

**BY ORDER OF THE COMMANDER
AIR FORCE GLOBAL STRIKE COMMAND**

**AIR FORCE GLOBAL STRIKE COMMAND
INSTRUCTION 21-118**



1 DECEMBER 2009

Maintenance

**LOGISTICS MAINTENANCE PERFORMANCE
INDICATOR REPORTING PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements AFGPD 21-1, *Air and Space Maintenance*. It establishes requirements and provides procedures for reporting aircraft maintenance performance indicators (MPI) on all assigned aircraft. AFGSCI 21-118 prescribes Reports Control Symbol (RCS): AFGSC-A4M 9302, Monthly Logistics Indicators' Report, and RCS: AFGSC-A4M 9303, Special Requests for Logistics Data. This publication does not apply to the Air National Guard (ANG) and Air Force Reserve Command (AFRC). Send comments and suggested improvements to this instruction on AF Form 847, *Recommendation for Change of Publication*, or email through channels, to HQ AFGSC/A4M, 41 Orville Wright Avenue, Suite 5341, Barksdale AFB LA 71110. Ensure that all records created as a result of the processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at <https://www.my.af.mil/gcss-af61a/afrims/afrims/>. Contact supporting records managers as required for approval.

OVERVIEW

This instruction: Aligns Air Force Global Command (AFGSC) fix rate philosophy and computations with AFI 21-101 and T.O. 00-20-2. Implements the automated Enterprise Knowledge Management (EKM) System MPI process. Makes Report Control Symbol (RCS): AFGSC-A4M 9302 reporting via the EKM system mandatory for all wings reporting to AFGSC and covers all aspects of EKM, including report templates, automated routing, continuous comments, and training. Requires units to provide explanations for all indicators each month, even when key indicators meet standards and goals. Provides revised flying scheduling

effectiveness (FSE) formulas. Establishes the requirement to report repeat-recur rates and drivers. Describes Air Force and AFGSC maintenance and logistics standards review process.

Chapter 1

GENERAL INSTRUCTIONS

1.1. Introduction. This instruction defines logistics performance terms and has reporting and review procedures to enable AFGSC to manage by fact. The focus is measurement of the many logistics processes that provide combat capability to the unit. The result of compliance with this instruction should be the quick and accurate identification of areas for improvement, as well as identification of support problems beyond the scope of the unit. The unit's role emphasizes in-depth analysis of work processes, integrity in measurement methods, timeliness in reporting, and comprehensive remarks describing particular unit support issues requiring further analysis and action. The headquarters' role is to assist AFGSC units in process analysis, identification of opportunities for process improvement, identification of process standards and benchmarks, and maintenance of guidelines for consistent unit performance measurement and reporting. This program is called Logistics and Maintenance Performance Indicators (L-MPI). By no means should units limit their performance reviews to only the items reported to the headquarters. There are many other metrics available to unit managers that are helpful in determining unit health such as repeat/recur rates, Cannot Duplicate rates, deferred discrepancy rates, maintenance scheduling effectiveness, system reliability/capability, attrition, etc.

1.2. Applicability. This instruction applies to all AFGSC units possessing or supporting aircraft (to include helicopters). All units will adhere to this instruction to the greatest extent possible within the current contract requirements. CLS limitations will be identified and waivers to the applicable portions of AFGSCI 21-118 will be requested from HQ AFGSC/A4M. AFGSC policy is to reduce these waivers, where possible, when CLS contracts are reviewed / renegotiated.

1.3. Responsibility. Wing, Unit, and Maintenance Group and Operations Group commanders are responsible for compliance. Commanders or their designated representative will ensure all reports cited in this instruction are prepared and transmitted as prescribed. The preparing agency and office of primary responsibility (OPR) is the Maintenance Data Systems Analysis (MDSA) section (or designated contractor where required) regardless of organizational structure. Commanders will review the accuracy of data required by this instruction and take action to improve deficiencies. Commanders have overall responsibility for ensuring quality, in-depth analysis of L-MPI drivers as prescribed in paragraph 3.2. References within the document to "you" or "your" apply to the preparing agency unless otherwise noted.

1.4. Request for Waivers or Changes to Instruction. Submit recommended changes and / or waivers to this instruction via regular mail to HQ AFGSC/A4M, 41 Orville Wright Avenue, Suite 5341, Barksdale AFB LA 71110, or e-mail to AFGSCA4M@barksdale.af.mil.

1.5. Reporting During Minimize Conditions. Minimize conditions are controlled by a designated communication agency. A minimize condition occurs to limit message traffic during contingencies as needed. All reporting will continue during minimize conditions with "Minimize Considered" entered at the bottom of each page of the report. Reports cited under this instruction are essential and require expeditious preparation and transmission during emergency conditions.

1.6. Algorithms. Formulas used in computing rates and performance indicators are listed in attachment 2.

1.7. References. Personnel responsible for the reports described in this instruction should be familiar with the applicable portions of AFI 10-602, AFI 21-101, AFI 21-103, AFCSM 21-558 through 579, Vol. 2, AFMAN 23-110 Vol. 2, AFI 21-103_ AFGSCSUP, and AFGSCI 21-165.

Chapter 2

REPORT TRANSMISSION INSTRUCTIONS

2.1. Report Transmission Methods. The Monthly Logistics Indicators Report, RCS: AFGSC-A4M 9302 must be transmitted via the EKM System using the MPI Enterprise Portal. The EKM is located at <https://www.aekm.wpafb.af.mil>. A username and password is required to access the site. Contact your local EKM administrator for assistance or call AFGSC/A4M, DSN 781-0253. All other reports specified in this instruction will be transmitted via electronic mail (e-mail) to: **AFGSCA4M@barksdale.af.mil**. Where e-mail capability is not available, send required reports via fax to DSN 781-9899.

2.2. Report Templates. Each wing/unit has a 9302 report template specifically designed for its MDS(s) and reporting requirements. Use of the templates is mandatory. The templates must not be modified in any manner. This includes adding external data links. External data links are expressly forbidden, because they adversely affect data upload on the EKM servers. Templates can be obtained from the EKM/MPI web site. Templates change based on HQ AFGSC reporting requirements, so wings/units should check this web site frequently.

2.3. Enterprise Knowledge Management (EKM) System Training. EKM/MPI training is available via the EKM website using the MPI customer support portlet. If additional training is needed, contact AFGSC/A4M.

2.4. Restriction on Types of Information. Only UNCLASSIFIED information is acceptable. Do not include CLASSIFIED information in the report. If we require classified information on any report, we will specify the appropriate transmission method (usually SIPRNET e-mail).

2.4.1. Logistics Data Classification. Aircraft inventory, status, and utilization data reported under this instruction are unclassified. AFSSI, volume 1, table 3.2, states: "Logistics information, data concerning status and allocation of personnel and material to/from various locations (such as unit readiness and weapon status), is considered sensitive information. "There is no distinction between normal operations or real world operations and the classification of data does not change." Units are required to submit complete, timely 9302 reports during contingencies.

Chapter 3

AIRCRAFT REPORTING REQUIREMENTS

3.1. Types of Reports. This chapter describes the overall report concept. It provides formats for each type of report, i.e., Monthly Logistics Indicators Report, RCS: AFGSC-A4M 9302; and Special Requests for Logistics Data, RCS: AFGSC-A4M 9303.

3.2. Explanatory Remarks. Each report provides space for explanatory remarks. Use the space to explain findings from staff research (analysis) into unit processes. Your unit's comments provide background information for the L-MPI briefing to AFGSC/CC. Therefore, quality, in-depth remarks are required. Provide explanations for your cumulative unit data. Combine all the comments into one narrative for a given rate. For example, do not provide a separate Not Mission Capable Maintenance (NMCM) narrative for a particular squadron and for the unit overall. If there are key issues for a squadron, make sure those are put in with the overall unit comments. Deployed comments must be rolled up into the overall unit comments. Comments must be entered in the appropriate block (SEC2 NARRATIVE) of the report template.

