

**BY ORDER OF THE COMMANDERS
AIR COMBAT COMMAND
UNITED STATES AIR FORCES IN
EUROPE AND PACIFIC AIR FORCES**



ACC INSTRUCTION 21-165

22 APRIL 2008

**DAVISMONTHAN AIR FORCE BASE
Supplement**

5 NOVEMBER 2009

Maintenance

**CAF: AIRCRAFT FLYING AND
MAINTENANCE SCHEDULING
PROCEDURES**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: This publication is available digitally.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: HQ ACC/A4QM

Certified by: HQ ACC/A4Q
(Maj Gen P. David Gillett, Jr.)

Supersedes: ACCI21-165, 19 November 2004;
USAFEI21-165, 9 September 2005;
PACAFI21-165, 21 January 2005

Pages: 86

(DAVISMONTHANAFB)

OPR: 355 MOS/MXOOP

Certified by: 355 MXG/CC (Col Dennis
W. Shumaker)
Pages: 27

This instruction implements AFPD 21-1, *Managing Aerospace Equipment Maintenance*; AFI 21-101, *Aerospace Equipment Maintenance Management*; and AFI 21-101_COMBAT AIR FORCES (CAF) Supplement. It establishes policy and assigns responsibility for the operations group (OG), maintenance group (MXG), and mission support group (MSG) commanders to develop and execute aircraft flying and maintenance programs. This instruction prescribes policies and procedures governing aerospace equipment maintenance management for Air Combat Command (ACC), Pacific Air Forces (PACAF) and United States Air Forces in Europe (USAFE). It applies to all ACC, USAFE (including Royal Air Force (RAF) Fairford and all Munitions Support Squadron (MUNSS) sites) and PACAF bases. Only the following bases are exempt from applicability, Yokota, Hickam, Ramstein, RAF Mildenhall and Mobility Air Forces (MAF) units at Kadena and Elmendorf who will follow the MAF Sup. The maintenance backshop squadrons, MOS and MXG staff agencies at Kadena and Elmendorf will follow the

CAF Sup unless otherwise stated. It applies to these organizations and personnel that maintain aircraft, aircraft systems, equipment, support equipment, and components regardless of Air Force Specialty Code. It provides a broad management framework for the Group Commanders to adjust procedures to compensate for mission, facility, and geographic differences of the units. This instruction does not apply to the Air National Guard (ANG) or Air Force Reserve Command (AFRC); however, CAF Classic Associate units will comply with the guidance provided within this instruction. The reporting requirements in this publication (unless otherwise specified) are exempt from licensing in accordance with (IAW) AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*. **Units will publish a single supplement to consolidate local policies mandated by the ACCI. Units may develop separate Operating Instructions as long as they are referenced in their 21-165 publication.** Maintain records created as a result of prescribed processes IAW AFMAN 33-363, *Management of Records*, and dispose of them IAW the AF Records Disposition Schedule (RDS) at <https://afrims.amc.af.mil>. Contact supporting records managers as required. Send comments, questions, and suggested improvements to this publication on AF Form 847, *Recommendation for Change of Publication*, through channels to HQ ACC/A4QM, 130 Douglas Street, Suite 210, Langley AFB VA 23665-2791.

(DAVISMONTHANAFB) ACCI 21-165, 22 APRIL 2008, is supplemented as follows: This is the wing's initial supplement to ACCI 21-165; it is recommended users read contents in its entirety. This publication refines and clarifies scheduling timelines, policies and directives in ACCI 21-165, and establishes specific maintenance and operations scheduling procedures. It also supersedes FW OI 11-6, Planning and Scheduling, dated 15 Dec 2000. It applies to all agencies within the 355 FW and tenant organizations operating from DMAFB. Suggestions for supplement modification should be directed to 355 MOS/MXOOP. Maintain records created as a result of published processes IAW AFMAN 33-363, *Management of Records*, and dispose of records IAW the AF Records Disposition Schedule (RDS), available from the Air Force Portal at the AF Records Information Management System (AFRIMS) link. Contact supporting records managers as required. Send comments and suggested improvements on AF Form 847, *Recommendation for Change of Publication*, through 355 MOS/MXOOP, 4015 S. Phoenix Street, Davis-Monthan AFB, AZ 85707.

SUMMARY OF CHANGES

ACCI/PACAFI/USAFI 21-165-- These documents are integrated within this ACCI and there are substantial revisions. Therefore, the ACCI must be completely reviewed.

Chapter 1—MANAGEMENT PHILOSOPHY	7
1.1. Scheduling.	7
1.2. Scheduler.	7
1.3. Collocate.	7
1.4. Annual Plan.	7
1.5. Planning.	7

1.6.	Deployments.	8	
1.7.	Unscheduled Events.	8	
1.8.	Overflies.	8	
1.9.	Planning Impacts.	8	
1.10.	Program Changes.	8	
1.11.	Surges.	8	
1.12.	Utilization (UTE).	9	
1.13.	So what should you do?	9	
1.14.	You may have problems if some of the following are evident within your program:		10
1.15.	Approach.	11	
Chapter 2—GENERAL RESPONSIBILITY AND POLICY		12	
2.1.	Responsibilities.	12	
2.2.	Policy.	13	
2.3.	Objectives.	14	
2.4.	Applicability.	14	
2.5.	Reporting Requirements.	14	
2.6.	Standards.	14	
2.7.	Waivers.	14	
2.8.	Standardization.	15	
2.9.	Airframe Capability and Scheduling.	15	
2.10.	Alert Aircraft.	15	
2.11.	Electronic Publishing.	15	
Chapter 3—FLYING AND MAINTENANCE SCHEDULING PROCEDURES		16	
3.1.	Flying and Maintenance Planning Cycle.	16	
3.2.	The Proposed Flying Hour Program Requirements.	16	
3.3.	COMBAT AIR FORCES (CAF) Baseline Allocation Message.	19	
3.4.	Annual Maintenance Planning Cycle.	19	
3.5.	Quarterly Scheduling:	21	
3.6.	Monthly Scheduling:	22	
Table 3.1.	Unit Planning/Scheduling Meeting Example Month.	25	
3.7.	Weekly Scheduling:	27	
3.8.	Changes to the Weekly Schedule:	29	

Chapter 4—FLYING SCHEDULING EFFECTIVENESS	32
4.1. Purpose.	32
4.2. Requirements.	32
4.3. Flying Schedule Deviations.	32
Table 4.1. Common Flying Scheduling Effectiveness Deviation Determination Matrix.	35
4.4. Deviation Causes.	38
4.5. Scheduling Exceptions:	39
4.6. Combat Sortie Generation.	41
4.7. Air Tasking Order.	41
4.8. Unscheduled Tasking.	42
4.9. Test and Evaluation.	42
4.10. Scheduling Options to Maximize Sortie Production.	42
4.11. Flying Scheduling Effectiveness Computations.	44
Chapter 5—MAINTENANCE SCHEDULING EFFECTIVENESS	45
5.1. Purpose.	45
5.2. Computations:	45
Table 5.1. MSE Deviations and Functions.	47
Table 5.2. Maintenance Scheduling Effectiveness Computation.	48
Chapter 6—DEPLOYED OPERATIONS AND OFF-STATION SORTIES	49
6.1. Purpose.	49
6.2. General.	49
6.3. Scheduling.	49
6.4. Deployed Daily Activity Report.	49
6.5. Off-Station Sorties.	49
6.6. Deployed MOF PS&D Support Operations.	50
Chapter 7—FLYING SCHEDULING REPORTING PROCEDURES	51
7.1. Purpose.	51
7.2. Responsibilities:	51
Table 7.1. Ground Deviation Codes and Functions.	52
Table 7.2. Category Codes and Functions.	52
Table 7.3. Cause Codes and Functions.	52
Table 7.4. Air Deviation Codes and Functions.	53

