BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND

AIR FORCE MATERIEL COMMAND
INSTRUCTION 21-118

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Maintenance

AIRCRAFT MAINTENANCE
PRODUCTION/COMPRESSION
REPORT (AMREP)

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This instruction implements Air Force Instruction (AFI) 16-402 Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination. It explains the procedures for entering and updating the Aircraft Maintenance Production/Compression Report System (AMREP/A030D), outlines responsibility for data entry, and addresses exercise management. The AMREP System provides Headquarters (HQ), Air Force Materiel Command (AFMC), HQ United States Air Force (USAF), other services and possessing/assigned owning Major Command (MAJCOM) with the status of aircraft undergoing depot level maintenance at all Department of Defense (DoD), Air Force, contractor, other commercial repair and Depot Maintenance Inter-Service Agreement facilities. It provides annual production plans based on project directives and scheduled completion date, and provides users the capability to complete detailed Root Cause analysis. This instruction applies to AFMC and Regular Air Force (RegAF). This publication does not apply to the Air National Guard (ANG), United Space Force (USSF), and the Air Force Reserve Command (AFRC) and their units. This publication may be supplemented at any level, but all Supplements must be routed to the Office of Primary Responsibility (OPR) of this publication for coordination prior to certification and approval. The authorities to waive requirements in this publication are identified with a Tier (“T-0, T-1, T-2, and T-3”) number following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161, Publishing Processes and Procedures, for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. Refer recommended changes and questions about this publication to the OPR using the
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**SUMMARY OF CHANGES**

This revision to AFMCI 21-118 adds Product Support Manager along with weapon system Program Manager as responsible authority for inputs into AMREP System. Further clarifies what aircraft are included in the quality standard calculation. Defines the timeframe of a quality year vs fiscal year and identifies 31 Oct as deadline for program offices to request deviations to quality standard calculation. Work Performance Categories (Job Designators) have been modified to identify only the categories now allowed in the AMREP System and further identifies what Job Designators can be classified as planned vs unplanned workload. Changes Programmed Depot Maintenance to Planned/Scheduled Depot Level Maintenance and provides greater clarity. Assigns when official AMREP System extensions can occur during either the assessment period or after. Provides further clarification on what is classified as additional workload in regards to planned events when an aircraft is already possessed by depot repair facility. Identifies that only one record per aircraft visit to a depot activity will be input in AMREP System, with ability to deviate on a case-by-case basis. Depot Possessed definition has been added to Attachment 1, Glossary of References and Supporting Information. Basing and Logistics Data Environment (BLADE) has replaced Global Combat Support System AIR FORCE Data Services in the document and in Glossary of References. Replaced reference to AFI 33-360 with DAFI 90-160 and DAFMAN 90-161 to be in compliance with updated publication policy. Added what AMREP System users are required to do when errors are entered in AMREP System and corrections can no longer be made at their level.

1. Introduction
2. Purpose
3. Work Performance Categories (Job Designator Codes)
4. Related Metrics Definitions and Reporting Requirements
5. Responsibilities
6. Procedures
7. Contingency/Exercise Management

**FIGURE**

1. FORMULAS (Page 1)
1. **Introduction.** This instruction provides guidance and procedures and identifies responsibilities for input and maintenance of the data in the AMREP System. It also confers policy for reporting weapon systems such as aircraft, both fixed and rotary wing and Remotely Piloted Aircraft 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 System data is used to measure overall AFMC weapon system support. This instruction applies to organic (ORG), contract (CON), Organic Field Team (OFT), Contract Field Team (CFT), Depot Maintenance Inter-Service Agreement and partnership activities; it outlines aircraft metrics definitions and reporting requirements.

2. **Purpose.** The purpose of the AMREP System is to document the status of aircraft possessed by AFMC (to include AFMC contractors, partnership and other DoD activities) for the various depot maintenance repair activities, engineering evaluation, or other related actions. **Aircraft possessed information is a factor in computing aircraft availability metrics used by senior AIR FORCE officials to make resource allocation decisions across weapon systems, charter process improvement and other initiatives.** It documents the in-work/storage status of weapon systems such as aircraft, both fixed and rotary and Remotely Piloted Aircraft possessed by AFMC and undergoing depot maintenance (including maintenance performed by depot organic or contract field teams) at a government, contractor, or transitory commercial facility. It also identifies aircraft that can be compressed or accelerated for early return to the possessing/assigned MAJCOM in support of a simulation or real world contingency.

3. **Work Performance Categories (Job Designator Codes).** See **Attachment 2.**

4. **Related Metrics Definitions and Reporting Requirements.** See **Attachment 3.**

5. **Responsibilities:**

   5.1. HQ AFMC /A4/10 Directorate of Logistics, Civil Engineering, Force Protection and Nuclear Integration is the command OPR for the AMREP System and will act as the System OPR to assign Mission Design Series (MDS) user permission.

   5.2. The weapon system Program Manager (PM), (to include Designated PMs), as well as Product Support Managers (PSM), are the OPRs for data contained in this system. PMs in coordination with PSMs will coordinate responsibilities identified in this AFMCI and designate both a primary and alternate AMREP System representative who will enter and
update data in the AMREP System, specify MDS and identify any specific input details (e.g., Organic only, Programmed Depot Maintenance only, Field Teams). The responsible PMs/PSMs will maintain a current appointment letter and notify HQ AFMC /A4F of personnel changes by submitting a copy of the updated appointment letter to HQ AFMC /A4F Workflow. The PM/PSM may delegate the authority to update forecast out dates, inputting of root cause data, and Functional Check Flight (FCF) data if mutually agreed upon by the PM/PSM and Repair Activity. When work is performed at a site other than where the PM/PSM is located, the PM/PSM may delegate the authority and designate an individual at that location to enter and update AMREP System data. However, the PM/PSM will not delegate approval authority for schedule changes (extension requests). The PM/PSM will ensure the timeliness of all Revised Out Date schedule changes (extension requests). HQ AFMC /A4F will act as Information Owner with the authority to grant user access and administrative roles. (T-2)

5.2.1. Aircraft possessed by AFMC undergoing depot level inspections, repairs or modifications at an Air Logistics Complex (ALC), field location, contractor or transitory commercial facility will be reported in the AMREP System. This includes both scheduled (programmed “P record”) and unscheduled (unprogrammed/drop-in “D record”) depot maintenance where AFMC has taken possession of the aircraft (physically or virtually). Aircraft in the Reliability and Maintainability Information System (REMIS) with “D*” series Purpose Identifier Codes (PIC) must report in the AMREP System. Follow guidelines in AFI 21-103, Equipment Inventory, Status, and Utilization Reporting, for weapon system reporting process and PIC code definitions. A REMIS error listing is contained in the AMREP System to identify those aircraft which are in depot status, but have not been reported in AMREP System. As a minimum, PMs/PSMs will review the REMIS Error Listing weekly to ensure all records are included in AMREP System. Additionally, all aircraft owned by other services and Foreign Military Sales within AFMC’s control for the purpose of depot level maintenance, must also report. All aircraft must report as received (Received Date on an open AMREP System record) in the AMREP System within three (3) workdays after the arrival of the aircraft at the Repair Activity unless specified in a special agreement between the PM/PSM, Repair Activity, and possessing/assigned MAJCOM. For aircraft awaiting field team maintenance or depot input, the initial entry is made no later than three (3) workdays from the date the 107 request (per Technical Order 00-25-107, Maintenance Assistance) repair action(s) have been formally accepted to be worked by AFMC. As a minimum, the AMREP System received date data field entry will be the date AFMC accepted repair or disposition responsibility of the aircraft (i.e., REMIS PIC code DJ start date). (T-2)