3.2.1. Provide explanations for all indicators each month, even when key indicators meet standards and goals. The narrative is not complete unless it covers the Who, What, When, Where, Why, and How of the indicator. Do **not** simply regurgitate numbers for the narrative explanations. Narratives **must** provide important details explaining why an item drove unit performance. List the top five subsystem drivers and top three component (5-digit) drivers for each subsystem. When addressing aircraft status, list NMCM, Not Mission Capable Supply (NMCS), and Not Mission Capable Both (NMCSB) drivers. If various inspections drove Not Mission Capable (NMC) time, list the pacing Mission Impaired Capability Awaiting Parts (MICAPs). Analyze the data. Long-term and short-term trends are important. Do not just focus on the current month's data to determine if a trend exists. Look at the entire picture to make those determinations. The direction from AFGSC leaders is to provide "predictive analysis," which means determining where indicators are headed over next several months. Predictive analysis includes, among other things, identifying anticipated changes in aircraft availability, i.e., expected depot inductions, depot field teams, extended scheduled maintenance, or any other issues that may impact the unit's ability to meet mission requirements. When possible, quantify an issue or event's impact on mission capability, i.e., one-time inspection reduced aircraft availability by 10%. Although the statement "No Trends Noted" is completely valid, do not use it lightly. Your unit's report **must** include comments from maintenance management/sortie production personnel (i.e., Maintenance Group/Deputy Group Commander, Maintenance Operations, Aircraft Maintenance Unit (AMU) OICs, Aircraft Maintenance Squadron (AMXS) Commanders, and Maintenance Operations Officers). List pacing aircraft and unit events such as training, exercises, stand-downs, or deployments that may have affected unit performance. Provide projected unit plans to fix pacing items. Submit thorough comments so we can incorporate them directly into our L-MPIs with minimal editing. For all explanations, use the full five-digit work unit code (WUC).

3.2.2. For NMCS drivers and high cannibalization items, provide the full National Stock Number (NSN), part number (if obtained through CLS contractor), full five-digit WUC, noun, and explanation. This enables A4M analysts and Air Force Global Logistics Support Center (AFGLSC) personnel to address the correct parts problems. The comment "NSN not available" is not acceptable. Be sure components are listed under the correct subsystem/WUC. For manning and training issues, we require the complete AFSC as well as an explanation of the problem. For

inspections and Time Change Technical Orders (TCTO), the type of inspection and TCTO number are required.

3.3. Coordination and Correction Procedures. Unit commanders will establish coordination procedures to ensure the on-time release of accurate data to HQ AFGSC/A4M. Route the report through all appropriate maintenance management/sortie production personnel for their review and comments prior to transmission to HQ AFGSC/A4M. The MPI Enterprise Portal has an automated routing tool. It should be used to the greatest extent possible. To ensure valid MICAP drivers are submitted, the Maintenance Supply Liaison (MSL)/Logistics Readiness Squadron (LRS) must review and validate the top Total Not Mission Capable Supply (TNMCS) items and ensure each one has a valid NSN as well as a complete part description. For example, instead of saying PDU Flap/Slat, say **Power Drive Unit.** Instead of Cyl, Servo Hyd, Horiz Stab Lower L&R, use **Stab Actuator.** To facilitate this review, the MSL/LRS should maintain close contact with the AFGLSC weapon system manager who supports their unit's weapon system(s). The local Logistics Readiness Squadron commander should review the report also. Tenant unit coordination must include base supply/Contractor Operated and Maintained Base Supply (COMBS) representatives responsible for MICAP support. The automated EKM/MPI process is designed to allow only one "successful" 9302 submission per month. After a "successful" 9302 submission via the EKM/MPI process, any corrections to reports must be submitted by separate e-mail or fax with reference to the first data as well as the corrected data. To prevent briefing erroneous data to HQ AFGSC/A4/7 or HQ AFGSC/DS, we require a telephone "heads-up" of the data change. The unit OPR will maintain a master file of monthly reports for the current and previous fiscal year. If there are any reporting errors identified after the reports arrive at HQ AFGSC/A4M, we will contact the unit OPR. The OPR, in turn, will notify the appropriate base agency to correct erroneous data. Wing Analysis sections will ensure the timely submission of corrected reports.

3.4. Monthly Aircraft Logistics Indicators Report, RCS: AFGSC-A4M 9302

3.4.1. Report Use. Intermediate command and MAJCOM managers use this report. It is the official source document for MPI briefings to the HQ AFGSC/DS and the AFGSC/A4/7. It consists of three primary sections: Section I (wing overall), Deployed (wing deployment), Section II (drivers and narrative explanations). The comments should be specific and address reasons why the unit did not meet standards.

3.4.2. Report Auto-Population and Manual Entries. The majority of the 9302 report data is auto-populated via the EKM/MPI process. The report is prefilled with all required data items, except Sorties Programmed, Hours Programmed, Total Utilization Rate (UTE) Deviations for FSE (all categories), Average Hangar Queens and Hangar Queen Categories, Total Dedicated Crew Chiefs (DCCs) Job Data Documentation (JDD) Error Rate, Total Maintenance Man-hours per Flying Hour, Repeats - Recurs, Pilot Reported Discrepancy (PRDs), Total Possessed Hours, and Deployed data. These items must be updated manually. The 9302 must be submitted via EKM/MPI Portal. To facilitate monthly report preparation, prefilled weekly reports can be downloaded to allow units to begin early analyses of specific drivers.

3.4.3. Home base units will report deployed aircraft information under a separate column in the deployed section (tab) of the standard template. The EKM/MPI process does not auto-populate the 9302 deployed data tab. It is a "stand-alone" worksheet that must be updated manually. The deployment column will be labeled with the deployment name and MDS. When a unit is supporting more than one major deployment, each deployment will be reported under a separate

column. Deployed drivers and their impact on overall wing performance must be highlighted, i.e., specifically referred to, and clearly identified in wing comments. For deployments, unless otherwise stated, the programmed hours/sorties flown are equal to the actual hours/sorties flown. Add these programmed hours/sorties in to the overall Wing total programmed hours/sorties. Do not report zero for programmed hours/sorties if your unit had actual hours/sorties flown at a deployed location. Do not report data for exercises, i.e., Red Flag, Air Warrior, etc., in the deployed section of the AFGSC-A4M 9302. This section is used for wartime operations, contingencies, and real-world crises. When exercise data is required, units will be given specific guidance on reporting requirements.

3.4.4. Frequency of Reporting: The AFGSC-A4M 9302 report is transmitted to HQ AFGSC monthly. Transmit the data elements (rates/raw data in template Section 1 and the Deployed tab) via EKM/MPI NLT 1200L on the fifth duty day following the month being reported. Top drivers and comments must be transmitted NLT the eighth duty day following the month being reported. Please **inform** AFGSC/A4M **as soon as you are aware** of any situation that may cause a late transmission.

3.4.5. Report Preparation. The 9302 report is auto-populated as outlined in the standard report template specifically designed for each wing. Use of the standard report template is mandatory. Do not deviate from the numbering system outlined in this instruction or in the template. The standard templates for each wing are available on the EKM website at <https://www.aekm.wpafb.af.mil>.

3.4.5.1. Section I. Section one contains the overall wing/MDS/Block data totals.

Table 3.1. SECTION I (WING TOTALS)

Oct-2004		509 BW		
DATA ELEMENT		B-2A		
#	NAME	DATA	FSE	RATE
1	SORTIES PROG	0		
2	SORTIES FLOWN	0		
3	HOURS PROG	0.0		
4	HOURS FLOWN	0.0		
5	POSS HOURS	0.0		
6	MC HOURS	0.0		0.0
7	TNMCM HOURS	0.0		0.0
8	TNMCS HOURS	0.0		0.0
9	NMCB HOURS	0.0		
10	PMCM HOURS	0.0		
11	PMCS HOURS	0.0		
12	PMCB HOURS	0.0		
13	TOT SORTIES SCHED	0		
14	TOT MTX DEVS (TOT/FSE)	0	0	
15	TOT OPS DEVS (TOT/FSE)	0	0	

16	TOT SUP DEVS	0	0	
17	TOT HQT DEVS	0	0	
18	TOT HQN DEVS	0	0	
19	TOT HQP DEVS	0	0	
20	TOT EXH DEVS	0	0	
21	TOT EXL DEVS	0	0	
22	TOT WXX DEVS	0	0	
23	TOT SYM DEVS	0	0	
24	TOT ATC DEVS	0	0	
25	TOT UTE DEVS (TOT/FSE)	0	0	
26	TOT OTH DEVS	0	0	
27	TOT DEVS / (TOT FSE DEVS)	0	0	
28	FSE RATE / MX-OPS DEV RATE		0.0	0.0
29	AIR ABORTS	0		
30	GROUND ABORTS / TOT ABORT RATE	0		0.0
31	CODE 3 BREAKS / RATE	0		0.0
32	# FIXED IN 4 HOURS / RATE	0		0.0
33	# FIXED IN 8 HOURS / RATE	0		0.0
34	# FIXED IN 12 HOURS / RATE	0		0.0
35	TOT CANNIS / RATE	0		0.0
36	AVERAGE HANGAR QUEENS	0.00		
36A	CAT I HANGAR QUEENS	0.0		
36B	CAT II HANGAR QUEENS	0.0		
36C	CAT III HANGAR QUEENS	0.0		
37	TOTAL DCCS BY MDS			
37A	TOT DCCS (MSGT)	0		
37B	TOT DCCS (TSGT)	0		
37C	TOT DCCS (SSGT)	0		
37D	TOT DCCS (SRA)	0		
37E	TOT DCCS (A1C)	0		
38	TOT MX MHRS / MHRS PER FLY HOUR	0.0		0.0
39	N/A			
40	JDD ERROR RATE	0.0		
41	TOTAL REPEATS / RATE	0		0.0
42	TOTAL RECURS / RATE	0		0.0
43	PRDS / REPEAT / RECUR RATE	0		0.0
44	ADJUSTED SCHEDULE	0		0.0
45	AIRCRAFT AVAILABILITY RATE			0.0
45A	TOTAL POSSESSED HOURS (TAI)	0		

3.4.5.1.1. FSE Items. These items require two entries each. The first entry includes **all** deviations for that category, and the second entry only includes a tally of deviations used to compute the FSE rate (i.e., no spare ground aborts). Refer to AFGSCI 21-165 for guidance on specific deviations used in FSE rate calculation.