Chapter 8—ATTRITION AND SPARES	54
8.1. Attrition.	54
8.2. Attrition Factor Application:	54
8.3. Prorated Weather Attrition:	55
8.4. Spares.	55
Chapter 9—(Added-DAVISMONTHANAFB) LOCAL PROCEDURES	1
9.1. (Added-DAVISMONTHANAFB) Purpose.	57
9.2. (Added-DAVISMONTHANAFB) Annual Planning Functions.	57
9.3. (Added-DAVISMONTHANAFB) QUARTERLY PLANNING FUNCTIONS. ..	57
9.4. (Added-DAVISMONTHANAFB) MONTHLY PLANNING FUNCTIONS	58
9.5. (Added-DAVISMONTHANAFB) WEEKLY PLANNING FUNCTIONS.	58
9.6. (Added-DAVISMONTHANAFB) Daily Planning Functions/Flying Schedule. ...	62
9.7. (Added-DAVISMONTHANAFB) FHP Program Updates.	62
9.8. (Added-DAVISMONTHANAFB) Aircraft Utilization Reporting and Verification.	62
9.9. (Added-DAVISMONTHANAFB) Hosting Off-Station Units.	64
9.10. (Added-DAVISMONTHANAFB) Snowbirds.	66
9.11. (Added-DAVISMONTHANAFB) Air Refueling Tanker Business Efforts And Orientation Flights.	66
9.12. (Added-DAVISMONTHANAFB) Airspace Scheduling.	69
9.13. (Added-DAVISMONTHANAFB) Live Load Scheduling.	69
9.14. (DAVISMONTHANAFB) Static Displays/Flyovers.	69
9.15. (Added-DAVISMONTHANAFB) GILA BEND/FT HUACHUCA EGRESS TRAINING.	70
9.16. (Added-DAVISMONTHANAFB) Demo Team Operations.	70
9.17. (Added-DAVISMONTHANAFB) Paratroop Procedures.	70
9.18. (Added-DAVISMONTHANAFB) Quiet Hours.	70
9.19. Adopted Forms:	71
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	72
Attachment 2—WAIVER/CHANGE REQUEST FORMAT	82
ATTACHMENT 3—(Added-DAVISMONTHANAFB) LOCAL SCHEDULE INPUT AND PUBLISHING DEADLINES	83
ATTACHMENT 4—(Added-DAVISMONTHANAFB) SORTIE SEQUENCE LINE NUMBERS	84

ATTACHMENT 5—(Added-DAVISMONTHANAFB) SAMPLE RANGE REQUEST WITH TANKER 85

ATTACHMENT 6—(Added-DAVISMONTHANAFB) SAMPLE RANGE REQUEST 86

Chapter 1

MANAGEMENT PHILOSOPHY

1.1. Scheduling. Aircraft flying and maintenance scheduling is a planned, methodical approach to achieving maintenance and flying goals. The weekly flying and maintenance schedule directly dictates the workload of a major portion of wing personnel from flightline mechanics to dining facility personnel. The wing flying-hour program is directly tied to wing funding and the readiness of aircrews and aircraft to perform their war-time mission. This is one of the most important products the wing produces so the right resources must be dedicated to producing an effective and efficient plan.

1.2. Scheduler. In some wings, operations scheduling is an additional duty for a lieutenant or captain. Optimally, Operations Schedulers should be assigned to the function for a minimum of 1 year. Remember, these are the wing experts at building the plan and everything they do directly impacts the operations (ops) tempo of the wing. Committing personnel for at least a year will improve consistency and the opportunity to meet the flying-hour program while efficiently executing the mission, increasing effective pilot training and reducing turbulence for the wing.

1.3. Collocate. One way to facilitate communication and enhance understanding of the impact of program decisions is when possible to collocate the operations and maintenance schedulers. This option is a proven method to improve communication but care must be exercised to ensure that collocation does not interfere with their respective functions and organizational/leadership structure.

1.4. Annual Plan. The annual plan is the most important element of the flying-hour program. With smart planning, programming and updating of the immediate (in-year) and long-range (out-year) programs, the difficulties of managing this program can be largely eliminated. With the risk of being redundant, this is one area where your investment of time and energy can return big dividends to wing personnel. Unfortunately, experience has shown that too often many wing operations and maintenance schedulers do not fully understand the program. This indicates a lack of appropriate knowledge driven primarily by a lack of instructions (AFI/ACCIs) familiarization and position experience. As a result, many programs are developed and submitted without proper planning or foresight. Programs that are not carefully worked and planned waste an inordinate amount of resources in preparation and may cause the unit to fall short of meeting their flying-hour goals.

1.5. Planning. The more planning factors that can be built into the flying schedule, the more stability you will have to meet the operations and maintenance workload. Additionally, maintenance schedulers can target maintenance resources and use them more efficiently to reduce the variation within the scheduling process. It is critical that maintenance analysis, along with Plans, Scheduling and Documentation (PS&D), perform a monthly maintenance, personnel and facility capability study then cross-check this study with the flying-hour program to ensure the program is supportable. If the unit's mission cannot be supported within the unit's organic capacity limitations, then changes must be made to ensure successful execution. Always be mindful that resources (personnel, aircraft, and equipment) are not over-tasked. When capability is exceeded, notify squadron and group senior leadership so the plan can be adjusted to meet

objectives. Remember, failure by the schedulers to make appropriate inputs and properly project capabilities could force the wing or squadron to try to execute an unsupportable program.

1.6. Deployments. As the program is developed, schedulers should also consider the time required to prepare for deployments. Scheduling normal flying or surges in the days immediately preceding a deployment/temporary duty (TDY) may impact the ability of maintenance personnel to prepare the aircraft appropriately. Personnel need time to prepare for deployments (pre-deployment briefs, out-processing and personal business). Conversely, you have a problem if you plan to resume normal operations too quickly after returning to home station. This is a sure way to deplete your resources, wear down your personnel and fail to meet your programmed goals.

1.7. Unscheduled Events. Solid planning is the key to success, but pop-up events can influence or cause turbulence to the scheduling process. For example, poor winter weather has forced units to heavily weight their programs toward the good weather months via planned attrition. However, weather being what it is--unpredictable; it may not materialize as planned. If this occurs, units are then faced with a dilemma. Maintain the sortie utilization (UTE) plan as is or overfly the program. The recommended solution is to take advantage of the unexpected "good" weather and fly. However, care must be exercised not to exceed the maintenance capability for the sake of getting ahead. If you overfly or underfly the approved program by more than 10 percent, then units should reflow the balance of their flying program.

