BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND

AFMC INSTRUCTION 21-118

12 JULY 2004

Maintenance

AIRCRAFT MAINTENANCE PRODUCTION/ COMPRESSION REPORT (AMREP)

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the HQ AFMC WWW site at: **https://www.afmc-mil.wpafb.af.mil/pdl/**

OPR: HQ AFMC/LGP (Larry Birri)
Supersedes AFMCI21-118, 26 Feb 96

Certified by: HQ AFMC/LG (Sue Dryden)
Pages: 17
Distribution: F

This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenance*. It explains the procedures for entering and updating the Aircraft Maintenance Production/Compression Report (AMREP) System, outlines responsibility for data entry, and addresses exercise management. The AMREP System (A030D) provides AFMC, HQ USAF and owning commands the status of aircraft undergoing depot maintenance at all AFMC or contractor repair facilities. It also projects when equipment will be inducted into Programmed Depot Maintenance (PDM).

SUMMARY OF REVISIONS

This revision to AFMCI 21-118 aligns the instruction with AFI 21-102, *Depot Maintenance Management* and TO 00-25-04, *Depot Maintenance of Aerospace Vehicles and Training Equipment*. It updates policy and procedures, terminology and responsibilities for input of data to the AMREP System, deletes the requirement to report on missiles, defines the *Assessment Period* and *AMREP Item Number,* and allows limited changes to the Scheduled Out Date. It outlines the performance measure of Depot Level Maintenance Possessed Aircraft (RCS: HAF-ILM(M)0102) and Command Aircraft Due Date Performance reporting.

Section A—Background

1. Introduction. This instruction provides guidance and procedures, and identifies responsibilities for input and maintenance of the data in the AMREP System (A030D). It also confers policy for reporting aircraft (both fixed and rotary wing) in a depot maintenance status, scheduling of aircraft back to the user, and the operation and use of the AMREP System during exercises and contingencies. AMREP data is used to measure overall AFMC weapon system support. System data should not be used to evaluate an ALC repair activity as a stand-alone metric. Related Metrics are defined and explained in **Attachment 3**.

2. Purpose. The purpose of the AMREP System is to document the status of aircraft possessed by AFMC (to include AFMC contractors) for depot maintenance repair, engineering evaluation, or other related

actions. It documents the in-work/storage status of aircraft (both fixed and rotary wing) possessed by AFMC and undergoing depot maintenance (including inspections performed by depot or contract field teams) at government or contractor facilities. It also identifies aircraft that can be compressed or accelerated for early return to the owning commands when required.

3. Abbreviations, Acronyms, and Terms. See **Attachment 1**.

4. Work Performance Categories. See **Attachment 2**.

5. Related Metrics. See **Attachment 3**.

Section B—Procedures

6. Responsibilities:

6.1. HQ AFMC Directorate of Logistics is the command office of primary responsibility (OPR) for the AMREP System.

6.2. The Weapon System Program Director (SPD)/System Support Manager (SSM) is the ALC OPR for data contained in this system. SPDs will designate certain individuals who may enter and change data in the AMREP. When work is performed at a site other than where the SPD/SSM is located, the SPD/SSM may delegate the authority to that location to enter and change AMREP data. Each Center will designate a Prime ALC AMREP Program Manager who will oversee data input and user Mission Design Series (MDS) tables. HQ AFMC/LGN will appoint a back-up AMREP Program System Manager who has the authority to authorize access to user MDS tables.

6.2.1. Aircraft possessed by AFMC undergoing depot-level repair at an ALC, a field location, or a contractor facility are reported into the AMREP System. The initial entry in the AMREP System must be made within one (1) workday after the arrival of the aircraft at the repair activity. This input date will be considered the day the aircraft is placed in work (inducted). For aircraft undergoing field team maintenance, initial entry will be one day from the date the AFTO Form 107, is approved by the repair center for action. Exceptions to the above policy may be recommended by the SPD/SSM to HQ AFMC/LG. Such recommendations must be coordinated with the owning command prior to review by HQ AFMC/LG. Early arrivals negotiated with the owning command for logistics considerations will not require an exception and will be input into the AMREP system no later than one day after the prior agreed to induction date (to meet TAKT time) to maintain the original negotiated PDM schedule. Contractor Logistics Support (CLS) aircraft may be exempted as approved by AFMC/LG. Non-DoD aircraft such as Foreign Military Sales (FMS) and North Atlantic Treaty Organization (NATO) owned aircraft are not reported into the AMREP system.