3.4.5.1.2. JDD Error Rate. Enter the wing's overall JDD Error rate one time. Do not enter it elsewhere.

3.4.5.2. AMU MPI Data (Old Section II). The requirement to report aircraft maintenance indicators by AMU is rescinded. Although units are no longer required to provide HQ AFGSC with Section II data, Weapon System Teams (WSTs) and other staff agencies may request this information to answer questions from senior leadership. When tasked, provide the requesting agency with the appropriate AMU data.

3.4.6. Total Aircraft Inventory (TAI). See paragraph A2.19.

3.4.7. Automated MPI and Continuous Comments. The automated MPI tool has a Continuous Comments feature that allows units to record the details surrounding logistics drivers throughout the month. This feature is a key component of the EKM/MPI process. It facilitates analyses of drivers by providing a means to record the root causes, on-line, while the details are still fresh in the minds of those persons involved. It allows for a continuous flow of information from across the Maintenance Group and a collection point for explanatory remarks. Then, the explanatory remarks are integrated into the Section II Narratives portion of the 9302. The result is more accurate, thorough analyses of drivers and timely completion of the 9302 report. Use of the Continuous Comments feature is mandatory. All users should make inputs to the wing's Continuous Comments.

SECTION II - COMMENTS. Provide explanations for all indicators each month, even if key wing/unit indicators meet HQ AFGSC standards, goals, or MDS averages. List the top five subsystem drivers and top three 5-digit WUC drivers for each subsystem when addressing MC, NMCM, NMCS, and NMCB. List the top five system drivers and top three 5-digit WUC drivers for abort, break, fix, FSE, cannibalizations, and repeat-recurs. See Attachment 3. Refer to paragraphs 3.2.1 and 3.2.2 for more information concerning narrative requirements.

NOTES:

*Section I, item 34, will reflect the number fixed in 12 hours for the B-2, B-52.

Chapter 4

DEPLOYMENT REQUIREMENTS

4.1. Applicability. This chapter outlines **guidance** for units with a deployment commitment for contingencies, exercises, crises, or wartime operations. Paragraph 4.5 provides a sample report format to collect data at deployed locations. Units may use any format they choose for local reporting as long as it satisfies RCS: AFGSC-A4M 9302 requirements. We do not require a weekly deployment report. However, when contingencies arise, we may re-instate the AFGSC-A4M 9303 report to request such data. See **Chapter 5**.

4.2. Reporting Requirements. Units are required to report on deployed aircraft (including those gained from other units) in accordance with Operational Plans (OPlans) under which they are tasked for support. They must comply with guidelines on reporting established by the MAJCOM and Joint Task Force they are tasked to support. During deployments, the unit's primary reporting role will be to the deployed headquarters with informational copies to their home base and supporting MAJCOM. **When Maintenance Data Systems Analysts are not deployed, deployed commanders will designate an individual or activity to perform L-MPI reporting requirements.**

4.2.1. Deployed reporting to HQ AFGSC will only be required for wartime operations, contingencies, major deployments, and real-world crises, not deployments to Red Flag, Gunsmoke, or participation in Air Warrior, etc.

4.2.2. Personnel at homestation will report deployed aircraft information under a separate column in the deployed tab of the RCS: AFGSC-A4M 9302, Monthly Aircraft Logistics Indicators Report template. The EKM/MPI process does not autopopulate the 9302 deployed data tab. It is a "stand-alone" worksheet that must be updated manually. Explanations must be provided for deployed units even if key indicators meet AFGSC standards, goals, or averages. The explanations must be included in the overall wing comments.

4.3. Development of Analysis Deployment Package. Each unit's MDSA section should develop a deployment package. The package should identify equipment and supplies required for each type of deployment commitment, i.e., bare-base operation, limited communications, or full-blown operation. Things to consider when developing this package are the equipment needed to operate the Integrated Maintenance Data System (IMDS) i.e., personal computers, printers, modems, cables, and quantity required. MDSA should also identify required software, i.e., InfoConnect, word-processing, spreadsheet, database, etc. How many days or months of office supplies are required? Also needed are lists of points of contact at base level, MAJCOM, deployed Headquarters and units, and manuals on operating the IMDS. Units should also have written manual backup procedures for IMDS documentation. Gather all applicable instructions and manuals the deployed analyst may need. In addition, wing or command level analysts at deployed locations are encouraged to contact their replacement(s) at the earliest possible time to inform them of any training or job knowledge requirements needed to perform the assigned duties at the deployed location(s).

4.4 IMDS for Mobility (G081) Training. Maintenance Analysis responsibilities at some deployed locations may require the use of G081. If training is needed, analysts can access the G081 Analysis Training program via the 367th Training Support Squadron's Interactive Course Management System (ICMS). The 367th Training Support Squadron is located at Hill AFB. The World Wide Web address is <https://367catalog.hill.af.mil/catalog/index.aspx>. The G081 Analysis Training program will familiarize the student with G081 GUI screens, specifically the program

used to produce batch reports. Personnel must download and install the ICMS software to use the on-line course material. The Interactive Multimedia Flight POC can be reached at DSN 586-4014 or 777-0160, or email at 367trss.tsidp@hill.af.mil. Units can also contact AFGSC/A4M Analysis Team, DSN 781-0253, for assistance.

4.5. Sample Deployed Operation Weekly Report. A sample report is provided below to ensure that during deployments, a minimum set of data elements are captured for briefings to senior leaders and analyses of problem areas. This is a sample report only. Your deployed unit's specific report format will depend on your deployed commander's requirements.

SAMPLE DEPLOYED OPERATION WEEKLY REPORT

SUBJECT: DEPLOYED OPERATION WEEKLY REPORT

SECTION I - AIRCRAFT STATUS SUMMARY (CUMULATIVE FROM 0001 MONDAY THRU 2400L SUNDAY)

1. MDS
2. UNIT/FLYING SQUADRON
3. POSS HOURS
4. MC HRS/RATE
5. TNMCM HRS/RATE
6. TNMCS HRS/RATE
7. NMCB HRS/RATE
8. TPMCM HRS/RATE
9. TPMCS HRS/RATE
10. PMCB HRS/RATE

SECTION II - FLYING PROGRAM

1. SORTIES FLOWN
2. HOURS FLOWN
3. AVERAGE SORTIE DURATION

SECTION III - SPARE ENGINE STATUS (List by TMSM)

1. AUTH
2. ON HAND
3. NET SERVICEABLE (number of serviceable RFI engines minus obligations, i.e. aircraft holes)
4. ENMCS (also list supply data for parts (including NSN for next higher assembly) required)
5. AWM (number of engines awaiting maintenance)
6. IN WORK (number of engines that are being worked)
7. SHIPPED (include TCN, engine serial number, and date shipped)

SECTION IV - AVIONICS/ECM SYSTEMS/PODS/TEST STATIONS

LIST EACH AREA SEPARATELY IN THE FOLLOWING FORMAT:

TYPE	AUTH	POSS	MC	NM	NS	REMARKS (EXPLAIN NM/NS)
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SECTION V - AGE STATUS (REPORT BY EXCEPTION ONLY, I.E., IF BELOW CRITICAL LEVEL)

AUTH ASGN CRITICAL LEVEL IN COMM MAINT SUPPLY

SECTION VI - EXPENDABLE FUEL TANK STATUS

N/A.

SECTION VII - AIRCRAFT MICAP INCIDENTS

MDS NO. OF OUTSTANDING MICAPS STATUS REMARKS

SECTION VIII - COMMANDER'S REMARKS (DESCRIBES EXISTING AND POTENTIAL PROBLEMS THAT DEGRADE MISSION AFGSCOMPLISHMENT. SHOULD NOTE SIGNIFICANT CHANGES IN LOGISTICS POSTURE SINCE LAST REPORT.)**Chapter 5****SPECIAL REQUEST FOR LOGISTICS DATA, RCS: AFGSC-A4M(AR)9303**

5.1. Applicability. Periodic requirements exist for recurring short-term reports to collect data in support of special studies and analyses. We use the RCS: AFGSC-A4M 9303 report to task units for these special requests. Units will not be tasked without prior approval of HQ AFGSC/A4M. All units assigned to AFGSC are subject to this tasking. Reports are not required unless specifically tasked by HQ AFGSC/A4M.