1.8. Overflys. In developing the reflow, care must also be exercised to ensure sufficient sorties/hours remain in the months from which the sorties/hours are removed. This will ensure unit tasking and operational training requirements are met. Banking "extra" sorties and hours prior to the summer months will possibly allow more latitude in leave scheduling and offer personnel some downtime. "Overflys" of programmed sorties and hours must be coordinated fully between your OG and MXG.

1.9. Planning Impacts. It is imperative maintenance schedulers understand and appreciate operational requirements and how they impact planning efforts. The operations scheduler must understand and appreciate how his/her decisions will impact, not just maintenance, but all wing agencies supporting the mission. For example, a single configuration change can take 2 to 4 hours and as many as six people. This change will have a definite impact on maintenance's ability to manage work shifts, repair aircraft and perform preventive maintenance.

1.10. Program Changes. The point of contact for changes that impact the overall yearly flying program is Operations and Training Division (ACC/A3T). All changes that impact the overall programmed hours or sorties must be approved by ACC/A3T. If the changes do not affect the overall program, a copy of the reflow must be provided to ACC/A3T to ensure that the correct numbers are being reported at the local, MAJCOM and Air Staff level.

1.11. Surges. One method for generating a high number of sorties and hours is a sortie surge. Surges, if properly planned and executed, can potentially lessen the impact of "summer" high sortie UTE rates due to the restrictive nature of the "winter" operating environment. That is, by surging, a large portion of the required monthly program can be accomplished in a short period of time. In turn, this allows for a significantly lower UTE rate for the remainder of the month. At the same time, carefully executed surges can have a positive effect on unit esprit de corps. Following are some tested basic principles that go a long way toward developing a successful surge program.

1.11.1. Surges should never be treated nor executed as a casual or "spur of the moment" event. Instead, surges should be built into a unit's annual flying program and advertised base-wide. In turn, the program should include target sortie goals, planned dates and backup dates. Future planning does several things. First, the entire base is aware that something non routine is going to occur at a point in time and they need to plan and program their activities accordingly. Second, the maintenance community, by knowing when surges are programmed, can ensure the force is properly managed so that preventative maintenance actions are properly scheduled and the aircraft phase/inspection flow is managed in preparation for the surge. Third, personnel resources can be managed to ensure maximum availability of the maintenance force to support the surge.

1.11.2. Surges are a significant base event and, as such, can be disruptive to base activities. Therefore, the surge must be worth the effort. In this light, short-notice, 1-day surges are often, in the long-term, counterproductive. The extensive preparation beforehand, and recovery afterwards, often outweighs the advantages of a 1-day surge. It is often impossible to justify the effort for a "surge" that produces very little in return. On the other hand, a lot of energy is expended to ensure local Salty Nation (or equivalent) exercises are successful. A surge falls into the same category and requires the same planning effort to be successful.

1.11.3. Be aware that sortie surges can have a negative impact on your training program and your hourly program. Because sortie duration is usually shortened to facilitate the surge, the aircrew training benefits often drop in relation to the sortie duration. Additionally, if you fly too many surges and do not keep an eye on your Average Sortie Duration (ASD), you may have to add more sorties than originally programmed at the end of the year to make your hourly program.

1.12. Utilization (UTE). In units tasked to fly out an annual flying-hour program, UTE is the key to ensuring success. UTE is a measure of performance--the goal the wing is trying to achieve. To ensure success, you must publish the program and make sure the people understand it. You must also track program progress by squadron and reward the people when the goal is reached. Remember, do not chase flying-hours. Track the ASD. It is the link between sorties and flying hours.

1.13. So what should you do?

1.13.1. Plan what you fly and fly what you plan.

1.13.2. Agree on the basics and write it down: Standard flying window, Rules of Engagement (ROE) for surges, night flying, Cross Country (XC) sorties, weekend duty, quiet hours, training days, standard configurations, minimum/standard turn times, XC ROE, crew ready/step minimums, standard turn times, quick turn times, etc.

1.13.3. Establish a standardized approval authority for AF Form 2407, *Weekly/Daily Flying Schedule Coordination*, scheduling changes (If it is too easy to change the schedule, it will not be built right the first time).

1.13.4. Be aware that aircraft should rarely be "added". If aircraft are added because maintenance cannot provide enough front lines, something else is wrong and most likely the problem is being compounded. There is a domino effect: How many more aircraft will you add to the "broke" pile before you call "knock it off?"

1.13.5. Closely monitor the flying window. The window drives shift scheduling, but be aware, operations and maintenance are not the only agencies involved in sortie generation. Petrol, Oils, and Lubricants (POL), Air Traffic Control (ATC), Weather and many others will assist in the effort. Supervision must cover the entire flying window and then some. The length of the flying window determines effectiveness of maintenance “fix” shift. Turbulence in the flying window equals stress on the flightline--keep it consistent throughout the week. Combining a late start today with an early start tomorrow hurts!

1.13.6. For tanker and airlift units, communicate constantly between the sortie generation element and the plans and scheduling element. It is vital in the management of the isochronal inspection concept. This communication ensures aircraft are available for their scheduled dock input and available to meet mission requirements.

1.13.7. Ensure your maintenance schedulers are flowing aircraft -6 maintenance inspections, time changes, and Time Compliance Technical Order (TCTO) requirements as smoothly as possible to maximize aircraft availability and reduce excessive maintenance downtime.

1.13.8. Insist on a well-crafted short- and long-term plan. A unit cannot plan what they do not know. Conversely, a unit that fails to plan--plans to fail. In tanker and airlift units, scheduling flexibility is the key to success with adherence to sound maintenance management and policy.

1.13.9. Do not reconfigure aircraft between gos, unless there is an overwhelming need to do so. Work with your operations counterpart to fly the same configuration for the entire week, if possible. Reconfiguring drains manpower from troubleshooting, repairing, inspecting, servicing, launching and recovering.

1.13.10. Do not allow weekend duty to become routine. Weekend duty should be based on rules and aircraft should not be worked unless there is no other option to replace a Monday flyer. XCs should rarely, if ever, return on a weekend. Remember, to return on a weekend you must call multiple people in from a variety of base agencies to support the return and recovery.

1.13.11. Review the next weeks flying window length. It should be looked at from both the wing and squadron perspective.

1.14. You may have problems if some of the following are evident within your program:

1.14.1. The “lead operations scheduler” changes too frequently (i.e., week-to-week or month-to-month).

1.14.2. AF Form 2407 is approved by whoever is around.

1.14.3. Late landings or early take-offs are the norm.

1.14.4. You are reconfiguring instead of servicing in the turn unless circumstances dictate.

1.14.5. Fix rates down, deviations are up, ground aborts and cannibalization rate are on the rise.

1.14.6. No attention given to the number of hours required and the number of jets that can be phased in a given month.

1.14.7. Flying shift is fixing aircraft.

1.14.8. Major/numerous changes to next week's flying.

1.14.9. The maintenance schedule does not receive the same attention as the flying schedule.

1.14.10. Maintenance Scheduling Effectiveness is 100% but there are many overdue inspections.

1.14.11. Weekend duty is the norm rather than the exception.

1.14.12. Technicians do not know what time they are coming to work tomorrow.

1.15. Approach. Remember, this is not an art or science, just a planned approach to mission accomplishment. It is imperative you know your schedulers and you understand and monitor their programs. Balance is the key to managing mission requirements with maintenance capabilities.