6.2.2. The SPD/SSM is responsible for timely system updates and assuring the accuracy of the aircraft status data in A030D. The AMREP system is “real time”. As a minimum, system updates for minor changes shall be made on a weekly basis; major aircraft status changes should be made daily. When determining the frequency of system updates, the SPD/SSM should balance between the effort required to update the system as individual events occur, as opposed to less frequent "batch" updates that may affect the accuracy of data in the system.

6.2.3. Exceptions to Reporting. Exceptions may be recommended by the SPD/SSM to HQ AFMC/LG. Such recommendations must be coordinated with the owning command prior to

review by HQ AFMC/LG. The SPD/SSM may make exceptions for aircraft undergoing short turn-around maintenance. Short turn-around maintenance is defined as maintenance completed within 10 flow days. The 645 MATS is permanently exempt from reporting, although its aircraft status data must be submitted on request from HQ AFMC Battle Staff. When requested, status will be due no later than 8 hours after the initial request for information. The requesting office will specify report format. The following aircraft are exempt from AMREP reporting:

C-9	C-12	C-20	C-21	C-22	C-23	TG-10
C-26	C-32	C-27	EC-18B/D	T-1A	C-137	TG-7/9
C-150	E-4	E-9	TG-3/4	UV-18	T-3	VC-25
C-41	T-43	TC-18E	E-8	T-6	UC-26	C-38 A
TG-4	TG-3	C-37	JPATS	C-40	TG-11	T-37/38

7. Procedures:

7.1. Establishing Original Scheduled Out Date and Scheduled Out Date:

7.1.1. The Original Scheduled Out Date is established no later than the day the aircraft is placed in work. The negotiated flow days specified in the contract or project directive for each aircraft tail number is for all projected known requirements; i.e., PDM, analytical condition inspection (ACI), on condition maintenance (OCM), modifications (mods), etc. These negotiated flow days are added to the Date In Work, thus becoming the Original Scheduled Out Date.

Date In Work + Negotiated Flow Days = Original Scheduled Out Date

Once established, the Original Scheduled Out Date (baseline) will not be changed.

7.1.2. The Scheduled Out Date is computed after the depot has completed its assessment of the aircraft. The Scheduled Out Date reflects changes to the Original Scheduled Out Date driven by assessment period findings. The Scheduled Out Date considers the level of effort required to complete the negotiated work package by specific tail number. The ALC's delivery performance will be measured against the Scheduled Out Date.

7.1.3. Assessment Period. The repair activity will assess (evaluate and inspect) the aircraft before the Scheduled Out Date is established. The Assessment Period duration for each mission, design, and series (MDS) and type will be defined and agreed to by the System Program Director/System Support Manager (SPD/SSM), the ALC MA, and the MAJCOM based on repair processes, repair activity capacity and/or contract requirements. HQ AFMC/LGP will maintain a file of assessment period agreements. Changes to the assessment periods will be forwarded to HQ AFMC/LGP within one week of completion. The completion date for the Assessment Period will be recorded in the AMREP System.

7.1.4. Scheduled Out Date Changes:

7.1.4.1. Changes made <u>during</u> the Assessment Period. The SPD/SSM is responsible for informing/negotiating any schedule changes with the customer to ensure that a revised delivery date (changes to the Scheduled Out Date) is established. The Scheduled Out Date may be changed to reflect time required for changes to the scope of work as a result of latent defects (unplanned requirements) discovered during the assessment period, or additional work

requested by the customer. The Scheduled Out Date may be revised downward if the production organization adds shifts or increases the workweek.

7.1.4.2. Changes after the Assessment Period. Any schedule changes must be coordinated between Maintenance and the SPD/SPM and approved in writing by the SPD/SSM, the owning command, and MA. Changes will be made only when the scope of work has changed beyond the original work specification, e.g., customer requested modifications/inspections, previously undiscovered defects (unplanned requirements), or SPD/SSM directed safety inspections. The SPD/SSM must ensure that any added requirements are supportable, i.e., materials and funds are available. No other changes are authorized to the Scheduled Out Date. The SPD/SSM will document schedule changes with a description of any added requirements, the man-hours required to accomplish the task, the impact to the established schedule, and a detail of why the schedule was affected. The additional flow days will be added to the negotiated flow days to determine the new Scheduled Out Date. The Remarks and the Work Description fields may be used to describe reasons for schedule changes. Only the SPD/SSM may input any changes into the AMREP system.

7.1.4.3. Changes to the Scheduled Out Date will not be made to compensate for parts supportability problems, facility constraints, or adverse weather conditions. Nor will changes to the Scheduled Out Date be made for "over and above" work if there is an allocation in the MRRB brochure for "over and above" unless the added work exceeds the "over and above" allocation. Changes to the delivery date as a result of these causes will be reflected in the Forecasted Out Date.