5.2. Tasking Instructions. HQ AFGSC/A4M provides instructions in the tasking notification. Instructions will specify report format, content, procedures for data collection, and frequency of report as well as a report termination date.

5.3. Method and Frequency of Reports. Send all RCS: AFGSC-A4M 9303 reports via e-mail to HQ AFGSC/A4M. When e-mail is not available, fax reports to all addressees listed in the tasking message. Applicable intermediate headquarters should receive information copies of all reports.

Chapter 6**STANDARDS REVIEW PROCESS**

6.1. Applicability. The purpose of the Standards Review Process is to develop standards for the Air Force, Combat Air Forces (CAF) and for Air Force Global Strike Command (AFGSC) aircraft. CAF members are Air Force Global Strike Command (AFGSC), Air Combat Command (ACC), Pacific Air Forces (PACAF), U.S. Air Forces in Europe (USAFE), Air National Guard (ANG) and Air Force Reserve Command (AFRC). The collective goal is to have standards that Air Force personnel will be motivated to obtain and exceed based on operational and resource requirements. Standards are used to keep leadership advised of overall force readiness, to identify and isolate breakdowns in required outside resources, and to identify units that need further examination.

6.2. Air Force Maintenance Standards. Standards for MC, Total Not Mission Capable Maintenance (TNMCM), and Total Not Mission Capable Supply (TNMCS) are requirements-based and computed at Air Force level. AF standards are used to measure unit and fleet health. Until FY04, the MC, TNMCM and TNMCS rate standards were based primarily on unit capabilities, taking into consideration weapon system technical and support limitations. Now, the Air Force MC Rate standard is based primarily on fleet flying hour program and training

requirements. The TNMCS rate standard is based upon the aircraft availability targets and funding streams. The TNMCM rate standard is based on known scheduled maintenance requirements and a study of unscheduled maintenance rates over the past three years, with adjustments based on projected NMCB rates, potential maintenance issues such as programmed time compliance technical orders, etc. The AF maintenance standards development process begins when MAJCOMs are tasked to provide specific information on aircraft operated in the command. This data includes, but is not limited to; primary aircraft authorized (PAA), utilization rates, attrition, turn patterns, fly days, spares, and scheduled maintenance factors. Subsequently, AFGSC/A4M sends requests to all AFGSC wings to obtain their input. Wings are also highly encouraged to provide any additional information, positive or negative, that may impact operational requirements. Impacts should be quantified when possible. Wing input is consolidated, reviewed and validated by weapon system teams, and finally approved for submission to AF/A4L. AFGSC/A4M works closely with AF/A4L throughout the standards development process. Air Force Reserve (AFRES) and Air National Guard (ANG) standards are developed independently per AF/A4L direction.

6.3. AFGSC Standards, Goals, and MDS Averages. Standards are developed for all AFGSC owned aircraft for the following indicators: 8 Hour Fix Rate, 12 Hour Fix Rate, Total Abort Rate, Flying Scheduling Effectiveness Rate, Maintenance/Operations Deviation Rate, Cannibalization Rate, and Repeat - Recur rate. AFGSC measures the Break Rate using MDS averages. **NOTE:** 12 Hour Fix Rate only applies to B-2, B-52.

6.4. AFGSC Standards Review and Development Process. The review and development process takes place annually, or as needed. These reviews usually occur during July or August. Each review involves these basic steps:

6.4.1. The units are contacted for their inputs as needed.

6.4.2. MAJCOM analysts prepare historical data for use in the review.

6.4.3. The standards review and development process begins. MAJCOM analysts and weapon system teams (from maintenance and supply) perform the review. Information reviewed includes, but is not limited to, unit inputs, historical data, and expected changes in support and the operational environment. Historical data includes current indicator average, unit and fleet trends, frequency units meet current standard, variance, and standard deviation.

6.4.4. After MAJCOM analysts and weapon system teams develop the "preliminary" AFGSC standards, they are forwarded to AFGSC/A4 for approval. Standards are published prior to the beginning of each fiscal year.

6.4.5. Interim standards are established when there is an insufficient amount of historical data. This usually occurs with new weapon systems, units still in buildup or draw down, or when there is a significant change in mission or support.

ANN L. MITCHELL, SES-2, DAF
Director, Logistics, Installations and
Mission Support

Attachment 1
GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 10-602, (<http://www.e-publishing.af.mil/pubfiles/af/10/afi10-602/afi10-602.pdf>), *Determining Mission Capability and Supportability Requirements*

AFI 21-101, (<http://www.e-publishing.af.mil/pubfiles/af/21/afi21-101/afi21-101.pdf>), *Aerospace Equipment Maintenance Management*

AFI 21-103, (<http://www.e-publishing.af.mil/pubfiles/af/21/afi21-103/afi21-103.pdf>), *Equipment Inventory, Status, and Utilization Reporting*

AFMAN 23-110, Vol 2, (<http://www.e-publishing.af.mil/pubfiles/af/23/afman23-110/afman23-110.pdf>), *USAF Supply Manual*

AFI 21-101_AFGSCSUP, (https://wwwmil.AFGSC.af.mil/AFGSCpubs/pubs/21series/afi21-101_AFGSC1.pdf), *Aerospace Equipment Maintenance Management*

AFI 21-103_AFGSCSUP, (https://wwwmil.AFGSC.af.mil/AFGSCpubs/pubs/21series/afi21-103_AFGSC1.pdf), *Equipment Inventory, Status, and Utilization Reporting*

AFGSCI 21-165, (<https://wwwmil.AFGSC.af.mil/AFGSCpubs/pubs/21series/AFGSCi21-165.pdf>), *Aircraft Flying and Maintenance Scheduling Procedures*

Abbreviations and Acronyms

AFGSC—Air Force Global Strike Command

AFGLSC—Air Force Global Logistics Support Center

AMU—Aircraft Maintenance Unit

AMXS—Aircraft Maintenance Squadron

ASD—Average Sortie Duration

BAI—Backup Aircraft Inventory

CANN RATE—Cannibalization Rate

CHRG—Chargeable Aircraft

CLS—Contractor Logistics Support

CND—Cannot Duplicate

COMBS—Contractor Operated and Maintained Base Supply

CRT—Cathode Ray Tube

CUM—Cumulative

DCC—Dedicated Crew Chief

DDR—Data Documentation Record

DEV—Deviation

DIFM—Due In For Maintenance

EKM—Enterprise Knowledge Management

E-MAIL—Electronic Mail

EMD—Engine Monitor Display

EOTS—Electro-Optical Test Set

ETIC—Estimated Time in Commission

FAX—Facsimile

FCF—Function Check Flight

FMC—Fully Mission Capable

FSE—Flying Scheduling Effectiveness
FCF—Functional Check Flight
GCS—Ground Control Station
HUD—Head-Up Display
ICMS—Interactive Course Management System
IMDS—Integrated Maintenance Data System
JDD—Job Data Documentation
JFC—Joint Force Commander
JFAFGSC—Joint Force Air Component Commander
LANTIRN—Low Altitude Navigation and Targeting Infrared for Night
L-MPI—Logistics-Maintenance Performance Indicators
LRS—Logistics Readiness Squadron
MAJCOM—Major Command
MC—Mission Capable
MDS—Mission Design Series
MDSA—Maintenance Data Systems Analysis
MICAP—Mission Impaired Capability Awaiting Parts
MPI—Maintenance Performance Indicators
MSL—Maintenance Supply Liaison
MX--Maintenance
NMC—Not Mission Capable
NMCM—Not Mission Capable Maintenance
NMCS—Not Mission Capable Supply
NMCB—Not Mission Capable Both
NRTS—Not Repairable This Station
NSN—National Stock Number
OCF—Operational Check Flight
OPlan—Operations Plan
OPR—Office of Primary Responsibility
OPS—Operational
PAA—Primary Aircraft Authority
PAI--Primary Aircraft Inventory
PDAI—Primary Development/Test Aircraft Inventory
PMAI—Primary Mission Aircraft Inventory
PMC—Partially Mission Capable
PMCB—Partially Mission Capable Both
PMCM—Partially Mission Capable Maintenance
PMCS—Partially Mission Capable Supply
POAI—Primary Other Aircraft Inventory
POC—Point of Contact
PPSL—Predatory Primary Satellite Link
PROG UTE—Programmed Utilization
PTAI—Primary Training Aircraft Inventory
RCS—Report Control Symbol
RSP—Readiness Spares Package
RSS—Regional Supply Squadron
SORT UTE—Sortie Utilization

SRAN—Stock Record Account Number
TAI—Total Aircraft Inventory
TCTO—Time Change Technical Order
TMSM—Type, Model, Series Modification (Engines)
TNMCM—Total Not Mission Capable Maintenance
TNMCS—Total Not Mission Capable Supply
TNG—Training
TPMCM—Total Partially Mission Capable Maintenance
TPMCS—Total Partially Mission Capable Supply
TST—Test
2LM—Two-Level Maintenance
UTE—Utilization Rate
WST—Weapon System Teams
WUC—Work Unit Code

Terms and Definitions

Aircraft Availability—Percentage of a fleet not in a Depot possessed status or NMC status (that are unit possessed).