Chapter 2

GENERAL RESPONSIBILITY AND POLICY

2.1. Responsibilities. Commanders at all levels are responsible for compliance with this instruction.

2.1.1. **(Added-DAVISMONTANAFB)** 355th Operations Group Commander (OG/CC) coordinates all flying activities, higher headquarters tasking and requirements, individual Fighter Squadron (FS) commitments, and associated group training.

2.1.2. **(Added-DAVISMONTANAFB)** 355th Operations Support Squadron Commander (OSS/CC) provides coordination and staff support necessary to meet requirements and tasking from the OG/CC.

2.1.3. **(Added-DAVISMONTANAFB)** 355th Operations Support Squadron (OSS) coordinates scheduling tasks and requests from outside the operations group; enables the most efficient allocation of resources, tasking allocation, and application of operations group and maintenance group commander policies.

2.1.4. **(Added-DAVISMONTANAFB)** 355 OSS Current Operations (OSO) monitors operations programs to ensure all requirements are met, and coordinates activities between all agencies under its control; will also be referred to as wing scheduling throughout this chapter.

2.1.5. **(Added-DAVISMONTANAFB)** 355 OSS Wing Operations Scheduling (OSOS):

2.1.5.1. **(Added-DAVISMONTANAFB)** Publishes and distributes wing's daily flying schedule and briefs the 355 FW/CC on its status once a week; monitors unit flying hour programs (FHP); schedules Tombstone Military Operating Areas, AR-639, AR-639A, AR-649 refueling tracks, VR-259, VR-260, VR-267/8/9, and VR-1233; and consolidates Barry M. Goldwater Ranges (BMGR) schedules.

2.1.5.2. **(Added-DAVISMONTANAFB)** Serves as the single point of contact for the following issues: close air support requests, static display or fly-over requests, off-station unit deployments to Davis-Monthan AFB, and all 355 FW FS air refueling activities and share the responsibility for business effort tankers with 755 OSS/OSOOT.

2.1.6. **(Added-DAVISMONTANAFB)** FS Commander plans and programs their squadron flying activities including the timely graduation of assigned students, meeting assigned tasking and pilot training requirements, and ensures compatibility of operational requirements with squadron capabilities. Plans and programs an effective flying hour program (FHP) in coordination with the AMU (IAW Chapter 2 and ACCI 11-103).

2.1.7. **(Added-DAVISMONTANAFB)** 355th Maintenance Group Commander (MXG/CC) coordinates maintenance support of all flying activities, higher headquarters tasking and requirements, individual FS commitments, associated training, and allocating maintenance resources to meet the flying hour program. The MXG/CC exercises oversight authority for maintenance capability in the development and execution of the flying hour program. Additionally, the 355 MXG/CC will also coordinate maintenance support to meet the flying hour programs for the 55 ECG and 563 RQG.

2.1.8. **(Added-DAVISMONTHANAFB)** Aircraft Maintenance Unit (AMU) will coordinate with FS operations to plan and program a maintenance schedule that meets flying squadron requirements and manages the health of the fleet IAW Chapter 2.

2.1.9. **(Added-DAVISMONTHANAFB)** 355th Maintenance Operations Squadron Commander (MOS/CC) provides coordination and staff support necessary to support maintenance planning, scheduling, coordination, and analysis.

2.1.10. **(Added-DAVISMONTHANAFB)** 355th Maintenance Operations Squadron (MOS) monitors maintenance programs to ensure requirements are de-conflicted and coordinates activities between all agencies under its control to include, but not limited to, the maintenance operations center (MOC), maintenance data system analysis (MXOOA), engine management (MXOOE), and wing maintenance plans, scheduling and documentation (MXOOP).

2.1.11. **(Added-DAVISMONTHANAFB)** 55th Electronic Combat Group (ECG):

2.1.11.1. **(Added-DAVISMONTHANAFB)** The 55 ECG Commander coordinates all flying activities, higher headquarters tasking and requirements, individual squadron commitments, and associated group training for the 55 ECG.

2.1.11.2. **(Added-DAVISMONTHANAFB)** The 755 OSS Group scheduling (DOSO) coordinates all flying scheduling activities within the 55 ECG, and acts as liaison between 355 OSS and 55 ECG for all matters concerning flying scheduling. 755 OSS/OSOO is responsible for planning and scheduling all E/HC-130 air refueling activities and shares the responsibility for business effort tankers with 355 OSS/OSOS.

2.1.11.3. **(Added-DAVISMONTHANAFB)** The 755 AMXS Maintenance Supervision (MXA) coordinates all maintenance activities for the 55 ECG with the 355 MXG. This includes maintenance scheduling, flying schedule support, and shared resources. 755 AMXS/MXA also attends the 355 MXG daily production maintenance meeting.

2.1.12. **(Added-DAVISMONTHANAFB)** 563rd Rescue Group:

2.1.12.1. **(Added-DAVISMONTHANAFB)** The 563 RQG Commander coordinates all flying activities, higher headquarters tasking and requirements, individual squadron commitments, and associated group training for the 563 RQG.

2.1.12.2. **(Added-DAVISMONTHANAFB)** The 563 OSS Group Scheduling (OSOS) coordinates all flying scheduling activities within the 563 RQG, and acts as liaison between 355 OSS and 563 RQG for all matters concerning flying scheduling.

2.1.12.3. **(Added-DAVISMONTHANAFB)** The 563 MXS Maintenance Supervision (MXM) coordinates all maintenance activities for the 563 RQG with the 355 MXG. This includes maintenance scheduling, flying schedule support, and shared resources. 563 MXS production supervisor attends the 355 MXG daily production maintenance meeting.

2.2. Policy. This instruction provides procedures and audit methods for units to develop their flying and maintenance scheduling program and analyze their effectiveness. It is intended to be a local tool for operations and maintenance activities to use in support of their programs. Reviewing reasons for deviating from the flying and maintenance schedule will allow wing commanders (WG/CC) and staff to evaluate unit flying program and scheduling procedures.

Higher Headquarters (HHQ) management attention is directed to those areas beyond a unit's control.

2.2.1. **(Added-DAVISMONTANAFB)** Squadron and staff agencies will plan and schedule on an annual, quarterly, monthly, weekly, and daily cycle. Each agency involved in the scheduling process will provide its commitments and requirements as far in advance as possible to other organizations with which it interacts.

2.2.2. **(Added-DAVISMONTANAFB)** The primary goal of operations and maintenance scheduling is mission accomplishment by:

2.2.2.1. **(Added-DAVISMONTANAFB)** Successfully balancing all Programmed Flying Training (PFT) requirements with maintenance capabilities.

2.2.2.2. **(Added-DAVISMONTANAFB)** Meet mission requirements including exercise participation, pilot training requirements and currencies.