5.2.1.1. Early arrivals negotiated between the possessing/assigned MAJCOM, PM/PSM and Repair Activity are placed in-work into the AMREP System no later than three (3) workdays after the agreed upon in-work date. To maintain the original negotiated schedule, the reporting activity must ensure the agreed upon date is entered into the in-work date block of AMREP System. Condition and circumstance will be documented in the Remarks section of AMREP System. (T-2)

5.2.2. The PM/PSM and appointed designees are responsible for timely system updates and assuring the accuracy of the aircraft status data in AMREP System. Aircraft status changes (e.g., revised schedule changes, completions, deliveries, remarks) shall be made no later than one business day from date of occurrence. AMREP System is a “real time”
system that supports BLADE. Accuracy of AMREP System data is paramount in keeping the production plan, projections and root cause codes current for further analysis and presentation to senior leaders. (T-2)

5.2.3. Exceptions to Reporting. Aircraft in Purpose Identifier Code (PIC) DL (Depot Delivery Flight) and aircraft undergoing regeneration for Aerial Target activities are exempt from reporting in the AMREP System. Any additional exception to reporting must be recommended by the appropriate Program Executive Officer to HQ AFMC /A4. Such recommendations must be coordinated with the possessing/assigned owning MAJCOM prior to submission. HQ AFMC /A4 remains the sole approval authority for exceptions to reporting. All aircraft will be reported in AMREP System until the exception is granted. (T-2)

5.2.4. The PM/PSM will ensure Depot Maintenance performed by contractors (including Contract Depot Maintenance contracts, Contractor Logistics Support contracts, Interim Contract Support contracts, and Public-Private Partnership contracts) and non-Air Force repair activities comply with the requirements identified within this instruction or meet its intent as part of the contract, statement of work, performance work specifications, or Depot Maintenance Inter-Services Agreement. (T-2)

5.2.5. AMREP System input users or designated PM/PSM representatives working with the AMREP System input users will accomplish the AMREP System self-assessment checklist annually or more frequently if not in compliance with AMREP System policy. The AMREP System self-assessment checklist is contained in the Management Internal Control Toolset (MICT) system and is mandated as part of the commander’s Inspection Program, in accordance with AFI 90-201. MICT can be accessed using the following link: https://mict.us.af.mil/. (T-2)

6. Procedures:

6.1. Establishing Original Scheduled Out Date and Revised Scheduled Out Date:

6.1.1. Original Scheduled Out Date. The Original Scheduled Out Date is established and input no later than the day the aircraft is placed in-work. The Original Scheduled Out Date is computed based on the negotiated flowdays and before aircraft is placed in-work. Negotiated flowdays can be derived from; Aircraft and Missile Requirement work specification, weapon system brochure, engineering requirements, contract, project directive, depot/customer requested workload agreement, PM/PSM approved items listed in the Air Force Technical Order Form 103, Aircraft/Missile Condition Data; e.g., Programmed Depot Maintenance, Analytical Condition Inspection, on condition maintenance, modifications, Air Force Technical Order 00-25-107, Fixed Price Worksheet. Weapon system maintenance requirements are determined by evaluating data from a variety of sources and not limited to only those stated in this chapter. Flowdays are negotiated by the PM/PSM and Repair Activity with the possessing/assigned MAJCOM in accordance with Air Force Manual 63-143, Centralized Asset Management Procedures and Technical Order 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment. In accordance with Air Force Manual 63-143, the PM/PSM must ensure that all requirements are supportable with existing capacity (i.e., material/parts, facility, manpower, and funds). Requirements that are not supportable will not be accepted by Repair Activity. Parts supportability issues on planned tasks come with the understanding
that additional flowdays may be required and will be added to the AMREP System record. Once established, the Original Scheduled Out Date (baseline) will not be changed. (T-2)

6.1.2. Assessment Period. The Assessment Period starts when the aircraft is placed In-Work and ends on the Assessment End Date. The Assessment Period duration shall be 45 percent of the original negotiated flowdays by MDS or serial number with a stretch goal of 30 percent. See Figure 1 for formulas used. Any changes to the assessment period duration must be agreed to by the PM/PSM, the Repair Activity commander or civilian equivalent and possessing/assigned MAJCOM. Any updates to an aircraft’s Assessment Period will be updated in the AMREP System with details in the Remarks section. (T-2)

6.1.3. Revised Scheduled Out Date. The Revised Scheduled Out Date reflects schedule changes (official extension request asking for additional days) to the Original Scheduled Out Date based on the level of effort required to accomplish assessment period findings, e.g., additional work, Work Specification (project) Related Unpredictables and Over & Above (see paragraph 6.1.7). The new revised date will reflect the days necessary to acquire and install additional parts. Repair Activity Due Date Performance (DDP) will be measured against the Revised Scheduled Out Date.

6.1.4. Schedule Changes:

6.1.4.1. Schedule change restrictions. No more than two changes to the Original Scheduled Out Date are allowed (extension requests asking for additional days): one during the assessment period and one after. Any request to revise the schedule beyond the two authorized changes must be submitted by the PM/PSM and approved by HQ AFMC /A4. Only the PM/PSM may authorize any schedule changes to the AMREP System (this authority cannot be delegated to a Repair Activity or contracting representative). Changes to the schedule will not be made to compensate for parts supportability problems, facility constraints, or seasonal weather conditions (except as provided for in section 6.1.4.4.). The only exception to this would be new parts required to accomplish additional approved workload. Work Specification (project) Related Unpredictables and Over and Above requirements are considered additional workload. Changes to the scheduled out date as a result of approved acceleration/compression, adjustment to work shifts, or modified workweek are not valid reasons to change the Original Out Date and must be reflected by changing the Forecast Out Date. Official schedule changes will be made by changing the Revised Scheduled Out Date in AMREP system. (T-2)

6.1.4.2. Changes made during the Assessment Period (1st official extension). The Repair Activity will submit a schedule change (official extension request to add additional days) request signed by the Repair Activity commander, civilian equivalent, or designated representative to the responsible PM and PSM. This extension request will include a description of any added requirements to include significant changes in scope to established tasks, the man hours and parts required to accomplish the task, the impact to the established schedule, and a detailed explanation of why the schedule was affected. This will be broken out by days needed per individual reason, with details provided for each. The designated organic, contract, partnership, and non-Air Force Repair Activity representative must be appointed by the Repair Activity commander or civilian equivalent in writing. The PM/PSM is responsible for notifying the owning
MAJCOMs of any revisions to the scheduled completion date (Revised Scheduled Out Date). Changes will be made only when the scope of work has changed beyond the original work specification (e.g., customer requested modifications or inspections, previously undiscovered defects, additional Over and Above, new parts required to complete added requirements, or PM/PSM directed safety inspections). If new parts are required, the time to acquire and install these parts will be factored into the new revised out date. The additional flowdays will be added to the previously approved flowdays to determine the new Revised Scheduled Out Date. The PM/PSM and the Repair Activity must ensure that any added requirements are supportable with existing capacity (i.e., material/parts, facility, manpower, and funds). Requirements that are not supportable will not be accepted unless mutually agreed upon by the PM, PSM and Repair Activity with the understanding that additional flowdays may be required that may include queue time. Flowdays will be directly tied to the supportability of the aircraft. The PM in coordination with PSM is the final approval/disapproval authority on schedule changes and will provide a written decision to the Repair Activity. The PM/PSM will maintain copies of all approved and disapproved change requests. In the event the PM/PSM disapproved a request to revise the schedule, the Forecast Out Date must be updated to ensure it reflects the most current estimated completion date. The Forecast Out Date will be revised accordingly if the production organization adjusts work shifts or modifies the workweek. At this point, it is possible for the Forecast Out Date and the Revised Scheduled Out Date to differ. (T-2)