Air Abort—An airborne aircraft that cannot complete its primary or alternate mission.

Air Abort Rate—The number of air aborts per sorties flown. The rate only includes air aborts caused by Maintenance or Operations.

Attrition (Aircraft)—Aircraft required to replace primary aircraft inventory losses. Do not confuse this term with computing attrition rates (e.g., Weather) for developing the flying schedule.

Average Hangar Queens—An average computed by dividing the total Hangar Queen days accrued in the reporting period by the inclusive number of days in the reporting period, e.g., 20 Hangar Queen days divided by 30 days in reporting period equals 0.67 average Hangar Queens. Hangar Queens are broken into three categories: Category I (31-59 days), Category II (60-89 days), and Category III (day 90 and above).

Awaiting Maintenance (AWM) Rate—The total deferred discrepancies for maintenance, divided by possessed aircraft. See definition of deferred discrepancies.

Awaiting Parts (AWP) Rate—The total deferred discrepancies requiring parts and have a valid supply requisition number, divided by possessed aircraft. See definition of deferred discrepancies.

Backup Aircraft Inventory (BAI)—Aircraft above the primary mission inventory to permit scheduled and unscheduled maintenance, modifications, inspections, and repair without reduction of aircraft available for operational missions.

Break Rate—This is the percentage of aircraft that land with an overall aircraft landing status of Code-3 or 4. The term Break will refer to the sortie rather than the individual pilot reported discrepancies.

Cannibalization Rate—The average number of cannibalization actions per 100 sorties. A cannibalization action is the removal of a serviceable part from an aircraft or engine to replace an unserviceable part on another aircraft or engine. Cannibalization actions also include the removal of a serviceable part to fill Readiness Spares Packages (RSP). This rate includes all aircraft-to-aircraft or RSP and engine-to-aircraft or RSP cannibalization actions. Per T.O. 00-20-2,

paragraph 5.2.4, cannibalization actions from depot aircraft are valid and must be counted in the cannibalization rate.

Chargeable Aircraft (CHRG)—The number of aircraft against which units should build their flying programs and against which the UTE will be measured. Chargeable aircraft will normally equal PAA, but in cases where the number of possessed aircraft is forecast to be significantly different than PAA, HQ AFGSC/A3 and A4/7 will assign a chargeable aircraft number.

Contractor Logistics Support (CLS)—Non-government managed logistics processes such as supply and/or maintenance performed by civilian contractors.

Contractor Operated and Maintained Base Supply (COMBS)—Non-government managed supply operation/warehouse supported by civilian contractors.

CY/FY Cumulative (CUM)—The calendar (Jan - Dec) or fiscal year (Oct - Sep) cumulative performance of an indicator.

Deferred Discrepancy—Malfunctions or discrepancies not creating a NMC or PMC condition for the aircraft and are not corrected "on the spot" are considered deferred discrepancies.

Deviation—Departure from the printed weekly flying schedule.

Fix Rate—The percentage of aircraft sorties landing with CAP Code-3 or 4 pilot reported discrepancies (PRDs) in which all of the CAP Code-3 or 4 PRDs are fixed in a certain amount of time (clock hours). Problems found by maintenance after the aircraft lands (ground found) are not considered in the fix time. The fix time stops when all CAP Code-3 or 4 PRDs are fixed even if the aircraft remains NMC. This includes breaks and fixes that occur at any location (off-Station, etc.).

12-Hour Fix Rate—The cumulative percentage of aircraft breaks fixed within 12 hours. The break is considered fixed when all CAP Code-3 or 4 PRDs are corrected. This interval is used for aircraft other than fighters, but includes the T-38.

Flying Scheduling Effectiveness (FSE) Rate—The FSE rate is the percentage of sorties flown as scheduled. This rate determines how efficiently the planned / printed flying schedule was executed. It also indicates unit turmoil caused by flying schedule deviations.

Functional Check Flight (FCF)—The flight of an aircraft, in accordance with the applicable dash -6 manual, to verify the airworthy condition of the aircraft.

Ground Abort—Event after crew show time that prevents a "crew ready" aircraft from becoming airborne. Ground aborts are categorized as maintenance (GAA, GAB, GAC), operations, HHQ, weather, sympathy, other, etc. The difference between a ground abort and a cancellation is after crew show it is a ground abort, before crew show it is a cancel. A ground abort by itself is not a deviation, but can cause a deviation such as lost sortie or late take-off.

Ground Abort Rate—The number of ground aborts per sortie attempts. This rate includes only ground aborts caused by Maintenance, Operations, and Supply.

Hangar Queen—An aircraft that has not flown for more than 30 consecutive days. See the definition for Average Hangar Queens.

Hourly UTE Rate—This is the average hours flown per authorized/chargeable aircraft/systems per month.

Issue Effectiveness Rate—The percentage of parts requirements immediately satisfied by Supply, used to measure how well customers are supported. It is used as a macro index for effectiveness from all supply sources.

JDD Error Rate—The percentage of records found in error in the IMDS JDD subsystem during the Data Integrity Team (DIT) review. For JDD error rate computations, a record is one Detail

Data Record (DDR). When a DDR contains more than one documentation error, the JDD error rate will reflect one error for the entire DDR. Report the uncorrected error rate.

Logistics—This term, when used in reference to aircraft maintenance, will consider anything concerning maintenance, weapons, supply, transportation, plans or contracting.

Maintenance/Operations (MX/OPS) Deviation Rate -- The number of maintenance and operations deviations divided by adjusted sorties scheduled multiplied by 100. Reflects the number of deviations within unit control. The MX/OPS deviation rate is a subset of FSE. Only count the MX/OPS deviations used to compute the FSE rate.

Mission Capable (MC) Rate—The percent of possessed time an aircraft/system is partially or fully mission capable.

Not Mission Capable Maintenance (NMCM) Rate—The percent of possessed time an aircraft/system is not mission capable due to maintenance (NMCM).

Not Mission Capable Supply (NMCS) Rate—The percent of possessed time an aircraft/system is not mission capable due to supply (NMCS).

Not Mission Capable Both (NMCB) Rate—The percent of possessed time an aircraft/system is not mission capable due to both maintenance and supply (NMCB).

Operational Check Flight (OCF)—The first flight of an aircraft that has had extended downtime or extensive maintenance which does not require an FCF.

Overall Base Repair Cycle Processing Time—The total time in days for an unserviceable asset to be repaired on base or sent Not Repairable This Station (NRTS) to another repair agency. It starts when the replacement part is issued by the flightline parts store (or Base Supply) and ends when the asset is returned serviceable to the part store's shelf or is sent NRTS to another repair agency. Overall Repair Cycle Processing Time and narratives are obtained from the Supply Due In For Maintenance (DIFM) Monitor.

Percent Of Assigned Aircraft Within 30 Percent Of No Remaining Time—The percent of assigned aircraft within 30 percent of inspection time.

Primary Aerospace Vehicle Authorized (PAA)—Aircraft authorized for performance of the unit's mission (e.g. Combat, Combat Support, Training, Test and Evaluation, etc...). The PAA forms the basis for the allocation of operating resources to include manpower, support equipment, and flying hour funds. The operating command determines the PAA required to meet their assigned missions.

Primary Aircraft Inventory (PAI)—Aircraft assigned to meet primary aircraft authorization. (Includes PDAI, PMAI, POAI, and PTAI.)

Primary Mission Aircraft Inventory (PMAI)—Aircraft assigned to a unit for performance of its wartime mission (Possession codes: CA, CC).

Primary Training Aircraft Inventory (PTAI)—Aircraft required primarily for technical and specialized training of crew personnel or leading to aircrew qualification (Possession code: TF).

Primary Development/Test Aircraft Inventory (PDAI)—Aircraft assigned primarily for the test of the aircraft or its components for purposes of research, development, test and evaluation, operational test and evaluation, or support for testing programs (Possession code: CB).

Primary Other Aircraft Inventory (POAI)—Aircraft required for special missions not elsewhere classified.

Reconstitution Reserve—Aircraft stored or on the ramp which are planned for return to the operating forces in the event of mobilization, replacement, or reconstitution.

Recur Rate—A recurring discrepancy on an aircraft occurs on the second through fourth sortie or attempted sortie after corrective action has been taken and the system or subsystem is used. The discrepancy must indicate the same malfunction as the original.

Repeat Rate—A repeat discrepancy on an aircraft occurs on the next sortie or attempted sortie after corrective action has been taken and the system or subsystem is used. The discrepancy must indicate the same malfunction as the original.