2.2.2.3. **(Added-DAVISMONTANAFB)** The FSs and AMXS are the basic organizations around which the 355 FW flying schedules are planned. To the maximum extent possible, daily scheduling decisions will be made at the squadron level. Other squadrons and staff agencies will provide assistance, guidance, and supervision as necessary to help the squadrons meet their operational goals. The total contribution of all squadrons and staff agencies will be directed toward the accomplishment of the wing mission. If the changes require additional support from other maintenance/logistics squadrons, the changes will be coordinated with them as well.

2.3. Objectives. This instruction allows units the flexibility to meet mission requirements through effective flying and maintenance scheduling. Scheduling evaluation procedures provides an audit trail to identify problems in flying and maintenance schedules. The primary purpose of unit scheduling assessment is to evaluate the effectiveness of the unit's flying program in support of combat capability.

2.4. Applicability. This publication is applicable to all CAF units possessing or supporting CAF aircraft, including contractor maintained aircraft.

2.5. Reporting Requirements. Units will use the Integrated Maintenance Data System (IMDS) reporting procedures. This includes contractor-maintained, wing assigned aircraft. In the event that the contractor is not obligated to utilize IMDS, the MXG commander is responsible to ensure all reporting procedures are followed. MAF units deployed to a combatant command reporting through CAF will continue to use G081 for tracking and scheduling deployed assets or equipment.

2.6. Standards. Standards and goals assist commanders in assessing the effectiveness of unit performance. The CAF aircraft maintenance scheduling effectiveness standard is 95 percent. There are two aircraft flying scheduling effectiveness (FSE) standards developed by HQ ACC/A4J, approved by HQ ACC/A4, and provided to the user each September. Overall FSE rate is measured using recorded deviation data as outlined in Chapter 4. Operations and Maintenance (O&M) FSE rate includes deviations only in the maintenance and operations categories.

2.7. Waivers. Waiver authority for this publication rests with HQ ACC/A4Q. ACC waiver requests are submitted by the WG/CC. See Attachment 2, Waiver/Change Request Format.

2.8. Standardization. Wings will develop a supplement to this instruction standardizing scheduling practices for the wing and each assigned mission design series (MDS). Minimum topics will include standardized flying windows, specific surge rules, quiet hour policies, cross country take-offs and returns, minimum turn times, crew ready times, etc. Supplements will include local schedule input and publishing deadlines along with any wing unique requirements.

2.8.1. **(Added-DAVISMONTHANAFB)** The flying window begins at the first local takeoff and ends at the last local landing. Any deviations to the window will be coordinated between each AMU officer in charge (OIC) and FS then briefed at the 355th Maintenance Group (MXG)/355th Operations Group (OG) weekly scheduling meeting a minimum of two weeks prior to affected week. All flying (local and cross-country, takeoffs and returns) will be conducted within the wing window. Flights are not authorized outside the window without 355 MXG/CC and 355 OG/CC approval which will be granted or denied during the 355 MXG/OG weekly scheduling meeting referred to in paragraph 2.7.

2.8.2. **(Added-DAVISMONTHANAFB)** See paragraph [9.12.3.1](#) for Quiet Hours information.

2.8.3. **(Added-DAVISMONTHANAFB)** See paragraphs [3.6.4](#) and [3.7.2.12](#) for local schedule input and publishing deadlines.

2.9. Airframe Capability and Scheduling. To ensure accurate projection of operations and maintenance capacity, units will compute airframe capabilities using only the number of Primary Aircraft Inventory (PAI) aircraft; do not include Backup Aircraft Inventory (BAI) or attrition reserve aircraft. Operational and training schedules will be based on the capability of PAI aircraft to execute the schedule. The OG/CC and MXG/CC will ensure BAI and attrition reserve aircraft are not computed when building the flying program.

2.10. Alert Aircraft. Aircraft Maintenance Unit (AMU) officer in charge (OIC) and Noncommissioned Officer in Charge (NCOIC) will ensure aircraft entering or coming off alert are managed to avoid Hangar Queen candidacy as a result of extended idle alert periods. Maintenance Data Systems Analysis (MDSA) will review sortie performance and reliability trends of aircraft coming off alert/immediate response (IR) and present performance analysis to affected AMU maintenance operations and MOF maintenance operations.

2.11. Electronic Publishing. Plans and schedules may be published via electronic means (e.g., web pages or E-mail) provided operations security is not compromised. Normal daily operations and training schedules are FOUO and should not be restricted to classified systems.

Chapter 3

FLYING AND MAINTENANCE SCHEDULING PROCEDURES

3.1. Flying and Maintenance Planning Cycle. The objective of the flying and maintenance planning cycle is to execute the wing flying hour program (FHP) consistent with operational requirements (AFI 11-102, *Flying Hour Program Management*) and maintenance capabilities. These procedures enhance operations and maintenance interface. The flying and maintenance planning cycle begins with the annual allocation of flying hours and UTE rates. For additional information on flying hour allocation and planning procedures for CAF units, AFI 11-102_ACC Sup, *Flying Hour Program Management*. Maintenance schedulers must understand operational needs to determine supportability and operations schedulers must consider maintenance capabilities. Maintenance and operations schedulers will develop a proposed annual flying plan balancing both operational requirements and maintenance capabilities. The annual plan, detailed by month, will evaluate the capability of maintenance to support the annual flying hour program. The plan will be coordinated and consolidated by OSS Current Operations Flight operations scheduling and forwarded to the current operations flight commander, AMXS/CC and Maintenance Operations Officer (MOO), Munitions Officer/Munitions Control, MOS/CC, MOF/CC and MOF PS&D. The printed wing plan will include an assessment of the wing's ability to execute the flying hour program. The plan will be presented to the OG and MXG CCs for approval before being approved by the WG/CC. Commit the fewest number of aircraft possible to meet programmed UTE rate standards and goals. The annual plan is further refined into quarterly/monthly operations and maintenance plans and then into weekly schedules using the guidelines contained in the following sub-paragraphs.

3.1.1. The number and length of sorties are of prime consideration in planning to meet programmed UTE rate standards/goals based on Flying Hour Program Development based on RAP Models or course syllabus.

3.1.2. Principal areas of concern are in the overall flying schedules. For mission accomplishment and improved efficiency, the following must be considered: maximize crew training on all flights, plan alternate missions when possible, ensure configurations and fuel loads are accurate, establish launch and recovery patterns, and utilize historical attrition data.

3.2. The Proposed Flying Hour Program Requirements.

3.2.1. Proposed FHP Process. The Proposed FHP process initiates funding and a unit's FHP for the next fiscal year. MOF PS&D and OSS/OSO lead the development of their Wing's Proposed FHP. It's critical that all operational requirements are reviewed and weighed against maintenance capability factors. Units will ensure thorough coordination with all assigned squadrons and aircraft maintenance units prior to ACC submission.

3.2.1.1. **Developing the Proposed FHP response:** MOF/PS&D and OSS/OSO will ensure the Proposed FHP process is initiated **NLT 15 March**. MOF PS&D will request that MDSA accomplish an airframe, personnel, and facility capabilities assessment, using ACC templates for each AMU based on historical data. The capabilities are due back to MOF PS&D no later than the last workday of March. This process identifies operational requirements and maintenance capability for the next fiscal year. Units will perform the flowing steps prior to submitting their Flying Hour Program to ACC/A3T.