6.1.4.2.1. The Revised Scheduled Out Date must be updated in AMREP System within ten (10) days of Assessment End Date. This will allow time for the completion of internal routing and coordination of the scheduled output date change through Repair Activity and to the PM/PSM. Recommend PMs/PSMs maintain an internal metric to track for coordination and routing issues that need to be addressed. The timeliness of the approval/disapproval process is critical to monthly reporting requirements, and any delay impacts accuracy of reports provided to HQ AFMC, Air Staff and DoD. It is at the authority of the PM/PSM if late submissions will be disapproved due to tardiness. For example, if the Assessment End Date is July 1, the request for an extension process must be submitted, all signatures and approval process must be 100% complete by July 11. (T-2)

6.1.4.3. Changes after the Assessment Period (2nd official extension). The Repair Activity will submit a schedule change (extension request to add additional days) request signed by the Repair Activity commander, civilian equivalent, or designated representative to the responsible PSM and PM. This extension request will include a description of any added requirements to include significant changes in scope to established tasks, the man hours and parts required to accomplish the task, the impact to the established schedule, and a detailed explanation of why the schedule was affected. This will be broken out by days needed per individual reason, with details provided for each. The designated organic, contract, partnership, and non-Air Force Repair Activity designated representative must be appointed by the Repair Activity commander or civilian equivalent in writing. The PM/PSM is responsible for notifying the owning MAJCOMs of any revisions to the scheduled completion date (Revised Scheduled Out Date). Changes will be made only when the scope of work has
changed beyond the original work specification (e.g., customer requested modifications or inspections, previously undiscovered defects, additional Over and Above, new parts required to complete added requirements, or PM/PSM directed safety inspections). If new parts are required, the time to acquire and install these parts will be factored into the new revised out date. The additional flowdays will be added to the previously approved flowdays to determine the new Revised Scheduled Out Date. The PM/PSM and the Repair Activity must ensure that any added requirements are supportable with existing capacity (i.e., material/parts, facility, manpower, and funds). Requirements that are not supportable will not be accepted unless mutually agreed upon by the PM, PSM and Repair Activity with the understanding that additional flowdays may be required that may include queue time. Flowdays will be directly tied to the supportability of the aircraft. The PM in coordination with PSM are the final approval/disapproval authorities on schedule changes and will provide a written decision to the Repair Activity. The PM/PSM will maintain copies of all approved and disapproved change requests. In the event the PM and/or PSM disapproved a request to revise the schedule, the Forecast Out Date must be updated to ensure it reflects the most current estimated completion date. The Forecast Out Date will be revised accordingly if the production organization adjusts work shifts or modifies the workweek. (T-2).

6.1.4.3.1. The Revised Scheduled Out Date must be updated in AMREP System NLT fifteen (15) days after the actual completion of the aircraft. For example, if the date the aircraft was completed is 1 July, all signatures and approval process must be 100% complete by 16 July. This will allow time for internal coordination and routing of the scheduled output date change through Repair Activity and to the PSM and PM. If an extension request is still in process at the time the aircraft completes, do NOT input the completion date into AMREP System until the extension request process has been fully completed. Recommend PMs/PSMs Maintain an internal metric to track for coordination and routing issues that need to be addressed. It is important to remember the timeliness of this second AMREP System extension is critical for providing accurate metrics to senior Air Force officials and any delays will be addressed immediately. The timeliness of the approval/disapproval process is critical to monthly reporting requirements and any delay impacts accuracy of reports provided to HQ AFMC, Air Staff and DoD. It is at the authority of the PM and PSM if late submissions will be disapproved due to tardiness. (T-2)

6.1.4.4. The schedule may also be revised due to extreme weather conditions (e.g., devastating hail storm, ice storm, flooding, and extreme temperature) resulting in base closure, consecutive late reporting, damage to operations and maintenance infrastructure, or safety concerns that significantly caused delays in the schedule. Changes to the scheduled output date for these reasons must be coordinated with Repair Activity and will follow guidance in paragraphs 6.1.4.2 to 6.1.4.3.

6.1.4.4.1. Changes to the schedule due to extreme weather condition count towards the maximum of two changes.

6.1.4.5. Schedule Change Waiver. Any request beyond the two authorized changes must be coordinated through HQ AFMC /A4F and approved by HQ AFMC /A4. The
responsible PM in coordination with PSM will submit a schedule change request signed by the Repair Activity management (Repair Activity commander or civilian equivalent) and coordinated with the possessing/assigned MAJCOM. Waivers will only be considered when the scope of work has changed beyond the original work specification (e.g., customer requested modifications or inspections, previously undiscovered defects), additional Over and Above requirements, PM/PSM directed safety inspections, extreme weather conditions, or other extenuating situations. The PM/PSM must ensure that any added requirements are supportable with existing capacity (i.e., material/parts, facility, manpower, and funds). The PM in coordination with PSM will send all waiver requests to HQ AFMC /A4 Workflow and follow procedures in accordance with HQ AFMC /A4 StandardizedWaiver Request and Approval Policy memorandum. (T-2)

6.1.5. Forecast Out Date. The Forecast Out Date represents the best estimated aircraft completion date regardless of the date which appears in the Original/Revised Out Date. This field must be updated as soon as a new forecast out date has been identified or the aircraft completion date is expected to slip. An accurate Forecast Out Date is vital to MAJCOM customers to allow real world/contingency mission planning and facilitate expectation management. The PM/PSM is responsible for keeping the customer MAJCOM informed of any variations to the original work package and scope of each aircraft undergoing depot level repair. The Forecast Out date can be changed as many times as needed and is not the date used to measure ability to produce planned aircraft according to schedule, however it is used to measure ability to produce unplanned aircraft according to schedule (see Attachment 3). (T-2)

6.1.5.1. For tail numbers input into AMREP System as unplanned/Unscheduled/Drop-In (D) aircraft, the Forecast Out Date acts as the Revised Out Date and will be used to identify if an aircraft completes on time. Unscheduled/Drop-In’s do not have a Revised Out date field in AMREP System. While an unscheduled aircraft can change the Forecast Out date as many times as needed, it can be late if the delay is maintenance self-induced and will require a Root Cause input.

6.1.5.2. For Tail numbers input into AMREP System as Planned/Scheduled aircraft, the Forecast Out Date is not used to measure DDP and cannot be used to reflect an official AMREP System schedule extension. It can be changed as many times as necessary to show any unofficial changes to the estimated completion date.

