine(s) operating and is to be immediately relaunched.

NOTE: If OOMA connectivity does not support real time review and signatures, then electronic forms shall be emailed between sites and electronically signed. For UAS activities: Final electronic copies with all signatures shall be maintained at point of UA origin and a hardcopy aircraft inspection sheet (OPNAV 4790/141) shall be generated as reference for back fitting the data into OOMA.

(2) For hot seat evolutions, a new Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) will be initiated. At a minimum, "Hot Seat" shall be entered in block 8, and the new pilot-in-command shall review the ADB and sign block 11. Performance of these actions will signify a physical continuation for flight of an inspected, serviced, and certified aircraft with a change in pilot or crew and adherence to hot seat servicing and inspection minimums. The debarking pilot shall sign block 10.

(3) Turnaround inspections are not required for aircraft participating in hot seating evolutions. Only those items pertaining to the refueling shall be required for aircraft participating in hot refueling evolutions when the aircraft is to be immediately relaunched. All applicable NATOPS checklists shall be complied with during such ground periods. When servicing or minor maintenance is performed during such ground periods, only those portions of turnaround inspections applicable to that servicing or maintenance need to be performed, as directed by Maintenance Control. This is not intended to limit commands from exercising

their prerogative of performing inspections they deem necessary. Inspection or servicing intervals shall not be exceeded during successive evolutions.

NOTE: Single engine, fixed wing aircraft may conduct a hot seat using the above administrative procedures with the engine shutdown, provided the APU is operating. The Program Office or Type Wing shall provide local procedures and restrictions as appropriate.

5.1.1.5 Functional Check Flights (FCF)

a. FCFs are required to determine whether the airframe, power plant, accessories, and equipment are functioning per predetermined standards while subjected to the intended operating environment. These flights are conducted when it is not possible to determine proper operation by ground checks, for example, aerodynamic reaction, air loading, or signal propagation.

NOTE: Unless directed by the applicable T/M/S NATOPS manual, UAS may not require an FCF, other than for acceptance inspection, after completion of standard rework, or when not flown for 30 days or more.

b. The below listed conditions requiring FCFs are minimal and mandatory unless type specific requirements have been established in applicable NATOPS manuals. This does not preclude operational commanders from imposing additional requirements of the scope and frequency deemed necessary. FCFs are required as follows:

(1) Upon completion of standard rework conducted by the rework facility.

(2) When a reporting custodian accepts a newly assigned aircraft and upon return of an aircraft from standard rework. Activities deploying detachments that transfer and accept between home guard and detachments are not required to perform an FCF when transferring between home guard and detachments.

NOTE: Combining an FCF with an operational flight (check and go) is specifically prohibited when a post D-level evolution FCF attesting to the Safe for Flight status of the aircraft has not been previously performed.

(3) FCFs are not required upon the completion of phase inspections unless the corrective action(s) resulting from a discrepancy discovered during the inspection requires it or the item inspection requires a removal, disassembly, adjustment, alignment, reinstallation, or reassembly of any of those items in the following paragraphs. The MRCs will indicate the phase packages requiring a partial system FCF.

(4) After the installation or reinstallation of an engine, propeller, propeller governor, major fuel system component, helicopter engine drive train, transmission, and gearbox; in addition, any other components which cannot be checked during ground operations.

(5) When fixed flight surfaces have been installed or reinstalled. This excludes removal and reinstallation of quick-disconnect aft sections of gas turbine engine aircraft when no work which requires an FCF is performed on removed section.

(6) When movable flight surfaces or rotary wings have been installed, reinstalled, or rigged.

NOTES: 1. Installation or reinstallation of exhaust gas vectored thrust nozzles (hot and cold) is accomplished by pin alignment and does not affect the adjustment of the nozzle; therefore, an FCF is not required.

2. For aircraft equipped with onboard automated rotor vibration and diagnostic capability, FCFs are not required when making small incremental adjustments to minimize rotor induced vibrations provided no other maintenance actions have been completed that would require an FCF.

(7) When an aircraft with a single primary attitude source per pilot station has had the attitude indicator or display, attitude source, subsystem, or component removed, replaced, or adjusted.

(8) When an aircraft with dual or multi-independent attitude reference sources has had the indicators or displays, attitude reference sources, subsystems, or components removed, replaced, or adjusted in two or more of the attitude reference systems. Aircraft with four or more independent attitude reference sources in which two sources are known good, and the integrity of those two sources has not been jeopardized, will not require an FCF.

NOTE: FCFs are not required when the maintenance action involves only the removal and reinstallation of connecting hardware without a change in adjustment or alignment to one of the attitude reference systems noted in paragraph 5.1.1.5.b.(7 and 8). However, a thorough ground functional check must be conducted before the aircraft is released Safe for Flight. An entry noting the system was disconnected, reconnected, and a ground functional check was accomplished must be made on the Work Order (WO).

(9) When any condition cited in the applicable NATOPS manuals occurs.

(10) When an aircraft that has not flown in 30 or more days is returned to flight status.

NOTE: The requirement for and depth of FCFs shall be determined by the CO when ABDR procedures have been implemented.

c. FCF Procedures

(1) At the discretion of the CO, FCFs required by conditions cited in this paragraph may be flown in combination with operational flights, provided the operational portion is not conducted until the FCF requirements have been completed and entered on the FCF checklist.

(2) Pilots and crew members who perform FCFs shall be qualified per OPNAVINST 3710.7 and the applicable aircraft NATOPS manual. They shall be given a thorough briefing, coordinated by Maintenance Control, through the use of appropriate QA and work center personnel. The briefing shall describe maintenance performed, the requirements for that particular flight, and the expected results.

(3) FCFs shall be conducted with the minimum crew necessary to ensure proper operation of all required equipment.

(4) FCFs should be of sufficient duration to perform the prescribed checks and to determine whether any additional maintenance is required.

(5) FCFs shall be conducted using the criteria established by OPNAVINST 3710.7 and the appropriate aircraft NATOPS manual.

(6) FCF checklists shall be properly completed and promptly returned to maintenance control.

d. FCF Checklists are published by COMNAVAIRSYSCOM whenever a checklist is required. These checklists are derived by abbreviating the FCF procedures contained in the applicable NATOPS manual. FCF checklists shall be prepared locally for aircraft that do not have published checklists, for example, aircraft on loan from other services.

(1) FCF checklists shall contain provisions for recording:

(a) Required instrument indications.

(b) Satisfactory or unsatisfactory performance of all listed items or systems.

(c) Detailed comments and recommendations concerning the flight.

(2) Retention of Checklists. Completed FCF checklists shall be retained in the aircraft maintenance files for a minimum of 6 months or one phase cycle, whichever is greater.

e. Additional D-Level Rework FCF Requirements:

(1) General. All aircraft that have completed standard rework will be functionally checked in flight. The flight profile and check lists to be used during FCFs will be prescribed in the rework specifications and appropriate T/M/S NATOPS for the aircraft. The Aviation Safety Officer (ASO) and the Flight Check Officer ensure applicable safety of flight, quality, and reliability standards are met prior to designating an aircraft to be Safe for Flight. This includes the coordination of FCF standards and requirements with the various divisions of the Quality Department and the evaluation of FCF data to ensure safe operation and acceptance by the operating forces. FCFs of commercially reworked aircraft may be accomplished by contractor/government personnel as specified in the rework contract. If a government FCF is required after a contractor's FCF, unnecessary duplication of checks successfully conducted and documented by the contractor will be minimized.

(2) FCFs are normally performed by military pilots and aircrews assigned to Fleet Readiness Centers (FRC). When required, military aviators assigned to other commands may be used. All post standard rework FCF pilots shall be designated in writing by the FRC CO.

5.1.1.6 Aircraft, UAS, and Equipment Inspection Procedures and Responsibilities

a. Scheduled maintenance requirements are the minimum necessary under all conditions and are mandatory to ensure timely discovery and correction of defects. Reporting custodians may increase the depth or frequency of any scheduled inspection or may require additional inspections whenever excessive flight or calendar time has elapsed between inspections, environmental, or operational conditions are considered to have impaired the material reliability or integrity of the aircraft or equipment. Inspections performed to a greater depth or at an increased frequency are logged, if required, as the type which would normally be performed and do not alter the schedule of the programmed inspections.

NOTES: 1. Mission capability will be impacted and the appropriate EOC code assigned when an aircraft or equipment reaches the maximum operational limit allowed between scheduled maintenance intervals or a condition exists which makes the aircraft or equipment not safely operable until the inspection is complete.

2. When scheduled inspection requirements do not require a major disassembly of the aircraft or equipment and thus do not affect mission capability, the aircraft or equipment is considered to be mission capable during the entire inspection. However, if panels and equipment are removed to conduct area inspections and cannot be replaced within a 2-hour time frame, then that portion of the inspection will be considered to have impacted mission capability and will be documented using the appropriate EOC code. Appropriate EOC codes must be applied to material discrepancies found during the inspection.

(1) Aircraft and equipment inspections are scheduled per the interval specified in applicable maintenance technical manuals.

(2) Inspections shall be scheduled by each activity so a minimum number of aircraft are undergoing inspection at any one time.

(3) The first inspection interval for inspections based on calendar time commences on the date of the Department of Defense (DOD) acceptance check flight. In the event a new production aircraft is accepted by Defense Contract Management Agency (DCMA), but immediately commences modifications prior to

delivery to a fleet or test activity, the first inspection interval for inspections based on calendar time commences on the date the aircraft is accepted by the first fleet or test activity.

(4) The first inspection interval of those inspections based on flight hours, operating hours, cycles, or events shall include any hours or events accumulated prior to Navy acceptance.

(5) Special inspection MRCs are applied on a continuing basis to aircraft in all status codes, as defined in Appendix E, except for Strike Codes 1S0 through 4S0 and when aircraft are placed in Type II or III preservation. Special inspections may be delayed while in Type I preservation as follows:

(a) Aircraft having preservation MRCs will be inspected and the preservation maintained per the applicable preservation MRCs. No special inspections need be performed while the aircraft is preserved, other than those listed on the applicable preservation MRCs.

(b) On aircraft not having preservation MRCs, special inspections may be delayed while the aircraft is in preserved status at the option of the reporting custodian.

(c) A one-time inspection, consisting of all MRCs not accomplished while the aircraft was preserved, must be performed prior to returning the aircraft to flight status.

(6) The phase maintenance concept divides the total scheduled maintenance requirement into small packages or phases of approximately the same work content. These are done sequentially at specified intervals. Completion of all required phases at their specified intervals completes the phase inspection cycle. The cycle is repetitive for the service life of the aircraft and is not interrupted during standard rework. Phase inspections are not included in the standard rework specifications, and are not done during the standard rework process. Aircraft returning from standard or special rework have the next phase due upon expiration of the authorized interval from the last phase inspection completed. Details for calendar-based phase inspection aircraft are in paragraph 5.1.1.6a(7)(e)3.

(a) New production aircraft initial phase implementation may be performed at any time during the time allotted for the first phase. This will establish the time for the phase base date and hours. The next phase will be due at the completion of the required interval plus or minus 10 percent, for example, 75 hour interval, first phase implemented at 60 flight hours, next phase due at 135 flight hours. However, if for planning purposes the plus 10 percent is used on implementation, the next phase would be due as if no deviation had occurred from the phase interval during implementation, for example, 75 hour interval, first phase implementation at 80 flight hours, next phase due at 150 flight hours. Those activities desiring to start the phase cycle at other than phase A to facilitate maintenance scheduling have the option to do so, provided all MRCs necessary to certify accomplishment of all phases advanced are performed. If the cycle is started at phase C, perform MRCs for phases A and B as part of acceptance inspection and log on conditional and phase pages of aircraft logbook and aeronautical equipment service record (AESR) (as applicable). Activities with NTCSS Optimized OMA NALCOMIS shall use CM procedures to update CM ALS.

(b) The Maintenance Material Control Officer (MMCO) shall hold a planning meeting in advance of each phase inspection. The phase inspection supervisor and representatives from QA, Material Control, and all applicable work centers shall attend the meeting. The purpose of the meeting is to prepare changes to the sequence control card (SCC), including TD compliances, any additional maintenance requirements, and to plan for the replacement of scheduled removal component (SRC) items and other required material.

(7) Accomplishment of the next phase or engine major inspection is not a requirement of standard or special rework unless specifically requested by the reporting custodian and approved by the ACC or TYCOM and COMNAVAIRSYSCOM. Appropriate logbook entries shall be made for all inspection

requirements actually performed by rework activities to enable the receiving activity to accurately reschedule inspections.

(a) All MRC tasks required for flight safety or aircraft ferry shall be included in the appropriate standard rework specification and accomplished as an integral element.

(b) An MRC exclusion list is developed as part of each standard rework specification by the ISSC with the concurrence of the ACC or TYCOM. This list contains all MRC items that are not performed during standard rework.

(c) Accomplishment of special inspections is a requirement of standard rework activities unless the rework is performed at the reporting custodian's site. In this instance, the reporting custodian is responsible for performing special inspections. If standard rework procedures are such that special inspections would not apply or could not reasonably be completed, for example, due to disassembly, they need not be accomplished when due, but shall be completed prior to the aircraft FCF.

NOTE: When an aircraft returns to the reporting custodian upon completion of standard rework, the new base date for those special inspections performed as part of standard rework will be the date the aircraft completed rework. If satisfied per the rework specifications, D-level FRCs, prior to the aircraft FCF, may rebase all completed special inspections as of the rework completion date. Activities will make entries establishing this new base date in the miscellaneous/history section of applicable AESRs. Activities with NTCSS Optimized OMA NALCOMIS shall use CM procedures to establish new base dates.

(d) Accomplishment of conditional inspections are a requirement of standard and special rework when situations requiring conditional inspection compliance occur.

(e) Aircraft having standard rework specifications will be rescheduled into the inspection cycle at the time of acceptance as follows:

1. Aircraft may be rescheduled into any phase within the cycle, provided those MRCs for each phase advanced, which do not have equivalent standard rework requirements, are performed in addition to the normal acceptance inspection. For example, if the inspection cycle consists of four phases and the next phase due upon return from standard rework is phase B, perform those phase B MRCs which do not have equivalent standard rework requirements during acceptance inspection. Perform phase C at the expiration of the established interval. If it is desirable to restart the inspection cycle at phase A, perform those MRCs not having equivalent standard rework requirements from phases B, C, and D at time of acceptance. Perform phase A at the expiration of the established interval. Activities with NTCSS Optimized OMA NALCOMIS shall use CM procedures to activate or defer MRC tasks.

2. Following a regular acceptance or post D-level inspection, aircraft may be operated until the next phase is normally due. For example, an aircraft is returned from standard rework with 40 hours remaining until the next phase in the sequence is due. An acceptance inspection is performed and the aircraft operated for 40 hours and then the next phase due is performed.

NOTE: All flight time accumulated during standard rework will be counted when computing the time the next phase inspection is due.

3. For calendar-based phase inspection aircraft inducted for D-level Special Structural Inspection (SSI), Enhanced Special Structural Inspection (ESSI), or Special Structural Inspection-Kit (SSI-K) sustainment events and preserved per T/M/S requirements, the phase inspection running time will be suspended until the aircraft is returned to the reporting custodian. At the conclusion of the sustainment event and upon acceptance by the reporting custodian, the phase interval clock will resume from the time of D-level event induction. Activities shall ensure that life-limited/high-time items are not affected by this action.

(8) Aircraft Preservation. The MO shall determine when an aircraft will be placed in preservation. T/M/S maintenance technical manuals provide procedures to perform aircraft preservation. For aircraft not having preservation maintenance technical manuals, preservation shall be performed per NAVAIR 15-01-500. The T/M/S Baseline Manager will ensure requirements of NAVAIR 15-01-500 are built into the baseline for aircraft not covered by preservation maintenance technical manuals.

(9) Components and assemblies with operating limitations are normally replaced during the scheduled inspection, which falls nearest to the applicable limitation. To reduce component or assembly replacement at other than scheduled inspections, a margin of plus or minus 10 percent of the stated operating limitations is authorized, unless such extension is prohibited by the applicable periodic maintenance information card (PMIC) or other directive.

NOTES: 1. The plus 10 percent extension is not authorized for LCF limited items which have accumulated their assigned cycles or operating hours. The plus 10 percent extension is not authorized for structural life limited components (listed in NAVAIRINST 13120.1, NAVAIRINST 13130.1, and applicable PMICs) that have reached their basic life limitations or would reach those limitations during the extension.

2. Over the course of a complete Phase Inspection Cycle, all components and assemblies requiring and AESR, MSR, ASR, EHR, SRC card, or ALSS record for aircraft mounted components must be inventoried and verified for correct serial number as listed in the applicable record or CM ALS. Components and assemblies with serial numbers that cannot be sighted without disassembly of the aircraft beyond Phase inspection requirements are exempt from the inventory. The inventory will be performed using a locally prepared form containing a preprinted list of the items required to be inventoried, with a column for recording each item's serial number. On condition items requiring EHR cards must be included on this inventory list. Logs and Records will review the completed inventory list and verify serial numbers match the aircraft logbook, AESR inventory record, or CM ALS.

b. Deviations. To meet unusual situations or to ease workload scheduling, reporting custodians may apply plus or minus deviations to inspection intervals, if specified in T/M/S MRCs or commercial aircraft derivative task cards. The next inspection must be scheduled as if no deviation occurred. If deviations are not specified in T/M/S technical manuals or commercial aircraft derivative task cards, the following maximum deviations may be applied:

(1) Plus or minus 3 days, or a portion thereof, may be applied to the authorized inspection interval of all inspections, including preservation, which are performed in increments of calendar days. The next inspection is scheduled as if no deviation had occurred. Deviations within the plus or minus 3 day interval do not require logbook entry.

(2) Plus or minus 10 percent, or a portion thereof, may be applied to the authorized inspection interval of scheduled maintenance requirements based on flight hours, operating hours, cycles, or events. Intervals that create fractional deviations will be rounded to the lower value. For example, 10 percent of a 125 hour inspection cycle equates to a 12.5 hours fractional deviation that must be rounded down to 12 hours. The next inspection will be scheduled as if no deviation had occurred. To facilitate establishing a concurrent airframe and engine inspection cycle, new engines or engines that have had a major engine inspection are authorized a plus or minus 10 percent deviation in the scheduled inspection interval without requiring the next engine inspection to be scheduled as though no deviation has occurred. Deviations within the plus or minus 10 percent interval do not require a logbook entry.

NOTES: 1. A one-time deviation in excess of the high (+) limits described per paragraph 5.1.1.6b may be granted due to operational necessity or aircraft ferry schedule only. Reporting custodians must submit the deviation request to the cognizant Wing, COMFAIR, CVW, or Aviation Combat Element (ACE) commander. The Wing COMFAIR, CVW, or ACE commander may grant up to one additional high (+) limit interval. Authorization for additional deviations must be

approved by the ACC. Deviation requests must contain sufficient detail on the conditions of the deviation. Requests will clearly state the deviation being requested, for example, "Request deviation to go 10 flight hours beyond the 10 percent "plus" high limit for the 200 Hour engine inspection on BUNO 161234." The request must state the circumstances necessitating the deviation, for example, "Deviation is required to support ferry flight for short notice directive to transfer aircraft." The request must state the estimated completion of the deferred inspection, for example "200 hour inspection will be performed during acceptance inspection by the receiving squadron." If applicable, the request will provide details of any logistics deficiency related to the deviation, such as requisition number, National Item Identification Number (NIIN) and part number, and status. If a deviation is authorized, a Miscellaneous/History (OPNAV 4790/25A) logbook entry is required and the next inspection is scheduled as if no deviation had occurred. Activities operating OOMA will use the CM procedures to change tasking and update CM ALS to record deviation authorization.

2. The plus 10 percent extension is not authorized for low cycle fatigue (LCF) limited items that have accumulated their assigned cycles or operating hours.

3. The plus 10 percent extension is not authorized for structural life limited components (listed in NAVAIRINST 13120.1, NAVAIRINST 13130.1, and applicable PMICs as "RETIRE") that have reached their basic life limitations or would reach those limitations during the extension.

4. After the inspection interval plus 3 days or plus 10 percent (as applicable) high limit has expired, aircraft, UAS, and UAS Control Stations are restricted from flight operations until completion of the applicable inspection.

5. During combat, operational commanders are authorized to defer scheduled maintenance of otherwise functional equipment, including replacement of high time components. This authority does not apply to LCF or structural life limited items. Deferral authority cannot be delegated below the CO of the ship, Marine Expeditionary Unit (MEU) commander, or air wing commander as appropriate. ACC notification is not required except for deferral of replacement of high time components, which will be reported to the ACC by priority message when installed components are at or beyond high time. Notification will include the following information: T/M/S, BUNO, Component Nomenclature, PN, Replacement Due Time/Cycles, Current Time/Cycles, and applicable requisition numbers and status. Operational commander deferral of scheduled maintenance during combat should not exceed one interval of that maintenance event. The ACC will be consulted before authorizing further deferrals. As soon as operations permit, deferred maintenance actions must be brought current.

6. Inspections may be done earlier (rebased) than the low limit of the interval, (minus 3 days, minus 10 percent). When an inspection is done earlier than the low limit of the interval, the next inspection is due based on the hour or cycle the inspection WO was initiated, and an entry to document rebasing the inspection cycle is required in the Miscellaneous/History page of the logbook or CM ALS. Commands with NTCSS Optimized OMA NALCOMIS will use the "Inspections Near Due" queue to rebase inspections. Using task properties in CM is not acceptable for documenting inspection rebasing.

c. Aircraft daily and turnaround inspections are documented on a Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Figures 5-2 and 5-3). The records may be destroyed on completion of the next like inspection. All other inspections are documented on the WO per Chapter 15. The Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) is completed by entering the following information:

Block 1 - PREFLIGHT, DAILY, TURNAROUND, and POSTFLIGHT blocks. Check the type of inspection being performed.

Block 2 - DATE AND TIME. Date and time the inspection is performed.

Block 3 - T/M/S. Aircraft T/M/S being inspected.

Block 4 - BUNO. BUNO of aircraft being inspected.

Block 5 - SIDE NO. Side number of aircraft being inspected.

Block 6 - ACTIVITY. Activity performing inspection.

Block 7 - CARD NUMBER/RTG/MOS. Separate entries are required for each MRC, for example, PC-1, PC-1.1, and PC-1.2 would be three separate line entries. If desired, rating or MOS may be included. When using checklists enter one step number per line for example, steps 1, 2, 3, 4, would be four separate line entries.

Block 8 - TOOL CONTAINER NUMBER. Tool container number, entered once, on the line where the using technician's name first appears.

Block 9 - DISCREPANCY / JCN*. Enter a brief narrative description of each discrepancy. A JCN is required for all discrepancies except those corrected by servicing. (Chapter 15 contains additional guidance.)

Block 10 - CORRECTED. Check in YES column if discrepancy in Block 9 is corrected; check in NO column if discrepancy has not been corrected. If NO is checked, there must be a JCN in Block 9.

Block 11 - SIGNATURE AND RATE / MOS**. Signature and rate or MOS of the individual performing the inspection. A signature and rate or MOS must appear for each line entry.

NOTE: For inspections requiring only one individual to perform all applicable MRC/checklist numbers, the first and last card number are required to be signed (with an arrow connecting both signatures) by the individual performing the inspection (Figures 5-2 and 5-3).

Block 12 - MAINTENANCE CONTROL REPRESENTATIVE. Signature and rate or rank indicating maintenance control has reviewed the inspection record, MRCs have been checked for currency, and JCNs have been issued as required.

d. Types of Aircraft Inspections:

(1) Daily Inspection. This inspection is conducted to inspect for defects to a greater depth than the turnaround inspection. The daily inspection is valid for a period of 72 hours commencing from the date and time the inspection is completed, provided no flight occurs during this period and no maintenance other than servicing has been performed. Aircraft may be flown for 24 hours without another daily. This 24 hour period begins with the first launch following accomplishment of the daily inspection. The 24 hours cannot exceed the 72 hour expiration of the daily unless the expiration occurs during a mission, in which case the aircraft will require a daily before the next flight. Turnaround requirements are not included in the daily inspection and must be accomplished separately. Accomplishment of a turnaround does not affect the 72 hour validity of the daily inspections (Figure 5-3).

NOTES: 1. In the event maintenance, other than servicing, must be performed after the daily inspection or turnaround inspection is completed, Maintenance Control must determine if a complete or partial daily or turnaround inspection is required, or if no portion of either inspection is required.

2. COs may authorize pilots-in-command to conduct applicable T/M/S NATOPS pilot inspections, ensure servicing requirements are accomplished, and sign the Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Figure 5-1) in the certification block while operating away from home without qualified maintenance personnel for periods not exceeding 72 hours. In these cases, the daily inspection must be completed immediately prior to the commencement of the mission. The expiration of the 72 hours may occur during the return flight to home base (or to a site with maintenance support), per NOTE 2 of Figure 5-4. On a case-by-case basis, Wings and MAGs may authorize an additional 24 hours (maximum of 96 hours), due to operational necessity. COs must request the authorization in writing (letter,

memorandum, or naval message) citing the specific BUNO, name and rank of the pilot in command, and a description of the mission with justification of operational necessity. Type Wing or MAG authorization must be in writing. The Date Time Group (DTG) of the message or serial number of letter authorizing the deviation will be cited on the WO of the daily inspection conducted prior to commencement of the mission. Accomplishing these requirements, rather than completing all daily, turnaround, and fuel sampling requirements, is sufficient for Safe for Flight certification.

(2) Turnaround Inspection. This inspection is conducted between flights to verify the integrity of the aircraft for flight, verify proper servicing, and to detect degradation that may have occurred during the previous flight. The turnaround inspection is valid for a period of 24 hours commencing from the date and time the inspection is completed, provided no flight and no maintenance other than servicing occurs during this period. The accomplishment of the daily inspection does not satisfy the turnaround inspection requirements.

NOTE: Accomplishment of a complete turnaround inspection is not required between repetitive flight evolutions interspersed with brief periods, such as passenger or cargo stops, hot seating, hot refueling, or short interruptions for adjustments during helicopter FCFs. Accomplishment of a complete turnaround inspection is not required if cold refueling aircraft for immediate relaunch when the pilot in command remains the same. When servicing or other minor maintenance is performed during such ground periods, only those portions of the turnaround inspection applicable to that servicing or maintenance need to be performed, as directed by Maintenance Control. Inspection or servicing intervals will not be exceeded during successive evolutions. All applicable NATOPS checklist must be complied with during ground periods.

(3) Servicing. These requirements provide for replenishment of fuel, oil, and other consumables expended during flight.

(4) Special Inspection. Special inspections are scheduled inspections with a prescribed interval other than daily or phase. Special Inspection intervals are based on elapsed calendar time, flight hours, operating hours, or number of cycles or events, as specified in applicable maintenance technical manuals. Examples: 7, 28 days; 50, 100, 200 hours; 10, 100 arrestments; and 5,000 rounds fired. In some cases, aircraft special inspections also contain engine inspection requirements and are referred to as combined airframe and engine special inspections.

(a) Completed aircraft special inspection WOs will be maintained in the aircraft inspection file or the electronic historical files. All engine inspections require AESR entries or CM ALS updates except fluid sampling, engine wash, and recurring special engine inspections not requiring NDI or disassembly/reassembly, or servicing. All other equipment having an AESR require entries only if the inspection requires NDI or disassembly and reassembly. Inspections baselined in the CM task will be automatically logged in the appropriate CM ALS inspection record for activities with NTCSS optimized OMA NALCOMIS.

NOTE: Inspections based on less than 100 hour intervals are not required to be logged in the AESR until the aircraft is transferred or an AESR tracked component is removed and turned in for repair, in which case the most recent inspections performed of each type and interval and the component hours must be logged. (Not required for activities with NTCSS Optimized OMA NALCOMIS because all inspections are electronically logged upon completion of a WO that affects CM ALS.)

(b) When an individual special inspection or a group of special inspections due simultaneously will consume more than 8 hours of elapsed maintenance time, the inspection requirements may be divided into portions performed incrementally at any time during the allowable deviation period. When this deviation is used, Maintenance Control or Work Center 140 must maintain the controlling special inspection WO for each inspection performed. Work centers will be issued WOs listing the applicable MRCs for each

portion of the inspection to be completed. This ensures that the applicable QAR or CDI inspection have performed prior to the work center signing off their supporting WOs.

NOTE: Listing applicable MRCs on the WO is not required for activities with NTCSS Optimized OMA NALCOMIS.

(5) Conditional Inspection. Conditional maintenance requirements are unscheduled events required as the result of a specific over limit condition, or as a result of circumstances or events which create an administrative requirement for an inspection. A logbook or CM ALS entry is required for a conditional maintenance requirement which prescribes inspections to determine equipment condition, for example, airframe hard landing, precarrier, predeployment, aircraft ferry, acceptance, transfer, and engine overspeed and overtemp inspections. Those conditional requirements which specify servicing or fluid sampling need not be logged.

(6) Phase Inspection. The phase maintenance concept divides the total scheduled maintenance requirement into small packages or phases of approximately the same work content. These are done sequentially at specified intervals. Completion of all required phases at their specified intervals completes the phase inspection cycle. The cycle is repetitive for the service life of the aircraft and is not interrupted during standard or special rework. Phase inspections are not included in the standard rework specifications, and are not done during the standard or special rework process. Aircraft returning from standard or special rework have the next phase due upon expiration of the authorized interval from the last phase inspection completed. Details for calendar-based phase inspection aircraft are in paragraph 5.1.1.6a(7)(e)3.

(7) Zonal Inspection. This inspection is a general inspection of a specific area of an aircraft. These inspections are for obvious defects such as leaks, frayed cables, cracks, corrosion, or physical damage. Zonal inspections are normally performed in conjunction with other scheduled maintenance tasks by the rating or MOS assigned. For example, an AT rating or MOS assigned to perform an inspection on a radar antenna may also be assigned a zonal inspection of the compartment for obvious defects.

(8) Acceptance Inspection:

(a) An acceptance inspection shall be performed when a reporting custodian accepts an ATO aircraft under XRAY Action Codes G and R (Appendix E). Acceptance inspection shall include:

1. Inventory of all equipment listed in the AIR.
2. Verification of cartridge activated devices (CAD) and propellant actuated devices (PAD).
3. Configuration verification.
4. Hydraulic fluid sampling.
5. Daily inspection.
6. Aircraft acceptance conditional inspection technical publication requirements (if applicable).
7. Complete FCF.

NOTE: The Wing may waive the FCF requirement for intra-wing aircraft acceptance providing all the above requirements are met.

(b) Verification of CADs, PADs, and configuration is accomplished by visual external inspection and examination of logs and records. Disassembly beyond daily inspection requirements of applicable planned maintenance system (PMS) publications is not required.

NOTES: 1. Configuration verification includes commercial and government entity (CAGE), part number, and serial number verification of all components and assemblies installed on the aircraft that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SSK Record, or Aircrew Systems Record.

2. The Joint Strike Fighter (JSF) delivery procedure eliminates the requirement for configuration verification during acceptance inspection when received from the factory. Disassembly beyond the daily inspection requirements to perform configuration verification is not authorized without TYCOM approval.

(c) Reporting custodians may elect to increase the depth of acceptance inspection if equipment condition, visual external inspection, or examination of logs and records indicate such action is warranted.

(d) Administrative requirements of aircraft acceptance include:

1. Submission of XRAY and DECKPLATE ETR(s).

2. Electronic receipt of aircraft and associated ALSS equipment in the virtual fleet support (VFS) CADPAD, TRACE CADPAD, and TRACE LIFE SUPPORT Modules (if applicable).

3. Verification of the Monthly Flight Summary (OPNAV 4790/21A) (Figure 5-5) by calculating cumulative FLYING HOURS in PERIOD and SINCE NEW blocks/fields.

4. Verification of the Equipment Operating Record (OPNAV 4790/31A) (Figure 5-6) by calculating cumulative OPERATING HRS ACCUM blocks/fields.

5. Submission of a WO for Aircraft Gain.

6. Entry in the aircraft and AESR logbooks on the inspection page titles “Conditional”. Authority for the entry is this instruction.

7. Hydraulic fluid sampling results entry in the Miscellaneous/History (OPNAV 4790/25A) section of the logbook.

NOTE: Not required for NTCSS Optimized OMA NALCOMIS activities.

(e) Operating units that transfer aircraft between homeguard and detachments are not required to perform an acceptance inspection or FCF. Administrative requirements listed in paragraph 5.1.1.6d(8)(d) are required.

(f) Operating units that accept a short-term transfer aircraft are not required to perform an acceptance inspection or FCF. Administrative requirements listed in paragraph 5.1.1.6d(8)(d) are required.

NOTE: In instances where an acceptance inspection is not required, the reporting custodian may elect to conduct an acceptance inspection if determined by the MO as a prerequisite to acceptance.

(g) FCF final waiver approval will not preclude a reporting custodian from electing to conduct an FCF if determined by the MO as prerequisite to acceptance.

(h) Due to the dynamic nature of Test Evaluation (TE) and Fleet Support (FS), COMNAVAIRSYSCOM ACC is authorized to waive acceptance inspection and FCF requirements for all

aircraft under its cognizance. This waiver authority does not apply to acceptance of aircraft from off-site D-level special rework. Administrative requirements listed in paragraph 5.1.1.6d(8)(d) are required.

(9) Transfer Inspection:

(a) A transfer inspection must be performed when a reporting custodian is directed to transfer an aircraft by Aircraft Transfer Order (ATO) to another operating unit. A transfer inspection is also required when an aircraft and its records are reassigned to NAVAIRSYSCOM Fleet Support (FS) controlling custody. Transfer inspections must include:

1. Inventory of all equipment listed in the AIR.

2. Verification of CADs and PADs.

3. Configuration verification.

4. Aircraft transfer conditional inspection technical publication requirements (if applicable).

5. Daily inspection.

6. Entry in the aircraft and AESR logbooks on the inspection page titled "Conditional". Authority for the entry is this instruction.

7. Hydraulic fluid sampling results entry in the Miscellaneous/History section of the aircraft logbook.

(b) Verification of CADs, PADs, and configuration is accomplished by visual external inspection and examination of logs and records. Disassembly beyond daily inspection requirements of applicable PMS publications is not required.

NOTE: Configuration verification includes CAGE, part number, and serial number verification of all components and assemblies installed on the aircraft that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SSK Record, or Aircrew Systems Record.

(c) Reporting custodians may elect to increase the depth of inspection if equipment condition, visual external inspection, or examination of logs and records indicate such action is warranted.

(d) Aircraft transferred from an FRC or commercial rework facility require hydraulic fluid sampling before transfer.

(e) Administrative requirements of aircraft transfer shall include:

1. Submission of DECKPLATE Engine Transaction Reports (ETR).

2. Electronic transfer of aircraft and associated ALSS equipment in the VFS Support Cartridge Actuated Device/Propellant Actuated Device (CADPAD), Traceability Cartridge Actuated Device/Propellant Actuated Device (TRACE CADPAD), and TRACE LIFE SUPPORT Modules (if applicable).

3. Verification of the Monthly Flight Summary (OPNAV 4790/21A) (Figure 5-5) by calculating cumulative FLYING HOURS in PERIOD and SINCE NEW blocks/fields.

4. Verification of the Equipment Operating Record (OPNAV 4790/31A) (Figure 5-6) by calculating cumulative OPERATING HRS ACCUM blocks/fields.

5. Submission of the appropriate MAF/WO for Loss. (Not required for NTCSS Optimized OMA NALCOMIS activities.)

(f) Operating units that transfer aircraft between home guard and detachments are not required to perform a transfer inspection. Administrative requirements listed in paragraph 5.1.1.6d(9)(e)are required.

(g) Operating units that transfer a short-term transfer aircraft are not required to perform a transfer inspection. Administrative requirements listed in paragraph 5.1.1.6d(9)(e)are required.

(h) Aircraft originally planned for short-term transfer, but due to operational or TE requirements exceed 90 days, will require a complete transfer inspection before transferring the aircraft to another reporting custodian.

NOTES: 1. In instances where a transfer inspection is not required, the reporting custodian may elect to conduct a transfer inspection if deemed by the MO as a prerequisite to transfer.

2. An FCF is not required for aircraft transfer. This does not preclude a reporting custodian from electing to conduct an FCF if deemed by the MO as prerequisite to transfer.

(10) ASPA Evaluation (for aircraft not under PDM).

(a) ASPA evaluations are performed by certified ASPA evaluators. ASPA evaluators include an analysis of records and logbooks, and a physical examination of the aircraft based on engineering specifications prepared by the ISSC. Refer to OPNAV 3110.11 for ASPA program.

(b) Repair of ASPA Defects. The ASPA evaluator will provide the reporting custodian with a signed copy of the ASPA Evaluation Record including all Critical, Major, or Minor defect discrepancies. The reporting custodian must provide the ASPA evaluator with the JCN assigned to the ASPA support WOs and the total man-hours expended for ASPA preparation. The reporting custodian will initiate WOs with a When Discovered Code of U for all discrepancies. Critical defects must be corrected prior to release for flight, regardless of assessed maintenance level. The ASPA evaluator will act as critical repair coordinator for D-level discrepancies until relieved by the leader of the D-level repair team. The ACC will coordinate field repair of D-level Major defects not recommended for deferral until the next PDM induction. The ACC may decline a recommendation for PED adjustment in consideration of operational and readiness impacts. Per OPNAVINST 3110.11, aircraft that fail ASPA must be inducted for PDM no later than 90 days after the current PED.

(11) Pre D-level Inspection. This inspection is performed prior to induction to on-site standard or special rework. The inspection is performed per applicable standard or special rework MRCs, and includes an inventory of all equipment listed in the AIR, verification of CADs and PADs, and configuration verification.

(12) Post D-level Inspection. This inspection is performed at the time a reporting custodian receives an aircraft back from on-site standard and special rework. It includes an inventory of all equipment listed in the AIR, verification of CADs and PADs, configuration verification, hydraulic fluid sampling, daily inspection, and FCF. Activities may elect to increase the depth of inspection if defects noted in equipment condition, or during visual external inspection, or record examination indicates additional inspection is warranted.

(13) On receipt of an aircraft from depot rework, the reporting custodian must document deficiencies attributed to the depot's work by submitting an Acceptance Inspection Deficiency Report (AIDR) per paragraph 10.9.

e. Minimum Operating Requirements for Aircraft to be ferried.

(1) The conditions requiring minimum operating requirements apply primarily to aircraft to be ferried:

(a) From one operating activity to another.

(b) To a Navy or commercial activity for rework.

(c) From any activity to storage.

(d) From a Navy or commercial activity after rework.

(2) Operating activities having physical custody of the aircraft to be ferried shall ensure minimum requirements for a safely flyable aircraft are in agreement with planned mission requirements, distance and duration, and the specific aircraft NATOPS manual. All aircraft will be properly equipped per OPNAVINST 3710.7 and mobility criteria set forth in the MESM (provided on CNAP Share portal). In addition, aircraft to be ferried shall be within W&B limitations. Ensure all special and conditional inspections and the applicable portions of the appropriate MRCs, which are due or might reasonably be expected to fall due during the ferry mission, are completed or waived by this instruction prior to starting the mission. A logbook entry certifying compliance with the above provisions shall be made in the inspection section of the logbook under "Conditional Inspections". State the type of inspection, for example, aircraft ferry inspection; authority is "COMNAVAIRFORINST 4790.2". Waivers shall be logged on the Miscellaneous/History page of the logbook.

(3) Ensure the inventory procedures are completed.

(4) In addition to the above requirements, the handbook of W&B data, corresponding computer, and a current NATOPS manual will be aboard the aircraft. The logbook and records shall be current, accurate, and closed out. Activities with NTCSS Optimized OMA NALCOMIS transfer records using the CM Group explorer. All additional administrative records required for transfer of naval aircraft shall be per paragraph 5.2.1.

(5) Ten days advance notice, via naval message, is required prior to sending an aircraft to the AMARC for storage. The message will be addressed to AMARC Davis Monthan AFB AZ, info COMNAVAIRSYSCOM DET FSO Tucson AZ and COMNAVAIRSYSCOM Patuxent River MD.

5.1.1.7 Engine Inspection Procedures and Responsibilities

a. General. Engine inspections shall be accomplished using the applicable MRCs upon expiration of the established interval. Engine inspections may be performed independently of, or concurrently with, any airframe inspection. Unless otherwise indicated by the PMIC, a plus or minus 10 percent of the engine inspection interval is allowed for scheduling purposes.

NOTES: 1. The plus 10 percent extension is not authorized for LCF limited items which have accumulated their assigned cycles or operating hours. The 10 percent extension is not authorized for structural life limited components (listed in NAVAIRINST 13120.1, NAVAIRINST 13130.1, and applicable PMICs) that have reached their basic life limitations or would reach those limitations during the extension.

2. Operational commanders are authorized to defer scheduled maintenance of otherwise functional equipment, including replacement of high time components. This authority is effective only during combat, and shall not be delegated below the CO of the ship or air wing commander as appropriate. ACC or TYCOM notification is not required except in the case of high time components which will be reported to the ACC or TYCOM by priority message when installed components are at or beyond high time, to include the following information: T/M/S, BUNO, NOMEN, PN, and REQN NR STATUS. This authority is not to be applied to LCF or

structural life limited items (those items whose disposition is "RETIRE" in the PMIC). Scheduled maintenance deferred at the local operational commander level should not exceed one interval of that maintenance event. As soon as operations permit, deferred maintenance actions must be brought current. Authorization for further deferral should be referred to the ACC or TYCOM.

b. Major Engine Inspection. This is a comprehensive inspection performed to determine the material condition of the engine. The organizational activity removes a QECA due for inspection from the aircraft, turns it in to the supporting IMA, requisitions an RFI QECA, and installs it in the aircraft. The removed QECA is inspected by the IMA and returned to RFI status. MRCs provide all requirements necessary for performing major engine inspections, and include the inspection requirements for the engine and all applicable QEC accessories for the respective aircraft applications. These MRCs are normally used by the IMA. When O-level activities retain QEC components they will be inspected using the applicable QECA MRCs. QECA MRC tasks will be a part of CM ALS for NTCSS Optimized OMA NALCOMIS activities.

c. Phase Engine Inspection. The phase maintenance concept divides the total scheduled maintenance requirements into small packages or phases that are accomplished sequentially at specified intervals. Completion of all required phases at their specified interval completes the phase inspection cycle. The cycle is repetitive for the service life of the engine and is not interrupted during aircraft standard rework. The inspection is accomplished on installed engines using a bore scope or other inspection aids as directed in the applicable aircraft phase MRCs.

d. Special Engine Inspections. This concept provides for scheduled maintenance requirements accomplished at specified intervals. These requirements may or may not coincide with the aircraft phase or major engine inspection interval and may be repetitive or cumulative in nature. Recently designed modular engines may have hourly special inspection requirements of this type. Some engines maintained under the major engine inspection concept also have this requirement while installed. This inspection is accomplished on installed engines using a bore scope or other test equipment and inspection aids per the T/M/S special and conditional MRCs.

e. Conditional Engine Inspections. These are performed when a specific over limit condition occurs as identified in the applicable aircraft PMIC. The PMIC may, in some instances, direct more frequent performance of engine special inspections as a result of the over limit condition. Cumulative occurrences of the over limit condition may require performance of a major engine inspection as directed by the applicable aircraft maintenance technical manual troubleshooting procedures. Although the PMIC identifies conditional engine inspections, procedures for performance are contained in the aircraft special conditional inspection maintenance technical manuals.

f. Unscheduled Third and Second-Degree Repairs. IMAs will perform the next major inspection due on all removed engines requiring unscheduled I-level repair using the following criteria:

(1) Engines with major inspection intervals of 400 hours or more will have major inspections performed if 25 percent or less of the interval remains until the next inspection.

(2) Engines with major inspection intervals of less than 400 hours will have major inspections performed if less than 100 hours remain until the next inspection.

(3) Engines inducted for repair and maintained per the installed inspection (special and phase) concept shall have the inspection requirements performed as specified in the applicable QECA MRC, engine MRC, or maintenance technical manual

.

NOTE: The AESR/CM ALS AESR of engines received from the IMA or Supply shall be screened to determine which inspections, if any, have been performed and when the next inspection is due. This action is required to ensure the engine inspection sequence is aligned with the aircraft inspection cycle.

g. Unscheduled First-Degree Repair. The repair of a gas turbine engine to a depth which includes replacement of compressor rotor or other repairs to the same depth, identified in the maintenance allocation table of the applicable MIM, is classified as unscheduled first-degree repair. All engine inspections are accomplished during first-degree repair; therefore, engines installed following first-degree repair are zero timed for inspection purposes. First-degree repairs of a minor nature, not requiring an excessive amount of man-hours, may have the inspection requirements waived by the ACC or TYCOM.

5.1.1.8 Support Equipment (SE) Issue and Receipt Procedures

a. The Support Equipment Transaction Report (OPNAV 4790/64) is used to record SE issue and receipt transactions.

b. The following procedures shall be used to issue or receive SE on a subcustody basis:

(1) Issue Procedures. All personnel shall have in their possession a valid USN Aviation Support Equipment Operator's License (OPNAV 4790/102) for specific equipment being checked out. A joint (issuing and receiving personnel) preoperational inspection shall be performed, using the applicable MRCs, prior to issue. Personnel receiving the SE will sign the SE Preoperational Record (OPNAV 4790/52) (Figure 5-7) in the inspector's block. Issuing personnel will sign the supervisor's block. The SE Preoperational Record (OPNAV 4790/52) will accompany each item of SE. The Support Equipment Transaction Report (OPNAV 4790/64) shall be signed in block 27f by the user to document SE issue. The white, green, and yellow copies of the TR will be retained by the issuing activity for local record keeping purposes. The pink copy will be retained by using activity for its records.

(2) Receipt Procedures. All persons shall have in their possession a valid USN Aviation Support Equipment Operator's License (OPNAV 4790/102) for specific equipment being returned. The applicable SE Preoperational Record (OPNAV 4790/52) shall be returned with the SE. A joint (issuing and receiving personnel) preoperational inspection will be performed by the using and receiving personnel using the applicable MRCs. The SE Preoperational Record (OPNAV 4790/52) will be annotated the same as above. The transaction report (TR) will be signed in block 28f by receiving personnel to document SE return.

(3) Discrepancy Identification. All discrepancies noted during issue/receipt or preoperational inspections shall be annotated on a MAF by Production Control.

5.1.1.9 Support Equipment (SE) Acceptance and Transfer Procedures

a. The SE Custody and Maintenance History Record (OPNAV 4790/51) is used to record acceptance information, custody and transfer, rework, preservation and depreservation, TDs, and any other miscellaneous history required to accompany the SE throughout its service life.

b. The following procedures shall be used to transfer or accept SE on a permanent basis:

(1) Acceptance Procedures. An inspection is performed at the time a reporting custodian accepts an item of SE on a permanent basis or upon return from a D-level or commercial repair activity. It includes an inventory of all records and components that make up the item of SE, a configuration verification, a preoperational inspection as required by the applicable MRCs, hydraulic fluid sampling, and a functional test. Hydraulic sampling results shall be recorded in the Miscellaneous History Record section. The activity receiving the item of SE may elect to increase the depth of inspection if the SE condition indicates such

action is warranted and shall screen the item for periodic maintenance that may have come due during the time it was shipped.

(2) Transfer Procedures. An inspection is performed at the time a reporting custodian transfers an item of SE on a permanent basis or upon transfer to a D-level or commercial repair activity. It includes an inventory of all records and components that make up the item of SE, a configuration verification, a preoperational inspection as required by the applicable MRCs, and a functional test. Hydraulic fluid sampling shall be performed when SE is transferred from a D-level or commercial repair activity, the results of which shall be recorded in Miscellaneous History Record section. The activity transferring the item of SE may elect to increase the depth of inspection if the SE condition indicates such action is warranted and shall screen the item to ensure all periodic maintenance is current prior to shipping.

5.1.1.10 Aviation Life Support Systems (ALSS) Inspection Procedures and Responsibilities

The scheduled maintenance requirements for aircraft and man-mounted equipment are published in the applicable aircraft MRCs, shop process cards, and NAVAIR 13-1-6 (series) manuals. All ALSS inspections are special inspections based on calendar days and are authorized a plus or minus three days deviation during compliance by the prescribed maintenance level. All scheduled and unscheduled aircraft and man-mounted equipment maintenance requirements will be controlled by Maintenance Control. For specific guidance concerning ALSS refer to Chapter 6. The ALSS Baseline Manager will ensure all requirements are maintained in CM for activities with NTCSS Optimized OMA NALCOMIS.

NOTES: 1. Activities operating with OOMA shall use AERs and ALS to manage, report, and generate records for all ALSS assemblies and components. OOMA activities are not authorized to use Trace Life Support Modules or survival equipment asset tracking system (SEATS).

2. Due to the uniqueness of each platform T/M/S, should a conflict occur between sources of guidance, the governing authority for a plus or minus authority resides with applicable T/M/S MRCs, NAVAIR 13-1-6 (series) manuals or commercial aircraft derivative task cards.

5.1.1.11 Scheduled Removal Components (SRC) and Assemblies

SRCs and assemblies with operating limitations are normally replaced at the scheduled inspection which falls nearest to the applicable limitation. To reduce replacements at other than scheduled inspections, a margin of plus or minus 10 percent of the stated operating limitations is authorized for components or assemblies, unless such extension is prohibited by the applicable PMIC or other directive. Components or assemblies requiring SRC cards or ASRs shall be inventoried during phased inspection for the applicable equipment being inspected. Activities with NTCSS Optimized OMA NALCOMIS shall verify all applicable PMICs against the CM Inventory Explorer. At the completion of one complete phased cycle all SRC or ASR and CM ALS items shall have been inventoried. The inventory is performed using a locally prepared form containing a preprinted list of SRC or ASR or CM ALS items with a column provided for recording the serial number of the installed items. On-condition items requiring EHRs or CM ALS items shall be included on this inventory list. This list will be reviewed to ensure installed components and assemblies requiring ASR, EHR, or CM ALS and SRC cards match the aircraft or AESR inventory record or CM Inventory Explorer.

NOTE: The 10 percent extension deviation is not authorized for structural life limited components (listed in NAVAIRINST 13120.1, NAVAIRINST 13130.1, and applicable PMICs) that have reached their basic life limitations or would reach those limitations during the extension.

5.1.1.12 Aircraft and Equipment Cannibalization Management

a. Cannibalization is an acceptable management choice only when necessary to meet operational objectives. Commands are responsible for eliminating unnecessary cannibalization that provides no benefit to accomplishment of the mission.

b. Commands will assess the effectiveness of their cannibalization by tracking related measurements, such as material availability rate, A-799 rate, I-level TAT, supply response time, cannibalization per 100 sorties, and average maintenance man-hours per cannibalization.

NOTES: 1. Under no circumstance will cannibalization be performed to create a pool of RFI parts for general use to support flight operations or detachments.

2. Orders to cannibalize must come from Maintenance Control. Maintenance Control or Production Control must enter the appropriate malfunction code (Appendix E) when initiating a cannibalization WO or MAF. If the cannibalization requires Wing or ACC approval, the approval notification will be cited in the Discrepancy block, for example "Cannibalization approved by (Wing or ACC, and Rank and Name of approver) via email 01Feb2017.

3. Cannibalization of egress systems will be minimized. Egress system cartridges, CADS, and PADs will not be cannibalized without prior approval of the cognizant Wing.

c. Squadrons will monitor and report cannibalization actions between squadron aircraft per Type Wing or MAW instructions.

d. Authority for cannibalization between squadrons within the same Type Wing or MAW will be requested via email from the requesting unit Maintenance Officer to the Wing Maintenance Officer. Cannibalization requests will be supported by justification to include the latest supply system stock posture, the status of the requisition of the required component or equipment, and the effect the cannibalization will have on the operational readiness of the recipient unit. The approving Wing will direct the cannibalization action via email to the providing and recipient units, and will include the supporting supply activity, operational chain of command, and the ACC as info addressees.

e. Authority for aircraft or equipment cannibalization between Wings of MAGs, and cannibalization from aircraft that have been non-mission capable in excess of 90 days, must be requested via email from the Wing or MAG Commander to the ACC. The Wing will obtain concurrence of need to cannibalize from the supporting supply activity prior to submitting the request.

NOTES: 1. Naval messages or letters will be used to request approval to cannibalize only if the activity has no email connectivity.

2. When deployed, the CVW or ACE Maintenance Officer will assume Wing responsibilities for cannibalization management.

(1) COMNAVAIRFOR (N421/N423) is the approval authority for COMNAVAIRFOR aircraft or equipment. Email requests to: cnaf_flt_canns@navy.mil.

(2) COMNAVAIRFORES (N42) is the approval authority for Reserve aircraft or equipment. Email requests to: cnafr_cann.fct@navy.mil

(3) COMNAVAIRSYSCOM (AIR-5.0D) is the approval authority for COMNAVAIRSYSCOM aircraft or equipment.

(4) CNATRA (N421) is the approval authority for CNATRA aircraft or equipment.

f. Authority for cannibalization of aircraft or UAS out of MCRS (OOR), will be requested from the respective ACC. ACC authorization is also required for diversion of RFI aircraft components intended for aircraft or equipment undergoing a D-level event, for example, diversion of an RFI component from a D-level production line to a fleet activity. Approval authorities are:

(1) COMNAVAIRFOR activities will request approval from COMNAVAIRFOR (N421). Email requests to: cnaf_flt_canns@navy.mil.

(2) COMNAVAIRFORES activities will request approval from COMNAVAIRFORES (N421). Email requests to: cnafr_cann.fct@navy.mil.

(3) COMNAVAIRSYSCOM activities will request approval from COMNAVAIRSYSCOM (AIR-5.0D).

(4) CNATRA activities will request approval from CNATRA (N421).

g. Authority to cannibalize NRFI components undergoing repair by the IMA is left up to the IMA and supporting supply leadership.

h. Cannibalization for Broad Arrow equipment from another site requires ACC approval.

i. COMNAVAIRFOR (N421/N423) and COMNAVAIRSYSCOM (AIR-5.0D) will work with AIR-4.0 Engineering and PEOs to identify systems where readiness concerns drive high cannibalization rates.

5.1.1.13 Monthly Maintenance Plan (MMP)

The purpose of the MMP is to provide scheduled control of the predictable maintenance workload, for example, inspections, transfer or receipt of aircraft, and compliance with TDs. By scheduling predictable maintenance, the capability for accomplishing unscheduled work can be determined. In addition, requirements for SE, material, manpower, and other factors affecting the maintenance operation can be determined in advance of actual need. The MMCO is responsible for preparing and publishing the MMP; however, Maintenance Control will note deviations from the MMP and initiate necessary actions to adjust the maintenance workload to meet the noted variations. Chapter 3 provides additional details.

5.1.1.14 Phased Depot Maintenance (PDM) Induction Requirements

a. PDM is categorized as Standard Rework, which is scheduled D-level maintenance performed per an established recurring schedule. Integrated Maintenance Concept/Program (IMC/P) and Planned Maintenance Interval (PMI) events are examples of Standard Rework.

NOTES: 1. "Special" Rework is non-PDM, non-recurring depot rework performed as required. Examples of Special Rework include modifications, conversion, and major repairs that cannot be performed in the field. Refer to Appendix A for full descriptions of Standard and Special Rework.

2. Depot field team In Service Repair (ISR) and Planner and Estimator (P&E) services are not categorized as deport rework. Refer to paragraph 3.2.2.24 for P&E procedures.

b. The reporting custodian must perform the following actions prior to delivery of an aircraft for PDM:

(1) One month prior to the scheduled induction date, submit a Phased Depot Maintenance Work Request (OPNAV 4790/65) to the designated rework activity, with copies to cognizant Type Wing Commander, ACC, and COMNAVAIRSYSCOM program office. PDM Special Work Requests for aircraft going to commercial rework activities will include a copy to the Contract Administration Office (CAO) at the rework activity. Special request items are workload over and above the planned PDM and result in extra cost. Therefore, the PDM Special Work Request will only list actions that are beyond the capability of the operating activity and its supporting I-level activity, such as incorporation of D-level changes or modifications, correction of continuing or recurring discrepancies, special painting while disassembled, and tests that require D-level equipment. Blocks A through L, O, Q, and R are self-explanatory and are completed by the reporting activity. Blocks M and N TD information will be filled in by the rework activity. Special work items requested in block O will be listed in order of priority. The rework activity and the ACC PDM Liaison Officer will mutually decide which of the items will be performed during PDM.

COMNAVAIRSYSCOM activities must describe any peculiar aircraft instrumentation and other pertinent data that may assist the rework activity with processing the aircraft.

(2) Prior to delivery of the aircraft to the rework activity, remove all loose gear not required during the rework process and, if applicable, annotate the inventory log.

(3) Remove all ammunition and pyrotechnics, except those required for flight safety.

(4) Inventory and verify aircraft configuration, including all equipment listed in the AIR and CADS and PAD.

(5) If transferring the aircraft to the depot, provide up-to-date logbooks and CM ALS and other necessary records. Verify all entries are current as of the date of delivery. Verify all MSR, ASR, EHR, and SRC cards are inventoried and verified against installed equipment.

(6) Deliver SE with the aircraft as prescribed in the PDM rework requirements, for example, jury struts, landing gear ground safety locks, and intake covers.

(7) Deliver aircraft to the rework activity no later than 1200, the day prior to the scheduled induction date.

5.1.1.15 Preservation Procedures and Responsibilities

a. Aircraft preservation is designed to protect the material condition of aircraft which are not expected to be flown for extended periods of time. An aircraft may be preserved at any time, regardless of the material condition reporting status, when it is determined to be in the best interest of the aircraft or activity. The MO is responsible for determining when an aircraft is required to be placed in preservation. For aircraft placed in preservation per T/M/S maintenance technical manuals, all scheduled special inspections may be deferred until the aircraft is removed from preservation. For aircraft without preservation maintenance technical manuals, preservation shall be performed per NAVAIR 15-01-500. Baseline Managers will ensure all requirements for aircraft preservations performed per NAVAIR 15-01-500. Aircraft may be removed from preservation at the discretion of the MO. All scheduled special inspections shall be performed on aircraft not in preservation. Aircraft T/M/S maintenance technical manuals shall be used to perform system operational checks when not placed in preservation. For aircraft without specific T/M/S operational system check maintenance technical manuals, aircraft systems will be exercised every 28 days (+/- 3 days) using applicable maintenance technical manuals. Maintenance Control shall ensure a daily inspection is performed and annotated on a Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Figures 5-2 and 5-3) prior to performing an operational systems check.

b. SE, Armament Weapons Support Equipment (AWSE), and weight handling equipment (WHE) preservation is designed to protect the material condition of equipment which is not expected to be used for extended periods of time. This equipment may be preserved at any time, regardless of material condition, when it is determined to be in the best interest of the equipment or activity. For standardized management of personnel and resources, activities may use the following categories to determine the level of preservation desired:

(1) Category A – SE, AWSE, WHE which has anticipated usage within the next 90 days. This equipment shall be maintained under current SE/PMS directives.

(2) Category B – SE, AWSE, or WHE which could possibly be used within the next 180 days. This equipment may be placed in a minimum of Level I.

(3) Category C - SE, AWSE, or WHE not needed for extremely long periods of time (in excess of 180 days) may be placed in Level II or III preservation depending on the resources at the geographical area.

c. Levels of preservation for aircraft and SE/AWSE/WHE are defined below. Dehumidification (Level III) is the preferred method of preservation.

(1) Level I: 0 - 90 days.

(2) Level II: 0 - 1 year.

(3) Level III: 0 - indefinite.

d. Corrosion Prevention and Control. QA will monitor to determine if:

(1) A preventive maintenance program is in effect that ensures compliance with NAVAIR 01-1A-509 (series), NAVAIR 15-01-500, NAVAIR 17-1-125, NAVAIR 17-35FR-06, and other existing directives.

(2) Only authorized and current shelf life corrosion prevention/control materials are used.

e. Maintenance personnel supervising or performing corrosion prevention, arrestment, and removal receive corrosion control training.

NOTE: SE in Category B or Category C preservation should be removed from the MRC inspection schedule. During normal Category B and C preservation, the "clock" stops for MRCs and is started again upon depreservation. When SE is depreserved, it shall resume its formal PMS inspection program. Refer to NAVAIR 17-1-125 for exceptions.

f. Aircraft detachable mission equipment (troop seats, external cargo hook/pod, etc.), not identified as an end item, shall be preserved to protect the material condition of such equipment when it is not installed or in use. This equipment may be placed in preservation at any time, regardless of ready for use condition. Preservation of equipment and gun systems not addressed in the T/M/S maintenance technical manuals shall be maintained per applicable maintenance technical manuals and directives. Baseline Managers will ensure CM baseline tasks include preservation requirements for equipment and gun systems.

g. Work performed on preserved aircraft, SE, AWSE, or WHE must be directed by Maintenance or Production Control and monitored by Work Center Supervisors and personnel assigned QA responsibilities. Depreservation, maintenance, and the represervation of a specific area where maintenance was performed must be annotated in the Corrective Action block of the original discrepancy WO or MAF. The QAR, CDQAR, or CDI in-process inspection must ensure all represervation requirements are met after maintenance is performed. No additional depreservation/represervation WO logbook CM ALS entry is required.

h. Type Wings, MAWs, or equivalent may waive or modify preservation requirements for aircraft/aeronautical equipment undergoing extensive repairs or modifications when the preservation would adversely affect the completion of the task. Type Wings, MAWs, or equivalent shall coordinate with the ACC or TYCOM to determine the specific maintenance procedures required to monitor the material condition of these assets until returned to an operational status or placed in preservation.

5.1.1.16 Additional Maintenance Control Responsibilities

Detailed maintenance control responsibilities are in the following NAMPSOPs (Chapter 10).

Fuel Surveillance Program (paragraph 10.2)
Navy Oil Analysis and Consumption Monitoring Program (paragraph 10.3)
Hydraulic Contamination Control Program (paragraph 10.5)
Tire and Wheel Maintenance Safety Program (paragraph 10.6)
Technical Directive Compliance Program (paragraph 10-10)
Foreign Object Damage Prevention Program (paragraph 10.11)
Tool Control Program (paragraph 10.12)

Corrosion Prevention and Control Program (paragraph 10.13)
Support Equipment Planned Maintenance System (paragraph 10.17)
Electrostatic Discharge (ESD) Protection and Electromagnetic Interference (EMI) Reporting Program (paragraph 10.21)

5.1.2 Production Control

a. All enlisted personnel, E-6 and above, and all officers assigned to Production Control must complete the IMA Production Control course (Course C-555-0043).

b. All personnel assigned to Power Plants Production Control must complete the IMA Power Plant Production Control course (Course C-555-2021).

5.1.2.1 Material Management Concepts

a. Basic concepts and guidelines are established for regulating the IMA to ensure:

(1) Requisitioning procedures are standardized and properly used by maintenance activities.

(2) Positive control of all accountable material.

(3) Maximum use of personnel and material resources.

(4) Supply response to material demands is optimum.

b. Goals. The concepts and guidelines represent material management policies of CNO, implemented by COMNAVAIRFOR, for maintenance and supply personnel at all echelons engaged in NAMP support. The impact of sophisticated weapon systems requires intensified management by both Maintenance and Supply activities to accomplish the following:

(1) Improve response time. The turnaround time (TAT) of repairables must be improved through better control and reporting procedures.

(2) Improve stock records to accurately reflect material availability, location, condition, and quantity.

(3) Data input reliability must be improved. Substantial progress has been made through mechanization, but better data input is necessary for good material management. Erroneous requisitions and transaction errors greatly affect response time. Copying wrong part numbers or misrouting of components result in delayed weapon systems support. Personal attention to detail at the operating level is still the most effective management tool for achieving optimum weapon systems support.

c. Related Information. To operate a production control effectively, a maintenance manager must be familiar with many aspects of the total maintenance effort. Listed below are some aspects within this Chapter:

(1) The Navy Supply System.

(2) Source, Maintenance, and Recoverability (SM&R) Codes.

(3) Material allowances.

(4) Fixed allowances.

(5) Processing of training device components.

(6) Navy Working Capital Fund (NWCF) financing of Aviation Depot level Repairables (AVDLR).

5.1.2.2 Supply Priorities and Project Codes

a. Assignment. When informed by the work center of repair parts requirements, Production Control assigns the supply priority and project code.

b. Supply Priorities. All activities in the Navy are assigned a force activity designator (FAD) for determining priorities for material support based on their mission. Instructions for using the material priority system and for assigning FADs are in OPNAVINST 4614.1 series and implemented by fleet commander and support commander instructions. The FAD is correlated with an urgency of need requirement to determine the priority assigned to requisitions. For example, a FAD II activity can submit Priority 2, 5, or 12 requisitions, depending on the urgency of the requirement as related to mission readiness. A FAD III activity would submit Priority 3, 6, or 13 requisitions for corresponding requirements. The priority, not the project code, assigned to the material requisition determines the speed with which a requisition must be filled by the supply system. Abuse of the priority system dilutes the effort the supply system can devote to units directly involved in combat.

NOTE: Piece parts for repairables inducted for expeditious repair (EXREP) will be requisitioned using the priority (not project code) assigned to the NMCS or PMCS demand generating the EXREP.

c. Project Codes. Project codes are assigned to identify requisitions and related documents applicable to specific projects or programs. Project codes are mandatory entries on all requisitions. Some of the most commonly used project codes assigned to material requisitions are:

(1) BK0 - Assigned by the IMA when requisitioning material to repair SE that is inoperative and a workaround, redundancy, or local backup is available. Requires BA reporting if the condition is projected to impact aircraft support in the near term and jeopardize sustained support of O-level maintenance. Assign a D series document number to all BK0 material requisitions. GB requisition series should only be used with ZF7 project code.

(2) BK1 - Assigned by the IMA when requisitioning material to stop an AWP condition on a specific end item or component (other than aircraft engines) undergoing repair. (BK1 will not be used for material required for components undergoing EXREP for NMCS or PMCS requirements - see Project Code ZC8.)