3.2.1.1. (DAVISMONTHANAFB) 355 MOS will develop a Proposed Flying Hour team, this team will consist of as minimum; senior 2R1X1, 2R0X1 and MOS MOO or designee.

3.2.1.2. MOF MDSA will develop an initial airframe, personnel and facility capability study using ACC model templates.

3.2.1.3. MOF PS&D will refine the initial MDSA airframe capability by applying projected maintenance requirements to the historical data. MOF PS&D will provide copies of the capability study to each Operating Squadron (OS) operations scheduling AMU OIC/NCOIC, AMXS/CC/MOO and to MXS/CC/MOO.

3.2.1.4. NLT 5 duty-days after OSS/OSO receives (NLT 31 May IAW AFI 11-102 and ACC Sup) the “Proposed FHP” message, OSS/OSO will provide MOF PS&D a copy of “Proposed FHP” message and a breakdown of operational requirements to include at a minimum the following data:

3.2.1.4.1. O&M days

3.2.1.4.2. Sorties/hours/UTE rates (hourly & Sortie) required (programmed)

3.2.1.4.3. Sorties/hours Scheduled (programmed + attrition)

3.2.1.4.4. Average sorties per O&M day

3.2.1.4.5. NLT 15 duty days after OSS/OSO receives the “Proposed FHP” message, MOF PS&D will provide Proposed FHP maintenance capability projections in a monthly format to OS operations officer, AMU OIC/NCOIC, AMXS/CC/MOO. Projections include “Proposed FHP” operational requirements, an assessment of maintenance’s ability to support the monthly contract requirements, and an overall assessment of the unit’s maintenance capability to meet the annual flying hour program.

3.2.1.5. NLT 25 duty days after OSS/OSO receives the “Proposed FHP” message, MOF PS&D will gather the AMXS and OS coordinated responses to the Proposed FHP message and forward them to OSS Current Operations Flight operations scheduling section for consolidation into a comprehensive package that includes a breakdown of the following items by OS/AMU:

3.2.1.6. Utilization (UTE) rates.

3.2.1.6.1. Hourly UTE (HUTE) rates are the number of hours an aircraft must fly per month in order to meet the annual requirement. HUTE rates will be computed by month for the entire fiscal year for contracted (required) hours and scheduled hours. The HUTE rate equals the number of hours per month divided by the number of Primary Mission Aerospace Vehicle Inventory (PMAI) aircraft.

3.2.1.6.2. Sortie UTE (SUTE) rates are the number of sorties an aircraft must fly per month in order to meet the annual requirement. SUTE rates will be computed by month for the entire fiscal year for contracted (required) sorties and scheduled sorties. The SUTE rate equals the number of sorties per month divided by the number of PMAI aircraft.

3.2.1.6.2.1. Aircraft Authorizations:

3.2.1.6.2.1.1. HQ USAF specifies the PMAI for each unit in the USAF Programs: PA, Aerospace Vehicles and Flying Hours.

3.2.1.6.2.1.2. Units projected to possess less aircraft than authorized may be assigned a revised PMAI or Chargeable Aircraft Authorization (CHRG) for UTE and flying hour computations. The CHRG will be displayed for each applicable unit in allocation messages.

3.2.1.7. Sorties contracted/scheduled per day. Compute the number of sorties (hours) required per O&M day to meet the operational requirement using the formula: Number of sorties (hours) required divided by number of O&M days in a given month. Sorties (hours) per day will be computed by month for each operational squadron/AMU.

3.2.1.8. Monthly scheduled sorties. Compute monthly scheduled sortie requirements using the formula: (Number of sorties or hours required) divided by (1 minus the attrition factor). Example: 1,000 sorties or hours required divided by (1 minus 0.15) equals 1,177 sorties or hours to schedule. Remember to round any part up to the next whole sortie.

3.2.1.9. Phase/Isochronal (ISO) inspection dock capability. Compute the number of Phases/ISO inspections to be accomplished in order to meet operational requirements for each AMU, by month, for the entire fiscal year. Compute dock capability using the formula (number of O&M days) divided by (number of phase days) times (inspection cycle).

3.2.1.10. MOF/PS&D and MOF/MDSA will compute and provide the phase/ISO dock capability projection. This projection will be reviewed with AMXS and MXS supervision. Compute dock capability using the formula (number of O&M days) divided by (number of PH/PE/ISO days) multiplied by (inspection cycle) an example (20 O&M days/5 day phases X 400 hour inspection cycle = 1600 hours). This number correlates to how many airframe inspection hours maintenance can support in a given month.

3.2.1.11. NLT 30 duty days after OSS/OSO receives the "Proposed FHP" message, MOF PS&D and OSS/OSO will co-chair a Proposed FHP meeting with all required agencies. Agencies will include but are not limited to AMXS, MXS, MUNS, MSG (i.e. Fuels) and OS. Capability studies and operational requirements will be discussed and reviewed. Any maintenance, operational, or support shortfall will be noted and briefed to the MXG, OG and MXG CCs.

3.2.1.11.1. MOF PS&D and OSS/OSO will compile the airframe, personnel, and facility capability studies, operational requirements (paragraph 3.2.1.4), and any noted shortfall. A package will be prepared and briefed to group commanders (OG/MXG/MSG) prior to Wing/CC final approval. Once approved, the OG and MXG will provide ACC/A3T/A4J a coordinated "Proposed FHP" response message. The message will depict the operational requirements by month for the next fiscal year and provide an overall capability statement of the unit's ability to meet the plan. Maintenance and operational shortfalls will be noted and explained.

3.2.1.11.2. NLT 35 duty days after OSS/OSO receives the "Proposed FHP" message, once compiled, packages will be presented to the MSG, OG and MXG/CCs (or equivalents) before being presented to the WG/CC for final approval. MOF

PS&D will review the comprehensive package submitted to OSS Current Operations Flight operations scheduling section and provide feedback to AMU OIC/NCOIC, AMXS/CC/MOO and MXG/CC if required. Final assessments of maintenance capabilities to support the operations "Proposed FHP" projections are then sent to ACC/A3TB and ACC/A4J. The "Proposed FHP" response message is due to ACC/A3T NLT the "Propose FHP" message suspense date.

3.3. COMBAT AIR FORCES (CAF) Baseline Allocation Message. Once COMACC approves a unit's Proposed FHP response, the CAF Baseline Allocation message will become the contract between CAF (ACC) and the unit. This message will be forwarded to the unit **NLT 1 Sep** each year and will be the basis for the unit's annual flying and maintenance planning process. **NOTE:** Except for emergencies or HHQ tasking at year-end (e.g., hurricane evacuations or air sovereignty scrambles), **UNIT FLYING HOUR PROGRAMS WILL NOT BE OVERFLOWN** by more than 20 hours per MDS **WITHOUT PRIOR HHQ APPROVAL**. Unit commanders are not required to "zero out" their annual flying hour program at the end of the fiscal year. The last flying day of the year should be planned and flown as a normal flying day and should not be truncated solely because the annual flying hour contract has been satisfied.