6.1.6. Record deletions. Deletions will be kept to a minimum and only used to correct major input errors. Since all deletions are captured in the AMREP System, annotate the reason for the deletion in the remarks section of the new entry if the record is being re-entered. (T-2)

6.1.7. Additional work. Additional work added (customer driven or Over and Above/unpredicted) after an aircraft is received and placed in work will not count as separate actions/completions. It will be staffed as a schedule change request (paragraph 6.1). Do not close out the record (input a completion date) and then re-open as a Drop-In or as another Planned record. The details of the added work is documented in the remarks section of AMREP System. AMREP System does not track by funding type, nor does it track flowdays by separate maintenance actions/tasks, whether they are planned, unplanned
tasks, or work added before or after aircraft is in work to include, but not limited to: AFTO Form 103 (Aircraft/Missile Condition Data for other negotiated maintenance requests)/TO 00-25-107 Assistance Request/AFMC Form 202 (Non Conforming Technical Assistance Request and Reply) request, unit request, AIR FORCE Time Compliance Technical Order released, modifications (new or already planned prior to or during induction), added inspection(s), over and above, unpredictable, unscheduled, Unscheduled Depot Level Maintenance, facility/manpower induced, repairs, related or unrelated additional workload, project or non-project, Analytical Condition Inspection, On Condition Maintenance, previously undiscovered defects, directed safety inspections, depaint/paint, rework, or Time Compliance Technical Orders. Additional work also includes any workload that was scheduled at a later date, but was moved forward. It is one visit, one record. One visit means aircraft has not left the facility/Base nor taken out of a “D” PIC in REMIS. Aircraft movement around base (towed) does not denote it has left. Only HQ AFMC/A4/10 has the authority to grant any deviation to separate records on a case by case basis. At no time will aircraft be flown back to unit to only fly it back to depot for the sole purpose of separating workload flowdays unless approved by both PM and MAJCOM. This is not encouraged in this policy and is not economical. (T-2)

6.1.8. Documentation. The PM/PSM and appointed designees must document details of any change to the Revised or Forecast Out Date in the Remarks section of the AMREP System. At a minimum, they must provide the details of what caused the schedule change. (T-2)

6.1.9. Duplicate/Overlapping Records. At no time will an aircraft be inducted multiple times in the AMREP System with the same or overlapping dates. The system is designed to reflect one aircraft induction per visit to a depot maintenance Repair Activity to line up with aircraft availability metrics contained in AFI 21-103. For example, an aircraft record cannot be opened and placed in-work on 5 Jan and then another record opened for the same aircraft with an in-work date of 15 Jan, even if there are separate maintenance actions (see paragraph 6.1.7). (T-2)

6.1.10. User AMREP System input error. Any user created input errors (incorrect dates, codes, type of record, missing inputs, etc.) must be corrected in the system. Do not state in the remarks field or root cause analysis as “not really late because an input error was made”. If any kind of AMREP System data has been input in error, users must contact HQ AFMC/A4FI and ensure all errors are corrected if the record has been closed (delivery date has been input).

6.2. Acceleration and Compression Procedures (see definitions in Attachment 1). For the purposes of estimating Acceleration/Compression, PMs/PSMs will establish procedures for each aircraft MDS. PMs/PSMs are responsible for ensuring accuracy of Acceleration/Compression factors in the AMREP System. (T-2)

6.2.1. Acceleration and Compression Factors between 0 and 1.0. Factors are used to increase production rate during war-time or contingency/emergency requirements (increased need for aircraft). Day to day factors found in AMREP System are non-official estimates and can be used for exercises/inspections only. The development of real world factors will be calculated in an official engineering assessment. Acceleration and compression factors should be developed using past experience, expected gains from
moving from the current work schedule to up to a 24-hour a day work schedule, personnel constraints, facility constraints, expected changes in efficiency, and other factors as applicable.

6.3. If the Program Management Office is directed to compress or accelerate an aircraft by the possessing/assigned owning MAJCOM, they will have the maintenance organization perform a detailed evaluation of the request. Acceleration and compression of aircraft will be in accordance with procedures in HQ AFMC and Air Force Life Cycle Management Center/Air Force Sustainment Center Plan 70. New compression or acceleration flowdays developed as a result of the detailed evaluation will be entered in the AMREP System, overriding the AMREP System calculated compression/acceleration flowdays. (T-2)

6.4. Annual Production Plan. Each PM/PSM is responsible for entering their annual fiscal year production plan (in accordance with Air Force Manual 63-143) by MDS into AMREP System in terms of expected production for each month broken out by Programmed Depot Maintenance, modifications, and other planned workload. See Attachment 3 for specific details on entering and maintaining the planned production. (T-2)

7. Contingency/Exercise Management:

7.1. During contingencies or higher levels of alert, PMs/PSMs will immediately calculate how many aircraft could be compressed or accelerated. This data should be forwarded to possessing/assigned owning MAJCOM and to the HQ AFMC Battle Staff as soon as possible. If an aircraft compression or acceleration is officially requested, the PM/PSM must solicit a detailed evaluation from the Repair Activity in order to calculate the associated cost. (T-2)

7.2. Command and Joint Chiefs of Staff Command Post Exercise. HQ AFMC Crisis Action Team will be responsible for initiating the system’s exercise option and notifying the appropriate activities of this action. (T-2)

7.3. Local Exercise. Each activity will initiate their own exercise option according to the instructions in the AMREP System Users Manual (copies are available within the AMREP System online on AMREP System Home Screen). (T-2)
FIGURE 1. FORMULAS (Page 1).

1. **Negotiated Flowdays**
   a. Negotiated Flowdays is the number of days negotiated to accomplish ALL work.
   b. Information needed:
      i. All the work (100% of everything that is going to be done to it) requested to be accomplished to the Tail Number being input into depot.
      ii. Fixed Price Worksheet or equivalent (Air Force Manual 63-143).
   c. Flowdays for scheduled workload + Flowdays for unscheduled workload (103/-107/202/customer requests) = Negotiated Flowdays.
   d. Example: Tail Number 231 is coming in for Programmed Depot Maintenance, paint, Modification X and the unit requested additional inspections. Depot agreed to perform all work. Depot told the MAJCOM/PM/PSM the scheduled work will take 200 days and the unscheduled additional 85 days to complete.
   e. 200 + 85 = 285
   f. Negotiated Flowdays for this tail number is 285.

2. **Original Scheduled Out Date**
   a. The calendar date projected to complete ALL the work.
   b. Information needed:
      i. Date In Work
      ii. Negotiated Flowdays
      iii. Julian Calendar
   c. Date In-work + Negotiated Flow Days = Original Scheduled Out Date
FIGURE 2. FORMULAS (Page 2).

a. Example: Tail Number 231 has arrived at the depot location and all work being performed has been agreed upon (285 Negotiated Flowdays). Maintenance personnel started working on 5 Jan 2017.

b. Convert calendar days into Julian dates (remember leap years 2020, 2024, 2028 are different). 5 Jan 2017 is converted to Julian date 17005. **Date in work is now 17005**.

c. 17005 + 285 = 17290

d. 17290 converted back to a calendar date = 17 Oct 2017.

e. Original Scheduled Out Date for this tail number is 17 Oct 2017.