(3) ZC8 - Assigned by the IMA when requisitioning material to stop an AWP condition on components and aircraft engines undergoing repair when directly related to aircraft support, for example, components that are undergoing EXREP repair for NMCS or PMCS requirements and engines that are being repaired for bare firewalls.

(4) ZF7 - "Broad Arrow" (SE inoperative) assigned by IMA to material requirements for nonoperational SE used in direct support of operational aircraft for which there is no redundancy, for example, backup SE locally available or when loss of one or more SE items significantly impacts required production capacity to sustain the operational readiness of supported units.

(5) ZQ9 - Engine maintenance work stoppages for all model aircraft engines. (ZQ9 will not be assigned for material required for engines being repaired for bare firewalls, see Project Code ZC8.)

5.1.2.3 Awaiting Part (AWP) Validation

Validation of AWP items, using the AWP list provided by the aviation support division, shall be performed jointly with the AWP unit at least weekly. AWP validation ensures all parts on order are still required and all

required parts are still on order. Possible cannibalization actions are also explored to reduce the number of AWP components.

5.1.2.4 Workload Priorities Assignment

a. Production Control, in working with the component control section (CCS) and aeronautical material screening unit (AMSU), will set workload priorities based on the following:

(1) Priority 1. Support of NMC or PMC aircraft. NMCS and PMCS items, based on a valid outstanding requisition held by supply (EXREP), or work requests causing NMC or PMC conditions on aircraft, will be assigned Priority 1. Priority 1 is also assigned to all workload for activities within 30 days of deployment, regardless of NMC/PMC status.

(2) Priority 2. Repair of critical local repair cycle assets (LRCA) and SE. This priority is also assigned to O-level maintenance activity's work stoppage requirements.

(3) Priority 3. Repair of noncritical LRCAs and SE, and repair or manufacture of material for nonfixed allowance stock.

(4) Priority 4. Processing of salvaged material and nonaeronautical work.

b. Priorities may be adjusted by the IMA Maintenance and Supply officers as necessary to meet local support requirements and operation conditions.

c. These assigned priorities apply to any work on AWSE which must be done by the IMA in support of the Weapons Department. This work includes component repair, for example, off-equipment maintenance, work beyond the capability of the Weapons Department, and beyond capability of maintenance (BCM actions.

d. Sustaining aircraft readiness is achieved through the stabilization of replenishment times and synchronization of maintenance and supply activities to end-user demand. MALS, FRCs, ASDs, and Afloat and OCONUS IMAs shall use the BMT throughout the Maintenance Department to:

(1) Monitor daily workload and assign priorities to ensure efficient movement of components through the work centers.

(2) Align workload priorities to inventory allowances and customer demand.

(3) Conduct historical repairable component time to reliably replenish (TRR) analysis to identify improvement opportunities.

(4) Identify items in the Black color zone that are workable for insertion into the production queue.

(5) Ensure clean handoffs within links (from shift to shift) and between links (Production Control to Work Center, O-level, Supply to Maintenance, etc.).

(6) Work resources consistently and expeditiously without impeding quality or safety.

(7) Efficiently work EXREPs by determining whether another component of the same Family Group Code is in the repair process. Continue with repair on the item furthest along to avoid disruption of the TRR for other components.

(8) Conduct AWP validation to track status of supply requisitions.

e. Maintain open communication with supported activities, Type Wings or MAGs, and Supply.

5.1.2.5 Controlling Awaiting Maintenance (AWM)

Within space allocations, items AWM should be stored in a central location. If bins are available, the exact location of the AWM item may be marked on the MAF to facilitate location by AMSU. Keeping AWM and AWP items out of the work centers and in a central location helps prevent damage to the items and may reduce indiscriminate, unauthorized, cannibalization. When centralized location of AWM items is not possible due to space limitations, AWM items may be stored in the work centers.

5.1.2.6 Hold Time for Repairable Components

When check, test, and repair capability does not exist at the IMA, all AVDLRs and some field level repairables (FLR) must be shipped to the designated support point (DSP), designated rework point (DRP), or another activity having the capability to repair that component. Under normal circumstances, the determination must be made within 24 hours. When determined that repair capability does not exist, the component will be shipped to another activity within 48 hours. Total IMA, Supply and Maintenance, hold time shall not exceed 3 days.

5.1.2.7 Logs and Records Screening Procedures

a. Maintenance of logs and records and CM ALS must be performed by Production Control. When satellite Production Controls are established, logs and records and CM ALS may be maintained within satellite areas; however, in no instance will they be maintained outside the Production Control work spaces. Logs and records on aeronautical equipment consist of Aeronautical Equipment Service Record (OPNAV 4790/29), SE Custody and Maintenance History Record (OPNAV 4790/51), and Mobile Facility Logbook and Inventory Record (OPNAV 4790/63).

b. Production Control must develop procedures for screening incoming logs and records and CM ALS to ensure all maintenance required to be performed is identified for accomplishment during the repair/inspection process. When screening logs and records and CM ALS, Production Control must ensure all publications are available which contain maintenance requirements. The publications should include, but are not limited to, the following:

(1) Support Equipment TD Listing (NALDA TDRS (NAT02).

(2) PMICs.

(3) Daily/Special/Preservation MRCs.

(4) Phase MRCs.

(5) Technical Manual Intermediate Maintenance.

(6) Technical Manual QECA Maintenance Requirements Manual.

(7) Complete Engine Repair Requirements Cards.

(8) Publications applicable to SE (NAVAIR 17 and NAVAIR 19 series).

NOTE: Local forms may be developed to serve as inventory forms, directives applicability listings, inspection requirements, and high-time components. All forms developed for equipment shall be filed in the equipment historical file.

5.1.2.8 Liaison with Quality Assurance (QA)

a. Attaining quality in maintenance and preventing maintenance errors is an all hands task. This can only be accomplished through positive leadership, proper organization, and a complete understanding of responsibilities by each individual in the department. QA requirements, as well as QA functions and responsibilities, provide a sound basis for an effective QA process.

b. QA is a staff function which requires both authority and assumption of responsibility. Direct liaison between QA and production divisions is a necessity and must be energetically exercised. Although the QA officer is responsible for the overall quality of maintenance within the department, production division officers and work center supervisors are responsible for assuring required inspections are conducted and high quality work is attained.

5.1.2.9 Maintenance Database Administrator/Analyst (MDBA/A) Responsibilities

a. The MDBA/A shall provide qualitative and quantitative analytical information to the MO allowing a continuous review of the management practices within the activity/department. MDBA/A will be established in I-level activities to monitor, control, and apply the MDS within the activity. The MDBA/A will serve as a contact point between work centers and the SSCA and is responsible for the management of all aspects of the MDS to include NALCOMIS reports/inquires at the activity level.

NOTE: In those cases where an analyst is not authorized for the Weapons Department, the IMA analyst will provide appropriate guidance and assistance. Weapons Department supervisors should acquaint themselves with general analysis requirements, procedures, and products to convey their needs to the IMA analyst. Since the IMA and the Weapons Department both perform AWSE maintenance in varying degrees, there will often be requirements for the same or similar data products in the two departments.

b. The MDBA/A must be a senior petty officer or noncommissioned officer formally trained in MDS procedures to include NALCOMIS data processing capabilities and the techniques of statistical analysis. It is imperative the analyst receive the complete support of the MO, division officers, and work center supervisors.

NOTE: Within the scope of manpower management, the NALCOMIS MDBA/A is a significant activity information resource. In the area of accurate MDS data, the analyst is the one individual within the activity who can either prove or disprove the justification for manpower increases and decreases. A complete understanding of NAMP policies and procedures, accurate documentation procedures, meticulous attention to detail, a viable aviation 3M training program, and close communication between analysts at supported activities should be foremost in the primary and technical responsibilities of the data analyst.

c. The primary responsibilities of the analyst are:

(1) Provide management with data, in graphic and narrative form, necessary to make qualitative decisions about aircraft, equipment, test bench, SE, material condition, readiness, utilization, maintenance workload, or failure trends.

(2) Review data products for accuracy, completeness, and content.

(3) Conduct and coordinate MDS/NALCOMIS training of Maintenance Department personnel in all facets of documentation and in the content and use of available data products.

(4) Coordinate with the SSCA to resolve problems.

(5) Maintain MDS/NALCOMIS report files for the department per Appendix B.

(6) Ensure an adequate supply of source documents is on hand to support the MDS and NALCOMIS during system downtime.

(7) Use MSHARP to assist in logbook reconstruction (Marine Corps only).

(8) Ensure local data is reported up-line to the top-tier and central repository (DECKPLATE).

(9) Keep informed of current efforts and issues with the MDS used by their activity by referencing the SSCA customer support site (https://sailor.nmci.navy.mil).

(10) Initiate trouble calls with SSCA. Trouble calls can be submitted via the SSCA Web site.

d. The technical functions of the MDBA/A are:

(1) Coordinate and monitor the MDS/NALCOMIS for the department.

(2) Review NALCOMIS reports to identify trends.

(3) Use the MDS/NALCOMIS to assist in identifying possible deficiencies in technical training or documentation procedures.

(4) Monitor the assignment of the third position of work center codes.

(5) Collect, maintain, and distribute in narrative, tabular, chart, or graph form the data required to monitor, plan, schedule, and control the maintenance effort.

(6) Develop charts, graphs, and displays for command presentation.

(7) Assist the MO and other supervisory personnel in determining the specific goals for new types of data reports required for managing the maintenance effort.

(8) Identify and apply analytical techniques to areas of material deficiencies, high man-hour consumption, or other pertinent trends.

(9) Provide assistance to Production Control or Maintenance/Material Control in determining material consumption and projected usage based on MDS/NALCOMIS Report/Inquiries.

(10) Coordinate MDR matters with the SSCA.

(11) For NALCOMIS responsibilities refer to Chapter 13.

(12) Activities with NTCSS Optimized OMA NALCOMIS refer to paragraph 5.2.3.2 for SA/A responsibilities.

(13) Use MSHARP to assist in logbook reconstruction (Marine Corps only).

(14) Ensure local data is reported up-line to the top-tier and central repository (DECKPLATE).

(15) Keep informed of current efforts and issues with the MDS by referencing the SSCA customer support site (https://sailor.nmci.navy.mil).

(16) Initiate trouble calls with SSCA. Trouble calls can be submitted via the SSCA Web site.

5.1.2.10 Cannibalization Reduction

All levels of command are directed to actively pursue cannibalization reduction. Paragraph 5.1.1.12 provides direction on managing cannibalization and the related metrics commands must monitor.

NOTE: Maintenance or Production Control must enter the appropriate cannibalization Malfunction Code when initiating a cannibalization WO or MAF. Malfunction Codes are in Appendix E.

5.1.2.11 Broad Arrow (BA) Reporting

a. The IMA SE BA report occurs when there is an item of inoperative SE and there is no redundancy in that piece of SE, or the redundancy is inadequate such that aircraft support will be impacted, thereby, jeopardizing the operational readiness of supported units. All BA reports will be submitted whether or not a part requirement exists and the reporting command does not foresee restoration of repair capability in sufficient time to preclude an adverse impact on the operational readiness of supported units.

b. When inoperative SE requires the attention of support staffs, a BA report shall be submitted. The equipment custodian is in the best position to know the impact on customer service; therefore, the custodian must be the organization to determine if a BA condition exists.

c. BA reporting shall be done by all IMAs. All IMAs, including CONUS shore-based IMAs, shall report BA conditions using BA reports (Figures 5-8 through 5-14). Ships in shipyards are not exempt from submitting BA reports.

d. Broad Arrow Reporting Conditions

(1) A BA exists when an item of SE (bench/test set/operational test program set (OTPS)/rolling stock) is inoperative and an IMA has lost the capability to support or repair aeronautical components that will impact the readiness of supported activities. SE is considered inoperative when it loses its capability to perform its designated function. The focus in this determination is the ability to support the customer or squadrons rather than simply a report to say a piece of SE is down or inoperative. The following guidance is provided in determining when to submit a BA report (Figures 5-8 and 5-9):

(a) Partial Mission Capable: Project Code BK0. SE is inoperative but adequate work around, redundancy, or local backup is available. If such a condition is projected to impact aircraft support or production capability in the near term and any additional degradation will jeopardize sustained support of O-level maintenance, the condition qualifies for BA reporting. This condition would normally result in an impact rating of C1 or C2 as determined by the reporting activity. Assign a D series document number to all BK0 material requisitions.

C1: No impact on repair capability.
Repair capability can be maintained with multiple or legacy test benches.

C2: Impact on repair capability.
Repair turnaround time is able to meet customer demand rate.
AWM backlog is low or none.
Workaround may exist, but is unreliable.

NOTE: A GB requisition series should only be used with ZF7 project code.

(b) Not Mission Capable: Project Code ZF7. Inoperative SE or TPS resulting in the immediate loss of authorized onboard intermediate repair capability for aeronautical components or the loss of SE degrades workload capacity such that the IMA is unable to sustain readiness to the supported activities. This condition would normally result in an impact rating of C3 or C4 as determined by the reporting activity.

For deployed MALS, afloat and overseas IMAs, GB requisition series should only be used with ZF7 project code. CONUS IMAs and MALS will assign D series document numbers to ZF7 requirements.

C3: Significant impact on capability.

Repair turnaround time does not meet customer demand rate.

Workaround exists, but cannot meet demand.

Supply reserves may exist, but are or approaching Pool Zero with on-board/on-station replacement assets available but at critical level.

No supply reserves, but no maintenance backlog with no on-aboard/on-station replacement assets available and no immediate requirements exists.

C4: No capability to provide repair/calibration/service.

1 of 1 bench/test set/OTPS/rolling stock non RFU with no workaround.

1 of 2 bench/test set/OTPS/rolling stock RFU, but EXREPs cannot be cleared in a timely manner.

(c) A loss of repair capability is often the result of problems with an interface device and not a failure of the basic ATE. If a BA report is determined to be appropriate, it should clearly cite the interface device as the failed item (as opposed to the bench itself). If a second interface device should fail affecting additional airborne components, a separate BA report shall be submitted.

(d) A BA report shall be submitted even though there are no repair parts on order. For example, airborne component support capability may have been lost due to some complex SE anomaly. The solution could involve ETS assistance to analyze the problem and effect adjustments or alignments. A BA report would be appropriate to bring attention to the lost capability and to expedite assistance. The BA report is not a substitute for the ETS request.

(2) When a BA condition exists, there will be times when the normal logistics support system cannot correct the situation in a timely manner, particularly to support deployed units. Under these circumstances, SE must be cannibalized from one activity to another. The following procedures shall be used:

(a) ACC or TYCOMs shall direct all temporary loans and BA transfers via message and will identify the shipping TCN to be used. The temporary/transfer loan message will provide means of replacement. Generally, a temporary loan will occur when the supply system can support the material need, however, the need cannot be met in a timely manner. A transfer action is generally directed when the supply system cannot support the material need.

(b) The receiving activity shall:

1. Advise the ACC or TYCOM and all concerned upon receipt of transferred material.

2. If directed by the ACC or TYCOM, cancel the BA requisition.

3. When appropriate, submit BA SEIS Report the next day following the restoration of the unit's operational capability for overseas and afloat activities and within 5 working days for all other units. A support equipment in service (SEIS) Report shall be submitted even if the condition has been resolved through the temporary loan of SE from another activity.

(c) The transferring activity will:

1. Initiate a BA message citing the ACC or TYCOM transfer or temporary loan authority message.

2. If the asset was not taken as a temporary loan and if directed by ACC or TYCOM, place an asset on order and cite the receiving activity's requisition as proof of turn in.

(3) A BA Addendum (Figures 5-10 and 5-11) shall be submitted when additional problems, directly related to the original failure, are detected. In most cases a BA Addendum is submitted when additional repair parts are needed to solve the problem described in the original message. However, a BA Addendum may also be appropriate to highlight the requirement for additional assistance, for example, ETS, technical data, and FRC field team.

(4) A BA SEIS Report (Figures 5-11 and 5-12) shall be submitted when the SE is operational, as described in its applicable MIMs, and no further assistance is required.

(5) A BA Requisition Completion Report (Figure 5-14) shall be completed within one day of requisition receipt. If a BA SEIS Report can be submitted in the same one day period, the information may be included in the SEIS and a separate BA Requisition Completion Report is not required.

(6) The following reporting and requisitioning procedures will be used for all inoperative SE and TPS.

(a) When equipment meets BA criteria, submit a BA Report (Figures 5-8 and 5-9). This report shall be submitted immediately and include all information required on the BA Report. Additional parts requirements shall be submitted via a BA Addendum (Figures 5-10 and 5-11) and should be annotated on Aircraft Material Readiness Report.

(b) For accounting purposes, BA report numbers will be a two part number. Part one will be the year the BA is initiated; and part two will be a three digit sequential number starting with 001 for the first BA of the calendar year, for example, 2008001, 2008002, and 2008003. BA SEIS Report (Figures 5-12 and 5-13) illustrates placement of the BA report number. The original BA report number should be referenced in any follow-on correspondence, such as the BA Addendum, BA SEIS Report, BA Requisition Completion Report (Figures 5-10 through 5-14).

NOTE: If more than 999 reports are generated in a calendar year start over with sequence number 001.

(c) A test bench and its associated TPSs are considered separate items and shall receive separate BA report numbers, for example, the ALQ-99 TPS has its own BA report number and would be different from the CASS BA report number. Multiple items that fall under different WUCs will be given different BA report numbers. Multiple test benches with two or more stations down will have separate BA report numbers given to each station.

(d) All repairable SE components beyond IMA repair capability shall be preserved, packaged, documented, and shipped within 24 hours. Shipment shall be via fastest traceable means to the organic or commercial DRP or ATAC hub (as appropriate), unless otherwise directed by the ACC or TYCOM.

(e) Assisting activities will make every effort to obtain required material, however, to ensure satisfactory status is received, the requisitioner is responsible for direct follow-up action to the activity last known to hold the requisition.

(7) ACC or TYCOMs shall be involved with the expediting process and shall retain positive control of actions from the time the requirements are first visible until receipt of the BA Requisition Completion Report or BA SEIS Report.

e. All reports are exempt from communications MINIMIZE restrictions.

5.1.2.12 Component Repair

a. Component repair is the overhaul, repair, check, test, certification, modification, or manufacturing of aeronautical material, mission equipment, engines, and SE.

b. Activities shall perform on-equipment repair vice removal of components when operationally feasible and effective. Factors to consider:

(1) Possibility of damage to the component or attaching parts.

(2) Difficulty of component reinstallation, for example, re-rigging, realignment, bleeding, and readjustment.

(3) Immobilization of aircraft.

(4) Loss of mission capability and readiness.

c. Criteria for Repair. Aeronautical material will be repaired at the level of maintenance that most efficiently uses manpower, material and equipment resources in achieving naval aviation material readiness and operational objectives.

NOTES: 1. COMNAVAIRSYSCOM is responsible for the development, expansion, execution, and support of maintenance plans for component repair. Maintenance activities will advise the responsible COMNAVAIRSYSCOM program office of administrative or logistic obstacles that impede component repair at the most effective and efficient level.

2. Items covered under a Performance Based Logistics (PBL) contract are not normally repaired by IMAs. Requests to repair PBL items will be referred to ACC with justification for deviating from the PBL Maintenance Plan.

(1) SM&R codes specify if a component is intended to be repaired at the O-level, I-level, or D-level of maintenance.

NOTE: All NRFI FLRs with SM&R code PAOOO will be processed through the supporting IMA for review of potential to repair. If the IMA determines repairs are economically possible in consideration of the replacement cost of the item, the ICRL capability code will be listed as C3 and the IMA will submit a recommendation to change the SM&R Code to PAOOG or PAOOH. If the IMA determines repairs to a particular PAOOO NIIN are not economically feasible, the ICRL capability will be listed as X1 and the local field will be annotated "1Y RevComp". Once the PAOOO item is coded X1, supported O-level activities are no longer required to turn-in the item and may locally dispose of the material.

(2) All maintenance activities are authorized to repair consumable materials if a replacement item is not available in stock locally, and the item is required to offset a NMCS, PMCS, or work stoppage, and the repair is within their capability.

(3) All maintenance activities are authorized to repair manufactured M series material if it is economical and within their capability. M series material may be forwarded to the next higher maintenance level for repair on a customer service basis.

(4) 2M avionics repairs shall be accomplished only by activities designated 2M repair capable by their ACC or TYCOM. Upon recommendation of the ACC or TYCOM and subsequent approval by COMNAVAIRSYSCOM, certain IMAs may perform D-level repairs on designated electronic assemblies. Chapter 3 contains additional information.

(5) IMAs are authorized to perform any maintenance for which they have capability and authorization. With ACC or TYCOM permission, IMAs may be approved to perform specified D-level maintenance on a standing basis, if authorized by the responsible ISSC. Chapter 3 provides procedures for submitting FED requests for one-time authorization to repair an individual component damaged beyond allowable I-level repair limits. I-level activities are authorized to manufacture aeronautical material, if they have the capability, regardless of the manufacturing level assigned.

(6) An extensively damaged component should not normally be repaired if the repair costs exceed the replacement cost. When the repair cost will exceed the published standard replacement price, or if the costs are unknown, disposition will be:

(a) When components are so severely damaged in the judgment of the IMA that repair is not feasible, the component shall be declared BR, condemned and surveyed, or returned to the DRP per the SM&R code. BCM 7 is the appropriate action taken code for beyond repair (BR) components.

(b) When an IMA determines repair is feasible, but more expensive than the beyond economic repair (BER) threshold, the component should be considered for BCM 8 action. The exception is when readiness requirements justify repair vice BCM due to excessive time to replenish the component.

(c) When a D-level activity determines repair is feasible but not cost effective in relation to the replacement cost, the FRC shall contact NAVSUP WSS for disposition instructions.

(7) When components with specified removal intervals are repaired by an IMA, the component time shall not be zeroed-out unless authorized to do so. The component should have enough time remaining after repair to complete a full phase inspection interval prior to forced removal. In certain cases, repair is authorized for components with inadequate operating time remaining to complete a phase interval, for example, RFI replacement is not available. The IMA will also repair this type of material when required for reinstallation on a transient aircraft and the logbooks are not available to verify operating times. Data concerning the repair will be provided to the flight crew for logbook entries upon return to home station.

(8) Assembled A-series components are normally not procured and stocked. Requirements to repair A-series components shall be forwarded to the supporting IMA or the D-level activity via supply system requisitions.

d. IMAs:

(1) Provide assistance to supported units for on-equipment repairs.

(2) Coordinate with D-level activities when assistance is required.

NOTES: 1. D-level activities support the O-level and I-level component repair process via Customer Service Requests and BCM Interdiction.

2. D-level maintenance activities may use decals to identify the repair activity, degree of repair performed, and date of processing or installation of aeronautical components.

(3) Document BCM authorization using a locally developed form. (Figure 5-54 is an example of a BCM Request Form.)

(4) Conduct Component Repair Reviews and ICRL validations per paragraph 10.20.

(5) Use AIRSpeed CPI principles to improve and expand repair capability, when cost-effective. With ISSC approval, IMAs may request ACC or TYCOM permission to perform D-level repairs. Paragraph 5.1.2.12g provides guidance for requesting additional repair capability.

e. BCM procedures. IMAs may encounter material, logistical or readiness constraints that prevent the repair of components designated for I-level repair. Constraints are generally categorized in the following BCM Action Taken Codes:

(1) BCM 1 - Repair Not Authorized. The activity is specifically not authorized to repair the item in applicable directives, for example, required maintenance function not assigned by SM&R code, MIM, maintenance plan, other technical decision, peculiar item from an aircraft not supported by an activity, or SM&R coded XXXXD.

(2) BCM 2 - Lack of Equipment, Tools, or Facilities. The repair is authorized but cannot be performed due to lack of equipment, tools, or facilities, for example, required equipment is on IMRL but authorized quantity is zero, receipt of authorized individual material repair list (IMRL) equipment not expected within 30 days (zero quantity on hand), return of required equipment from repair or calibration not expected within 30 days, non-IMRL tools and equipment not on hand, lack of permanently installed facilities, or specifically directed by the ACC or TYCOM.

(3) BCM 3 - Lack of Technical Skills. The repair is authorized but cannot be performed due to a lack of technical skills, for example, permanent billet will be vacant for more than 30 days; temporary additional duty (TAD) billet will be vacant for more than 30 days; billet incumbent absent (TAD, leave, etc.); formal technical training is nonexistent; formal technical training exists but cannot be used due to lack of quota or funds; Rating, NEC, or MOS required is not reflected on manpower authorization; or Rating, NEC, or MOS is on board but billet not assigned to IMA.

(4) BCM 4 - Lack of Parts. Repair is authorized but cannot be performed because required parts will not be available.

(5) BCM 5 - Fails Check and Test. The activity's authorized level of maintenance is limited to check and test only and repair is required.

(6) BCM 6 - Lack of Technical Data. Repair is authorized but cannot be performed due to a lack of technical data, for example, maintenance technical manuals or TPSs exist but cannot be obtained within 30 days, maintenance technical manuals or TPSs do not exist or cannot be identified within 30 days, applicable maintenance technical manuals or TPSs are available but do not provide adequate technical information.

(7) BCM 7 - Beyond Authorized Repair Depth. Some level of repair beyond check and test is authorized, but the maintenance function required to return the item to a RFI condition is not assigned by SM&R code, MIMs, maintenance plan, or other technical decision.

(8) BCM 8 - Administrative. Repair is authorized and feasible but not attempted due to an EI exhibit, SRC data unknown and cannot be determined, item under warranty, I-level repair costs exceed AVDLR Net Unit Price or replacement cost, excessive backlog, budgetary limitations, materials in excess of requirements, or when specifically directed by the ACC or TYCOM.

NOTE: The determination to use BCM 8 for excessive backlog will be made jointly by the maintenance and supply officers. BCM 8 for materials in excess of requirements or budgetary limitations require ACC or TYCOM approval.

(9) BCM 9 - Condemned. A repairable item is so severely worn or damaged that repair is not feasible, as determined by local maintenance personnel, or specifically directed by ACC or TYCOM. The

item is locally condemned and returned to the Supply Department for survey, retrograde, or scrap (as appropriate) per applicable directives.

f. BCM Authority:

NOTE: For BCM actions pertaining to armament equipment, gun systems and associated material, authorization to BCM for reasons other than BCM 1 or BCM 7 shall be requested from the TYCOM Armament Systems Program Office per COMNAVAIRFORINST 8380.1.

(1) IMAs shall develop local command procedures for authorization of BCM Codes 1, 5, 7, and 9 actions.

NOTES: 1. Components with an F, G, or H in the 4th position of the SM&R code shall not be BCM with Action Taken Code BCM 1 by IMAs specified in the code (F-Afloat IMA, G-Afloat and Ashore IMA, H-Shore based IMA). BCMs for those items shall be coded with the most appropriate BCM Code associated with the constraint. For example, an Afloat IMA would use BCM 2 for an item SM&R Coded PAOGD for which they do not have the equipment to repair.

2. Components with an SM&R Code suspected to be in error shall be immediately reported to the TYCOM Class Desk responsible for the TMS aircraft/engine/equipment.

3. Armament Systems (AAS) with an SM&R Code suspected to be in error shall be reported to the TYCOM AAS Class Desk.

(2) BCM Codes 2, 3, 6 and 8. Authority to BCM with Action Taken Code 2, 3, 6, or 8 requires prior approval from the AIMD Officer (CVN or L-class ships) or the CO/OIC (IMA). BCM under these codes is authorized only if the action meets the following conditions:

NOTE: The CO/OIC/AIMD Officer may delegate, in writing, approval authority for BCM Codes 2,3,6, and 8 to the MMCO/PCO. If delegated, the CO/OIC/AIMD Officer shall be briefed monthly on all BCM Code 2,3,6, and 8 actions and the status of resolving deficiencies requiring BCM.

(a) BCM 2, BCM 3, and BCM 6 are authorized only if the deficiency in equipment, skills, or technical data cannot be resolved within 30 days.

(b) BCM 2 for lack of equipment or tools shall only be granted when the required equipment/tool cannot be readily attained, or a Broad Arrow message has been transmitted specifically identifying the deficiency and TYCOM/MAW has acknowledged inability to mitigate.

(c) BCM 3 shall only be granted when the TYCOM or MAW cannot mitigate the skill shortfall. Navy skills deficiencies shall be reported in the activity's Personnel Situation and Management Report, Enlisted Manning Inquiry Report, or Unplanned Loss Report. (Marine Corps shortfalls shall be reported per Marine Corps equivalents.) Use ICRL Capability Code X3 along with accompanying TCC and TCCD.

(d) BCM 6 shall only be granted when the activity, naval aviation technical data and engineering services (NATEC) and the TYCOM or MAW have acknowledged inability to obtain the required technical data. Use ICRL Capability Code X6 along with accompanying TCC and TCCD.

(e) BCM 8 shall only be granted when repair costs exceed the net AVDLR costs and the BCM will result in improved delivery time of an RFI component needed to mitigate a critical readiness shortfall. BCM 8 shall not be used to improve a repair site's TRR metric. BCM 8 used for failure of test equipment to correctly fault isolate or fault detect requires submission of an EI request and inclusion of the EI message DTG on the BCM MAF. ACC or TYCOM approval is required for BCM 8 for materials/equipment in excess of requirements or budgetary limitations.

NOTES: 1. BCM 8 for engineering investigation (EI) exhibit may be approved by the Production Officer. EIs submitted for record purposes to document an ongoing, known problem normally do not require an EI exhibit be shipped. In those cases, the component shall be inducted for repair using standard procedures.

2. Sites shall not assign ICRL Capability Code of X1 to components based on lack of SE, technical data, technicians or training. In these cases, ICRL Capability Code X2 shall be assigned along with a TCC and TCCD.

(3) BCM 4. Navy I-level CO, OIC, and AIMD Officers will jointly approve BCM 4 with the station or ship Supply Officer after confirming operational need with the Wing Maintenance Officer (Type Wing, CVW, or ACE). BCM 4 authority for MALS is the MALS CO. BAM 4 is authorized when there is a replacement asset in the wholesale system and the asset is required to resolve a material deficiency that is negatively affecting an operational requirement. The unit requiring the material must meet one of the following conditions:

(a) Designated FAD II or higher.

(b) Designated FAD III, but directly supporting a deploying or deployed FAD II unit.

(c) Designated FAD III and the lack of parts are preventing the unit from achieving specified aircraft readiness requirements, e.g., Ready for Tasking (RFT).

NOTE: BCM 4 authority cannot be delegated.

g. Adding Repair Capability:

(1) If an increase in, or establishment of, a repair capability is needed, activities shall submit a letter requesting increased capability to COMNAVAIRSYSCOM via the applicable ACC or TYCOM. The request, to the SRA level shall include:

(a) Specific capability being requested. Include extent of improved capability, for example, limited repair, complete repair, or overhaul.

(b) Identification of the specific items by part number and CAGE code.

(c) System/aircraft on which the item is used and number of systems supported. Include projected number of units to be processed per month.

(d) Justification. The number of items BCM per year, most common repair action, parts to be replaced (if known), anticipated improvements in TAT, projected increases in system/aircraft readiness, and any additional items that could be repaired using the improved capability.

(e) Tools, equipment, and facilities required, and what is now on hand or available locally.

(f) Personnel impact, such as billet reductions, increases, or changes to NEC/MOS requirements.

(g) Training required, such as special courses.

(h) Publications required.

(2) The ACC or TYCOM shall review requests for increased repair capability and add any information needed to support or deny the request. The ACC or TYCOM shall:

(a) Amplify the benefits in terms of reduced costs for shipping and repair, reduction in TAT, and increased readiness.

(b) Validate requests with analysis of aviation 3M data.

(c) Verify equipment, facilities, personnel, training, and calibration requirements.

(d) Estimate total cost of providing improved capability and identify any additional funding requirements.

(e) Identify any workload reduction in other areas caused by establishing improved capability.

(f) Recommend maintenance plan and SM&R code changes to the SRA level.

(g) Make a recommendation, for or against, extending the improved repair capability to other similar sites.

(h) If approved, ensure an implementation plan of actions and milestones is developed and executed.

(3) Upon receipt of a request for increased capability and the ACC or TYCOM endorsement, COMNAVAIRSYSCOM shall:

(a) Review the request and endorsement.

(b) Determine the need for and frequency of a quality audit, and arrange for it to be done.

(c) Approve or disapprove the request and provide justification.

(d) If approved, designate the specific activity to receive the increased capability and specific capability authorized.

h. Deleting Repair Capability. Activities may request deletion of assigned responsibilities from the ACC or TYCOM. Full justification should accompany all requests.

5.1.2.13 Preservation Procedures and Responsibilities

a. SE, AWSE, and WHE preservation is designed to protect the material condition of equipment which is not expected to be used for extended periods of time. This equipment may be preserved at any time, regardless of material condition, when it is determined to be in the best interest of the equipment or activity. The MO is responsible for determining when this equipment is required to be placed in preservation. For equipment placed in preservation per applicable maintenance technical manuals or directives, all PMS inspections may be deferred until the equipment is removed from preservation. Equipment not placed in preservation shall receive corrosion prevention or treatment per applicable maintenance technical manuals. For standardized management of personnel and resources, activities may use the following categories to determine the level of preservation desired:

(1) Category A - SE/AWSE/WHE which has anticipated usage within the next 90 days. This equipment shall be maintained under current SE/PMS directives.

(2) Category B - SE/AWSE/WHE which could possibly be used within the next 180 days. This equipment may be placed in a minimum of Level I.

(3) Category C - SE/AWSE/WHE not needed for extremely long periods of time (in excess of 180 days) may be placed in Level II or III preservation depending on the resources at the geographical area.

b. Levels of preservation for aircraft and SE/AWSE/WHE are defined below. Dehumidification (Level III) is the preferred method of preservation.

(1) Level I: 0 - 90 days (+/- 3 days).

(2) Level II: 0 - 1 year.

(3) Level III: 0 - indefinite.

c. Work performed on preserved SE/AWSE/WHE shall be directed by Production Control and monitored by work center supervisors and personnel assigned QA responsibilities. Depreservation, maintenance, and the represervation of a specific area where maintenance was performed shall be annotated in the corrective action block of the original discrepancy MAF. The QAR/CDI in-process inspection shall ensure all represervation requirements are met after maintenance is performed. No additional depreservation/represervation MAF or logbook entry is required.

d. Type Wings, MAWs, or equivalent may waive or modify preservation requirements for aircraft/aeronautical equipment undergoing extensive repairs or modifications when the preservation would adversely affect the completion of the task. Type Wings, MAWs, or equivalent shall coordinate with the ACC or TYCOM to determine the specific maintenance procedures required to monitor the material condition of these assets until returned to an operational status or placed in preservation.

5.1.2.14 Additional Production Control Responsibilities

Detailed production control responsibilities are in the following NAMPSOPs (Chapter 10):
Fuel Surveillance Program (paragraph 10.2)
Navy Oil Analysis and Consumption Monitoring Program (paragraph 10.3)
Hydraulic Contamination Control Program (paragraph 10.5)
Tire and Wheel Maintenance Safety Program (paragraph 10.6)
Oil Consumption Program (paragraph 10.8)
Technical Directive Compliance (paragraph 10-10)
Foreign Object Damage (paragraph 10.11)
Tool Control Program (paragraph 10.12)
Corrosion Prevention and Control Program (paragraph 10.13)
Support Equipment Planned Maintenance System Program (paragraph 10.17)
Electromagnetic Interference/Electrostatic Discharge Program (paragraph 10.21)

5.1.3 Material Control

The Material Control functions and responsibilities outlined below are applicable to Navy activities. Maintenance/Material Control functions and responsibilities for Marine Corps activities are outlined in Chapter 4.

5.1.3.1 Functions and Responsibilities

a. Material Control centers are contact points within maintenance organizations where requirements for indirect material are coordinated with the ASD. Direct material requirements are expedited by ASD to ensure:

(1) Maintenance requirements for parts and material are forwarded to the ASD in a timely and continuous manner.

(2) Parts and material received are expeditiously routed to applicable work centers and not allowed to accumulate.

(3) ASR, EHR, and SRC card trackable components have the appropriate cards.

NOTE: To efficiently administer the Material Control Work Center ashore and afloat, including the OOMA NALCOMIS system and the OIMA NALCOMIS system, it is highly recommended that all personnel, officer and enlisted, assigned to the Material Control Work Center attend the Naval Aviation Material Control Management course (Course C-555-0051).

b. Plant layout, communication requirements, and workload determine the method of control, centralized or decentralized, that may be used. To prevent duplication of effort when decentralized Material Control is used, the following guidelines apply:

(1) The MMCO is responsible for the overall management of the Material Control function. This responsibility may be exercised through various Production Division officers, the Support Services Division Officer (if established), and supervisors as determined by the MO.

(2) Production Division Officers are responsible for the actual production of their divisions. They must keep the MMCO informed of problems that can affect the department and division output.

(3) If the Support Services Division is established, the Division Officer will be directly responsible to the MMCO in all matters that can affect the department and division output.

c. The responsibility of Material Control is to provide material support to their cognizant organizations and coordinate indirect material requirements to ensure the material ordered is the material required and delivered to the work centers. Material Control shall:

(1) Establish delivery/pickup points for material ordered.

(2) Maintain liaison with the supporting ASD on maintenance material matters to ensure the material needs of the organization are satisfied.

(3) Prepare documents for material required for operational support, for example, aviation fuel, lube oil, flight clothing, and material carried in service market outlets.

(4) Furnish information to the Supply activity on the identity and quantity of material.

(5) Establish procedures to ensure proper operation of tool rooms and the performance of tool inventories.

(6) Ensure surveys are prepared in the event of loss, damage, or destruction of accountable material.

(7) Perform memorandum OPTAR funding, accounting, charting, and budgeting of costs. A separate material control register is maintained for each OPTAR held.

NOTE: The O-Level Material Control Supervisor shall attend Financial Management for Naval Aviation Operating Target Accounting course (Course C-555-0018) within 6 months of assuming position. This course is recommended for all other Material Control personnel.

(8) Maintain adequate accountability of material and equipment on custody.

(9) Maintain inventory control of authorized allowances of material listed in the IMRL and authorized allowance lists.

(10) Validate NMCS/PMCS requisitions daily and maintain (by aircraft BUNO) current NMCS/PMCS status records.

(11) Perform an inventory of aircraft, with technical assistance, upon receipt or transfer to ensure inventory log entries are made and inventory shortage listings are prepared and forwarded to Maintenance Control for inclusion in the aircraft inventory record (AIR).

5.1.3.2 Ordering Parts and Material

a. Requests for parts and material for indirect support of weapon systems maintenance are forwarded by work centers and support areas to Material Control.

b. Materials for TD modifications are issued and accounted for based on the requirements stated in the TD. TD kits and the government furnished equipment (GFE) which complement these kits are budgeted for and issued as COMNAVAIRSYSCOM owned material for one time installation in the specified equipment during fleet maintenance overhaul, repair, or modification programs. They are not considered items of supply. KINs, in lieu of NSNs, are assigned to TD kits and GFE by the COMNAVAIRSYSCOM for the purposes of identification, requisitioning, and reporting. Centralized records and stock balances are maintained for the COMNAVAIRSYSCOM by NAVSUP WSS on the Master Data File through daily receipt and processing of TIRs from stock points. TD kits are normally at wholesale stock points, but may be positioned at any TIR activity to support local modification requirements with ACC or TYCOM approval.

c. NALCOMIS Operated Material Control shall:

(1) Receive requirements from work centers and support areas (O-level).

(2) Use appropriate automated procedures to provide data to the ASD (O-level).

(3) Enter date and time ordered in the register to reflect the exact time of submission to ASD. This time is required for determining accurate NMCS start time and conducting follow-up inquiries (O-level).

(4) Approve or disapprove indirect material requirements from work centers by reviewing message mailbox (I-level).

d. When a repairable item is delivered by supply the defective component must be available for simultaneous exchange. Obtain signature for retrograde material.

NOTE: In the case where Field Level Repairables (FLR) are SM&R coded PAOOO, those items will be processed through AMSU for disposition.

e. In some instances it is not feasible or advisable to remove a repairable component until a replacement is in hand. The items in this category are identified in the NAVSUP WSS CRIPL. The NAVSUP WSS CRIPL is produced by NAVSUP WSS, based on operating site/ACC or TYCOM input, which has been screened by COMNAVAIRSYSCOM. The responsibilities and procedures for establishing, maintaining, and modifying the NAVSUP WSS CRIPL are in OPNAVINST 4440.25. Items identified in the NAVSUP WSS CRIPL are the only authorized exceptions to the one-for-one exchange rule.

f. Phase Maintenance Kits. The establishment of a phase maintenance kit is optional as directed by the ACC or TYCOM. When the program is implemented, the following procedures will be followed:

(1) MMCOs will jointly determine phase maintenance kit requirements using MRCs and other maintenance information.

(2) Material Control will prepare and submit to the ASD a listing of all PNs and quantities for each phase maintenance kit, including support period of the kit, for example, 30-day maintenance period, and whether replenishment of the kit is necessary.

(3) Material Control will advise ASD when kit replenishment is required and whether changes in PNs or quantities are required due to changes in MRC requirements.

(4) Kits may be pre-expended or charged to each squadron upon issue, based upon the total parts inventory cost in each kit.

(5) Mandatory turn-in repairable components, D-level and FLRs, are not authorized in the phase maintenance kits.

5.1.3.3 Receipt and Delivery of Parts and Material

a. Material Control shall:

(1) Receive the material and a DOD Single Line Item Requisition System Document (DD 1348) (or facsimile form) from the ASD MDU.

(2) Sign the DD 1348 copy as receipt.

(3) Enter the date and time the material is delivered to the specified delivery point on the DD 1348.

NOTE: At this time, earlier in some circumstances, other copies of the DD 1348 may be received to act as control documentation on material movement, custody, and funding.

(4) Determine if the component is ASR, EHR, or SRC card trackable and that the appropriate ASR, EHR, or SRC card is with the component before forwarding it to the work center. Activities with NTCSS Optimized OMA NALCOMIS will, upon receipt or delivery of a tracked component, ensure the CM ALS has been received. If the appropriate record or card is not received with the component and a replacement RFI component is not available, contact COMNAVAIRSYSCOM (AIR-6.8.4.3) for reconstruction or disposition directions. For activities with NTCSS Optimized OMA NALCOMIS, contact COMNAVAIRSYSCOM (AIR-6.8.4.2) for providing the appropriate CM ALS record.

(5) Distribute received material to the appropriate work center.

(6) Obtain signature of work center personnel receiving material on DD 1348.

(7) Turn in defective repairable CRIPL components within 24 hours of receipt.

b. Unsatisfactory Issues. Instances will occur when Supply delivers material that does not satisfy the intended maintenance action. This condition arises when the wrong material is ordered or delivered, the material was improperly marked, or the material is determined to be NRFI on receipt and not installed. When these instances occur, use the following procedures:

(1) Prepare a DOD Single Line Item Release/Receipt Document (DD 1348-1A) for turn in ensuring the NSN of the material being turned in is used.

(2) Ensure blocks V and Y contain the original JCN and document number, blocks AA through CC (remarks) contain a statement why the material is being returned, and blocks DD through EE contain the correct part number of the material being turned in.

(3) Ensure that all accompanying documentation, for example, RFI tag, SRC card, and VIDS/MAF Copy 4, are returned with all items.

NOTE: The remarks section of DD 1348-1 should include sufficient data to permit the Supply Department to input a Report of Discrepancy (if appropriate).

c. Reorder material, if required, using a new document number and cite original document number in remarks of new requisition. Use Advice Code 5G (if applicable).

d. Notify Supply that the material is ready for pickup.

5.1.3.4 Turn-in of Defective Components

a. Repairable material will be removed from an aircraft and made available for turn-in when a replacement is requested, unless specifically authorized to remain in place by the CRIPL. When the replacement CRIPL item is received, turn-in of the old item must be made within 24 hours. Supporting Supply activities shall strictly enforce the one-for-one exchange of repairables using the CRIPL to identify the authorized exceptions.

b. All defective repairable components shall be wrapped using a cushioning material, cellular plastic film (bubble wrap) PPP-C-795, class 1 or class 2, for short term protection of equipment from handling and shock when the component is turned in to Supply. Refer to, paragraph 10.21, for packaging, handling, and storage requirements of ESDS components.

c. For an ASR, EHR, or SRC tracked component, ensure the appropriate ASR, EHR, or SRC card is enclosed in a plastic envelope and attached to the component and a photocopy is enclosed in a plastic envelope and is securely attached to the outside of the shipping container. Activities with NTCSS Optimized OMA NALCOMIS will ensure CM ALS are transferred to the receiving activity.

d. Under no circumstances shall spare repairable components of any type, RFI or NRFI, be allowed to be held in any activity, unless authorized by higher authority.

e. For defective material awaiting EI or PQDR disposition, refer to, paragraph 10.9.

f. Embarked Air Detachments. Embarked air detachments will turn-in NRFI repairables to the host air capable ship for retrograde shipment to the supporting shore site POE.

(1) Air detachments will turn-in applicable component history records, SRC cards, or other history documents with NRFI components and will verify the turn-in WO cites the same document number used to requisition the RFI replacement.

(2) Maintenance personnel shall maximize use of reusable shipping containers to protect the non-RFI component before turn-in to Supply.

5.1.3.5 Repairables Management

a. Control of Components Processed by the IMA. All components inducted by the IMA are processed per procedures in Chapter 9. When work on components in the IMA must be delayed due to an AWP status, the component is turned in to the AWP unit of the CCS. When work on a component is completed, return the component to Material Control for processing. Material Control shall:

(1) Receive the component and documentation from the work center. Ensure MAF or Hard Copy Notice (HCN) indicate the action taken.

(2) Determine if the component is ASR, EHR, or SRC card trackable and that the appropriate ASR, EHR, or SRC card is with the component before forwarding it to the work center.

(3) Notify ASD the component is ready for pickup.

(4) Obtain ASD signature of receipt on MAF/HCN.

(5) Turn in the component, MAF/HCN, logs, records, or CM ALS and condition tag to ASD.

(6) Forward MAF/HCN to QA via Production Control.

b. Preservation, Packaging, and Handling:

(1) All aeronautical material, regardless of its status, RFI or NRFI, shall be preserved, packaged, and handled by Supply and Maintenance personnel in such a manner as to prevent damage or deterioration. The P700-CNP Web site (https://tarp.navsisa.navy.mil/p700.nsf) provides preservation and packaging requirements for specific repairable components. When it is positively known a component repaired by an IMA will be reissued to local operating units in a reasonably short time, it need only receive the minimum amount of preservation and packaging to ensure positive identification and short-time protection.

NOTE: All solid state electronic components and assemblies containing such components are considered ESDS items unless otherwise directed by higher authority. Refer to, paragraph 10.21, for guidance and direction for the identification, handling, and protection of ESDS components.

(2) In no cases shall NRFI material be casually or carelessly handled merely because it is intended to undergo repair. Particular care shall be given to prevent further damage of repairable items that are to be returned to overhaul.

(3) The IMA is responsible for internal and external preservation (prior to packing) of all components. The IMA will adequately protect components for local routing to the supply department packing and preservation section. Engines will be packed and preserved by the IMA. Additionally, supply assets will be tracked to ensure reinspection and represervation is performed per the P700-CNP Web site (https://tarp.navsisa.navy.mil/p700.nsf).

c. EI and PQDR exhibits shall be prepared and handled per, paragraph 10.9.

5.1.3.6 Source, Maintenance, and Recoverability (SM&R) Codes

a. SM&R Codes are used to communicate maintenance and supply instructions to various logistic support levels and using commands for the logistic support of systems, equipment, and end items. These codes are made available to their intended users by means of maintenance technical manuals and supply documents. SM&R Codes are assigned to each supported item based on the logistic support planned for the end item and its components.

b. The primary objective is to establish uniform policies, procedures, management tools, and means of communication to promote inter-Service and integrated material support within and among military services. Thus, the establishment of uniform SM&R codes is an essential step toward improving overall capabilities for more effective inter-Service and integrated support.

c. For additional information on policies, procedures, and responsibilities for SM&R codes, see SECNAVINST 4410.23, NAVSUPINST 4423.29 and NAVAIRINST 4423.12.

5.1.3.7 Financial Management

a. Management at the DOD level requires the measurement of performance against plans for given programs and functions. Therefore, resources (funds) are identified, budgeted, and accounted for in terms of Six Year Defense Plan and budget activities. Operating resources identified by subhead are allocated by CNO to the major claimants, for example, the Commander U.S. Fleet Forces Command. The Commander U.S. Fleet Forces Command issues the expense limitations, by subhead, to themselves for fleet level functions and to ACCs/TYCOMs who issue operating budgets to shore activities designated as responsibility centers. Type and fleet commanders also issue operating budgets to themselves as responsibility centers for

centrally managed programs, such as ship overhaul, the expenses of their own staffs, and expenses of their ships, squadrons, and units.

b. Aviation Maintenance Costs. This term is used to define costs which have accumulated as a result of O-level and I-level maintenance performed on, or in support of aircraft. All aviation maintenance costs will be reported against the T/M/S aircraft units which used the service. ACCs/TYCOMs are responsible for apportioning such costs when required. O-level and I-level costs will be reported separately.

c. Organizational Maintenance Cost:

(1) All materials and services requisitioned by a Navy or Marine Corps squadron ultimately cost the government money. Since the requirement for these items originates in the squadron, financial responsibility starts there as well.

(2) Annually, Congress enacts an Operational and Maintenance Navy (O&MN) appropriation. At the squadron level in the chain of command, the O&MN appropriation is known as Operating Target (OPTAR). Generally, the squadron's ACC or TYCOM gives the squadron a portion of the OPTAR each fiscal quarter.

(3) AVDLRs are financed by the NWCF. Under this process, the end user finances the D-level repair and procurement of 7R COG repairables through the local replenishment of these repairables determined to be BCM, lost, or missing. Although the squadron usually initiates repairable demands, the IMA has primary control over whether these transactions would result in an AVDLR NWCF charge. Thus, the IMA or station will retain control of the AVDLR replenishment OPTAR and corresponding accounting responsibilities.

(4) Intermediate Maintenance Cost. This is the cost of authorized items (gross adjusted obligations) used by the IMA to perform I-level maintenance.

(5) Flight Operations Funds (OFC-01). The following is a list of expense type transactions that are proper charges to the flight operations OPTAR:

(a) Aviation fuels consumed in flight operations.

(b) Initial and replacement issues of authorized items of flight clothing and flight operational equipment for pilots and flight crews.

(c) Consumable office supplies for aviation squadrons.

(d) Aerial film, recording tape, and chart paper consumed in flight.

(e) Flight deck shoes and safety shoes used by squadron personnel directly involved in the readiness, launch, and recovery of aircraft.

(f) Liquid and gaseous oxygen consumed during flight by the aircrew.

(g) Nitrogen used in aircraft and weapon systems.

(h) Aircraft maintenance costs and repair parts when obtained from any other military source.

(i) COG 1I forms when not directly used in support of maintenance.

(j) Consumable ASW operations center supplies when consumed in flight.

(k) Publications (other than those of a recreational nature) used to impart technical and professional knowledge to officers and enlisted personnel of the command.

(l) Plaques for the CO and XO offices only.

(m) Special identification clothing, for example, flight deck jerseys and helmets, used by squadron personnel in the readiness, launch, and recovery of aircraft.

(6) Aviation Fleet Maintenance (AFM) Funds

(a) AFM Funds will be used to finance the cost of the following:

1. Paints, wiping rags, towel service, cleaning agent, and cutting compounds used in preventive maintenance and corrosion control of aircraft.

2. Consumable repair parts, miscellaneous material, and Navy stock account parts used in direct maintenance of aircraft, including repair and replacement of FLRs, AVDLRs, and related SE.

3. Pre-expended, consumable maintenance material meeting requirements of NAVSUP Publication 485 used in maintenance of aircraft, aviation components, or SE.

4. Aviation fuel used at I-level in test and check of aircraft engines during engine buildup, change, or during maintenance. Oils, lubricants, and fuel additives used at both O-level and I-level.

5. Allowance list items (NAVAIR 00-35QH-2) used strictly for maintenance, such as impermeable aprons, explosive handlers coveralls, industrial face shields, gas welders gloves, industrial goggles, and nonprescription safety glasses.

6. Fuels used in related SE (shipboard only).

7. Replacement of components used in test bench repair.

8. Maintenance or equipment replacement of aircraft loose equipment listed in the AIR.

9. Consumable hand tools used in the readiness and maintenance of aircraft, maintenance and repair of components, and related equipment.

10. Safety and flight deck shoes used in maintenance shops.

11. Repair and maintenance of flight clothing and pilots and crew equipment.

12. Authorized decals used on aircraft.

13. Replacement of consumable tools and IMRL allowance list items.

14. Items consumed in interim packaging and preservation of aviation fleet maintenance repairables.

15. Items, such as MAFs, MAF bags, equipment condition tags, and COG 1 forms, and publications, used in support of direct maintenance of aviation components or aircraft.

16. Authorized special purpose clothing for unusually dirty work while performing maintenance of aircraft.

17. Civilian labor only when used in direct support of AFM (requires ACC or TYCOM approval prior to use).

18. Costs incurred for IMRL repair.

19. Replacement of general purpose electronic test equipment allowance items which are missing or unserviceable (COG Z).

20. Oils, lubricants, and fuel additives consumed during flight operations.

21. Navy stock account repairable material (non-AVDLR) used in direct maintenance of aircraft component repair, or related SE.

22. The requisitioning of material incidental to TD installation, for example, fluids, epoxies, and shelf life items, not to exceed one thousand dollars per TD per squadron.

NOTE: During the verification process, the verifying activity will identify excess costs to the cognizant COMNAVAIRSYSCOM APML for a determination whether to restructure or cancel the TD.

23. IMRL/TBA replenishment/replacement.

(b) AFM funds shall NOT finance:

1. Housekeeping, office supplies, or habitability items.

2. Services, such as printing and office equipment maintenance.

3. General station collateral equipment, including labor-saving devices (Section C allowance list items).

4. Packing, crating, and preservation for storage or shipment.

5. Data processing equipment and supplies.

6. Operating costs of vehicular and mobile equipment other than shipboard SE.

7. Nonaviation miscellaneous equipment, even though repair may be performed in the ship's AIMD, for example, MG-5, automotive vehicles, crash cranes, deck scrubbers, and fork lifts.

8. Maintenance of SE by Public Works Departments or Centers.

9. TDs requiring the local requisitioning of significant chargeable materials for the purpose of modifying or improving assigned airframes or equipment. These will be funded by COMNAVAIRSYSCOM, upon submission of a request citing TD number, aircraft type, or other system application, and total funds required. Significant chargeable materials are considered to be materials valued at one thousand dollars or more per TD per unit.

10. Initial outfitting of IMRL and TBA allowance list items.

NOTE: OFC-01/09 funds with Fund Code 8X will be used to fund IMRL and TBA initial outfitting.

11. Labor, unless specifically authorized.

(7) Financial Accounting. Each ACC or TYCOM will issue an operating budget from the applicable future defense plan expense limitation to finance the operations, maintenance, administrative, and TAD travel requirements of units assigned and of their own staff. Auditable records will be maintained

which will show the transaction costs incurred and the available balance of the operating budget, including such values for each OPTAR granted. Each ship, aviation squadron, or command issued an OPTAR is responsible for the efficient and effective use, including accurate and timely accounting and reporting per procedures outlined here. Prompt action will be taken in the research and validation of transactions reported by the Defense Finance and Accounting Service (DFAS) operating location, Pacific or Atlantic relative to the status of each OPTAR held by the command.

(8) Financial Records, Logs, and Files.

(a) Requisition/OPTAR Log. Each ship, aviation squadron, and command will establish a Requisition/OPTAR Log (NAVCOMPT 2155) to record OPTAR grants and the value of transactions authorized to be incurred as chargeable to the ACC or TYCOM operating budget. A separate Requisition/OPTAR Log will be established for each OPTAR received. AVCAL holders will maintain an AVCAL Requisition/OPTAR Log (NAVCOMPT 2206) for the AVCAL account. When consolidated accounting is authorized, the command will establish a Requisition/OPTAR Log for each ship, aviation squadron, or unit concerned. The Requisition/OPTAR Log parallels and provides a check on the official accounting records maintained at applicable DFAS operating locations. OPTAR grants will be entered on the Requisition/OPTAR Log and reduced by the value of chargeable requisitions (unfilled orders). All chargeable requisitions and purchase orders must be recorded in the log. All non-chargeable, for example, appropriation purchases account requisitions will also be entered, but these documents have no effect on the OPTAR balance. Additionally, differences reported by the DFAS on the Summary Filled Order/Expenditure Difference Listing (SFOEDL) must be entered in the log and will increase or decrease the OPTAR balance. A mechanized Requisition/OPTAR Log with data files maintained per data processing procedures approved by the ACC or TYCOM (and ASN(FM&C) (if applicable)) will satisfy the requirements of the Requisition/OPTAR Log.

(b) Personnel assigned responsibility for maintaining the Requisition/OPTAR Log shall attend Financial Management for Naval Aviation Operation Target Accounting (OPTAR) course (Course C-555-0018) within 6 months of assuming this position.

NOTE: For Marine Corps activities, this is a combined function performed by the Supply Accounting Division and the Squadron Support Division.

(c) Holding Files. Files will be established by fiscal year for each OPTAR received to hold the appropriate accounting documents and listings pending transmittal to applicable DFAS operating locations. Holding files contents are defined as follows:

1. File 1. Unfilled Order Chargeable Documents For Transmittal. This file contains the accounting copy DD 1348 green copy, DD 1348M, and DD 1149. Underway replenishment requisitions and all debit adjustment documents which increase the estimated cost chargeable based on an advance price change will be included. Requisitions for appropriate purchase account (APA) items or other nonchargeable material will not be placed in this file. All documents will be priced, extended, and entered in the estimated cost chargeable section of the Requisition/OPTAR Log for the period involved, with a corresponding decrease to the OPTAR balance.

2. File 2. Unfilled Order Cancellation Documents/Lists for Transmittal. This file contains lists of confirmed cancellations or copies of individual cancellation documents, advance downward price adjustments, and copies or lists of administrative cancellations of above threshold unfilled orders that decrease the estimated cost chargeable (credit adjustment). All documents will be priced, extended, and entered in the estimated cost chargeable section of the Requisition/OPTAR Log for the period involved, with a corresponding increase to the OPTAR balance.

(d) Required Transmittals and Reports

1. OPTAR Document Transmittal Report (NAVCOMPT 2156). Unfilled orders, cancellation documents, processed listings (or detail cards) and other transactions documents which affect the status of the OPTAR will be transmitted to applicable DFAS operating locations on an accurate and timely basis to permit the up-to-date maintenance of the official accounting records of the ACC or TYCOM or other operating budget holders (Figure 5-15). On the 15th and last day of each month, the documents in holding files 1 and 2 for the current fiscal year, will be removed for transmittal with the OPTAR Document Transmittal Report (NAVCOMPT 2156) to the applicable DFAS operating locations. If no transactions have taken place since the last transmittal, a transmittal will not be made for such period or periods.

2. Budget and OPTAR Report (NAVCOMPT 2157). Except when the ship or unit is in the immediate vicinity of a DFAS operating locations or during periods of message minimize, a message report of Budget and OPTAR data will be submitted in lieu of the Budget and OPTAR Report (NAVCOMPT 2157). The message report will be submitted to applicable DFAS operating locations, with a copy to the ACC or TYCOM on the first work day of the month following the end of the month being reported. Current and prior year OPTAR reports and any other related information prescribed by the ACC or TYCOM will be included. The Requisition/OPTAR Log is the principle source of data required in the preparation of the Budget and OPTAR Report. Prior to the preparation of the Budget and OPTAR Report, the Requisition/OPTAR Log will be balanced.

(e) Transaction Listings Received from the DFAS

1. SFOEDL. The SFOEDL (original and 1 copy) will be forwarded monthly by the DFAS to individual OPTAR holders for each OPTAR held. OPTAR holders will accept and post to the Requisition/OPTAR Log all differences shown on the SFOEDL. After posting the differences, the OPTAR holder will review the listing and annotate transactions considered invalid with the rejection codes. Rejection codes are listed in NAVSO P-3013-1. The valid rejections will be revised with a correction transaction by DFAS and will appear on a later SFOEDL.

2. Age Unfilled Order Listing (AUOL). An AUOL will be forwarded quarterly (except for the first quarter of the current fiscal year) by the DFAS to the individual OPTAR holders for each OPTAR held. The original only, with supporting detail cards for each line item, will be provided to Atlantic fleet ships and operating force units. An original and one copy will be provided to Atlantic fleet aviation operating forces and all Pacific fleet units without supporting detail cards. The AUOL lists all unfilled orders held in the DFAS files over 120 days old which have not matched with related expenditure documents and have not been cancelled.

NOTE: The SFOEDL and AUOL will be submitted to the DFAS for processing as soon as required validation actions have been accomplished.

3. Unmatched Expenditure Listing. An unmatched expenditure listing (original and one copy) will be forwarded quarterly by the DFAS to the individual OPTAR holders. The unmatched expenditure listing itemizes expenditure documents (regardless of value) received by the DFAS for material or services which have not matched with an unfilled order.

NOTE: Refer to NAVSO P-3013-1 and local ACC or TYCOM instructions for detailed funding and accounting information.

(9) Flight Packets. Supply officers or Material Control officers of aviation activities shall be responsible for flight packets for issue to pilots making extended flights. These flight packets will contain instructions to assist pilots to obtain any material or services deemed necessary for the continuation of a flight. Custody and issue control of flight packets shall be as prescribed by the CO. Flight packets shall be inventoried by the Supply Officer or Material Control Officer when returned after each extended flight and at

least monthly. Strict accountability of the Purchase Order/Invoice/Voucher (SF 44) will be established and maintained using the preprinted serial control number on the document. Each aircraft making an extended flight will be provided with a flight packet containing, at a minimum, those items listed in NAVSUP Publication 485.

NOTE: Detailed information on flight packets is in NAVSUP Publication 485 and current ACC or TYCOM instructions.

5.1.3.8 Aeronautical Material Screening Unit (AMSU)

a. All components received in the repairable material section (RMS) SSU from O-level or I-level maintenance units are processed through AMSU to determine whether the component is within the check, test, or repair capability of the IMA. AMSU and SSU units have two distinct functions and responsibilities, but both share joint ownership of the component undergoing repair. ASD has responsibility for physical custody and repair maintenance of components inducted. IMA may combine SSU, document control unit (DCU), and AMSU, as long as specific ownership is identified.

(1) Receive check, test, and repair components from the CCS (RMS for the Marine Corps) and ensure all documentation, for example, logs, records, MAFs, and WOs are attached to the component. For activities with NTCSS Optimized OMA NALCOMIS, verify the CM ALS is received with the components.

NOTE: FLRs with SM&R coded PAOOO will be processed through AMSU for disposition. AMSU will confer with Production Control to determine if the repair is feasible and cost-effective. Refer to paragraph 5.1.2.12c.(1) for additional direction on processing SM&R Code PAOOO items.

(2) Identify components and determine whether they are within the check, test, and repair capability of IMA using the standard ICRL. When check, test, or repair capability does not exist, components shall be shipped to the designated support point or DRP (via the ATAC Program) within two working days after screening.

NOTES: 1. In cases where a component inducted has a When Discovered Code Y, AMSU shall notify QA and Production Control. AMSU shall complete section C of the Y-Code Process Form (Chapter 7). AMSU shall process the component after QA assigns a report number and completes Section B of the Y-Code Process Form. The Y-Code Process Form shall be routed with the component during the repair process.

2. AMSU will initiate an ICRL Change Request (Figure 10.20-1) for P/Ns being inducted for the first time per paragraph 10.20.

3. Discrepancies against items listed as X1 CC on the ICRL will be screened for potential to repair. X1 items with minor discrepancies, for example, broken/missing knobs or fasteners shall be referred to Production Control to determine if repair is possible.

4. The P/N on the WO/MAF will be checked against the P/N on the component identification plate. If the ID plate is missing, validate the P/N with the TRU and the MAF originator. New P/Ns will be added to NALCOMIS by TRU.

(3) Notify Production Control of the receipt of components for scheduling into the appropriate work center.

(4) Receive notice from Production Control when components are to be scheduled for induction.

(5) Route components to the Work Center.

b. The AMSU shall ensure the ASR, EHR, or SRC card is packaged properly to prevent loss or damage. Activities with NTCSS Optimized NALCOMIS move the CM ALS to the receiving activity. When components are shipped between activities, the following procedures shall be followed:

(1) Photocopy the ASR, EHR, or SRC card and place it in a plastic envelope and securely attach it to the outside of the shipping container.

NOTE: The photocopy of the ASR, EHR, or SRC card may be used to reconstruct a new card in the case of a lost or mutilated card per paragraphs 5.2.1.28a(4), 5.2.1.29a(8), and 5.2.1.30a(4).

(2) Insert and seal the ASR, EHR, or SRC card in a plastic envelope. Shipping documents and MAFs will not be placed in the same envelope. Activities with NTCSS Optimized NALCOMIS move the CM ALS to the receiving activity.

(3) Attach the plastic envelope directly to the component and put both items inside the shipping container.

(4) If the component must be shipped in an open crate or without a container, a photocopy is not required; however, special attention shall be given to ensure the envelope containing the ASR, EHR, or SRC card is securely attached to the component.

5.1.3.9 Aircraft Maintenance Material Readiness List (AMMRL) Program

AMMRL is the title of the overall program which provides the data required for the effective management of SE at all levels of aircraft maintenance. The program also provides data for the management of ATE related operational TPSs. Refer to Chapter 3 for more information.