3.4. Annual Maintenance Planning Cycle. The annual planning cycle develops the wings maintenance and operation plan to support/sustain the FHP established by the CAF Baseline Allocation message. MOF PS&D and OSS/OSO leads the development of their wing's annual plan. Both maintenance and operations are required to refine their requirements and re-evaluate their capability to support the FHP. It is critical that all factors are considered and operational requirements are balanced with maintenance capability throughout the year. MOF/PS&D will identify all major maintenance impacting airframe availability using IMDS products, such as Time Distribution Index (TDI), Planning Requirements (PRA), and Workable TCTO Report background products to determine long-range maintenance requirements. MOF/ PS&D & MDSA will validate all capability studies. OSS/OSO will validate their requirements and O&M days.

3.4.1. Developing the Annual Plan: MOF/PS&D and OSS/OSO will ensure the annual planning process is initiated **NLT 15 March** and their Final Flying Hour Program (Proposed FHP response) message is submitted to ACC/A3T/A4J NLT the "Propose FHP" message suspense date. Units will ensure the following steps prior to submitting their final Flying Hour Program (Annual plan).

3.4.1.1. (Added-DAVISMONTHANAFB) FSs have the primary responsibility to develop and coordinate a FHP with associated AMUs and will submit a yearly plan to 355 OSS/OSOS and 355 MOS/MOF in response to the annual "FHP" from ACC/DOT. Planning should look at Ready Aircrew Program (RAP), Programmed Flying Training (PFT), Historical Attrition Rates (HAR), Exercise Tasking (ET) and Operation & Maintenance (O&M) days. FSs and AMUs will work together to balance maintenance capabilities and FS requirements. FSs will develop an annual/monthly schedule by inputting planning factors into PEX. FSs will submit to 355 OSS/OSOS their FYxx monthly sortie and flying hour plan within two weeks of receiving first look message.

3.4.2. MOF/PS&D and MOF/MDSA build and validate all capability studies which includes: airframe, personnel, facility and phase/ISO dock projections. The studies will be

reviewed and analyzed with AMXS and MXS supervision. Capability shortfalls will be noted and briefed to the MXG/CC.

3.4.2.1. MOF/MDSA will provide updated attrition factors to MOF PS&D and OSS/OSO.

3.4.2.2. MOF/PS&D will provide all known major maintenance which includes but is not limited to: Programmed Depot Maintenance (PDM), Phase/ISO, Refurbishment, and major modification schedules.

3.4.2.3. MOF PS&D will calculate and provide an average aircraft availability per month.

3.4.2.4. OSS/OSO will validate their monthly breakdown of hours and sorties (based on RAP/contingency/curriculum requirements) in the baseline allocation message and provide maintenance the following planning factors:

3.4.2.4.1. TDYs (if known)

3.4.2.4.2. Exercises (if known)

3.4.2.4.3. Safety, training, UTE, family, and all non-O&M days

3.4.2.4.4. O&M days

3.4.2.4.5. Sorties/hours/UTE rate required (programmed). Yearly requirement broken out by month

3.4.2.4.6. Sorties/hours Scheduled (programmed + attrition). Yearly requirement broken out by month

3.4.2.4.7. Average sorties per O&M day

3.4.2.4.8. Suggested turn pattern

3.4.2.4.9. Configuration/munition requirements

3.4.3. NLT 15 duty days after OSS/OSO receives the "Proposed FHP" message, MOF/PS&D and OSS/OSO will chair an annual planning meeting with all required agencies. Agencies will include but are not limited to AMXS, MXS, MUNS, OS and MSG (i.e. Fuels servicing). Capability studies, operational requirements and planning factors will be reviewed and validated during this meeting. Maintenance and operational shortfalls will be noted and briefed to the MXG/CC and OG/CC.

3.4.4. NLT 30 duty days after OSS/OSO receives the "Proposed FHP" message, MOF/PS&D and OSS/OSO will prepare and brief the wing's annual maintenance and flying hour program to the group commanders (MXG/OG/MSG) prior to Wing/CC approval. Once Wing/CC approved, the OG and MXG will provide ACC/A3T/A4J a coordinated final Flying Hour Program message. The message will depict the operational requirements by month for the next fiscal year and provide an overall capability statement of the unit's ability to meet the plan. NOTE: If maintenance or operational capability does not exist to meet peacetime operational requirements due to split peacetime/AEF operations, or if a operational event impacts a unit's ability to execute, the unit has the option to revise their Flying Hour Program. This can be accomplished when submitting their annual plan or they can reflow

sorties/hours quarterly, as required. Changes to the total hours/sorties on the CAF Baseline allocation message require justification by the unit.

3.4.4.1. **(Added-DAVISMONTHANAFB)** A coordinated AMU and FS request to reflow flying hours or change the ACC approved flying hour allocation will be submitted to 355 OSS/OSOS by the 15 calendar day of the month preceding the affected month (if such proposal is required). 355 OSS/OSOS will submit proposals through 355 OG/CC commanders to HQ ACC/DOTB for approval. Program change and reflow proposal procedures are outlined in ACCI 11-103, *Management Reports and Guidance for Flying Hour Program*.

3.4.5. **(Added-DAVISMONTHANAFB)** After OG and MXG approval, 355 OSS/OSOS will forward the annual plan to FW/CC for approval and then send it to ACC/DO for incorporation into the ACC flying hour program. Once ACC distributes the FYxx baseline allocation message, 355 OSS/OSOS will break down the sorties/hours by Program Element Code (PEC). **Note:** The A-10 FTUs share the same PEC, so allocations should be based on unit tasking and requirements.

3.5. Quarterly Scheduling:

3.5.1. Quarterly scheduling starts with the operational requirement for flying hours, UTE rate, airframe availability, alert, and other related scheduling data. The OS operations officer provides these requirements to AMU OIC/NCOIC, MUNS Control NCOIC/Munitions OIC and PS&D NLT the first weekly scheduling meeting the month prior to the effective quarter. AMU supervision and the OS operations officer discuss these requirements at the scheduling meeting before the quarter being scheduled. Launch/recovery blocks, sortie flow timing, etc., are established based on training ranges (TR) and air refueling (AR) allocations.

3.5.2. Schedulers ensure quarterly plans are as detailed and accurate as possible at the time of preparation. Include known special missions, depot maintenance input and output schedules, higher headquarters commitments, and lateral command support requirements.

3.5.2.1. Use the following priority to determine which objectives to support if a lack of resources prevents meeting requirements:

3.5.2.1.1. Alert Commitments.

3.5.2.1.2. Higher-headquarters directed missions.

3.5.2.1.3. Training.

3.5.3. The OG/CC and MXG/CC jointly chair a quarterly meeting (calendar quarter, Oct - Dec, Jan - Mar, Apr - Jun, Jul - Sep) NLT the monthly meeting (can be held in conjunction with) prior to the effective quarter. A rolling 3-month plan briefed each month meets the intent of the quarterly scheduling process. OSS Current Operations Flight operations scheduling compiles, coordinates, and briefs the quarterly plan to include operational requirements, support capability, and difficulties expected. This meeting may be held in conjunction with the weekly scheduling meeting or as a separate scheduling meeting. Once an approved quarterly plan is established, OSS Current Operations Flight operations scheduling will forward a copy to OS, AMXS, MOS, OG, and MXG/CCs along with all scheduling agencies. The plan will be posted so it may be viewed by both maintenance and operations. When changes to the quarterly plan are required to achieve the unit objectives,

make necessary adjustments to the monthly and weekly plans while keeping within unit capabilities.