2. **Assessment Period**
   a. The Assessment Period Days is the number of days given from the date Tail Number is placed in work to the Assessment End Date.
   b. Information needed:
      i. Date In Work
      ii. Negotiated Flowdays
   c. Negotiated Flowdays x .45 = # of Assessment Period days.
   d. Assessment Period Days are calculated as 45% of the Negotiated Flowdays.
   e. Example: Tail Number 231 has come in for depot maintenance (285 Negotiated Flowdays) and management would like to know the number of days for initial assessment that is tied to the first AMREP System extension opportunity.
   f. 285 x .45 = 128.25
   g. Assessment Period Days for this tail number is 128 days. The depot has 128 days once the Tail Number is placed in work to discover any additional work and request first AMREP System extension.

3. **Assessment End Date**
   a. The Assessment End Date is the calendar date that shows the end of the assessment period (first AMREP System extension permitted). After this date, the second AMREP System extension must be used.
   b. Information needed:
      i. Date In Work
      ii. Negotiated Flowdays
      iii. Julian Calendar
   c. Date In Work + Assessment Period Days = Assessment End Date.
   d. Example: Tail Number 231 was placed in work on 5 Jan and the assessment period was calculated at 128 days.
   e. Convert calendar days into Julian dates (remember leap years 2020, 2024, 2028 are different). 5 Jan 2017 is converted to Julian date 17005. **Date in work is now 17005**.
   f. 17005 + 128 = 17133
   g. 17133 converted back to a calendar date = 13 May 2017.
FIGURE 3. FORMULAS (Page 3).

1. Early, On Time and Late
   a. Is aircraft Early, On Time or Late? A lot of metrics use this information to measure how effective the Repair Activity’s ability to plan to the Original and Revised Scheduled Out date (Forecast Out date on Unplanned/Drop-In’s). First, find out the day variance for each aircraft once it has completed.
   b. Information needed:
      i. Projected Out dates
         1. Original Scheduled Out Date
         2. Revised Scheduled Out Date
         3. For Drop-In’s ONLY, the Forecast Out Date
      ii. Completion Date
      iii. The current threshold values for early, on time and late
         1. Example: Early is 1 or more days before the projected, On Time is on same date as projected and Late is 1 or more days after projected.
   c. Completion date – Projected Out Date = number of days early, on time or late
   d. Example: Tail Number 231 Original Out Date was 16 Oct, Revised Out Date was 20 Dec with an actual completion date of 26 Dec.
   e. Convert dates into a Julian Date. 16 Oct is 17289, 20 Dec is 17354 and 26 Dec is 17360.
   f. 17360 – 17289 = 71 days against the Original, 17360 – 17354 = 6 days against the Revised.
   g. This aircraft completed 71 days past what was originally estimated at the beginning of visit and 6 days past the date after an official extension was given (Revised Out Date). BOTH are late to deliver back to the customer. A decision is required to determine what DDP will be measured.

2. Original Due Date Performance
   a. Measurement used to determine how close the actual completion date came to original estimate. This was estimated prior to aircraft being placed in work at the beginning of the visit. This is a measurement of estimated completion date verses actual completion.
   b. Information needed:
      i. Original Out Date
      ii. Completion Date
      iii. The current threshold values for early, on time and late
   c. Completion date - Original Out Date = number of days early, on time or late.
   d. Example: Tail Number 231 Original Out Date was 16 Oct and it actually completed on 26 Dec.
   e. Convert both dates into a Julian Date. 16 Oct is 17289 and 26 Dec is 17360.
   f. 17360 – 17289 = 71 days
FIGURE 4. FORMULAS (Page 4).

| a. This aircraft completed 71 days past what was originally estimated at the beginning of visit. |
| 1. **Revised Due Date Performance** |
| a. Measurement used to determine how close the actual completion date came to revised estimate. This date is estimated when an official extension (schedule change request for additional days) has been approved and a Revised Out date input in AMREP System. This is a measurement of the new revised out date versus actual completion. |
| b. Information needed: |
| i. Revised Out Date (will be different than the Original Out date if extension was approved) |
| ii. Completion Date |
| iii. The current threshold values for early, on time and late |
| c. Completion date - Revised Out Date = number of days early, on time or late. |
| d. Example: Tail Number 231 Revised Out Date was 20 Dec and it actually completed on 26 Dec. |
| e. Convert both dates into a Julian Date. 20 Dec is 17354 and 26 Dec is 17360 |
| f. 17360 − 17354 = 6 days. |
| g. This aircraft completed 6 days past what the Revised Out date was estimated after extension was approved. |
| 2. **Actual Flowdays** |
| a. Actual number of days (calendar days) it took to perform all work. Calculated after aircraft is completed. |
| b. Information needed: |
| i. Date In-work |
| ii. Completion date |
| c. Date completed − Date In Work = Actual Flowdays. |
| d. Example: Tail Number 231 Was placed In Work on 5 Jan and completed all depot work on 26 Dec. |
| e. Convert both dates into a Julian Date. 5 Jan is 17005 and 26 Dec is 17360. |
| f. 17360 − 17005 = 355 (it took 355 Flowdays to perform all the work on this tail number). |

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Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AIR FORCE INFORMATION 16-402, Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination, 27 September 2019
AIR FORCE INFORMATION 21-101_AFMCSUP, Aircraft and Equipment Maintenance Management, 10 November 2020
AIR FORCE INFORMATION 21-103, Equipment Inventory, Status, and Utilization Reporting, 30 April 2020
AIR FORCE INFORMATION 33-322, Records Management and Information Governance Program, 22 March 2020
Air Force Life Cycle Management Center and Air Force Sustainment Center Surge Contingency Plan 70, 15 March 2014
AIR FORCE MANUAL 63-143, Centralized Asset Management Procedures, 18 December 2020
AIR FORCE POLICY DIRECTIVE 21-1, Maintenance of Military Materiel, 1 August 2018
DAFMAN 90-161, Publishing Processes and Procedures, 14 April 2022
DEPARTMENT OF THE AIR FORCE INSTRUCTION 90-160, Publications and Forms Management, 14 April 2022
DEPARTMENT OF THE AIR FORCE MANUAL 90-161, Publishing Processes and Procedures, 15 April 2022
DoD Instruction 5000.02, Operation of the Adaptive Acquisition Framework, 23 January 2020
Headquarters Air Force Materiel Command Plan 70: Materiel Surge, 19 January 2018
Technical Order 00-25-107, Maintenance Assistance, 1 October 2015
Technical Order 00-25-4, Depot Maintenance of Aerospace Vehicles and Training Equipment, 25 January 2018
Technical Order 00-35D-54 United States Air Force Deficiency Reporting, Investigation, and Resolution, 15 April 2021

Prescribed Forms

None

Adopted Forms

DEPARTMENT OF THE AIR FORCE FORM 847, Recommendation for Change of Publication,
AIR FORCE TECHNICAL ORDER Form 103, Aircraft/Missile Condition Data,
Abbreviations and Acronyms

AFI—Air Force Instruction
AFMC—Air Force Materiel Command
AFRC—Air Force Reserve Command
AFRIMS—Air Force Information Management System
AFTO—Air Force Technical Order
ALC—Air Logistics Complex
AMREP—Aircraft Maintenance Production/Compression Report
ANG—Air National Guard
BLADE—Basing Logistics Data Environment
CFT—Contract Field Team
CON—Contract
DAF—Department of the Air Force
DAFI—Department of the Air Force Instruction
DAFMAN—Department of the Air Force Manual
D—Drop-In/Unscheduled Depot Level Maintenance
DoD—Department of Defense
FCF—Functional Check Flight
HQ—Headquarters
IAW—In Accordance With
MAJCOM—Major Command
MDS—Mission Design Series
MICT—Management Internal Control Toolset
OFT—Organic Field Team
ORG—Organic
PIC—Purpose Identifier Code
PM—Program Manager
PSM—Product Support Manager
RDS—Records Disposition Schedule
RegAF—Regular Air Force
REMIS—Reliability and Maintainability Information System
TO—Technical Order
USAF—United States Air Force
USSF—United States Space Forces

Terms

**Acceleration**—Maximum production required for certain designated mission essential materiel undergoing depot level maintenance or modification. Acceleration of aircraft is intended to meet war-time or contingency requirements. Maximize production and preparedness by: suspending routine peacetime aircraft inputs to depot maintenance facilities, extending the workday and workweek up to 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 FCFs).