7.2. Flow Day Calculation. Planned Flow Days are the days reflected by the Input/Output Schedule. Actual Flow days are calculated from the Date In Work, or the day when the aircraft undergoes incoming processing action. To arrive at the Actual Flow Days for a particular aircraft, subtract the Date In Work from the Completion Date (Ready for Delivery).

Completion Date – Date In Work + 1 = Actual Flow Days

7.3. Acceleration and Compression Procedures (see definitions in **Attachment 1**). For the purposes of estimating Acceleration/Compression, SPD's will establish these procedures for each aircraft mission/design.

7.3.1. Acceleration and Compression Factors between 0 and 1.0. (The development of Acceleration and Compression Factors is an engineering function. Acceleration and compression factors should be developed using past experience, expected gains from moving from the current work schedule to a 24-hour a day work schedule, personnel constraints, facility constraints, expected changes in efficiency, and other factors as applicable.)

7.3.2. Cutoff Flow Days. Cutoff flow days are the initial days in depot flow time used for in-processing the aircraft, but prior to beginning disassembly.

7.3.3. Compression Factors for Cutoff Flow Days. To determine workdays remaining under acceleration or compression, multiply the appropriate factor for each aircraft by the remaining flow days unless the cutoff flow day has not been reached. Portions of acceleration and compression flow days are always rounded up (13.1 = 14 flow days). The cutoff flow day is that day on which the aircraft has completed in- processing and disassembly is to start.

Example:

The factors established for the F-XX are:

Compression - .62 Acceleration - .78

Cutoff flow days – 13 Cutoff compression - 3 days

The remaining forecast flow days are 133.

Compression Flow Days = 133 x .62 = 82.46 rounded up to 83.

Acceleration Flow Days = 133 x .78 = 103.74 rounded up to 104

If the aircraft has not reached its 13th flow day, then compression flow days = 3.

7.4. If the SPD/SSM is directed to compress or accelerate an aircraft by the owning command, they will request (through HQ AFMC/LG) that the maintenance organization perform a detailed evaluation of the aircraft. Compression or acceleration flow days developed as a result of the detailed evaluation and entered in the AMREP System will override the estimated compression/acceleration flow days.

8. Contingency/Exercise Management:

8.1. During contingencies or higher levels of alert SPDs should immediately calculate how many aircraft could be compressed or accelerated. This data should be forwarded to customer commands and to the HQ AFMC Battlestaff as soon as possible. Additionally, associated cost related to the acceleration or compression should be provided with the acceleration/compression data.

8.2. Joint Chiefs of Staff Command Post Exercise. HQ AFMC Battlestaff Logistics Readiness Center will be responsible for initiating the systems exercise option and notifying the appropriate activities of this action.

8.3. Local Exercise. Each activity will initiate their own exercise option according to the instructions in the AMREP Users Manual (copies are available from the HQ AFMC/LGPN AMREP System OPR).

DEBRA K. WALKER, Deputy Director
Directorate of Logistics

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Terms

Acceleration—Maximum production required for certain designated mission essential materiel undergoing depot level maintenance or modification. Maximize production and preparedness by:

-Suspending routine peacetime aircraft inputs to depot maintenance facilities.

-Extending the workday and workweek to a 24 hours a day/7 -days a week operation.

-Realigning the workstations and redistributing the labor force as required.

-Cannibalizing as necessary to complete the essential maintenance or modification. Requirements on the maximum amount of materiel.

-During acceleration conditions, the maintenance facility follows the same basic procedure as in compression, except that the peacetime work specifications normally remain unchanged. This includes the requirement for functional check flights (FCF).

ACI—Analytical Condition Inspection. The systematic disassembly and inspection of a representative sample of aircraft to find hidden defects, deteriorating conditions, corrosion, fatigue, overstress and other deficiencies in the aircraft structure or systems.

Actual Flow Days—Actual Flow Days are calculated by subtracting Date In Work from Date Completed. Measured in calendar days.

AMREP Item Number (Required for G072E processing)—A line number indicating a given aircraft, belonging to a given command, being repaired by a specific DMAG repair activity. AS-OF-DATE-provides the cutoff date of a report identified as YYQ, which is the last 2 digits of the FY and the quarter. AMREP item number ranges are assigned by the AMREP OPR for each weapon system or organization using the AMREP reporting system. An AMREP item number should not be assigned to more than one aircraft within the depot. An item number can be reused 30 days (or more) after the aircraft has left the depot. If the Item Number is no longer used, it should be removed from any display/report and the requirement to input that data should be removed from the system. Reference AFMCMAN 20-1 for the structuring of the AMREP Item number.