5.1.3.10 Warranty Program

Warranted items will be repaired at the maintenance level which would normally repair such items as determined by the logistics support analysis process if they were not under warranty. For additional specific information concerning this program, refer to Chapters 3 and 15 for documentation.

5.1.3.11 Aircraft Inventory Records (AIRs)

a. The AIR shall be used to establish a formal, continuous chain of accountability for specific equipment and material installed on or designated for use on any aircraft of a specified T/M/S. An AIR is applicable to all aircraft of a specified T/M/S and lists selected material and equipment accountable by all Navy or Marine Corps organizations that are assigned or physically possess operational aircraft.

b. A master aircraft inventory record (MAIR) identifies those items of installed and loose equipment which require a periodic inventory, shall be maintained by COMNAVAIRSYSCOM (AIR-6.6). A MAIR shall be maintained as the standard for each T/M/S aircraft. The MAIR serves as a checklist for items requiring an inventory, provides reasons/authority for any shortages that exist, and documents certificates of accountability.

c. In addition to the accountability of AIR items, an accounting of equipment listed in or comprising subsystems of the applicable MESM will be done prior to aircraft transfer. A number of MESM items are identified at the subsystem level, not by exact equipment designation. Therefore, the MESM cannot be used as a specific equipment checklist as can the AIR. The accountability of most MESM related equipment is done by system operational checks and maintaining a WO file vice an AIR type accountability. When the accountability of an aircraft's equipment is transferred and the aircraft is defined as less than FMC due to supply actions, the missing MESM related equipment will be identified in the AIR as shortages. Even though that specific equipment is not listed.

d. Aircraft are transferred and accepted only after an equipment/item inventory and notation on the forms of the AIR are completed. There may be exceptions to this requirement, such as aircraft procured for research and development only, or the number of aircraft procured is small and employment is restricted. AIRs for these aircraft will not be required if authorized by COMNAVAIRSYSCOM. Equipment

inventories for AIR exempt aircraft will be completed to the mutual satisfaction of the transferring and accepting activities. In all other instances when an aircraft is transferred, an inventory of the aircraft is accomplished based on items of selected equipment and material listed in the AIR and systems identified in the MESM.

e. The AIR is not to be considered a packing list, bill of materials, or configuration list. Selection of items to be included in the AIR shall be governed by the following list without regard to whether the items are GFE or CFE:

(1) Special equipment items essential to the health, safety, and morale of the crew, for example, bedding, life rafts, first aid kits, crash axes, and portable fire extinguishers.

(2) Equipment/material required for the protection of the aircraft during flight and overnight storage, for example, covers, control locks, plugs, and covers for external openings.

(3) Items of equipment subject to pilferage or readily convertible to personal use, for example, clocks, tool kits, compasses, Aldis lamps, and mirrors.

(4) All classified items which are installed or for which installation provisions have been incorporated on the aircraft except when items are accounted for by an authorized classified material accounting system during aircraft transferring actions.

(5) All items of loose equipment applicable to an aircraft which are designated for transfer by the ACC or TYCOM/COMNAVAIRSYSCOM whenever the aircraft is transferred.

(6) All mission essential equipment that cannot be installed in a given aircraft or configured for other missions.

f. The following is a summary of criteria for items to be excluded from an AIR:

(1) Items of equipment which are rigidly fixed and are considered to be a basic or integral part of the aircraft, for example, engines, propellers, wheels, tires, brakes, instruments, and ejection seats.

(2) Items considered personal issue which are furnished or authorized by a squadron allowance.

(3) Equipment and material which is authorized by the IMRL.

(4) Equipment and material which is provided on a less than a one-per-aircraft basis and is accounted for by another material accounting system.

(5) ACC or TYCOM controlled material.

g. Preparation of AIRs:

(1) An AIR shall be compiled for each new block or series of operational, tactical, and nontactical aircraft, except as noted earlier. The AIR will be prepared by the aircraft manufacturer and will be delivered with each individual aircraft. A copy of the AIR for each block or series (as applicable) will be forwarded to COMNAVAIRSYSCOM (AIR-6.6) for approval prior to delivery to the Navy. This proposed AIR will include CFE/GFE MESM related equipment which will be provided subsequent to the delivery of the aircraft.

(2) COMNAVAIRSYSCOM (AIR-6.6) shall be responsible for determining the adequacy and accuracy of the AIR, ensuring the AIR has been prepared per the AIR item criteria established in this instruction, and ensuring the AIR contains complete item identification and PNs covered by the contract.

(3) The cognizant DCMD shall be responsible for providing COMNAVAIRSYSCOM (AIR-6.6) with the aircraft manufacturer's proposed AIR, and for providing a copy of the AIR actually delivered for each. It is desired AIRs be unclassified. When classified equipment meets the criteria for an AIR item, the following will apply:

(a) When the nomenclature, title, and location of classified equipment are not classified, this information will be shown in the same manner as unclassified equipment. However, the security classification, SECRET or CONFIDENTIAL, will be indicated in the AIR in capital letters, immediately following identifying nomenclature or title. In addition, an asterisk (*) with a footnote, "Nomenclature and title unclassified," will be included.

(b) When the nomenclature/title of the equipment is classified, but the location or installation in the aircraft is not, only the security classification, in capital letters, will be indicated. In addition, the symbol # with a footnote, "Location unclassified," will be included.

(c) When the location or installation of the equipment is classified, no notation will be made in the basic AIR.

(4) When the conditions outlined above pertain, the notation, "See supplemental pages for classified items" shall appear in the "Miscellaneous Section" of the AIR. Supplemental pages shall be prepared showing the nomenclature, title, location, and security classification of all classified material either installed in the aircraft or for which provisions have been incorporated. The classification assigned to the supplemental pages will be the highest classification of any of the contents listed. If circumstances cause the classified supplemental pages to become longer than the basic record, supplemental pages will not be used. The basic record will then be given a classification equal to the highest classification of the equipment installed in the aircraft. The handling of the classified supplemental pages or the basic record when classified is per current classification guides.

(5) When provisions for installation of classified equipment are incorporated in the aircraft, and the classified items are not installed at that time, the item will be shown in the basic record or supplemental pages (as applicable) and the appropriate shortage entries will be made.

h. Use and Maintenance of AIRs.

(1) COMNAVAIRSYSCOM (AIR-6.6) is the sole authority for changes and revisions of AIRs. Recommendations for changes or revisions shall be forwarded, with justification, via the appropriate chain of command. In addition, COMNAVAIRSYSCOM (AIR-6.6) shall be responsible for development and maintenance of the MAIRs; issuance of changes to AIRs; coordination of AIR changes with the appropriate ACC or TYCOM, ISSC, and PMA; and NAVSUP WSS Philadelphia, PA will be responsible for providing assistance to resolve supply support problems which cause long term AIR shortages.

(2) ACCs or TYCOMs are responsible for providing assistance required for the development and maintenance of standard AIRs within T/M/S aircraft, to organizations under their command, ensuring the AIRs for aircraft under their command are in agreement with the applicable MAIRs; reviewing and processing recommended changes to MAIRs, and providing all assistance required to account for, and transfer, all equipment authorized for a particular aircraft when that aircraft is transferred.

(3) The ISSC shall be responsible for assisting in the maintenance of standard AIR applicable to T/M/S aircraft and providing COMNAVAIRSYSCOM (AIR-6.6) with recommended changes to T/M/S MAIR based on applicable TDs or other applicable configuration changes.

(4) In the event an AIR becomes lost or destroyed, the reporting custodian shall reconstruct the AIR using a copy of the MAIR provided by COMNAVAIRSYSCOM (AIR-6.6) and by performing a physical inventory.

(5) When an AIR is completely used, that is, the data applicable to a number of separate transfers has been completely used, additional copies of the specific forms may be obtained from the appropriate supply point and inserted in the record after listing the items of material and equipment as shown on the originals. The inventories recorded on these new forms are numbered in sequence, starting with the first subsequent transfer. When the second subsequent transfer has been recorded on the new forms the superseded forms may then be destroyed.

i. Aircraft Transfer and Acceptance. When an aircraft is to be transferred on site, designated inventory teams from the transferring and accepting activities jointly inventory the aircraft and record, in the appropriate column of the Aircraft Inventory Record Equipment List (OPNAV 4790/111) (Figure 5-16), the quantity of each item onboard the aircraft at the time of transfer. The Aircraft Inventory Record Shortages (OPNAV 4790/112) (Figure 5-17) shall be completed to identify shortages of AIR items and MESM related equipment which are not available for transfer, concurrent with the aircraft. An Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104) (Figure 5-18) shall be completed at the time of transfer. When a ferry pilot is required to effect an aircraft transfer, two inventories are to be made, one prior to the ferry flight by the transferring activity and one upon completion of transfer by the accepting activity. The aircraft ferry pilot will not participate in the inventories except to accept custody of pilferable and classified equipment from the transferring activity and to transfer custody of the items to the accepting activity. AIR items which cannot be placed on the aircraft for transfer will be shipped separately marked as "AIR Equipment for Aircraft BUNO". A note to indicate such shipments is made in Column E of the Aircraft Inventory Record Equipment List (OPNAV 4790/111) opposite each affected equipment. Immediately upon receipt of notification of transfer, the transferring activity will inventory all equipment specifically assigned to the aircraft (AIR and MESM equipment) including all items which cannot be placed aboard the aircraft for transfer and list such equipment on a Requisition and Invoice/Shipping Document (DD 1149). This "loose equipment" will be turned in to Supply for appropriate shipment to the receiving activity. A receipt copy of the Requisition and Invoice/Shipping Document (DD 1149) will be attached to the AIR and one will be retained by the shipping activity for their records.

(1) When an aircraft is delivered to a D-level or contractor facility and is scheduled to be returned to the same organization after standard rework testing or special projects, items not requiring rework or required by an activity for testing or special projects will be retained by the current reporting activity. All removals should be appropriately noted on an Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) to relieve the D-level or other activity of accountability requirements. The Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104) (Figure 5-18) will be certified during the transfer action.

(2) When an aircraft is transferred via a D-level or contractor program, the transferring activity will ship only the minimum of essential AIR items, noting all shortages on an Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17). The remaining equipment will be shipped to the receiving activity 30 days prior to the scheduled depot or contractor completion date. The Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104) (Figure 5-18) will be certified during this transfer action.

(3) When an aircraft is being prepared for transfer to the Aircraft Maintenance and Regeneration Center for storage, any AIR items used to protect the aircraft from damage, to make the aircraft safe for maintenance, or required for passenger support will remain with the aircraft. Questions concerning the disposition of AIR items prior to transfer of aircraft to AMARC should be forwarded via the chain of command to COMNAVAIRSYSCOM (AIR-6.6).

(4) AIR items which are not required by an organization for mission accomplishment may be removed from the aircraft and lined out of the applicable Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16) after obtaining concurrence from the ACC or TYCOM and COMNAVAIRSYSCOM (AIR-6.6). They will be processed for turn-in to Supply. The name of the

removing organization and turn-in control number will be entered in Column E of the Aircraft Inventory Record (Equipment List) (OPNAV 4790/111). In addition, an appropriately described entry will be recorded and maintained on Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17). COMNAVAIRSYSCOM (AIR-6.6) will continue to maintain required quantities of such items on the MAIR since the same type aircraft within other commands require continued usage of the equipment.

j. Shortages.

(1) Prior to transfer, an Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) shall be prepared listing all missing AIR and MESM related items. The original signed copy of this form is to be retained by the transferring activity as a permanent record of transfer. A second copy of the form shall remain in the AIR and be delivered to the accepting activity. A third copy of the form shall be forwarded to the ACC or TYCOM of the transferring activity. A fourth copy will be forwarded to the appropriate COMFAIR/CGMAW/Type Wing. In the case of an aircraft transfer between ACCs/TYCOMs, the third copy of the form shall be forwarded to the ACC or TYCOM of the accepting activity.

(2) For the AIR shortages to be related to any specific inventory or transfer transaction, the following mandatory entries will be made on the Aircraft Inventory Record (Shortages) (OPNAV 4790/112):

(a) Name of transferring/receiving activity.

(b) Equipment check/certification number.

(c) Date.

(d) Signature of inventorying activity's CO or representative authorized to sign by direction.

(3) When a new production aircraft is authorized for delivery with CFE/GFE shortages, the DCMD will ensure the Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) is prepared listing shortage items with estimated delivery dates. Copies of this form shall be provided to the aircraft receiving activity, ACC or TYCOM, and COMNAVAIRSYSCOM (AIR-6.6).

(4) When new production aircraft are received by a Navy or Marine Corps activity with item shortages not identified on Aircraft Inventory Record (Shortages) (OPNAV 4790/112), the activity receiving the aircraft will report the CFE shortages to the Defense Contract Management Area or District (DCMD) by naval message, requesting item shipping data. GFE shortages will be reported by naval message to COMNAVAIRSYSCOM (AIR-6.6) requesting acquisition instructions, with an information copy to the ACC or TYCOM of the accepting activity and the supporting COMFAIR/Commanding General Marine Air Wing (CGMAW)/Type Wing. The message format will include the PN and nomenclature of each missing item, identified to the applicable aircraft BUNO.

(5) When shortages of inventory items are revealed in preparing an aircraft for transfer, every effort will be made to locate the items or effect replacement prior to transfer. However, transfer of the aircraft will not be delayed pending replacement of the items, but the transferring organization will make entries on the Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16) and Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) and accomplish the following: if missing items have been removed for repair, a notation will be entered in Column D of the Aircraft Inventory Record - Shortages (OPNAV 4790/112) and necessary steps taken to ensure the items are forwarded and appropriately marked for the applicable BUNO when received; if the item has been placed on requisition, the notation in Column D will include a statement that the item will be forwarded on receipt. When items are back ordered by the ICP, the transferring activity will cancel the requisitions, advise the accepting activity, and furnish information and justification on the Aircraft Inventory Record (Shortages) (OPNAV 4790/112) which can be used by the accepting activity for obtaining replacement items. CFE shortages, which should have been noted on a previous record must be transcribed to the new Aircraft Inventory Record (Shortages) (OPNAV 4790/112).

The transferring activity shall notify the DCMD of the aircraft CFE shortage and provide updated shipping instructions for the CFE.

(6) When shortages are discovered upon receipt of an aircraft and are not properly recorded in the AIR, the receiving organization will itemize shortages and submit a list of such shortages, within 10 working days after receipt of the aircraft, to the organization from which the aircraft was received. The transferring organization will take one of the following actions within 15 working days after receipt of shortage identification:

(a) Furnish vouchered turn-in document, or

(b) Furnish shipping data indicating shortages are enroute, or

(c) Provide other legitimate means of accounting for listed property. If the transferring activity is unable to locate or justify missing items, an explanatory statement signed personally by the transferring activity's CO shall be forwarded to the accepting activity indicating the authority for shortages, for example, the Financial Liability Investigation of Property Loss (DD 200).

(7) In all cases, authority for transferring aircraft with shortages must be obtained from the ACC/ TYCOM prior to aircraft transfer.

(8) AIR shortages which persist for 90 days before transfer, without proper authority/justification noted in Column D or E of the Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17), will be forwarded to COMNAVAIRSYSCOM (AIR-6.6) for resolution.

(9) The notation "Missing on Receipt" is not an adequate notation on Aircraft Inventory Record (Shortages) (OPNAV 4790/112) and is not to be used. Appropriate authority will be referenced and a copy of the authorization, for example, letter, message, document, will be included in the AIR until the shortage is filled.

(10) MESM equipment, not AIR listed, required to be transferred with the aircraft will be included on the Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) if identified as a shortage. When this MESM equipment is received by the accepting activity, appropriate deletions will be made to Aircraft Inventory Record (Shortages) (OPNAV 4790/112). No changes are required to be made to the Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16) unless equipment is listed on the MAIR.

k. Disposal of Records. Disposal of AIRs will be prescribed by COMNAVAIRSYSCOM (AIR-6.6).

l. Contents and Instructions for Preparing AIRs. The AIR shall consist of the following parts: Department of the Navy Aircraft Inventory Record Cover (OPNAV 4790/109); Aircraft Inventory Record (OPNAV 4790/110); Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16); Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17); Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104).

(1) The Aircraft Inventory Record (OPNAV 4790/110) (Figures 5-19 and 5-20) illustrate the sectional breakdown applicable to each type aircraft, together with various explanatory notes. It shall be made up as follows:

AIRCRAFT TYPE. The complete government aircraft designation.

SERIAL NO. The government serial number.

CONTRACT NO. The government contract number.

PRIME CONTRACTOR. The full name of the contractor.

ACCEPTANCE DATE. The date the aircraft was accepted by the government.

EXPLANATION. The section letter, designation, and name of each section shown on the sectional breakdown diagram shall be entered, for example, Section A. Nose section.

SECTIONAL BREAKDOWN DIAGRAM. This shall consist of a side elevation of each particular aircraft, drawn to an appropriate scale, but not less than 5 inches in length. Additional views, such as the plan view of a wing, may be shown as desired. Division of the diagram shall correspond to the natural divisions of the aircraft. The sections shown in the diagram may be further subdivided laterally, if necessary, to facilitate checking. The identification of sections contained in the diagram shall be alphabetical, the letter A being assigned to the first section, B to the next, and so on, generally to the rear of the aircraft. The letter R shall denote items mounted on the exterior of the fuselage, and the letter F may be used to indicate those items to which access is gained from the fuselage. Any subdivisions of the sections shall be identified by the letter assigned to the section as outlined above followed by a lower-case letter, for example, Aa, Ab.

MISCELLANEOUS DATA. Any additional information concerning the contents of the form may be entered.

(2) The Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16) shall not be considered a components list for an operational and tactically complete aircraft upon delivery from the aircraft manufacturer's plant. It shall include both GFE and CFE which are applicable to listings as required in this instruction and shall be used to establish formal accountability for an aircraft and its equipment. Equipment shown shall actually be on board the aircraft or listed as a shortage. The equipment list shall be divided into sections which list the items pertaining to that particular section of the aircraft. Individual items within each section shall be numbered as nearly as possible in the sequence of their physical location, generally from front to rear. Each section shall be headed by a notation, for example, Section B pilot's compartment stations 106-201. Each section shall begin with page 1; with the addition of equipment items, the necessary pages can be inserted and numbered in the proper sequence. All equipment listings in the AIR shall be double spaced between items and listed as follows:

SECTION. The appropriate section designator.

GOVERNMENT SERIAL NO. The applicable serial number.

AIRCRAFT TYPE. The complete government aircraft designation.

PAGE OF PAGES. The applicable page number.

Column A - ITEM NO. Item numbers shall contain a letter prefix to indicate the section/compartment of the aircraft where the item is located. The numbers shall start with No. 1 for each section/compartment. Items shall be numbered, if possible, in numerical sequence corresponding to their physical location.

Column B - NOMENCLATURE, TYPE, AND MODEL. The nomenclature, type, and model for each item shall be entered. GFE shall carry the nomenclature, type, and model as designated in the government furnished list. CFE shall carry the nomenclature, type, model, and PN corresponding to that shown in the airplane model specification or other authorized CFE lists. Items within a box or assembly, if listed, shall be indented to show the relationship to the major item.

Column C - REQUIRED HERE. The quantity of that item installed at that particular section of the aircraft shall be entered.

Column D - EQUIPMENT CHECKS. This column is provided for inventory personnel to use in denoting the physical presence of equipment/items. The subdivisions, 1 through 24, of this column shall be identified by appropriately completing the legend at the bottom of the page. Entries in the

legend shall be accomplished by inserting the date the inventory was completed and shall be signed by the person conducting the inventory. Enter the number of items present and if none of the items are present, enter 0. These notations shall be made by the person physically inventorying the aircraft at that time.

Column E - LOCATION OR REMARKS. This column may be used to denote a brief description of the exact location of those items which are considered difficult to locate. Station numbers may serve as auxiliary information. It will not be necessary to list the location of items easily recognized and when location is readily apparent. The visual stowage location of an item and its actual location may be given.

(3) The Aircraft Inventory Record (Shortages) (OPNAV 4790/112) (Figure 5-17) shall reflect shortages of equipment or parts subject to inventory when an aircraft is transferred. The following shortages not subject to inventory shall be listed and forwarded with the AIR:

Column A - ITEM NO. Column A shall reflect the item number corresponding to the item listed in the equipment list and prefixed with the section designator.

Column B - NOMENCLATURE, PN, TYPE AND MODEL. Information required in this column shall be the same as in Column B of the Aircraft Inventory Record (Equipment List) (OPNAV 4790/111) (Figure 5-16).

Column C - QUANTITY SHORT. Enter the shortage quantity.

Column D - AUTHORITY OR REASON FOR SHORTAGE. The authority/reason for the shortage shall be entered.

Column E - REMARKS. This column may be used to enter brief remarks.

(4) The Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104) (Figure 5-18) shall be completed at time of transfer or receipt of the aircraft (as applicable).

5.1.3.12 Predeployment Planning

a. It is the responsibility of the supporting activity afloat or ashore to provide full supply support The Combat Information Systems Department is responsible for providing NTCSS IT21 Optimized OMA NALCOMIS support for tenant fleet aircraft and reserve squadrons. However, the continuing need for operational flexibility requires short term deployments of aircraft to sites which do not support the particular aircraft. Increasingly, special support procedures are required which accent speed of response, mobility, and reliability, but which are feasible within existing stocks of materials. These special procedures include the carrying of a limited pack up of supplies and SE by the deploying unit, or the use of limited augmented outfitting at the site. Accurate preplanning is essential and must include the level of aircraft maintenance to be performed.

b. Responsibilities and Functions:

(1) Ships. When a ship is away from a CONUS port, and embarked squadrons are scheduled to operate ashore, the ship is responsible for providing initial and replenishment material not available ashore. Procedural arrangements and requirements determination will be established between the ship, squadron, air group commander, and station concerned in advance. In general, a pack up will be sent ashore in the custody of the squadron. Expenditure requisitions will be returned to the ship. The ship will initiate, coordinate, and monitor the support and shall keep the air group commander and squadron CO advised as to status. Emergency requisitions should be initiated by the station when the ship is not within reasonable range. Additionally, the Combat Information Systems NTCSS IT21 will be provided for Optimized NALCOMIS connectivity and mid-tier support.

(2) Type Wing Commanders. The Type Wing Commander will initiate, coordinate, and monitor the special support procedures and will assure only a minimal range of essential material is approved for pack up or recommended for augmentation. The Type Wing Commander will keep the ACC or TYCOM advised as to status of planning, readiness, and outstanding support problems prior to the temporary deployment.

(a) Pack up Support. If a determination is made to provide support by means of a pack up, the Type Wing Commander will coordinate with the local supply activity to provide, on a temporary custody basis, a limited pack up based on the length of shore operation, normal usage data, and overall ship support requirements. All unused material will be returned to the activity issuing the pack up, accompanied by the requisitions to replace all the consumed material, upon completion of the deployment.

NOTE: For Marine Corps activities (not aboard ship) this is a function of the MALS Aviation Supply Officer.

(b) Augmenting Outfitting. If a determination is made to request a limited augmenting outfitting of the site on a long term basis, the Type Wing Commander will forward the request to the ACC or TYCOM for further processing.

(3) Squadrons. Navy squadron aviation usage data, mission and flying hour projection, and proposed aircraft maintenance plans provide the basic elements of aviation supply planning. Refer to the following paragraphs to derive a valid list of requirements.

(a) Advance liaison with the temporary supporting activity will be established. This liaison shall determine:

1. Specific usable supplies, SE, and maintenance and personnel facilities available.

2. Necessary materials not available to be brought in a pack up.

3. Squadron personnel requirements.

4. Available and proposed replenishment channels.

5. The Combat Information Systems ensures all NTCSS IT21 Optimized OMA NALCOMIS equipment is in place, operational, and connectivity issues are addressed.

(b) Except for deployments away from carriers at other than CONUS ports which are covered in above paragraphs, submit a list of net requirements to the Type Wing Commander. Action should be scheduled to permit the Type Wing Commander sufficient time to coordinate assembly and movement of required material.

(c) Material Control. Take custody of assigned pack up material and maintain accurate stock records and usage data. Submit requisitions for all material used. Return the balance of unused material to the supplying activity. Ensure all repairable items are returned RFI or NRFI. Deficits must be covered by a funded document. Unserviceable repairables must be accompanied by a turn in MAF or WO. Upon completion of deployment, initiate a summary of usage and comments to the Type Wing Commander. The purpose of this data is to provide more efficient support for future deployments.

(4) MAGs/MACGs/Marine Wing Support Groups (MWSG)

(a) Aircraft squadrons, MATCDs, and Marine Wing Support Squadrons (MWSS) submit Navy funded aviation peculiar support requirements to the supporting MALS.

(b) MALS, upon receipt of a request from a supported unit, determine support available at the deployment site and prepare a pack up to augment support at the site. Provide a MALS support element, as

appropriate, to support deployed squadron operations. Ensure all NTCSS IT21 Optimized OMA NALCOMIS equipment is in place, and operational, and connectivity issues are resolved.

5.1.3.13 Supply Related Publications

a. NAVAIR Publications. Publications dealing primarily with the operation and maintenance of aircraft and related equipment within the DON are issued by or under the direction of COMNAVAIRSYSCOM. The Naval Aeronautical Publications Index is made up of four parts:

(1) NAVICP Publication 2003.

(2) The NATEC Web site (https://mynatec.navair.navy.mil).

(3) NAVAIR 01-700.

(4) NAVAIR 01-XXXX-0 or A1-XXXX-AML-000.

b. Allowance lists, ARRs, and TBAs are approved by COMNAVAIRSYSCOM and published by NAVSUP WSS.

(1) The contents of these lists contain the following:

(a) The equipment and material (both consumable and repairable) necessary to outfit and maintain units of the aeronautical organization.

(b) Items used with sufficient frequency to justify their issuance to all activities maintaining aircraft or equipment for which the lists are designed.

(c) Information concerning NSN, nomenclature, interchangeability, and superseded NSNs.

(d) Detailed instructions for the application and use of the publication.

(e) A table of logistic data showing the total weight and cube of all material contained in the list.

(2) Allowance lists contain material and equipment for the purposes indicated in each list. Allowance lists are used as guides in establishing IMRLs.

(3) Allowance Requirements Registers list material and equipment for the purposes indicated in the register. Material listed is normally retained in Supply Department stocks until required for use. The various Allowance Requirements Registers are used as guides in establishing an AVCAL for ships, air stations, and MALS. The AVCAL is a list of all aviation peculiar items authorized to be carried in stock by these activities for support of aircraft and missiles.

(4) Table of Basic Allowances (TBA) are listings of equipment and material required for performance of specific missions. They contain both shop equipment and common supporting spare parts, and include allowances of tools and material required for use by such activities as FMF squadrons, guided missile activities, and drone type activities.

(5) Allowance Parts List. The APL is provided by NAVSUP WSS and lists both an equipment's technical characteristics and logistics information. It specifies all maintenance significant repair parts associated with the equipment and is the basis for allowances.

(6) Allowance Equipage List. The Allowance Equipage List is provided by NAVSUP WSS and describes a system supported by an authorized range of operating space items. This material falls into the general categories of tools and equipage to be retained in the custody of the users department.

(7) Marine Corps Aviation Supply Desk Top Procedures (MCO P4400.177). The manual provides functional procurement, receipt, expenditure, inventory and financial management procedures, and some policies for all MALS using the SUADPS/RT and NALCOMIS Phase II and beyond.

c. Illustrated Parts Breakdown. An IPB, also known as Illustrated Maintenance Parts List or Illustrated Parts Catalog, is prepared by the manufacturer for each model aircraft, engine, accessory, electronic equipment, or SE. It is printed and issued by the authority of COMNAVAIRSYSCOM. The IPB is designed to let the Supply and Maintenance personnel identify and order replacement parts for the aircraft or equipment. All procurable assemblies with detail parts are illustrated and listed in such a manner as to make possible quick identification of assemblies and their component parts. The items are arranged continuously in assembly breakdown order with the illustrations placed as near as possible to their appropriate listing.

d. Technical Directives. Personnel will often be required to prepare or process requisitions for incorporation of TDs or for component parts of them. It is necessary to understand their types, titles, categories, arrangement, and where to find applicable supply data in them. A TD may direct parts or material be added, removed, changed, altered, relocated, or repositioned. TD types and categories are in, paragraph 10.10.

(1) Titles. Each TD is assigned a title in relation to the part of the aircraft or specific equipment it affects. For example, if the change affects the wing of a P-3 aircraft the TD would be titled "P-3 Airframe Change _____". Each specific area of an aircraft or in some cases the type of equipment, is so titled. Another example is a change to some electronic component which would be titled "Avionics Change _____". Separate titles are assigned and are found in Appendix E.

(2) Arrangement. TDs must be arranged in the order listed in the following paragraph. All of these headings are mandatory and if there is not information applicable to a particular element heading "not applicable" or "N/A" is entered.

(3) TD Element Headings. The following are the element headings in the order they will appear in the TD:

Heading.

Subject.

References.

Enclosures.

Documentation affected.

Purpose of directive.

Application.

Compliance. This gives the time frame in which the change must be effected.

Man-hours required.

Supply data.

Reidentification.

Detailed instructions.

Weight and balance.

Interim support.

Signature.

Prepared by.

Verified by.

(4) Supply Data. This section lists all modification kits, parts, materials, and SE necessary to comply with the directive. Materials are identified by PN, commercial and government entity, nomenclature, SM&R code, and when available, NSN. It also lists a source of supply and a disposal listing. The Supply Data Section is divided into three subheadings; requirements for basic equipment, requirements for trainers, and requirements for spares. Only those applicable subheadings are listed. The following subparagraphs discuss some of the information listed under the Supply Data Section subheadings:

(a) Kits Required. The supply data furnished in this section is listed in columns. The modification kit is identified and listed on the first line. The contents of the kit are listed immediately below the kit entry.

(b) Other Material Required. The supply data furnished in this section is listed in the same manner as "kits required". This subheading includes all material required to comply with the directive but not included in the kit.

(c) Support Equipment. This subheading lists all SE required to accomplish the modification, other than common or standard hand tools. The code in the "source" column indicates where to requisition the tool. The code in the disposition column tells what to do with the tool after use.

(d) Source of Supply. This subheading contains a cross reference to explain the codes listed in the source columns of the previous subheadings.

e. Parts/Materials Removed and Disposition. This subheading lists all parts and materials removed as a result of accomplishing the TD. The disposition column is completed and keyed to notes to indicate the appropriate disposition of the item.

5.1.3.14 Surveys

a. Definition. A survey is the procedure required when Navy property and Defense Logistics Agency (DLA) material, including IMRL equipment/SE, in Navy custody is lost, damaged, or destroyed.

b. Purpose. To determine responsibility for lost, damaged, or destroyed property and to fix the actual loss to the government. To make a true determination, the facts surrounding the loss or damage must be thoroughly investigated and reported in a timely manner. It should not be limited to verifying statements of interested parties, but should be broad enough to ensure the interests of the government as well as the rights of the individual(s) or activities concerned are fully protected. Review is required to prove or disprove statements and to place responsibility where it belongs.

c. Procedures. The Financial Liability Investigation of Property Loss (DD 200) will be used in connection with survey procedures. Detailed procedures for proper accountability for government property lost, damaged, or destroyed are contained in NAVSUP Publication 1, Vol II, and NAVSUP Publication 485. NTCSS Optimized OMA NALCOMIS activities that own items tracked in Navy property, DLA material, including IMRL equipment/SE that is lost, damaged, or destroyed shall send a copy of approved survey to

COMNAVAIRSYSCOM (6.8.5). The surveying activity shall annotate in the CM ALS that the component is missing, stricken, or surveyed, change the CM indicator to BCM, and make remarks in the miscellaneous record of the CM ALS.

5.1.3.15 Aircraft Battle Damage Repair (ABDR) Supply Procedures

ABDR materials are requisitioned through the normal supply process. Sufficient quantities of raw materials shall be strategically prepositioned to ensure that battle group requirements can be met in a timely manner.

5.2 Aircraft Logbook (Paper), Reports, and Configuration Management (CM) Auto Log-Sets (ALS)

5.2.1 Aircraft Logbook

NOTES: 1. CM ALS is the primary source of information for activities using NTCSS Optimized OMA/IMA NALCOMIS. The following paper logbook forms are not required to be kept in the aircraft logbook or AESR and may be disposed of per paragraph 5.2.1.9:

Monthly Flight Summary (OPNAV 4790/21A)
Equipment Operating Record (OPNAV 4790/31A)
Inspection Record (OPNAV 4790/22A)
Repair/Rework Record (OPNAV 4790/23A)
Miscellaneous History (OPNAV 4790/25A)
Preservation/Depreservation Record (OPNAV 4790/136A)
Structural Life Limits (OPNAV 4790/142)

2. At a minimum, the ALS for each BUNO will be saved weekly and kept on file for 2 weeks in XPS format on an external media source, for example, CD, DVD, or external hard drive. Refer to https://sailor.nmci.navy.mil FAQ section or the CNAP Share portal for instructions on how to save ALS items using XPS format.

5.2.1.1 Logbook Clerk

NOTE: Activities with NTCSS Optimized OMA NALCOMIS refer to paragraph 5.2.2 for guidance/policy.

a. Most functions of maintaining the logbook/records are performed by the Logbook Clerk assigned to Maintenance or Production Control, naval inter-service, or commercial contractor FRCs. It is imperative that personnel assigned to Logs and Records have a good foundation in these processes. All personnel assigned to OMA NALCOMIS Optimized squadrons, IMAs and MALS Logs and Records shall complete the Logs and Records Configuration Management for Organizational and Intermediate Activities course (Course C-555-0059).

b. The Logbook Clerk has responsibilities for functions within the following areas:

(1) Administrative Records Required for Transfer of Naval Aircraft. The Logbook Clerk shall receive or compile the following items for receipt or transfer of aircraft, including relocation of aircraft to or from a D-level facility for standard rework. The minimum requirements for records and administrative information for aircraft being transferred or inducted and returned from standard rework are as follows:

(a) The logbook, records, and applicable parachute records, SSK records, and aircrew systems records for aircraft mounted components.

(b) AIRs.

(c) W&B Handbook.

(d) Current contents of the ADB.

(e) Current contents of the aircraft inspection, TD compliance, aircraft general, or electronic history files and NALCOMIS OMA ad hoc Aircraft Transfer Report.

NOTE: When an NALCOMIS OMA (Legacy) activity transfers an aircraft to an NTCSS Optimized OMA NALCOMIS activity or non-NALCOMIS activity, the transferring Legacy activity shall produce a NALCOMIS OMA ad hoc Aircraft Transfer Report (Figure 5-21) and send it to the receiving activity. Refer to the OMA-SAM for specific procedures when transferring an aircraft to another NALCOMIS OMA (Legacy) activity. Refer to paragraph 5.2.3 for NTCSS Optimized OMA NALCOMIS policy.

(f) Updated TDRS Lists Nos. 02 and 04 (aircraft only).

(g) Records of all FCFs for preceding 6 months or one phase cycle, whichever is greater.

(h) Previous and current Hydraulic Contamination Control Trend Analysis Charts.

(i) A facsimile of the current Flight Loads/Launch/Landing Data (NAVAIR 13920/1).

(j) Other specific information required by the ACC or TYCOM. All military and commercial rework activities will forward the complete set of aircraft maintenance files that accompanied the aircraft into standard rework when the aircraft is transferred upon completion of standard rework. In addition, when aircraft are at the D-level facility the ISSC may elect to make copies of the records for historical record analysis.

(k) If operating NALCOMIS OMA, provide aircraft historical data tape.

(l) NALCOMIS Engine Configuration. Ensures all engine configuration base line requirements are entered into NALCOMIS as part of the engine induction process.

(m) Update the custody section of the VFS CADPAD, TRACE CADPAD Module to electronically transfer the installed explosive devices on the aircraft and egress systems.

(n) On transfer of an aircraft, update the custody section of VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Modules to electronically transfer the associated ALSS equipment and installed explosive devices data on the aircraft and egress systems to the receiving command.

NOTE: Aircraft undergoing D-level rework/modification shall remain in the reporting custody of the operating activity throughout the rework evolution, regardless of location, unless otherwise directed by ACC or TYCOM.

(2) W&B Handbook. The Logbook Clerk will forward the aircraft W&B Handbook to the W&B Officer.

(3) AIRs. The Logbook Clerk at the O-level will forward the AIRs to Material Control. The D-level Logbook Clerk will forward the AIRs to management services.

(4) Configuration Verification and Inventory of Components and Assemblies (O-level). All components and assemblies installed on aircraft/equipment that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SKK Record, or Aircrew Systems Record shall be inventoried and configuration verified. Activities shall prepare a local form to record the CAGE, PN, and serial number of the installed items. Physical verification of aircraft/equipment items shall be conducted by verifying the inventoried items part number and serial number with the actual part number and serial number in the logbook and records. Any discrepancies noted shall be resolved to ensure accurate inventory of all aircraft/equipment items. Items shall

be inventoried upon acceptance, prior to transfer and during the phase inspection for the applicable equipment being inspected. All items shall have been inventoried and verified by the completion of one complete phase cycle. UAS Control Station AESRs shall be inventoried and verified annually. If operating NALCOMIS OOMA, use applicable NALCOMIS reports for obtaining and verifying inventory of components and assemblies.

NOTE: The JSF delivery procedure eliminates the requirement for configuration verification during acceptance inspection when received from the factory. Disassembly beyond the daily inspection requirements to perform component verification is not authorized without TYCOM approval.

(5) Engine Transaction Report and End of Quarter Engine Report. Activities with reportable engines refer to NAVAIRINST 13700.15 for reporting procedures.

(6) Aircraft Accounting, OPNAV XRAY Reporting, and Quarterly Aircraft Audit Reports. The Logbook Clerk will perform the functions and be responsible for aircraft reporting as required by paragraph 5.3 and applicable ACC instructions.

(7) Flight and Ground Loads Reporting. The Logbook Clerk will report flight loads, launch, and landing data and make required logbook entries per NAVAIRINST 13920.1.

(8) VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Modules. The D-level logbook clerk is responsible for the VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Modules. The use of VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Modules are mandatory. FRC shall update the VFS CADPAD, TRACE CADPAD and TRACE LIFE SUPPORT Module data bases with all changes and electronically transfer custody to the receiving command upon completion or rework/repair cycle.

(9) TDs. Upon receipt of new TDs, the Logbook Clerk, P&E, or Examination and Evaluation (E&E) will screen all TDs for applicability to assigned aircraft and related equipment and perform the following:

(a) O-level and I-level logbook clerks will notify Maintenance/Production Control of applicability and priority. The D-level logbook clerk will notify planning and management of applicability and priority.

(b) Ensure required TD kits are ordered.

(c) Make appropriate logbook entries upon receipt. Some TDs may require multiple entries in the logbook and applicable records.

(d) Add new TD to TDRS List No. 02 if it is an airframes change (AFC) or airframe bulletin (AFB). All other TDs will be logged on the appropriate TD page.

(e) Complete logbook and record entries upon incorporation, and annotate technical directive reporting system (TDRS) List Nos. 02 and 04 (if applicable) or complete TD page entry requirements.

(f) FRC Depots are required by NAVAIR 00-25-300 to submit Technical Directive Compliance Reports, download and update Lists 02 and 04, and include them in the aircraft logbook prior to transferring the aircraft.

NOTE: Upon receipt of TDRS List Nos. 02 and 04, inserting OPNAV 4790/24A Technical Directives pages titled AFB and AFC TDs, including Amendments and Revisions, is no longer authorized. Tracking AFB and AFC TDs and related Amendments and Revisions will be accomplished directly on TDRS List Nos. 02 and 04.

(10) Production Equivalents, ECPs, and Prototype or Modification of Aircraft or Equipment. The Logbook Clerk will comply with the details in the related correspondence describing the required action. Logbook entries will be made as required on the appropriate TD page and Miscellaneous History page or applicable record's Technical Directives section.

(11) Naval Aircraft Flight Record (OPNAV 3710/4) and Flight Hour Management. The logbook clerk will obtain the necessary Naval Aircraft Flight Record (OPNAV 3710/4) flight information to maintain applicable logbook and records, for example, flight time and landing data. The O-level Logbook Clerk will perform the following:

(a) Receive Copy 3 from Maintenance Control, update records, and place Copy 3 in the current month's file.

(b) Maintain Copy 3 for a minimum of 3 months.

(c) Enter data in the logbook/records as applicable using the Copy 3 or the verified monthly total.

(d) Update running totals of aircraft hours, engine hours, and any other data in the Maintenance Department required for aviation 3M documentation and management requirements.

(e) If operating NALCOMIS OMA, use automated NAVFLIRS data entry procedures and reports to accomplish above tasks. NALCOMIS OMA sites shall use electronic media to retain required historical records.

(12) Service Life Items (O-level and I-level). The logbook clerk will maintain local records on items that have a service life. Monitor accumulations and keep Maintenance/Production Control informed of forced removal items, such as high time.

(13) Monthly Maintenance Plan (O-level and I-level), submit inputs for the MMP. Required topics include:

(a) Forced removal items.

(b) TD compliance requirements.

(c) Compass calibrations due.

(d) Phase inspection requirements.

(e) Special inspection requirements.

(f) Locally required information.

(g) Anticipated aircraft, UAS, and equipment transfers/receipts.

NOTES: 1. These minimum information requirements may be enclosures produced by current information technology reports. Current information technology databases are also optional. In such a case, the database locator sheet shall be included in the MMP. If this option is used, strict security safeguards shall be enforced for appropriate administrator and read-only access levels.

2. The MMP, including locator sheet reference, must be available offline in its entirety for contingency NALCOMIS operations.

(14) Aircraft Flight and Summary Reporting Procedures (O-level and I-level). The Logbook Clerk will initiate, maintain, closeout, reinitiate, and dispose of logbook/records.

(15) MAF Requirements. The Logbook Clerk will perform the following functions:

(a) Screen all documents for logs and records requirements.

(b) Make required logs and records entries. When logbooks or related records specify a warranted item, ensure the MAF contains appropriate warranty information in the removed item and installed item time cycle fields.

(c) Close out all logs and records (as necessary).

(d) Complete the Entries Required Signature blocks on the MAF to certify appropriate logbook/records entries have been made or no entries are required.

(e) Forward completed documents to the analyst or SA/A (as applicable).

(f) Forward closed out records to Maintenance Control to be matched with turn-in documents and the applicable component or equipment.

(16) Logbooks and Records. The Logbook Clerk will initiate, maintain, close out, reinitiate, and dispose of logbooks and records.

(17) NALCOMIS Engine Configuration. Ensure all engine configuration base line requirements are entered into NALCOMIS as part of the engine induction process.

(18) Additional responsibilities are identified in the following NAMPSOP detailed in Chapter 10:

Navy Oil Analysis and Consumption Monitoring Program (paragraph 10.3)
Hydraulic Contamination Control Program (paragraph 10.5)
Technical Directive Compliance Program (paragraph 10.10)
Tool Control Program (paragraph 10.12)
Electrostatic Discharge Program (paragraph 10.21)

5.2.1.2 General Information

a. All activities that have reporting custody of naval aircraft and equipment not undergoing off-site rework shall maintain logbook and records in a proper and up-to-date status. In addition, NALCOMIS OMA activities will maintain the applicable logs and records subsystem in a proper and up-to-date status.

b. The logbook and records are kept in the custody of the Depot FRC, inter-service, or commercial depot where the aircraft is undergoing rework. Classified logbook information will be safeguarded per applicable security regulations. The logbook/records are transferred when the aircraft or equipment is transferred or returned to the reporting custodian. The logbook and records are updated before turnover to the new station, unit, or reporting custodian. When flights are involved in the transfer or turnover, the logbook/records are turned over to the physical custody of the aircraft pilot. The ferry pilot is responsible for providing ferry flight time to the receiving activity. The logbook and records are reviewed by the receiving activity as part of the acceptance procedure and all discrepancies are resolved promptly.

c. Incomplete or poor logbooks and records necessitate unnecessary inspection and repair or rework of aircraft/equipment. Activities receiving questionable or incomplete logbook/records should request immediate corrective action from the delinquent activity. Obvious mistakes in record keeping may be corrected by the current custodian and initialed or signed off. Discrepancies requiring corrective action by

the previous custodian may be signed off by the current custodian after receipt of correspondence indicating corrective action.

d. FRCs that have reporting custody of naval aircraft and equipment shall maintain logbooks/records in a proper and up-to-date status. Logbooks are an essential element of aeronautical technical discipline. They provide a history of maintenance, operation, and configuration of the aircraft or equipment, and control of maintenance schedules for life limited components and assemblies. All IMC/P aircraft will undergo D-level purge of the aircraft logbook and administrative records at least once per FSP during the PMI designated by the T/M/S Program Manager. FRCs without reporting custody shall notify the reporting custodian of any discrepancies between the logbook and the structure installed. D-level activities with reporting custody will fulfill requirements specified below:

(1) The logbook/records are kept in the custody of the naval, inter-service, or commercial contractor FRC where the aircraft is undergoing rework. In the FRCs this is normally the Production Planning Department. Classified logbook information will be safeguarded per applicable security regulations. The logbook/records are transferred when the aircraft/equipment is transferred. The logbook is updated before turnover to the new station or unit. When flights are involved in the transfer, the logbook/records are transferred to the physical custody of the aircraft pilot. The ferry pilot is responsible for providing ferry flight time to the receiving activity. The logbook/records are reviewed by the receiving activity as part of the acceptance procedure and all discrepancies are resolved promptly.

(2) Upon induction of an aircraft for rework, the FRC reworking the aircraft will screen all logbooks for information pertinent to the rework and purge the logbooks of all entries not required as a permanent part of the logbook. The logbook of each aircraft will be maintained during rework. All major repairs, inspections, flight and operational data will be recorded. Also included in the logbook, in the appropriate section, is a record of TDs affecting the aircraft, its components, and assemblies. When the aircraft is transferred, the logbook is transferred with it. Acceptance and transfer of operating forces aircraft delivered to an FRC requires accomplishment of certain nonproductive work prior to actual induction. This includes defueling, defusing/disarming, and removal of pyrotechnic devices and safety/survival gear. It also includes performance of an aircraft inventory and the screening of logbooks.

(3) FRCs shall screen aircraft logbooks to ensure accuracy of entries relating to all life, time, or event limited structures and components for all aircraft being processed. Incomplete or poor logbooks/records necessitate unnecessary inspection and repair or rework of aircraft/equipment. Activities receiving questionable or incomplete logbooks/records should request immediate corrective action from the delinquent activity. Obvious mistakes in record keeping may be corrected by the current custodian and initialed or signed off. Discrepancies requiring corrective action by the previous custodian may be signed off by the current custodian after receipt of correspondence indicating corrective action.

e. All logbook/record entries shall be made under the direction of the MO of the activity to which the aircraft/equipment is assigned or under the supervision of the individual responsible for logbook custody at the activity where the aircraft/equipment is undergoing rework. All entries in the logbooks/records shall be typewritten or plainly printed using a ball point pen with black ink, except where pencil entries are authorized. THE USE OF A FELT TIP MARKER IS NOT AUTHORIZED.

NOTE: Component Repair. Generally, logs and records requirements pertain to aircraft and engines, but certain components cycled through the component repair process have equally important logs and records requirements. Although this Chapter is written for aircraft and engine logs and records, the policy and procedures apply to all components designated as ASR, EHR, and SRC card trackable. Special emphasis must be applied at each FRC to ensure compliance with logs and records policies during the component repair process.

5.2.1.3 Aircraft Logbook Description

a. The aircraft logbook is a hard cover, loose-leaf ring binder containing separators, page insert forms, and related records. Since the logbook contains loose-leaf forms, it is imperative the model and BUNO be inserted on both sides of each page in the spaces provided to ensure positive identification when pages are removed or new continuing pages are initiated.

b. Additional Data. Pages or forms, other than those described in this instruction (unless specifically directed by COMNAVAIRSYSCOM), are not inserted, stapled, or otherwise attached to the logbook. Additional data, for which there is not a designated place in the logbook shall be maintained in the manila envelope in the back of the logbook. Superseded forms will be closed out with the statement "NO FURTHER ENTRIES THIS PAGE" and a new form initiated. The superseded form will remain in the logbook in its proper section until purged, as required by this instruction.

c. Contents. Each aircraft logbook shall have a record of rework, major repairs, flight, and operational data. Also included in the logbook, in the appropriate sections, is a record of maintenance directives affecting the aircraft, its components, and accessories. See Figure 5-22 for aircraft logbook construction and sequence. Upon receipt of the aircraft, the rework activity shall screen the entire logbook for information pertinent to standard rework. Upon completion of standard rework, the rework activity will ensure required entries have been made and are complete. All aircraft logbook forms and records are purged per guidance provided for maintenance of each form and record.

d. Multiple Binders. In certain instances, aircraft may require more than one loose-leaf binder to accommodate the required forms and records. When this is necessary, the binders are marked Volume I, Volume II, etc.

e. An aircraft logbook will be maintained by reporting or physical custodians on all naval aircraft. For aircraft supported under contractor maintenance, the onsite support center liaison officer will ensure verification of the logbook/records required per the ULSS and the Contract Data Requirements List (DD 1423).

5.2.1.4 Initiation

a. Navy Acceptance. The original accepting activity, upon acceptance of the aircraft, will initiate the logbook and ensure the number of flights and flight hours since new, including those hours flown by the manufacturer, are entered on the Monthly Flight Summary page. TD pages will be initiated for AFCs, AFBs, and all other applicable TDs. All production equivalents, incorporated TDs, not incorporated TDs, and not applicable TDs will be entered on corresponding TD pages.

NOTE: When initiating TD pages, all TDs must be listed in numeric sequence. Only the original accepting activity may make block entries, for example, Dynamic Component Changes, Dynamic Component Bulletins. Once initial TD Lists Nos. 02 and 04 are received and verified, they will take the place of the TD page for AFCs and AFBs. (Refer to paragraph 5.2.1.16 for additional details.)

b. Cognizant Contract Administrator Acceptance. When an aircraft has been procured for the Department of the Navy (DON) under a DOD contract, and delivery is made to the DON at the contractor's plant, the cognizant contract administrator is considered to be the original accepting activity. If the plant does not have a resident inspector, or if the aircraft has been procured for the DON under an Air Force or Army contract and delivery is not made directly to the DON representative at the contractor's plant but to an aircraft delivery point, the DON representative at the delivery point is considered the original accepting activity. When an aircraft, previously operated by the Air Force or Army, is transferred to the DON, the DON representative at the delivery point is considered the original accepting activity.

5.2.1.5 Signature Authority

a. The following personnel are authorized to sign aircraft logbooks and records:

(1) CO.

(2) O-level MO.

(3) I-level MO.

(4) D-level Director of Operations or Production Officer.

(5) OMD Officer.

NOTE: MOs may designate authorization to sign logbooks via the MMP.

b. Additional personnel may be authorized to sign aircraft logbooks and records if they have been designated in writing to do so by one of the personnel listed above. When the contractor or FRC field team supervisor is not authorized or does not sign the required logbooks and records, the reporting custodian shall verify the work performed and sign the necessary logbook and record entries.

c. Rubber stamp signatures are not authorized. FRC artisan certification or verification device (as applicable) will satisfy the COs signature requirements on MSR, ASR, EHR, and SRC cards only.

d. Signatures are not required to be transcribed when a new logbook is initiated or when old logbook/records are consolidated. The same date is used for all entries on the Inspection and TD pages and in the date completed column of the Repair/Rework Record. The signature appearing on the Repair/Rework Record is certification that the entries on the Inspection and TD pages are complete and correct as of that date. Subsequent record changes shall be treated as separate line items and signed accordingly. If logbook/records must be transcribed and the original personnel are not available for signature, the original person's name will be typed or printed onto the new page preceded with /s/ to indicate it was transcribed. Use original documented dates.

e. A signature must also be placed in the Repair/Rework Record section of each record within the logbook/records as they are separate and complete items and the equipment may not be permanently associated with the same aircraft/equipment.

f. When an aircraft/equipment is repaired, modified, reconditioned, or has TDs incorporated by FRCs or contractor field teams at other than the FRC or contractor's facility, the reporting custodian will make all required entries on the appropriate logbook/records. When a TD is accomplished at the reporting activity by a Depot FRC team, the team will submit the document for incorporation in the TDRS Program. When a TD is accomplished at the reporting activity by a contractor team, the reporting activity will submit a WO to document incorporation in the TDRS Program. The required information and the work order authorizing the work shall be provided by the FRC or contractor team supervisor/designee. The authenticating signature and stamp for completed work on all logbook entries shall be that of the Depot FRC or contractor team supervisor/designee or reporting activity after verification. The reporting custodian will ensure the Repair/Rework Record is completed and signed even though no additional logbook entries are required (when modification or recondition is accomplished). A copy of the work order and all pertinent data, such as wiring diagrams, will be placed in the manila envelope in the back of the logbook or in the appropriate aircraft/equipment historical file.

5.2.1.6 Corrections

a. All corrections will be made by lining out the erroneous entry, or portion thereof, with a single line drawn through each line of type and the correct entry inserted above or below as space permits.

b. Corrective tape and correction fluid are not authorized for use on logbooks or records.

c. All corrections will be initialed by a person authorized to sign logbook/records.

5.2.1.7 Dates

A standardized date entry of YYMMDD will be used on all logbooks, ALSS, and supplemental forms. When a date entry is required and the only date available is year and month, enter the last day of the month for the DD portion of the date entry.

5.2.1.8 Shipping Information

a. When equipment/components are shipped between activities, the following procedures shall be followed to reduce the possibility of loss or damage to logbook/records:

(1) Handle the logbook properly to prevent damage or loss.

(2) Bind the AESR with a two prong fastener when not installed in a logbook.

(3) Insert and seal the AESR, MSR, ASR, EHR, or SRC card in a plastic envelope. Shipping documents and MAFs will not be placed in the same envelope with the record or card.

b. When shipment of the equipment or component is in a box or container, attach the plastic envelope to the equipment or component prior to packaging for shipment. If the shipping container has a special holder for records, for example, engine containers, place the plastic envelope in the special holder.

c. When shipment is in an open crate or without a container, firmly attach the plastic envelope to the equipment or component. The AESR, MSR, ASR, EHR, or SRC card will not be removed by anyone except the intended shipment recipient.

5.2.1.9 Disposition

a. Logbook/records for aircraft/equipment stricken from the Navy inventory are disposed of as follows:

(1) Destroyed Aircraft/Equipment. The logbook/records are disposed of locally after necessary investigation and preparation of required reports, provided the aircraft/equipment is not sold, transferred, or is a special category aircraft/equipment.

(2) Sale or Transfer. When an aircraft/equipment is sold or transferred to other than Navy custody, the logbook/records accompany the aircraft/equipment unless otherwise directed by the ACC or TYCOM. Classified information is removed from the logbook/records or cleared for release through the chain of command prior to transfer or sale.

(3) Special Categories. The following logbook/records are transferred to the Washington National Records Center, Washington, DC:

(a) Logbook/records for experimental aircraft/equipment.

(b) Logbook/records considered of historical value.

(c) Logbook/records of aircraft/equipment lost in combat or that have been involved in a mishap resulting in death, missing in action, personal injury, or substantial damage to other than government property are retained by the operating activity for one year (for defense in cases of litigation action) and then forwarded to the Washington National Records Center.

NOTE: Refer to SECNAV M-5210.1 for procedures for transferring records to the Washington National Records Center. SECNAVINST 5510.30 provides guidance for shipping classified information to the Washington National Records Center.

(4) CM ALS procedures. Once all paper copy records of the logbook/records of aircraft/equipment have been entered into NTCSS Optimized OMA/IMA and the MO has verified via CM ALS Miscellaneous History entry, dispose of locally.

b. Serviceable logbook binders for aircraft/equipment stricken from the inventory shall be retained or disposed of locally.

c. Information for obtaining logbook binders, forms, and other records is listed in Appendix B.

5.2.1.10 Reconstruction

a. In the event an aircraft logbook is lost, destroyed, or damaged, every effort shall be made to reconstruct the logbook.

b. The following sources of information will be helpful in reconstructing a logbook:

(1) File of completed work order (WO) or MAFs (aircraft inspection and general files).

(2) Contents of the ADB.

(3) Lists Nos. 02 and 04 obtained from COMNAVAIRSYSCOM (AIR-6.8.5.2).

(4) MSR, ASR, and SRC card information obtained from the CMIS Repository at COMNAVAIRSYSCOM (AIR-6.8.5.2).

(5) EHR information obtained from the applicable ISSC.

(6) File of XRAY and ETRs.

(7) Records maintained by the ISSC and rework activity.

(8) Aircraft manufacturer.

(9) Other available data sources, such as NALDA (DECKPLATE) and NALCOMIS OMA.

5.2.1.11 Logbook Forms and Records

Logbooks and records are an integral part of aviation maintenance. They are the administrative means of providing managers with aircraft/equipment age, status, modification, configuration, and historical data to plan, maintain, and operate aircraft and equipment. Properly maintained logbook/records are critical to aviation maintenance and safety.

5.2.1.12 Structural Life Limits (OPNAV 4790/142)

a. General Information. This form (Figure 5-23) is used to monitor structural life limited components designated for D-level replacement which do not require SRC or ASR documentation. In addition, this form also provides a means for documenting basic life limitations, for example, maximum flight hours, catapults, arrestments, and landings, which must be properly managed to ensure safety and structural integrity throughout the service life of each T/M/S aircraft. NAVAIRINST 13120.1 and NAVAIRINST 13130.1 provide policy for management of this program and also serve as a reference for D-level activities when updating PMICs. Aircraft shall not exceed structural life limits specified in applicable PMICs without prior

approval from the COMNAVAIRSYSCOM. Such approval shall be requested via the chain of command. Ensuring aircraft structural components never exceed life limits is the responsibility of all persons involved with the program. Specific responsibilities listed in NAVAIRINST 13120.1 and NAVAIRINST 13130.1 are summarized as follows:

(1) COMNAVAIRSYSCOM (AIR-4.0) will develop technical and engineering solutions, determine life limits, and publish them via NAVAIRINST 13120.1 and NAVAIRINST 13130.1. They will ensure the publication and distribution of quarterly Structural Appraisal Of Fatigue Effects (SAFE) Program Reports. COMNAVAIRSYSCOM (AIR-6.0) will ensure ISSCs incorporate limits into applicable PMIC decks and provide logistics resources planning to preclude reaching any structural life limits. Ensure FRCs, ISSCs, and commercial rework facilities review aircraft logbooks for all D-level life limited items requiring replacement during next operating period. They will ensure their activities incorporate structural fatigue life expenditure status into planning for D-level modifications to preclude reaching any structural life limits.

(2) ACCs or TYCOMs. Ensure reporting custodians adhere to limits published in NAVAIRINST 13120.1, NAVAIRINST 13130.1, SAFE Program reports, applicable PMICs, TDs, and IRACs. Plan aircraft schedules for D-level modifications to preclude exceeding any structural life limits.

(3) Reporting Custodians. Incorporate into aircraft logbooks all current limitations on structural life limits as provided by the directives in the preceding paragraph. Aircraft reporting custodians are also responsible for submitting flight loads, launch, and landing data as required by NAVAIRINST 13920.1. Monitor actual aircraft usage against published limitations to preclude exceeding any structural life limits.

b. Purging. None. This page is a permanent part of the logbook.

c. Specific Documentation:

Page One

Block 1 - TYPE/MODEL/SERIES. Enter the applicable aircraft T/M/S.

Block 2 - BUNO/SERIAL NUMBER. Enter the aircraft BUNO.

SECTION I - BASIC LIFE LIMITS

Block 3 - REFERENCE. Enter the applicable directive from which the structural life limits were extracted.

Block 4 - REFERENCE DATE. Enter the date listed on the reference document.

Block 5 - PAGE INITIATION DATE. Enter the date the form was initiated.

Block 6 - DESCRIPTION. Enter the basic life limitations, for example, maximum airframe flight hours, catapult cycles, arrestment cycles, established for the T/M/S as listed in the applicable maintenance technical manual or NAVAIRINST.

Block 7 - NOTES. Enter the applicable NOTE(s) identified in the referenced directive in Block 3.

SECTION II - SERVICE LIFE LIMITS

Block 8 - FLIGHT HOURS/CALENDAR TIME. This block contains all components with life limits measured in flight hours or calendar time.

Block 8a - COMPLIANCE (HOURS/CAL). Enter the replacement due time based on total aircraft hours plus service life hours for the limited component. For example, if the aircraft has 8065 total flight hours at time of component installation, and the component is allowed 2500 service life hours, then the entry would be 10,565.

Block 8b - COMPONENT/AFC. Enter the applicable part number and AFC(s). After all flight hour limited items have been entered, skip one line and type "Calendar Time", then list all applicable calendar time limited items.

Block 9 - CATAPULT. This block contains all components and AFCs with life limits measured by number of CATs.

Block 9a - COMPLIANCE (CATS). Enter the replacement due based on total aircraft catapults plus service life catapults for the limited component.

Block 9b - COMPONENT/AFC. Enter the applicable part number, nomenclature, and AFC(s).

Block 10 - ARREST/LANDINGS. This block contains all components with life limits measured in arrestments or landings.

Block 10a - COMPLIANCE (ARREST/LANDINGS). Enter the replacement due based on total aircraft arrestments or landings plus service life arrestments or landings for the limited component.

Block 10b - COMPONENT/AFC. Enter the part number, nomenclature, and AFC(s). After all arrest limited items are listed, skip one line and type "Landing", then list all applicable landing limited items.

5.2.1.13 Monthly Flight Summary (OPNAV 4790/21A)

a. General Information. The reporting custodian maintains this record except during off-site standard rework, when it is maintained by the D-level facility. This form (Figure 5-5) is designed to permit the monthly compilation of significant flight operational data throughout the service life of an aircraft. Reporting custodians/D-level activities will ensure all monthly totals have been entered on this form prior to a physical location change from or to the off-site D-level facility.

(1) This form is used for recording landing and special information, for example, catapult shots that may be useful to a reporting custodian.

(2) The ferry pilot is responsible for providing aircraft ferry flight data to the receiving activity.

(3) Months will be accounted for in chronological order. D-level repair facilities are authorized to make a one line block entry in lieu of separate end of the month closeout entries provided there was no operating time during the inclusive months. For example, 940601-950131, could be entered in PART IV MONTHLY DATA, starting in block 1 of OPNAV 4790/21A, with 0.0 in block 3.A. Accumulated totals are brought forward as appropriate.

b. Purging. None. This page is a permanent part of the logbook.

NOTE: Initiate second and succeeding pages for the current period as follows: Part I, transcribe all information from the first page of the current period; Part II, transcribe the initial and last REV/ADJ entry from the preceding page; Part III, check appropriate extension block.

c. Specific Requirements

Block 1 - TYPE/MODEL/SERIES. Enter the aircraft T/M/S.

Block 2 - BUNO/SERIAL NUMBER. Enter the aircraft BUNO.

Block 3 - SERVICE PERIOD. Enter the current service period.

PART I - SERVICE PERIOD. Entries by NAVAIR FS activities only, upon receipt or transfer of aircraft.

Block 1 - DATE. Enter the YYMMDD of entry.

Block 2 - PERIOD NO. Enter the number of the current aircraft period, must be three digits, for example, 008.

Block 3 - OPSERMOS. Enter the number of OPSERMOS accumulated, must be three digits, for example, 165.

Block 4 - ACTIVITY. Enter the short title of the activity making entry, for example, FRC East.

PART II - TOUR / PERIOD REVISION / ADJUSTMENT. Entries by operating commands for the receipt, revision, or adjustment of a period. Initially, blanks will be filled in at the time of initiation of the form; make additional entries as required. PED adjustment may occur as a result of an ASPA inspection, special rework of 30 days or more at the D-level site (paragraph 5.3), or revision to OPNAVINST 3110.11.

Block 1 - DATE. Enter the YYMMDD of action obtained from item C of the OPNAV XRAY report.

Block 2 - TOUR/PERIOD. Enter the YYMMDD of the computed PED obtained from item H of the OPNAV XRAY report.

Block 3 - OPSERMOS. Enter the total computed OPSERMOS obtained from item M of the OPNAV XRAY report. Must be three digits, for example, 198.

PART III - EXTENSIONS. Entries by reporting custodian.

Numbered boxes 1 through 10. Check the appropriate numbered box to indicate current extension granted.

PART IV - MONTHLY DATA (applicable to all commands).

End of month and transfer entries. All hour entries will include tenths. FCFs are entered prior to closing out the log for transfer. The flight summary form is closed out in pencil when the aircraft is transferred. When closing out the log enter in pencil on the line directly under the last dated entry "LAST ENTRY PRIOR TO CLOSE OUT". On the next line enter in pencil the flight time to date. The next line will be used by the ferry pilot to enter the ferry flight time. At the end of the month, the receiving custodian or rework activity compiles all penciled entries by the previous custodian, adds the ferry time, and enters on one line the total flight data for that month. Flight time accumulated while in the physical custody of the rework activity is recorded against the ending tour. New operating service period flight time begins upon receipt by the receiving custodian (paragraph 5.3). Monthly entries are typed or printed in black ink. Operating hours are obtained from Record Type (RECTYP) 7B of the Naval Aircraft Flight Record (OPNAV 3710/4).

Block 1 - DATE. Enter the YYMMDD of the entry.

Block 2 - REPORTING CUSTODIAN. Enter the short title of the activity making the entry, for example, HS-5.

Block 3 - FLYING HOURS.

Block 3A - MO. Enter the accumulated flying hours for this month in hours and tenths, for example, 21.5.

Block 3B - PERIOD. Add "This Month" entry to last month's "In Service Period" total and enter the hours and tenths in this block. Verify on acceptance and transfer.

Block 3C - SINCE NEW. Add "This Month" entry to last month's "Since New" total and enter the hours and tenths in this block. Verify on acceptance and transfer.

Block 4 - LANDINGS. Select landing codes that are applicable to T/M/S and label heading blocks using the night codes. Day and night totals will be added together for each type landing to make monthly total.