**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 Flowdays**—Actual flowdays are calculated after aircraft has completed. Calculate by subtracting Date In-work from Date Completed plus one day. Measured in calendar days.

**AMREP System Item Number**—Optional field used by PM/PSM to track aircraft sequence 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.

**Assessment Period**—A period of time, measured from the date that the aircraft is placed in-work, that Examination and Inventory is conducted (see paragraph 6). Based upon the results of the Assessment Period, the PM/PSM may alter the Revised Scheduled Out Date.

**Basing & Logistics Analytics Data Environment (BLADE)**—BLADE is “data analytics as a service” (DAaaS) solution for the Logistics Enterprise (including Civil Engineering & Force Protection). Provides access to A4 data and analytic tools and training for functional users to turn it into meaningful information and enhance decision support. Subsumes what was known as Global Combat Support System —AIR FORCE Data Services.

**Completion Date (Ready for Delivery)**—The date the aircraft is ready for delivery to the possessing/assigned owning MAJCOM providing that:

All work is completed.
Additional work is not started after this point (see paragraph 6.1.7.).
FCF acceptance, if required, is completed along with the corrections of any identified discrepancies requiring work.
The possessing/assigned owning MAJCOM has been notified the aircraft is ready for pickup.
The aircraft stands ready for crew acceptance and flyaway, except for the operational preflight. If additional maintenance discrepancies are found during preflight, the completion date will be
voided out (removed from the record so the record is open again). A new completion date will be
input after all the work is accomplished. This will be considered over and above not directly
related to work performed.

**Compression**—When the maximum production is required for specified mission essential aircraft
undergoing depot maintenance/ modification. Compression of aircraft is intended to meet war-time
or contingency requirements. 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 as
directed by engineering.

Extending the workday and the workweek up 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 PM Chief Engineer under compression conditions. This normally requires an
engineering assessment of the minimum essential inspections, maintenance, repairs, and
modifications required to return each depot- possessed tail number to service.

**Date In**—Work—The date the depot workload activity began work on the aircraft.

**Date Received**—The date the aircraft arrived at the Repair Activity or once request for Field Team
(-107 request) has been officially approved or disposition responsibility of the aircraft.

**Delivery Date**—The date the aircraft was picked up by, or transported to the possessing/ assigned
owning MAJCOM.

**Depot Delivery Flight**—This flight is to deliver aircraft to and from the maintenance facility. This
is not part of the FCF or Operational Check Flight (OCF).

**Depot Maintenance**—Maintenance that requires overhauling or rebuilding parts, assemblies,
subassemblies, and end items. It may include manufacture of parts, modifications, inspections,
repair, 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
aircraft that has been placed in a “D*” PIC in REMIS.

**Depot Maintenance Facility (Repair Activity)**—A government (Organic/ ORG ), contractor
(CON), facility or depot field team (Organic Field Team/OFT and Contract Field Team/CFT) that
performs depot level maintenance (see above Depot Maintenance).

**Depot Possessed**—Any aircraft that is either in physical possession (sitting at a maintenance
facility) or is in virtual possession (-107 has been formally approved, but waiting for team to arrive
to begin work) having or awaiting depot level work. Possessed aircraft can be Air Force, Inter-
Service (Army, Navy, Marine or Coast Guard) and Foreign Military owned. Possessed is not just
determined by a purpose identifier code (PIC) used in REMIS.
Drop—unscheduled depot level maintenance - Reactive maintenance with an unknown number of flow days. AFTO 00-25-107 Maintenance Assistance Requests (crash damage, cracks, corrosion, etc.) or warranty work. It is no longer considered a drop-in record if any planned workload is added. May be performed at a depot facility or aircraft’s location.

Due Date Performance—DDP is the accepted metric for aircraft production. It is used to measure aircraft in the month produced against operative schedule (original or revised) against the actual completion date.

Functional Check Flight—A flight performed after completing inspections or maintenance to make sure that the aircraft is airworthy and capable of mission accomplishment. FCF information must be entered into the AMREP System prior to aircraft delivery. AMREP System will automatically calculate the total number of attempts once the number of FCFs and ground aborts are entered. This data is used to calculate each new fiscal year FCF and ground abort standards.

Flowdays—The number of days required to complete work on the aircraft. Flowdays are measured from the Date In-Work. Flowdays are negotiated, by MDS and work package, between the PM/PSM, Repair Activity, and MAJCOM based on weapon system specific work schedule and any additional work agreed upon.

Forecast Flowdays—The number of forecasted calendar flowdays, calculated by subtracting the Forecast Out Date from the Date In-Work plus one day. Used for unplanned/drop in maintenance. Flowdays for scheduled workload + flowdays for unscheduled workload (-107 requests/warranty only) = negotiated flowdays.

Forecast Out Date—The date the Repair Activity expects to deliver the aircraft to the possessing/assigned owning MAJCOM. This date may be earlier or later than the Original or Revised Scheduled Out Dates. The Forecast Out Date must reflect the best estimate of completion. Consequently, it will change as conditions warrant and as many times as needed.

In-work Date—The date of the first maintenance action in a series of scheduled events to complete a repair, preventive maintenance, or modification. Also referred to as Induction Date.

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 (DoD 4120.15L, Model Designation of Military Aerospace Vehicles).

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 possessing/assigned owning MAJCOM. The Original Scheduled Out-Date is established/input no later than the day the aircraft is placed in work. This date serves as the baseline and once entered, this date cannot be changed.

Over and Above—Unknown work/tasks discovered during the course of performing overhaul, maintenance, and repair efforts that is (1) not within the general scope of the work specification, Project Directive or contract, (2) not covered by the line item(s) for the basic work under the work specification, Project Directive or contract, and (3) necessary in order to satisfactorily release the aircraft. These are low frequency items or work that is not called out in the work specification, Project Directive or covered under economy or flight safety tasks. These items of work will only
be done to correct a critical or major deficiency and must be approved by the Project Administration Officer or the PM/PSM representative.

**Original Flowdays**—The original (negotiated) calendar flowdays specified in the contract, work specification, workload agreement, or Project Directive for each aircraft tail number for all known requirements, e.g., Programmed Depot Maintenance, Analytical Condition Inspection, On Condition Maintenance, TCTOs, modifications or any workload with an established number of flowdays. Used for planned/scheduled workload. The original flowdays are calculated by subtracting the Original Out-Date from the Date In-Work.