Assessment End Date—The Assessment End Date is the date that an overall evaluation of the aircraft is to be completed and the scope of work is known. The Assessment End Date is calculated by adding the Assessment Period to the Date In Work. After the Assessment End Date, the schedule is considered fixed unless there are special circumstances as specified in paragraph 6.1.5. The Assessment End Date is calculated by adding the Assessment Period to the Date In Work.

Assessment Period—A period of time, measured from the date that the aircraft is placed in work, that Evaluation and Inventory is conducted (see **paragraph 6.1.2**.). Based upon the results of the Assessment Period, the SPD/SSM may alter the Scheduled Out Date.

Completion Date (Ready for Delivery)—The date the aircraft is ready for delivery to the owning command providing that:

-All work is completed.

-FCF acceptance, if required, is completed along with the corrections of any identified discrepancies requiring work.

-The owning command has been notified that the aircraft is ready for pickup.

-The aircraft stands ready for crew acceptance and flyaway, except for the maintenance/operational ferry preflight.

Compression—When the maximum production is required for specified mission essential aircraft that are undergoing depot maintenance/modification, production is compressed by:

-Suspending routine peacetime work requirements and discontinuing aircraft inputs to depot maintenance facilities.

-Reassembling the aircraft after doing the absolute minimum maintenance essential to the safety of flight, and only those modifications essential to the weapon's war mission configuration.

-Extending the workday and the workweek to 24 hours a day/7 days a week operation; realigning the workstations; and redistributing the labor force, as needed to meet maximum production efforts.

-Resorting to whatever cannibalization is needed to complete the essential maintenance/modification on the maximum number of aircraft.

Compression Specifications—The minimum maintenance or modification requirements needed to render an aircraft effective in its assigned war mission. The requirement for FCF is left to the discretion of the depot under compression conditions.

Cutoff Flow Day—Cutoff flow days are the initial days in depot flow time used for in processing the aircraft, but prior to beginning disassembly.

Date In Work—The date the repair activity began work on the aircraft. Work begins when the aircraft undergoes incoming processing action.

Date Received—The date the aircraft arrived at the repair activity.

Delivery Date—The date the aircraft was picked up by, or transported to, the owning command.

Depot Maintenance—Maintenance that requires overhauling or rebuilding parts, assemblies, subassemblies, and end items. It may include manufacture of parts, modifications, testing, and reclamation. Depot maintenance supports base-level technicians by giving them technical help and doing any repairs beyond their responsibility. Depot maintenance includes all software maintenance.

Depot Maintenance Facility (Repair Activity)—A government or contractor facility that performs depot maintenance and modification of aircraft.

Due Date Performance—Due Date Performance is the accepted METRIC for aircraft production. It is used to measure aircraft in the month produced against operative schedule, either initial or adjusted, but not both. Thresholds have been established for early, on-time or late production:

-Early: Produced more than 5 days prior to Scheduled Out Date

-On-Time: Produced on Scheduled Out Date ±5 days

-Late: Produced more than 5 days after Scheduled Out Date

Examination and Inventory—A process by which the actual condition of the aircraft is determined upon arrival at the depot and placed in work.

FCF—Functional Check Flight. A flight performed after completing inspections or maintenance to make sure that the aircraft is airworthy and capable of mission accomplishment.

Flow Days (scheduled and forecasted out)—The number of days required to complete work on the aircraft. Flow days are measured from the Date In Work. The scheduled (original) calendar flow days are based on a single-shift, 5-day week operation. If the production division intends a multi-shift, extended workweek operation, there will be a commensurate adjustment to the calendar flow days. If the aircraft requires more flow days to complete the original work package or ”over and above” work, the revised flow day duration will be listed as forecasted out flow days.

Forecast Out Date—The date the repair activity expects to deliver the aircraft to the owning command. This date may be earlier or later than the Original Scheduled Out Date or the Scheduled Out Date. The Forecast Out Date is expected to reflect the best estimate of completion. Consequently, it will change as conditions warrant.

MDS Mission, Design, and Series—The official designation for aerospace vehicles used to represent a specific category of aerospace vehicles for operations, support, and documentation purposes.

Normal Maintenance Production—The normal production schedule for depot maintenance is based on an 8hour, 5day week, one shift operation. Exceptions may occur for certain MDS that require multishift operations.

OCM. On Condition Maintenance—A program to schedule selected aircraft into a depot level facility to correct known specific defects. Selection is based on combinations of critical and major defects.