NOTE: As shown in the following example, the columns will be labeled alphabetically, left to right, using the NAVFLIRS Night Landing Code column letter. For example, when SHIP Touch and Go's are recorded, the column would be labeled with the letter "B" and all Touch and Go's, day and night, would be entered under that column.

NAVFLIRS Landing Codes Table

TYPE	DAY	NIGHT (used to label columns)
Ship Arrest/RAST	1	A
Ship Touch and Go	2	B
Ship Bolter/RAST Free Deck	3	C
Ship Helicopter/Clear Deck	4	D
NFO	Y	Z
FCLP	5	E
Field/Field Touch and Go	6	F
Field Arrest	7	G
VSTOL Slow	8	H
VSTOL Vertical	9	J
VSTOL Vertical Roll	0	K
NVD Ship	_	N
NVD Field/Field T&G	_	P
NVD FDLP	_	Q

Block 5 - MONTHLY TOTAL

Block 5A - LAND. Enter the total landings for the month.

Block 5B - A/R. Enter the total of RAST System recoveries for the month.

Block 5C - CATS. Enter the CATs for the month. For an aircraft that had a SAT during the month, the SAT will be logged in this block after monthly CATs, for example, 23/2.

Block 6 - ACCUMULATED TOTAL

Block 6A - LAND. Add this month's total landings to last month's accumulated landings, and enter the new total in this block.

Block 6B - A/R. Add this month's total Arrests/RASTs to last month's accumulated Arrests/RASTs, and enter the new total in this block.

Block 6C - CATS. Add this month's CATs to last month's accumulated CATs, and enter the new total in this block. For those aircraft that have accumulated SATs, enter the total accumulated SATs in this block after CATs, for example, 123/5.

5.2.1.14 Inspection Record (OPNAV 4790/22A)

a. This form (Figure 5-24) used in the logbook and the AESR, provides a record of all scheduled and conditional inspections performed on the aircraft during each period and on equipment for which an AESR is required. Accurate inspection records prevent instances of wasted effort due to the failure of logbook

custodians to make proper entries. Questionable or incomplete records leave receiving activities no alternative but to assume previous noncompliance and reinspect per existing directives or refuse acceptance of the aircraft/equipment until corrective action has been taken.

b. Logbook Requirements:

(1) Phase inspection and conditional inspection records are maintained on separate pages. The form provides space at the top of the page for identifying the type of inspection. The left column of the form is titled "Type or Description of Inspection" to facilitate proper descriptive entries for individual inspections.

(2) Phase inspections are logged sequentially, for example, Phase A/(time), Phase B/(time). The sequence is not interrupted or resequenced by standard rework, unless the performance of a phase inspection is certified by the activity performing the standard rework. All phases performed on the aircraft during a period and the flight hours on the aircraft are entered in the "Type or Description of Inspection" column.

(3) Phase inspection induction and completion dates are entered in the applicable columns of the inspection record.

(4) Routine turnaround, daily, special, servicing, engine wash, recurring special engine inspections not requiring NDI or disassembly/reassembly, recurring special engine inspections not requiring NDI or disassembly/reassembly, and oil sampling are not logged.

(5) Conditional inspections are conducted as a result of a specific over limit condition or as a result of circumstances or events which create an administrative requirement for an inspection, for example, hot start, overtemp, hard landing, precarrier, predeployment, ASPA, acceptance, or transfer. A logbook entry is required for conditional maintenance requirements, which prescribe inspections to determine equipment condition. Conditional requirements, which specify servicing or fluid sampling, need not be logged. Compass calibration is entered in the miscellaneous/history section and need not be logged on the Inspection Record. Any inspection directed by higher authority, not directed by a TD, shall be logged. Due to operational circumstances, conditional inspections may be required on a recurring basis. Relief from the repeated logging of these inspections may be requested from the cognizant Wing, COMFAIR, CVW, or Aviation Combat Element Commander.

(6) Some operating activities perform periodic aircraft maintenance inspections on an incremental basis. The records of such inspections will be recorded in this section.

NOTE: Local inspections, for example, PQDR recommendations or MO orders, shall be documented on the Miscellaneous/History page.

c. AESR Requirements

(1) Engines. Phase and major engine inspection records are maintained on one page. Special and conditional inspections are maintained as separate pages within this section of the AESR. The record provides space for identifying the type of inspection performed. The left column of the record is titled "Type or Description of Inspection" to facilitate proper descriptive entries for individual inspections. All phase inspections, special inspections, conditional inspections, and major engine inspections (except fluid sampling, engine wash, recurring special engine inspections not requiring NDI or disassembly/reassembly, or servicing) require AESR entries by the activity performing the inspection. This includes those engine inspections performed as a part of the aircraft phase inspection.

(2) Equipment requirements are as follows:

(a) Inspections performed on equipment for which an AESR is required are logged in the AESR. This provides a correct place in the logbook/record for recording any particular inspection and

ensures inspection records for major aeronautical equipment remain with the equipment after it has been removed.

(b) This form reflects all inspections performed on the equipment. In the case of Aircraft Phase MRCs, log only the phases actually performed on the equipment. Routine servicing and oil sampling, turnaround inspections, and daily inspections are not logged.

(c) All other equipment having an AESR shall have the inspection logged on an inspection record form titled "Special" only if the inspection required NDI or disassembly/reassembly.

NOTE: O-level activities maintaining helicopter dynamic components requiring an AESR are not required to log repetitive NDI inspections based on less than 100 hour intervals. When aircraft are transferred or AESR tracked components are removed/cannibalized, activities shall log the most recent NDI inspections (each type and interval) performed and component hours.

(d) Acceptance inspections and transfer inspections on uninstalled equipment are not required.

(3) Purging. During standard rework, the rework activity will screen this section of the aircraft logbook. The I-level activity during first-degree repair or D-level activity during rework screens this section of the AESR. The old Inspection Record pages for scheduled maintenance will be removed and a new record containing the data necessary for determining when the next inspection is due will be initiated. The I-level or D-level activity also screens the Conditional Inspection pages for items of historical or maintenance value and transcribes them to a new page. A minimum of 2 years data will be maintained at all times on the Conditional Inspection page.

(4) Specific Requirements:

PHASE_____ (Periodical or Conditional). Identify the type of inspection.

Block 1 - AIRCRAFT MODEL OR EQUIPMENT NAME. Enter aircraft T/M/S or the equipment nomenclature.

Block 2 - TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter T/M/S.

Block 3 - BUNO OR SERIAL NUMBER. Enter the BUNO of the aircraft or the equipment serial number.

Block 4 - TYPE OR DESCRIPTION OF INSPECTION. Describe the type inspection, enter title and flight hours at time of inspection, for example, Phase A/7003.2.

Block 5 - REFERENCE. The reference block of the form will identify the maintenance technical manual or directive describing the action taken.

Block 6 - DATE COMMENCE. Enter the YYMMDD the inspection began.

Block 7 - DATE COMPLETED. Enter the YYMMDD the inspection was completed.

Block 8 - ACTIVITY. Enter the short title of the activity accomplishing the inspection, for example, HS-5.

Block 9 - SIGNATURE. A person having logbook/records signature authority will sign this block.

5.2.1.15 Repair/Rework Record (OPNAV 4790/23A)

a. General Information. This form (Figure 5-25) used in the logbook and the AESR, contains a complete record of all repair, reconditioning, standard rework, conversion, modification, modernization, and ASPA inspections performed on the aircraft by a repair activity or on the equipment by any I-level or D-level

activity. When an aircraft is inducted into a FRC or contractor activity for rework, the logbook accompanies the aircraft and is updated as necessary by the activity performing the work. This applies even though there is no change in reporting custodian. In all cases where an item requires an AESR it will accompany the equipment through the maintenance action required and will be updated by the activity accomplishing that action.

b. Purging. None. This page is a permanent part of the logbook or AESR. At the time of rework, outdated forms may be consolidated onto new forms.

c. Specific Requirements:

Block 1 - AIRCRAFT MODEL/EQUIPMENT NAME. Enter the aircraft T/M/S or the equipment nomenclature.

Block 2 - TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter the T/M/S.

Block 3 - BUNO OR SERIAL NUMBER. Enter the BUNO of the aircraft. If equipment, enter the serial number.

Block 4 - DATE INDUCTED. Enter the YYMMDD the aircraft or item was inducted for repair/rework.

Block 5 - DATE COMPLETED. Enter the YYMMDD the aircraft or item completed repair/rework.

Block 6 - DESCRIPTION OF WORK. Enter a brief description of the work accomplished. For engines, include degree of maintenance.

Block 7 - REFERENCE. Identify the maintenance technical manual or directives requiring the work. When an In-Service job/work order is supplied, record the job order number.

Block 8 - ACTIVITY. Enter the short title of the activity accomplishing the work, for example, FRC East.

Block 9 - SIGNATURE. A person having logbook/records signature authority will sign this block.

5.2.1.16 Technical Directives (OPNAV 4790/24A)

a. General Information.

(1) This form (Figure 5-26) used in the logbook and the AESR, contains a record of TDs affecting the airframe structure and its integral parts. Separate pages are required to record each type of TD on equipment and its integral parts. All TDs including revisions and amendments shall be logged in the sequence received. A separate form shall be initiated for each type TD affecting the basic equipment. AFC and AFB are tracked via TDRS lists. TDs concerning equipment require careful screening to ensure the AESR reflects the actual configuration of the equipment.

(2) Preparation. To provide uniformity throughout the system for all aircraft and equipment, all applicable changes and bulletins, including revisions, are recorded in this section of the logbook or AESR with the NAVAIR 00-500C as the baseline.

NOTE: Removal of TDs from applicable NAVAIR TDRS reports does not relieve reporting custodians of responsibility to verify or know status of these TDs. Cancelled, Completed (process of removing TDs from applicable NAVAIR TDRS reports) or Superseded TDs are not to be deleted from the equipment record until the item to which the TD was incorporated has been replaced with a new part number or has been removed due to obsolescence.

(3) TDs that affect a component for which an MSR, ASR, EHR, or SRC card is required are also recorded in the TD part of that record as well as the logbook or AESR (multiple entries). In this instance, the TD identification is entered and a notation to refer to the applicable MSR, ASR, EHR, or SRC card is entered in the title/remarks column, for example, see (component nomenclature) SRC card. No other information or signature is required. The complete information regarding the change is then entered, with authenticating signature, in the appropriate section of the MSR, ASR, EHR, or SRC card.

(4) When documenting TDs on ASR, EHR, and SRC cards, only those TDs that apply to the respective component nomenclature are recorded, such as an accessory bulletin that applies to a hydraulic pump need not be recorded on a generator SRC card. Likewise, a power plant change (PPC) that applies to an afterburner module need not be recorded on an accessory MSR. If the TD is applicable only to a specific part number or range of part numbers, enter the directive in the TD identification blocks, enter "NA" in the status block and the statement, "NA this PN," in the title/remarks block.

(a) Engines/modules inducted into an IMA for I-level industrial facility for D-level maintenance shall have the engine logbook screened for TD incorporation. Any required TD, which has not been incorporated upon logbook screen, will be installed if the TD Kit is available or is exempted as stated below.

(b) A TD issued after the engine/module is inducted shall be incorporated if it does not affect the critical path or cause previous work to be redone. Safety of flight TDs that are issued while an engine/module is in the disassembly stage should be automatically incorporated. However, any safety of flight TD issued against an engine in the assembly stage that affects the critical path should have COMNAVAIRSYSCOM (AIR-6.8, AIR-6.4, and AIR-4.4), and the TYCOMs involved to ensure coordinated decisions are being made concerning the engine/module in question. Consideration will be given to D-level when rework is required.

(c) If a TD is not installed as a result of the above direction, the IMA for I-level industrial facility shall annotate in the engine logbook that the TD was not installed, or kit not available to ensure Fleet configuration awareness. Due to the need for uniformity between D-level activities, the following are examples of verbiage to be used in the logbook entries when a TD is not incorporated due to a waiver or other reasons.

Example 1 - Waiver for PPC 123 granted per PMA 23414 ltr., Ser. 94402 dated 29 November 1999, until next D-level repair.

Example 2 – PPC 456 was released after the induction date of this engine. It is recorded as not incorporated (NINC) on the technical directive pages. Waiver for PPC 456 granted IAW PMA 12345 ltr., Ser 94402 dated 29 November 1999, until next Depot repair.

(5) For airframe TDs requiring one time or continuing inspections, the initial, or one time inspection, is logged on the TD page of the logbook. Subsequent or continuing inspection requirements are added to the MRCs as required in the basic TD. When this action has been completed, no further logbook entry is required for that TD.

(6) TDRS Report Listings:

(a) List No. 02, directives applicable to a specific bureau/serial number (NINC), and List No. 04, directives applicable to a specific bureau/serial number (INC), are prepared by COMNAVAIRSYSCOM under the TDRS Program and can be downloaded by reporting custodians/FRC. Type wings will receive List No. 03, TDRS INC/NINC Summary Matrix, to monitor the configuration of assigned aircraft. In addition, I-level maintenance activities with DECKPLATE access shall retrieve from the TDRS engine database a List No. 02 (Not Incorporated Listing for Technical Directives) on engines/modules received, and verify the data

on those lists against the engine (AESR)/module (MSR) and the actual configuration of the engine/module. If any updates are required, update the engine (AESR)/module (MSR) and mail an updated copy of the List No. 02 to COMNAVAIRSYSCOM (AIR-6.8) for direct input into the database. TDRS Report Listings are available via the DECKPLATE Web site at http://www.navair.navy.mil/logistics/deckplate. All TDs on a List No. 02 that are not logged must be researched to determine their incorporation status. The verification process shall be to the degree afforded by the maintenance being performed and should not hinder the normal maintenance process.

(b) When initial Lists Nos. 02 and 04 are received, verify against the TD page in the logbook. After verification, the TD page may be destroyed at the discretion of the reporting custodian (aircraft only). Thereafter, Lists Nos. 02 and 04 will be used to log all applicable AFCs and AFBs. TDs that are not applicable will not be on Lists No. 02 or 04. TD pages will be initiated for logging all other type TDs applicable to the aircraft. Some TDs will require multiple documentation in the logbook (with a refer to statement) and applicable records. This includes TDs, such as accessory changes and bulletins, which will be logged on applicable SRC/EHR cards and QECs and bulletins that will be logged in the AESR.

NOTE: Lists Nos. 02 and 04 may replace the TD page for aircraft only. All other Lists Nos. 02 and 04 are provided for use as a management tool only. For aircraft, care must be taken before destroying TD pages. Production equivalents and ECPs performed on the aircraft by the manufacturer are not presently covered by the TDRS Program and will not appear on Lists Nos. 02 and 04. A separate TD page will be used to log all production equivalents and ECPs, and will be maintained for historical reasons.

(c) List No. 04H is a history file created and maintained by COMNAVAIRSYSCOM (AIR-6.8.5) to reduce active file volume and operating cost. The List No. 04H is produced and distributed annually to reporting custodians and marked "Historical Inc., Retain for Permanent Record."

NOTE: Care must be taken when removing List No. 04 each quarter to ensure List No. 04H is not mistakenly removed. Not all aircraft have a history baseline, therefore, not all aircraft have List No. 04H. Contact the appropriate TDRS manager if a question develops.

(d) Insert Lists Nos. 02 and 04 in the TD section of the logbook. List No. 02 precedes List No. 04.

(e) Depot FRCs submits compliance transactions to update TDRS directly.

(f) Operating Activity Receipt of TD Lists Nos. 02 and 04. When new Lists Nos. 02 and 04 are received, verify against Lists Nos. 02 and 04 in the logbook. The TDs that were documented as being incorporated but did not move from List No. 02 to List No. 04 will require further research. If a previously submitted MAF has been correctly entered into the aviation 3M System, update the new Lists Nos. 02 and 04 using TD Code P on the List No. 02. If a MAF has not been previously submitted, then a MAF must be submitted using TD Code P in block A35 to update the TDRS database. Update the new Lists Nos. 02 and 04 using TD Code P on the List No. 02. Refer to Chapter 15 for documentation procedures.

(g) When a new TD is received, use a black ballpoint pen to annotate the TD on List No. 02. At a minimum, the following information must be listed (if applicable): I, if interim; TD code, TD basic number, revision letter, amendment number, TD part number, kit required. When the TD is complied with, annotate the TD status code immediately to the left of SER column. Transcribe all TD identification data and TD status codes to List No. 04. This will provide a complete, up-to-date configuration listing of the aircraft at all times.

(h) Production Equivalents, ECPs, and Prototype or Modification of Aircraft or Equipment. The operating activity logbook clerk, FRC P&E or E&E will comply with the details in the related correspondence describing the action to be accomplished, if authorized. Logbook entries will be made as required on the appropriate TD page and Miscellaneous/History page or applicable record's TD section.

(i) Block Entry Procedures. Block entries are authorized for use by the original accepting activity, rework activities, and I-level first-degree engine repair sites upon completion of first-degree engine repair. The use of this type of entry provides for a consolidated accounting of TDs when the equipment is new and upon completion of each standard rework or first-degree engine repair. Block entries may be used only for a series of consecutively numbered TDs having the same status code. This procedure is necessary so subsequent custodians can determine the configuration of the aircraft without being required to screen the entire file of TDs for applicability. Original accepting activities ensure each entry in this section is valid and is supported by an official TD. NAVAIR 00-500C is the TD accountability baseline. All previous TDs are part of current configuration.

NOTE: Block entries are authorized for use by all activities when consolidating ASRs, EHR cards, MSRs, and SRC cards.

1. INC. Use block entries when possible. Enter basic number, status, activity, date, and signature. The date is considered the date of acceptance or the date of overhaul. Examples of INC block entries follow:

a. When a change is incorporated during production and a TD is issued, the assigned TD number is entered as INC and the notation "Production Equivalents" is entered for a block of incorporated changes in the title/remarks column, for example, an entry may be 120-155 INC. If the production equivalent changes are included within this block, the title/remarks column might contain the notation "129, 139, 152, Production Equivalents". These changes often differ physically from changes issued to field and operating activities and require this notation to avoid confusion. A separate page will be used to log all ECPs. All incorporated ECPs shall be entered numerically, using the block entry procedure, and remain as a permanent logbook entry.

b. When a series of incorporated TDs is entered in block form, the next line is used for listing subsequently issued, not incorporated revisions to TDs included within the entry. The notation "Revisions to above block entries" appears on this line and the listing of revisions shall follow. Operating activities also use this line for listing revisions that are subsequently issued to TDs within the block entry. The actual records of status and compliance are entered on the pages designated revisions.

2. NINC. Separate entries are required. Enter the TD identification, status code (in pencil), priority, and title/remarks.

3. NA. Use block entries when possible. Only the TD identification, activity, and signature are required. When a new version of the same model aircraft is produced, it is the responsibility of the original accepting activity to account for changes to the original model by making a logbook entry. For example, 1-155 NA, and the notation "PPCs 1-155 are now part of current configuration or apply to another T/M/S", in the title/remarks column. This entry ensures all TDs in the model series are accounted for, and cites by number, either those TDs not applying to the new version, or those considered part of the current configuration. No action is required by Navy activities. The entry is not to be construed as indicating the modifications prescribed by the TDs contained within the block entry may not have been included in the production models of the new version.

4. NIS. Separate entries are required. Enter the TD identification and status code only.

5. CANCELLED. Use block entries when possible. Only activity and signature are required.

(j) Documenting the Removal of a TD. COMNAVAIRSYSCOM approved configuration will be maintained. In some cases TDs are removed, this is particularly true with PPCs.

1. Prior to the removal of any TD, proper authorization must be obtained. ACCs have authority to approve TD removal via message if operational necessity dictates. However, the COMNAVAIRSYSCOM APML must be an info addressee on the authorization message. Financial responsibility for parts to reinstall the TD lies with the ACC or TYCOM and reporting custodian.

2. TD removal will be documented in the same manner as TD incorporation. The only exception is the use of TD Status Code Q in Block A35 of the MAF.

3. The TD page will be annotated in the following manner:

a. Draw a single line through the TD status code (Block 6), enter TD Status Q in the same block, with initials of the person authorized in writing to sign logbooks and records.

b. Make an entry on the Miscellaneous/History page; specify the reason for removal, authority, location of parts removed, and other pertinent information.

(k) When reinstalling a removed TD, document as a normal TD incorporation. Make a complete TD entry on the revision page. When documenting the removal and reinstallation of a TD on an item, which has an MSR, ASR, EHR, or SRC card, see specific documentation for that applicable record.

(l) TD page status codes are as follows:

1. INC. Indicates the specified TD has been completely incorporated. A complete entry is required.

2. NINC. A temporary entry made in pencil. This code is used to indicate TDs that have been issued but not incorporated, including TDs that are only partially incorporated. It is not necessary to assign codes to denote reasons for nonincorporation. Activities should screen logbooks at frequent intervals to determine the interim status of nonincorporated TDs. Enter TD identification, status code (in pencil), and title.

3. PINC. Identifies TDs that were previously incorporated.

4. NA. TDs that do not apply to the particular aircraft model or BUNO. Enter TD identification, status code, activity, and signature. A brief notation is made in the title/remarks column to indicate nonapplicability, for example, previous models only or not this BUNO. Title of the TD is not required.

5. NIS. TDs that have not been issued, will not be issued, or have not been received. This entry is made in pencil unless it is determined the TD will not be issued, in which case a permanent entry is made. Enter TD identification and status code. No other information or signature is required.

6. CANCELLED. This code is used when a TD has been previously issued but is cancelled prior to incorporation. Enter TD identification, status code, activity, and signature. No title of the TD is required; however, the cancelling reference should be noted in the title block. When a TD has been incorporated and is later cancelled, the TD status code remains INC.

7. Q (TD Removal). Used to document the removal of an installed TD.

b. Purging. Upon completion of off-site standard rework, the rework activity will purge the AESR. Consolidate this section of the aircraft logbook using block entries on new pages. The D-level activity, upon completion of repair or rework, will consolidate this section of the AESR using block entries on new pages. IMC/P aircraft AESRs will be purged by a D-level activity once per FSP as directed by the T/M/S Program Manager.

c. Specific Documentation:

Block 1 - TYPE DIRECTIVE. Enter the type of TD. Separate pages will be maintained for each type of TD to include separate pages titled Amendments and Revisions.

NOTE: Inserting OPNAV 4790/24A Technical Directives pages titled AFB and AFC TDs, including Amendments and Revisions, is no longer authorized. Tracking AFB and AFC TDs and related Amendments and Revisions will be accomplished directly on Lists Nos. 02 and 04.

Block 2 - AIRCRAFT MODEL/EQUIPMENT NAME. Enter the aircraft T/M/S. If equipment, enter the equipment name.

Block 3 - TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter T/M/S.

Block 4 - BUNO OR SERIAL NUMBER. Enter the aircraft BUNO or equipment serial number.

Block 5 - TECHNICAL DIRECTIVE IDENTIFICATION

Block 5a - BASIC. Enter the basic number of the TD. All TDs are logged in numerical sequence except on the pages titled "Revisions and Amendments". These are logged in the order they are received. This includes numbered spaces for TDs not received.

Block 5b - INT. Interim TDs are recorded on the same sheet as formal TDs and are identified by an I in the INT Block. When cancellation instructions in an interim TD indicate a regular TD will supersede it, enter in pencil the regular TD number on the following line with a temporary status code NINC.

Block 5c - REV. Enter the letter to indicate revision. They are logged as received on the revision page.

Block 5d - AM. Enter the number to indicate the amendment. A separate line is required for each amendment. When different amendments are to be incorporated by different levels of maintenance, a temporary code of NINC (in pencil) will be made for the applicable amendment. In instances where a single line has been left for a TD not received (NIS status) and a TD is subsequently received with an amendment or multiple amendments, the basic TD is entered and accounted for on the applicable TD page. This entry will also reference the remaining amendments, which are recorded on the revision page.

NOTE: All applicable amendments will be logged with the exception of those listed on List Nos. 02 and 04.

Block 5e - PT. Multiple Part TD. Some TDs consist of several parts. Accounting for this type directive presents special problems when the separate parts are assigned different priorities or are to be accomplished at different times. If a part number appears in the title line of the TD, use that part number. To provide a standard recording procedure for this type of TD, logbook and AESR entries are made per the following:

(1) When a TD is composed of several parts, separate consecutive entries are made for each part indicating the priority and status of each. A multiple part TD is not included in a block entry unless all parts have been incorporated.

(2) In instances where a single line has been left for a TD not received (NIS status) and a multiple part TD is subsequently received, the basic TD is entered and accounted for on the applicable TD page. This entry also will reference the remaining parts, which are to be recorded on the applicable Technical Directives revisions pages.

Block 5f - KIT. Enter kit number as identified in the TD; if none, enter 00. Use a separate line for each kit.

Block 5g - PRI. Enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose, as applicable. Category K shall be used when a modification has been completely incorporated by the contractor in all accepted equipment prior to issuance of the TD, and when retrofit of repairables in the Navy's possession is not required.

Block 6 - STATUS. Enter the appropriate status code. No status codes other than those prescribed shall appear in the logbook, nor is any code used to indicate other than its intended meaning. When documenting the removal and reinstallation of a TD on an item which has an MSR, ASR, EHR, or SRC card, see specific documentation for the applicable record.

Block 7 - TITLE/REMARKS. Enter the title of the TD and any necessary remarks. This need not be the complete subject title of the TD. For items, which have an MSR, ASR, EHR, or SRC card, see specific documentation for that applicable record.

Block 8 - COMPLIANCE

Block 8a - BY (Activity). Enter the short title of the activity complying with the TD, for example, VF-1.

Block 8b - DATE. Enter the YYMMDD of the compliance.

Block 9 - SIGNATURE. A person having logbook and records signature authority will sign this block.

(3) When documenting TD amendments that QA has determined to involve only administrative actions (part number change, completion date, or BUNO) the following required entries shall be made on the respective TD page, titled Revision and Amendments:

Block 5a - BASIC. Enter the basic number of the TD.

Block 5b - INT. Enter only if applicable.

Block 5c - REV. If applicable, enter the letter to indicate the revision.

Block 5d - AM. Enter the number to indicate the AM.

Block 5e - PT. Enter only if applicable.

Block 5f - KIT. Enter the kit number as identified in the TD; in none, enter 00.

Block 5g - PRI. As applicable, enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose. PRI shall be the same as the basic or last revision issued.

Block 6 - STATUS. If the amendment is a cancellation to the basic TD or revision, enter CANCELLED. If the amendment is not applicable, enter NA. For items having an MSR, ASR, EHR, AESR, SRC, or Aircrew Record, leave blank and enter appropriate record.

Block 7 - TITLE/REMARKS. Enter the purpose of the amendment (change completion date, add BUNO/SERIAL) for items having an MSR, ASR, EHR, AESR, SRC, or Aircrew Record, enter applicable notation, for example, see Air Turbine Starter EHR Card.

Block 8a - BY (Activity). Enter the short title of the activity complying with the TD, for example, VAW-115. Leave blank for those items that are not an integral part of the airframe.

Block 8b - DATE. Enter the YYMMDD of the compliance. For items having an MSR, ASR, EHR, AESR, SRC, or Aircrew Record, leave blank and enter on appropriate record.

Block 9 - SIGNATURE. A person having logbooks and records signature authority will sign this block. For items having an MSR, ASR, EHR, AESR, SRC, or Aircrew Record, leave blank and enter on appropriate record.

5.2.1.17 Miscellaneous/History (OPNAV 4790/25A)

a. General Information. This form (Figure 5-27) is used in the logbook and the AESR.

(1) Aircraft. This form is used to record significant information affecting the aircraft for which no other space is provided in the logbook. This information shall include abnormal flight characteristics, peculiar troubles of an undetermined nature, damage to the aircraft, major component changes not logged elsewhere in the logbook (struts, control surfaces, and tail sections) historical data, authorization for service period extension, PED and operational service months (OPSERMOS) adjustment as a result of an ASPA inspection, verification of flight hours in period and since new on acceptance and transfer, and exposure to large quantities of salt water, fire extinguishing agents, or other corrosive elements. This section may also be used to record serial number information concerning research and development and bailment aircraft, for example, special modifications or special testing.

(2) Equipment. This form is used to record pertinent information affecting the equipment for which no other place has been provided within the AESR, for example, special test data, abnormal characteristics, significant damage/repair, NOAP entries, authorization for extension of operating intervals, verification of equipment operating hours on acceptance and transfer, and exposure to large quantities of salt water, fire extinguishing agents, or other corrosive elements.

(3) Equipment Rejection. To aid the I-level and D-level activities in determining repair or rework requirements of equipment following rejection, it is imperative that activities rejecting equipment document completely the reasons for and the nature of the rejection. A simple entry such as "overtemp" is not sufficient. Include specific information on the degree of overtemp, length of overtemp, the circumstances under which it occurred (start, in-flight, shutdown, and ground run-up), and the corrective measures taken.

b. Specific Examples Requiring an Entry:

(1) The DOD activity originally accepting an aircraft for the Navy will make a miscellaneous logbook entry stating: "DOD acceptance check flight flown this date".

(2) A change in the authorized inspection interval of aircraft or equipment requires the following entry be made: "Effective this date (aircraft or equipment) was placed on (specified interval) per (authority); next inspection due (date or hours)".

(3) A change in the inspection induction date or hourly sequence of aircraft or equipment requires the following entry be made: "Effective this date inspection induction date (or hours) was rescheduled from (old date or hours) to (new date or hours) as authorized by (reference)".

(4) Hydraulic Contamination Logbook entries shall be made as follows:

(a) When testing reveals Navy Standard Class Five Contamination level is exceeded, or evidence of water, chlorinated solvent, or any other form of contamination exists that requires decontamination per NAVAIR 01-1A-17. Indicate the date, type of contamination, class, method of decontamination used, and appropriate reference(s).

(b) When aircraft are transferred from a depot or commercial repair activity, hydraulic samples shall be analyzed and an entry shall be made indicating the date and class of the results.

(c) When aircraft are received from a D-level, commercial repair activity, or another reporting custodian, hydraulic samples shall be analyzed and an entry shall be made indicating the date and class of the results.

(5) Compass calibration entry requirements are specified in paragraph 6.1.2.3.5.

(6) When either the aircraft or equipment is exposed to large quantities of salt water, fire extinguishing agents, or other corrosive elements, an entry will be made on this form. The entry will include a description of the decontamination accomplished and the approximate time between exposure and completion of decontamination.

(7) When dye is added directly to aircraft fuel tank(s) to determine the location of a leak, an entry will be made on this form (Figure 5-27).

(8) An entry will be made to indicate certification of airborne CMS. This entry is a permanent part of the logbook.

(9) NOAP. Whenever oil analysis indicates abnormal wear limits, amounts of metal or other contamination, an entry is required. For ASRs and SRC card items this entry will be made in the Repair/Rework/Overhaul section of the applicable record. For EHR card items, this entry will be made in the maintenance record section of the applicable record.

(10) Aircraft Acceptance and Transfer. Activities performing acceptance and transfer inspections on aircraft will make the following entry, "This date, the Monthly Flight Summary flight hours in period and since new were verified to be correct.". Activities transferring aircraft will also make the following entry, “Automated Log Set verified to be saved to CD-RW and stored in the manila envelope.”

(11) Equipment Receipt and Transfer. Activities receiving and transferring equipment with an Equipment Operating Record will make the following entry, "This date, the Equipment Operating Record accumulated operating hours were verified to be correct." Activities transferring equipment will also annotate the form with the date, reason for transfer, activity transferred to, JCN, shipping document number, star/status code (if applicable), and make the following entry, “Automated Log Set verified to be saved to CD-RW and stored in the manila envelope.”

(12) If, during D-level maintenance, an inaccessible area is found to contain a foreign object that is not removed the FRC will make a logbook entry denoting its location.

(13) If a tool is reported missing during D-level maintenance, all tool control procedures will be complied with in an attempt to recover the missing tool. If the tool is not found and it cannot be determined with certainty that it is not in the applicable aircraft or equipment, the details will be entered in the applicable logbooks or records. This entry will include tool nomenclature, markings, location, search results, and any other pertinent comments.

(14) An entry shall be made when ABDR actions are performed, including operating limitations and monitoring requirements imposed by those actions.

(15) At the end of each evolution a propeller is used on a ground test stand/engine test cell, the total accumulated ground test stand/engine test cell time shall be recorded. NAVAIR 03-20CBBK-1 contains maximum ground test stand/engine test cell time a propeller may accumulate.

(16) An entry will be made to document the incorporation of Mode S capability into the Identification, Friend, or Foe (IFF) System and record the permanent Mode S address assigned to specific BUNO. The Mode S address will become a permanent part of the logbook.

(17) An entry will be made to document the incorporation of Mode 5 capability into the IFF System and record the Mode 5 National Origin (NO) and Platform Identification Number (PIN) assigned to specific BUNO. The Mode 5 NO and PIN assignments will become a permanent part of the logbook.

c. Late Entries. When making late entries, enter the date of the entry in the Date block and the date of the event in the Remarks block. A late entry is a required entry that must be entered following an existing entry.

d. Purging. Purging will be accomplished during the off-site standard rework by the rework activity. For items of historical or maintenance value, an identical entry will be transcribed to a new form. The Miscellaneous/History section of the AESR will be purged only by the I-level activity during first-degree repair or D-level activity during rework. At no time will the O-level purge the Miscellaneous/History section of the AESR. A minimum of 2 years data will be maintained at all times. Those records that may affect future rework, repair, or modifications, for example, major structure repairs, peculiar flight characteristics, shall be retained indefinitely. For IMC/P and EPM aircraft, the Miscellaneous/History section will be purged by a D-level activity once per FSP as directed by the T/M/S Program Manager.

NOTE: CMS certification and Mode S address (if applicable) are a permanent part of the logbook and must always be documented in the Miscellaneous/History section.

e. Specific Documentation:

1. AIRCRAFT MODEL/EQUIPMENT NAME. Enter the aircraft T/M/S or the equipment nomenclature.

2. TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter the T/M/S.

3. BUNO OR SERIAL NUMBER. Enter the aircraft BUNO or equipment serial number.

DATE. Enter the YYMMDD of the occurrence.

REMARKS. Enter the required statement or enough detailed text to report occurrence. All entries on this form will require an authorizing signature and the short title of the activity making the entry, for example, LCDR W. E. HAVENS, HS - 5.

5.2.1.18 Preservation/Depreservation Record (OPNAV 4790/136A)

a. General Information. This form (Figure 5-28) is used in the aircraft logbook, AESR, and MSR. An entry is required any time preservation, represervation, or depreservation is performed on that item (aircraft or equipment).

(1) Installed Equipment. Entries are required in the AESR or MSR if the applicable preservation MRCs or NAVAIR 15-01-500 specify a preservation requirement. No entry will be made if the equipment is not preserved as part of an aircraft preservation action.

(2) Uninstalled Equipment. Entries are required in the AESR or MSR if the applicable maintenance manual specifies a preservation requirement.

b. Purging. During off-site standard rework, the rework activity will initiate a new page for the aircraft logbook. The I-level activity doing first-degree repair or D-level activity doing rework will initiate a new page for the AESR. Old pages may be destroyed.

c. Specific Documentation.

Block 1 - AIRCRAFT MODEL OR EQUIPMENT NAME. Enter the aircraft T/M/S or the equipment nomenclature.

Block 2 - TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter the T/M/S.

Block 3 - BUNO OR SERIAL NUMBER. Enter the aircraft BUNO or the equipment serial number.

Block 4 - PRESERVATION

Block 4a - DATE. Enter the YYMMDD the preservation is accomplished.

Block 4b - BY (Activity). Enter the short title of the activity accomplishing the preservation, for example, HS-5.

Block 4c - TYPE PRESERVATION. Enter the type of preservation accomplished.

Block 4d - REFERENCE. Identify the COMNAVAIRSYSCOM or major command document directing the preservation.

Block 5 - REPRESERVE. Date Due. Indicate the YYMMDD the represervation is due. When represervation is not required, leave blank.

Block 5a - DATE DUE. Enter the YYMMDD the preservation is due.

NOTE: Aircraft preservation requirements (type and length) are contained in applicable preservation MRCs for selected aircraft. Otherwise, refer to NAVAIR 15-01-500.

Block 6 - DEPRESERVATION

Block 6a - DATE. Enter the YYMMDD the depreservation is accomplished.

Block 6b - BY (Activity). Enter the short title of the activity accomplishing the depreservation, for example, HS-5.

5.2.1.19 Installed Explosive Device Record (OPNAV 4790/26A)

a. General Information. When an aircraft has an ejection seat, the records will be inserted into the appropriate ejection seat AESR. The VFS CADPAD, TRACE CADPAD module generated Installed Explosive Devices Record (OPNAV 4790/26A) is authorized for use. This form (Figure 5-29) is used in the logbook and the AESR.

(1) This section of the logbook and AESR contains a record of all explosive devices, for example, initiators and canopy releases installed in the aircraft or major assemblies. Explosive devices installed in major assemblies or equipment, for example, ejection seats and in-flight refueling stores, shall be recorded in the Installed Explosive Device Record (OPNAV 4790/26A) of the appropriate AESR. Explosive devices installed in personnel parachutes are recorded on the Parachute Record (OPNAV 4790/101). When installed in other safety and survival equipment, they shall be recorded on the Seat Survival Kit Record (OPNAV 4790/137) or Aircrew Systems Record (OPNAV 4790/138). All other explosive devices shall be recorded on the Installed Explosive Device Record (OPNAV 4790/26A) of the aircraft logbook or AESR.

(2) The possibility of transferring certain equipment from one aircraft to another during standard rework and replacement during periods of scheduled maintenance emphasizes the necessity for careful and periodic checking of this record regarding the status of the explosive devices currently installed in the aircraft or equipment.

(3) Cartridges and devices used to effect stores separation are not intended for inclusion in this record unless specifically directed for a particular application.

(4) The VFS CADPAD, TRACE CADPAD Module Installed Explosive Device Record (OPNAV 4790/26A) is maintained, in a current status, by all activities having custody of or performing rework on the aircraft or equipment in which explosive devices are installed.

(5) Documentation Requirements. A single line entry is required for each installed explosive device and a new record shall be generated.

(6) Removal/Replacement of Devices. When a device is removed, and a like item is not reinstalled, a single red line shall be drawn through the entire old device line entry and VFS CADPAD, TRACE CADPAD Module database updated to reflect changes (a new record should not be generated). When like items are reinstalled, the VFS CADPAD, TRACE CADPAD Module database shall be updated to reflect changes and a new record shall be generated. To report changes, refer to paragraph 5.2.1.1b(9).

b. Purging. During off-site standard rework, the rework activity shall verify all information and generate a new record (if applicable).

c. Specific Documentation. VFS CADPAD, TRACE CADPAD Module database shall be used to record and report installed explosive device information.

Block A1 - TYPE AIRCRAFT. Enter the aircraft T/M/S.

Block A2 - BU/SERNO. Enter the aircraft BUNO or equipment serial number.

Block A3 - ASSEMBLY PART NUMBER. Enter the assembly part number for ejection seats, in-flight refueling stores, or other assemblies with installed explosive devices.

Block A4 - ASSEMBLY SERNO. Enter the serial number of the ejection seat, in-flight refueling store, or other assemblies with installed explosive devices.

Block A5 - ORG CODE. Enter the organization code of the command that has custody of the aircraft or assembly. Pencil may be used.

Block B1 - DODIC. Select the DODIC or NALC for replacement/editing from the standardized explosive logbook configuration provided in VFS CADPAD, TRACE CADPAD Module database. DODICs are also listed in NAVSEA SW010-AF-ORD-010 and technical manuals mentioned in the details for Block B10.

Block B2 - NOMENCLATURE/LOCATION. The VFS CADPAD, TRACE CADPAD Module provides standardized explosive logbook configuration, based on specific location code for each T/M/S aircraft.

Block B3 - PART NUMBER. Provided in the VFS CADPAD, TRACE CADPAD Module for selecting specific part number installed.

Block B4 - LOT NUMBER. Enter the lot number of the device.

Block B5 - SERIAL. Enter the serial number of the device. For emergency stores release cartridges that are not normally serialized, enter NA.

Block B6 - ORG. Enter the organization code of the installing activity. For new aircraft, use the accepting ACO/site representative organization code.

Block B7 - MFG DATE. Date of Manufacture. The VFS CADPAD, TRACE CADPAD Module enters the year, month, and last day of the month (YYMMDD) the device was manufactured (derived from the lot number). If unable to derive appropriate manufactures date, the user will enter the date when requested by the program.

Block B8 - C/O DATE. Container Open Date. Enter the year, month, and last day of the month (YYMMDD) the container was opened.

Block B9 - INST DATE. Enter the year, month, and last day of the month (YYMMDD) the device was installed.

Block B10 - EXPIRE DATE. The VFS CADPAD, TRACE CADPAD Module computes year, month, and last day of the month (YYMMDD) of expiration. Installed service life expiration dates for explosive devices are computed from the date of manufacture, the date the hermetically sealed

container is opened, thus expiration date based on earliest expiring date. The method used in computing the expiration date of explosive devices, and the number of months or years a specific device may remain in service is contained in NAVAIR 11-100-1.1-CD. When installed explosive devices have extensions granted, the VFS CADPAD, TRACE CADPAD Module will be updated electronically and a new Installed Explosive Device Record (OPNAV/26A) shall be generated. The authority granting the extension, for example, message originator and DTG or official service life extension number, will be posted electronically in the LOCAL USE block.

LOCAL USE. Contains any general comments the user has added to the database on this airframe and will identify any service item on an extension including the authorization for the extension.

5.2.1.20 Inventory Record (OPNAV 4790/27A)

a. General Information.

(1) This form (Figure 5-30) is used in the logbook and the AESR. It is used to maintain a current inventory of all equipment, components, and assemblies requiring an MSR, ASR, EHR, or SRC card. Mission configuration items, for example, multiple ejector racks and triple ejector racks, are not required to be maintained on this record.

(2) It is impractical to include a standard list of components since requirements vary according to aircraft model/equipment. However, all airframe components/assemblies requiring an ASR, EHR, or SRC card and items that require an MSR will be recorded in this section of the logbook/AESR.

NOTE: ASR, EHR, or SRC card items that are inventoried in the MSR are not listed on the Inventory page in the AESR.

(3) Sound maintenance practices and flight safety considerations will dictate those items, other than mandatory, that should be recorded in this section. It is emphasized that components/assemblies/modules properly associated with equipment that require an AESR are to be recorded in the applicable section of those records and not with airframe components in the logbook.

(4) Aircraft engines, propellers, APUs, ejection seats, and other major assemblies requiring an AESR shall not be listed on this or any other form in the aircraft logbook.

(5) AESR, MSR, ASR, EHR, SRC Card, Parachute Record, SSK Record, Aircrew Systems Record, and Aircrew Personal Equipment Record for aircraft mounted components shall be inventoried during phase inspections for the applicable equipment being inspected. All items shall have been inventoried and verified by the completion of one complete phase cycle. UAS Control Station AESRs shall be inventoried and verified annually. The inventory is performed using a locally prepared form containing a preprinted list of items requiring an MSR, ASR, EHR, or SRC card with a column provided for recording the serial numbers of the installed items. This list will be reviewed to ensure installed items match the logbook records. Engine components and assemblies, which require disassembly to gain access for inventory, will be verified during major engine inspection/rework. The Logbook Clerk is responsible for screening engine MSR, ASR, EHR, and SRC card(s) upon receipt of an engine to verify the time remaining on engine components.

b. Purging. During off-site standard rework, the rework activity removes all the old inventory record forms from the aircraft logbook and inserts new forms. The I-level activity during first-degree repair or D-level activity during rework accomplishes this function in the AESR. All items that remain installed and all newly installed items will be listed.

c. Specific Documentation:

Block 1 - AIRCRAFT MODEL/EQUIPMENT NAME. Enter the aircraft T/M/S or the equipment nomenclature.

Block 2 - TYPE/MODEL/SERIES. If aircraft, leave blank. If equipment, enter the T/M/S.

Block 3 - BUNO OR SERIAL NUMBER. Enter the aircraft BUNO or the equipment serial number.

Block 4 - NOMENCLATURE. Enter the nomenclature of the installed item.

Block 5 - PART NO. Enter the part number of the installed item.

Block 6 - SERIAL NO. Enter the serial number of the installed item.

Block 7 - DATE.

Block 7a - INSTALL. Enter the YYMMDD the item was installed.

Block 7b - REMOVE. Enter the YYMMDD the item was removed.

Blocks 8, 9, 10, and 11 - These blocks are a continuation of the form and are documented as above.

5.2.1.21 Aviation Life Support System (ALSS); Parachute Record (OPNAV 4790/101)

a. General Information.

NOTES: 1. Activities operating NALCOMIS OOMA shall use AERs and ALS to manage, report, and generate records for all ALSS assemblies and components. NALCOMIS OOMA activities are not authorized to use Trace Life Support Modules or SEATS.

2. Activities using NALCOMIS OOMA are not required to use VFS to generate ALSS history records. The Aircrew Equipment/Personal Record generated in NALCOMIS contains all pertinent information and meets all requirements per this instruction.

(1) The logbook contains a file of all aircraft installed ALSS records, excluding aircraft equipped with ejection seats. When an aircraft has an ejection seat, the records will be inserted into the appropriate ejection seat AESR. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated Parachute Record (OPNAV 4790/101) is authorized for use.

(2) The Parachute Record (OPNAV 4790/101) (Figure 5-31) is designed to provide the current configuration and inspection record of a parachute assembly and its components. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated Parachute Record (OPNAV 4790/101) is a single copy, single-sided record designed to be filed in the aircraft logbook or the ejection seat AESR where the parachute system is installed.

(3) When a parachute component is retired because its total service life has expired, it will be replaced, the assembly reinspected, repacked, and issued to the organizational custodian. Under no circumstances shall a component be used if the history of the component cannot be firmly established. When a parachute has been involved in an aircraft mishap, the current record shall be forwarded per OPNAVINST 3750.6 and NAVAIR 13-1-6.2.

b. Initiation, Maintenance, and Handling Procedures:

(1) The activity placing the parachute in service shall initiate the record. The aircraft BUNO may be annotated in pencil. The record shall be securely attached to the parachute assembly when issued to the receiving custodian.

(2) The receiving custodian shall review the record to verify for completeness and accuracy. All discrepancies in the record shall be resolved with the issuing activity prior to acceptance of the parachute. On acceptance of the parachute record, ensure electronic receipt of ALS and associated ALSS equipment in OOMA is accurate and complete. In OOMA enter the aircraft BUNO/SERNO in the BUNO/SERNO field.

This enables electronic transfer of the parachute with the assigned aircraft when it transfers to another command.

NOTE: Non-OOMA sea going commands are authorized to use SEATS, and non-OOMA shore commands are authorized to use VFS-TRACE in lieu of OOMA.

(3) Upon installation of the parachute assembly, the record shall be forwarded to Maintenance Control for insertion in the aircraft logbook or ejection seat AESR.

(4) The record shall accompany the parachute assembly any time it is removed and sent to the supporting I-level for reinspection or maintenance.

(5) The I-level activity shall initiate a new record each time the parachute is inducted for repack or maintenance. Upon verification of the new record by the I-level QAR, CDQAR, or CDI the old record may be destroyed.

(6) Upon transfer of the parachute assembly, the record shall be forwarded to the new custodian. Update ALS and the custody section of OOMA to electronically transfer the parachute assembly when transferred to another command.

c. Specific Documentation:

BASIC ASSEMBLY INFO

Block A1 - TYPE ASSEMBLY. Identifies the complete parachute assembly, for example, NES-14.

Block A2 - SERIAL NUMBER. The serial number of the parachute assembly. Use canopy serial number.

Block A3 - PART NUMBER. The part number of entire parachute assembly.

Block A4 - CONFIGURED FOR (TECS). Specific type of aircraft.

Block A5 - CUSTODIAN ORG CODE. Organization code of activity to which parachute assembly is issued.

Block A6 - BU/SER NUMBER. Bureau number of aircraft in which parachute assembly is installed; entered in pencil by the O-level. In the VFS CADPAD, TRACE LIFE SUPPORT MODULE enter the aircraft BU/SERNO in the BU/SER field. This enables electronic transfer of parachute assembly with assigned aircraft when transferred to another command.

Block A7 - RFI Date. Enter YYMMDD the parachute repack is completed.

Block A8 - RFI SHF CYC. Maximum period of time parachute assembly may remain on shelf before inspection cycle begins.

Block A9 - LATEST RFI. Latest date parachute assembly may be issued from RFI pool and still have a complete inspection cycle remaining. RFI date + RFI shelf cycle = latest RFI issue date (YYMMDD).

Block A10 - DATE ISSUED. Enter YYMMDD the parachute assembly was issued.

Block A11 - INSP CYCL. Inspection cycle specified by applicable aircraft PMIC deck and NAVAIR 13-1-6-2.

Block A12 - SCHD RMVL DATE. Date issued + inspection cycle = scheduled removal date (YYMMDD).

Block A13 - PACKED (NAME). Rate, first initial, and last name of the individual who packed the parachute assembly. The packer shall sign the printed record.

Block A14 - INSPECTED (NAME & QA STAMP #). Rate, first initial, last name, and QA stamp number of the individual who inspected the assembly. The inspector must sign and stamp the printed record.

Block A15 - Org Code. Organization code of I-level where packing was performed.

SERVICE LIFE ITEMS

Block B1 - NOMENCLATURE. Nomenclature of shelf life or controlled items.

Block B2 - PART #. Part number of item.

Block B3 - CONT #/LOT #. Contract number or lot number of item.

Block B4 - SER #. Serial number of item (if applicable). NA if not.

Block B5 - MFG DATE. Date item was manufactured (YYMMDD).

Block B6 - INSTL DATE. Enter the year, month, and the day of the month (YYMMDD) the item was placed in service or installed.

Block B7 - EXP DATE. Enter computed year, month, and the day of the month (YYMMDD) of expiration.

CARTRIDGES AND CARTRIDGE ACTUATED DEVICES

Block C1 - NOMENCLATURE. Nomenclature of cartridge or CAD.

Block C2 - PART #. Part number of cartridge or CAD.

Block C3 - CONT #/LOT #. Contract number or lot number of cartridge or CAD. Always use lot number on cartridges.

Block C4 - DODIC. DODIC or NALC, for example, MW19.

Block C5 - SER #. Serial number of cartridge or CAD (if applicable). NA if not applicable.

Block C6 - MFG DATE. Enter the year, month, and the last day of the month (YYMMDD) the cartridge or CAD was manufactured.

Block C7 - C.O. DATE. Enter the year, month, and the last day of the month (YYMMDD) the cartridge or CAD container was opened (start of service life).

Block C8 - EXP DATE. Enter computed year, month, and last day of the month (YYMMDD) the cartridge or CAD will expire.

TECHNICAL DIRECTIVES

WARNING: IT IS IMPORTANT TO RETAIN AN ACCURATE TD COMPLIANCE RECORD. B AND D CODED TDS FROM NAT01 SHALL BE DOCUMENTED AND NOT DELETED FROM THE RECORD UNTIL REMOVED FROM NAT01 OR UNTIL THE ITEM (TO WHICH THE TD WAS INCORPORATED) HAS BEEN REMOVED OR REPLACED. THE CONFIGURATION OF THE REMOVED AND REPLACED ITEMS SHALL REMAIN THE SAME. FAILURE TO DO SO INVALIDATES THE ENTIRE RECORD.

NOTE: Log entries are not required on the Parachute Record (OPNAV 4790/101), Seat Survival Kit Record (OPNAV 4790/137), Aircrew Systems Record (OPNAV 4790/138), and Aircrew Personal Equipment Record (OPNAV 4790/159) history records for Aircrew System Change and Aircrew

System Bulletin amendments that are administrative in nature and do not required additional work. No documentation other than the retention of the TD Routing and Tracking Sheet (Parts 1 and 2), with all required signatures, is required and shall be maintained by QA. A copy of the amendment from the CTPL shall be retained by work centers 130, 13A, 040; and 800 divisions.

Block D1 - TYP. Type TD code, for example, 66 or 67.

Block D2 - NO. Basic number of TD.

Block D3 - REV. Revision letter of TD.

Block D4 - AM. Amendment number of TD.

Block D5 - QA. QA number of individual inspecting TD compliance.

Block D6 - ORG. Organization code of I-level completing TD.

Block D7 - DATE. TD compliance date (YYMMDD).

Block D8 - STAT. Status of TD.

LOCAL USE. This space is provided for documenting any other data that is required but not provided for in other blocks, for example, local inspection requirements, and conditional inspections not requiring repack.

NOTE: Additional documentation information for this record is in NAVAIR 13-1-6.2.

5.2.1.22 Aviation Life Support System (ALSS); Seat Survival Kit Record (OPNAV 4790/137)

a. General Information.

NOTES: 1. Activities operating NALCOMIS OOMA shall use AERs and ALS to manage, report, and generate records for all ALSS assemblies and components. NALCOMIS OOMA activities are not authorized to use Trace Life Support Modules or SEATS.

2. Activities using NALCOMIS OOMA are not required to use VFS to generate ALSS history records. The Aircrew Equipment/Personal Record generated in NALCOMIS contains all pertinent information and meets all requirements per this instruction.

(1) The logbook contains a file of all aircraft installed ALSS records, excluding aircraft equipped with ejection seats. When an aircraft has an ejection seat, the records will be inserted into the appropriate ejection seat AESR. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated Seat Survival Kit Record (OPNAV 4790/137) is authorized for use.

(2) The Seat Survival Kit Record (OPNAV 4790/137) (Figure 5-32) is designed to provide configuration and inspection information for an SSK and its components. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated OPNAV 4790/137 is a single copy, single-sided record designed to be filed in the aircraft logbook or the ejection seat AESR in which the SSK is installed. When an SSK has been involved in an aircraft mishap, the current record shall be forwarded per OPNAVINST 3750.6 and NAVAIR 13-1-6.3.

b. Initiation, Maintenance, and Handling Procedures:

(1) The activity placing the SSK in service shall initiate the record. The record shall be securely attached to the SSK when issued to the receiving custodian.

(2) The receiving custodian shall review the record to verify for completeness. All discrepancies shall be resolved with the issuing activity prior to acceptance of the SSK. On acceptance of the SSK record, ensure electronic receipt of ALS and associated ALSS equipment in OOMA is accurate and complete.

(3) Upon installation, the record shall be forwarded to Maintenance Control for insertion in the aircraft logbook or ejection seat AESR.

(4) The record shall accompany the SSK anytime it is removed and sent to the supporting I-level/D-level for inspection or maintenance.

(5) The supporting I-level/D-level shall initiate a new record each time the SSK is inducted for repack or maintenance. Upon verification of the new record by the I-level QAR, CDQAR, or CDI/D-level QA personnel the old record may be destroyed.

(6) Upon transfer of the SSK, the record shall be forwarded to the new custodian. Update the custody section of OOMA electronically transfer the SSK when it transfers to another command.

c. Specific Documentation:

BASIC ASSEMBLY INFORMATION

Block A1 - TYPE ASSEMBLY. Specific type seat kit assembly, for example, SKU-2/A.

Block A2 - SERIAL NUMBER. Serial number of seat kit assembly.

Block A3 - PART NUMBER. Part number of seat kit assembly.

Block A4 -FSCM. CAGE code for manufacturer of seat kit assembly.

Block A5 - CONFIGURED FOR (TECS). Specific TEC.

Block A6 - CUSTODIAN ORG CODE. Organization code of activity to which the seat kit is issued.

Block A7 - BU/SERNO. Bureau number of aircraft in which the seat kit is installed; entered in pencil by O-level.

Block A8 - RFI DATE. Enter the YYMMDD the seat kit repack is completed.

Block A9 - RFI SH CYC. Maximum period of time seat kit may remain on shelf before inspection cycle begins.

Block A10 - LATEST RFI. Latest date seat kit may be issued from RFI pool and still have a complete inspection cycle remaining. RFI date + RFI shelf cycle = latest RFI issue date (YYMMDD).

Block A11 - DATE ISSUED. Enter the YYMMDD the seat kit was issued.

Block A12 - INSP CYCL. Inspection cycle specified by applicable aircraft PMIC deck and NAVAIR 13-1-6-2.

Block A13 - SCHD RMVL DATE. Date issued + inspection cycle = scheduled removal date (YYMMDD).

Block A14 - PACKED (NAME). Rate, first initial, and last name of the individual who packed the seat kit. The packer shall sign the printed record.

Block A15 - INSPECTED BY (NAME & QA STAMP #). First initial, last name, and QA stamp number of the individual who inspected the seat kit during repack. The inspector must sign and stamp the printed record.

Block A16 - ORG CODE. Organization code of I-level that inspected or packed seat kit.

SERVICE LIFE ITEMS

Block B1 - NOMENCLATURE. Nomenclature of service life items installed in seat kit.

Block B2 - PART #. Part number of item.

Block B3 - CONT #/LOT #. Contract or lot number of item.

Block B4 - SER #. Serial number of item (if applicable). NA if not applicable.

Block B5 - QTY. Quantity of item.

Block B6 - MFG DATE. Enter the year, month, and last day of the month (YYMMDD) the item was manufactured.

Block B7 - INSRV DATE. Enter the year, month, and last day of the month (YYMMDD) the item was placed in service or installed.

Block B8 - EXP DATE. Enter the computed year, month, and last day of the month (YYMMDD) the item will expire.

O2 SYS TEST (oxygen system test signatures).

Block C1 - COMPLETED (NAME). Rate, first initial, and last name of individual who performed the oxygen system test.

Block C2 - INSPECTED (NAME & QA STAMP #). Rate, first initial, last name, and QA stamp number of individual who inspected the oxygen system test. The inspector must sign and stamp the printed record.

KIT TECHNICAL DIRECTIVES

WARNING: IT IS IMPORTANT TO RETAIN AN ACCURATE TD COMPLIANCE RECORD. B AND D CODED TDS FROM NAT01 SHALL BE DOCUMENTED AND NOT DELETED FROM THE RECORD UNTIL REMOVED FROM NAT01 OR UNTIL THE ITEM (TO WHICH THE TD WAS INCORPORATED) HAS BEEN REMOVED OR REPLACED. THE CONFIGURATION OF THE REMOVED AND REPLACED ITEMS SHALL REMAIN THE SAME. FAILURE TO DO SO INVALIDATES THE ENTIRE RECORD.

Block D1 - TYP. Type of TD, for example, 66 or 67.

Block D2 - NO. Basic number of TD.

Block D3 - REV. Revision letter of TD.

Block D4 - AM. Amendment number of TD.

Block D5 - QA. QAR or CDQAR stamp number or initials of individual inspecting TD compliance.

Block D6 - ORG. Organization code of I-level/D-level completing TD.

Block D7 - DATE. TD compliance date (YYMMDD).

Block D8 - STAT. Status of TD.

LIFE RAFT HISTORY

Block E1 - TYPE ASSEMBLY. Type life raft assembly installed in seat kit.

Block E2 - PART #. Part number of life raft.

Block E3 - CONTRACT #. Contract number of life raft.

Block E4 - FSCM. CAGE code for manufacturer of life raft.

Block E5 - SER #. Serial number of life raft.

RAFT TEST RECORD

Block E6 - TEST CYCLE. Type of test performed on life raft. Document applicable cycle.

Block E7 - COMPLETED (NAME). Rate, first initial, and the last name of the individual who completed the test on the life raft.

Block E8 - INSPECTED (NAME & QA STAMP #). Rate, first initial, last name, and QA stamp number of the individual who inspected the life raft test. The inspector must sign and stamp the printed record.

LIFE RAFT TECHNICAL DIRECTIVES

WARNING: IT IS IMPORTANT TO RETAIN AN ACCURATE TD COMPLIANCE RECORD. B AND D CODED TDS FROM NAT01 SHALL BE DOCUMENTED AND NOT DELETED FROM THE RECORD UNTIL REMOVED FROM NAT01 OR UNTIL THE ITEM (TO WHICH THE TD WAS INCORPORATED) HAS BEEN REMOVED OR REPLACED. THE CONFIGURATION OF THE REMOVED AND REPLACED ITEMS SHALL REMAIN THE SAME. FAILURE TO DO SO INVALIDATES THE ENTIRE RECORD.

Block F1 - TYP. Type of TD, for example, 66 or 67.

Block F2 - NO. Basic number of TD.

Block F3 - REV. Revision letter of TD.

Block F4 - AM. Amendment number of TD.

Block F5 - QA. QA number of individual inspecting TD compliance.

Block F6 - ORG. Organization code of I-level//D-level completing TD.

Block F7 - DATE. TD compliance date (YYMMDD).

Block F8 - STAT. Status of TD.

LOCAL USE. This space is provided for documenting any other data that is required but not provided for in other blocks, for example, local inspection requirements, and conditional inspections not requiring repack.

NOTE: Additional documentation information for this record is in NAVAIR 13-1-6.3.

5.2.1.23 Aviation Life Support System (ALSS); Aircrew Systems Record (OPNAV 4790/138)

a. General Information.

NOTES: 1. Activities operating NALCOMIS OOMA shall use AERs and ALS to manage, report, and generate records for all ALSS assemblies and components. NALCOMIS OOMA activities are not authorized to use Trace Life Support Modules or SEATS.

2. Activities using NALCOMIS OOMA are not required to use VFS to generate ALSS history records. The Aircrew Equipment/Personal Record generated in NALCOMIS contains all pertinent information and meets all requirements per this instruction.

(1) The logbook contains a file of all aircraft installed ALSS records, excluding aircraft equipped with ejection seats. When an aircraft has an ejection seat, the records will be inserted into the appropriate ejection seat AESR. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated Aircrew Systems Record (OPNAV 4790/138) is authorized for use.

(2) The Aircrew Systems Record (OPNAV 4790/138) (Figure 5-33) is designed to provide a current configuration and inspection record of ALSS components, kits, and assemblies. The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated OPNAV 4790/138 is a single copy, single-sided record, which shall be filed in the logbook of the aircraft which the ALSS component, kit, or assembly is installed. For personnel mounted equipment or other equipment which is not aircraft installed, the record will be maintained as directed by the MO. When an ALSS component, kit, or assembly has been involved in an aircraft mishap, the record shall be forwarded per OPNAVINST 3750.6 and NAVAIR 13-1-6 series manuals.

b. Initiation, Maintenance, and Handling Procedures:

(1) The record will be initiated by the activity placing the ALSS component, kit, or assembly into service. When a new record is initiated and all data is transcribed and verified, the old record may be destroyed.

(2) Record Maintenance. The record is maintained in the appropriate aircraft logbook or file.

(3) The receiving custodian shall review the record and verify for completeness. All discrepancies in the record shall be resolved with the issuing activity prior to acceptance of the ALSS component, kit, or assembly. On acceptance of the aircrew systems record, ensure electronic receipt of ALS and associated ALSS equipment in OOMA is accurate and complete.

(4) Upon installation of the component, kit, or assembly in the aircraft, the record shall be forwarded to Maintenance Control for insertion in the aircraft logbook.

(5) The record shall accompany the ALSS component, kit, or assembly any time it is removed and sent to the supporting I-level/D-level for inspection or maintenance.

(6) Upon transfer of the ALSS component, kit, or assembly, the record shall be forwarded to the new custodian. Update ALS and the custody section of OOMA to electronically transfer the Aircrew Systems record when it transfers to another command.

c. Specific Documentation:

Block A1 - TYPE ASSEMBLY. Identifies the complete assembly, for example, LPU-23.

Block A2 - SERIAL NUMBER. Serial number of assembly.

Block A3 - PART NUMBER. Part number of complete assembly.

Block A4 - FSCM. CAGE code for manufacturer of assembly.

Block A5 - CONT #. Contract number of basic assembly.

SERVICE LIFE ITEMS (within equipment)

Block B1 - NOMENCLATURE. Nomenclature of service life or controlled item.

Block B2 - PART #. Part number of service life or controlled item.

Block B3 - CONT #/LOT #. Contract number/lot number of service life or controlled items. Always use lot numbers for explosive devices.

Block B4 - DODIC. DODIC or NALC of installed explosive device.

Block B5 - SER #. Serial number of installed item (if applicable) or NA.

Block B6 - QTY. Quantity of item.

Block B7 - MFG DATE. Enter the year, month, and the last day of the month (YYMMDD) the item was manufactured.

Block B8 - INSTL. Enter the year, month, and the day of the month (YYMMDD) the item was installed or placed in service.

Block B9 - EXP DATE. Enter the year, month, and the last day of the month (YYMMDD) the installed item service life will expire.

TECHNICAL DIRECTIVES

WARNING: IT IS IMPORTANT TO RETAIN AN ACCURATE TD COMPLIANCE RECORD. B AND D CODED TDS FROM NAT01 SHALL BE DOCUMENTED AND NOT DELETED FROM THE RECORD UNTIL REMOVED FROM NAT01 OR UNTIL THE ITEM (TO WHICH THE TD WAS INCORPORATED) HAS BEEN REMOVED OR REPLACED. THE CONFIGURATION OF THE REMOVED AND REPLACED ITEMS SHALL REMAIN THE SAME. FAILURE TO DO SO INVALIDATES THE ENTIRE RECORD.

Block C1 - TYP. Type TD code, for example, 66 or 67.

Block C2 - NO. Basic number of TD.

Block C3 - REV. Revision letter of TD.

Block C4 - AM. Amendment number of TD.

Block C5 - QA. QAR or CDQAR stamp number or initials of individual inspecting TD compliance.

Block C6 - ORG. Organization code of activity completing TD compliance.

Block C7 - DATE. TD compliance date (YYMMDD).

Block C8 - STAT. Status of TD.

LOCAL USE. This space is provided for documenting other data that is required but not provided for in other blocks, for example, local inspection requirements and conditional inspections not requiring repack.

CURRENT INSPECTION DATA AND SIGNATURES

Block D1 - PACKED (NAME). Rate, first initial, and the last name of individual who packed the equipment. The packer must sign the printed record.