**Planned/scheduled Depot level 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. Number of flowdays have been established (via 1st article testing, validation/verification (val/ver), proof of concept). Fully released, in production workload will only be input as a planned record in AMREP System.

**Repair Activity**—A government (Organic ), contractor, facility or depot field team, (Organic Field Team and Contract Field Team) that performs depot level maintenance (see above Depot Maintenance).

**Revised Flowdays**—The flowdays resulting from an approved schedule extension. The number of days required to complete work on an aircraft based on the Revised Out Date.

**Revised Scheduled Out Date**—A revision to the previously approved scheduled out date as a result of allowable changes.

**Root Cause**—The cause that, if corrected, would prevent recurrence of this and similar occurrences. Root causes are required for all aircraft that are LATE.

**Root Cause Analysis**—A step by step method that leads to the discovery of the cause or causes that led to occurrence.

**Scheduled (Revised) Flowdays**—These are the renegotiated calendar flowdays and are calculated by subtracting the Revised Out Date from the Date In-Work plus one day.

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

**Product Support Manager**—A designated individual responsible for managing the support functions required to field and maintain the readiness and operational capability of major weapon systems, subsystems, and components, including all functions related to weapon system readiness, in support of the program manager’s life cycle management responsibilities.

**Work Specification (project) Related Unpredictables**—Requirements that are defined or can be related to one of the work codes in the work specification document. These discrepancies within the scope of the Work Specification have a negotiated block of hours/money available to assign against in the course of performing programmed maintenance.
A2.1. The work performance category is an alpha code used to describe the type and extent of work being done. The below list provides a brief description of job designator codes as applied in the AMREP System and are the only authorized work performance categories. Authorized work performance categories are as follows:

Table A2.1. Work Performance Category Codes.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title and Description (input as a Planned record only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Planned/Scheduled Depot Maintenance. Planned depot level maintenance that require skills, equipment or facilities not normally possessed by operating locations. Includes aircraft with cyclical Standard Depot Level Maintenance and Programmed Depot Maintenance (PDM) programs to include but not limited to PDM, C-Checks, Scheduled Structural Inspections (SSI), Analytical Critical Inspections (ACI), etc.</td>
</tr>
<tr>
<td>C</td>
<td>MDS Conversion. The alteration of the basic characteristics of an item to such an extent as to change its mission, performance, or capability (C-130J converted into an AC-130J).</td>
</tr>
<tr>
<td>H</td>
<td>Planned/Scheduled Mod, TCTOs and other (paint, 103 work). Includes paint/de-paint, de-modifications, TCTOs, Aircraft Structural Integrity Program (ASIP), workload not covered above and any depot work with negotiated flow days with customer.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title and Description (input as a Drop-in record only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Unplanned / Drop-In Repair. Reactive maintenance with an unknown number of flow days. AFTO 00-25-107 Maintenance Assistance Requests (crash damage, cracks, corrosion, etc.). May be performed at a depot facility or aircraft’s location. No other workload other than drop-in will be added. If planned workload is added, the record must be input as a Planned record.</td>
</tr>
<tr>
<td>Q</td>
<td>Warranty Work. Used to document work to correct depot induced quality defects/escapes identified after aircraft delivery. No other workload other than drop-in will be added. If planned workload is added, the record must be input as a Planned record.</td>
</tr>
</tbody>
</table>
METRICS DEFINITIONS AND REPORTING REQUIREMENTS

A3.1. Aircraft Due Date Performance: DDP measures AFMC’s ability to produce aircraft according to schedule. This measure tracks scheduled (programmed) and unscheduled (unprogrammed) organic and contract depot level maintenance performed by Air Logistics Complexes, depot maintenance contractors, and non-AIR FORCE repair activities. DDP does NOT include field team maintenance (OFT or CFT) workload. Data source for aircraft DDP is AMREP System.

A3.1.1. Calculation: Aircraft are measured in the month produced against the operative schedule, both the original and revised.

A3.1.1.1. Original Due Date Performance. The Original DDP is a measure of the program office and Repair Activity’s ability to plan to the basic depot work package and deliver aircraft to the possessing/assigned MAJCOM based on the original schedule. Aircraft are measured in the month produced against the original schedule. The operative schedule is the original schedule as agreed upon by the PM/PSM, Repair Activity, or possessing/assigned MAJCOM In Accordance With paragraph 6 of this instruction.

A3.1.1.1.1. Threshold values for early, on time, or late deliveries are:

Early – Produced 1 day or more before the Original Scheduled Out Date
On Time – Produced on the Original Scheduled Out Date
Late – Produced 1 day or more after the Original Scheduled Out Date
Aircraft Produced Early + Aircraft Produced on Time/Total Aircraft Produced = Original DDP

A3.1.1.2. Revised DDP. Revised DDP is a measure of PM/PSM and Repair Activity’s ability to execute to the plan with consideration to the assessment period guidance in paragraph 6 of this regulation. Aircraft are measured in the month produced against the revised schedule. The revised schedule is the current schedule reflecting adjustments as agreed upon by the PM/PSM and Repair Activity In Accordance With paragraph 6 of this instruction.

A3.1.1.2.1. Threshold values for early, on time, or late deliveries are:

Early – Produced 1 day or more before the Revised Scheduled Out Date
On Time – Produced on the Revised Scheduled Out Date
Late – Produced 1 day or more after the Revised Scheduled Out Date
Aircraft Produced Early + Aircraft Produced on Time/Total Aircraft Produced = Revised DDP

A3.1.2. Frequency: DDP is tracked and reported on a monthly basis or as required.

A3.1.3. Standards: HQ AFMC/A4F will publish annual DDP standards for each MDS and post them on the HQ AFMC A4 Metrics SharePoint® Office 365 Community Site. Requests for deviations from the approved calculation of the standard must be submitted with justification by the PM in coordination with PSM to HQ AFMC/A4F not later than 31 October each year. The HQ AFMC A4 Metrics Community site is located at https://usaf.dps.mil/teams/22369/SitePages/Home.aspx.
A3.1.4. Root Cause Reporting Requirement: A root cause is required for any aircraft produced (Organic, Contract, and Field Teams) one day or more past its Revised Scheduled Out Date (Forecast Out date for Drop-In’s). As a minimum, PMs/PSMs will review the Root Cause Analysis weekly to ensure all Candidate, Open and Rejected root cause statuses are promptly addressed in AMREP System. Additionally, all aircraft owned by other services and Foreign Military Sales within AFMC’s control for the purpose of depot level maintenance, must also provide root cause reporting on all late completions. The following data must be included with the root cause: Tail Number, Repair Activity, In-Work Date, Completion Date, and Cause for Delay (Cause Code), number of delayed days attributed to each cause and current planned action/measure(s) taken to prevent recurrence. Root Causes for late aircraft will be entered and released to HQ AFMC for submission into AMREP System via the Root Cause Analysis module no later than the third workday of the month following the close of the reported month. Use AMREP System User’s Manual for details. A snapshot of the AMREP System Root Cause screen is provided below. (T-2)

Figure A3.1. Sample Root Cause Record.