Original Scheduled Out Date—The original date when all maintenance on the aircraft is due to be completed and the aircraft is to be ready for delivery to the owning command. The Original Scheduled Out Date is established no later than the day the aircraft is placed In Work. (Previously referred to as the Initial AMREP.) This date serves as the baseline, once entered, this date cannot be changed.

PDM. Programmed Depot Maintenance—Predetermined amount of repair work (requiring depot skills, equipment, and tooling) that requires disassembly, necessary cleaning, and inspection for repair or replacement, as necessary, of the component or assemblies.

Planned Flow Days—The negotiated calendar flow days specified in the contract or project directive for each aircraft tail number for all known requirements, i.e., PDM, ACI, OCM, and modifications. The negotiated calendar flow days are based on a single-shift, 5-day week operation. If the production division intends a multi-shift, extended workweek operation, there will be a commensurate adjustment to the calendar flow days.

Repair Activity—The depot or contractor location that is responsible for depot maintenance on the aircraft. Repair activity/location codes are available in the AMREP System.

Scheduled Out Date—A revision to the Original Scheduled Out Date as a result of allowable changes. (Previously referred to as Revised AMREP or Adjusted AMREP.)

SPD—System Program Director. A designated individual assigned the responsibility and delegated the authority for the centralized management of a particular system/project.

SSM—System Support Manager. The individual, organization, or activity assigned the responsibility for planning, organizing, coordinating, and directing the efforts of responsible organizational elements and individuals to insure that logistics support of a system, program, or project will be effective, timely, and economical.

TAKT Time—A Lean Concept term representing production pace (available production time divided by the rate of customer demands). It sets the production pace to match the customer demand rate.

Attachment 2

WORK PERFORMANCE CATEGORIES

The work performance category is an alpha code used to describe the type and extent of work being done. This list provides a brief description of job designator codes. For a more precise description of each code, refer to DOD 7000.14. Authorized work performance categories are as follows:

Table A2.1. Work Performance Categories.

Code	Title and Description
A	Overhaul. The disassembly, test, and inspection of the operating components and the basic structure to determine and accomplish the necessary repair, rebuild, replacement, and servicing required achieving the desired level of performance. Overhaul is synonymous with "rework" and "rebuild."
B	Programmed Depot Maintenance. Inspection and correction of defects that require skills, equipment or facilities not normally possessed by operating locations.
C	Conversion. The alternation of the basic characteristics of an item to such an extent as to change its mission, performance, or capability.
D	Activation. The process of returning an item from preservation, storage, or inactive status to an active, serviceable status by removing from storage and containers, stripping, inspecting, servicing, testing, repairing and replacing components, assemblies, or subassemblies as required.
E	Inactivation. The servicing and preservation of an item prior to placement in storage or an inactive status.
F	Renovation. The proof and test evaluation, and rework of ammunition or ordnance items as required for retaining there desired capability.
G	Analytical Condition Inspection. The disassembly, test, and inspection of end-items, assemblies or subassemblies to determine and accomplish the necessary rework, rebuild, replacement or modification required. It includes the technical analysis of the findings and determination of maintenance criteria. Includes prototype teardown, analysis and rework of an item to determine job and material specifications for a subsequent maintenance requirement.
H	Modifications (and Upgrades). Modifications and upgrades are changes to systems and equipment for safety reasons, to correct a deficiency, or to improve program performance. A "modification" is a change to a system that is still being produced; an "upgrade" is a change to a system that is out of production.
I	Repair. Action to restore an item to a serviceable condition from an unserviceable condition, correcting principally those defects that rendered the item unserviceable.

Code	Title and Description
J	Inspection and Test/Engineering Investigations. The examination and confirmation of the condition or operational status of an item relative to its applicable specifications; includes First Article Test. Engineering investigations are used to determine the cause of reported equipment failure or malfunction and are accomplished through the application of a disassembly and inspection investigation, material analysis inspection, and/or an engineering assistance investigation.
K	Manufacture. The fabrication of an item from raw materials or components.
L	Reclamation. The authorized processing of end-items, assemblies or subassemblies to obtain parts or components that are to be retained in operating materials and supplies prior to taking disposal action on the end-item, assembly or subassembly. Covers demilitarization actions on items prior to disposal when the demilitarization is incidental to the reclamation.
M	Storage. The inspection, represervation and maintenance in a storage status of weapons and equipment items, as well as their subsystems and components in the supply system.
N	Technical Assistance. The use of qualified depot maintenance personnel to provide technical information, instructions or guidance, or to perform specific work requiring special skills for operational activities or other maintenance organizations. Includes all demilitarization other than that incidental to reclamation when required to be reported.
O, P, and Q -	Not used.
R	Depot Development of Technical and Engineering Data.
S	Not used.
T	Non-maintenance(Other) Work. Used to complete the reporting of all maintenance work force costs incurred. Any costs incurred at a depot maintenance activity funded by the Air Force Working Capital Fund that do not meet the criteria for reporting under the other work performance categories shall be reported in this category. This includes any maintenance support costs funded by the Air Force Working Capital Fund activity. Maintenance support includes centralized programming and planning support, technical and engineering services, preparation of maintenance publications and engineering data, and technical and administrative training.
U	Software Support. The sum of all amounts for efforts required to correct software deficiencies to ensure that, during the post-deployment phase of a mission-critical computer system's life, the implemented and fielded software continues to support the system mission. Depot maintenance software support excludes efforts required to update software to operate the new hardware configurations or required to support new missions. Depot maintenance software support addresses both embedded software systems and support equipment software (e.g., automated test equipment).