Block D2 - INSPECTED (NAME & QA STAMP #). Rate, first initial, last name, and QA stamp number of the individual who inspected equipment during repack. The inspector must sign and stamp the printed record.

Block D3 - TEST CYCLE. If applicable, enter the cycle of the inspection that was completed (F, 1, 2, or 3).

Block D4 - ORG CODE. Organization code of activity performing the inspection.

Block D5 - RFI DATE. Date equipment completed inspection and repack (YYMMDD).

Block D6 - RFI SHF CYC. Maximum period of time an item may remain on shelf before inspection cycle begins.

Block D7 - LATEST RFI. Latest date item may be issued from RFI pool and still have a complete inspection cycle remaining. RFI Date + RFI shelf cycle = latest RFI issue date (YYMMDD).

Block D8 - CUSTODIAN ORG CODE. Organization code of activity to which equipment is issued.

Block D9 - DATE ISSUED. Date equipment was issued (YYMMDD).

Block D10 - INSP CYCL. Inspection cycle specified by applicable aircraft PMIC deck and NAVAIR 13-1-6-2.

Block D11 - SCHD RMVL DATE. Date issued + inspection cycle = scheduled removal date (YYMMDD).

NOTE: Additional documentation information for this record is in NAVAIR 13-1-6 series manuals.

5.2.1.24 Aviation Life Support System (ALSS); Aircrew Personal Equipment Record (OPNAV 4790/159)

a. General Information.

NOTES: 1. Activities operating NALCOMIS OOMA shall use AERs and ALS to manage, report, and generate records for all ALSS assemblies and components. NALCOMIS OOMA activities are not authorized to use Trace Life Support Modules or SEATS.

2. Activities using NALCOMIS OOMA are not required to use VFS to generate ALSS history records. The Aircrew Equipment/Personal Record generated in NALCOMIS contains all pertinent information and meets all requirements per this instruction.

(1) The VFS CADPAD, TRACE LIFE SUPPORT MODULE generated Aircrew Personal Equipment Record (OPNAV 4790/159) is authorized for use.

(2) The Aircrew Personal Equipment Record (OPNAV 4790/159) (Figure 5-34) is designed to provide a record of the current configuration of all personal survival equipment issued to the aircrew. Only items of ALSS requiring inspection at the O-level shall be documented on this record. Each item of ALSS which requires inspection at the I-level shall have a separate Aircrew Systems Record (OPNAV 4790/138).

b. Initiation, Maintenance, and Handling Procedures:

(1) The Aircrew Personal Equipment Record (OPNAV 4790/159) shall be initiated by the cognizant O-level activity upon the initial issue of personal equipment to the aviator or aircrewman. When a new record is initiated and all data is transcribed and verified, the old record may be destroyed. On acceptance of an aviator or aircrewman, ensure electronic receipt of the Aircrew Personal Equipment Record in OOMA is accurate and complete. Update the custody section of OOMA to electronically transfer an aviator or aircrewman when they transfer to another command.

(2) Record Retention. Each aircrewman shall have a separate file containing the Aircrew Personal Equipment Record (OPNAV 4790/159), and separate Aircrew Systems Records (OPNAV 4790/138) as needed. The aircrew flight equipment file shall be constructed of a 9 x 12 folder with the Aircrew Personal Equipment Record (OPNAV 4790/159) firmly attached on the right side of the folder and all applicable Aircrew System Records (OPNAV 4790/138) placed on the left.

(3) If not operating NALCOMIS OOMA, all maintenance actions performed on an aircrewman's equipment shall be documented on a VIDS/MAF. After normal processing of the completed VIDS/MAF, Copy 3 will be placed in the aircrewman's flight equipment file beneath the Aircrew Personnel Equipment

Record (OPNAV 4790/159) until Copy 1 is received from the data services facility. Copy 3 can then be discarded. Copy 1 will be placed beneath the Aircrew Personal Equipment Record (OPNAV 4790/159) and retained for a minimum of 6 months or one complete inspection cycle, whichever is greater.

NOTE: All aircrew flight equipment records and files shall be maintained as directed by the MO.

c. Specific Documentation:

Block A1 - NAME. First initial and last name of the aircrew person.

Block A2 - RANK/RATE. Rank or rate.

Block A3 - FLT BILLET. Position aircrew normally fills, for example, pilot, aircrew, or SAR crew.

Block A4 - ORG. Organization code to which aircrew is permanently attached.

Block A5 - BU/SERNO. Serial number of aircrew (first and last initials of name and last four digits of SSN).

RFI DATE. Date assembly completed inspection and repack (YYMMDD).

INSP CYC. Inspection cycle specified by.

DUE DATE. Date next scheduled periodic maintenance is due (YYMMDD).

AIRCREW EQUIPMENT LOG. The Aircrew Equipment Log will list all equipment issued to aircrew, such as torso harness, G-suit, survival vest, helmet, strobe light, SRU-31/P, and compass. As an item is removed from service, it will be deleted from the record by drawing a single red line through all information pertaining to that item. Information pertaining to the removed items replacement will be annotated in the next available line below.

Block B1 - NOMENCLATURE. Nomenclature of equipment.

Block B2 - EQUIP. TYPE. Model number or part number of equipment. If model number is not available, use part number.

Block B3 - CONT #/LOT #. Contract number or lot number of equipment.

Block B4 - DODIC. DODIC or NALC number of CAD, cartridge, or flare.

Block B5 - SER #. Serial number of equipment (if available).

Block B6 - QTY. Quantity of equipment.

Block B7 - CYC. Inspection cycle of equipment.

Block B8 - MFG. Date of manufacture of equipment (YYMMDD).

Block B9 - INSTL. Date equipment was placed in service, issued or installed (YYMMDD).

Block B10 - EXP DATE. Expiration date of item (YYMMDD).

TECHNICAL DIRECTIVES

WARNING: IT IS IMPORTANT TO RETAIN AN ACCURATE TD COMPLIANCE RECORD. B AND D CODED TDS FROM NAT01 SHALL BE DOCUMENTED AND NOT DELETED FROM THE RECORD UNTIL REMOVED FROM NAT01 OR UNTIL THE ITEM (TO WHICH THE TD WAS INCORPORATED) HAS BEEN REMOVED OR REPLACED. THE CONFIGURATION OF THE REMOVED AND REPLACED ITEMS SHALL REMAIN THE SAME. FAILURE TO DO SO INVALIDATES THE ENTIRE RECORD.

Block C1 - EQUIPMENT TYPE. Type equipment of item that the TD was performed on, for example, MA-2, and HGU-34/P.

Block C2 - SER #. Serial number of item.

Block C3 - TYP. Type TD code, for example, 66 or 67.

Block C4 - NO. Basic number of TD.

Block C5 - REV. Revision letter of TD.

Block C6 - AM. Amendment number of TD.

Block C7 - QA. QAR or CDQAR number or initials of individual inspecting TD compliance.

Block C8 - ORG. Organization code of activity completing TD.

Block C9 - DATE. TD compliance date (YYMMDD).

Block C10 - STAT. Status of TD.

5.2.1.25 Aeronautical Equipment Service Record (OPNAV 4790/29)

a. General Information.

(1) The AESR (Figure 5-35) is a loose-leaf record. It may be inserted in the aircraft logbook or may stand alone. Special care must be taken to ensure the separate forms are not lost when the record is removed from the logbook. A two prong fastener will be used to bind the record together when it is transferred, shipped as a separate item, or stands alone. DO NOT USE STAPLES. See Figure 5-36 for AESR construction and sequence and Figure 5-37 for AESR forms matrix.

(2) The AESR is maintained similarly to the aircraft logbook. Since it contains loose-leaf forms, the full identification data and serial number are inserted on both sides of each page in the spaces provided to ensure ready identification when pages are removed or new continuing pages are initiated. The AESR accompanies the equipment at all times. When equipment is installed as part of the aircraft, this record is maintained concurrently with, and becomes part, of the aircraft logbook.

(3) Details. Details on pages that are used in both the AESR and the aircraft logbook are covered under the page descriptions in the aircraft logbook section.

(4) Additional Data. Pages or forms, other than those described in this instruction (unless specifically directed by COMNAVAIRSYSCOM), are not inserted, stapled, or otherwise attached to the AESR. Additional data, for which there is not a designated place in the AESR, and a copy of the most recent engine setup or test record shall be maintained in the manila envelope in the back of the AESR. Superseded forms will be closed out with the statement "NO FURTHER ENTRIES THIS PAGE" and a new form initiated. The superseded form will remain in the AESR, in its proper section, until purged.

(5) The requirement for AESRs is determined by T/M/S aircraft PMIC decks and COMNAVAIR-SYSCOM, including the list of forms required. AESRs for equipment not associated with an aircraft are listed below. Newly established AESR requirements shall be published by COMNAVAIRSYSCOM and shall include a listing of forms required as part of the AESR. AESRs are required for all equipment within the following categories:

(a) AEF, MCEAGS, FLOLS, HPRU, MOSLS, F-58, F-70, L-series lighting, L-95, radios and F-series packages.

(b) Gas turbine power plant (7LM 1500 PB-104).

(c) MK-105 magnetic minesweeping gear.

(d) SEGTEs listed in NAVAIR NOTE 4700.

(e) Engine test cell/stand.

(f) UAS Control Station.

(g) GTF.

(6) The AESR is initiated by the activity originally accepting the equipment for the DON.

(7) In the event an AESR is lost, destroyed, or damaged, every effort shall be made to reconstruct the record. The following will be helpful in reconstructing an AESR:

(a) File of completed MAFs (aircraft and engine inspections and general files).

(b) Contents of the ADB.

(c) Lists Nos. 02 and 04 and related historical data obtained from COMNAVAIRSYSCOM (AIR-6.8.5.2).

(d) Command historical files of completed TDs on related equipment.

(e) MSR, ASR, and SRC card information obtained from the CMIS Repository at COMNAVAIRSYSCOM (AIR-6.8.5.2).

(f) EHR historical data obtained from the applicable ISSC repository.

(g) File of engine transaction reports.

(h) Records maintained by the ISSC and rework activity.

(i) Aircraft and equipment manufacturer.

(j) CMIS Composition Tracking System for Aircraft/Engines.

b. Purging. All AESR forms and records are purged as specified by the requirements listed in this instruction.

c. Specific Documentation:

NOMENCLATURE OF EQUIPMENT. Enter the nomenclature of the applicable equipment.

REPLACEMENT. For equipment, enter the appropriate data. For engines, the data required for the Replacement Interval block shall be obtained by review of the replacement interval data blocks on each MSR, ASR, and SRC card. The lowest time recorded shall be recorded in the Replacement Interval block on the AESR. The Replacement Due block will be computed by adding the interval time to the engine time. Entries will be made in pencil to allow for component changes at repair and rework activities.

TYPE. Enter the type equipment code of the applicable equipment.

MODEL. Enter the model of the applicable equipment.

SER NO. Enter the serial number of the equipment. If a propeller assembly, enter the hub serial number.

INSTALLED ON. For items not installed, leave blank.

MODEL. Enter the model of the item on which the equipment is installed.

BUNO/SERIAL NO. Enter the aircraft BUNO or equipment serial number on which the equipment is installed.

DATE. Enter the YYMMDD the equipment was installed.

BY. Enter the short title of the activity that installed the item, for example, VFA-34.

CURRENT ENGINE OR PROPELLER POSITION NO. Enter the appropriate number for the engine or propeller position. Leave blank if not applicable.

5.2.1.26 Equipment Operating Record (OPNAV 4790/31A)

a. General Information. This record (Figure 5-6) is used in the AESR only.

(1) This form is intended for use with all aeronautical equipment requiring the monthly compilation of significant operating data. Reporting custodians will ensure that operating and monitoring system data is entered on this form monthly and upon transfer of the equipment.

NOTE: I-level and D-level repair facilities are authorized to make a one-line block entry in lieu of separate end of the month closeout entries. These block entries facilitate recording of nonoperating hours for equipment, including uninstalled aircraft engines, while in the storage, off-site standard rework, or repair cycles. For example, 940601-950131 could be entered in block 4 of the Equipment Operating Record (OPNAV 4790/31A), 0.0 in block 5 and corresponding data in blocks 5b and 6 through 8 on the same line (as appropriate).

(2) Operating hours are obtained from the Naval Aircraft Flight Record (OPNAV 3710/4).

b. Purging. This record remains a permanent part of the AESR.

c. Specific Documentation:

Block 1 - EQUIPMENT. Enter the nomenclature of the equipment.

Block 2 - T/M/S. Enter the equipment T/M/S.

Block 3 - SERIAL NUMBER. Enter the serial number of the equipment.

Block 4 - DATE. Enter the YYMMDD for entry.

Block 5 - OPERATING HRS. A pen and ink or typed entry will be made to close out the form each time the equipment changes custody. Each activity will make an entry. Pencil entries or consolidated monthly entries are not required.

Block 5a - THIS MONTH. Enter the operating hours and tenths for the current entry.

Block 5b - ACCUM. Add the current entry hours and tenths to the last accumulated entry and enter the new total in this block. Verify on acceptance and transfer.

Block 6 - MONITORING SYSTEM DATA (e.g., TSR STARTS, COUNTS, ROUNDS). Uncaptioned columns are provided to be labeled as required, for example, starts, rounds fired, LCF, or meter reading. If equipment is monitored by TSN or TSO, label the first column under monitoring system data as TSN or TSO (as appropriate). The cumulative column under operating hours will then display the TSN or TSO hours.

Block 7 - ACTIVITY. Enter the short title of the activity making the entry, for example, HMM-164.

Block 8 - REMARKS. This block is for logging additional information (as appropriate).

d. Ground test stand/engine test cell time is not required to be logged for aircraft engines since it is not used in calculating inspection intervals, removal intervals, or maximum operating time. Engines monitored by automated systems shall have LUIs or other appropriate life cycle counts manually calculated from a predetermined formula and entered into the monitoring system. Ground test stand/engine test cell time for propellers is required to be logged on the Equipment Operating Record (OPNAV 4790/31A) (Figure 5-6). Additionally, at the end of each evolution a propeller is used on a ground test stand/engine test cell, the total accumulated ground test stand/engine test cell time shall be recorded in the Miscellaneous/History section of the propeller AESR. NAVAIR 03-20CBBK-1 contains maximum ground test stand/engine test cell time a propeller may accumulate.

5.2.1.27 Module Service Record (OPNAV 4790/135)

a. General Information.

(1) Modular engine design allows I-level activities to readily remove and replace interchangeable modules with RFI spares. The MSR, Figures 5-38 through 5-41, provides the method for recording the maintenance data for these modules and their life limited assemblies and components. The MSR will be attached to and accompany the component to its final destination.

(2) The MSR is a four page attached form that opens to make one record. The MSRs are placed within the AESR to make up a propulsion system.

(3) The MSR accompanies the module at all times. When the module is installed as part of a propulsion system, this record is maintained concurrently with, and becomes part of, the propulsion system AESR. When the module is uninstalled, a two prong fastener will be used to bind the record. DO NOT USE STAPLES.

(4) MSR composition:

(a) Module Service Record (OPNAV 4790/135) (Figures 5-38 through 5-41).

(b) Assembly Service Record (OPNAV 4790/106A) (Figures 5-42 and 5-43).

(c) Equipment History Record (EHR) Card (OPNAV 4790/113) (Figures 5-45 and 5-46).

(d) Scheduled Removal Component Card (OPNAV 4790/28A) (Figures 5-47 and 5-48).

NOTE: Additional Technical Directive forms (OPNAV 4790/24A) and Miscellaneous History forms (OPNAV 4790/25A) are authorized to be inserted when sections V or X of the MSR are full. Consolidation procedures will be followed when any other section of the MSR is full (paragraph 5.1.1.27a(9)).

(5) An MSR shall be maintained for all modular engines.

(6) MSR initiation for modules installed on aeronautical engines as part of DOD contracts shall be the responsibility of the activity accepting the engines for the DON. When these modules are delivered to the

DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

(7) When an MSR is lost or mutilated, the activity having custody shall initiate a new record and all available information shall be transcribed to the new record. When a record contains no space for additional entries, consolidation procedures shall be applied per paragraph 5.2.1.27a(9). If an MSR is lost, contact COMNAVAIRSYSCOM (AIR-6.8.4.3) (DSN 757-8883 or COMM (301) 757-8883, on the ATCM Web site (http://www.navair.navy.mil/logistics/CMIS), or message or letter consistent with the priority of the requirement for the information.

(8) Upon completion of repair or rework, a copy of the MSR reflecting the current status of the module shall be forwarded to the CMIS Repository. The MSR shall be securely attached to the module being returned to the supply system or inserted in the propulsion system AESR (as appropriate).

(9) Consolidation Procedures. MSRs may be consolidated at any maintenance level when no space is available for further entries within any one section. Minimum requirements for consolidating:

SECTION I - IDENTIFICATION DATA. All entries are to be completed.

SECTION II - MODULE COMPOSITION. If subcomponents were not changed during the consolidation process, transcribe all data reflecting the currently installed subcomponents. If subcomponents were changed, enter the removal date for the removed subcomponents on the original card. Transcribe all data reflecting the currently installed subcomponents to the new MSR. Enter the installation information on the new MSR for the newly installed subcomponents.

SECTION III - INSTALLATION DATA and SECTION IV - REMOVAL DATA. Recalculate the existing entries to ensure correctness. If a correction is required, refer to paragraph 5.2.1.6 for correction procedures. If the component is installed at the time of consolidation, record the last installation action. No entry is required in the removal section. If the component is not installed at the time of consolidation, record the last installation and the corresponding removal action.

SECTION V - TECHNICAL DIRECTIVES. Block entries are to be used to document component applicable incorporated TDs. A separate block entry is required for each type of TD and status.

Block A - TECHNICAL DIRECTIVE IDENTIFICATION

Block A (1) - CODE. Enter the TD code.

Blocks A (2) through (8) - For TDs that refer to installed subassembly cards, enter the REFER TO entry, for example, REFER TO COMP RTR ASR CARD.

Block B - STATUS. Enter PINC indicating previously incorporated, NA for not applicable TDs, or leave blank for REFER TO entries.

Block C - TITLE/REMARKS. Enter the basic numbers and associated revisions, amendments, and parts.

Block D - COMPLIANCE. Enter the aviation 3M ORG code of the activity consolidating the MSR and the YYMMDD date the MSR was consolidated.

Block E - SIGNATURE. Enter the word "CONSOLIDATED" indicating this entry is a result of MSR consolidation. Block entries do not indicate the activity that actually incorporated the TDs. They signify the TDs had been consolidated from previous records. All applicable incorporated TD numbers must be listed in the TITLE/REMARKS block. A blanket statement indicating that all TDs up to a specific basic have been incorporated is not authorized. Applicable TDs that have not been incorporated or have been removed must have separate line entries and be documented per paragraph 5.2.1.16. TDs incorporated during the MSR consolidation effort and not documented on the original MSR must have a separate line entry on the consolidated form.

SECTION VII - REPAIR/REWORK/OVERHAUL/EXCEEDANCES

When the component is a life limited item with no secondary time/cycle requirement, for example, C-6000-Retire, transcribe the last repair action.

When the component is a life limited item and has a secondary time/cycle requirement, for example, T-700-Retire and T-100-NDT/I, transcribe the last secondary requirement action and the last repair action. This may be one entry if the last repair action was the secondary requirement action.

When the component has an overhaul with no secondary time/cycle requirement, for example, C-2000-Overhaul, transcribe the last overhaul and the last repair action. This may be one entry if the last repair action was an overhaul.

When the component has an overhaul and a secondary time/cycle requirement, for example, U-36-Overhaul and D-244-IMA Inspection, the last action for both requirements must be entered. If the last action is an overhaul, only the overhaul action need be entered.

Upon completion of MSR consolidation, make an entry in the Repair/Rework/Overhaul/Exceedances Section with a YYMMDD date indicating the date of card consolidation, the aviation 3M ORG code of the activity consolidating the MSR, and the statement, "MSR CONSOLIDATED, all entries are certified to be correct." This entry requires a signature.

NOTE: Upon completion of MSR consolidation, make an entry in the Miscellaneous/History section with a YYMMDD date indicating the date of card consolidation, the aviation 3M ORG code of the activity consolidating the MSR, and the statement, "MSR CONSOLIDATED, all entries are certified to be correct". This entry requires a signature.

b. Purging. Upon completion of first-degree repair or rework, the MSR will be consolidated. A new MSR will be initiated if no additional space remains for entries. A copy of the MSR reflecting the current status of the module will be forwarded to: CMIS REPOSITORY, ATTN AIR-6.8.4.3 BLDG 448 STE 200B, NAVAIRSYSCOMHQ, 47060 MCLEOD RD UNIT 8, PATUXENT RIVER MD 20670-1626.

c. Specific Documentation:

Page One (Figure 5-38)

_____ MODULE SERVICE RECORD (title line). Indicate the type of MSR, for example, fan, turbine, afterburner.

REPLACEMENT

COMPONENT/ASSEMBLY. Enter the noun name of the component/assembly that will require the module to be removed from the propulsion system because of its life cycle limit. This entry is made in pencil.

MODULE DUE. This entry is computed when the Module is built up RFI. The Module Due time should already be calculated and entered on the component card(s) that are physically installed in the Module MSR. Transcribe the replacement due time from the first component/assembly card that will require the module to be removed from the engine/propulsion system. This entry is made in pencil.

ENGINE/PROP SYSTEM DUE. This entry is computed when the Module is installed on an engine/propulsion system. The ENG/PROP SYSTEM Due equals Module Due time minus current Module hours or counts (SECTION III, Block E), plus engine/propulsion system hours or counts at install (SECTION III, Block D). For example, a 4000 Module Due time with 3000 Module time since new installed on an engine/propulsion system with 1795 hours (total engine/propulsion system hours). will have an entry of 2795 in the ENG/PROP SYSTEM Due Block. This entry is made in pencil.

SECTION I - IDENTIFICATION DATA

Block A - PART NUMBER. Enter the part number of the module.

Block B - SERIAL NUMBER. Enter the serial number of the module.

Block C - TYPE/MODEL/SERIES. Enter the T/M/S of the module.

Block D - WORK UNIT CODE. Enter the WUC of the module.

Block E - CFA. Enter the ISSC for the module.

SECTION II - MODULE COMPOSITION. Only subassemblies that require data tracking will be listed in this section, for example, ASR, EHR, SRC card items.

Block A - NOMENCLATURE. Enter the nomenclature of the subassembly.

Block B - P/N. Enter the part number of the subassembly.

Block C - S/N. Enter the serial number of the subassembly.

Block D - DATE

INSTALL. Enter the YYMMDD date the item was installed.

REMOVE. Enter the YYMMDD date the item was removed.

Blocks E through H. Continuation of blocks A through D.

SECTION III - INSTALLATION DATA

Block A - DATE. Enter the YYMMDD date the module is installed in a propulsion system.

Block B - SERIAL NO. INSTALLED ON. Enter the serial number of the propulsion system on which the module is being installed.

Block C - BY (Activity). Enter the three position aviation 3M ORG code of the activity installing the module, for example, AC7.

Block D - TOTAL PROPULSION SYSTEM HOURS OR COUNTS. Enter hours/counts (whole number only) preceded by the appropriate time/cycle code of the propulsion system on which the module is being installed. Uncaptioned columns are provided for propulsion systems that have monitoring systems installed, and may be labeled as required, for example, LCF, ELCF, or EOT. Propulsion systems without monitoring systems will use the first column only. The TSN will be entered.

Block E - TOTAL MODULE HOURS OR COUNTS. Enter the hours/counts (whole number only) preceded by the appropriate time/cycle code of the module as appropriate. Uncaptioned columns have been provided and will be labeled with the applicable information, for example, TSN, TSO, LCF, or EOT.

SECTION IV - REMOVAL DATA

Block A - DATE. Enter the YYMMDD date that the module is removed.

Block B - TOTAL PROPULSION SYSTEM HOURS OR COUNTS. Enter the hours or counts (whole numbers only) preceded by the appropriate time/cycle code of the propulsion system from which the module is removed. Uncaptioned columns are provided for propulsion systems that have monitoring systems installed and may be labeled as required, for example, LCF, ELCF, or EOT. Propulsion systems without monitoring systems will use the first column only. The TSN will be entered.

Block C - TOTAL MODULE HOURS OR COUNTS. Subtract total propulsion system hours or counts at installation from total propulsion system hours or counts at removal. Add this Figure to the total hours or counts on the module at installation and enter in the appropriate columns preceded by the appropriate time/cycle code. Label columns as required.

Block D - REASON FOR REMOVAL AND JOB CONTROL NUMBER. Enter the reason for removal and JCN from the MAF that documented the removal of the module from the propulsion system.

Page Two (Figure 5-39)

SECTION V - TECHNICAL DIRECTIVES

Block A - TECHNICAL DIRECTIVE IDENTIFICATION

Block A (1) - CODE. Enter the TD code.

Block A (2) - BASIC. Enter the four digit TD basic number.

Block A (3) - INT. If an interim TD enter "I"; if not, leave blank.

Block A (4) - REV. Enter the revision letter (if applicable).

Block A (5) - AM. Enter the numeric amendment number (if applicable).

Block A (6) - PT. Enter the numeric TD part number, for example, part - 02 (if applicable).

Block A (7) - KIT. Enter the kit number, enter 00 if no kit is required.

Block A (8) - PRI. Enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose (as applicable).

NOTE: Blocks A (2) through (8) - For TDs that refer to installed subassembly cards, enter a REFER TO entry, for example, REFER TO COMP RTR ASR CARD.

Block B - STATUS. Enter the code indicating the status of the TD. No status codes other than those prescribed shall appear on the MSR nor shall any code be used for other than its intended meaning. Code descriptions and instructions are in paragraph 5.2.1.16a(12).

Block C - TITLE/REMARKS. Enter a brief description of the TD.

Block D - COMPLIANCE

Block D (1) - BY (Activity). Enter the three position aviation 3M ORG code of the activity completing the TD compliance, for example, AC7.

Block D (2) - DATE. Enter the YYMMDD date the TD was incorporated.

Block E - SIGNATURE. A person having logbooks/records signature authority will sign this block.

Page Three (Figure 5-40)

SECTION VI - IDENTIFICATION DATA

Block A - PART NUMBER. Enter the part number of the module. (Same as Section I.)

Block B - SERIAL NUMBER. Enter the serial number of the module. (Same as Section I.)

Block C - TYPE / MODEL / SERIES. Enter the T/M/S of the module. (Same as Section I.)

SECTION VII - REPAIR / REWORK / EXCEEDANCE

Block A - DATE. Enter the YYMMDD date the repair, rework, or exceedance was accomplished.

Block B - ACTIVITY. Enter the three position aviation 3M ORG code of the activity accomplishing the repair, rework, or exceedance, for example, WC8. D-level include one of the following action taken codes that best describes the action that was taken:

A - Check/test

C - Repair/rework/SDLM/PDM

D - Modified

H - Overhaul

N - New

9 - Condemned

Block C - DESCRIPTION. Give a concise narrative of the repair or rework action. For exceedance, enter the type and level along with any other appropriate additional information to describe the event.

Block D - SIGNATURE. A person having logbooks and records signature authority will sign this block. At D-level the certification or verification device, as applicable, will satisfy the COs signature requirement.

SECTION VIII - INSPECTION RECORD

Block A - TYPE AND DESCRIPTION OF INSPECTION. Enter the type and description of the inspection that affects the module.

Block B - REFERENCE. Identify the document directing the inspection, for example, message originator and DTG, MRCs.

Block C - DATE COMPLETED. Enter the YYMMDD date the inspection was completed.

Block D - ACTIVITY. Enter the three position aviation 3M ORG code of the activity performing the inspection, for example, WC8.

Block E - SIGNATURE. A person having logbook/records signature authority will sign this block. At D-level the certification or verification device, as applicable, will satisfy the COs signature requirement.

SECTION I PRESERVATION/DEPRESERVATION

Block A - DATE. Enter the YYMMDD date of the preservation.

Block B - ACTIVITY. Enter the three position aviation 3M ORG code of the activity performing the inspection, for example, WC8.

Block C - TYPE. Enter the type of preservation accomplished, for example, Level III.

Block D - REFERENCE. Identify the COMNAVAIRSYSCOM or major command document directing the preservation.

Block E - REPRESERVE DUE. Indicate the YYMMDD date the represervation is due. When represervation is not required, leave blank.

Block F - DATE. Enter the YYMMDD date the depreservation is accomplished.

Block G - ACTIVITY. Enter the three position aviation 3M ORG code of the activity performing the inspection, for example, WC8.

Page Four (Figure 5-41)

SECTION X - MISCELLANEOUS/HISTORY

Block A - DATE. Enter the YYMMDD date of the entry.

Block B - REMARKS. This section is used to record pertinent information for which no other place has been provided. When equipment is exposed to large quantities of salt water, fire extinguishing agents, or other corrosive elements, an entry will be made on this form, including a description of the decontamination and approximate time between exposure and completion of decontamination. See paragraph 5.2.1.17 for additional situations that may require a Miscellaneous/History entry in this block.

To aid in determining repair or rework requirements of modules following rejection, it is imperative activities rejecting modules, separated from a propulsion system, document completely the reasons for, and the nature of the rejection. For example, a simple entry such as overtemp is not sufficient. The text must also include information on the degree of overtemp, length of overtemp, and the circumstances under which it occurred, for example, start, in-flight, shutdown, ground run-up, and corrective measures taken.

Activities transferring modules that are not a part of a propulsion system will annotate this section with the YYMMDD, reason for transfer, activity transferred to, JCN, star/status code, and (if applicable) the shipping document number.

All entries will require an authorized signature and the three position aviation 3M ORG code of the activity, for example, AC7.

5.2.1.28 Assembly Service Record (OPNAV 4790/106A)

a. General Information

An ASR (Figure 5-42) is a two page form to track data on assemblies. Candidates for an ASR are items with rework or overhaul life limits and subassemblies designated to be removed and discarded.

b. Initiation and Reconstruction Procedure.

(1) Initiation of an ASR for components installed on or delivered with aeronautical equipment, for example, components installed on aircraft and engines as part of a DOD contract, is the responsibility of the activity accepting the equipment for the DON. When components are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

(2) Initiation of the original ASR for a new component delivered without an ASR is the responsibility of the requisitioning activity.

(3) Loss of an ASR. The CMIS Repository at COMNAVAIRSYSCOM (AIR-6.8.4.3) has the responsibility to determine the required course of action under these circumstances. To enable accurate reconstruction, the repository will receive copies of all found and cancelled ASRs updated records after standard rework and repair , and copies of all ASRs generated for new items. Requests to CMIS for information regarding ASRs may be made by telephone (DSN 757-8883 or COMM (301) 757-8883), on the Web site (http://www.navair.navy.mil/logistics/CMIS) or by naval message or letter.

NOTE: Activities that have converted to the Aircraft Component Tracking System (ACTS) do not have to mail copies to CMIS. All ASRs will be maintained within ATCS.

(4) Upon completion of depot rework of an item with an ASR, the depot must forward a copy of the updates ASR to the CMIS Repository. This includes assemblies repaired or reworked individually or concurrently as part of the aircraft PDM process. The original ASR will be securely attached to the assembly being returned to the supply system or inserted in the logbook, AESR, or MSR (as applicable).

(5) When an ASR is no longer needed due to a change in the PMIC, reporting custodians will forward affected ASRs to the CMIS Repository for purging of the master file. The PMIC change authorizing deletion must be annotated on the ASR in Section VI Repair, Rework, Overhaul, or Exceedances.

c Consolidation Procedures. ASRs will be consolidated by the repairing activity upon completion of first-degree repair or rework. ASRs will also be consolidated at any maintenance level when no space is available for further entries within any one section. The original ASR and a copy of the ASR will be forwarded to: CMIS REPOSITORY, ATTN AIR-6.8.4.3 BLDG 448 STE 001B, NAVAIRSYSCOMHQ, 47060 MCLEOD RD UNIT 8, PATUXENT RIVER MD 20670-1626. Minimum requirement for consolidation:

SECTION I - IDENTIFICATION DATA. All entries are required.

SECTION II - COMPONENTS

Transcribe all data for subcomponents that were not changed during the repair process. Enter the removal date for any subcomponents changed during the repair process on the original ASR and enter the installation information for the newly installed subcomponents on the new ASR.

NOTE: When consolidating the ASR upon completion of first-degree repair or rework, the date of install, TSN, and Replacement Due times for subcomponents that were NOT replaced during repair/rework will be transcribed from the original ASR.

SECTION III - INSTALLATION DATA and SECTION IV - REMOVAL DATA

Recalculate the existing entries to verify they are correct. If a correction is required, refer to paragraph 5.2.1.6 for correction procedures.

If the assembly is installed in aircraft or equipment at the time of consolidation, record the last installation action. No entry is required in the removal section.

If the assembly is not installed in aircraft or equipment at the time of consolidation, record the last installation and the corresponding removal action.

SECTION V - TECHNICAL DIRECTIVES

Use block entries to document previously incorporated TDs, to include “not applicable” (NA) TDs. A separate block entry is required for each type of TD, (AVC, PPB, etc.) and status (PINC, NA, etc.). Block entries are recorded as follows:

Block A (1) - CODE. Enter the TD code. Example: 50 for AFC.

Block B - STATUS. Enter PINC (previously incorporated) or NA (not applicable).

Block C - TITLE/REMARKS. Enter the basic numbers and associated revisions, amendments, and parts.

Block D - COMPLIANCE. Enter the aviation 3M ORG code of the activity consolidating the ASR and the YYMMDD date the ASR was consolidated.

Block E - SIGNATURE. Enter the word "CONSOLIDATED" indicating this entry is a result of ASR consolidation.

NOTES: 1. Block entries do not indicate the activity that actually incorporated the TDs. Block entries signify the TDs had been previously incorporated.

2. All incorporated TD numbers (001, 002, etc.) must be listed in the TITLE/REMARKS block. A blanket statement that all TDs up to a specific basic have been incorporated is not authorized.

3. Applicable TDs that were incorporated or removed during the repair or rework process will not be included in a block entry. These TDs must have separate line entries and be documented per paragraph 5.2.1.16.

SECTION VI - REPAIR/REWORK/OVERHAUL/EXCEEDANCES

If the component is life limited with no secondary time/cycle requirement, for example, C-6000 - Retire, transcribe the last repair action.

If the component is life limited and has a secondary time or cycle requirement, for example, T-700-Retire and T-100-NDT/I, transcribe the last secondary requirement action and the last repair action. This will be one entry if the last repair action was the secondary requirement action.

If the component has an overhaul with no secondary time or cycle requirement, for example, C-2000-Overhaul, transcribe the last overhaul and the last repair action. This will be one entry if the last repair action was an overhaul.

If the component has an overhaul and a secondary time or cycle requirement, for example, U-36-Overhaul, and D-244-IMA Inspection, the last action for both requirements must be entered. If the last action is an overhaul, only the overhaul action will be entered.

Upon completion of consolidation, make an entry in the Repair/Rework/Overhaul/Exceedances Section stating "ASR CONSOLIDATED, all entries are certified to be correct" with the YYMMDD date of card consolidation and the aviation 3M ORG code of the activity consolidating the ASR. This entry requires a signature.

d. Specific ASR Documentation:

ASR (Front) (Figure 5-42)

_____ ASSEMBLY SERVICE RECORD (title line) - Indicates the type of assembly, for example, "COMPRESSOR ROTOR ASSEMBLY SERVICE RECORD", or "POWER TURBINE ASSEMBLY SERVICE RECORD".

REPLACEMENT DUE, REPLACEMENT INTERVAL, and TIME REMAINING - These blocks are used to record replacement due (equipment hours or counts at which the assembly must be removed from service for maintenance), replacement interval as stipulated by the PMIC, and time remaining on the complete assembly. This information provides a reference for determining scheduled maintenance requirements. Figure 5-43 provides procedures for determining replacement due and time remaining entries. Replacement block entries will be made in pencil and must be updated each time the card is updated or the assembly is installed in an end item.

SECTION I - IDENTIFICATION DATA

Block A - PART NUMBER. Enter the part number of the complete assembly.

Block B - SERIAL NUMBER. Enter the serial number of the complete assembly.

Block C - WORK UNIT CODE. Enter the WUC of the complete assembly.

Block D - FST. Enter the ISSC responsible for the complete assembly.

Block E - CAGE. Enter the five digit CAGE code for the complete assembly.

SECTION II - COMPONENTS. This section lists each life limited and forced removal subassembly. Maximum hours/counts expended on any subassembly is the controlling factor for removing the assembly. Hours for engine discs or blades that have not been replaced since new or during the current rework will be determined by total accumulated engine time in Section IV. Hours for discs or blades replaced during a rework will be determined by computing actual operating hours expended since last replacement.

Block A - NOMENCLATURE. Enter the nomenclature of the subassembly.

Block B - P/N. Enter the part number of the subassembly.

Block C - S/N. Enter the serial number of the subassembly.

Block D - COMPONENT TIME OR COUNTS (TSN, METER, LCF). This block contains six columns used to record subassembly component installation and removal dates and information about the service life accumulated on the component. The first column of this block is labeled DATE INST (date the component was installed), and the sixth column is labeled DATE RMVD (date the component was removed). Use the standard date (YYMMDD) when completing the DATE INST and DATE RMVD columns.

The four center columns are used for data about the service life of the component. Columns for components with monitoring systems installed are labeled as required, for example, LCF1, LCF2, and TTI. For components without monitoring systems installed, label the second through fourth columns as follows: Assembly TSN; Component TSN; and Component TSO. Enter the hours or counts in whole numbers of the item being recorded, preceded by the appropriate time/cycle prefix code. If the TSN is unknown, enter the TSO and label the column.

Block E – COMPONENT INTERVAL/REPLACEMENT DUE. These blocks record the replacement interval and replacement due times stipulated by the PMIC. This information provides a reference for determining scheduled maintenance requirements. Figure 5-43 provides procedures for replacement due entries. Entries will be made in pencil and must be updated each time the component is installed.

NOTE: All Section II entries must be updated whenever the assembly is repaired or overhauled and when the card is consolidated. The date of install and all section II assembly and subcomponent hours at install will be transcribed from original installation data.

SECTION III - INSTALLATION DATA

Block A - DATE. Enter the YYMMDD date that the assembly was installed on an aircraft or equipment.

Block B - BUNO/SERIAL INSTALLED ON. Enter the BUNO of the aircraft, or the SERNO of the equipment on the assembly is installed on.

Block C - BY (Activity). Enter the three position aviation 3M ORG code of the activity installing the assembly, for example, AT1.

Block D - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter hours or counts (whole numbers only) preceded by the appropriate time/cycle code of the aircraft/equipment on which the assembly is being installed (TSN). Uncaptioned columns have been provided for aircraft or equipment that have monitoring systems installed and may be labeled as required, for example, ELCF, LCF, or EOT. Aircraft or equipment without monitoring systems will use first column only.

Block E - ASSEMBLY HOURS OR COUNTS. Enter hours/counts (whole numbers only) preceded by the appropriate time/cycle code since new and overhauled/reworked. Uncaptioned columns have been provided and will be labeled with the appropriate information required, for example, TSN, TSO, LCF, or EOT. When entering data for new material, the entry in the TSO column will be NEW. When total hours or counts since new is unknown, the entry in the TSN column will be UNK.

ASR (Back) (Figure 5-42)

SECTION IV - REMOVAL DATA

Block A - DATE. Enter the YYMMDD date that the assembly was removed.

Block B - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter the hours or counts (TSN), in whole numbers only, of the aircraft or equipment the assembly was removed from. The TSN will be preceded by the appropriate time or cycle code listed in Appendix E. The four unlabeled columns are used for aircraft or equipment that have monitoring systems installed. The columns will be labeled as required per the PMIC, for example, LCF, ELCF, or EOT. Aircraft or equipment without monitoring systems will use the first column only.

Block C - ASSEMBLY HOURS OR COUNTS. Subtract the total aircraft/equipment hours or the counts at installation from total aircraft/equipment hours or counts at removal. Add to the total hours or the count on the assembly at installation and enter in the appropriate columns preceded by the appropriate time/cycle code. Label the columns as required.

Block D - REASON FOR REMOVAL AND JOB CONTROL NUMBER. Enter the reason for removal and JCN from the WO or MAF that documented the removal of the assembly from the aircraft or equipment.

SECTION V - TECHNICAL DIRECTIVES

Block A - TECHNICAL DIRECTIVE IDENTIFICATION

Block A (1) - CODE. Enter TD code.

Block A (2) - BASIC. Enter the TD basic number.

Block A (3) - INT. If an interim TD, enter "I"; if not, leave blank.

Block A (4) - REV. Enter the revision letter (if applicable).

Block A (5) - AM. Enter the numerical amendment number (if applicable).

Block A (6) - PT. Enter the numerical TD part number, for example, part-02 (if applicable).

Block A (7) - KIT. Enter the kit number. Enter 00 if no kit is required.

Block A (8) - PRI. Enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose (as applicable).

Block B - STATUS. Enter the code corresponding to the status of the TD. No status codes other than those prescribed will be entered on the ASR. Code descriptions and instructions are in paragraph 5.2.1.16a(6)(l).

Block C - TITLE/REMARKS. Enter the title and a brief description of the TD.

Block D - COMPLIANCE

Block D (1) - BY (Activity). Enter the three position aviation 3M ORG code of the activity complying with the TD, for example, AT1.

Block D (2) - DATE. Enter the YYMMDD date the TD was incorporated.

Block E - SIGNATURE. A person having logbook and records signature authority must review the entry and sign this block. For D-level the certification or verification device will satisfy the signature requirement.

SECTION VI - REPAIR/REWORK/OVERHAUL/EXCEEDANCES

Block A - DATE. Enter the YYMMDD date the repair/rework/overhaul was completed or exceedance occurred.

Block B - ACTIVITY. Enter the three position aviation 3M ORG code of the activity accomplishing the repair/rework/overhaul or exceedance, for example, D97. D-level activities must include one of the following codes that best describes the action taken:

A - Check/test

C - Repair/rework/SDLM/PDM

D - Modified

H - Overhaul

N - New

9 - Condemned

Block C - DESCRIPTION. Indicate whether the item has been repaired, reworked, or overhauled and a concise narrative of the maintenance performed. Exceedances of operational limitations must be logged. Enter the assembly TSN and TSO/TSR (if applicable).

Block D - SIGNATURE. A person having logbooks and records signature authority must review the entry and sign this block. For D-level, the certification or verification device will satisfy the signature requirement.

5.2.1.29 Equipment History Record (EHR) Card (OPNAV 4790/113)

a. General Information.

(1) An EHR card (Figures 5-45 and 5-46) is a two page form that provides a method of monitoring specific maintenance data on designated aeronautical components and equipment that do not qualify for an SRC card.

(2) This record provides the means of recording maintenance history on designated items. An individual EHR card is maintained for each serialized item as part of the aircraft logbook, AESR, or MSR while the component is installed. When the component is removed from the aircraft or equipment, the EHR card will be attached to and accompany the component to its final destination.

(3) EHR cards that pertain to items constantly being removed and installed for the purpose of aircraft mission configuration, such as multiple ejector racks and triple ejector racks, may be maintained within the respective division having custody of the mission configuration items. Aircraft logbook and AESR Inventory Record entries are not required.

(4) EHR card items are designated by the ISSC when it is determined they require special emphasis in monitoring and trending of failure data, for example, QECK, armament equipment, or on-condition items. On-condition items are those items which require scheduled inspections, tests, or measurements to determine whether an item is in, or will remain in, a satisfactory condition until the next scheduled inspection, test, or measurement. The list of current items requiring an EHR card is published within the applicable PMICs.

(5) EHR card initiation for components installed on or delivered with major aeronautical equipment, for example, aircraft and engines as part of a DOD contract, shall be the responsibility of the activity accepting such major equipment for the DON. When these components are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

(6) When EHR card requirements are not included in the Navy contract, EHR card initiation for new components drawn from the Navy supply system shall be the responsibility of the requisitioning activity.

(7) When the ISSC has determined an item is to be monitored, they will issue implementation instructions via the respective ACC and revise the applicable PMIC. The end item user will then initiate the EHR.

(8) When an EHR card becomes lost or mutilated, the activity having current custody shall initiate a new card, and all available information shall be transcribed to the new EHR card. When an EHR card contains no space for additional entries, a new card is prepared per consolidation procedures below.

(9) Loss of an EHR card does not render the item unusable. However, it is important for the ISSC to be able to monitor the history of EHR card designated items. To accomplish this, an EHR repository has been established at the ISSC. Cancelled EHR cards, copies of updated EHR cards after off-site standard rework and copies of all newly generated EHR cards must be forwarded to the appropriate ISSC for the equipment/component. The appropriate ISSC will respond to all requests for information regarding a particular EHR card item. The request for this data may be made by telephone, message, or letter consistent with the priority of the requirement for the information. If it can be determined that the component is in fact new, newly repaired, or reworked, an EHR card will be initiated upon receipt by the requisitioning activity prior to installation. If the above determination cannot be made, the ISSC should be contacted and requested to provide historical data or guidance. To enhance the ability to reconstruct an EHR card, the following procedures will be followed to support the ISSC repository:

(a) Once the EHR card is reconstructed, if the maintenance history was derived from other than an ISSC, a copy will be forwarded to the appropriate ISSC to ensure continuity of the component's maintenance history.

(b) For components with an AT code BCM 9, the EHR card shall be annotated BCM 9 in the reason for removal column and the EHR card forwarded to the ISSC repository. This will serve to purge the repository of records for that serialized component.

(c) When notified that EHR cards are no longer required via official correspondence or change to the applicable PMIC, reporting custodians will remove and forward the affected cards to the ISSC repository for purging of the master file. The deletion authorization must be annotated on the EHR.

(d) Upon completion of any maintenance performed on removed designated EHR card components at the D-level, the EHR card reflecting the current status of the component will be copied and the copy forwarded to the ISSC repository. The original EHR card will then be securely attached to the component, if that component is returned to the supply system, the EHR card is inserted in the logbook, AESR, or MSR, whichever is applicable.

b. Consolidation Procedures. Cards may be consolidated at any maintenance level when no space is available for further entries within any one section. The following directions are the minimum requirements to be used when consolidating:

SECTION I - IDENTIFICATION DATA. All entries are to be completed.

SECTION II - INSTALLATION DATA and SECTION III - REMOVAL DATA

Recalculate the existing entries to ensure accuracy. If a correction is required, refer to paragraph 5.2.1.6 for correction procedures.

If the component is installed at the time of consolidation, record the last installation action on the new card. No entry is required in the removal section.

If the component is not installed at the time of consolidation, record the last installation and the corresponding removal action on the new card.

SECTION IV - MAINTENANCE RECORD. For on-condition EHRs, transcribe the last entry of the maintenance record.

SECTION V - INSPECTION RECORD. Transcribe the last inspection entry to the new card.

SECTION VI - TECHNICAL DIRECTIVES

Use block entries to document previously incorporated TDs, to include "not applicable" (NA) TDs. A separate block entry is required for each type of TD, (AVC, PPB, etc.) and status (PINC, NA, etc.). Block entries are recorded as follows:

Block A (1) - CODE. Enter the TD code.

Block B - STATUS. Enter PINC indicating previously incorporated.

Block C - TITLE/REMARKS. Enter the basic numbers and associated revisions, amendments, and parts.

Block D - COMPLIANCE. Enter the aviation 3M ORG code of the activity consolidating the card and the YYMMDD date the card was consolidated.

Block E - SIGNATURE. Enter the word "CONSOLIDATED" indicating this entry is a result of card consolidation.

Block entries do not indicate the activity that actually incorporated the TDs. They signify the TDs had been previously incorporated.

All applicable incorporated TD numbers must be listed in the TITLE/REMARKS block. A blanket statement indicating that all TDs up to a specific basic have been incorporated is not authorized.

Applicable TDs that have not been incorporated or have been removed must have separate line entries and be documented per paragraph 5.2.1.16.

TDs incorporated during the card consolidation effort and not documented on the original card must have a separate line entry on the consolidated form.

Upon completion of card consolidation, make an entry in the MAINTENANCE RECORD Section with a YYMMDD date indicating the date of card consolidation, the aviation 3M ORG code of the activity consolidating the card, and the statement, "CARD CONSOLIDATED, all entries are certified to be correct". This entry requires a signature. The original EHR card and a copy of the new card will be forwarded to the ISSC.

c. Purging. Upon completion of first-degree repair or rework the EHR card will be consolidated. A new EHR card will be initiated if no additional space remains for entries. A copy of the EHR card will be forwarded to the applicable ISSC repository.

d. Specific Documentation:

EHR Card (Front) (Figure 5-45)

SECTION I - IDENTIFICATION DATA

Block A - NOMENCLATURE. Enter the nomenclature of the item.

Block B - WORK UNIT CODE. Enter the WUC of the item.

Block C - FSCM. Enter the five-digit CAGE code.

Block D - REPLACEMENT INTERVAL. Enter the hours, days, counts, etc., after which the component must be removed and replaced (if applicable); otherwise enter "ON-CONDITION". This entry is made in pencil.

Block E - MAINTENANCE DUE. This block is used to remind the custodian when the installed component removal is due per its time cycle requirement. The entry is computed when the component is installed and indicates the total count, hours, starts, rounds, or days, that will be against the end item when the installed component reaches its interval requirements. For example, a component with a 200 hours interval installed on an aircraft with 1287 flight hours will have a 1487 flight hour entry in the block. Entries in this block are made in pencil.

Block F - PART NUMBER. Enter the part number of the item.

Block G - SERIAL NUMBER. Enter the serial number of the item.

Block H - FST. Enter the ISSC responsible for the item.

Block I - REFERENCE. Using a pencil, enter PMIC or technical manual that directs creation of the EHR for the item.

NOTE: For AAE, enter the applicable technical manual.

SECTION II - INSTALLATION DATA

Block A - DATE. Enter the YYMMDD date that the item is installed.

Block B - BUNO/SERNO INSTALLED ON. Enter the BUNO of the aircraft, or the SERNO of the equipment on which the item is being installed.

Block C - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code of the aircraft/equipment on which the item is being installed (TSN). Uncaptioned columns are provided for aircraft/equipment that have monitoring systems installed and may be labeled as required, for example, LCF, ELCF, EOT. Aircraft/equipment without monitoring systems will use the first column only.

Block D - TOTAL HOURS OR COUNTS ON ITEM. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code since new and repaired/reworked. Uncaptioned columns have been provided and will be labeled with the appropriate information required, for example, TSN, TSO, TSR, LCF, or EOT. When entering data for new material, the entry in the TSO/TSR column will be NEW. When the total hours or counts since new is not known, the entry in the TSN column will be unknown (UNK).

SECTION III - REMOVAL DATA

Block A - DATE. Enter the YYMMDD date that the item is removed.

Block B - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code of the aircraft/equipment from which the item is being removed (TSN). Uncaptioned columns are provided for aircraft/equipment that have monitoring systems installed and may be labeled as required, for example, LCF, ELCF. Aircraft/equipment without monitoring systems will use the first column only.

Block C - TOTAL HOURS OR COUNTS ON ITEM. Subtract the total aircraft/equipment hours or counts at installation from the total aircraft/equipment hours or counts at removal. Add to the total count on the item at installation and enter in the appropriate columns preceded by the appropriate time/cycle code. Label columns as required.

Block D - REASON FOR REMOVAL AND JOB CONTROL NUMBER. Enter the reason for removal and JCN from the applicable MAF.

SECTION IV - MAINTENANCE RECORD

Block A - DATE. Enter the YYMMDD date the maintenance is performed.

Block B - ACTIVITY. Enter the three position aviation 3M ORG code of the activity performing the maintenance, for example, WC8. D-level include one of the following codes that best describes the action that was taken:

A - Check/test

C - Repair/rework/SDLM/PDM

D - Modified

H - Overhaul

N - New

9 - Condemned

Block C - REMARKS AND MAJOR PARTS REPLACED. Detail the action and major parts replaced with reason for removal. Enter the items TSN and TSO/TSR (if applicable).

Block D - SIGNATURE. A person having logbooks/records signature authority will sign this block.

EHR Card (Back) (Figure 5-46)

SECTION V - INSPECTION RECORD

Block A - TYPE AND DESCRIPTION OF INSPECTION. Enter the type and description of the inspection that affects the equipment/component.

Block B - REFERENCE. Identify the document directing the inspection, for example, message originator and DTG or the IRAC and publication number.

Block C - DATE COMMENCED. Enter the YYMMDD date the inspection began.

Block D - DATE COMPLETED. Enter the YYMMDD date the inspection was completed.

Block E - ACTIVITY. Enter the three position aviation 3M ORG code of the activity performing the inspection, for example, AC7.

Block F - SIGNATURE. A person having logbook/records signature authority will sign this block. The certification or verification device (as applicable) will satisfy the COs signature requirement.

SECTION VI - TECHNICAL DIRECTIVES

Block A - TECHNICAL DIRECTIVE IDENTIFICATION

Block A (1) - CODE. Enter the TD code.

Block A (2) - BASIC. Enter the TD basic number.

Block A (3) - INT. If an interim TD, enter "I"; if not, leave blank.

Block A (4) - REV. Enter the revision letter (if applicable).

Block A (5) - AM. Enter the numerical amendment number (if applicable).

Block A (6) - PT. Enter the numerical TD part number, for example, part - 02 (if applicable).

Block A (7) - KIT. Enter the kit number, enter 00 if no kit is required.

Block A (8) - PRI. Enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose (as applicable).

Block B - STATUS. Enter the code indicating the status of the TD. No status codes other than those prescribed shall appear on the EHR nor shall any code be used for other than its intended meaning. Code descriptions and instructions are in paragraph 5.2.1.16a(12).

Block C - TITLE/REMARKS. Enter the title and a brief description of the TD.

Block D - COMPLIANCE

Block D (1) - BY (Activity). Enter the three position aviation 3M ORG code of the activity complying with the TD, for example, AT1.

Block D (2) - DATE. Enter the YYMMDD date the TD was incorporated.

Block E - SIGNATURE. A person having logbook/records signature authority will sign this block. The certification or verification device, as applicable, will satisfy the COs signature requirement.

5.2.1.30 Scheduled Removal Component Card (OPNAV 4790/28A)

a. General Information.

(1) The SRC card (Figures 5-47 and 5-48) is a two page form used to record maintenance history, installation, and usage data. It is maintained as part of the logbook, AESR, or MSR as long as the component is installed. When the component is removed from the aircraft or equipment, the SRC card accompanies the component. Continuity of this maintenance history is paramount.

(2) SRC card initiation for components installed on or delivered with major aeronautical equipment, for example, aircraft and engines as part of a DOD contract, shall be the responsibility of the activity accepting such major equipment for the DON. When these components are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

(3) When SRC card requirements are not included in the Navy contract, SRC card initiation for new components drawn from the Navy supply system shall be the responsibility of the requisitioning activity.

(4) When an SRC card becomes lost or mutilated, the activity having current custody shall initiate a new card. All information shall be transcribed to the new card. When an SRC card contains no space for additional entries, a new card is prepared per consolidation procedures below. The original SRC card and a copy of the new card will be forwarded to: CMIS REPOSITORY, ATTN AIR-6.8.4.3 BLDG 448 STE 200B, NAVAIRSYSCOMHQ, 47060 MCLEOD RD UNIT 8, PATUXENT RIVER MD 20670-1626.

(5) Loss of an SRC can cause the loss of the assembly as an RFI asset. Therefore, it is extremely important to be able to reconstruct the assembly's history to determine the necessary course of action when the SRC is not available. The CMIS Repository at COMNAVAIRSYSCOM (AIR-6.8.4.3) has the responsibility to determine the required course of action under these circumstances. To enable the repository to accomplish this responsibility, it must receive misplaced and cancelled SRCs; copies of all updated records after off-site standard rework and repair and copies of all new SRCs generated for new SRC items. The CMIS Repository will respond to all requests for information regarding SRCs. The request for data may be made by telephone (DSN 757-8883 or COMM (301) 757-8883), on the Web (http://www.navair.navy.mil/logistics/CMIS), or message or letter consistent with the priority of the requirement for the information.

b. Consolidation Procedures. Cards may be consolidated at any maintenance level when no space is available for further entries within any one section. The following directions are the minimum requirements to be used when consolidating:

SECTION I - IDENTIFICATION DATA SECTION. All entries are to be completed.

SECTION II - INSTALLATION DATA and SECTION III - REMOVAL DATA

Recalculate the existing entries to ensure correctness. If a correction is required, refer to paragraph 5.2.1.6 for correction procedures.

If the component is installed at the time of consolidation, record the last installation action on the new card. No entry is required in the removal section.

If the component is not installed at the time of consolidation, record the last installation and the corresponding removal action on the new card.

SECTION IV - TECHNICAL DIRECTIVES

Use block entries to document previously incorporated TDs, to include "not applicable" (NA) TDs. A separate block entry is required for each type of TD, (AVC, PPB, etc.) and status (PINC, NA, etc.). Block entries are recorded as follows:

Block A (1) - CODE. Enter the TD code.

Block B - STATUS. Enter PINC indicating previously incorporated.

Block C - TITLE/REMARKS. Enter the basic numbers and associated revisions, amendments, and parts.

Block D - COMPLIANCE. Enter the aviation 3M ORG code of the activity consolidating the card and the YYMMDD date the card was consolidated.

Block E - SIGNATURE. Enter the word "CONSOLIDATED" indicating this entry is a result of card consolidation.

Block entries do not indicate the activity that actually incorporated the TDs. They signify the TDs had been previously incorporated.

All applicable incorporated TD numbers must be listed in the Title/Remarks block. A blanket statement indicating that all TDs up to a specific basic have been incorporated is not authorized.

Applicable TDs that have not been incorporated or have been removed must have separate line entries and be documented per paragraph 5.2.1.16.

TDs incorporated during the card consolidation effort and not documented on the original card must have a separate line entry on the consolidated form.

SECTION V - REPAIR/REWORK/OVERHAUL

If the component is a life limited item with no secondary time/cycle requirement, for example, C-6000-Retire, transcribe the last repair action.

If the component is a life limited item and has a secondary time/cycle requirement, for example, T-700-Retire and T-100-NDT/I, transcribe the last secondary requirement action and the last repair action. This may be one entry if the last repair action was the secondary requirement action.

If the component has an overhaul with no secondary time/cycle requirement, for example, C-2000-Overhaul, transcribe the last overhaul and the last repair action. This may be one entry if the last repair action was an overhaul.

If the component has an overhaul and a secondary time/cycle requirement, for example, U-36-Overhaul and D-244-IMA Insp, the last action for both requirements must be entered. If the last action is an overhaul, only the overhaul action need be entered.

Upon completion of card consolidation, make an entry in the Repair/Rework/Overhaul Section with a YYMMDD date indicating the date of card consolidation, the aviation 3M ORG code of the activity consolidating the card, and the statement, "CARD CONSOLIDATED, all entries are certified to be correct." This entry requires a signature.

c. Purging. Upon completion of first-degree repair or rework the SRC card will be consolidated. A new SRC card will be initiated if no additional space remains for entries. A copy of the SRC card will be forwarded to the CMIS Repository.

d. Specific Documentation:

SRC Card (Front) (Figure 5-47)

SECTION I - IDENTIFICATION DATA

Block A - NOMENCLATURE. Enter the nomenclature of the item.

Block B - WORK UNIT CODE. Enter the WUC.

Block C - FSCM. Enter the five-digit CAGE code of the item.

Block D - REPLACEMENT INTERVAL. Enter the hours, days, counts, etc. interval after which the component must be removed and replaced. This entry is made in pencil.

Block E - REPLACEMENT DUE. This entry is computed when the item is installed. It reflects the total count (whole numbers only), such as hours, starts, landings, engine monitoring system counts, on the aircraft or equipment, or the YYMMDD when it must be replaced. Replacement due equals total aircraft/equipment hours or counts plus replacement interval, minus hours or counts on the item at installation. For example, a 500 hour replacement interval item with 200 hours since overhaul installed on an aircraft with 795 hours (total aircraft hours), will have an entry of 1095 hours in the Replacement Due Block. This entry is made in pencil.

Block F - PART NUMBER. Enter the part number.

Block G - SERIAL NUMBER. Enter the serial number of the item.

Block H - FST. Enter the applicable ISSC.

SECTION II - INSTALLATION DATA

Block A - DATE. Enter the YYMMDD date the item is installed.

Block B - BUNO/SERNO INSTALLED ON. Enter the BUNO of the aircraft, or the SERNO of the equipment on which the item is being installed.

Block C - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code of the aircraft/equipment on which the item is being installed, TSN. Uncaptioned columns are provided for monitoring systems and may be labeled as required, for example, LCF, ELCF, EOT. Aircraft/equipment without monitoring systems will use the first column only.

Block D - TOTAL HOURS OR COUNTS ON ITEM. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code since new and overhauled/reworked. Uncaptioned columns have been provided and will be labeled with the appropriate information required, for example, TSN or TSO. When entering data for new material, the entry in the TSO column will be

NEW. When the total hours or counts since new is not known, the entry in the TSN column will be UNK.

SECTION III - REMOVAL DATA

Block A - DATE. Enter the YYMMDD date the item is removed.

Block B - TOTAL AIRCRAFT/EQUIPMENT HOURS OR COUNTS. Enter the hours/counts (whole numbers only) preceded by the appropriate time/cycle code of the aircraft/equipment from which the item is being removed, TSN. Uncaptioned columns are provided for aircraft/equipment that have monitoring systems installed and may be labeled as required, for example, LCF, ELCF, EOT. Aircraft/equipment without monitoring systems will use the first column only.

Block C - TOTAL HOURS OR COUNTS ON ITEM. Subtract total aircraft/equipment hours or counts at installation from total aircraft/equipment hours or counts at removal. Add to total hours or count on item at installation and enter in the appropriate columns preceded by the appropriate time/cycle code. Label columns as required.

Block D - REASONS FOR REMOVAL AND JOB CONTROL NUMBER. Enter the reason for removal and JCN from the MAF that documented the removal of the item.

SRC Card (Back) (Figure 5-48)

SECTION IV - TECHNICAL DIRECTIVES

Block A - TECHNICAL DIRECTIVE IDENTIFICATION

Block A (1) - CODE. Enter the TD code.

Block A (2) - BASIC. Enter the TD basic number.

Block A (3) - INT. If an interim TD, enter "I"; if not, leave blank.

Block A (4) - REV. Enter the revision letter (if applicable).

Block A (5) - AM. Enter the numerical amendment number (if applicable).

Block A (6) - PT. Enter the numerical TD part number, for example, part - 02 (if applicable).

Block A (7) - KIT. Enter the kit number, enter 00 if no kit is required.

Block A (8) - PRI. Enter I for Immediate, U for Urgent, R for Routine, or K for Record Purpose (as applicable).

Block B - STATUS. Enter the code indicating the status of the TD. No status codes other than those prescribed shall appear on the SRC nor shall any code be used for other than its intended meaning. Code descriptions and instructions are in paragraph 5.2.1.16a(12).

Block C - TITLE/REMARKS. Enter the title and a brief description of the TD.

Block D - COMPLIANCE

Block D (1) - BY (Activity). Enter the three position aviation 3M ORG code of the activity complying with the TD, for example, AC7.

Block D (2) - DATE. Enter the YYMMDD date the TD was incorporated.

Block E - SIGNATURE. A person having logbook/records signature authority will sign this block. The certification or verification device, as applicable, will satisfy the COs signature requirement.

SECTION V - REPAIR/REWORK/OVERHAUL

Block A - DATE. Enter the YYMMDD date the repair/rework/overhaul was accomplished.

Block B - ACTIVITY. Enter the three position aviation 3M ORG code of the activity accomplishing the repair/rework/overhaul, for example, D97. D-level include one of the following codes that best describes the action that was taken:

A - Check/test

C - Repair/rework/SDLM/PDM

D - Modified

H - Overhaul

N - New

9 - Condemned

Block C - DESCRIPTION. Indicate whether the item has been repaired/reworked/overhauled and a concise narrative of the maintenance performed. Enter a one word description of the action taken corresponding to the action taken code used in the Activity Block. Enter the TSN and the TSO/TSR (if applicable) of the item. Enter a concise narrative of the maintenance performed.

Block D - SIGNATURE. A person having logbook/records signature authority will sign this block. The certification or verification device (as applicable), will satisfy the COs signature requirement.

5.2.2 Aircraft Flight and Summary Reporting Procedures

Accurate and timely submission of the monthly report of aircraft summary data (RECTYP 79) is the joint responsibility of the aircraft reporting custodian and the Type Wing or MAW.

5.2.2.1 Units based in CONUS.

(a) The SA/A must forward the RECTYP 79 data to arrive at the ACC not later than 2400 on the tenth calendar day of the month following the report month.

(b) If the submission deadline cannot be met, each reporting custodian must report via message using the format in Figure 5-49.

5.2.2.2 Units Based or Deployed Outside CONUS or Embarked on Deployed Ships.

(a) If able to forward RECTYP 79 data via email, the SA/A must email the data to AV3M.fct@navy.mil, not later than 2400 hours on the tenth calendar day of the month following the report month.

(b) If email is not possible the report must be submitted via message to reach the ACC not later than 2400 hours on the tenth calendar day of the month following the report month.

NOTE: If the Maint-2 is not received by the tenth day of the month, aircraft reporting custodians must, without further delay, verify local records and submit available flight and EIS and EOS data to the cognizant ACC using the format in Figure 5-49. When the SCIR-3 report is received, submit the SCIR data by the third working day after receipt using the correction format in Figure 5-50.

5.2.2.3 Aviation detachment without a SA/A:

(a) Forward all completed aviation 3M source documents, WO or MAFs, and Naval Aircraft Flight Records (OPNAV 3710/4) to the parent command SA/A. The parent command SA/A will process the detachment documents and review correct daily audit reports. Detachment source documents not received by in time for processing prior to monthly closeout will be processed separate with an away code of Z, during the next data submission cycle.