A3.2. Actual Flowdays: The number of days required to complete work on the aircraft and are measured from the Date In-work. For metrics purposes, only scheduled (programmed) aircraft will be used to measure the flowdays. Data source for aircraft flowdays is AMREP System. At the enterprise level, flowdays will be grouped by AMREP System job designators codes B, H and C (see Table A2.1.).
A3.2.1. Calculation: Aircraft are measured in the month produced against the Original Out Date, Revised Out Date, Forecast Out Date, and the Actual Completion Date. Flowdays for scheduled workload + Flowdays for unscheduled workload (-103 requests) = Negotiated Flowdays

Total Original (Negotiated) Planned Flowdays = (Original Out Date – Date In-work) + 1
Total Revised (Scheduled) Planned Flowdays = (Revised Out Date – Date In-work) + 1
Total Forecasted Flowdays = (Forecast Out Date – Date In-Work) + 1
Total Actual Flowdays = (Completion Date – Date In-work) + 1

A3.2.2. Flow day definitions and allowable extensions to flowdays are contained in paragraph 6 and Attachment 1. Note: 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) will not be considered an allowable schedule change for purposes of the data recorded in AMREP System.

A3.3. FCF Reporting: PMs/PSMs in coordination with Repair Activity will report required FCF data into the AMREP System upon completion of the negotiated depot level repair/modification or no later than the delivery date as outlined in Chapter 14 of AFMC Supplement to AFI 21-101, Aircraft and Equipment Maintenance Management. The Number of FCFs and Number of Ground Aborts are required data fields in AMREP System; they are used to generate command level metrics for the FCF Fly Rate, Attempt Rate and Effectiveness Rate. FCF standards will be re-calculated annually and posted on the HQ AFMC A4 Metrics SharePoint® Office 365 Community Site as described in paragraph A3.1.3 Requests for deviations from the approved calculation of the standard must be submitted with justification by the PM in coordination with PSM to HQ AFMC /A4F not later than 31 October each year. Repair activities and PMs/PSMs will monitor FCF data to identify potential quality/efficiency issues In Accordance With 21-102, Depot Maintenance Management. (T-2)

A3.4. Programmed Aircraft Production Plan. The PM/PSM will ensure that programmed (planned) production plan is entered into AMREP System using the Production Planning tool within the data editing portion of AMREP System. The production plan will be consistent with the appropriate (original or revised) out date. The data will be entered no later than 15 days after the beginning of the fiscal year to include Programmed Depot Maintenance, modifications, and other scheduled workload. These production numbers will not include unscheduled aircraft or field team workload. Aircraft inducted for multiple types of maintenance (Programmed Depot Maintenance, modification, or other) will only enter the predominant type of maintenance in the plan. For types of maintenance added to aircraft already inducted, the annual production plan must be adjusted. For example, a Programmed Depot Maintenance aircraft with a modification added after induction, must remove the modification from the production plan. Additionally, annual production plans will be adjusted to compensate for aircraft produced early or late in the fiscal year program. For example, aircraft scheduled to produce in Fiscal Year 22 that produced in Fiscal Year 21 shall be removed from the Fiscal Year 22 plan. Likewise, any aircraft intended for Fiscal Year 22 production but not produced in Fiscal Year 22, must be added to the Fiscal Year 23 schedule. Any aircraft where the Revised Out date moves forward into a future month will adjust their plan accordingly. (T-2)

A3.4.1. Programmed Aircraft Production Reports. There are two separate reports available in AMREP System developed to track planned production. The Production Summary Report is
used to track the entire fiscal year planned production and the Aircraft Production Plan Report is used to track production based on current data in AMREP System (inducted aircraft based on original and revised out dates).

A3.4.1.1. Production Summary Report. This report is populated using data from the Production Planning data editing tool. It displays each MDS fiscal year plan by month for Programmed Depot Maintenance, modifications, and other planned workloads. This report displays the planned numbers for the entire fiscal year for all current and future completions regardless if the aircraft are inducted into AMREP System or not. Once entered, the Original Plan cannot change and all revisions thereafter will be considered the Revised Plan.

A3.4.1.2. Aircraft Production Plan Report. This report displays all planned aircraft production based on current aircraft inducted into the AMREP System. Data is populated using the original and revised out dates from the Comprehensive Report data elements. This is an automated report used to populate the Aircraft Production Metric. The Aircraft Production Metric measures the actual completions against the original and revised planned completions (Revised Out Date). The plan will be adjusted for aircraft produced early or late in the fiscal year program as discussed in paragraph A3.4, Programmed Aircraft Production. HQ AFMC activities will extract the Aircraft Production Plan Report on the fourth work day of each month for the previous month’s data. For the end of the fiscal year data, the report will be updated again on the 20th of October for the end-of-year closeout.

A3.5. Aircraft Quality Defect Rate:. Center Quality Offices will utilize AMREP System and Joint Deficiency Reporting System data in developing the monthly aircraft quality defect metric. Measurements showing reported, accepted Critical/Major Defects and reported minors will be developed based on the first month that the aircraft was produced, not the month in which the Quality Defect Rate (QDR) was received. Use the AMREP System completion date only to provide date defect will be reported in. AMREP System cannot be used to provide the task order (PDM, MOD, TCTO, etc.) where the defect occurred. PMs/PSMs are required to comply with Deficiency Reporting, Investigation and Resolution guidance In Accordance With Technical Order 00-35D-54 United States Air Force Deficiency Reporting, Investigation, and Resolution. PMs/PSMs will ensure accuracy of data entered in Joint Deficiency Reporting System to include the correct Report AMREP System completion date. (T-2)

A3.5.1. HQ AFMC /A4F will develop annual quality standards for each MDS using the formula below. Standards will be posted on the HQ AFMC A4 Metrics SharePoint® Office 365 Community Site as described in paragraph A3.1.3.

A3.5.2. Quality standard calculation is a simple algorithm taking the sum of the number of total accepted defects for the previous three years divided by the number of aircraft produced for the same time period. The number of aircraft produced will not include aircraft returned for quality deficiencies (those identified in AMREP System with a “Q” Job Designator). Calculation formula is included in Figure A3.2, below.

Figure A3.2. Annual Quality Standards.

$$\frac{\sum \text{Defects Accepted (previous 3 years)}}{\sum \text{Aircraft Produced (previous 3 years)}} \times 0.9 = \text{Accepted Defects Standard}$$
A3.5.3. Due to the 90 day interval between the receipt of the Quality Defect Rate and investigation process, July–June data will be used to calculate fiscal year standards. New QDR fiscal year quality defect standards will go into effect 1 January (due to 90 day lag). Requests for deviations from the approved calculation of the standard must be submitted with justification by the PM in coordination with PSM to HQ AFMC/A4F not later than 31 October each year. The overall Accepted Defects Standard is a weighted average of all MDSs produced. In no case will the individual MDS standard be less than 0.10 accepted critical or major defects per aircraft produced. After the MDS Accepted Defects Standard is calculated and the calculated standard is found to have increased, the previous standard will be used.

A3.5.4. HQ AFMC goal is to achieve .10 accepted critical or major defects per aircraft produced. Once a MDS achieves this goal, it will remain at .10. All new MDS platforms will automatically be assigned a quality standard of .10. Quality standards will be calculated using the entire Mission Design fleet, i.e., all C-135s will be used to calculate a standard for KC-135, RC-135s, OC-135s, etc. Any request to utilize specific MDS to calculate a quality standard must be coordinated through HQ AFMC /A4F.