Code	Title and Description
V	Calibration. The comparison of a measurement system or device of unknown accuracy to a system or device of known and greater accuracy. The system or device of greater accuracy is a measurement standard.
W	Contractor Logistics Support. CLS is commercial support for those weapon systems and equipment that do not have an organic support base established. Contractors provide total support including depot maintenance for the equipment, end-item, and components. Only those maintenance functions that would be classified as depot level, if the equipment were maintained organically, will be included.
X	Not Used.
Y	Scheduled Maintenance. The application of certain maintenance procedures to ensure that aeronautical equipment is maintained by controlling degradation resulting from time, operational cycles, use and climatic exposure. Scheduled maintenance requirements are the minimum necessary under all conditions and are mandatory to ensure timely discovery and correction of defects. Includes Standard Depot Level Maintenance (SDLM) and Programmed Depot Maintenance (PDM).
Z	Not used

Attachment 3

METRICS DEFINITIONS AND REPORTING REQUIREMENTS

1. Depot Level Maintenance Possessed Aircraft (RCS:HAF-ILM (M) 0102): Depot Level Maintenance Possessed Aircraft measures the number of aircraft possessed by AFMC for maintenance as COB on the last day of each month.

a. This report is the total number of aircraft that are undergoing depot level maintenance, and are possessed by AFMC. Aircraft may be at a repair facility (organic or contract), at a MAJCOM location, or at any other location. Centers/System Program Offices must report on all aircraft for which they maintain system/program management responsibility or are directly involved in the maintenance of that aircraft. Actual reporting responsibility rests with the repair activity for organic depot maintenance, and with the system/program manager for contract depot maintenance. Currently, the only aircraft that are excluded are the commercial-type aircraft (e.g., T43, C9, C12) as well as aircraft undergoing storage, preservation, withdrawal, or flyaway at AMARC. The determinant of whether an aircraft is undergoing depot level maintenance is the Possessed Purpose Code in CAMS/REMIS. For the purposes of this report, centers/SPOs should report all aircraft that are possessed by AFMC and have one of the following Possessed Purpose Codes:

(1) DJ – Depot Level Maintenance Possession – Depot Level Work: Applies to aerospace vehicles awaiting depot level work either at a depot, a contract facility, or the base organization location (to be performed by Depot, Contract, or Rapid Area maintenance (RAM)/field teams), or awaiting shipment to the appropriate repair facility. To be used when AFMC assistance has been requested and AFMC has formally acknowledged acceptance of the responsibility to repair the aerospace vehicle IAW TO 0025107.

(2) DK – Contract Work: Aerospace vehicles and trainers on contract to a civilian repair facility (Domestic or Foreign) for the performance of Programmed Depot maintenance (PDM), repair, modification, modernization, instrumentation, TO compliance and/or reconditioning.

(3) DM – Depot Level Maintenance Possession – Depot Level Work RAM/Field Teams: Aerospace vehicles undergoing maintenance beyond organizational/ intermediate level capability. Includes Depot level work being performed at the base organization location by Depot, contract, or RAM/Field Team.

(4) DO – Depot Level Maintenance Possession – Depot Work: Aerospace vehicles and trainers at USAF depots (domestic or foreign) undergoing programmed depot maintenance (PDM), repair, modification, modernization, technical order compliance, instrumentation and/or reconditioning.