Scheduled Sortie—An aircraft scheduled for flight by tail number on the weekly flying schedule and confirmed on the daily flying schedule. Incentive flights are considered scheduled sorties and published in the weekly schedule. Functional Check Flights (FCF) and Operational Check Flights (OCF) are excluded.

Sortie—A sortie begins when an aircraft becomes airborne or takes off vertically from rest at any point of support. It ends after airborne flight when the aircraft returns to the surface except for continuation sorties and: a) the engines are stopped, or b) the aircraft is on the surface for 5 minutes, whichever occurs first between a and b, or c) a change is made in the crew.

Sortie Attempts—Includes sorties flown and ground aborts.

Sortie UTE Rate—The average sorties flown per authorized/chargeable aircraft per month.

Stock Record Account Number (SRAN)—The "FJ" account at each base to which engines are assigned.

Time Distribution for Job Standards (Next Inspection)—A display of aircraft inspections by tail number showing the amount of time remaining to next inspection.

Total Abort Rate—The total number of aborts (air and ground) per sortie attempts. The number of air and ground aborts should match those used for the Air and Ground Abort Rates.

Total Active Inventory (TAI)—Aircraft assigned to operating forces for mission, training, test, or maintenance functions (includes primary aircraft inventory, backup aircraft inventory, attrition, and reconstitution reserve).

Total Not Mission Capable Maintenance (TNMCM) Rate—The percent of possessed time an aircraft/system is not mission capable due to maintenance (NMCM) and not mission capable for both maintenance and supply (NMCB).

Total Not Mission Capable Supply (TNMCS) Rate—The percent of possessed time an aircraft/system is not mission capable due to supply (NMCS) and not mission capable for both maintenance and supply (NMCB).

Two Level Maintenance (2LM) Repair Cycle Processing Time—The average time in days for an unserviceable 2LM asset on base to be repaired or sent NRTS to another repair agency. It starts when the replacement part is issued by the flightline parts store (or Base Supply) and ends when the asset is returned serviceable to the part store's shelf or is sent NRTS to another repair agency.

Type, Model, Series, and Modification (TMSM)—The standard nomenclature for engines according to MIL-STD-879.

UTE Rate—The average number of sorties or hours flown per authorized/chargeable aircraft/system per month. See the Hourly and Sortie UTE Rate Definitions.

War Reserve/Readiness Engines (WRE)—The quantity of serviceable engines required to sustain an operational unit's war effort until pipelines are filled and repair facilities are available.

Yearly UTE Goal—The annual sortie or hourly UTE rate target for a unit.

Attachment 2

ALGORITHMS FOR LOGISTICS - MAINTENANCE PERFORMANCE INDICATORS

A2.1. Mission Capable (MC) Rate.

$$\frac{(\text{FMC HOURS} + \text{PMCB HOURS} + \text{PMCM HOURS} + \text{PMCS HOURS})}{\text{POSSESSED HOURS}} \times 100$$

A2.2. Total Not Mission Capable Maintenance (TNMCM) Rate.

$$\frac{(\text{NMCM HOURS} + \text{NMCB HOURS})}{\text{POSSESSED HOURS}} \times 100$$

A2.3. Total Not Mission Capable Supply (TNMCS) Rate.

$$\frac{(\text{NMCS HOURS} + \text{NMCB HOURS})}{\text{POSSESSED HOURS}} \times 100$$

A2.4. Cannibalization Rate.

$$\frac{(\# \text{ OF ACFT TO ACFT OR RSP CANNIS}) + (\# \text{ OF ENGINE TO ACFT OR RSP CANNIS})}{\text{TOTAL SORTIES FLOWN}} \times 100$$

A2.5. Code 3 Break Rate.

$$\frac{\# \text{ OF SORTIES WITH CODE 3 LANDING STATUS (BREAKS)}}{\text{TOTAL SORTIES FLOWN}} \times 100$$

A2.6. Fix Rate.

A2.6.1. 4-Hour Fix Rate.

$$\frac{\# \text{ OF ACFT LANDING CODE 3 OR 4 (BREAKS) FIXED WITHIN 4 HOURS}}{\text{TOTAL \# OF ACFT LANDING CODE 3 OR 4 (BREAKS)}} \times 100$$

A2.6.2. 8-Hour Fix Rate.

$$\frac{\# \text{ OF ACFT LANDING CODE 3 OR 4 (BREAKS) FIXED WITHIN 8 HOURS}}{\text{TOTAL \# OF ACFT LANDING CODE 3 OR 4 (BREAKS)}} \times 100$$

A2.6.3. 12-Hour Fix Rate.

$$\frac{\# \text{ OF ACFT LANDING CODE 3 OR 4 (BREAKS) FIXED WITHIN 12 HOURS}}{\text{TOTAL \# OF ACFT LANDING CODE 3 OR 4 (BREAKS)}} \times 100$$

A2.7. Total Abort Rate. (Include only those caused by Maintenance, Operations, or Supply)

$$\frac{(\# \text{ AIR ABORTS} + \# \text{ GROUND ABORTS})}{(\text{TOTAL SORTIES FLOWN} + \text{GROUND ABORTS})} \times 100$$

A2.7.1. Air Abort Rate. (Include only those caused by Maintenance or Operations)

$$\frac{\# \text{ AIR ABORTS}}{\text{TOTAL SORTIES FLOWN}} \times 100$$

A2.7.2. **Ground Abort Rate.** (Include only those caused by Maintenance, Operations, or Supply)

GROUND ABORTS

(TOTAL SORTIES FLOWN + GROUND ABORTS) X 100

A2.8. **Average Number of Aircraft/Systems Possessed.**

TOTAL POSSESSED HOURS (MONTH TO DATE)

((# OF DAYS (MONTH TO DATE)) X 24)

A2.9. **Average Sortie Duration (ASD).**

HOURS FLOWN

SORTIES FLOWN

A2.9.1. **Sortie UTE Rate.**

SORTIES FLOWN

AUTHORIZED OR CHARGEABLE AIRCRAFT/SYSTEMS

A2.9.2. **Hourly UTE Rate.**

HOURS FLOWN

AUTHORIZED OR CHARGEABLE AIRCRAFT/SYSTEMS

A2.10. **Flying Scheduling Effectiveness Rate.**

(ADJ SORTIES SCHED (See para. A2. 10.3) - (CALCULATED DEVS (See para. A2.10.4))

ADJ SORTIES SCHEDULED X 100

A2.10.1. Total Sorties Scheduled = Total Sorties Flown + Cancellations - Additions.

A2.10.2. For RCS: AFGSC-A4M 9302 reporting purposes, total deviations include all deviations in the given category. Those deviations considered FSE computable are entered in the FSE column. AFGSCI 21-165 provides guidance on these deviations. For example, a scheduled line that ground aborts and is subsequently filled with a spare aircraft is not counted in the deviations portion of this formula. The ground abort does count toward the Ground Abort and Total Abort rates. If a scheduled line that ground aborts is not filled by a spare aircraft, the lost sortie is a deviation and is counted toward FSE. The abort is also included in the Ground Abort and Total Abort rates.

A2.10.3. Adjusted Sorties Scheduled = Sum of all scheduled sorties (home base, off station or deployed) Minus UTE cancellations.

A2.10.4. Calculated Deviations = Sum of all deviations minus air deviations, aircraft interchanges, aircraft spare actions, ground aborted sorties flown by spare aircraft (on-time), and UTE cancellations.

A2.10.5. OP/MT-Deviations = Sum of all Calculated Deviations recorded using OP_ or MT_ as the deviation cause code (include GAA, GAB and GAC).

A2.10.6. Breakdown of Deviation Categories (These rates reflect the sum of all Calculated Deviations in the various cause code categories).

A2.10.6.1. Maintenance Deviation Rate.

MAINTENANCE DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.2. Operations Deviation Rate.

OPERATIONS DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.3. Supply Deviations Rate.

TOTAL SUPPLY DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.4. Higher Headquarters (HQ_) Deviation Rate.

TOTAL HHQ DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.5. Weather Deviation Rate.

WEATHER DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.6. Sympathy Deviation Rate.

TOTAL SYMPATHY DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.7. Air Traffic Control (ATC) Deviation Rate.

TOTAL ATC DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.8. Other Deviation Rate.

TOTAL OTHER DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.9. UTE Deviation Rate.

TOTAL UTE DEVIATIONS

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.10. Maintenance and Operations Deviation Rate.

(MAINTENANCE DEVIATIONS + OPERATIONS DEVIATIONS)

ADJUSTED SORTIES SCHEDULED X 100

A2.10.6.10.1. Use the same number of maintenance and operations deviations used to compute the FSE rate.

A2.10.6.10.2. This rate is a subset of the FSE rate.

A2.11. Maintenance Man-hours Per Flying Hour.