(b) Submit a monthly flight data message, using the format in Figure 5-51, to the parent command SA/A and info the ACC, on the first working day following the end of each reporting period. If the required the parent command will submit corrections to the RECTYP 79 data for the detachment.

NOTE: If SSCA support is lost prior to production of the monthly reports and RECTYP 79 data, reporting custodians will use local records to determine EIS and EOS hours and related flight data for each BUNO, and will report via message using the format in Figure 5-49.

5.2.2.4 Disestablished Units

Disestablishing units will submit a final report, in the format of Figure 5-51, of flight data occurring within the last month of operation. The message subject will state: "Final report. Unit disestablished on (date)". The message must be submitted to the ACC within 24 hours of unit disestablishment.

5.2.2.5 Corrections

If previously submitted aircraft summary data is found to be in error, the aircraft summary data must be resubmitted via message using the format in Figure 5-50.

5.2.2.6 Transfer of Aircraft Between Reporting Custodians

When an aircraft is in the custody of more than one activity during a report month, the last receiving aircraft reporting custodian is responsible for ensuring the total EIS and EOS hours reported by each activity for that BUNO balance, and do not exceed the total hours in the report period. When physical custody changes at the location of the receiving unit, the receiving unit must provide detailed flight and mission capability data in the aircraft arrival message in the format specified in Figure 5-52. The transferring activity will use this information to complete documents.

5.2.2.7 Naval Aircraft Flight Record (OPNAV 3710/4)

Entries on copies 2 and 3 of the form are made via carbon copy as the form is filled in. Extreme care must be exercised in separating the three copies to verify all entries are complete, legible, and otherwise ready for data entry. Illegible entries must be retraced using the first page as the data source. If data is missing, the originator will be contacted. Data requirements for each field of the Naval Aircraft Flight Record are specified in, paragraph 15.1.2.6 and OPNAVINST 3710.7.

5.2.3 Configuration Management Auto Log-Sets

5.2.3.1 Configuration Management Module

NOTES: 1. CM ALS will be the primary source of information for activities using NTCSS Optimized OMA/IMA NALCOMIS. The following paper logbook forms are not required to be kept in the aircraft logbook and may be disposed of per paragraph 5.2.1.9:

Monthly Flight Summary (OPNAV 4790/21A)
Equipment Operating Record (OPNAV 4790/31A)
Inspection Record (OPNAV 4790/22A)
Repair/Rework Record (OPNAV 4790/23A)

Miscellaneous History (OPNAV 4790/25A)
Preservation/Depreservation Record (OPNAV 4790/136A)
Structural Life Limits (OPNAV 4790/142)

2. At a minimum, the ALS for each BUNO must be saved weekly and kept on file for 2 weeks in XPS format on an external media source, for example, CD, DVD, or external hard drive. Refer to https://webnet.scn.spawar.navy.mil FAQ section or the CNAP Share portal for instructions on ALS items using XPS format.

a. The CM Module's function is a general-purpose life usage and serialized configuration tracking system. The CM Module's baseline data is modifiable only by the baseline data owner. CM supports multiple weapon system types, consisting of different equipment breakdowns maintained at various maintenance activities. CM tracks usage parameters and TD compliance, schedules WOs, and provides the capability to have an owner that may be different than the user of an item. CM shall support general classes of inventory using Assembly Cd, WUC, and specific classes of inventory using CAGE, P/N, NIIN, and cost. The CM Module shall have modifiable maintenance tasks and intervals. CM will be updated using the maintenance and flight module (MU, HUMS, SMART cards, etc) (O-level only) of Optimized NALCOMIS.

b. General features of CM for O-level, I-level, and D-level activities are:

(1) WAN Explorer displays site database servers of Navy and Marine Corps sites. These sites are separated into two groups: East Coast and West Coast. The TYCOM activities (AIMDs, squadrons, etc.) are tied together geographically.

(2) Group Explorer is used to receive and transfer aircraft and equipment. It is divided into two areas: The left side consists of the Inbox, Outbox, Sent (Items), and the organization (Primary) and its detachments. The right side consists of tabs or data pages displaying information for the selected organization or group in the tree view.

(3) Inventory Explorer provides the top to bottom breakdown of the aircraft, equipment, and components. The Inventory Explorer has the following tabs:

(a) Inventory. Inventory Details indicate if an aircraft, equipment, or component is RFI, non-RFI, or BCM by showing a red icon for non-RFI and BCM or green icon for RFI. Inventory Subcomponents list all classes and subclasses of equipment and components details for a T/M/S.

(b) Task. Enables the user to establish, view, or modify the identity, definition, and status of a selected task. This box has icons that allow the user to Create Tasks, View Task Properties, Determine Next Task Status, Suspend Task, Cancel Task, and Deconfigure Task (for completed TD tasks).

(c) Task Plans. Enables the user to enter changes to the Deadline Date and Scheduled Expenditure fields of a selected task plan. The top box has icons that allow the user to Create Task Plans, View Task Plan Properties, Cancel Task Plan, Activate Suspended Task Plan, Suspend Task Plan Step, and Complete Task Plan Step. The lower box has icons that allow the user to View Task Properties, Next Task Status, Defer Task, Suspend Task, and Cancel Task for a specific task.

(d) Usage Records. The Usage Records box provides the user a display list of usage records. For example, properties, delete, and current usage.

c. Right click functionality of CM:

(1) Configuration Update Worksheet allows the user to update the P/N, SERNO, and usage of inventory items.

(2) Logset Explorer displays historical information of an activity's aircraft and equipment.

(3) Relocate enables the user to relocate aircraft, assemblies, and components to an organization or detachment into the Outbox for transfer to another activity.

(4) Create Inventory allows the user to create aircraft and equipment inventory.

(5) Create Component allows the user to create a component to add a serialized component in the database for processing through a repair cycle.

(6) Delete Inventory allows the user to delete aircraft, equipment, and component inventories.

(7) Inventory Properties allows the user to view properties of inventory.

(8) Send Item to Button Laser allows the user to transfer historical information to a laser button attached to a component.

(9) Search Inventory allows the user to search for CAGE and P/N inventory items.

d. NTCSS Optimized OMA NALCOMIS features a drag and drop option to manage assemblies and components within the aircraft/asset inventory tree. This option shall be used sparingly by O-level activities. To ensure the proper documentation is completed for all removals and installations:

(1) O-level activities shall use the WO in the Maintenance Module as the primary means for removing or installing an assembly or component to the aircraft tree in CM. Drag and drop shall be used only when a WO cannot be used, for example, administrative corrections for erroneously installed ALS by another command.

NOTE: AMCM squadrons are authorized to use the drag and drop option to build AMCM weapons systems sets for initial configuration of uninstalled AMCM weapons systems. Installation of AMCM weapons systems onto aircraft shall be accomplished by WO.

(2) IMA and FRC activities shall use the drag and drop option as the primary means for updating assembly inventory trees on assemblies inducted for repair such as engines and APUs. IMAs shall ensure that a valid MAF documenting the removal/installation of components on an assembly has been completed within the NALCOMIS Optimized IMA system.

e. If an NTCSS Optimized OMA NALCOMIS CM record is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest electronic record sent to your activity.

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

f. Aviation Life Support System (ALSS) Group Organization.

(1) IMA paralofts operating with NTCSS Optimized OMA NALCOMIS will create via Group Explorer and maintain via Inventory Explorer. At a minimum, the following groups will be established: ALSS (NRFI) and ALSS (RFI).

NOTE: Refer to the OOMA-SAM or OOMA-UM for building of ALS.

(2) IMA paralofts supporting NALCOMIS OMA Legacy squadron ALSS assets, the following additional group and sub-groups are required: Squadron (Legacy) with a sub-group for each Legacy squadron under the IMAs support, for example, VAQ-132, VAQ-133, and VAQ-135.

NOTE: Refer to the OOMA-SAM or OOMA-UM for building of ALS.

(3) Sub-groups for work centers or assets may be created based upon the organizational needs of the IMA activity.

NOTE: Refer to the OOMA-SAM or OOMA-UM for building of ALS.

(4) ALSS assets inducted for inspection/repair or maintained in the RFI ALSS pool will have the corresponding ALS filed in the appropriate group/sub-group.

(5) When an IMA issues and ALSS item, the corresponding ALS will be transferred to the receiving activity OOMA database along with a hardcopy printout of the related AER and completed MAF. The issuing IMA must sign and annotate the date issued and next scheduled removal date on the lower right side of the AER.

NOTE: ALSS items are identified by "YP" series Type Equipment Codes (TEC). Items with other than "YP" series TEC are not ALSS and do not require an AER, Non-"YP" series TEC items are considered aircraft inventory and only require ALS. Examples of non-"YP" series TEC items include fire extinguishers and panel mounted first aid kits.

(6) Upon issuing an ALSS asset to a NALCOMIS Legacy OMA activity, the corresponding ALS will be moved to the receiving activity group in the issuing IMAs, O-level and I-level NTCSS Optimized OMA NALCOMIS database.

NOTES: 1. Refer to the OOMA-SAM or OOMA-UM for building of ALS.

2. A print out of the RFI ALSS asset ALS and completed MAF/WO will be maintained with the RFI asset and issued with the gear to the receiving squadron.

(7) The supporting IMA shall maintain any ALSS ALS issued to a NALCOMIS OMA Legacy squadron in the corresponding Legacy squadron's group until the next inspection comes due as tracked by issue date and identified by NTCSS Optimized OMA NALCOMIS.

5.2.3.2 Auto Log-Set (ALS) Management

a. The physical custodian shall maintain CM ALSs. The on-site support center liaison officer shall ensure verification of the CM ALS records required per the ULSS and the Contract Data Requirements List (DD 1423) for aircraft under contractor maintenance.

b. Upon receipt of the aircraft, the rework activity shall screen the entire CM ALS for information pertinent to standard rework. Upon completion of standard rework, the rework activity will ensure required entries have been made and are complete.

c. Squadrons operating NALCOMIS OMA Legacy departing on detachment or deployment will obtain a download, from the IMA, of all applicable ALSS ALS held in the squadron's custody.

NOTE: This download should be obtained when the Legacy squadron draws their assets from the ALSS pool for detachment or deployment.

(1) Upon reporting to the detachment or deployment site, for example USS Nimitz, the Legacy squadron will turn the ALS into the local supporting IMAs SA.

(2) The receiving IMAs SA will upload the ALS into their NTCSS Optimized OMA NALCOMIS database and place the ALS in the appropriate group as outlined in paragraph 5.2.3.1d.

(3) Upon return to homeport, the Legacy squadron will return the ALS for owning assets and pool assets to the homeport supporting IMA along with the pool asset actuals.

5.2.3.3 Auto Log-Set (ALS) Reporting

CM ALSs will be maintained by the physical custodian for all naval aircraft. For aircraft supported under contractor maintenance, the on-site support center liaison officer will ensure verification of the CM ALS records required per the ULSS and the Contract Data Requirements List (DD 1423).

5.2.3.4 Configuration Management (CM) Auto Log-Set (ALS) Administrator

a. The CM ALS Administrator assigned to Maintenance Control, Production Control, or naval, inter-service, or commercial contractor D-level activities must have an in-depth working knowledge of CM ALS procedures and baseline management.

b. The CM ALS Administrator performs functions and has responsibilities within the following areas:

(1) Administrative Records Required for Transfer of Naval Aircraft. The CM ALS Administrator shall receive or compile items for receipt or transfer of aircraft, including aircraft transfer to or receipt from standard rework. The minimum requirements for records and administrative information for aircraft being transferred or inducted and returned from standard rework are as follows:

(a) The CM ALS and records for aircraft mounted components that are transferred using the NTCSS Optimized OMA NALCOMIS Group Explorer.

(b) AIRs.

(c) W&B Handbook.

(d) Current contents of the AADB.

(e) Current contents of the aircraft inspection, TD compliance, general or electronic aircraft history files.

NOTES: 1. When an OOMA activity transfers an aircraft or repairable life limited item to an activity that does not support CM ALS, the transferring activity shall forward the associated CM ALS record to the COMNAVAIRSYSCOM (AIR-6.8) via e-mail (OMAWHOLE@navy.mil), for storage.

2. Refer to OOMA-SAM, Appendix J, for specific procedures for transferring CM ALS records. For additional assistance, SAs shall contact SPAWARSYSCEN Fleet Support Center help desk at DSN 646-0534 or COMM (757) 443-0534, via e-mail (SSCN_helpdesk@navy.mil), or by submission of a trouble ticket via https://seitsm.sscno.nmci.navy.mil/.

(f) Records of all FCFs for preceding 6 months or one phase cycle, whichever is greater.

(g) Previous and current hydraulic contamination control trend analysis charts.

(h) Other specific information required by the ACC or TYCOM. All military and commercial rework activities will forward the complete set of aircraft maintenance files that accompanied the aircraft into standard rework when the aircraft is transferred upon completion of standard rework. In addition, when aircraft are at standard rework, the standard rework may elect to make copies of the records for historical record analysis. CM ALSs are received and transferred using the Optimized OMA Group Explorer.

(i) Receiving activity will receive historical data and the transferring activity shall generate and retain MAINT-2, MAINT-4, MAINT-5, and MAINT-6 reports for a minimum of 6 months.

(j) NTCSS Optimized IMA NALCOMIS Engine Configuration. Ensure all engine configuration baseline requirements are entered into NTCSS Optimized IMA NALCOMIS as part of the

engine induction process. The engine configuration baseline is provided in CM ALS when electronic records are transferred between NTCSS Optimized OMA NALCOMIS sites. Both NTCSS Optimized IMA NALCOMIS Engine CM and NTCSS Optimized OMA NALCOMIS Engine CM shall be maintained.

(2) AIRs. The CM ALS Administrator will forward the AIRs to management services.

(3) Inventory of Components and Assemblies. The CM Life Limited Component II Report is used to record the SERNO of installed items for inventory of the aircraft. Verify the inventoried item SERNO against the CM Life Limited Components I Report. Resolve any discrepancies. Items will be inventoried during the phase inspection for the applicable equipment being inspected. All items shall have been inventoried and verified by the completion of one complete phase cycle. UAS Control Station AESRs shall be inventoried and verified annually.

(4) Compass Calibration. Refer to paragraph 6.1.2.3.5 for documentation requirements.

(5) Engine Transaction Report. Refer to NAVAIRINST 13700.15 for reporting procedures.

(6) Aircraft Accounting and OPNAV XRAY reporting (as required) per paragraph 5.3 and Appendix E.

NOTE: Receipt XRAY is required for proper data processing in NTCSS Optimized OMA NALCOMIS.

(7) TDs. Upon receipt of a new TD, screen for application to assigned aircraft and related equipment, and perform the following:

NOTE: P&E or E&E will perform this screening at D-level.

(a) Notify Maintenance Control or Production Control or Planning and Management of applicability and priority.

(b) Ensure required TD kits are ordered.

(c) Initiate the Add New/Update Tasks from Baseline process to activate new TDs. The Inventory Explorer Utilities menu should be used at least daily to update new TDs from the baseline.

NOTE: TDRS Lists No. 02 and 04 are not applicable to CM ALS. A TD record has the TDRS List No. 02 and 04 combined and the TD record is updated by pushing new TDs from the baseline manager to the foundation tier into CM where the CM ALS Administrator will screen for new TD requirements periodically.

(8) Production Equivalents, ECPs, and Prototype or Modification of Aircraft or Equipment. Comply with instructions in the related correspondence describing the required action. CM ALS Miscellaneous Record entries will be made and CM ALS TD Record entries will be made (if applicable).

(9) Service Life Items. Monitor accumulations and keep Maintenance Control/Production Control informed of high time items using the NTCSS Optimized OMA NALCOMIS Maintenance Near Due Removal/Component Report, CM Component Removal Due Report, and CM Percent Life Remaining Report.

(10) MMP (O-level and I-level). Submit inputs for the MMP. Required topics include:

(a) Forced removal items.

(b) TD compliance requirements.

(c) Compass calibrations due.

(d) Phase inspection requirements.

(e) Special inspection requirements.

(f) Locally required information.

(g) Anticipated aircraft/equipment transfers/receipts.

NOTE: These minimum information requirements may be enclosures produced by current information technology reports. Current information technology databases are also optional. In such a case, the database locator sheet shall be included in the MMP. If this option is used, strict security safeguards shall be enforced for appropriate administrator and read-only access levels.

(11) WO Requirements:

(a) Screen WOs and ensure CM ALS record entries or updates are made.

(b) Track warranty components in CM. Warranty information is located in the inventory properties of CM.

(c) Ensure CM ALS entries or updates are made and transferred via the CM Group Explorer.

(d) For O-level activities, the signature to certify appropriate CM ALS record entries have been made or no entries are required is automatically accomplished via the WO and CM ALS with the exception of Miscellaneous, Repair/Record, and Exceedance Record entries. For I-level activities with CM ALS, all MAFs completed in the NTCSS Optimized IMA NALCOMIS will be screened and all CM ALS entries required in NTCSS Optimized OMA NALCOMIS will have to be manually entered in CM. Refer to the OMA-UG for updating procedures for Optimized IMAs.

(e) O-level activities will initiate, maintain, and close out, CM ALS and records (as applicable). D-level activities will initiate, maintain, close out, verify entries, reinitiate, and dispose of CM ALS and records.

(f) Submit all BTRs (paragraph 10.9 contains detailed procedures) to provide a means to report NTCSS Optimized OMA NALCOMIS baseline discrepancies.

(g) NTCSS Optimized OMA NALCOMIS Flight Module. Upon saving the flight document, applicable records and usage data will automatically update.

(12) Additional responsibilities are identified in the following NAMPSOPs in Chapter 10:

Navy Oil Analysis and Consumption Monitoring Program (paragraph 10.3)
Hydraulic Contamination Control Program (paragraph 10.5)
Technical Directive Compliance Program (paragraph 10.10)
Tool Control Program (paragraph 10.12)

5.2.3.5 General Information

a. NTCSS Optimized OMA NALCOMIS activities that have physical custody of naval aircraft, engines, and equipment shall maintain and update the CM ALS records.

b. D-level activities are assigned the following specific responsibilities:

(1) Use the NALCOMIS OOMA drag and drop feature to manage assemblies and components within the aircraft/asset inventory tree.

(2) Maintain OOMA CM ALS and ensure all life, time, or event limited structures and components are accurately maintained and updated to reflect maintenance performed.

(3) Perform migration of data to the correct Automated Maintenance Environment software format (if applicable).

(4) Create CM ALS if an aircraft, engine, component, or assembly has no history of an existing CM ALS.

NOTES: 1. If an aircraft, engine, component, or assembly is received without an OOMA CM ALS, every effort shall be made to locate CM ALS by contacting the transferring activity or performing a search of the OMA wholesale server. If the appropriate CM ALS is not available, the D-level activity shall create the OOMA CM ALS using paper records. At a minimum, all life-limited items listed in the PMIC shall have an OOMA CM ALS created prior to a change in physical custody.

2. If a non-OOMA aircraft in rework is scheduled for post-rework delivery to a non-OOMA squadron, the D-level activity shall maintain logbooks in the legacy format in which it was received.

3. If replacement items are received from a squadron, as part of the 7R Process (out of scope of D-level specifications being performed), the squadron is responsible for ensuring the correct CM ALS for the item is transferred to the D-level activity that will perform the installation.

(5) Perform configuration verification of all life, time, or event limited structures and components. Configuration verification includes CAGE, part number, and serial number verification of all components and assemblies that have an AESR, ASR, EHR, MSR, SRC Card, Parachute Record, SSK Record, or Aircrew Systems Record. Configuration verification shall also include items such as critical aircraft structure areas which may have life, time, or event limits imposed via service life bulletins.

NOTE: Disassembly beyond the maintenance specification requirements to perform configuration verification is not authorized without TYCOM approval.

(6) Ensure actual aircraft, engine, component, or assembly configuration (CAGE, serial number, and part number) matches both the paper records and CM ALS.

(7) Ensure all TDs accomplished on life, time, or event limited structures and components are properly recorded in CM ALS.

(8) Perform CM ALS updates, to include serial number and part number for any item which has been altered during a D-level event or maintenance to ensure proper aircraft, engine, component or assembly configuration is maintained, such as items modified, replaced, swapped or turned in to Supply for repair or replacement. This includes items which are not life limited but designated as a TCR within OOMA, but which were received, installed on the aircraft, engine, component or assembly, with an associated CM ALS.

(9) Use and maintain the AADB and CM ALS in NALCOMIS OOMA for items required to be modified, replaced, swapped or turned in to Supply for repair or replacement during FCFs.

NOTE: The D-level flight line's responsibility to comply with CM ALS requirements is for those items that are discovered as failures after a D-level event has been completed.

c. CM ALSs will be maintained by Maintenance Control/Production Control of the activity to which the aircraft or equipment is assigned. Classified CM ALS information will be updated and transferred to OMAWHOLE per applicable security regulations. CM ALS will be transferred via the CM Group Explorer at the time an aircraft or equipment is physically transferred. CM ALS must be reviewed by the receiving activity as part of the acceptance procedure. All discrepancies will be resolved prior to acceptance FCF (aircraft), or first operation (equipment).

NOTES: 1. O-level will electronically transfer all ALS for aircraft and non-installed AESR equipment to OMAWHOLE and will physically transfer ALS data via CD-RW at time of turn-in for repair or rework. I-level and D-level activities will do the same prior to transferring aircraft or equipment to Supply or O-level activities. The CD-RW will be stored in the manila envelope for the aircraft logbook or AESR.

2. OOMA-SAM, Appendix H, provides specific procedures for transferring ALS from one command to another. SA/A must contact SPAWARSYSCEN Fleet Support Center Help Desk at DSN 646-0534 or COMM (757) 443-0534, SSCN_helpdesk@navy.mil, or by submission of a trouble ticket via https://seitsm.sscno.nmci.navy.mil/.

3. Prior to creating a new CM ALS for a repairable or life limited item, the SA/A must query OOMA archives per paragraph 5.2.3.10 NOTE 4.

4. ALS for non-life limited or non-repairable items (including ALSS) will not be transferred to OMAWHOLE. O-level activities must create a sub-folder titled "NON-REPAIRABLE ALS (PENDING DELETIONS)". Each working day, the SA/A will screen all folders under Inventory Explorer for any non-life limited or non-repairable item CM ALS that are no longer in the activity's custody, and transfer the CM ALS to the "NON-REPAIRABLE ALS (PENDING DELETIONS)" sub-folder. At least once per week, the SA/A will screen the "NON-REPAIRABLE ALS(PENDING DELETIONS)" sub-folder and delete unnecessary CM ALS per the procedures of paragraphs 5.2.3.10, and 5.2.3.11. I-level activities will delete CM ALS for non-life limited/non-repairable items no longer in their custody per the procedures in the OOMA System and dataset Administration Guide, Appendix K.

d. Upon induction of an aircraft for standard rework, the FRC reworking the aircraft will screen CM ALS for information pertinent to the standard rework and purge the CM ALS of all entries not required as a permanent part of the CM ALS. The CM ALS of each aircraft will be maintained during rework. All major repairs, inspections, and flight and operational data will be recorded. When the aircraft is transferred, CM ALS will be transferred to the receiving activity or the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8). Acceptance and transfer of operating forces aircraft delivered to a FRC requires accomplishment of certain nonproductive work prior to actual induction. This includes defueling, defusing/disarming, and removal of pyrotechnic devices and safety/survival gear. It also includes performing an aircraft inventory and the screening of CM ALS.

e. Depot FRCs shall screen aircraft CM ALS to ensure accuracy of entries relating to all life, time, or event limited structures and components for aircraft being processed.

f. Activities receiving questionable or incomplete records should request immediate corrective action from the transferring activity. Obvious mistakes in record keeping may be corrected by the current custodian. The current custodian may sign off discrepancies requiring corrective action by the previous custodian after receipt of correspondence indicating corrective action.

NOTE: Generally, CM ALS requirements pertain to aircraft and engines, but certain components cycled through the component repair process have equally important CM ALS requirements. Although this Chapter is written for aircraft and engine CM ALS, the policy and procedures apply to all components designated as CM ALS ASR, EHR, and SRC card trackable. Special emphasis must be applied at each FRC to ensure compliance with CM ALS policies during the component repair process.

(1) The ALS administrator is responsible for screening and closing out the ALSs for aircraft, assemblies, components, and equipment identified for transfer. The ALS administrator is also responsible for relocating ALS to the OUTBOX in CM for transfer.

NOTE: The SA shall provide Material Control the nomenclature, PN, S/N, and document number for any ALS transferred or received via external media such as, e-mail or CD.

(2) Material Control is responsible for the management and upkeep of the IN/OUT boxes in CM via Inventory and Group Explorer. Upon verification of the receipt of ALS PN and S/N in the INBOX, Material Control shall relocate the ALS to the Primary folder within CM. Upon verification of ALS located in the OUTBOX against the Material Control register; Material Control shall transmit the ALS to the appropriate receipt activity.

NOTE: Material Control shall notify the IMRL manager when in receipt of any SE/IMRL ALS.

g. If an NTCSS Optimized OMA NALCOMIS CM record is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest electronic record sent to your activity.

h. CM ALS entries will only be made by personnel designated by the MO (O and I-level), or under the direct supervision of the individual responsible for CM ALS (D-level).

NOTE: Activities operating NTCSS Optimized OMA NALCOMIS (OOMA) must use the AADB in OOMA. The SA/A or DBA must perform a backup of all AADB Summary pages in XPS format on a CD, DVD, or external hard drive. At a minimum, AADB summary page backups must be performed prior to each flight, after the aircrew signs the Aircrew Inspection and Acceptance Record, and at the end of each shift.

5.2.3.6 Initiation

a. Navy Acceptance. The original accepting activity, upon acceptance of the aircraft, will create the ALS in the CM Inventory Explorer.

NOTE: When initiating TD records, the CM ALS Administrator shall coordinate with the Baseline Manager to ensure all TD compliances are listed in the applicable TD record.

b. Cognizant Contract Administrator Acceptance. When an aircraft has been procured for the DON under a DOD contract, and delivery is made to the DON at the contractor's plant, the cognizant contract administrator is considered to be the original accepting activity. If the plant does not have a resident inspector, or if the aircraft has been procured for the DON under an Air Force or Army contract and delivery is not made directly to the DON representative at the contractor's plant but to an aircraft delivery point, the DON representative at the delivery point is considered the original accepting activity. When an aircraft, previously operated by the Air Force or Army, is transferred to the DON, the DON representative at the delivery point is considered the original accepting activity.

5.2.3.7 Signature Authority

a. The following personnel are authorized to sign CM ALS and records:

(1) CO.

(2) O-level MO.

(3) I-level MO.

(4) D-level Director of Operations or Production Officer.

(5) OMD Officer.

b. Additional personnel may be authorized to sign CM ALS and records if they have been designated in writing to do so by one of the personnel listed above. When the contractor or COMFRC field team supervisor is not authorized or does not sign the required CM ALS and records, the reporting custodian shall verify the work performed and sign the CM ALS entries.

NOTE: Marine Maintenance Administration personnel (MOS 6046/6049) are authorized to sign CM ALS and records once they have obtained the T/M/S, MALS, CM ALS, and records qualifications in ASM and are designated in ASM by one of the personnel listed in paragraph 5.2.3.7a. This requirement applies to all Marine Maintenance Administration personnel (MOS 6046/6049) to include those assigned to MEU Composite Squadrons, joint units, D-level activities, and Weapons and Tactics Instructor screening teams.

c. By completing the WO "Inspected By" field, the CDI/QAR CM SMQ electronically updates the CM ALS "Authorized By" field, except entries for Miscellaneous History, Repair/Rework, and Exceedance records.

d. IMAs using NTCSS Optimized OMA NALCOMIS for managing CM ALS must use an electronic CDI stamp in lieu of the rubber stamp for NTCSS Optimized OMA NALCOMIS related documentation, for example, ALSS CM ALS. The following procedures for maintaining and assigning an electronic CDI stamp apply:

(1) Upon CDI/CDQAR qualification, the CDI/CDQAR will submit approved CDI/CDQAR certification document and the CDI stamp number assigned by QA to the activity's SA for SMQ and electronic CDI stamp assignment.

(2) The activity's SA will add, via the Personnel Module, the stamp number to the front of the CDIs rate, for example, 301PR1, 543AM2, 678AD2.

NOTE: The stamp number will be maintained as part of the user's rate in NTCSS Optimized OMA NALCOMIS for as long as the user is assigned the CDI/QAR SMQ.

e. For Miscellaneous History, Repair/Rework, and Exceedance record entries, the person making the entry will have their name electronically entered in the "Entered By" block.

f. Rubber stamp signatures are not authorized. FRC artisan certification or verification device (as applicable) will satisfy the COs signature requirements on MSR, ASR, EHR, and SRC cards only. For I-level and D-level activities with CM ALS records, signature documentation is performed in the CM Inventory Explorer tasks (Create, Task Properties, Next Task Status, Suspend Task, and Cancel Task). Refer to OMA-UG for detailed information.

g. A signature shall also be placed in the Repair/Rework Record section of each record within the CM ALS.

h. When aircraft/equipment are repaired, modified, reconditioned, or have TDs incorporated by FRCs or contractor field teams at other than the FRC or contractor's facility, the reporting custodian will make all required entries in the appropriate CM ALS. The required information and the WO authorizing the work shall be provided by the FRC or contractor team supervisor/designee. The authenticating signature and stamp for completed work on all CM ALS entries shall be that of the FRC, contractor team supervisor/designee, or reporting activity after verification. The reporting custodian shall ensure the Repair/Rework Record is completed and signed even though no additional CM ALS entries are required (when modification or recondition is accomplished). A copy of the WO and all pertinent data, such as wiring diagrams, will be placed in the appropriate aircraft/equipment general file.

5.2.3.8 Corrections

a. A person with the appropriate SMQ will make all corrections to CM ALS records.

b. Corrections to CM ALS for usage can be accomplished in the Flight Document prior to posting into history or manually done in CM task and usage modules. Corrections to Miscellaneous and Repair/Rework Records must be deleted prior to authorized signature being posted. If the authorized signature has been

posted a new corrected entry will be made. An entry will be made stating "this is a corrected entry" with a reference made to the invalid entry.

NOTE: CM ALS will not be deleted unless authorized by COMNAVAIRSYSCOM (AIR-6.8.4).

c. Corrections to CM SERNOs. Prior to changing SERNOs on a CM component, justification must be provided in the note section of the inventory properties of CM for that component SERNO. (Example: CM SERNO 0934AB for Mission computer P/N 123456 was changed to 0634AB vice 0934AB. SERNO was verified to be correct and all maintenance usage and maintenance history is applicable to this changed SERNO. HSL-43 Maintenance Officer, LCDR MCFALLS.)

5.2.3.9 Dates

CM ALS date entry will be day month year (16 Jul 2003). When a date entry is required and the only date available is year and month, enter the last day of the month for the day portion of the date entry.

5.2.3.10 CM ALS Transfer and Receipt

CM ALS will be transferred to the receiving activity per the procedures in the previous sections. If information or data is missing, contact the OMAWHOLE office (COMNAVAIRSYSCOM (AIR-6.8)). If connectivity to the OMAWHOLE is not available, download CM ALS life limited items via the OOMA item transfer function.

NOTES: 1. When an OOMA activity transfers an aircraft or repairable life limited item to an activity that does not support CM ALS, the transferring activity shall forward the associated CM ALS record to the OMAWHOLE (COMNAVAIRSYSCOM (AIR-6.8)) via e-mail (OMAWHOLE@navy.mil), for storage.

2. Refer to OOMA-SAM, Appendix J, for specific procedures for transferring CM ALS records. For additional assistance, SAs shall contact SPAWARSYSCEN Fleet Support Center help desk at DSN 646-0534 or COMM (757) 443-0534, via e-mail (SSCN_helpdesk@navy.mil), or by submission of a trouble ticket via https://seitsm.sscno.nmci.navy.mil/.

3. An OOMA activity receiving aircraft or repairable life limited items from an activity that does not support CM ALS will conduct an OOMA Top Tier component search via the DECKPLATE Web site (http://www.navair.navy.mil/logistics/deckplate). Select the DECKPLATE Reports option and continue to the component search options by selecting Public Folders > Shared User Reports > RS Functions and Examples > OOMA Top Tier INV Search and use one of the search options. For CM ALS records located within the OOMA architecture, it is the responsibility of the receiving activity to contact the previous custodian to have the CM ALS record transferred to the receiving activity.

4. To prevent duplicate CM ALS records within the OOMA architecture, an activity operating with OOMA will not create a new CM ALS record for an aircraft or repairable life limited item until a query of the OOMA architecture has been completed per Note 3.

5. An activity receiving a CM ALS record from the OMAWHOLE is responsible for updating all logbook historical data not previously entered on the CM ALS record while the CM ALS record was in the custody of a non-OOMA activity.

6. The I-Level MDBA must review the OIMA CM BCM folder monthly and remove CM ALS no longer in the activity's custody. Only CM ALS records for life limited and repairable components, identified in the T/M/S PMIC, will be transferred to OMAWHOLE. All other CM ALS will be deleted using the OOMA software inventory delete process.

5.2.3.11 Disposition.

CM ALS for aircraft and repairable life limited items stricken from the Navy inventory are disposed of as follows:

a. Destroyed Aircraft and Repairable Life Limited Items. The CM ALS Administrator shall transfer the records to the OMAWHOLE (COMNAVAIRSYSCOM (AIR-6.8)) via e-mail (omawhole@navy.mil).

b. Sale or Transfer. When an aircraft or repairable life limited item is sold or transferred to other than Navy custody, the printed copy of the CM ALS record shall accompany the aircraft or repairable life limited item unless otherwise directed by the ACC or TYCOM. Classified information will be removed from the CM ALS or cleared for release through the chain of command prior to transfer or sale. The CM ALS record of the aircraft or repairable life limited item will be transferred to the OMAWHOLE (COMNAVAIRSYSCOM (AIR-6.8)) upon completion of the transfer or sale, via e-mail (omawhole@navy.mil).

c. Special Categories. The following CM ALS records will be transferred to the OMAWHOLE (COMNAVAIRSYSCOM (AIR-6.8)) via e-mail (omawhole@navy.mil):

(1) Records for experimental aircraft/equipment.

(2) Records considered to be of historical value.

(3) Records of aircraft/equipment lost in combat or that have been involved in a mishap resulting in death, missing in action, personal injury, or substantial damage to other than government property.

d. CM ALS records for non-life limited or non-repairable components will not be sent to the OMAWHOLE. These components will be deleted locally using the OOMA software inventory delete process.

5.2.3.12 Reconstruction

If an NTCSS Optimized OMA NALCOMIS CM record is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest electronic record sent to your activity.

5.2.3.13 Aircraft/Equipment Auto Log-Set (ALS) and Records

a. CM Auto Log-set. CM ALS contains the electronic baseline, actual inventory, and historical information of aircraft, engines, SE, ALSS, and associated assemblies.

b. Data for which there is not a designated place in the CM ALS shall be maintained in a general file for paper records, for example, FCF, and engine test cell run sheets.

c. Contents. Each CM ALS shall have the following:

(1) Inventory list and details indicating aircraft, equipment, or component status.

(2) Active and historical maintenance task list of special, phase, and conditional inspections; TDs; and scheduled removals.

(3) Usage records and current usage for all parameters assigned.

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

5.2.3.14 Flight Summary Record

a. The reporting custodian maintains this record. This CM ALS record permits aircraft identification, the monthly compilation of significant flight operational data, and collection of historical OPNAV XRAY data throughout the service life of an aircraft.

(1) This record documents landings and special information, for example, catapult shots, that may be useful to a reporting custodian.

(2) The ferry pilot is responsible for providing aircraft ferry flight data to the receiving activity.

(3) Months will be accounted for in chronological order.

b. The source for updating this record is the Flight Module or CM Inventory Explorer usage record. This provides aircraft usage data to the Flight Summary record (hours, landings, and CATs/Arrests) for Monthly, In Life, In Period, and Total Landings for the activities that have physical custody of the aircraft.

c. This record provides the current OPNAV XRAY status, history of the aircraft, service period, OSM, and the capability to update service period and OSM manually.

d. Flight summary includes the Aircraft Summary (hours, landings, CATs/Arrests, and hoists), aircraft accounting OPNAV XRAY status, and service period.

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

5.2.3.15 Inspection Record

a. This CM ALS record provides a record of all scheduled, phase, conditional, and special inspections performed on the aircraft or equipment tracked in the CM Task Plans module. Additionally, all MCAPPs, ASPAs, etc., will be recorded.

b. Requirements:

(1) Phase inspection, special inspection, and conditional inspection records are maintained on separate tabs.

(2) Phase inspections are logged sequentially, for example, Phase A/(time) and Phase B/(time). The sequence is not interrupted or changed by standard rework, unless the performance of a phase inspection is certified by the activity performing the standard rework. All phases performed on the aircraft during a period and the flight hours on the aircraft are entered.

(3) Routine turnaround, daily, servicing, engine wash, and oil sampling are not logged.

(4) Conditional inspections are conducted as a result of a specific over limit condition or as a result of circumstances or events which create an administrative requirement for an inspection, for example, hot start, overtemp, hard landing, precarrier, predeployment, ASPA, acceptance, or transfer. An entry is required for conditional maintenance requirements that prescribe inspections to determine equipment condition. Conditional requirements that specify servicing or fluid sampling need not be logged. Compass calibration is entered in the miscellaneous/history section and need not be logged on the Inspection Record. Any inspection directed by higher authority, not directed by a TD, shall be logged. Due to operational circumstances, conditional inspections may be required on a recurring basis. Relief from the repeated logging of these inspections may be requested from the cognizant Wing, COMFAIR, CVW, or aviation combat element commander.

(5) Some operating activities perform periodic aircraft maintenance inspections on an incremental basis. The records of such inspections will be recorded in this section.

NOTE: Local inspections, for example, PQDR recommendations or MO orders, shall be documented on the Miscellaneous History Record.

(6) Engines. Phase and major engine inspection records are maintained on one tab. Special and conditional inspections are maintained as separate tabs within this section of the CM ALS AESR. All phase inspections, special inspections, conditional inspections, and major engine inspections (except fluid sampling, engine wash, or servicing) require CM ALS AESR entries by the activity performing the inspection. This includes those engine inspections performed as a part of the aircraft phase inspection.

(7) Equipment

(a) Inspections performed on equipment for which a CM ALS AESR is required are logged in the CM ALS AESR. This provides a correct place in the CM ALS record for recording any particular inspection and ensures inspection records for major aeronautical equipment remain with the equipment after it has been removed.

(b) This record reflects all inspections performed on the equipment. In the case of aircraft phase MRCs, log only the phases actually performed on the equipment. Routine servicing, oil sampling, turnaround inspections, and daily inspections are not logged.

(c) All other equipment having a CM ALS AESR shall have the inspection entered on an inspection record titled "Special" only if the inspection required NDI or disassembly/reassembly.

(d) Acceptance inspections and transfer inspections on uninstalled equipment are not required.

c. The source for updating the Inspection Record is the Maintenance Module via a WO or CM Inventory Explorer task and the CM Inventory Explorer task plans that are pushed down from the COMNAVAIRSYSCOM baseline.

d. This record includes the following tabs: Description, Completion Date, AFH/EFH, Activity, Reference, MCN, and the electronic signature of the CDI from the completed WO.

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

5.2.3.16 Repair/Rework Record

a. This CM ALS record provides a record of all repair, reconditioning, standard rework, conversion, modification, modernization, and ASPA inspections performed on the aircraft by a repair activity or on the equipment by an I-level or D-level activity. When an aircraft is inducted into an FRC or contractor activity for rework, the CM ALS accompanies the aircraft and is updated (as necessary) by the activity performing the work. This applies even though there is no change in reporting custodian. In all cases where an item requires a CM ALS AESR, it will accompany the equipment through the maintenance action required and will be updated by the activity accomplishing that action. Additionally, all MCAPPs, ASPAs, etc., that are tracked in CM task plans module will be recorded in the inspection record.

b. This CM ALS record is updated manually for the aircraft or equipment that requires a Repair/Rework entry. The source can be a WO, naval message, or directives.

c. This record includes the following columns: Date, Description, Reference/Authorization, Activity, Entered By, and Authorized By.

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

5.2.3.17 Technical Directives (TD) Record

a. This CM ALS record provides a record of TDs affecting the airframe structure and its integral parts. Separate subsections are required to record each type of TD.

b. The source for updating this O-level, I-level, and D-level record, is a WO or CM Inventory Explorer task that provides a detailed listing of TD requirements pushed down from the COMNAVAIRSYSCOM baseline.

c. TDs that affect a CM ALS component are recorded electronically in the TD part of that record.

NOTE: TD status code NA does not apply within CM ALS. CM ALS TDs are directly linked to applicable BUNO/SERNO and CAGE part/SERNO.

d. For airframe TDs requiring one time or continuing inspections, the initial, or one time inspection, is logged on the CM ALS TD section. Subsequent or continuing inspection requirements are added to the MRCs (as required) in the basic TD. When this action has been completed, no further CM ALS entry is required for that TD.

e. TDs requiring continuing inspections are logged on the CM ALS inspection record. Subsequent or continuing inspection requirements are pushed down from COMNAVAIRSYSCOM Baseline Managers as required in the basic TD.

f. Production Equivalents, ECPs, and Prototype or Modification of Aircraft or Equipment. The CM ALS Administrator will comply with the details in the related correspondence describing the action to be accomplished (if authorized). CM ALS entries will be made (as required) on the appropriate Miscellaneous History record.

g. TD Removal:

NOTE: Reporting custodians shall maintain COMNAVAIRSYSCOM approved configuration.

(1) Prior to the removal of any TD, proper authorization must be obtained. ACCs have authority to approve TD removal via message if operational necessity dictates. However, the COMNAVAIRSYSCOM APML must be an info addressee on the authorization message. Financial responsibility for parts to reinstall the TD lies with the ACC or TYCOM and reporting custodian.

(2) TD removal will be documented in the same manner as TD incorporation. The only exception is the use of TD Status Code Q.

(3) The TD record will be annotated in the following manner:

(a) Enter TD Status Q on the WO; CM ALS will reflect a status code of Q.

(b) Make an entry on the Miscellaneous History Record, specify the reason for removal, authority, location of parts removed, and other pertinent information.

h. This record includes the following columns: TD Code, Number, Interim, Revision, Amendment, Part, Kit Priority, Issue Date, Title/Remarks, Maintenance Level, Man-hours, Target Completion Date, Status, Completion Date, Activity, and Signature.

i. When reinstalling a removed TD, document it as a normal TD incorporation. Make a complete TD entry on the TD record. When documenting the removal and reinstallation of a TD on an item with a CM ALS MSR, ASR, EHR, TCR, or SRC, see specific documentation for that applicable record.

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

5.2.3.18 Miscellaneous History Record

a. Aircraft. This CM ALS record is used to record significant information affecting aircraft or equipment for which no other space is provided in the CM ALS. This information shall include abnormal flight characteristics, peculiar troubles of an undetermined nature, damage to the aircraft, equipment, major component changes not logged elsewhere in the CM ALS (struts, control surfaces, and tail sections) historical data, authorization for service period extension, PED, and OPSERMOS adjustment as a result of an ASPA inspection, verification of flight hours in period and since new on acceptance and transfer, and exposure to large quantities of salt water, fire extinguishing agents, or other corrosive elements. This section may also be used to record SERNO information concerning research and development and bailment aircraft, for example, special modifications or special testing.

b. Equipment. This CM ALS record is used to record pertinent information affecting equipment for which no other place has been provided within the CM ALS, for example, special test data, abnormal characteristics, significant damage/repair, NOAP entries, authorization for extension of operating intervals, and exposure to large quantities of salt water, fire extinguishing agents, or other corrosive elements.

c. Equipment Rejection. To aid I-level and D-level activities in determining repair or rework requirements of equipment following rejection, it is imperative that activities rejecting equipment document completely the reasons for and the nature of the rejection. A simple entry such as “overtemp” is not sufficient. Include specific information on the degree of overtemp, length of overtemp, the circumstances under which it occurred (start, in-flight, shutdown, and ground run up), and the corrective measures taken.

d. Specific examples requiring an entry:

(1) The DOD activity originally accepting an aircraft for the Navy will make a miscellaneous CM ALS entry stating “DOD acceptance check flight flown this date”.

(2) A change in the authorized inspection interval of aircraft or equipment requires the following entry be made: “Effective this date (aircraft or equipment) was placed on (specified interval) per (authority); next inspection due (date or hours)”.

(3) A change in the inspection induction date or hourly sequence of aircraft or equipment, requires the following entry be made: “Effective this date, inspection induction date (or hours) was rescheduled from (old date or hours) to (new date or hours) as authorized by (reference)”.

(4) Hydraulic contamination CM ALS entries shall be made as follows:

(a) When testing reveals Navy standard class five contamination is exceeded, or evidence of water, chlorinated solvent, or any other form of contamination, requiring decontamination per NAVAIR 01-1A-17, indicate date, type contamination, class, method of decontamination, and appropriate reference.

(b) When aircraft are received from a D-level, commercial repair activity, or another reporting custodian, hydraulic samples shall be analyzed and an entry shall be made indicating the date and class of the results.

(5) Compass calibration entry requirements are specified in paragraph 6.1.2.3.5.

(6) When either the aircraft or equipment is exposed to large quantities of salt water, fire extinguishing agents, or other corrosive elements, an entry will be made on this record. The entry will include a description of the decontamination accomplished and the approximate time between exposure and completion of decontamination.

(7) When dye is added directly to aircraft fuel tank(s) to determine the location of a leak, an entry will be made on this record.

(8) An entry will be made to indicate certification of airborne communications material systems (CMS). This entry is a permanent part of the CM ALS.

(9) Whenever oil analysis indicates abnormal wear limits, amounts of metal, or other contamination, an entry is required. For CM ALS ASRs and CM ALS SRC items this entry will be made in the Repair/Rework/Overhaul section of the applicable record. For CM ALS EHR items this entry will be made in the maintenance record section of the applicable record.

(10) Equipment Transfer. Activities transferring equipment will annotate the date, reason for transfer, activity transferred to, JCN, shipping document number, and star/status code (if applicable).

(11) If during D-level maintenance an inaccessible area is found to contain a foreign object that is not removed, the FRC will make a CM ALS entry denoting its location.

(12) If a tool is reported missing during D-level maintenance, all tool control procedures will be complied with in an attempt to recover the missing tool. If the tool is not found and it cannot be determined with certainty that it is not in the applicable aircraft or equipment, the details will be entered in the CM ALS. This entry will include tool nomenclature, markings, location, search results, and any other pertinent comments.

(13) An entry shall be made when ABDR actions are performed, including limitations and monitoring requirements imposed by those actions.

(14) If a propeller is used on a ground test stand/engine test cell, the total accumulated ground test stand/engine test cell, the time shall be recorded at the end of each evolution. NAVAIR 03-20CBBK-1 contains maximum ground test stand/engine test cell time a propeller may accumulate.

(15) An entry will be made to document the incorporation of Mode S capability into the IFF System and record the permanent Mode S address assigned to specific BUNO. The Mode S address will become a permanent part of the CM ALS.

(16) An entry will be made to document the incorporation of Mode 5 capability into the IFF System and record the Mode 5 National Origin (NO) and Platform Identification Number (PIN) assigned to specific BUNO. The Mode 5 NO and PIN assignments will become a permanent part of the CM ALS.

e. Late Entries. When creating an entry, enter the actual date of occurrence, CM ALS will place it in its correct chronological order.

f. The source for updating this record is the WO for one time conditional inspections only. The Miscellaneous History Record is updated for all other entries via the CM ALS Miscellaneous History Record using the create, duplicate, or delete icon in CM ALS.

g. This record includes the following columns: Date, Description, Activity, Entered By, and Authorized By.

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

5.2.3.19 Preservation/Depreservation Record

a. A CM ALS entry is required any time preservation, represervation, or depreservation is performed on tracked items or aircraft. The record is electronically updated using the WO for O-level, or updated using CM tasks for I-level and D-level.

(1) Installed Equipment. Entries are required in the CM ALS, if the applicable preservation MRCs or NAVAIR 15-01-500 specify a preservation requirement. No entry will be made if the equipment is not preserved as part of an aircraft preservation action.

(2) Uninstalled Equipment. Entries are required in the CM ALS if the applicable maintenance manual specifies a preservation requirement.

b. This record includes the following columns: Description, Completion Date, AFH/EFH, Activity, Reference, MCN, and Signature of the CDI from the completed WO.

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

5.2.3.20 Explosive Record

a. Explosive devices are treated as component inventory. All explosive devices are recorded in the aircraft CM ALS, and are electronically updated using the WO for O-level, or updated using CM tasks for I-level and D-level. CM ALSs for aircraft/ejection seat installed CADs are to be deleted locally upon replacement of the CAD. The squadron/D-level CM ALS administrator shall verify that all WOs are completed for replaced CADs prior to deleting CM ALSs.

NOTE: Do not transfer expired/replaced aircraft/ejection seat CAD CM ALSs to the local IMA. The IMA shall remain responsible for managing explosive device CM ALSs installed in equipment inducted to the IMA for repair or inspection (such as, parachutes and seat pans).

b. The Explosive Record of both the CM ALS and the CM ALS AESR contains a record of all explosive devices, for example, initiators and canopy releases installed in the aircraft or major assemblies. Explosive devices installed in major assemblies or equipment, for example, ejection seats and in-flight refueling stores, must be recorded in the Installed Explosive Device Record of the CM ALS AESR. Explosive devices installed in personnel parachutes or other safety and survival equipment are recorded on the Parachute Record, Seat Survival Kit Record, Aircrew Systems Record or the ALSS ALS/AER for OOMA commands. All other explosive devices must be recorded on the Installed Explosive Device Record of CM ALS or CM ALS AESR.

c. This record includes the following tabs: Identification, TD, Inst/Rem, Components, Explosive, and Inspection.

d. The possibility of transferring certain equipment from one aircraft to another during standard rework and replacement during periods of scheduled maintenance emphasizes the necessity for careful and periodic checking of this record regarding the status of the explosive devices currently installed in the aircraft or equipment.

e. The Installed Explosives Report is used to view detailed information for multiple explosive devices installed on aircraft, equipment, and components. The report includes the following columns: DODIC, Location/Nomenclature, Location Code, Lot Number, P/N, SERNO, NHA P/N, NHA SERNO, Shelf life months, and Installed life months.

f. The VFS CADPAD, TRACE CADPAD Module Installed Explosive Device Record is maintained in a current status by all activities having custody of or performing rework on the aircraft or equipment in which explosive devices are installed.

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

5.2.3.21 Component Record

The component Record lists all life limited items installed on aircraft/equipment and includes the following columns: Nomenclature, CAGE, P/N, SERNO, Installation Date, WUC, and POS.

5.2.3.22 Aeronautical Equipment Service Record (AESR) Auto Log-Set (ALS) Records

a. The AESR has been replaced by the Identification record in the Logset Explorer. The Identification records are treated as equipment inventory and are viewed or updated by using the CM Inventory Explorer and updated in the Maintenance module using a WO to remove and replace the equipment.

b. The CM ALS AESR is maintained similarly to the aircraft CM ALS. The CM ALS AESR accompanies the equipment at all times. When equipment is installed as part of the aircraft, this record is maintained concurrently with, and becomes part of the aircraft CM ALS.

c. Details on records that are used in both the CM ALS AESR and the aircraft CM ALS are covered under the aircraft CM ALS section. The following records apply:

(1) Inspection Record.

(2) Repair/Rework Record.

(3) Technical Directives Record.

(4) Miscellaneous History Record.

(5) Preservation/Depreservation Record.

(6) Explosive Devices Record (as applicable).

(7) Component Record.

d. Data for which there is not a designated place in the CM ALS AESR shall be maintained in a general file for paper records, for example, engine set-up, and engine test cell run sheets.

e. The requirement for CM ALS AESRs is determined by T/M/S aircraft PMIC decks and COMNAVAIRSYSCOM, including the list of required CM ALS. CM ALS AESRs for equipment not associated with an aircraft are listed below. Newly established CM ALS AESR requirements shall be published by COMNAVAIRSYSCOM and shall include a listing of requirements as part of the CM ALS AESR. CM ALS AESRs are required for all equipment within the following categories:

(1) AEF, MCEAGS, FLOLS, HPRU, MOSLS, F-58, F-70, L-series lighting, L-95, radios and F-series packages.

(2) Gas turbine power plant (7LM 1500 PB-104).

(3) MK-105 magnetic minesweeping gear.

(4) SEGTEs listed in NAVAIR NOTE 4700.

(5) Engine test cell/stand.

(6) UAS Control Station.

f. The CM ALS AESR is initiated by the activity originally accepting the equipment for the DON.

g. If a CM ALS AESR record is missing or required, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest electronic record sent to your activity.

h. This record includes the following tabs: Identification Data, TD, Components, Miscellaneous History, Repair/Rework, Preservation, Inspection, and EOR.

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

5.2.3.23 Equipment Operating Record (EOR)

a. The Equipment Operating Record provides CM ALS AESR equipment identification, monthly compilation of significant flight operational data, usage parameters, and accumulative usage data throughout the service life of the equipment.

b. The source for updating this record is the Flight document or CM Inventory Explorer usage record that provides the ability to update equipment usage data to the Equipment Operating Record for accumulative collection of engine flight hours or other usage parameters for activities that have physical custody of the equipment.

c. Ground test stand/engine test cell time is not required to be logged for aircraft engines since it is not used in calculating inspection intervals, removal intervals, or maximum operating time. Ground test stand/engine test cell time for propellers is required to be logged on the CM ALS Equipment Operating Record. If a propeller is used on a ground test stand/engine test cell, the total accumulated ground test stand/engine test cell time shall be recorded at the end of each evolution in the Miscellaneous History section of the propeller CM ALS AESR. NAVAIR 03-20CBBK-1 contains maximum ground test stand/engine test cell time a propeller may accumulate.

d. This record includes the following columns: Date, Usage Parameters, Monthly Usage, and Accumulative Usage.

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

5.2.3.24 Module Service Record (MSR)

a. Modular engine design allows I-level activities to readily remove and replace interchangeable modules with RFI spares. The MSR provides the method for recording the maintenance data for these modules and their life limited assemblies and components. A paper copy of the MSR will be attached to and accompany the component to its final destination. The electronic CM ALS MSR record will be transferred via the CM Group Explorer.

b. The MSR is treated as engine equipment inventory and viewed or updated by using the CM Inventory Explorer or a WO to remove and replace the module.

c. The MSR accompanies the module at all times. When the module is installed as part of an aircraft engine, the record is maintained concurrently with, and becomes part of, the aircraft engine CM ALS AESR.

d. This record includes the following tabs: Identification, TD, Components, Miscellaneous History, Repair/Rework, Exceedance, Preservation, Inspection, EOR, and Installed/Removed.

e. A CM ALS MSR shall be maintained for all modular engines, for example, T56, T400, T700, and F404.

f. MSR initiation for modules installed on aeronautical engines as part of DOD contracts shall be the responsibility of the activity accepting the engines for the DON. When these modules are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

g. If an MSR record is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest electronic record sent to your activity.

h. Upon completion of repair or rework a paper copy of the MSR will be attached to and accompany the component to its final destination. The electronic MSR record will be transferred via the CM Group Explorer.

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

5.2.3.25 Aircrew Equipment Auto Logset (ALS) Records

NOTE: Management of Aircrew Equipment ALS Records and Reports is the responsibility of the ALSS Program Manager.

a. Aircrew Equipment ALS Records document the current configuration of survival equipment. Aircrew Equipment Records (AER) are used for component inventory. All Aircrew equipment records are recorded in the ALSS AESR and updated using the WO for O-level or CM tasks for I-level and D-level.

b. AERs include the following tabs: Identification Data, TD, Repair/Rework, ALSS (shelf life and service life), Inspection, Components, Miscellaneous History, INST/REM, and Preservation.

c. The AER contains detailed information for installed aircrew equipment or components. The report includes the following three sections: Aircrew Equipment, TDs, and Inspections. All three sections of the report will be inserted in the appropriate aircrew file for personal mounted equipment or the aircraft logbook for aircraft installed equipment.

d. When the total service life of a parachute component has expired, the component must be replaced and the entire assembly must be inspected and repacked. Under no circumstances will a component be used if the history of the component cannot be confirmed. When a parachute has been involved in an aircraft mishap, the current record must be forwarded per OPNAVINST 3750.6 and NAVAIR 13-1-6.2.

e. Initiation, Maintenance, and Handling Procedures:

(1) The activity placing the aircrew equipment in service will initiate the CM ALS.

(2) The receiving custodian will review the CM ALS to verify it is complete and accurate. All discrepancies in the record must be resolved with the issuing activity prior to acceptance of the aircrew equipment.

(3) The CM ALS record must be forwarded any time the aircrew equipment is removed and sent to the I-level.

(4) The supporting I-level will update the record each time the aircrew equipment is inducted.

(5) Upon transfer of the aircrew equipment, the record must be forwarded to the new custodian.

f. Where appropriate, life limited ALSS consumables can be consolidated by nomenclature and grouped into lots based upon the Contract/Lot Number of the items, for example, if 50 installed bagged waters have 2 different Contract/Lot Numbers within the entire group, the 50 items can be consolidated into 2 different ALS vice 50 different ALS.

NOTES: 1. Items grouped together by Contract/Lot Number with different removal dates shall have the removal date for the entire lot based upon the item in the lot with the earliest removal due date.

2. The OMA-UG/Online Help provides detailed information of the records/reports and hot link definitions for functionality.

5.2.3.26 Component Auto Log-Set (ALS) Record

Component ALS records are used to record maintenance history, installation, and usage data. They are maintained as part of the CM aircraft, AESR, MSR ALS (as applicable) as long as the component is installed.

5.2.3.27 Life Limited Component Record

a. The Life Limited Component Record is used to record maintenance history, installation, and usage data. When the component is removed from the aircraft or equipment, the record accompanies the component. Continuity of this maintenance history is paramount. These records are treated as equipment inventory and are viewed or updated using the CM Inventory Explorer or a WO to remove and replace the component.

(1) NAVAIRINST 13120.1 and NAVAIRINST 13130.1 provide policy for management of the Structural Life Limit Program. This program is used to monitor structural life limited components designated for D-level replacement. This also provides a means for documenting basic life limitations, for example, maximum flight hours, catapults, arrestments, and landings, which must be properly managed to ensure safety and structural integrity throughout the service life of each T/M/S aircraft. COMNAVAIRSYSCOM (AIR-4.0) will develop technical and engineering solutions, determine life limits, and publish them via NAVAIRINST 13120.1 and NAVAIRINST 13130.1. They will ensure the publication and distribution of quarterly SAFE Program reports. COMNAVAIRSYSCOM (AIR-4.0) will ensure ISSCs incorporate limits into applicable PMIC decks and provide logistics resources planning to preclude reaching any structural life limits. Ensure FRCs, ISSCs, and commercial rework facilities review records for all D-level life limited items requiring replacement during the next operating period. They will ensure their activities incorporate structural fatigue life expenditure status into planning for D-level modifications to preclude reaching any structural life limit.

(2) ACCs/TYCOMs. Reporting custodians shall adhere to limits published in NAVAIRINST 13120.1, NAVAIRINST 13130.1, SAFE Program reports, applicable PMIC, TDs, and IRACs and plan aircraft schedules for D-level modifications to preclude exceeding any structural life limit.

(3) COMNAVAIRSYSCOM Baseline Managers shall ensure proper inventory class and subclass is assigned to each life limited component, as provided in the Baseline Data Management Plan and incorporate current limitations, as listed in the applicable directives in the preceding paragraphs, for all life limited components.

b. Record initiation for components installed on or delivered with major aeronautical equipment, for example, aircraft and engines as part of a DOD contract, shall be the responsibility of the activity accepting

such major equipment for the DON. When these components are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

c. When requirements are not included in the Navy contract, record initiation for new components drawn from the Navy Supply System shall be the responsibility of the requisitioning activity.

d. If a record is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest record sent to the activity.

(1) If it can be determined that the component is in fact new or newly overhauled, a record will be initiated upon receipt by the requisitioning activity prior to installation.

(2) Caution must be stressed concerning components having an established finite life, such as helicopter rotor blades. Since failure of a finite life item may have catastrophic consequences, it is mandatory that documented proof of its remaining service life be determined prior to installation. On components where an overspeed or overstress occurrence is a mandatory reportable factor, this information must also be determined and documented. Visual appearance and apparent satisfactory operation of an item are not considered sufficient evidences of remaining serviceability. If the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) does not have the record, the FRC having ISSC responsibility will be contacted for disposition as to its serviceability. For components with an AT Code BCM 9, the record shall be annotated BCM 9 in the reason for removal column and the record transferred to the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8).

(3) When notified that a record is no longer required, via a change to the applicable PMIC, the Baseline Manager will be notified to change the baseline. At that point, the record will become a tracked repairable or untracked (as required).

e. This record includes the following tabs: Identification, TD, Components, Miscellaneous History, Repair/Rework, INST/REM, Exceedance (as required), Inspection, and Preservation.

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

5.2.3.28 Tracked Component Record (TCR)

a. The TCR is used to record maintenance history for repairable components not designated as life limited. In addition, components are designated by the ISSC as EHR when it is determined they require special emphasis in monitoring and trending of failure data, for example, QECK, armament equipment, or on-condition items. On-condition items are those items that require scheduled inspections, tests, or measurements to determine whether an item is in, or will remain in, a satisfactory condition until the next scheduled inspection, test, or measurement. The current list of components designated as EHR is published within the applicable PMIC. The record is maintained as part of the CM Inventory when a repairable item is designated as a tracked item.

b. When the component is removed from the aircraft or equipment, the record accompanies the component. Continuity of this maintenance history is paramount. These records are treated as equipment inventory and are viewed or updated using the CM Inventory Explorer or a WO to remove and replace the component.

c. Record initiation for components installed on or delivered with major aeronautical equipment, for example, aircraft and engines as part of a DOD contract, shall be the responsibility of the activity accepting such major equipment for the DON. When these components are delivered to the DON at the contractor's plant, the cognizant DON representative is considered to be the original accepting activity.

d. When record requirements are not included in the Navy contract, initiation for new components drawn from the Navy Supply System shall be the responsibility of the requisitioning activity.

e. When the PMA or ISSC has determined an item is to be tracked, they will issue implementation instructions and revise the applicable PMIC (EHR only). The Baseline Manager will ensure the baseline is changed when the PMA or ISSC has determined an item to be tracked.

f. Loss of a TCR does not render the item unusable. If a TCR is missing or not received, contact the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8) for reconstruction of information/data or to have the latest record sent to the activity.

(1) For components with an AT Code BCM 9, the TCR (EHR only) shall be annotated BCM 9 in the reason for removal column and the TCR transferred to the OOMA Electronic Repository located at COMNAVAIRSYSCOM (AIR-6.8).

(2) When notified that TCRs are no longer required, the Baseline Manager will change the record to untracked or delete the component from the baseline.

g. This record includes the following tabs: Identification, TD, Repair/Rework, Preservation, INST/REM, and Inspection.

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

5.2.3.29 Untracked Record

a. The Untracked Record is used for identification of components that are designated in the CM baseline as untracked.

b. This record includes the following tabs: Identification Data and Components.

5.2.3.30 Archiving Configuration Management (CM) Auto Log-Set (ALS) Historical Data

a. Aircraft/Equipment CM ALS may be purged after two years from the completed action/entry date from the last recorded flight. This will permanently remain in the integrated data environment (IDE). The Miscellaneous History Record, Repair/Rework Record, and TDs that are NINC and INC, will remain for the life of the aircraft. The last complete phase and special inspection cycle will be maintained on the Inspection Record.

b. Component CM ALS records may be purged after two years from the completed action/entry date from the last recorded flight. This will permanently remain in the IDE. The Miscellaneous History Record, Repair/Rework Record, and TDs that are NINC and INC, will remain for the life of the component/assemblies. The last complete phase and special inspection cycle will be maintained on the Inspection Record.

NOTE: Purging or removal of data from a CM ALS is defined as removing completed actions/tasks from a CM ALS after 2 years from the last recorded flight. The history of that CM ALS is permanently maintained in the IDE and can be accessed by all fleet users. Only D-level activities and IMAs are authorized to purge or remove data.

5.2.3.31 Contingency Operations

a. In the event that NTCSS Optimized OMA NALCOMIS activities becomes inoperable, OOMA activities shall follow predefined contingency procedures per this instruction and locally established policy.

b. NTCSS Optimized OMA NALCOMIS activities shall maintain locally written policy and procedures as approved by the MO for contingency operations and the back fit of data under the following guidance:

(1) Any logbook entries made during the unavailability of NTCSS Optimized OMA NALCOMIS shall be back fitted into the applicable CM ALS in chronological order.

(2) CM ALS for assemblies and parts received during contingency operations shall be obtained and added to the Primary folder in CM Inventory Explorer prior to commencing the back fit of electronic A sheets, WOs, and flight documents.

NOTE: Activities receiving CM ALs from the OMAwhole sale server are responsible for back fitting all logbook historical data not previously entered into the CM ALS module while the aircraft/asset was in the custody of a non-NTCSS Optimized OMA NALCOMIS activity.

(3) Upon completion of the back fitting process, a verification of the Flight module, the Maintenance module, and the ALS's CM Inventory Explorer for the affected aircraft, assemblies/tracked assets shall be performed.

c. In the event the system is unrecoverable, NTCSS Optimized OMA NALCOMIS activities shall perform disaster recovery per the OMA-SAM and contact the SPAWARSYSCEN Fleet Support Center at DSN 646-0534 or COMM (757) 443-0534 for a data recovery push.