(5) DR – Post Depot/Contractor Maintenance: Applies to aerospace vehicles after depot work (DO or DN), contract work (DK), or RMA/Field Team (DM) maintenance has been completed and the vehicle is in preparation for functional check flight (FCF) or delivery to the organization that will possess it. To be used from the time when the aircraft has been released for FCF, during FCF, and the maintenance required after the FCF.

b. For purposes of this report, aircraft status is to be reported as of COB on the last calendar day of the month and submitted to AFMC/LGPA by COB on the fifth working day of the month following. Categories to be reported are:

(1) Number of aircraft awaiting delivery to the owning command.

(2) Number of aircraft undergoing PDM that are currently on schedule.

(3) Number of aircraft undergoing PDM that are currently behind schedule.

(4) Number of aircraft undergoing modification that are currently on schedule.

(5) Number of aircraft undergoing modification that are currently behind schedule.

(6) Number of aircraft undergoing all other maintenance (e.g., ACI, conversion) that are currently on schedule.

(7) Number of aircraft undergoing all other maintenance that are currently behind schedule.

(8) Number of aircraft that have been received at the repair facility but have not been placed in work. The term "in work" indicates that the aircraft has begun the incoming processing action (see **Attachment 1** for a more complete definition of "in work").

c. Definitions of these categories are as follows:

Scheduled Depot Level Maintenance (Scheduling): Maintenance requirements that are known and programmed in accordance with TO 00-25-4 and for which input/output schedules have been established by the SPD. Aircraft may be scheduled on the basis of modification accomplishment or time cycle. This includes PDM (AFTO Form 103) activity.

Awaiting Delivery: The aircraft is ready for delivery to the owning command. All of the following conditions must be satisfied: All work is complete; FCF acceptance, if required, has been completed along with the corrections of any identified discrepancies requiring work; the using command has been notified that the aircraft is ready for pickup; and the aircraft stands ready for crew acceptance and flyaway except for the maintenance/operational ferry preflight.

PDM (On Schedule): Aircraft undergoing PDM that are currently estimated to be produced on schedule (the scheduled out date as arrived at after the assessment period). In the AMREP, the Forecast Out Date is less than or equal to the Scheduled Out Date plus five days. (For definitions of Scheduled Out Date and Forecast Out Date, see **Attachment 1**.)

PDM (Past Schedule): Aircraft undergoing PDM that are currently estimated to be produced late (the scheduled out date as arrived at after the assessment period). In the AMREP, the Forecast Out Date is greater than the Scheduled Out Date plus five days

MOD (On Schedule): Aircraft undergoing modification that are currently estimated to be produced on schedule (the scheduled out date as arrived at after the assessment period). In the AMREP, the Forecast Out Date is less than or equal to the Scheduled Out Date plus five days. (For definitions of Scheduled Out Date and Forecast Out Date, see **Attachment 1**.)

MOD (Past Schedule): Aircraft undergoing modification that are currently estimated to be produced late (the scheduled out date as arrived at after the assessment period). In the AMREP, the Forecast Out Date is greater than the Scheduled Out Date plus five days. (For definitions of Scheduled Out Date and Forecast Out Date, see **Attachment 1**.)

Other (On Schedule): Aircraft undergoing depot work other than PDM or modification (e.g., ACI) that are currently estimated to be produced on schedule (the scheduled out date as arrived at after the assessment period). In the AMREP, the Forecast Out Date is less than or equal to the Scheduled Out Date plus five days.

Other (Past Schedule): Aircraft undergoing depot work other than PDM or modification that are currently estimated to be produced late (the scheduled out date as arrived at after the assessment period). In

the AMREP, the Forecast Out Date is greater than the Scheduled Out Date plus five days. (For definitions of Scheduled Out Date and Forecast Out Date, see **Attachment 1**.)

Awaiting In-Work: Aircraft that are on-station at the repair activity, but have not yet been placed in an In-Work status. (For a definition of In-Work, see AFMCI 21-118).

Unprogrammed Depot Maintenance (UDLM). Depot maintenance requirements which have not been forecast and programmed; however, maintenance assistance has been requested by the owning command IAW TO 00-25-107.

Maintenance Assistance: Assistance provided to maintaining activities by AFMC to resolve problems with maintenance procedures or production that are beyond the capability of the maintaining command. Maintenance assistance may take the form of emergency maintenance support, technical assistance, or a combination of both. It may be in conjunction with or separate from engineering assistance. (TO 0025107)

2. Command Aircraft Due Date Performance: The Command Due Date Performance (DDP) measures the ability of the Air Logistics Centers and depot maintenance contractors to produce aircraft according to schedule. The measures tracks organic and contract aircraft by Mission, Design and Series (MDS).

a. Calculation:

(1) Aircraft are measured in the month produced against the operative schedule, either initial or adjusted, but not both. The operative schedule is the current schedule reflecting adjustments, if any.