TOTAL DIRECT MAN-HOURS DOCUMENTED AGAINST AIRCRAFT AND ENGINES
HOURS FLOWN

NOTE: Excludes PMEL, AGE, SE, and Transient Maintenance Hours.

A2.12. Monthly JDD Error Rate.

NUMBER OF RECORDS (DDRS) IN ERROR

NUMBER OF RECORDS (DDRS) CHECKED X 100

A2.13. Base Repair Cycle Time.

PRE-MAINTENANCE DAYS + REPAIR DAYS + POST-MAINTENANCE DAYS

A2.13.1. Pre-Maintenance Time.

TOTAL NUMBER OF DAYS IN PRE-MAINTENANCE

TOTAL NUMBER OF ITEMS REPAIRED

A2.13.2. Repair Time.

TOTAL NUMBER OF DAYS IN REPAIR

TOTAL NUMBER OF ITEMS REPAIRED

A2.13.3. Post-Maintenance Time.

TOTAL NUMBER OF DAYS IN POST-MAINTENANCE

TOTAL NUMBER OF ITEMS REPAIRED

A2.14. Average Hangar Queens.

TOTAL HANGAR QUEEN DAYS IN REPORTING PERIOD

DAYS IN REPORTING PERIOD

A2.14.1. Breakdown of Average Hangar Queens by Category.

A2.14.2. Average Category 1 (CAT 1/31-59 Days) Hangar Queens.

TOTAL CAT 1 HANGAR QUEEN DAYS IN REPORTING PERIOD

DAYS IN REPORTING PERIOD

A2.14.3. Average Category 2 (CAT 2/60-89 Days) Hangar Queens.

TOTAL CAT 2 HANGAR QUEEN DAYS IN REPORTING PERIOD

DAYS IN REPORTING PERIOD

A2.14.4. Average Category 3 (CAT 3/90+ Days) Hangar Queens.

TOTAL CAT 3 HANGAR QUEEN DAYS IN REPORTING PERIOD

DAYS IN REPORTING PERIOD

A2.15. Repeat Rate.TOTAL REPEATS

PILOT REPORTED DISCREPANCIES X 100

A2.16. Recur Rate.TOTAL RECURS

PILOT REPORTED DISCREPANCIES X 100

A2.17. Total Repeat/Recur Rate.(TOTAL REPEATS) + (TOTAL RECURS)

PILOT REPORTED DISCREPANCIES X 100

A2.18. Workcenter Utilization Rate.DIRECT MAN-HOURS DOCUMENTED (100 LABOR CODE)

DIRECT MAN-HOURS ASSIGNED (100 LABOR CODE) X 100

A2.19. Aircraft Availability Rate.MC HOURS * X 100

TOTAL POSSESSED HOURS **

* MC Hours consists of Possession Purpose Codes (PPC): CA, CB, CC, CF, EH, EI, IF, PJ, PL, PR, TF, TJ, ZA, and ZB.

** Total Aircraft Inventory (TAI) consist of the following Possession Purpose Codes (PPC): BJ, BK, BL, BN, BO, BQ, BR, BT, BU, BW, BX, CA, CB, CC, CF, EH, EI, DJ, DK, DL, DM, DO, DR, IF, PJ, PL, PR, TF, TJ, XW, XZ, ZA, and ZB.

**Attachment 3
NARRATIVE FORMAT FOR 9302**

SECTION II - NARRATIVE. List the top five subsystems (3-digit WUC) and top three 5-digit WUC drivers for each subsystem.

ITEM 6. MC RATE. List the top five subsystems (3-digit WUC) and top three 5-digit WUC drivers for each subsystem. List WUC, nomenclature, and NMC hours for each subsystem and WUC.

DATA ELEMENT							
#	NAME	HOURS	RATE	REQ			
6	MC RATE	38768.1	77.6	***			
	SUBSYST	033	Hourly Inspection		NMC	1513.4	
	EM				HOURS:		
	WUC	NOMENCLATURE				NMC	
						HOURS	
	03300	Hourly Postflight Inspection					1513.4

***** REPEAT THIS FORMAT FOR NEXT FOUR SUBSYSTEMS *****

COMMENTS: This is the chance to tell your unit's story. Include analysis of top drivers, bad actors, or problem aircraft. Include AMU/CC's comments and explain any events that may have affected unit performance (e.g. deployments, stand-downs, training, exercises, etc...). **Example:** MC rates dropped slightly primarily due to a supply spike this month. The TNMCM rate held steady. Phase Inspections continue to be the main driver fleet-wide due to an influx of 3-level personnel and qualified technicians currently deployed. The only other systems that stood out were an increase in Electrics and Airframe work. After 5 months of steady improvements, supply rates increased in April. The Engine Monitor Display (EMD) and the Head-Up Display (HUD) continue to be our leading MICAP drivers. A shortage of Faceplate Assemblies has hampered repair of the Engine Monitor Displays but we are starting to see relief from the new contract that was awarded in January. A lack of Cathode Ray Tubes (CRTs) has impacted HUD repair. UTE execution was low because of reduced home station sortie generation capability due to Operation Northern Watch.

ITEM 7. TNMCM HOURS/RATE DRIVERS: List the top five NMCM and NMCB drivers by subsystem and top three 5-digit WUC drivers for each subsystem. List WUC, nomenclature, and NMCM/NMCB hours for each subsystem and WUC.

NMCM DRIVERS:

DATA ELEMENT					
#	NAME	HOURS	RATE	RE Q	
7	TNMCM RATE	8969.7	18.0	***	
NMCM DRIVERS					
	SUBSYSTEM	23Z	Turbofan Powerplant	NMCM HOURS:	947.4
	WUC	NOMENCLATURE			NMCM HOURS
	23Z00	Turbofan Powerplant (Assembled)			947.4

***** REPEAT THIS FORMAT FOR NEXT FOUR SUBSYSTEMS *****

COMMENTS: See the comment section under the MC Rate above.

NMCB DRIVERS:

NMCB DRIVERS					
	SUBSYSTEM	033	Hourly Postflight Insp	NMCB HOURS:	589.6
	WUC	NOMENCLATURE			NMCM HOURS
	03300	Hourly Postflight Inspection			589.6

***** REPEAT THIS FORMAT FOR NEXT FOUR SUBSYSTEMS *****

COMMENTS: See the comment section under the MC Rate above.

ITEM 8. TNMCS HOURS/RATE DRIVERS. List top five NMCS and NMCB drivers by subsystem and then top three 5-digit WUC drivers for each subsystem. For NMCS drivers, list WUC, nomenclature, national stock number, and NMCS hours for each subsystem and WUC. For NMCB drivers, list WUC, nomenclature, and NMCM/NMCB hours for each subsystem and WUC. Do not repeat the NMCB driver section if you provided the information in the TNMCM rate driver narrative.

NMCS DRIVERS:

		HOURS	RATE	REQ	
8	TNMCS RATE	5142.1	8.8	***	
NMCS DRIVERS					
	SUBSYSTEM	140	FLIGHT CONTROL SYS	NMCS HOURS:	904.5
	WUC	NOMENCLATURE		NSN	NMCS HOURS
	14DAC	ELEC/MECH Act CMD Servo		1650011508939	482.1
	14BA0	Rudder Aircraft AKG		1560010771314WF	229.5
	14C99	WIRING HARNESS, 121		6150012889951WF	201.0

***** REPEAT THIS FORMAT FOR NEXT FOUR SUBSYSTEMS *****

COMMENTS: See the comment section under the MC Rate above.

NMCB DRIVERS:

See NMCB Drivers portion of the TNMCM Section (Item 7). Do not repeat this section if NMCB drivers were listed in Item 7.

ITEM 28. DEVIATIONS (SCHEDULING EFFECTIVENESS RATE OUT OF STANDARD). List top five categories and type deviations for each category. You are required to provide narrative outlining reasons for deviations to include trends. Do not look at one month of data for trend information. Review previous months to determine if deviation causes are a trend.