5.3 DECKPLATE - Aircraft Inventory and Readiness Reporting System (DECKPLATE - AIRRS)

DECKPLATE - AIRRS is the Navy's official aircraft inventory program of record for all Navy and Marine Corps aircraft from initial acceptance to final disposition at AMARG, FMS or disposal. DECKPLATE-AIRRS provides the Offices of the Secretary of Defense, DON, and subordinate commands with comprehensive, current and historical data on Navy and Marine Corps aircraft location, status, and service in sufficient depth to support naval aviation inventory management, planning, and budgeting processes.

5.3.1 Reportable Inventory

Aircraft become subject to DECKPLATE-AIRRS upon official acceptance or reinstatement by the Navy and remain so until transferred to non-DON agencies, sold, or stricken from inventory. Reportable inventory applies to all fixed and rotary wing aircraft and UAS (GROUP 3 and above) aircraft. Small UAS (GROUP 2 and below) are managed within the units that procure and operate them. UAS (GROUP 2 and below) reports must be sent to the responsible ACC each month. COMNAVAIRSYSCOM (AIR 5.0D) will report all aircraft (including GROUP 3 and above UAS) in DECKPLATE-AIRRS, but are exempt from DECKPLATE-OOMA reporting for certain specified aircraft.

5.3.2 Function of the XRAY (Aircraft Custody and Status Change)

The XRAY is the primary means of recording aircraft status changes. The XRAY records aircraft custody, status and service life factor changes, include Depot rework. XRAYs also activate or deactivate Mission Capability Reporting System (MCRS) reporting status. Aircraft in A status are in MCRS (IN MCRS), and accumulate Subsystem Capability Impact Reporting (SCIR) data. Aircraft not in A status are out of MCRS (OUT MCRS).

5.3.3 XRAY Deadlines

Category 1 strike XRAYs for lost, (not recovered) or destroyed aircraft, must be submitted no later than 2400 on the day of occurrence. All outstanding XRAY corrections and other XRAY transactions occurring between 0001 and 2400 on a given day must be reported no later than 1600 the next working day. The action

date reported on the XRAY will be the date the transaction occurred, regardless of the date the XRAY report is actually transmitted.

5.3.4 XRAY Submission Procedures

Activities assigned reporting custody of naval aircraft must submit XRAYs via NALCOMIS Optimized OMA (OOMA) whenever there is any change in custody or status. Activities not operating OOMA will submit XRAYs directly into DECKPLATE-AIRRS (http://www.navair.navy.mil/logistics/DECKPLATE/index.html)

NOTE: OOMA activities with no connectivity to DECKPLATE-AIRRS must e-mail XRAY information to their Type Wing or MAW, and the Type Wing or MAW must submit the XRAY.

5.3.5 Reporting Policies

5.3.5.1 XRAYs must be submitted by reporting custodians to document status changes, such as acceptance into the naval inventory, transfer of custody, changes of location, rework, damage or strike from the inventory, and other situations defined in Appendix E. Status changes must be reported by XRAY, regardless of how brief the situation exists.

5.3.5.2 Aircraft undergoing Phased Depot Maintenance (PDM) will be placed in the appropriate AIRRS Standard Rework Status (Appendix E) during D-level rework, regardless of location.

a. Aircraft awaiting or undergoing depot repair or modernization or modification at the reporting custodian's operating site will be placed in the appropriate A_1 or A_2 Special Rework Status Code (Appendix E), unless approved to be placed in OUT MCRS status by the ACC. Examples: A11 will be used for a Combat category aircraft undergoing depot in-service repair (ISR) at the reporting custodian's site, and A12 will be used for a Combat category aircraft undergoing depot modernization or modification at the reporting custodian's site. Exceptions will be considered when a depot field repair does, or is expected to exceed 120 days. Requests to place aircraft OUT MCRS while undergoing on-site depot repair or modernization or modification will be submitted by naval message with the following minimum information:

(1) Each BUNO a deviation is requested for.

(2) Status requested.

(3) Justification for placing the aircraft OUT MCRS.

(4) Plan and timeline for returning the aircraft to IN MCRS.

5.3.5.3 When an aircraft is temporarily in the physical custody of an activity that is not the designated reporting custodian, the physical custodian is responsible for submitting all XRAYs required during the period of temporary custody. The most common situations occur when aircraft are undergoing rework at the Depot and reporting custody remains with the operating unit, or when a squadron deploys without its full complement of aircraft and leaves the non-deploying aircraft in the temporary physical custody of another squadron.

5.3.5.4 All aircraft will remain out of Mission Capable Reporting Status (OUT MCRS) during D-level standard rework, regardless of location. FID or PEDs can only be adjusted by the CNO (N980L).

5.3.6 Service Age of Aircraft

The service age of aircraft is established by the Material Inspection and Receiving Report (DD Form 250), initial bill of sale, or other documentation deemed acceptable by COMNAVAIRSYSCOM (AIR 5.0D) upon the aircraft's initial acceptance into the naval inventory. Specific reporting requirements and procedures for

aircraft with rework schedules, based on Aircraft Service Period Adjustment (ASPA), and aircraft with rework schedules, based on Phased Depot Maintenance (PDM), are provided in OPNAVINST 3110.11.

5.3.7 Security Classification

Generally, DECKPLATE-AIRRS reports may be treated as UNCLASSIFIED material.

5.3.8 Aircraft Controlling Custodians

5.3.8.1 Designation of Aircraft Controlling Custodians (ACC)

For purposes of DECKPLATE-AIRRS, and in no way altering naval administrative or command relationships, ACCs are reported as follows:

Controlling Custodian	DECKPLATE-AIRRS Abbreviations
Commander Naval Air Forces (CNAF)	CNAF
Commander Naval Air Force Reserve (COMNAVAIRFORES)	CNAFR
Chief of Naval Air Training (CNATRA)	CNATRA
Commander Naval Air Systems Command (COMNAVAIRSYSCOM)	NAVAIRSYSCOM
Aircraft assigned to COMNAVAIRSYSCOM Test and Evaluation	NASC TE
Aircraft assigned to COMNAVAIRSYSCOM Fleet Support	NASC FS
Pre-accepted Aircraft - Any Navy public aircraft supporting a Navy acquisition plan or program that has not been brought into the DECKPLATE-AIRRs inventory database.	NASC FS

Command Codes:

LANT NAVY	10	CNATRA	40
LANT MARINE	11	NASC TE	50
PAC NAVY	20	NASC FS	70
PAC MARINE	21	NASC TE (UAS)	51
OPNAVR NAVY	30	NASC FS (UAS)	71
OPNAVR MARINE	31	NASC Pre-Accepted	72
MISCELLANEOUS	90		

5.3.8.2 Aircraft Controlling Custodian (ACC) Reporting Responsibilities

a. Monitor reporting custodians for compliance with reporting requirements of this chapter and OPNAVINST 3110.11(series).

b. Obtain prior authorization from CNO (N980L) for aircraft transferring to and from COMNAVAIRSYSCOM.

c. Comply with DOD Directive 1225.06 when transferring aircraft from reserve component to active component.

d. Direct transfer of aircraft using Aircraft Transfer Orders (ATOs).

5.3.8.3 Contractor Held Aircraft (COMNAVAIRSYSCOM)

a. In some instances, contractors are provided naval aircraft under a contract with the Navy. Normally, contracts are written as lease agreements or as government furnished property (GFP) as part of a separate contract.

b. If a DCMA is on site, reporting custody will be transferred to the DCMA. Lease, extension of lease, or GFP agreements require approval of CNO (N980L).

(1) RDT&E, under COMNAVAIRSYSCOM, manages aircraft provided for research, development, evaluation, or production testing from the Navy.

(2) FS, under COMNAVAIRSYSCOM, manages non-IMC aircraft provided for D-level rework or modification from the Navy.

(3) Contractor held aircraft are reported as non-standard service life aircraft.

5.3.9 Wing and Aircraft Reporting Custodians

5.3.9.1 Type Wings and MAWs

a. Coordinate aircraft transfers per COMNAVAIRPAC/COMNAVAIRLANTINST 5442.3.

b. Ensure accuracy and timeliness of XRAYs submitted by units under their cognizance, and initiate corrective action on discrepancies.

c. Provide training to activities on DECKPLATE-AIRRS reporting procedures, as needed.

5.3.9.2 Reporting Custodians

Reporting custodians are activities with an allowance for aircraft, an inventory of aircraft, or both. A reporting custodian's ACC is the command responsible for aircraft custody, regardless of physical location. A squadron detachment becomes a reporting custodian when directed by the ACC and assigned a different Organization (ORG) and Permanent Unit Code (PUC) from the parent squadron.

a. DCMA has reporting custodian responsibilities for all new production and pre-accepted aircraft.

b. Reporting custodians must:

(1) Submit XRAYs for aircraft inventory status changes via OOMA. Activities not operating OOMA must submit XRAYs via DECKPLATE-AIRRS (http://www.navair.navy.mil/logistics/DECKPLATE/index.html/).

(2) Corrected XRAY transactions (OOMA activities) or corrected XRAY reports (non-OOMA activities) must be submitted within 24 hours of discovery of erroneous data.

NOTE: XRAY reports can be modified in OOMA within a period of 45 days from date and time of creation. If no corrections are done within 45 days of submission, the XRAY report is locked and an entry of LOCKED appears in the Update Indicator box located at the bottom of the report to prevent users from making additional changes. The SA User's Manual has procedures for unlocking an XRAY after the 45 day period has expired.

(3) Review the DECKPLATE-AIRRS daily status report within five days of submission. Verify XRAYs submitted via OOMA have replicated and are in the correct status. If an XRAY has not replicated in DECKPLATE-AIRRS after five days, notify ACC.

5.3.10 Aircraft Inventory Reporting Situations

5.3.10.1 Addition of Aircraft to the Naval Inventory

a. Adding aircraft to the naval inventory requires two steps:

(1) The assignment of a unique BUNO to each aircraft.

(2) Submission of an XRAY reporting acceptance, pre-acceptance, or reinstatement of the aircraft.

NOTE: CNO (N980L) maintains and controls the master bureau number log.

b. BUNO assignment to new production aircraft. Upon request by AIR-5.0D, CNO (N980L) will issue consecutive six digit BUNOs to the Program Manager of the activity accepting new production aircraft for the Navy. Acceptance of new production aircraft is reported by an acceptance XRAY via DECKPLATE-AIRRS. Aircraft procured by the Navy for other U.S. government agencies or MAP/FMS agreements, generally, do not enter the Navy's inventory.

c. Aircraft acquired from other than new production will have a BUNO assigned by CNO (N980L). The Program Office involved in acquiring the aircraft will provide the original delivery date of the aircraft to CNO (N980L). Regardless of service or organization, the acceptance date is the original date of delivery, vice the date of acceptance into the Navy inventory. CNO (N980L) will verify the accuracy of the acceptance date when entered into DECKPLATE-AIRRS for accounting of aircraft age. If the directive authorizing assumption of title does not include a BUNO assignment, contact CNO (N980L) via AIR 5.0D for assignment. Acceptance of aircraft from sources other than new production is reported by reinstatement XRAY.

NOTE: Naval aircraft previously stricken from the inventory will be reinstated using the original BUNO assigned prior to strike.

5.3.10.2 Aircraft Ferry Movement for Custody Change

a. Aircraft ferry movement is the flight or flights of an aircraft for the exclusive purpose of transfer between reporting custodians. OOMA users refer to OMA-UA for guidance on documenting ferry movement.

b. The movement may involve change in reporting status or physical custody, based on guidance in the ATO/ATL. If the transferring activity ferries the aircraft to the receiving activity, custody change occurs at the destination. If the receiving activity ferries the aircraft, custody change occurs at point of origin.

c. Ferry crews for aircraft ferry movements to and from storage facilities under NASC FS controlling custody:

(1) Flights to storage facilities will be flown by crews assigned from the transferring reporting custodian.

(2) When aircraft are removed from storage facilities, the receiving activity will provide the ferry crew.

NOTE: For aircraft shipped via surface or airlift shipment, custody changes upon arrival at the location of the receiving custodian.

d. Aircraft approved for strike will be ferried or moved to the site of final disposition prior to the reporting custodian issuing a Strike Action XRAY Report. Aircraft ferried to AMARG will be received and stricken by the Navy Fleet Support Office assigned to AMARG, not the ferrying activity.

5.3.10.3 Loan of Aircraft to the DON and Loan of DON Aircraft to Non-Naval Activities

a. ACCs and reporting custodians will not enter into aircraft loan agreements without CNO (N980L) authorization.

b. Aircraft loaned to the DON. Assignment of a BUNO and a reinstatement action XRAY report are required to add the aircraft to the naval inventory. The aircraft is then subject to normal XRAY reporting, and will be reported in Loan Status Codes U00, U10, U50, U60 or U70, as appropriate (Appendix E). No other XRAY reports are required until termination of the loan agreement. Upon termination of the loan agreement, the aircraft is reported stricken and returned to the loaning organization.

5.3.11 Strike from Inventory

5.3.11.1 DON Aircraft

DON Aircraft may not be stricken from inventory without the direct authorization of CNO (N98), except for aircraft lost or destroyed through accident, which may be stricken by the reporting custodian without prior authority.

a. CNO (N98) will semiannually approve a list of aircraft strike and disposition. Special strike requests will be submitted to CNO (N98) on a case-by-case basis.

b. When initial authorization is received to strike an aircraft, the aircraft is reported in the awaiting Strike Status Code (except Category 1 strike). Aircraft approved for strike will be ferried or moved to the site of final disposition prior to strike from the naval inventory. After movement to the site of final disposition, and when authorized by CNO (N98), the strike action is initiated by submission of a strike XRAY in NALCOMIS OOMA or DECKPLATE AIRRS. Aircraft in any of the Strike Status Codes (except 1S0, 2S0, 3S0, 4S0) are considered retired. Each strike XRAY must reference the CNO authority in remarks section. Stricken aircraft are no longer subject to the reporting requirements of this instruction, unless reinstated at a later date. If authorization to strike is not granted and an aircraft is retained in the inventory, the reporting custodian will reverse the strike action by submitting a "Y" action XRAY and reporting the aircraft in the appropriate status code. Aircraft authorized for disposition at AMARG or stricken due to unrecoverable crash or loss will follow the same procedures prescribed for transferring aircraft and NALCOMIS OOMA logsets to another reporting custodian by forwarding the NALCOMIS OOMA logsets to the AMARG server under the cognizance of NAVAIR 6.8.4.2. AMARG personnel will manage stricken aircraft logsets on the AMARG server with the assistance of NAVAIR 6.8.4.2.

5.3.11.2 Categories of Strike and Damage

There are four categories in which to declare a strike and one category to report repairable damage. Each involves a different administrative procedure:

a. Category 1 (Damage). Loss or damage to the extent that restoration is uneconomical or militarily impractical.

b. Category 2 (Depreciation). Depreciation caused by time and usage to the extent restoration is uneconomical or militarily impractical.

c. Category 3 (Administrative). Administrative decision reasons not related to damage, depreciation or completion of service life, such as obsolescent or excess aircraft; aircraft intentionally destroyed (including drones) in test, training or battle; aircraft diverted for use in ground training; and aircraft transferred to foreign governments, MAP/FMS, or other non-Navy recipients.

d. Category 4 (Completed Service Life). Completion of standard service life as defined for each model.

e. Category 5 (Repairable Damage). Repair is economical and practical (aircraft remains in the naval inventory).

5.3.11.3 Selection of Strike Category

The following rules apply when aircraft are eligible for strike in more than one category:

a. Strike the aircraft in Category 1, regardless of eligibility for other categories.

b. If eligible in Category 4 and Category 2 or 3, strike the aircraft in Category 4.

c. If eligible in both Categories 2 and 3, strike the aircraft in Category 2.

5.3.11.4 Category 1 (Strike Damage) Procedures

a. If an aircraft is lost, not recovered or destroyed, the reporting custodian will immediately report the strike in Category 1 via XRAY. If the damage incurred is of lesser degree, but still such that the reporting custodian believes the aircraft is eligible for Category 1 strike, the reporting custodian will notify the ACC and request disposition. Each ACC has the authority to declare an aircraft eligible for Category 1 strike and may request a P&E inspection to determine eligibility. A determination of eligibility constitutes both the authority and direction to strike the aircraft. Reporting custodians will make logbook entries prior to transferring a damaged aircraft to NASC FS custody. The reporting custodian will provide sufficient information for the receiving activity to report the aircraft stricken should the decision be made to strike the aircraft. The following will be entered into the Miscellaneous/History section:

(1) Date of accident.

(2) Reporting custodian at the time of the accident.

(3) Details of the mishap.

b. The strike XRAY will contain Action Code S, Status Code 1S0 and the appropriate strike or damage code. The FID or PED will be the month and year of strike. If a planning estimate is requested, the aircraft will be reported using Action Code X , Status Code Y00. An aircraft reported in Y00 status also requires the tentative strike or damage code to be entered into the aircraft logbook Miscellaneous/History section to include the DTG of the authorizing naval message. If the evaluation results in a decision to restore the aircraft, the reporting custodian must submit an XRAY report using the appropriate status code. Strike XRAYs representing aircraft lost or destroyed will include this instruction in the remarks section of the report as the approving authority. All other Category 1 strike actions will reference the specific authorizing directive.

5.3.11.5 Category 2 Strike (Depreciation) Procedures

a. When an aircraft depreciates to the extent that it may become eligible for strike, the reporting custodian must request P&E evaluation to determine eligibility for Category 2. P&E evaluation results will be sent to the cognizant ACC. Refer to paragraph 5.3.11.4b for reporting procedures if the aircraft is placed in Y00 status. Requests for Category 2 strike will be submitted via the ACC for CNO (N98) approval. If approved, CNO (N98) will place the BUNO on the semiannual Aircraft Strike Authorization naval message.

b. Pending P&E evaluation, aircraft awaiting decision to strike will be reported using an Action Code X Status Code PB0. When the P&E evaluation is completed and strike is recommended, use S20. When authorization is granted, the Category 2 strike action is reported as Action Code S, Status Code 2S0, with the appropriate strike or damage code.

5.3.11.6 Category 3 Strike (Administrative) Procedure

a. An aircraft will be stricken Category 3 on authorization issued by the CNO (N98) Semiannual Aircraft Strike Authorization for administrative reasons not related to damage, depreciation, or completion of service life. Category 3 strikes cover obsolescent or excess aircraft; aircraft intentionally destroyed (including drones) in test, training, or battle; aircraft diverted for use in ground training; and aircraft transferred to foreign governments, MAP/FMS, or other non-Navy recipients. If the strike is due to authorized intentional destruction, the reporting custodian will immediately report the strike by XRAY report. When strike and disposition do not involve MAP/FMS, the aircraft will be stricken at the disposal site. Aircraft are stricken for MAP/FMS on turnover to the foreign government or as directed by CNO (N98).

b. XRAYs reporting Category 3 strike will contain Action Code S, Status Code 3S0, and the appropriate strike or damage code.

5.3.11.7 Category 4 Strike (Completed Service Life) Procedure

a. Aircraft are stricken Category 4 if eligibility for strike is due to completion of service life. Eligibility for Category 4 strike is determined by engineering assessment and the ACC. Disposition requests for strike eligible aircraft will be submitted to CNO (N98) via the ACC.

b. If strike is approved, the aircraft will be reported stricken Category 4, Action Code S, Status Code 4S0, with the appropriate strike or damage code.

5.3.11.8 Strike XRAY Reporting

Strike XRAYS will be reported via OOMA or the DECKPLATE-AIRRS Web site (http://www.navair.navy.mil/logistics/quicklinks.html).

NOTES: 1. A strike XRAY is used only when reporting XRAY Status Codes; 1S0, 2S0, 3S0, and 4S0. The PED or FID will be adjusted to match the month and year of the XRAY action date.

2. AMARG will submit a receipt XRAY upon arrival of aircraft transferred to AMARG for preservation or strike. Upon completion of preservation of the aircraft AMARG will submit a strike XRAY. Commands transferring aircraft to AMARG will not submit a strike XRAY.

5.3.12 XRAY Data Description

BUNO. Enter the six-digit BUNO of the aircraft.

PUC. Enter the six-digit PUC assigned to the reporting custodian.

Action Date/Time: Enter the date of the actual transaction.

DECKPLATE-AIRRS:

Action Code. Enter the action code from Appendix E that best describes the transaction. Paragraph 5.3.12 provides guidance on data elements reported for each action code.

Status Code. Report the complete three-digit status code that best describes the aircraft status. Appendix E lists all status codes applicable to XRAY transactions and acceptable action code/status code combinations.

Type Model Series Designation. Report the complete model designation, including the dash, for example, FA-18C, EA-6B, MH-60S. Do not add slashes or plus signs to designations, for example, F/A-18D will be reported as FA-18D.)

Fixed Induction Date (FID)/Period End Date (PED). (FID for IMC/P aircraft only)(PED for Non IMC/P aircraft only)

Report the PED in the following format:

DECKPLATE-AIRRS WEB – YYYYMM

OOMA – MMMYYYY

Upon completion of standard rework, the PED will be reported as the last day of the month in which the OSP, in months, is reached.

Adjust the service period PED/OSM 12 months for each subsequent adjustment after completing an ASPA. Other than an ASPA, the PED will only change for OSP revision per change to OPNAVINST 3110.11 or by CNO (N980L) approval for individual BUNO aircraft.

Strike or Damage Code. Select the Strike or Damage Code from Appendix E to describe a strike or damage situation. Report all strike transactions, regardless of strike category. For aircraft sustaining lesser damage, yet requiring depot or special rework repair, report the appropriate damage code. Include the damage code only on the initial XRAY reporting the aircraft in the appropriate Special Rework Repair Status Code, such as F30, FC0, E30, E31, EC, D30, H30, H31, HC0, HC1, I30, IC0, G30 or G31. Appendix E details Strike and Damage Status Reporting Codes.

Acceptance Date. DCMA or AIR 5.0D are the only activities authorized to submit acceptance XRAYs for naval aircraft.

DECKPLATE-AIRRS:

Action Code – A. Acceptance. Report the Action Date/ Time the Navy accepted the new production aircraft from the acceptance date and time provided on the Material Inspection and Receiving Report (DD-250).

Action Code – P. Pre-acceptance. Report the Action Date/Time the Navy gained custody of the aircraft. In the DECKPLATE-AIRRS database this date will become the Pre-acceptance Date and this is the date that will be used to calculate the chronological age of the aircraft.

Action Code – Y. Reinstatement of aircraft from other service or source. When an aircraft is accepted into the naval inventory from another service or source, the Action Date becomes the Navy Inventory Date. AIR 5.0D or OPNAV (N980L) will enter the DD-250 date of the aircraft. Typically, the acceptance date is recorded as the first entry with signature on the Aircraft Inventory Record, the Aircraft Inventory Record Certification and Record of Transfer, Aircraft Logbook, Aircraft Data Plate or other documentation deemed acceptable by AIR 5.0D.

Action Code – Y. Reinstatement of a previously stricken aircraft. In this case the Action Date has no bearing on the Acceptance Date. The Acceptance Date is kept in the database and there is no need to report it again.

Action Code – Y. Reinstatement of pre-accepted aircraft. The Action Date on this XRAY will become the Navy Inventory Date. The previously reported Pre-acceptance Date is the date that the aircraft age is calculated from.

NOTE: DD250 or Pre-acceptance Dates are used to calculate the chronological age of the aircraft.

Aircraft Service Period Adjustment (ASPA).

The ASPA Code is a two-position code that indicates the increment and the number of inspections applicable to current operational service period.

ASPA Table Use for data item L	1st Inspection	2nd Inspection	3rd Inspection	Subsequent Inspection to the 8th	9th Inspection	10th Inspection	Subsequent Inspection
Scheduled for ASPA/PACE have not reached the inspection process	11	21	31	_1	A1	B1	_1
In-process of ASPA/PACE aircraft preparation, inspection, reassembly, ACC (deferral or non-deferral)	10	20	30	_0	A0	B0	_0
ASPA/PACE Inspection Non-Deferrals	19	29	39	_9	A9	B9	_9
ASPA Inspection Deferral	91	92	93	_9	9A	9B	9_
Note: *For subsequent inspections use the number of the inspection in the blank position represented by (i.e. 5 for fifth, 6 for sixth, up to 8 for eight).				**For inspections subsequent to 10th, use alphabetical characters in blank position represented by (i.e. C for eleventh, D for twelfth, etc...)			

1. If an aircraft is undergoing special rework modernization or modification (G4 status) at time of ASPA inspection, submit an XRAY to change data item L ASPA to 10 for first inspection, 20 for second, 30 for third, etc. Status will remain G4 until modernization or modification is complete.

2. When notification is received from the ACC of deferral or non-deferral of PED based on ASPA, submit an XRAY citing ACC authorization for the following:

Deferral Recommended: Report applicable status code, adjusted PED/OSM, and change ASPA to 91 for first inspection, 92 for second, 93 for third, etc.

NOTE: To obtain full ASPA deferral the ASPA inspection must be performed within the window of 6 months prior to PED, including PED month. If inspection is performed prior to window, deferral will be 1 month less for each month inspection is performed early. For example, with a PED of 1208, the ASPA window is 070108 through 123108. If ASPA inspection were performed in 0608, deferral would be 11 months. If performed in 0508, deferral would be 10 months, etc.

Deferral Not Recommended: Report applicable status code, and change ASPA to 19 for first inspection, 29 for second, 39 for third, etc. If deferral is not recommended with immediate service termination recommended, be sure to submit X action code XRAY reporting ASPA with non-SDLM status code.

Operating Service Months (OSM) For aircraft that have a FID/PED the OSM will be calculated by DECKPLATE-AIRRS as the difference in months between the FID/PED and the Acceptance or Pre-acceptance Date.

Estimated Rework Completion Date. Include this item only on those XRAYs reporting in process of standard or special rework. Report this date within DECKPLATE-AIRRS.

NOTE: When the estimated date of completion of rework is extended by two or more days from the last reported date, an XRAY must be submitted to report the revised estimated rework completion date.

Permanent Unit Code (PUC) of In-Service Activity. Required on all in-service XRAYs. Report the PUC of the in-service (physical) custodian of the aircraft.

PUC Received From. Used only on XRAYs reporting receipt of aircraft (action codes R or Y). Report the PUC of the unit received from.

Project or Support Code. Identifies whether the primary mission is for project or support. (COMNAVAIRSYSCOM Test and Evaluation only). The Project or Support Code is not reported on an XRAY, but maintained in the DECKPLATE-AIRRS Web application.

Organization Code. Required on all XRAYs. Use the reporting custodian's organization code associated to the PUC having aircraft custody.

Operational Status Category. Reported on Change of Location (Action Code L) XRAYs. Report the Operational Status Code from Appendix E that describes an aircraft's operational status.

Fleet Assigned Code. Reported on Change of Location (Action Code L) XRAYs. Select the Fleet Assigned Code from Appendix E to report an aircraft's fleet assignment for 30 days or more. Do not report transits through a fleet, report only the destination fleet where the assignment is for 30 days or more.

Aircraft Location. Required on every XRAY. Enter name of the ship, station, or facility, such as Theodore Roosevelt or Lemoore CA. If outside CONUS, and not at an established USN or Marine Corps facility, report city and country, for example, Sangin, Afghanistan.

For units that are deployed and are restricted from reporting their geographic locations, report location as deployed.

For aircraft enroute by flight or airlift enter the name of the destination ship, station, or facility.

For aircraft enroute by sea or surface lift transport report the name of the ship when aboard ship or the destination, if transport is by truck.

When movement of enroute aircraft has been interrupted 48 hours or more, report the actual physical location.

Remarks. Paragraph 5.3.17 lists specific remarks required, by action code. Do not report as Unknown in DECKPLATE-AIRRS. Detailed remarks and a causal factor are required on all XRAYs for aircraft in D40, D41, G30, G31, G40, or G41 status.

The following are examples of detailed remarks sufficient for data collection:

Aircraft awaiting or aircraft undergoing P&E for cracked or buckled web,
P/N 65201-05003-103, FS 462, WL 92, BL 20L
Aircraft inducted for PMI 1, scheduled event
Aircraft inducted for PMI 1, unscheduled, fire damage
Aircraft inducted for MOD, H-60 Airframe Change (AFC) NR 372, TD CODE 50,
incorporation of improved pilot and co-pilot seat cushions (RAMEC CHPT-95-10)

The following are examples of specific causal factors:

Human error
Reached structural life limit
Material fatigue
Component failure
Configuration change
Mechanical failure

NOTE: OOMA activities will refer to the NALCOMIS User's Manual for guidance on XRAY serial assignment.

5.3.13 OPNAV XRAY Action Code

5.3.13.1 XRAY Data Descriptions (paragraph 5.3.12) provides detailed description of XRAY data. Figure 5-54 amplifies, for each action code, items always required and items reported only when content has changed from information previously reported.

5.3.13.2 The following examples explain the use of each action code. Action codes always associated with reporting custody and, if applicable, change in reporting custody (Action Codes A, R, and Y).

Action Code A - DON Acceptance. Used to report the acceptance of new production aircraft into the naval inventory. Acceptance actions are reported only by NASC FS reporting custodians. Use Action Code Y to report reinstatement of previously stricken aircraft, aircraft acquired from other services, or aircraft that have been pre-accepted using Action Code P.

Action Code R - Receipt used by reporting custodians of all ACCs.

Action Code Y - Reinstatement. Used only when reporting:

1. The reinstatement of a previously stricken aircraft.
2. Addition of a used (not new production) aircraft to the naval inventory.
3. Aircraft that have been pre-accepted using Action Code P.

5.3.13.3 The following examples explain the use of each action code not associated with no change in reporting custody (Action Codes L, M, P, S, and X). For Action Code S, refer to paragraph 5.3.11.5.

Action Code M – Type Model Designation Change. Report change in model designation when an aircraft is converted. Enter the new model designation on the first and subsequent XRAYs reporting the aircraft entering the conversion process. If the model designation change is directed by administrative action (no depot rework involved), retain in the status code previously reported.

Action Code P - Pre-accepted aircraft. AUTHORIZED FOR USE BY NAVAIR ACC, ONLY.

1. NAVAIR ACC is the controlling custodian for pre-accepted aircraft and aircraft required to perform Contractor Testing (CT) and Developmental Testing (DT) prior to the final DD-250 and Navy acceptance. These aircraft will not be included in the active inventory, and will be tracked under NAVAIR FS Custody Command Code 72.

2. NAVAIR ACC will manage the pre-accepted aircraft inventory, and is the point of entry for all pre-accepted XRAYS.

Action Code X - Other change. Used by all reporting custodians when no other action code applies.

5.3.14 OPNAV XRAY Content for Unmanned Aircraft Systems (UAS)

Flight hour funded UAS become subject to DECKPLATE-AIRRS upon official acceptance by the Navy, and remain so until final strike from the inventory. Changes to flight hour funded UAS status will be accomplished primarily through DECKPLATE-AIRRS Web based XRAY reporting. UAS Ground Stations will not be included when reporting to DECKPLATE-AIRRS. UAS Ground Stations will be tracked using OOMA.

5.3.15 XRAY Reporting Custodian Change of Location

5.3.15.1 Organization Status Change Report

An Organization Status Change Report is required when a reporting custodian moves from one location to another, for example, shore to ship, ship to shore, ship to ship, or one shore location to another for a period of 30 days or more. In addition to reporting location change, changes to operational status category, fleet assigned code and Supply Org Code may apply. The organization status change will only be entered via DECKPLATE-AIRRS Web reporting.

a. Reporting custodians anticipating changes of location must obtain Type Wing, CVW, MAW, or ACC approval (as appropriate) prior to submitting the report. As a minimum, the Organization Status Change will report a change in at least one of the following categories: Location, Operational Status, Fleet Assigned or Supply Org Code.

b. Reporting custodians are established or disestablished at the direction of the ACC. The ACC will request a PUC Organization Code as part of unit activation preparations. Once assigned, the PUC will never change regardless of changes in the reporting custodian's mission, location, or administrative affiliation. CNO (N980L) manages PUC assignments and COMNAVAIRFOR (N422B) assigns Organization Codes and detachment PUCS upon ACC request.

c. Detachments may be established by the ACC as reporting custodians of aircraft. COMNAVAIRFOR maintains PUCs for assignment to detachments.

5.3.15.2 Aircraft Location Change (Action Code–L)

Action Code L will be used to report aircraft location change when embarking or debarking associated with extended deployments of 30 days or more. Refer to Figure 5-54 XRAY DATA ITEMS for Action Code L XRAY data.

5.3.16 Quarterly Hours in Life

5.3.16.1 Reporting Custodians are required to report Aircraft Hours in Life at the end of each quarter.

5.3.16.2 Quarterly Hours in Life must be submitted via the DECKPLATE-AIRRS Web site by the fifth working day of January, April, July, and October.

5.3.16.3 If DECKPLATE-AIRRS Web is unavailable, the reporting custodian will submit Quarterly Hours in Life via naval message using the sample message format of Figure 5-53.

5.3.16.4 Prior to submitting Quarterly Hours in Life, verify all XRAYs with an Action Code of A, P, R, or Y with an Action Date equal or prior to the reported quarter are valid.

5.3.16.5 Refer to Figure 5-53 and the DECKPLATE-AIRRS Web site for procedures to input Quarterly Hours in Life.

5.3.17 OPNAV XRAY Content by Action Code

5.3.17.1 XRAY Data Item Description (paragraph 5.3.12) provides detailed description for XRAY data items. Paragraph 5.3.17.2 amplifies, for each action code, items always required and items reported only when content has changed from information previously reported.

5.3.17.2 The following examples explain the use of each action code. Guidance on other XRAY items is in parentheses. Action codes always associated with reporting custody and, if applicable, controlling custody change (Action Codes A, F, G, R and Y).

Action Code A - DON Acceptance. Used to report the acceptance of new aircraft into the naval inventory. Acceptance actions are reported only by NASC FS reporting custodians. Use Action Code Y to report reinstatement of previously stricken aircraft, aircraft acquired from other services, or aircraft that have been pre-accepted using Action Code P.

Required Items:

Info: CNO WASHINGTON DC //N980L//.

A. BUNO.

B. PUC.

C. Date of Action (Navy Acceptance Date).

D. Action Code A.

E. Status Code (Allowable status codes: BX0, BA0, VF0).

F. Model Designation.

K. Acceptance Date.

V. Aircraft Location.

Remarks: XRAY Serial Number/DTG of previous XRAY, Local Time of Acceptance, Movement Directive ATO/Priority Assignment); other amplifying remarks as appropriate.

XRAY items reported only if error is discovered on information previously reported:

Z. Delete/Correct. (Naval messages only).

Action Code F (non-IMC/P aircraft) - Receipt at the end of an OSP. Used only by NASC FS reporting custodians to report: receipt of aircraft for Standard Rework; storage; or retirement at the end of an OSP. When using Action Code F, adjust PED to the month and year of the date of action. Adjust OSM to reflect total operating service months expended in service life as of PED. If preceded by an E action XRAY from an operating unit prior to a decision to change reporting custody, PED and OSM will remain unchanged from those reported on E action code XRAY.

Required Items:

INFO: ACC (of transferring activity if applicable).

TYPEWING (of transferring activity if applicable).

COMFAIR (of transferring activity if applicable).

Transferring Reporting Custodian.

CG MAW (of transferring activity if applicable).

MALS (of transferring activity if applicable).

A. BUNO.

B. PUC.

C. Date of Action.

D. Action Code F.

E. Status Code.

F. Model Designation.

G. Period Number.

H. PED.

M. OSM.

P. PUC Received From/Command Code.

V. Aircraft Location.

Remarks: XRAY serial number/DTG of previous XRAY, local time of custody change, and movement directive (ATO/Priority Assignment). Other amplifying remarks as appropriate.

XRAY items reported only when item content is different than information previously reported:

J. Strike/Damage Code.

N. Estimated Rework Completion Date.

Z. Delete/Correct (Naval message only).

Action Code G (non-IMC/P aircraft only) - Receipt (change in reporting custody) at start of operating service period. Used by OPNAV, OPNAVR, CNATRA, and CNASC TE/FS reporting custodians to report receipt of an aircraft beginning (not resuming) an operating service period. Use Action Code G on receipt of aircraft returning from standard rework (SDLM), Age Exploration, or ACI/AWI.

Required Items:

A. BUNO.

B. PUC.

C. Date of Action.

D. Action Code G.

E. Status Code.

F. Model Designation.

G. Period Number.

H. PED.

M. OSM.

P. PUC received from/command code.

V. Aircraft Location.

Remarks: Enter local time of custody change and movement directive (ATO/Priority Assignment) and other amplifying remarks as appropriate. If received from another ACC, report flight hours in period and flight hours in life.

XRAY items reported only if error is discovered on information previously reported:

Z. Delete/Correct (Naval messages only).

Action Code R - Receipt for other than action codes F or G. Used by reporting custodians of all ACCs.

Required Items:

A. BUNO.

B. PUC.

C. Date of Action.

D. Action Code R.

E. Status Code (appropriate status code).

F. Model Designation.

G. Period Number (Non-IMC aircraft).

H. PED/FID.

L. ASPA (if applicable).

O. PUC of In-Service activity (required on all in-service XRAYs).

P. PUC received from/command code.

S. Operational Status Category.

T. Fleet Assigned Code.

V. Aircraft Location.

Remarks: Enter local time of custody change and movement directive (ATO/Priority Assignment) and any other amplifying remarks (as appropriate). If received from another ACC, report flight hours in period and flight hours in life.

XRAY items reported only when item content is different than information previously reported:

J. Strike/Damage Code.

N. Estimated Rework Completion Date.

Z. Delete/Correct (Naval messages only).

Action Code Y - Reinstatement. Used only when reporting the reinstatement of a previously stricken aircraft, addition of a used (not new production) aircraft to the Naval inventory, or aircraft that have been pre-accepted using Action Code P.

Required items.

A. BUNO.

B. PUC.

C. Date of action (date of reinstatement of previously stricken aircraft or date of Navy acceptance for not new production aircraft).

D. Action Code Y.

E. Status Code (appropriate status code).

F. Model Designation.

G. Period Number (Non-IMC aircraft).

H. PED/FID (If applicable).

K. Acceptance Date (Original manufactured date, from the data plate).

L. ASPA (if applicable).

V. Aircraft Location.

Remarks: Enter local time reinstatement and reinstatement authority directive (ATO/Priority Assignment) and any other amplifying remarks (as appropriate). If received from another ACC, report flight hours in period and flight hours in life.

XRAY items reported only when item content is different than information previously reported:

Z. Delete/Correct (Naval message only).

5.3.17.3 The following examples explain the use of each action code. Guidance on other XRAY items is in parentheses. Action Codes always associated with no change in reporting custody. (Action codes E, H, L, M, P, S, and X).

NOTES: 1. Examples of Action Code L are in paragraph 5.3.12.

2. Examples of Action Code S are in paragraph 5.3.

Action Code E (Non-IMC/P aircraft only) - End of operating service period. Used by **COMNAVAIRFOR**, OPNAVR, CNATRA, and COMNAVAIRSYSCOM TE/FS reporting custodians. Reports termination of an OSP or induction of aircraft into SDLM, Age Exploration, or ACI/AWI. When using Action Code E, adjust PED and OSM to the month and year of the date of action.

NOTE: Action Code E is used only once to report period termination.

Required items.

A. BUNO.
B. PUC.
C. Date of Action.
D. Action Code E.
E. Status Code.
F. Model Designation.
G. Period Number.
H. PED.
M. OSM.
O. PUC of In-Service activity (required on all In-service XRAYs).
V. Aircraft Location.
Remarks: Enter amplifying remarks as appropriate.
XRAY items reported only when item content is different than information previously reported:
J. Strike/Damage Code.
N. Estimated Rework Completion Date.
Z. Delete/Correct (Naval message only).

Action Code H - Start of an OSP (non-IMC/P aircraft only). Used by LANT, PAC, OPNAVR, CNATRA, and NASC TE reporting custodians. Reports an aircraft that has completed standard rework and is beginning (not resuming) an OSP.

Required items.

A. BUNO.
B. PUC.
C. Date of Action.
D. Action Code H.
E. Status Code.
F. Model Designation.
G. Period Number.
H. PED.
M. OSM.
O. PUC of In-Service activity (required on all In-service XRAYs).
V. Aircraft Location.

Remarks: Enter local time of custody change and movement directive (ATO/Priority Assignment)and any other amplifying remarks as appropriate.

XRAY items reported only when item content is different than information previously reported:

Z. Delete/Correct (naval message only).

Action Code M - Model Designation Change. Report change in model designation when an aircraft is converted. Enter the new model designation in item Model Designation data element on the first and subsequent XRAYs reporting the aircraft entering the conversion process. If the model designation change is directed by administrative action (no depot rework involved), retain in the status code previously reported.

Required items.

A. BUNO.
B. PUC.
C. Date of Action.
D. Action Code M.
E. Status Code.
F. Model Designation.
O. PUC of In-Service activity (required on all In-service XRAYs).
V. Aircraft Location.

Remarks: Model designation change authority directive if administrative model designation change.

XRAY items reported only when item content is different than information previously reported.

H. PED.
J. Strike/Damage Code.
L. ASPA.
N. Estimated Rework Completion Date.
Z. Delete/Correct (Naval message only).

Action Code P - Pre-accepted aircraft XRAY reporting.

FOR NAVAIR ACC USE ONLY

1. NAVAIR ACC is the controlling custodian for pre-accepted aircraft and on certain occasions requires visibility of these aircraft that are required to perform Contractor testing (CT) and Developmental testing (DT) prior to the final DD-250 and Navy acceptance. These aircraft will not be included in the active inventory, but they will be tracked under NAVAIR FS custody command code 72 for automated inventory tracking/visibility.

2. NAVAIR ACC will manage the Pre-accepted aircraft inventory and be the point of entry for all pre-accepted XRAYS.

Required items:

A. BUNO.
B. PUC.
C. Date of Action.
D. Action Code – P (NAVAIR ACC USE ONLY).
E. Status Code U70. (Only Status Code allowed with Action Code P).
F. Model Designation.
V. Location.

Remarks: Amplifying remarks as appropriate.
Action Code X - Other change. Used by all reporting custodians when no other action code applies.

Required items.

A. BUNO.
B. PUC.
C. Date of Action.
D. Action Code X.
E. Status Code.
F. Model Designation.
O. PUC of In-Service activity (required on all in-service XRAYs).
V. Aircraft Location.
Remarks: Amplifying remarks as appropriate.

XRAY items reported only when item content is different than information previously reported:

PED/FID

J. Strike/Damage Code.
L. ASPA.
M. OSM.
N. Estimated Rework Completion Date.
Z. Delete/Correct (Naval message only).

5.3.18 XRAY Reporting Custodian Change of Location

5.3.18.1 Part I XRAY

a. Reporting custodians move from one location to another, for example, shore to ship, ship to shore, ship to ship, or one shore location to another for a period of 30 days or more, reporting custodian location, operational status category, and fleet assigned code changes. In conjunction with unit location change, the operational status category code and fleet assigned code are reported for extended deployments of 30 days or more.

b. Reporting custodians anticipating changes of location will conduct advance liaison with Type Wings, CVWs, CG MAWs or ACCs (as appropriate) to verify code changes and report submission. Part I XRAY reports the following XRAY data elements:

Part I (mandatory elements):
B. PUC.
C. Date of Action.
R. Aviation 3M Organization Code.
S. Operational Status Category (Appendix E - report only on change or establishment).
T. Fleet Assigned Code (Appendix E - report only on change or establishment).
These elements are only required if using Naval messages.
Z. Delete/Correct (if required)
Remarks: Change Location From (Previous Station) To (Current Station) Established/Disestablished (as appropriate) in accordance with (IAW) (Authority/Directive) at location; Change Operational Status Category From _____ to _____; Change Fleet Assigned Code From _____ to _____.

c. Reporting custodians are established or disestablished at the direction of the ACC. The ACC will request a PUC and Aviation 3M Organization Code as part of unit activation preparations. Once assigned, regardless of any changes in the reporting custodian's mission, location, or administrative affiliation, the PUC will never change. Reporting custodians with custody of aircraft under multiple ACCs will have a PUC

assigned for each ACC/reporting custodian situation. CNO (N980L) manages PUC assignments and COMNAVAIRFOR (N422D) assigns Aviation 3M Organization Codes on ACC request and detachment PUCs.

d. Detachments are established by the ACC as reporting custodians of aircraft. Detachments, as reporting custodians, normally exist by assigning operational aircraft under a detachment OIC. All detachments are responsible for meeting the requirements of this directive and references. COMNAVAIRFOR maintains PUCs for detachment assignment.

5.3.18.2 Part II XRAY (Aircraft Location Change)

a. Action Code L is used on a Part II XRAY to report aircraft location change when embarking or debarking associated with extended deployments of 30 days or more. An L action XRAY is required for each aircraft accompanying the reporting custodian Part I location change.

b. Part II XRAY elements follow:

Part II (mandatory entry)
A. BUNO.
B. PUC (must be the same as previously reported).
C. Date of Action.
D. Action Code L.
E. Status Code (must be the same as previously reported).
F. Model Designation (must be the same as previously reported).
V. Location.
XRAY items reported only when correction is required.
Z. Delete/Correct (When making a delete/correct that applies to Part II of a Part I/II combination XRAY, do not report the Part I).
Sample Part I/Part II XRAY Reported by Naval message.
PART I
B. 121032.
C. 042508.
R. KDA.
S. A.
T. 3.
REMARKS: CHANGE OF LOCATION FROM NORTH ISLAND TO REID. LAST XRAY 001 DTG 231400Z APR 08. Change Operational Status Category from B to A. Change Fleet Assigned from P TO 3.

PART II

A. 163541.
B. 121032.
C. 042508.
D. L.
E. A40.
F. SH-60B.
V. REID.

AIRCRAFT INSPECTION AND ACCEPTANCE RECORD

1. A/C BU/SER NO.	2. T/M/S	3. RPT. CUST.	4. OXY	5. FUEL GRADE	5. FUEL QTY	6. OIL GRADE	6. OIL 1	6. OIL 2	6. OIL 3	6. OIL 4	7. DATE

8. ORDNANCE / SPECIAL EQUIPMENT / LIMITATIONS / REMARKS	9. I have personally inspected this aircraft IAW the applicable MRCs/checklists. Any discrepancies noted have been entered on CNAF 4790/38.
	SIGNATURE OF PLANE CAPTAIN RANK/ RATE
	10. Certification of safe for flight condition by personnel authorized by the Commanding Officer to release aircraft Safe For Flight
	SIGNATURE RANK/ RATE
	11. I have reviewed the discrepancy reports of the 10 previous flights, insured proper filing of weight and balance data, and accept this aircraft for flight
	SIGNATURE OF PILOT IN COMMAND RANK

OPNAV 4790/141 (12-89)

Figure 5-1: Aircraft Inspection and Acceptance Record (OPNAV 4790/141) (Sample)

PREFLIGHT / DAILY / TURNAROUND / POSTFLIGHT MAINTENANCE RECORD

1. ☐ PREFLIGHT ☐ DAILY ☐ TURNAROUND ☐ POSTFLIGHT

2. DATE AND TIME STARTED _____ COMPLETED _____	3. T/M/S	4. BUNO	5. SIDE NO .	6. ACTIVITY

7. CARD NUMBER / RTG /MOS	8. TOOL CONTAINER NUMBER	9. DISCREPANCY / JCN *	10. CORRECTED		11. SIGNATURE AND RATE / MOS **
			YES	NO	

* JCN NOT REQUIRED FOR CORRECTED SERVICING ACTIONS .
** SIGNATURES CERTIFY THAT MRCs HAVE BEEN COMPLIED WITH , VIDS /MAFS HAVE BEEN INITIATED FOR DISCREPANCIES , AND ALL TOOLS ARE ACCOUNTED FOR .

12. MAINTENANCE CONTROL REPRESENTATIVE
(Signature and rate /rank)

OPNAV 4790/38 (4-15) Front PREVIOUS EDITIONS MAY BE USED UNTIL SUPPLY IS EXHAUSTED

Figure 5-2: Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Front) (Sample)

7. CARD NUMBER/ RTG/MOS	8. TOOL CONTAINER NUMBER	9. DISCREPANCY / JCN *	10. CORRECTED		11. SIGNATURE AND RATE / MOS **
			YES	NO	

CNAF 4790/38 (5-12) REVERSE PREVIOUS EDITIONS MAY BE USED UNTIL SUPPLY IS EXHAUSTED

Figure 5-3: Preflight/Daily/Turnaround/Postflight Maintenance Record (OPNAV 4790/38) (Back) (Sample)

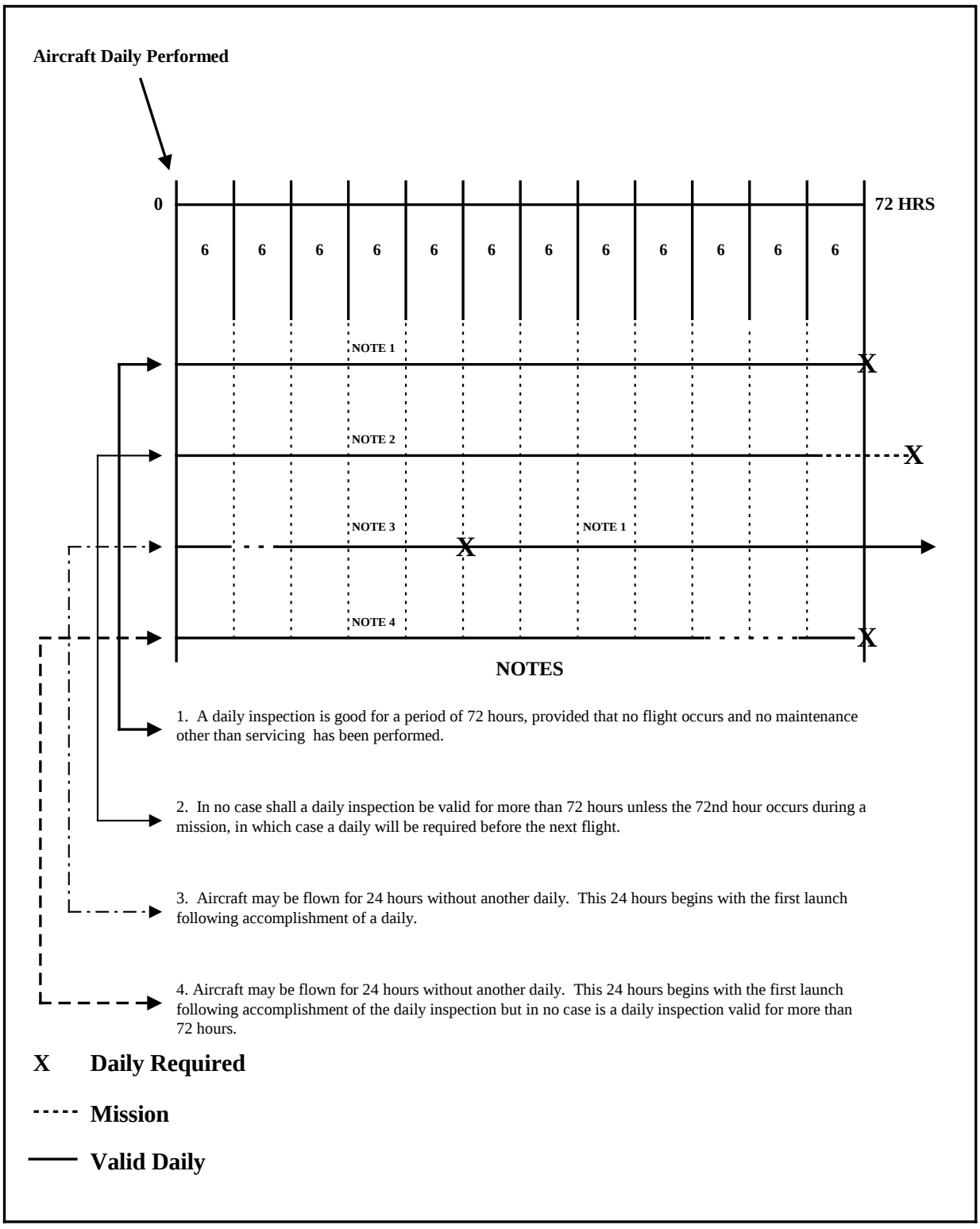


Figure 5-4: Daily Inspection Requirements

MONTHLY FLIGHT SUMMARY

1. TYPE / MODEL / SERIES	2. BUNO / SERIAL NUMBER	3. SERVICE PERIOD
SH-3H	148049	008

PART I - SERVICE PERIOD

(NAVAIR FS ACTIVITIES)

1. DATE	2. PERIOD NO	3. OPSERMOS	4. ACTIVITY
960215	008	165	NADEP CHERRY POINT

PART II - TOUR / PERIOD REVISION / ADJUSTMENT

(OPERATING COMMANDS)

	1. DATE	2. TOUR / PERIOD	3. OPSERMOS
INITIAL	960217	971130	198
REV. / ADJ. 1.			
REV. / ADJ. 2.			
REV. / ADJ. 3.			
REV. / ADJ. 4.			
REV. / ADJ. 5.			
REV. / ADJ. 6.			
REV. / ADJ. 7.			
REV. / ADJ. 8.			
REV. / ADJ. 9.			
REV. / ADJ. 10.			

PART III - EXTENSIONS

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐

PART IV - MONTHLY DATA

1. DATE	2. REPORTING CUSTODIAN	3. FLYING HOURS			4. LANDINGS						5. MONTHLY TOTAL			6. ACCUMULATED TOTAL		
		A. MO	B. PERIOD	C. SINCE NEW	B	D	F				A. LAND	B. A/R	C. CATS	A. LAND	B. A/R	C. CATS
960228	HS-5	21.5	21.5	8031.8	3	5	8				16	0	0	7048	0	0
960331	HS-5	43.6	65.1	8075.4	0	10	35				45	0	0	7093	0	0

OPNAV 4790/21A (REV 12/2014)

PERMANENT RECORD

Figure 5-5: Monthly Flight Summary (OPNAV 4790/21A) (Sample)

EQUIPMENT OPERATING RECORD

Entry required at end of month and upon transfer

1. EQUIPMENT											2. T / M / S	3. SERIAL NUMBER
4. MONTH AND YEAR	5. OPERATING HRS		6. MONITORING SYSTEM DATA (e.g., TSR, STARTS, COUNTS, ROUNDS)								7.	8.
	a. THIS MONTH	b. ACCUM	a.		b.		c.		d.			
			(1) THIS MONTH	(2) ACCUM	(1) THIS MONTH	(2) ACCUM	(1) THIS MONTH	(2) ACCUM	(1) THIS MONTH	(2) ACCUM	ACTIVITY	REMARKS

OPNAV 4790/31A (1-15)

PERMANENT RECORD

Figure 5-6: Equipment Operating Record (OPNAV 4790/31A) (Sample)

1. NOMENCLATURE		2. EQUIPMENT MODEL/PART NO.		3. SERIAL NO.	
4. DATE	5. INSPECTOR (Signature)	6. SUPERVISOR (Signature)	7. DATE	8. INSPECTOR (Signature)	9. SUPERVISOR (Signature)

OPNAV 4790/52 (Rev. 3-83) SN 0107-LF-770-5501 **SE PREOPERATIONAL RECORD**

10. DATE	11. INSPECTOR (Signature)	12. SUPERVISOR (Signature)	13. DATE	14. INSPECTOR (Signature)	15. SUPERVISOR (Signature)

OPNAV 4790/52 (Rev. 3-83)(BACK) ☆ U.S. GOVERNMENT PRINTING OFFICE: 1986-605-009/35326

Figure 5-7: SE Preoperational Record (OPNAV 4790/52)

FM REPORTING UNIT
TO APPLICABLE AIRCRAFT CONTROLLING CUSTODIANS
COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMNAVAIRESFOR NEW ORLEANS LA//N41/N42/N43//
COMFAIRWESTPAC ATSUGI JA//70//(WESTPAC activities)
APPLICABLE MAW/WING/MARBDE/MAG
INFO APPLICABLE COMCARGRU /COMPHIBGRU/COMPHIBRON
COMFAIRMED NAPLES IT//N42//(Med Activities)
COMFAIRKEFLAVIK IC//MO//(Keflavik activities)
COMNAVSURFOR SAN DIEGO CA//N42//
COMMARFORCOM (Marine activities only)
COMMARFORPAC (Marine activities only)
COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
NAVSUP WSS PHILADELPHIA PA//0332//
APPLICABLE ISSC
UNCLAS //N04790//
MSGID/GENADMIN/ACTIVITY//
SUBJ/BA REPORT NR XXXXXXX//
POC//
RMKS/1. FAILURE DATA
A. EQUIPMENT NOMENCLATURE, PART NR, AND SERIAL NR
B. AIRCRAFT (EACH TMS IF MORE THAN ONE), AIRCRAFT SYSTEM SUPPORTED (EACH SYSTEM IF MORE THAN ONE) AFFECTED
C. CAL REQUIRED/TYPE REQUIRED (NA IF CAL NOT REQUIRED)
D. DTG OF TECH ASSIST MESSAGE (NA IF NOT REQUIRED)
E. PART 1 OF X REQUIRED:
(1) REQUIRED PART DATA: (DOC NR, NOMEN, PART NR, QTY, SM&R, CAGE, NIIN, TECH DATA)
(2) DISPOSITION OF RETROGRADE (FOR EXAMPLE TURNED INTO SUPPLY, DISPOSED OF, OR CANNIBALIZED FOR TRANSFER TO XXX IAW AUTHORITY MESSAGE DTG)
PART 2 OF X REQUIRED:
(1) REQUIRED PART DATA: (DOC NR, NOMEN, PART NR, QTY, SM&R, CAGE, NIIN, TECH DATA)
(2) DISPOSITION OF RETROGRADE (FOR EXAMPLE TURNED INTO SUPPLY, CONSUMABLE, OR CANNIBALIZED FOR TRANSFER TO XXX IAW AUTHORITY MESSAGE DTG)
F. NEXT HIGHER ASSY: (NOMEN, PART NR, CAGE, NIIN, TECH DATA)
G. OUTSTANDING DOC NRS/STATUS FOR MAMS REQUISITIONS
H. REMARKS: (NA IF AMPLIFICATION NOT DESIRED)
I. MILSTRIP DATA

Figure 5-8: Broad Arrow Report (Message Format)

FM USS NIMITZ

TO COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMFAIRWESPAC ATSUGI JAPAN//70//

INFO COMCARGRU SEVEN
COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
NAVSUP WSS PHILADELPHIA PA//0332//
FRCSE JACKSONVILLE FL//JJJ//

UNCLAS //N04790//

MSGID/GENADMIN/NIMITZ//
SUBJ/BA REPORT NR 2000001//
POC/A. ARMAGOST/AVCM/PRIPHN: DSN 439-0123/-/PCCPO/SECPHN: COMM 206-479-0123//
RMKS/ 1. FAILURE DATA
A. RADCOM, A31U14200-5, PPD085
B. EACH TMS, SYSTEM
C. NA
D. NA
E. PART 1 OF 2
(1) 8360GB03, CKT CARD ASSY, D8255A, 6, PAOGG, 34649, 4920-01-120-6436, AT-170G1-000, FIG 7-3, PG 7-12
(2) CONSUMABLE

PART 2 OF 2

(1) NA, NA, DIGITAL WORD GENERATOR, A31U30200-1, 1, PBGGD, 26512, 4920-01-220- 4516, AT-828RA-MMI-000, WP008-00 FIG 1 PG 32 ITEM 173
(2) CANNIBALIZED TO USS LINCOLN IAW COMNAVAIRFOR MSG DTG 101023Z DEC04
F. PART 1 OF 2, AFG DRAWER, A31U13900-1, 26512, 7RH4790-01-220-4821, AT-828RA MMI-00 WP008-00 FIG 1 PG 32 ITEM 184.
PART 2 OF 2 NA

G. PART 1 OF 2, NA, PART 2 OF 2 0150DP75/265BBN32
H. DIGITAL WORD GENERATOR SHIPPED TP01 GREENSHEET MUST RIDE
TCN R03368-9100-GB99XXX
I. A01N72S662501411704719EA00001R033398360GB03RYS6PMUA9S07R9BU029995

Figure 5-9: Broad Arrow Report (Sample Message)

FM REPORTING UNIT
TO APPLICABLE AIRCRAFT CONTROLLING CUSTODIANS
COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMNAVAIRESFOR NEW ORLEANS LA//N41/N42/N43//
COMFAIRWESTPAC ATSUGI JA//70// (WESTPAC activities)
APPLICABLE MAW/WING/MARBDE/MAG
INFO APPLICABLE COMCARGRU/COMPHIBGRU/COMPHIBRON
COMNAVSURFOR SAN DIEGO CA//N42//
COMMARFORCOM (Marine activities only)
COMMARFORPAC (Marine activities only)
COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
NAVSUP WSS PHILADELPHIA PA//0332//
APPLICABLE ISSC
UNCLAS //N04790//
MSGID/GENADMIN/ACTIVITY//
SUBJ/BA ADDENDUM NR XXXXXXX //
POC//
RMKS/1. DTG OF ORIGINAL FAILURE BA REPORT
2. SERIAL NR OF ADDENDUM XX (XX = A THROUGH ZZ CONSECUTIVELY)
3. FAILURE DATA
A. EQUIPMENT NOMENCLATURE, PART NR, AND SERIAL NR
B. AIRCRAFT (EACH TMS IF MORE THAN ONE), AIRCRAFT SYSTEM SUPPORTED (EACH SYSTEM IF MORE THAN ONE) AFFECTED
C. CAL REQUIRED/TYPE REQUIRED (NA IF CAL NOT REQUIRED)
D. DTG OF TECH ASSIST MESSAGE (NA IF NOT REQUIRED)
E. PART 1 OF X REQUIRED:
(1) REQUIRED PART DATA: (DOC NR, NOMEN, PART NR, QTY, SM&R, CAGE, NIIN, TECH DATA)
(2) DISPOSITION OF RETROGRADE (FOR EXAMPLE, TURNED INTO SUPPLY, CONSUMABLE, OR CANNIBALIZED FOR TRANSFER TO XXX IAW AUTHORITY MESSAGE DTG)
PART 2 OF X REQUIRED:
(1) REQUIRED PART DATA: (DOC NR, NOMEN, PART NR, QTY, SM&R, CAGE, NIIN, TECH DATA)
(2) DISPOSITION OF RETROGRADE (FOR EXAMPLE, TURNED INTO SUPPLY, CONSUMABLE, OR CANNIBALIZED FOR TRANSFER TO XXX IAW AUTHORITY MESSAGE DTG)
F. NEXT HIGHER ASSY: (NOMEN, PART NR, CAGE, NIIN, TECH DATA)
G. OUTSTANDING DOC NRS/STATUS FOR MAMS REQUISITIONS
H. REMARKS: (NA IF AMPLIFICATION NOT DESIRED)
I. MILSTRIP DATA

Figure 5-10: Broad Arrow Addendum (Message Format)

FM USS NIMITZ

TO APPLICABLE AIRCRAFT CONTROLLING CUSTODIANS
COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMFAIRWESTPAC ATSUGI JA//70//
COMMATVAQWINGPAC WHIDBEY ISLAND WA//70//

INFO COMCARGRU SEVEN
COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
NAVSUP WSS PHILADELPHIA PA//0332//
FRCSW NORTH ISLAND CA//JJJ//

UNCLAS //N04790//
MSGID/GENADMIN/NIMITZ//
SUBJ/BA ADDENDUM NR 2000001//
POC/H.D. BIKE/LCDR/DEPLOYED/-/MMCO//
RMKS/1. 150125ZJAN 99
2. ADDENDUM E
3. FAILURE DATA
A. RSTS AN/APM446 AND DAG-0011
B. EACH TMS, SYSTEM
C. NA
D. NA
E. PART 1 OF 1 REQUIRED:
(1) 9350GB77, CKT CARD ASSY, 446AS22-131-001, 1, PAGDD, 30003, 7RH4920-00-166-6799, NA 16-30 APM446-3-22 FIG 002-00 PG 4 ITEM 37
(2) TURNED IN TO SUPPLY
F. BB-22, 446AS22-100-006, 30003, 7RH-4790-LL-R95-2061, NA 16-30 APM447-3-22 FIG 001-00 PG1320
G. 8355D498/150BBN32 EDD 0020
H. NA
I. A01N72S662501411704719EA00001R3339350GB77RYS6PMUA9S07R9BU029995

Figure 5-11: Broad Arrow Addendum (Sample Message)

FM REPORTING UNIT

TO APPLICABLE AIRCRAFT CONTROLLING CUSTODIANS
COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMNAVAIRESFOR NEW ORLEANS LA//N41/N42/N43//
COMFAIRWESTPAC ATSUGI JA//70// (WESTPAC activities)
APPLICABLE MAW/WING/MARBDE/MAG

INFO APPLICABLE COMCARGRU/COMPHIBGRU/COMPHIBRON
COMMARFORCOM (Marine activities only)
COMMARFORPAC (Marine activities only)
COMNAVSURFOR SAN DIEGO CA//N42//
COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
NAVSUP WSS PHILADELPHIA PA//0332//
APPLICABLE ISSC

UNCLAS //N04790//
MSGID/GENADMIN/ACTIVITY//
SUBJ/BA SUPPORT EQUIPMENT IN-SERVICE REPORT//
RMKS/1. BA NR XXXXXXX IN SERVICE DATA
A. EQUIPMENT NOMENCLATURE, PART NR, SERIAL NR
B. JULIAN DATE EQUIPMENT RETURNED TO SERVICE
C. COMPLETED DOCUMENT NRS
D. DTG OF BA REPORT//

Figure 5-12: Broad Arrow Support Equipment In-Service Report (Message Format)

FM USS NIMITZ
TO COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//
COMFAIRWESTPAC ATSUGIA JA//N42//
COMMATVAQWINGPAC WHIDBEY ISLAND WA//70//
INFO COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//
COMCARGRU SEVEN
NAVSUP WSS PHILADELPHIA PA//0332//
FRCSW NORTH ISLAND CA//JJJ//
UNCLAS //N04790//
MSGID/GENADMIN/NIMITZ//
SUBJ/BA SUPPORT EQUIPMENT IN-SERVICE REPORT//
RMKS/1. BA NR 2000001 IN-SERVICE DATA
A. ENGINE TEST STAND, A/F32T-1, 000027
B. 8360
C. 8330D497, 8330F498
D. 290219ZNOV98//
E. DOCUMENT REMAINS OUTSTANDING AS PAYBACK TO XXX. (IF REQUIRED)//

Figure 5-13: Broad Arrow Support Equipment In-Service Report (Sample Message)

FM REPORTING UNIT

TO APPLICABLE AIRCRAFT CONTROLLING CUSTODIANS

COMNAVAIRFOR SAN DIEGO CA//N421/N423/N413/N4131C/N423R//

COMNAVAIRESFOR NEW ORLEANS LA//N41/N42/N43//

COMFAIRWESTPAC ATSUGI JA//70// (WESTPAC activities)

APPLICABLE MAW/WING/MARBDE/MAG

INFO COMNAVAIRSYSCOM PATUXENT RIVER MD//6.6/6.7/PMA-260//

APPLICABLE COMCARGRU /COMPHIBGRU/COMPHIBRON

COMNAVSURFOR SAN DIEGO CA//N42//

COMMARFORCOM (Marine activities only)

COMMARFORPAC (Marine activities only)

UNCLAS //N04790//

MSGID/GENADMIN/ACTIVITY//

SUBJ/BA REQUISITION COMPLETION REPORT//

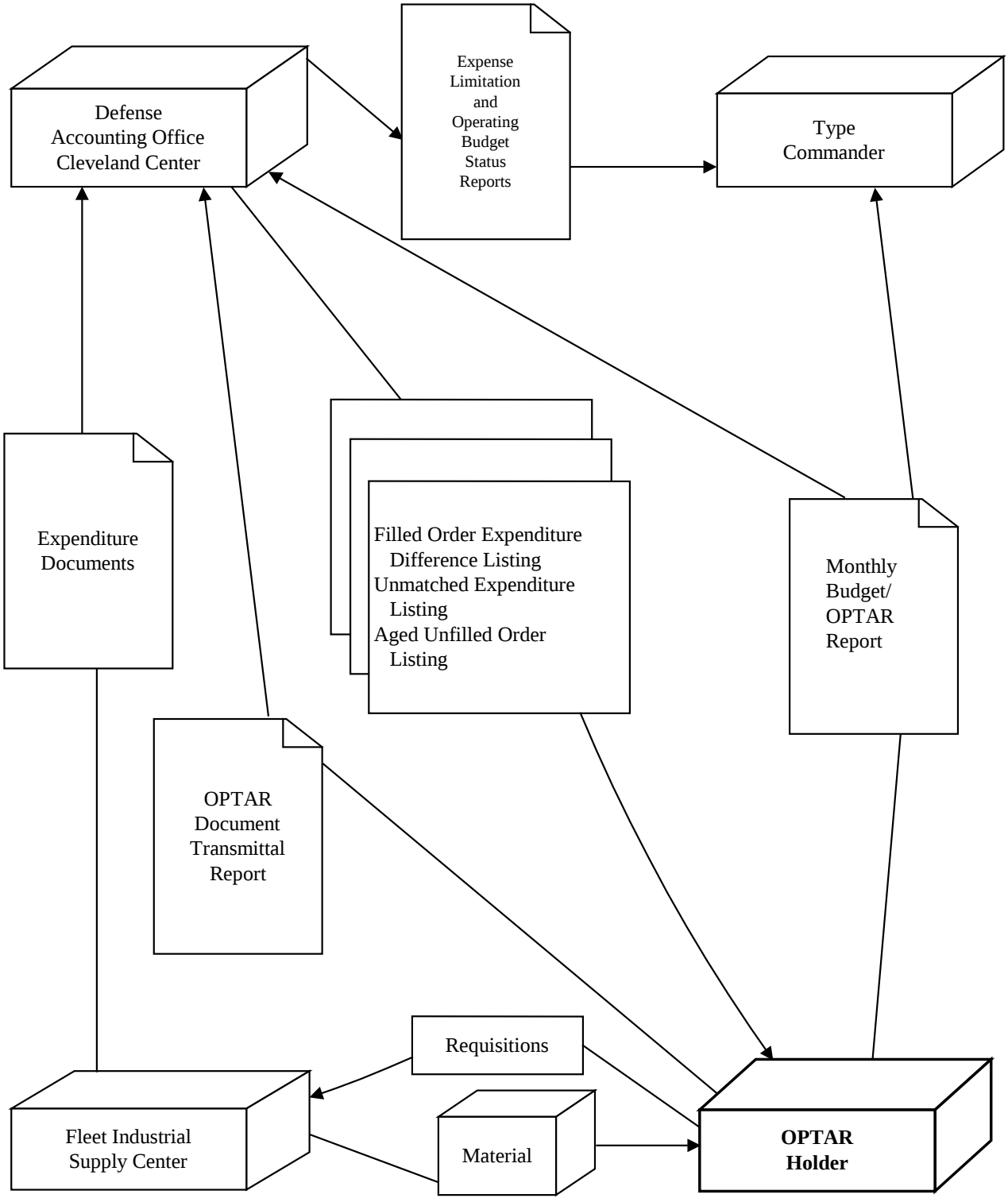
REF/A/GENADMIN/REPORTING UNIT/ORIG BA DTG//

RMKS/1. THE FOLLOWING BA REQUISITIONS WERE COMPLETED JD XXXX:

BA NR	REQ NR	NIIN RCVD	QTY
XXXXXXX	XXXXGBXX	XX-XXX-XXXX	X//

NOTE: List all GB document numbers received each day on one message.