(2) A narrative is required to explain all late completions for the current month. Common factors that caused late deliveries in previous months should be highlighted with a get-well plan. Threshold values for early, on time, or late deliveries are:

Early – Produced more than 5 days prior to the Scheduled Out Date

On Time – Produced on the Scheduled Out Date ±5 days.

Late – Produced more than 5 days after the Scheduled Out Date

$$\frac{\text{Aircraft Produced Early + Aircraft Produced on Time}}{\text{Total Aircraft Produced}} = \text{Due Date Performance}$$

(3) Contract extensions granted to a contractor as a result of the government's failure to act (e.g., failure to provide parts or Engineering Change Proposal evaluations in a timely manner) should not be considered an allowable schedule change for purposes of the data recorded in the AMREP nor for the purpose of this metric.

b. Frequency: Due Date Performance is tracked and reported on a monthly basis.

c. Standard: The sum of aircraft produced early and on time must be equal to or greater than 90 percent of total aircraft production.

d. Narrative Requirement: Performance is acceptable when the percent total of aircraft produced early plus on time equals or exceeds the standard. A narrative is required for any late aircraft. The following data must include: Tail Number, Reason(s) for Delay, Days Delayed. An example is provided.

Tail Number	Reason(s) for Delay	Days Delayed
841372	Weather	8
	Manpower Shortage	3
	Paint Hanger Constraint	2
870029	Post Dock Fuel Leaks	3
	Mod Kit Availability	97

3. Maintenance Aircraft Due Date Performance: The Maintenance Due Date Performance (DDP) measures the ability of the Air Logistics Centers and depot maintenance contractors to produce aircraft according to schedule. The measures track organic and contract aircraft by Mission, Design and Series (MDS).

a. Calculation:

(1) Aircraft are measured in the month produced against the operative schedule, either initial or adjusted, but not both. The operative schedule is the current schedule reflecting adjustments, if any.

(2) A narrative is required to explain all late completions for the current month. Common factors that caused late deliveries in previous months should be highlighted with a get-well plan. Threshold values for early, on time, or late deliveries are:

Early – Produced more than 5 days prior to the Scheduled Out Date

On Time – Produced on the Scheduled Out Date ±5 days.

Late – Produced more than 5 days after the Scheduled Out Date

$$\frac{\text{Aircraft Produced Early + Aircraft Produced on Time}}{\text{Total Aircraft Produced}} = \text{Due Date Performance}$$

(3) As this is a measure of the ability of depot maintenance to meet a schedule, exceptions to AFMCI 21118 are allowed. For the purposes of this metric only, schedule changes may be made for nonavailability of parts, weather delays, slow response to Engineering Change Proposals, or nonavailability of flight crews for Functional Flight Checks. Schedule changes will not be made for shortages of maintenance personnel or over and above work that should have been detected during the assessment period. Schedule changes for parts, weather, or flight crews are to be maintained separately and not entered into the AMREP system.

b. Frequency: Due Date Performance is tracked and reported on a monthly basis.

c. Standard: The sum of aircraft produced early and on time must be equal to or greater than 100 percent of total aircraft production.

d. Narrative Requirement: Performance is acceptable when the percent total of aircraft produced early plus on time equals or exceeds the standard. A narrative is required for any late aircraft. The following data must include: Tail Number, Reason(s) for Delay, Days Delayed. An example is provided.

Tail Number	Reason(s) for Delay	Days Delayed
841372	Weather	8
	Manpower Shortage	3
	Paint Hanger Constraint	2
870029	Post Dock Fuel Leaks	3
	Mod Kit Availability	97

4. Days Held Index: The purpose of this measure is to determine the length of time that the depot or depot maintenance contractor possesses aircraft for maintenance or modifications.

a. Calculation: Aircraft are measured in the month produced against the operative schedule, either initial or adjusted, but not both. The operative schedule is the current schedule reflecting adjustments, if any.

$$\frac{\text{Total Actual Flow Days}}{\text{Total Planned Flow Days}} = \text{Days Held Index}$$

b. Data Sources: Source data for aircraft production comes from the A030D, Aircraft and Missile Maintenance Production Compression Report (AMREP). Flow day definitions and allowable extensions to flow days are contained in paragraph 5. Note that contract extensions granted to a contractor as a result of the government's failure to act (e.g., failure to provide parts or failure to respond to Engineering Change Proposal evaluations in a timely manner) should not be considered an allowable schedule change for purposes of the data recorded in the AMREP.

c. The Days Held index is reported on a monthly basis.

d. Standard: Performance is acceptable when the Days Held Index is less than1.0.