	FSE DEVS	RATE	REQ	
28	FSE RATE	386	72.4	***
	DEV CATEGORY:	MAINTENANCE	# FSE DEVS:	135
	WUC	NOMENCLATURE	# DEVS	DEV TYPE / COMMON DISCREPANCY
	46000	FUEL SYSTEM	21	8 GA / 8 CX / 3 AD / 2 LT / FUEL LKS
	13000	LANDING GEAR SYS	16	7 CX / 5 GA / 2 LT / 2 AD / MLG LWRD
	74000	FIRE CONTROL SYS	11	5 GA / 3 LT / 2 CX / 1 AD / HUD MALF
	27000	TURBOFAN POWER PLNT	10	6 CX / 3 GA / 1 AD / THROTTLE GRINDS
	14000	FLIGHT CONTROL SYS	7	3 GA / 3 LT / 1 CX / FLCS FAIL
	DEV CATEGORY:	OPERATIONS	# FSE DEVS:	79
		Type Deviations:	51 CX / 13 LT / 8 AD / 7 ET	
	DEV CATEGORY:	SUPPLY	# FSE DEVS:	8
		Type Deviations:	8 CX	
	DEV CATEGORY:	HIGHER HEADQUARTERS	# FSE DEVS:	21
		Type Deviations:	18 CX / 1 ET / 1 LT / 1 AD	
	DEV CATEGORY:	WEATHER	# FSE DEVS:	30
		Type Deviations:	24 CX / 4 ET / 2 LT	
	DEV CATEGORY:	SYMPATHY	# FSE DEVS:	46
		Type Deviations:	43 LT / 2 GA / 1 CX	
	DEV CATEGORY:	AIR TRAFFIC CTRL	# FSE DEVS:	53
		Type Deviations:	44 CX / 9 GA	
	DEV CATEGORY:	OTHER	# FSE DEVS:	14
		Type Deviations:	11 CX / 2 LT / 1 ET	

COMMENTS: See the comment section under the MC Rate above.

ITEM 28A. MX/OPS DEVIATIONS (MX/OPS DEVIATION RATE OUT OF STANDARD). List top five categories and type deviations for each category. You are required to provide narrative outlining reasons for deviations to include trends. Do not look at one month of data for trend information. Review previous months to determine if deviation causes are a trend. Do not repeat this section (listing drivers) if the MX and OPS drivers were listed in Item 28. You only need to provide comments if the drivers were not previously listed.

		MX/OPS DEVS	RATE	REQ	
28A	MX/OPS DEV RATE	214	15.3	***	
	DEV CATEGORY:	MAINTENANCE	# FSE DEVS:	135	
	WUC	NOMENCLATURE	# DEVS	DEV TYPE / COMMON DISCREPANCY	
	46000	FUEL SYSTEM	19	8 GA / 8 CX / 3 AD / 2 LT / FUEL LKS	
	13000	LANDING GEAR SYSTEM	16	7 CX / 5 GA / 2 LT / 2 AD / MLG	
	74000	FIRE CONTROL SYSTEM	11	5 GA / 3 LT / 2 CX / 1 AD / HUD MALFS	
	27000	TURBOFAN POWER PLANT	10	6 CX / 3 GA / 1 AD / THROTTLE GRINDS	
	14000	FLIGHT CONTROL SYSTEM	7	3 GA / 3 LT / 1 CX / FLCS FAIL	
	DEV CATEGORY:	OPERATIONS	# FSE DEVS:	79	
		Type Deviations:	51 CX / 13 LT / 8 AD / 7 ET		

COMMENTS: See the comment section under the MC Rate above.

ITEM 30. TOTAL ABORT RATE. List top five systems drivers and top three 5-digit WUC drivers for each system, along with common discrepancies.

	ABORTS	RATE	REQ	
30	TOTAL ABORT RATE	70	5.6	***
TOTAL ABORT DRIVERS				
	SYSTEM	46	FUEL SYSTEM	ABORTS: 11
	WUC	NOMENCLATURE	# ABTS	COMMON DISCREPANCIES
	46FAB	EXTERNAL FUEL TANKS	4	TANK LEAKS
	46EAB	FUEL INDICATING / CONTROL	4	FUEL FLOW INDICATOR BAD
	46DAB	INTERNAL FUEL TANKS	3	NONE

***** REPEAT THIS FORMAT FOR NEXT FOUR SYSTEMS *****

COMMENTS: See the comment section under the MC Rate above. Example: There was a noticeable increase in Hydraulic System aborts. Maintenance replaced 8 hydraulic pumps this month. The main area of concern was aircraft 1234. It had three ground aborts for number 2 engine no start. After the first two aborts, maintenance was performed and the engine checked good for three to five ground starts with no subsequent failures. After the third ground abort, the aircraft was impounded. A dedicated troubleshooting team was unable to duplicate the condition until the sixth ground start attempt. Extensive troubleshooting by maintenance technicians and technical service representatives could not pinpoint a problem, though the engine failed to start on three consecutive attempts. The engine was replaced and the aircraft has flown twice.

ITEM 31. CODE 3 BREAK RATE. List top five systems drivers and top three 5-digit WUC drivers for each system, along with common discrepancies and corrective actions.

	BREAKS	RATE	REQ	
31	BREAK RATE	113	49.8	***
BREAK RATE DRIVERS				
	SYSTEM	41	A/C, PRESSURIZATION & SURFACE ICE CONTROL	BREAKS: 15
	WUC	NOMENCLATURE	# BREAKS	COMMON DISCREPANCIES
	41B00	CABIN AIR CONDITIONING SYSTEM	4	PRI OUTFLOW VALVE
	41KA0	WINDOW HEATER CONTROL	2	CMDR'S HEAT LIGHT
	41000	A/C, PRESS & SURFACE ICE CTRL	2	CABIN PRESS DISC

***** REPEAT THIS FORMAT FOR NEXT FOUR SYSTEMS *****

COMMENTS: See the comment section under the MC Rate above.

ITEM 33/34. 8-HR & 12-HR FIX RATE. List top five system drivers and top three 5-digit WUC drivers for each system.

	8-HR FIXES	RATE	REQ		
33	8-HOUR FIX RATE	66	58.4	***	
8-HOUR FIX RATE DRIVERS					
	SYSTEM	76	Electronic Countermeasures Sys		8-HR FIXES: 44
	WUC	NOMENCLATURE		# BREAKS	# NOT FIXED
				COMMON DISCREPANCIES	
	76MF0	Ctrl Oscillator Band 3		9	8
	76HB0	Ctrl Oscillator Assy		7	7
	76H00	AN/ALQ-135		10	6
					ICMS Failed (3)
					ICMS failed (2) ICS (2)
					ICS Light on (4)

******* REPEAT THIS FORMAT FOR NEXT FOUR SYSTEMS OR FOR 8- or 12-HOUR FIX RATES AS NEEDED*******

COMMENTS: See the comment section under the MC Rate above. Example: The primary driver of our fix rates is a lack of experienced technicians with good trouble shooting abilities. We are 40% manned in TSgt Crew Chiefs and 80% in SSgt Crew Chiefs. Hence, we have to grow our own experience and take time to teach proper trouble-shooting. Although the breaks are taking longer to fix, they are fixed properly as seen by our low repeat/recur rate.

ITEM 35. CANNIBALIZATION RATE. List top five subsystem drivers and top three 5-digit WUC component drivers for each subsystem along with national stock numbers.

	CANNS	RATE	REQ		
35	CANN RATE	98	8.3	***	
CANN RATE DRIVERS					
	SYSTEM	74	FIRE CONTROL SYSTEM		CANNS: 11
	WUC	NOMENCLATURE		# CANNS	NSN
	74AN0	MODULAR LOW POWER RADIO FREQUENCY		3	1270-01-233-0011
	74JL0	EXT CAP DATA ENTRY ELEC UNIT		3	7025-01-242-2033
	74DF0	INERTIAL NAVIGATION UNIT		1	6605-01-256-2380

******* REPEAT THIS FORMAT FOR NEXT FOUR SYSTEMS *******

COMMENTS: See the comment section under the MC Rate above.

ITEM 36B/36C. HANGAR QUEENS (CAT II & CAT III). List the aircraft tail number, date it last flew before going into NMC status, and the date it released from hangar queen status (if applicable).

		CAT II		REQ	
36B	HANGAR QUEENS	0.5		*	
HANGAR QUEEN INFORMATION (CAT II)					
	ACFT TAIL #	DATE LAST FLOWN	DATE RELEASED	DAYS	
	A1111	15-Aug-2001	12-Nov-2001	59	

ITEM 43. TOTAL REPEATS-RECURS RATE. List top five systems drivers and top three 5-digit WUC drivers for each system, along with common discrepancies and fixes.

		REP-REC	RATE	REQ	
43	TOTAL REP-REC RATE	70	5.6	***	
REPEATS-RECURS DRIVERS					
	SYSTEM	46	FUEL SYSTEM	REP-REC:	11
	WUC	NOMENCLATURE		# REP-REC	COMMON DISCREPANCIES/FIXES
	46FAB	EXTERNAL FUEL TANKS		4	TANK LEAKS
	46EAB	FUEL INDICATING / CONTROL		4	FUEL FLOW INDICATOR BAD
	46DAB	INTERNAL FUEL TANKS		3	NONE

***** REPEAT THIS FORMAT FOR NEXT FOUR SYSTEMS *****

COMMENTS: See the comment section under the MC Rate above. The repeat-recur rate is a measure of system reliability and quality of maintenance. When addressing repeat-recur drivers focus on component failures, maintenance processes, i.e., troubleshooting and actual fixes, internal and external pressure to commit aircraft to flying schedule, as well as lack of experienced qualified or trained technicians.