Figure 5-14: Broad Arrow Requisition Completion Report (Message Format)



Effective interplay of various financial reports depends upon accuracy and timeliness in OPTAR recordkeeping and reporting.

Figure 5-15: Flow of Accounting Data

OPNAVINST 4790.2 (Series)
COMNAVAIRFORINST 4790.2 (Series)

AIRCRAFT INVENTORY RECORD EQUIPMENT LIST	SECTION	GOVERNMENT SERIAL NO.	AIRCRAFT TYPE

ITEM NO. A	NOMENCLATURE, TYPE AND MODEL B	REQUIRED HERE C	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24 D	LOCATION OR REMARKS E

CHECK 1 BY	CHECK 7 BY	CHECK 13 BY	CHECK 19 BY
CHECK 2 BY	CHECK 8 BY	CHECK 14 BY	CHECK 20 BY
CHECK 3 BY	CHECK 9 BY	CHECK 15 BY	CHECK 21 BY
CHECK 4 BY	CHECK 10 BY	CHECK 16 BY	CHECK 22 BY
CHECK 5 BY	CHECK 11 BY	CHECK 17 BY	CHECK 23 BY
CHECK 6 BY	CHECK 12 BY	CHECK 18 BY	CHECK 24 BY

1. Verify each equipment check by entering the signature of the person performing the inventory

OPNAV 4790/111 (REV 4/2015)

Page 1 of 1

Figure 5-16: Aircraft Inventory Record Equipment List (OPNAV 4790/111)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

AIRCRAFT INVENTORY RECORD SHORTAGES	GOVERNMENT SERIAL NO.	AIRCRAFT TYPE

ITEM NO. A	NOMENCLATURE, TYPE AND MODEL B	QUANTITY SHORT C	AUTHORITY OR REASON FOR SHORTAGE D	REMARKS E

NAME OF TRANSFERRING/RECEIVING ACTIVITY	
EQUIPMENT CHECK #/CERTIFICATION #	
DATE:	
SIGNATURE OF TRANSFERRING ACTIVITY COMMANDING OFFICER OR A REPRESENTATIVE AUTHORIZED TO SIGN BY DIRECTION	

OPNAV 4790/112 (REV 4/2015)

Page 1 of 1

Figure 5-17: Aircraft Inventory Record Shortages (OPNAV 4790/112)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

AIRCRAFT INVENTORY RECORD CERTIFICATION AND RECORD OF TRANSFERS

1. NAME OF PRIME CONTRACTOR	2. GOVERNMENT SERIAL NO.	3. CONTRACT NUMBER	4. AIRCRAFT TYPE

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *DELIVERY*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

5. CERTIFICATE NUMBER	6. TRANSFERRED FROM	7. DATE TRANSFERRED	8. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *RECEIPT*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

9. CERTIFICATE NUMBER	10. RECEIVED BY	11. DATE RECEIVED	12. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *DELIVERY*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

13. CERTIFICATE NUMBER	14. TRANSFERRED FROM	15. DATE TRANSFERRED	16. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *RECEIPT*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

17. CERTIFICATE NUMBER	18 RECEIVED BY	19. DATE RECEIVED	20. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *DELIVERY*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

21. CERTIFICATE NUMBER	22 TRANSFERRED FROM	23. DATE TRANSFERRED	24. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *RECEIPT*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

25. CERTIFICATE NUMBER	26 RECEIVED BY	27. DATE RECEIVED	28. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *DELIVERY*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

29. CERTIFICATE NUMBER	30. TRANSFERRED FROM	31. DATE TRANSFERRED	32. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

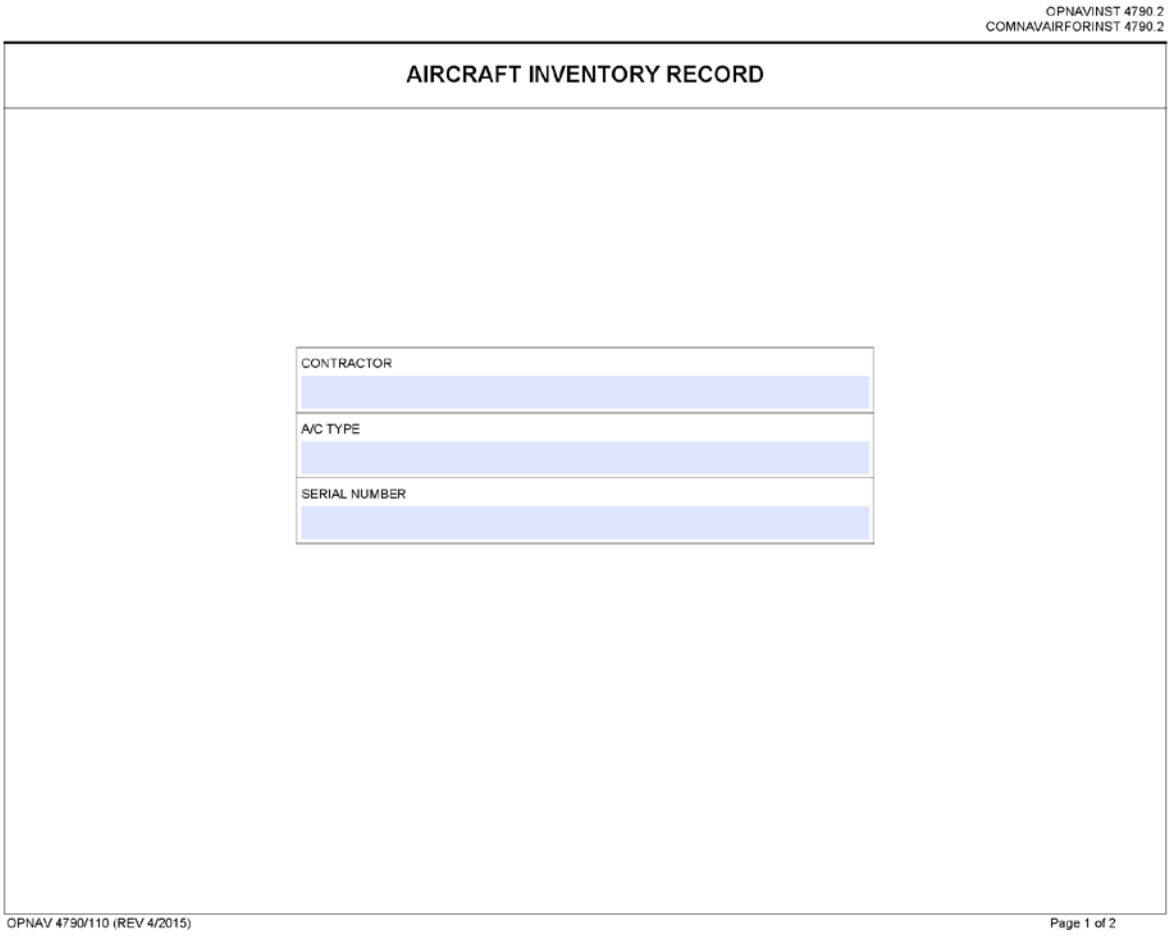
I CERTIFY THAT THIS AIRCRAFT AT THE TIME OF *RECEIPT*, WAS INVENTORIED IN ACCORDANCE WITH THE CURRENT COMNAVAIRFORINST 4790.2 AND WAS EQUIPPED WITH ALL ITEMS REQUIRED TO CONSTITUTE A COMPLETE AIRCRAFT, WITH THE EXCEPTION OF THOSE ITEMS NOTED ON OPNAV 4790/112.

33. CERTIFICATE NUMBER	34 RECEIVED BY	35. DATE RECEIVED	36. SIGNATURE OF GOVERNMENT REP, OR AUTHORIZING AGENT, OFFICIAL TITLE AND ORGANIZATION

OPNAV 4790/104 (REV 4/2015)

Page 1 of 1

Figure 5-18: Aircraft Inventory Record Certification and Record of Transfers (OPNAV 4790/104)



OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

AIRCRAFT INVENTORY RECORD

CONTRACTOR

A/C TYPE

SERIAL NUMBER

OPNAV 4790/110 (REV 4/2015)

Page 1 of 2

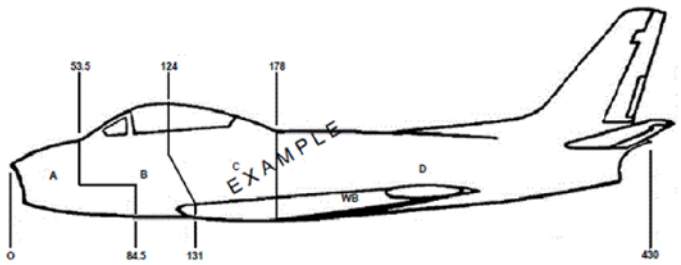
Figure 5-19: Aircraft Inventory Record (OPNAV 4790/110) (Front)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16

AIRCRAFT TYPE	SERIAL NUMBER	CONTRACT NO.	PRIME CONTRACTOR	ACCEPTANCE DATE

EXPLANATION

SECTIONAL BREAKDOWN DIAGRAM



MISCELLANEOUS DATA

OPNAV 4790/110 (REV 4/2015) BACK

Page 2 of 2

Figure 5-20: Aircraft Inventory Record (OPNAV 4790/110) (Back)

AIRCRAFT TRANSFER REPORT PART I BUNO 161862

MCN	JCN	W/C	SYSTEM REASON	WUC	TC	WD	TM	AT	MAL	IP	MNHRS	EMT	DT COMP	WORKER SIGNATURE	QA CD	SIGNATURE	SUPER SIGNATURE	CF	QA
OAC7VMZ	AC7205738	021	10 EHRS (P)	030000A	11	O	K	0	000	01	0.0	0.0	97205			AZ3 JONES	AZ3 JONES	N	N
OAC7VN2	AC7205739	021	10 EHRS (S)	030000A	11	O	K	0	000	01	0.0	0.0	97205			AZ3 JONES	AZ3 JONES	N	N
OAC7VSB	AC7206723	021	O/STRESS 7.0	030	11	O	S	0	000	01	0.0	0.0	97206			AZ3 JONES	AZ3 JONES	N	N

AIRCRAFT TRANSFER REPORT PART II BUNO 161862

MCN	W/C	DISCREPANCY	CORRECTIVE ACTION	CF	QA
OAC7VMZ	021	PERFORM 10 EHRS SPECIAL INSP:	C'ED/W ABOVE MRC'S	N	N
OAC7VN2	021	PERFORM 10 EHRS SPECIAL INSP:	C'ED/W ABOVE MRC'S	N	N
OAC7VSB	021	CHECK AIRCRAFT FOR O/STRESS	C'ED/W ABOVE MRC'S	N	N

AIRCRAFT TRANSFER REPORT PART III BUNO 161862

MCN	JCN	W/C	SYSTEM REASON	AT	MAL	E CAGE	E PART NUMBER	E SERNO	G CAGE	G PART NUMBER	G SERNO
OAC7VXN	AC7207700	110	NOZ. PUMP	T	814	07482	1156M46P08	23781	07482	1156M46P11	VKJE2854
AC7AA8H	AC7201188	110	L06 CODE T4B OT/BE	R	029	07482	1344M74P01	GDB0201V	07482	1344M74P01	GDBB5217
AC7AAZ3	AC7200700	200	BLGTING A/S IND	R	374	26512	21285-1139	239778	26512	21285-1139	316211

AIRCRAFT TRANSFER REPORT PART IV BUNO 161862

MCN	JCN	W/C	AWN NO	RSN CD	AWM HRS
OAC7VXN	AC7207700	110	1	8	21.2
AC7A9KW	AC7199701	122	1	3	6.0
AC7AFX4	AC7214A01	13B	1	6	0.5

AIRCRAFT TRANSFER REPORT PART V BUNO 161862

MCN	JCN	W/C	SYSTEM REASON	WUC	INDX	IND	AT	MAL	CAGE	PART NUMBER H-Z	QTY
AC7AFX4	AC7214A01	13B	WATER SEP. BAG	4112K	H	Y	R	105	70210	180849-10	1
AC7AFY1	AC7215048	280	WAVEGUIDE BROKEN	74A1500	H	Y	R	070	82577	3196864	1

AIRCRAFT TRANSFER REPORT PART VI BUNO 161862

MCN	JCN	W/C	CD	BASIC	KIT	INT RV	AMD	PRT	LV	NOT LATER THAN	PRI	DTE ISS	MNHRS	RCSN	DT	DRCTV	SERNO
AC792K5	AC7089146	120	50	0806	00						R	1092		4Q97		813	
AC7AZX7	AC7269119	230	57	0679	00				1	GUN INSP, 90 DAY	U	0395	2.0	4Q96		1287	
AC79R2D	AC7152116	280	50	0852	00				1	NEXT PHASE	R	0595	1.0	2Q00		1265	
									1								

Figure 5-21: Aircraft Transfer Report

Aircraft Logbook (Binder) (OPNAV 4790/19)

Structural Life Limits (Separator) (OPNAV 4790/142A)

Structural Life Limits (OPNAV 4790/142)

Monthly Flight Summary (Separator) (OPNAV 4790/21)

Monthly Flight Summary (OPNAV 4790/21A)

Inspection Record (Separator) (OPNAV 4790/22)

Inspection Record (OPNAV 4790/22A)

Repair/Rework Record (Separator) (OPNAV 4790/23)

Repair/Rework Record (OPNAV 4790/23A)

Technical Directives (Separator) (OPNAV 4790/24)

TDRS TD Lists Nos. 02 and 04 (Aircraft Only)

Technical Directives (OPNAV 4790/24A)

Miscellaneous/History (Separator) (OPNAV 4790/25)

Miscellaneous/History (OPNAV 4790/25A)

Preservation/Depreservation Record (Separator) (OPNAV 4790/136)

Preservation/Depreservation Record (OPNAV 4790/136A)

Explosive Devices (Separator) (OPNAV 4790/26)*

Installed Explosive Device Record (OPNAV 4790/26A)*

Inventory Record (Separator) (OPNAV 4790/27)

Inventory Record (OPNAV 4790/27A)

Assembly Service Record (OPNAV 4790/106A)*

Equipment History Record (EHR) Card (OPNAV 4790/113)*

Scheduled Removal Component Card (OPNAV 4790/28A)*

NOTE: ASR, EHR, and SRC cards are placed in the order they are listed in the PMIC.

ALSS Record (Separator) (OPNAV 4790/157)*

Parachute Record (OPNAV 4790/101)*

Seat Survival Kit Record (OPNAV 4790/137)*

Aircrew Systems Record (OPNAV 4790/138)*

Supplemental Records (Separator) (OPNAV 4790/134)*

Aeronautical Equipment Service Record (OPNAV 4790/29)*

*If applicable on aircraft without ejection seats.

Figure 5-22: Logbook Construction and Sequence

OPNAVINST 4790.2 (Series)
COMNAVAIRFORINST 4790.2 (Series)

STRUCTURAL LIFE LIMITS	1. TYPE/MODEL/SERIES:	2. BUNO/SERIAL NUMBER:
SECTION I - BASIC LIFE LIMITS		
3. REFERENCE:	4. REFERENCE DATE:	5. PAGE INITIATION DATE:
6. DESCRIPTON:		
7. NOTES:		

SECTION II - SERVICE LIFE LIMITS					
8. FLIGHT HOURS/CALENDAR TIME		9. CATAPULT		10. ARREST/LANDINGS	
a. COMPLIANCE (HOURS/CAL)	b. COMPONENT/AFC	a. COMPLIANCE (CATS)	b. COMPONENT/AFC	a. COMPLIANCE (ARREST LANDINGS)	b. COMPONENT/AFC

OPNAV 4790/142 (Rev May 2016) PERMANENT RECORD

Figure 5-23: Structural Life Limits (OPNAV 4790/142)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

(Periodical or Conditional)

INSPECTION RECORD

1. AIRCRAFT MODEL OR EQUIPMENT NAME:	2. TYPE/MODEL SERIES:	3. BUNO OR SERIAL NUMBER:

4. TYPE OR DESCRIPTION OF INSPECTION:	5. REFERENCE:	6. DATE COMMENCED:	7. DATE COMPLETED:	8. ACTIVITY:	9. Signature

OPNAV 4790/22a (REV 12/2014)

Figure 5-24: Inspection Record (OPNAV 4790/22A) (Sample)

PERMANENT RECORD

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

REPAIR/REWORK RECORD

1. AIRCRAFT MODEL OR EQUIPMENT NAME:	2. TYPE/MODEL SERIES:	3. BUNO OR SERIAL NUMBER:

4. DATE INDUCTED:	5. DATE COMPLETED:	6. DESCRIPTION OF WORK:	7. REFERENCE:	8. ACTIVITY:	9. Signature

OPNAV 4790/23A (REV 12/2014)

PERMANENT RECORD

Figure 5-25: Repair/Rework Record (OPNAV 4790/23A) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M6000.16

TECHNICAL DIRECTIVES									1. TYPE DIRECTIVE		
2. AIRCRAFT MODEL/EQUIPMENT NAME:							3. TYPE/MODEL/SERIES:		4. BUNO OR SERIAL NUMBER:		
5. TECHNICAL DIRECTIVE INDENTIFCATION							6. STATUS	7. TITLE/REMARKS	8. COMPLIANCE		9. SIGNATURE
A. BASIC	B. INT	C. REV	D. AM	E. PT	F. KIT	G. PRI			A. BY (Activity):	B. DATE	

OPNAV 4790/24A (REV 12/2014)

Page 1 of 1

Figure 5-26: Technical Directives (OPNAV 4790/24A) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M8000.16

MISCELLANEOUS/HISTORY

1. AIRCRAT MODEL/EQUIPMENT NAME:	2. TYPE/MODEL/SERIES:	3. BUNO OR SERIAL NUMBER:

DATE	REMARKS

OPNAV 4790/25A (REV 02/2015)

Figure 5-27: Miscellaneous/History (OPNAV 4790/25A) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16 Volume III

PRESERVATION / DEPRESERVATION RECORD

1. AIRCRAFT MODEL OR EQUIPMENT NAME	2. TYPE / MODEL / SERIES	3. BUNO OR SERIAL NUMBER

4. PRESERVATION				5. REPRESERVE	6. DEPRESERVATION	
a. DATE	b. BY (Activity)	c. TYPE PRESERVATION	d. REFERENCE	a. DATE DUE	a. DATE	b. BY (Activity)

OPNAV 4790/136A (REV 5/2015)

Page 1 of 1

Figure 5-28: Preservation/Depreservation Record (OPNAV 4790/136A) (Sample)

LOGBOOK Page: 01 Printed on: 19 December 1996

INSTALLED EXPLOSIVE DEVICE RECORD	A1. TYPE AIRCRAFT F-14A	A2. BU/SER 158612	A3. ASSEMBLY PART NUMBER	A4. ASSEMBLY S/N	A5. ORG CODE KB1

SERVICE LIFE ITEMS

B1. DODIC	B2. NOMENCLATURE/LOCATION	B3. PART NUMBER	B4. LOT NUMBER	B5. SERIAL	B6. ORG	B7. MFG DATE	B8. C/O DATE	B9. INST DATE	B10.EXPIRE DATE
M258	CART ACT INIT /280	841AS100	SOS88C004002	0687	KB2	880331	920131	920229	000331
M258	CART ACT INIT /280	841AS100	SOS88C004001	0009	WN1	880331	941031	941031	000331
M259	CART ACT INIT /372-395	841AS125	SOS88E004002	0085	WN1	880531	941031	941031	000531
M259	CART ACT INIT /372-395	841AS125	SOS88E004002	0086	WN1	880531	941031	941031	000531
M726	CART ACT INIT /213	841AS225	SOS89A005001	0145	KB2	890131	920831	920831	970131
M726	CART ACT INIT /292	841AS225	SOS89A005001	0146	KB2	890131	920831	920831	970131
M727	CART ACT INIT /213	841AS250	SOS89A004001	0218	KB1	890131	960430	960430	970131
M727	CART ACT INIT /213	841AS250	SOS89A004001	0219	KB1	890131	960430	960430	970131
M728	CART ACT INIT /280	841AS275	UPC93C002003	0085	KB1	930331	960430	960430	010331
M728	CART ACT INIT /345-395	841AS275	UPC93C002003	0086	KB1	930331	960430	960430	010331
M728	CART ACT INIT /350	841AS275	UPC93C002003	0087	KB1	930331	960430	960430	010331
M741	GAS PRESS GEN /350	841AS325	UPC89J003010	3764	KB2	890930	920131	920229	990131
M742	GAS PRESS GEN /280	841AS475	SOS88B004001	0202	KB2	880229	920131	920229	990131
M742	GAS PRESS GEN /280	841AS475	SOS88B004001	0203	KB2	880229	920131	920229	990131
M742	GAS PRESS GEN /350	841AS475	SOS88B004001	0204	KB2	880229	920131	920229	990131
M742	GAS PRESS GEN /350	841AS475	SOS88B004001	0205	KB2	880229	920131	920229	990131
M613	FCDC /350	841AS350	ETI90H003018	1094341	WN1	900831	950131	950131	000131
M613	FCDC /350	841AS350	ETI90H003018	10943041	WN1	900831	950131	950131	000131
MD63	FCDC /350	841AS500	ETI86B002015	0282131	WN1	860228	900331	950131	970331
MD63	FCDC /350	841AS500	ETI86B002015	0282132	WN1	860228	900331	950131	970331
MD74	FIRE EXT CART /580 LG BOTTLE	841AS5252	NCI88D004005	261	KB2	880430	910630	910630	990131

LOCAL USE

OPNAV 4790/26A

Figure 5-29: Installed Explosive Device Record (OPNAV 4790/26A)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

INVENTORY RECORD

1. AIRCRAFT MODEL/EQUIPMENT NAME:	2. TYPE/MODEL/SERIES:	3. BUNO OR SERIAL NUMBER:

4. NOMENCLATURE	5. PART NO:	6. SERIAL NO:	7. DATE: A. INSTALL:	7. DATE: B. REMOVE:	8. NOMENCLATURE	9. PART NO:	10. SERIAL No	11. DATE: A. INSTALL:	11. DATE: B. REMOVE:

OPNAV 4790/27A (REV 11/2016)

Figure 5-30: Inventory Record (OPNAV 4790/27A) (Sample)

PARACHUTE RECORD

BASIC ASSEMBLY INFO	A1. TYPE ASSEMBLY A/P28S-32(V)4	A2. SERIAL NUMBER MB0600	A3. PART NUMBER MBEU147713	A9. LATEST RFI 920608	A12. SCHD RMVL DATE 980309
	A4. CONFIGURED FOR (TECS) AFWE	A5. CUSTODIAN ORG CODE GB8	A6. BU/SER NUMBER 159633	A8. RFI SHF CYC 90	A11. INSP CYCL 2190

SIGNATURES	A13. PACKED (NAME) PR2 R. JOHNSON	A14. INSPECTED (NAME & QA STAMP #) PR1 D. HEARN M13	A15 ORG CODE W5F	A7. RFI DATE 920310	A10. DATE ISSUED 920310

SERVICE LIFE ITEMS

B1. NOMENCLATURE	B2. PART #	B3. CONT #/LOT #	B4. SER #	B5. MFG DATE	B6. INSTL DATE	B7. EXP DATE
CANOPY PARA ASSY	MBEU147610	N0019-85-C-0143	UNK	910731	920301	040331
RISERS ASSY	MBEU147689	N0019-85-C-0143	UNK	910531	920301	040331
WITHDRAWAL LINE	MBEU147607	N0019-85-C-0143	UNK	911101	920301	040331
SLEEVE DEPL ASSY	MBEU147716	N0019-85-C-0143	UNK	910831	920301	040331
STRAP CROSS CNTR	MBEU141488	N0019-85-C-0143	UNK	910731	920301	040331
ELECT PACK ASSY	852AS101	CAX91L004-052	29665	911130	940216	991130
ELECT PACK ASSY	852AS101	CAX91L004-052	29666	911130	940216	991130
BATTERY	852AS102	CAX94A002-041	0126	940131	940216	980131
BATTERY	852AS102	CAX94A002-041	0127	940131	940216	980131

CARTRIDGES AND CARTRIDGE ACTUATED DEVICES

C1. NOMENCLATURE	C2. PART #	C3. CONT #/LOT #	C4. DODIC	C5. SER #	C6. MFG DATE	C7. C.O. DATE	C8. EXP DATE
IMPULSE CARY	851AS275	HCX93L003006	MW19	6979	931130	940216	990228
IMPULSE CARY	851AS275	HCX93L003006	MW19	6978	931130	940216	920228

TECHNICAL DIRECTIVES

D1. TYP	D2. NO.	D3. REV	D4. AM	D5. QA	D6. ORG	D7. DATE	D8. STAT	D1. TYP	D2. NO.	D3. REV	D4. AM	D5. QA	D6. ORG	D7. DATE	D8. STAT	D1. TYP	D2. NO.	D3. REV	D4. AM	D5. QA	D6. ORG	D7. DATE	D8. STAT

LOCAL USE

OPNAV 4790/101 PAGE 01 OF 01

Figure 5-31: Parachute Record (OPNAV 4790/101)

SEAT SURVIVAL KIT RECORD

BASIC ASSEMBLY INFO

A1. TYPE ASSEMBLY	A2. SERIAL NUMBER	A3. PART NUMBER	A4. FSCM	A10. LATEST RFI	A13. SCHD RMVL DATE
SKU-2	1370	221J100-1	30941	970304	980227

A5. CONFIGURED FOR (TECS)	A6. CUSTODIAN ORG CODE	A7. BU/SER NUMBER	A9. RFI SHF CYC	A12. INSP CYCL
AAED	GB8	156479	90	448

SIGNATURES

A14. PACKED (NAME)	A15. INSPECTED (NAME & QA STAMP #)	A16 ORG CODE	A8. RFI DATE	A11. DATE ISSUED
PR3 J. JONES	PR1 R. JOHNSON 478	W5F	991204	961206

SERVICE LIFE ITEMS

B1. NOMENCLATURE	B2. PART #	B3. CONT #/LOT #	B4. SER #	B5. QTY	B6. MFG DATE	B7. INSRV DATE	B8. EXP DATE
BEACON URT-33A	7037618-10	N00383-95-C-5513	001001	1	960601	961203	
BATTERY	7747390-10	F41608-92-D-3079	001211	1	961001	961201	991031
ASPIRIN	51079 005 22	7L398	NA	10	941101	961203	991130
EYE OINTMENT	0168-0079-038	6041	NA	1	941001	961203	991031
IMODIUM	50458-400-01	95B100	NA	10	950201	961203	000228
SIGNAL SMOKE	712793	ATV94L005008	NA	2	941130	961204	InDefinite
BAGGED WATER	MIL-W-44126	088-2	NA	3	931201	961203	981231

02. SYS TEST:

C1. COMPLETED (NAME)	C2.. INSPECTED (NAME & QA STAMP #)
PR3 B. BROWN	PR1 R. SMITH 81B

KIT TECHNICAL DIRECTIVES

LIFE RAFT HISTORY

E1. TYPE ASSY	E2.. PART #	E3. CONTRACT #	E4. FSCM	E5. SER #
LR-1	MIL-L-81542A9AS0	N00383-92-C-4639	30003	876

RAFT TEST RECORD

E6. TEST	E7. COMPLETED (NAME)	E8. INSPECTED (NAME & QA STAMP #)
CYCLE: 1	PR3 J. JONES	PR1 R. JOHNSON 47B

RAFT TECHNICAL DIRECTIVES

F1. TYP	F2. NO.	F3. REV	F4. AM	F5. QA	F6. ORG	F7. DATE	F8. STAT	F1. TYP	F2. NO.	F3. REV	F4. AM	F5. QA	F6. ORG	F7. DATE	F8. STAT

D1. TYP	D2. NO.	D3. REV	D4. AM	D5. QA	D6. ORG	D7. DATE	D8. STAT
66	0468			81B	W5F	920801	INC
67	0556	C	1	81B	W5F	920801	INC
67	0684			81G	W5F	931015	INC
67	0721			81J	W5F	940927	INC
67	0684	A		81H	W5F	961204	INC

LOCAL USE

OPNAV 4790/137

PAGE 01 OF 01

Figure 5-32: Seat Survival Kit Record (OPNAV 4790/137)

AIRCREW SYSTEMS RECORD	A1. TYPE ASSEMBLY	A2. SERIAL NUMBER	A3. PART NUMBER	A4. FSCM	A5. CONT #
	SKU-2	156	63A80H1-601	30003	N00383-94-C-045P

SERVICE LIFE ITEMS

B1. NOMENCLATURE	B2. PART #	B3. CONT #/LOT #	B4. DODIC	B5. SER #	B6. QTY	B7. MFG DATE	B8. INSTL	B9. EXP DATE
RADIO SET PRT-5	10800000	N00383-91-C-9259		02005	1	910331	961216	
BATTERY PACK	10800100	451-95-M-M534		0114	1	951231	961216	980430
RADIO PRC-90-2	A3-01-0307	FA1608-88-C-3889		25771	1	920228	961216	
BATTERY BA1568U	BA-1568U	DAAB07-95-D-1023		114	1	950430	961216	980430
BAGGED WATER	MIL-W-44126	L523		NA	17	940531	961216	990531
BAGGED WATER	GC536W1	01		NA	15	930630	961216	980630
FOOD PACKETS	MIL-F-15381	UNK		NA	20	930228	961216	
EYE OINTMENT	0168-0079-38	CON 87-002		NA	2	950131	961216	980131
SIGNAL KIT	2112952	SGK92L002003	L258	NA	2	921130	961216	InDefinite
MAR SMOKE ILL	3139734	MEI93B001018	L283	NA	6	930228	961216	InDefinite
POVIDONE IODINE	NDC0034-2100-02	2K53		NA	2	940430	961216	970930
STROBE LT SDU-5E	MIL-L-38217	UNK		12200	1	900731	961216	
BATTERY	BA1574U	DAAB07-95-F-0027		UNK	1	950731	961216	980731
MAR SMOKE ILL	3139734	MEI94L002021	L283	NA	4	941130	961216	InDefinite

TECHNICAL DIRECTIVES

C1. TYP	C2. NO.	C3. REV	C4. AM	C5. QA	C6. ORG	C7. DATE	C8. STAT	C1. TYP	C2. NO.	C3. REV	C4. AM	C5. QA	C6. ORG	C7. DATE	C8. STAT	C1. TYP	C2. NO.	C3. REV	C4. AM	C5. QA	C6. ORG	C7. DATE	D8. STAT
67	0684	A		45B	W5F	960512	INC																
67	0808			45B	W5F	960512	INC																
67	0805			45B	W5F	960512	INC																
67	0657	A		45B	W5F	960512	INC																

LOCAL USE

CURRENT INSPECTION DATA AND SIGNATURES

D1. PACKED (NAME)	D2.. INSPECTED (NAME & QA STAMP #)	D3. TEST CYCLE	D4. ORG CODE
PR3 B. BROWN	SGT R. YANEZ 75B	1	W5F

D5. RFI DATE	D6. RFI SHF CYC	D7. LATEST RFI	D8. CUSTODIAN ORG CODE	D9. DATE ISSUED	D10. INSP CYCL	D11. SCHD RMVL DATE
961217	90	970317	GB8	961218	224	970730

OPNAV 4790/138

PAGE 01 OF 01

Figure 5-33: Aircrew Systems Record (OPNAV 4790/138)

AIRCREW PERSONAL EQUIPMENT RECORD	A1. NAME	A2. RANK/RATE	A3. FLT BILLET	A4. ORG	A5. BU/SER	RFI DATE	INSP CYC	DUE DATE
	R. BOYLES	LTCOL	PILOT	GB6	RB1486	961220	30	970119

AIRCREW EQUIPMENT LOG

B1. NOMENCLATURE	B2. EQUIP. TYPE	B3. CONT #/LOT #	B4. DODIC	B5. SER #	B6. QTY	B7. CYC	B8. MFG	B9. INSTL	B10. EXP DATE
COVERALLS FLYER R	8415010438387	DLA100-92-C-0443		RB1486	3	360	920331	940115	
FLYER JACKET IN	MIL-J-7823	DLA100-91-F-EC85		RB1486	1	360	910131	920512	
FLYER GLOVES	MIL-G-81188	DLA100-90-D-4010		NA	1	360	950228	961127	
HELMET HGU-85P	89D7981-7	N00383-92-G-K500		07511	1	90	940531	961127	
MASK MBU-16V1P	G012-1050-01	UNK		188	1	30	890331	961127	
ANTI-G CSU-13P	MIL-A-83406B	F41608-89-D-2035		007320	1	180	890430	921015	
HARN ASSY PCU33P	829AS100-7	N00383-83-C-1611		0045	1	90	840331	930105	990331
SURV VEST SV-2B	67A100D2-401	DLA100-90-C-0551		00147	1	90	950331	950823	
SURVIVAL KNIFE	MIL-K-8662	N00077-92-D-4410		RB1486	1	90	920430	920512	
STROBE LT SD-5E	MIL-L-38217	DLA400-87-F-2352		122259	1	90	890630	950823	
BATTERY	BA1574U	DAAB02-95-F-0027		0129	1	90	950731	950823	950731
FLASHLIGHT	MX-991U	UNK		RB1486	1	90		950823	
SNAP HOOK KNIFE	MIL-K-25594	N00383-90-C-8967		NA	1	90	910531	950823	
WRIST COMPASS	WCC100	N00383-85-C-4188		NA	1	90	940228	950823	
SIGNAL MIRROR	MIL-M-18371-E	DLA400-86-C-5285		NA	1	90	860331	950823	
MAR SMOKE & ILL	3139734	MEI93B001018	L283	UNK	1	90	930228	950823	InDefinite
SIGNAL KIT	2150423	SGK88H001011	L118	UNK	1	90	880831	950823	InDefinite
FLIGHT BOOTS	MIL-B-24911	DLA100-90-C-4307		NA	1	360	910630	961006	
BATTERY	BA1574U	DAAB02-95-F-0027		0129	1	90	950731	950823	980731

TECHNICAL DIRECTIVES

C1. EQUIPMENT TYPE	C2. SER #	C3. TYP	C4. NO.	C5. REV	C6. AM	C7. QA	C8. ORG	C9. DATE	C10. STAT	C1. EQUIPMENT TYPE	C2. SER #	C3. TYP	C4. NO.	C5. REV	C6. AM	C7. QA	C8. ORG	C9. DATE	
MBU-16V1P MASK	188	66	560			47	GB8	950808	INC	MAR SMOKE & ILL	UNK	67	684	A		47	GB8	950808	INC
SIGNAL KIT	UNK	67	657	A		47	GB8	950808	INC	HGU-85 HELMET	07511	66	499			47	GB8	950808	INC
SV-2B SURV VEST	00147	66	569		1	47	GB8	950808	INC	SV-2B SURV VEST	00147	67	820			24	GB8	950821	INC
SV-2B SURV VEST	00147	66	599	A		24	GB8	950821	INC	SV-2B SURV VEST	00147	66	436	A		47	GB8	950808	INC

OPNAV 4790/159

PAGE 01 OF 01

Figure 5-34: Aircrew Personal Equipment Record (OPNAV 4790/159)

AERONAUTICAL EQUIPMENT SERVICE RECORD

NOMENCLATURE OF EQUIPMENT		REPLACEMENT	
		Interval	Due
TYPE	MODEL	SER NO. *(Hub if prop.)*	

INSTALLED ON --

MODEL	BUNO/SERIAL NO.	DATE	BY *(Activity)*

CURRENT ENGINE OR PROPELLER POSITION NO .

DEPARTMENT OF THE NAVY , CHIEF OF NAVAL OPERATIONS

OPNAV4790/29 (1-84)

NOTE : DO NOT ROLL OR BEND . When removed from the log book for separate shipment , this record must be secured with a suitable fastener (e.g., a metal file fastener) at the points indicated . **DO NOT USE STAPLES** .

Figure 5-35: Aeronautical Equipment Service Record (OPNAV 4790/29) (Sample)

Aeronautical Equipment Service Record (OPNAV 4790/29)

Equipment Operating Record (Separator) (OPNAV 4790/31)

Equipment Operating Record (OPNAV 4790/31A)

Inspection Record (Separator) (OPNAV 4790/22)

Inspection Record (OPNAV 4790/22A)

Repair/Rework Record (Separator) (OPNAV 4790/23)

Repair/Rework Record (OPNAV 4790/23A)

Technical Directives (Separator) (OPNAV 4790/24)

Technical Directives (OPNAV 4790/24A)

Miscellaneous/History (Separator) (OPNAV 4790/25)

Miscellaneous/History (OPNAV 4790/25A)

Preservation/Depreservation Record (Separator) (OPNAV 4790/136)

Preservation/Depreservation Record (OPNAV 4790/136A)

Explosive Devices (Separator) (OPNAV 4790/26)

Installed Explosive Device Record (OPNAV 4790/26A)

Inventory Record (Separator) (OPNAV 4790/27)

Inventory Record (OPNAV 4790/27A)

Module Service Record (OPNAV 4790/135)

Assembly Service Record (OPNAV 4790/106A)

Equipment History Record (EHR) Card (OPNAV 4790/113)

Scheduled Removal Component Card (OPNAV 4790/28A)

NOTE: MSR, ASR, EHR, and SRC cards are placed in the order they are listed in the PMIC.

ALSS Record (Separator) (OPNAV 4790/157)

Parachute Record (OPNAV 4790/101)

Seat Survival Kit Record (OPNAV 4790/137)

Aircrew Systems Record (OPNAV 4790/138)

Figure 5-36: AESR Construction and Sequence

AESR	4790/ 31A	4790/ 22A	4790/ 23A	4790/ 24A	4790/ 25A	4790/ 136A	4790/ 26A	4790/ 27A	4790/ 101	4790/ 137	4790/ 138
Expeditionary Airfield System	M	M	M	M	M	M	*	*	*	*	*
Magnetic Minesweeping Gear	M	M	M	M	M	M	*	*	*	*	*
SE Gas Turbine Engine	M	M	M	M	M	M	*	*	*	*	*
Engine Test Cell	M	M	M	M	M	M	*	*	*	*	*
AN/AWW-13 Control Monitor Set	M	M	M	M	M	*	*	*	*	*	*
UAS Ground Control Systems	M	M	M	M	M	M		M			

NOTE

M - Indicates a mandatory form.
* - Indicates the form is to be used if applicable.

Figure 5-37: AESR Forms Matrix

OPNAVINST 4790.2(Series)
COMNAVAIRINST 4790.2 (Series)

MODULE SERVICE RECORD

REPLACEMENT	
COMPONENT/ASSEMBLY	
MODULE DUE	ENG/PROP SYSTEM DUE

SECTION I - IDENTIFICATION DATA

A. PART NUMBER	B. SERIAL NUMBER	C. TYPE/MODEL/SERIES	D. WORK UNIT CODE	E. CFA

SECTION II - MODULE COMPOSITION

A. NOMENCLATURE	B. P/N	C. S/N	D. DATE		E. NOMENCLATURE	F. P/N	G. S/N	H. DATE	
			INSTALL	REMOVE				INSTALL	REMOVE

SECTION III - INSTALLATION DATA

A. DATE	B. SERIAL NO. INSTALLED ON	C.BY (Activity)	D. TOTAL PROPULSION SYSTEM HOURS OR COUNTS					E. TOTAL MODULE HOURS OR COUNTS				

SECTION IV - REMOVAL DATA

A. DATE	B. TOTAL PROPULSION SYSTEM HOURS OR COUNTS					C. TOTAL MODULE HOURS OR COUNTS					D. REASON FOR REMOVAL & JOB CONTROL NUMBER

OPNAV 4790/135 (REV. 08/2016) PERMANENT RECORD Page 1 of 4

Figure 5-38: Module Service Record (OPNAV 4790/135) (Page 1) (Sample)

OPNAVINST 4790.2(Series)
COMNAVAIRINST 4790.2 (Series)

SECTION V - TECHNICAL DIRECTIVES												
A. TECHNICAL DIRECTIVE IDENTIFICATION								B. STATUS	C. TITLE/REMARKS	D. COMPLIANCE		E. SIGNATURE
(1) CODE	(2) BASIC	(3) INT	(4) REV	(5) AM	(6) PT	(7) KIT	(8) PRI			(1) BY (Activity)	(2) DATE	

OPNAV 4790/135 (REV. 08/2016) PERMANENT RECORD Page 2 of 4

Figure 5-39: Module Service Record (OPNAV 4790/135) (Page 2) (Sample)

OPNAVINST 4790.2(Series)
COMNAVAIRINST 4790.2 (Series)

SECTION VI - IDENTIFICATION DATA		
A. PART NUMBER	B. SERIAL NUMBER	C. TYPE/MODEL/SERIES

SECTION VII - REPAIR/REWORK/EXCEEDANCE			
A. DATE	B. ACTIVITY	C. DESCRIPTION	D. SIGNATURE

SECTION VIII - INSPECTION RECORD				
A. TYPE AND DESCRIPTION OF INSPECTION	B. REFERENCE	C. DATE COMPLETED	D. ACTIVITY	E. SIGNATURE

SECTION IX - PRESERVATION/DEPRESERVATION						
A. DATE	B. ACTIVITY	C. TYPE	D. REFERENCE	E. REPRESERVE DUE	F. DATE	G. ACTIVITY

OPNAV 4790/135 (REV. 08/2016) PERMANENT RECORD Page 3 of 4

Figure 5-40: Module Service Record (OPNAV 4790/135) (Page 3) (Sample)

OPNAVINST 4790.2(Series)
COMNAVAIRINST 4790.2 (Series)

SECTION X - MISCELLANEOUS / HISTORY	
A. DATE	B. REMARKS

OPNAV 4790/135 (REV. 08/2016) PERMANENT RECORD Page 4 of 4

Figure 5-41: Module Service Record (OPNAV 4790/135) (Page 4) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

ASSEMBLY SERVICE RECORD			1. REPLACEMENT DUE		2. REPLACEMENT INTERVAL		3. TIME REMAINING	
SECTION I - IDENTIFICATION DATA								
A. PART NUMBER	B. SERIAL NUMBER		C. WORK UNIT CODE		D. FST		E. CAGE	
SECTION II - COMPONENTS								
A. NOMENCLATURE	B. P/N	C. S/N	D. COMPONENT TIME OR COUNTS				E. REPLACEMENT DATA	
			DATE INST			DATE RMVD	INTERVAL	REPLACEMENT DUE
SECTION III - INSTALLATION DATA								
A. DATE	B. BUNO/ SERIAL NO. INSTALLED ON	C. BY (Activity)	D. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				E. ASSEMBLY HOURS OR COUNTS	

OPNAV 4790/106A (REV 10/2016)

Page 1 of 2

Figure 5-42: Assembly Service Record (OPNAV 4790/106A) (Front) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2

SECTION IV - REMOVAL DATA

A. DATE	B. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				C. ASSEMBLY HOURS OR COUNTS				D. REASON FOR REMOVAL AND JOB CONTROL NUMBER

SECTION V - TECHNICAL DIRECTIVES

A. TECHNICAL DIRECTIVE IDENTIFICATION								B. STATUS	C. TITLE/REMARKS	D. COMPLIANCE		E. SIGNATURE
(1) CODE	(2) BASIC	(3) INT	(4) REV	(5) AM	(6) PT	(7) KIT	(8) PRI			(1) BY (Activity)	(2) DATE	

SECTION VI - REPAIR / REWORK / OVERHAUL / EXCEEDANCES

A. DATE	B. ACTIVITY	C. DESCRIPTION	D. SIGNATURE

OPNAV 4790/106A (REV 10/2016)

Page 2 of 2

Figure 5-43: Assembly Service Record (OPNAV 4790/106A) (Back) (Sample)

Sample Periodic Maintenance Information Card Entries

NOMENCLATURE	PART/MODEL NUMBER	DISPOSTION	REMOVAL INTERVAL	JUSTIFICATION/ REMARKS
Servocylinder	X2330-10	Overhaul	1800 hrs	Note 1
Trunnion Assembly	X2450-15	Overhaul	4200 hrs	Note 2
Housing Assembly	X2550-20	Retire	5700	Note 2

NOTES

1. Assembly Service Record, OPNAV 4790/106A, applies.
2. Subassembly of Assembly Service Record item.

Procedures for Determining Replacement Due and Time Remaining Entries

1. Screen the Section II, III, IV and VI entries to determine which component has the least amount of operating time remaining.

a. Trunnion assembly is authorized 4200 hours operating time between overhaul and currently has 0 hours operating time since overhaul; therefore, it can be operated for 4200 hours.

b. Housing assembly is authorized a total service life of 5700 hours before it must be retired and currently has 4000 hours time since new accumulated; therefore, it can be operated for 1700 hours.

c. Servocylinder assembly is authorized 1800 hours operating time between overhauls and currently has 0 operating time since overhaul; therefore, it can be operated 1800 hours.

2. In this example, the housing assembly becomes the limiting factor when determining the replacement due time for the assembly. The replacement due for the assembly is based on the 1700 hours of operating time remaining for the housing assembly, which is added to the aircraft time since new at time of assembly installation. 8975 + 1700 = Replacement Due at 10,675.

SERVOCYLINDER ASSEMBLY SERVICE RECORD	REPLACEMENT DUE	REPLACEMENT INTERVAL	TIME REMAINING
	10,675	1800	1700

SECTION II - COMPONENTS

A. NOMENCLATURE	B. P/N	C. S/N	D. COMPONENT TIME OR COUNTS (TSN, TSR, METER, LCF)						E. REPLACEMENT DATA	
			DATE INST	ASSY TSN	COMP TSN	COMP TSO		DATE RMVD	INTVL	DUE
TRUNNION ASSY	X2450-15	A151	970312	C3245	C3850	C0000				
HOUSING ASSY	X2550-20	A256	970312	C3245	C4000	NEW				

SECTION III - INSTALLATION DATA

A. DATE	B. SERIAL NO. INSTALLED ON	C.BY (Activity)	D. TOTAL PROPULSION SYSTEM HOURS OR COUNTS				E. ASSEMBLY HOURS OR COUNTS			
			A/C TSN				ASSY TSN	ASSY TSO		
970330	149725	AN1	A8975				C3245	C0000		

SECTION VI - REPAIR / REWORK / OVERHAUL / EXCEEDANCES

A. DATE	B. ACTIVITY	C. DESCRIPTION	D. SIGNATURE
970312	WC6 - H	OVERHAULED IN ACCORDANCE WITH NA 03-15BAK-3	WC6 - 19

Figure 5-44: Assembly Service Record Entries (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16 Volume III

EQUIPMENT HISTORY RECORD (EHR) CARD

SECTION I - IDENTIFICATION DATA

A. NOMENCLATURE	B. WORK UNIT CODE	C. FSCM	D. REPLACEMENT INTERVAL	E. MAINTENANCE DUE

F. PART NUMBER	G. SERIAL NUMBER	H. FST	I. REFERENCE

SECTION II - INSTALLATION DATA

A. DATE	B. BUNO / SERNO INSTALLED ON	C. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				D. TOTAL HOURS OR COUNTS ON ITEM			

SECTION III - REMOVAL DATA

A. DATE	B. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				C. TOTAL HOURS OR COUNTS ON ITEM				D. REASONS FOR REMOVAL AND JOB CONTROL NUMBER

SECTION IV - MAINTENANCE RECORD

A. DATE	B. ACTIVITY	C. REMARKS AND MAJOR PARTS REPLACED	D. SIGNATURE

OPNAV 4790/113 (REV 5/2015)

Page 1 of 2
PERMANENT RECORD

Figure 5-45: Equipment History Record (EHR) Card (OPNAV 4790/113) (Front) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16 Volume III

SECTION V - INSPECTION RECORD

A. TYPE AND DESCRIPTION OF INSPECTION	B. REFERENCE	C. DATE COMMENCED	D. DATE COMPLETED	E. ACTIVITY	F. SIGNATURE

SECTION VI - TECHNICAL DIRECTIVES

A. TECHNICAL DIRECTIVE IDENTIFICATION								B. STATUS	C. TITLE/REMARKS	D. COMPLIANCE		E. SIGNATURE
(1) CODE	(2) BASIC	(3) INT	(4) REV	(5) AM	(6) PT	(7) KIT	(8) PRI			(1) BY (Activity)	(2) DATE	

OPNAV 4790/113 (REV 5/2015) BACK

Page 2 of 2

Figure 5-46: Equipment History Record (EHR) Card (OPNAV 4790/113) (Back) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16

SCHEDULED REMOVAL COMPONENT CARD

SECTION I - IDENTIFICATION DATA

A. NOMENCLATURE	B. WORK UNIT CODE	C. FSCM	D. REPLACEMENT INTERVAL	E. REPLACEMENT DUE

F. PART NUMBER	G. SERIAL NUMBER	H. FST

SECTION II - INSTALLATION DATA

A. DATE	B. BUNO / SERNO INSTALLED ON	C. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				D. TOTAL HOURS OR COUNTS ON ITEM			

SECTION III - REMOVAL DATA

A. DATE	B. TOTAL AIRCRAFT / EQUIPMENT HOURS OR COUNTS				C. TOTAL HOURS OR COUNTS ON ITEM				D. REASONS FOR REMOVAL AND JOB CONTROL NUMBER

OPNAV 4790/28A (REV 1/2015)

Figure 5-47: Scheduled Removal Component Card (OPNAV 4790/28A) (Front) (Sample)

OPNAVINST 4790.2
COMNAVAIRFORINST 4790.2
OPNAV M-8000.16

SECTION IV - TECHNICAL DIRECTIVES

A. TECHNICAL DIRECTIVE IDENTIFICATION								B. STATUS	C. TITLE/REMARKS	D. COMPLIANCE		E. SIGNATURE
(1) CODE	(2) BASIC	(3) INT	(4) REV	(5) AM	(6) PT	(7) KIT	(8) PRI			(1) BY (Activity)	(2) DATE	

SECTION V - REPAIR / REWORK / OVERHAUL

A. DATE	B. ACTIVITY	C. DESCRIPTION	D. SIGNATURE

OPNAV 4790/28A (REV 1/2015)

Figure 5-48: Scheduled Removal Component Card (OPNAV 4790/28A) (Back) (Sample)

FROM (ACTIVITY)
TO (APPROPRIATE CONTROLLING CUSTODIAN)
INFO (FUNCTIONAL COMMANDER, OR AS APPROPRIATE)
UNCLAS //N04790//
MSGID/GENADMIN/-//
SUBJ/MONTHLY AIRCRAFT SUMMARY DATA REPORT//
REF/A/DOC/COMNAVAIRFOR/01FEB05//
AMPN/COMNAVAIRFORINST 4790.2//
POC/AZ1 BULLOCK/DSN 363-5961//
RMKS/1. (UNIT DESIGNATION) (ORGANIZATION CODE) (PERMANENT UNIT CODE) (MONTH AND YEAR OF REPORT).
2.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
155514	AFPH	029	100	200	020	010	000	000	720	000	A	000	000	001531	A8D

Note 1. Columns are identified as follows:

A. BUNO
B. Type Equipment Code (TEC)
C. Not Mission Capable Maint - Scheduled (NMCM-S)
D. Not Mission Capable Maint - Unscheduled (NMCM-U)
E. Not Mission Capable Supply (NMCS)
F. Total Flight Hours (FH)
G. Total Number Of Flights (FLT)
H. Ship Operation Flight Hours (SHOP FH)
I. Ship Operation Flights (SHOP FLT)
J. Equipment In Service Hours (EIS)
K. Equipment Out Service Hours (EOS)
L. Inventory Code (IC)
M. Partial Mission Capable Maintenance (PMCM) Hours
N. Partial Mission Capable Supply (PMCS) Hours
O. SCIR Hours (SCIR HRS)
P. Data Processing Code (DP CODE)

Note 2. All data elements in the format must be reported. If there is no data to report, fill the fields with zeros. Report items C thru K, M and N in three digits rounded off to nearest whole hour. Precede with zeros if required. Item O must be reported as six digits rounded off to the nearest whole hour. Precede with zeros if required. Item L is reported as one digit using appropriate inventory code per the E-00 Report, as updated to reflect aircraft status as of 2400 last day of report period.

Note 3. Use only this format. This format enables direct key entry for further processing.

Figure 5-49: Aircraft Summary Data Message Format (Sample)

FROM (ACTIVITY)
TO (APPROPRIATE CONTROLLING CUSTODIAN)
INFO (FUNCTIONAL COMMANDER, OR AS APPROPRIATE)
UNCLAS //N04790//
MSGID/GENADMIN/-//
SUBJ/MONTHLY AIRCRAFT SUMMARY DATA CORRECTION REPORT//
REF/A/DOC/COMNAVAIRFOR/01FEB05//
AMPN/COMNAVAIRFORINST 4790.2
POC/AZCS LINTHICUM/QACPO/DSN 326-7910/COMM (301) 826-7910//
RMKS/1. (UNIT DESIGNATION) (ORGANIZATION CODE) (PERMANENT UNIT CODE) (MONTH AND YEAR OF REPORT)
2.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
155514	AFPH	029	100	200	020	010	000	000	720	000	A	000	000	001531	1	A8D
155514	AFPH	029	100	200	021	011	000	000	720	000	A	000	000	001531	2	A8D

Note 1. Columns are identified as follows:

- **A. BUNO**
- **B. Type Equipment Code (TEC)**
- **C. Not Mission Capable Maint – Scheduled (NMCM-S)**
- **D. Not Mission Capable Maint – Unscheduled (NMCM-U)**
- **E. Not Mission Capable Supply (NMCS)**
- **F. Total Flight Hours (FH)**
- **G. Total Number Flights (FLT)**
- **H. Ship Operation Flight Hours (SHOP FH)**
- **I. Ship Operation Flights (SHOP FLT)**
- **J. Equipment In Service Hours (EIS)**
- **K. Equipment Out Service Hours (EOS)**
- **L. Inventory Code (IC)**
- **M. Partial Mission Capable Maintenance (PMCM) Hours**
- **N. Partial Mission Capable Supply (PMCS) Hours**
- **O. SCIR Hours**
- **P. Correction Code (CC)**
- **Q Data Processing Code (DP CODE)**

Note 2. All data elements in the format must be reported. If there is no data to report, fill the field with zeros. Report items C thru K, M and N in three digits Item O must be reported as six digits rounded off to the nearest whole hour. Precede with zeros if required. Item L is reported as one digit using appropriate inventory code per the E-00 report, as updated to reflect aircraft status as of 2400 last day of report period

Note 3. List only those bureau numbers previously submitted in error. Use two lines for each correction. The first line will list the incorrect data, exactly as submitted, with the correction code indicator, 1, in column R. The second line will list the correct data with the correction indicator, 2, in column R.

Note 4. Use only this format. This format enables direct key entry for further processing

Figure 5-50: Aircraft Summary Data Correction Message Format (Sample)

FROM (ACTIVITY OF DEPLOYED AIRCRAFT OR NEAREST COMMUNICATION FACILITY)
TO (REPORTING CUSTODIAN OF THE DEPLOYED AIRCRAFT)
INFO (AIRCRAFT CONTROLLING CUSTODIAN)
UNCLAS//N04790//
MSGID/GENADMIN/-//
SUBJ/MONTHLY FLIGHT DATA REPORT//
REF/A/DOC/COMNAVAIRFOR/01FEB05//
AMPN/COMNAVAIRFORINST 4790.2//
RMKS/
A. ACFT BUNO
B. TYPE EQUIP CODE
C. ORG CODE
D. PERM UNIT CODE
E. REPORT PERIOD (MO/YR)
F. NUMBER FLYING HOURS ACCUMULATED DURING REPORT PERIOD
G. NUMBER FLTS ACCUMULATED DURING REPORT PERIOD
H. NUMBER SHIP OPS FLYING HOURS ACCUMULATED DURING REPORT PERIOD
I. NUMBER SHIP OPS FLTS ACCUMULATED DURING REPORT PERIOD
J. EQUIPMENT IN SERVICE HOURS
K. EQUIPMENT OUT SERVICE HOURS
L. INVENTORY CODE//

Figure 5-51: Flight Data Submission Message Format

FROM (RECEIVING REPORTING CUSTODIAN)
TO (TRANSFERRING REPORTING CUSTODIAN)
INFO (CONTROLLING CUSTODIAN, AND ANY APPROPRIATE ADDEES IF APPLICABLE
DEPARTURE AND DOWN MECH MESSAGES)
UNCLAS//N03710//
MSGID/GENADMIN/-//
SUBJ/ACFT ACCEPTANCE ARRIVAL//
REF/A/DOC/-/-//
AMPN/REF A IS THE FERRY MOVEMENT DIRECTIVE MESSAGE//
RMKS/1. (AIRCRAFT MODEL) (BUNO) (RANK) (NAME) (TANGO NUMBER) (ACTIVITY) ACPT (DATE) FERTIME (HOURS) PT (TENTHS) LDGS (TOTAL LANDINGS). FLYING HOUR COST (TOTAL ALL STUBS) DOLS.
2. FLT DATA. ALL TIMES ZULU. READ ACROSS.

DEP	DTG	ARR	DTG	HRS	LDGS	TMR
NGU	162100	NCO	162240	1.7	1N	2J1
NCO	170040	NAS	170240	2.0	1N	2J2

3. SCIR DATA. ALL TIMES ZULU. READ ACROSS.

	WUC	AT	MAL	WD	RCVD DATE/TIME/EOC	INWK DATE/TIME/EOC
A.	7236100	R	383	D	8016/2240/D	8016/2240/D
B.	7325410	R	382	D	8016/2240/Z	8016/2240/Z

	COMPDATE/TIME	JS/DATE/TIME/EOC	JS/DATE/TIME/EOC	JCN
A.	8016/2340	(SEE NOTE 1)	(SEE NOTE 1)	AB8015001
B.	8016/2352	S/8016/2300/Z	M/8016/2330/Z	AB8015002

4. TIME OF PHYSICAL CUSTODY CHANGE (ZULU TIME)
5. (REMARKS AS APPLICABLE)//

NOTES: 1. VIDS/MAF Maint/Supply record (Blocks B53-D17) if applicable.

2. Transferring activity will transcribe SCIR data on VIDS/MAF and submit to SSCA per transient maintenance documentation.

Figure 5-52: Aircraft Arrival Message Format

FROM: MESSAGE ORIGINATOR
TO: COGNIZANT TYPE WING (Navy Units)
COGNIZANT WING (Marine Corps Units)

INFO: ACC
MAG AND MALS (Marine Corps Units)
UNCLAS //N04790//
SUBJ: QUARTERLY HOURS IN LIFE
1. UNIT NAME, REPORT DATE YYYYMMDD, PUC 000001
A. 159004 159015
X. 2661.3 2478.5

NOTES: 1. Include the letters A. (BUNO) and X. (Hours, Time Since New) in the first left-hand column only, not in every column.

2. Do not include any remarks or references.

Figure 5-53: Quarterly Hours in Life (Sample)

XRAY DATA ITEMS	XRAY ACTION CODES								
	Change in Reporting Custodian			No Change in Reporting Custodian					
	A	R	Y	L	M	P	S	X	Part I
BUNO	R	R	R	R	R	R	R	R	
Org Code	R	R	R	R	R	R	R	R	R
PUC	R	R	R	R	R	R	R	R	R
Action Date /Time	R	R	R	R	R	R	R	R	R
Action Code	R	R	R	R	R	R	R	R	
Status Code	R	R	R	R	R	R	R	R	
Type Model Series Designation	R	R	R		R	R	R	R	
FID/PED		1	2 or 3				R	1 or 2	
Strike/Damage Code		2					R	1 or 2	
Acceptance Date									
ASPA		2	2					1 or 2	
Estimated Rework Completion Date		2			1 or 2			1 or 2	
PUC of the In-Service Activity					2			1 or 2	
PUC Received From/Command Code			R						
Supply Org Code		R		R				1 or 2	R
Operational Status Category Code		R		R	R			1 or 2	R
Fleet Assigned Code		R		R	R			1 or 2	R
Reinstatement Type			R						
Aircraft Location	R	R	R	R	R	R	R	R	R
Remarks	R	R	R	R	R	R	R	R	R

Legend:
R – Required
1 – Report only when item content is different than information previously reported
2 – Required if applicable when status code dictates
3 – Required only on reinstatement to restore appropriate information that existed prior to strike action
Blank – Not Reported

Figure 5-54: XRAY Action Codes