3.6. Monthly Scheduling:

3.6.1. Monthly plans refine quarterly requirements. Forecast and monitor requirements for the current and next 2 months. Include predictable maintenance factors based on historical data along with other inputs, such as flow times for maintenance, turnaround times and parts replacement schedules from the long-range plan. Additionally, include all known operational events (e.g., exercises, deployments, and surges) to determine maintenance capability to meet operational requirements.

3.6.1.1. Long-range maintenance plans will be developed in as much detail as possible. All maintenance requirements will be consolidated into a single long-range plan using AF Form 2401, *Equipment Utilization and Maintenance Schedule*, or computer generated Form. As a minimum, the long-range plan shows the current month and the next 2 months' known flying and maintenance requirements. Known maintenance requirements are defined as any maintenance event that impacts aircraft availability and maintenance events requiring management attention to ensure smooth flow of scheduling/completion. **Maintenance events should be consolidated during a single down period to the greatest extent possible.** As a minimum, include calendar inspections that prevent operational utilization for that day(s) flying schedule, calendar time change items, TCTOs in workable status, PDM schedules, training aircraft, cannibalization aircraft, and aircraft ISO/PE/Phase inspections. Specific locally developed codes will be used to identify each different special inspection, TCI, and TCTO on the AF Form 2401. Other maintenance requirements, such as engine changes, hourly requirements, inspections, training aircraft and cannibalization aircraft will be posted as they become known or planned. Add Alternate Mission Equipment (AME) inspections to the long-range plan if the aircraft is scheduled to stay in that configuration to ensure the inspections are included in the monthly and weekly schedules. Refine monthly and weekly schedules to ensure the quarterly plan objectives are met.

3.6.1.2. **(Added-DAVISMONTHANAFB)** AMU PS&D submits the AF Form 2401, *Equipment Utilization and Maintenance Schedule*, or computer generated product to MOF PS&D NLT 1200 Thursday of the third full week of the preceding month. FSs will ensure that monthly OSOS calendars are updated prior to the MXG/OG monthly scheduling meeting which occurs on the last Wednesday of the month.

3.6.2. The OS operations officers and AMU OIC/NCOIC will review their applicable portion of the monthly and weekly schedule prior to submission to MOF PS&D. To optimize aircraft and munitions support, MXS, AMXS and OS commanders will ensure the number of aircraft committed to the schedule and/or munitions configurations are minimized and standardized. Use the following sequence of actions to ensure monthly planning results in a contracted flying schedule. The monthly planning process is as follows:

3.6.2.1. NLT the first weekly OG/MXG scheduling meeting of the month, the OPS officer provides AMU OIC/NCOIC, MUNS Control/Munitions officer and AMU PS&D with the estimated operational needs for the following month in as much detail as possible. Include known take-off times, landing times, the flying hour window and

munitions configurations. If the take-off and landing times are unknown, block turn patterns are required.

3.6.2.2. NLT the second weekly OG/MXG scheduling meeting of the month, the AMU OIC/NCOIC tells the OPS officer whether requirements can be met or limitations exist which may prevent successful fulfillment of requirements. MUNS control NCOIC/Munitions officer tells the OPS officer whether munitions requirements can be met or limitations exist. Make adjustments to the proposed monthly flying and maintenance plan to satisfy maintenance and operational requirements.

3.6.2.3. NLT the third weekly OG/MXG scheduling meeting of the month, operations and maintenance formalize next month's plan prior to presenting it to the WG/CC for approval.

3.6.3. During the monthly meeting, OS scheduling outlines past accomplishments, status of flying goals, problems encountered, and detailed needs for the next month.

3.6.3.1. AMU/AMXS outline projected maintenance capability, and aircraft/equipment availability. MUNS control NCOIC/Munitions officer outlines projected munitions supportability.

3.6.3.2. Operational requirements and maintenance capability scheduling conflicts that are not solvable by planned alternatives will be arbitrated by the group and wing commanders to decide what portion of the schedule will be executed.

3.6.3.3. **(Added-DAVISMONTHANAFB)** FSs will submit monthly calendars for the upcoming fiscal year to 355 OSS/OSO for the 355 MXG/CC and 355 OG/CC approval. These calendars will include as much detail as available for required/scheduled sorties and special flying events such as live weapons drops and scheduled off-station operations.

3.6.4. When the proposed monthly flying schedule contract is agreed upon and approved by the WG/CC, it is included as a portion of the monthly flying and maintenance schedule. The monthly flying and maintenance schedule is published/distributed NLT 5 duty days prior to the beginning of the effective month. All agencies will submit their monthly plan inputs to MOF PS&D before presentation to the WG/CC.

3.6.5. The sortie/flying hour contract specifies the number of sorties and hours required to be flown. The contract is the final resolved product between operational requirements and maintenance capabilities. The total forecasted attrition factor will be considered and added to the required sorties to ensure fulfillment of the contract. The annual required sorties for the month, plus the historical attrition factor (note paragraph 8.1: MXG approved revised attrition is also permitted), is the basis for the development of the monthly flying and maintenance schedules. Attrition sorties are not substitutes for capability shortfalls; they are figured against the contract. The monthly flying schedule will reflect the number of sorties contracted, the number of attrition sorties added, and the number of sorties scheduled for each unit. **NOTE:** The calendar in Table 3.1. is an example month and represents when group and wing level quarterly, monthly, and weekly scheduling meetings should be held. The calendar also illustrates when maintenance and operations requirements must be met. **Each unit may hold scheduling meetings at times during the week/month convenient to the organization, as long as the timelines in this instruction are met.**

3.6.6. Included in the monthly flying and maintenance schedule are:

3.6.6.1. A detailed monthly operations utilization calendar which specifies total aircraft flying hours, total sorties and missions, alert requirements, and scheduled sortie or mission requirements, daily turn plans for each MDS by squadron, group, or wing.

3.6.6.2. Maintenance workload requirements.

3.6.6.3. Transient work schedule, if applicable.

3.6.6.4. Aircraft scheduled inspections, deployments, TCTOs, engine changes, time changes, contract or depot maintenance, washes, corrosion control, training aircraft, and alert commitments. The letter "F" (F2, F3, etc...) may be printed on the AF Form 2401 or automated product to reflect the number of sorties each aircraft is scheduled to fly and to facilitate TDI/Phase management. **As a minimum, automated Forms must reflect all required entries and standardized for each MDS.**

3.6.6.5. Support equipment (SE) scheduled inspections, contract or depot maintenance, TCTOs, time changes, washes, and corrosion control.

3.6.6.6. Avionics and other off-equipment maintenance to include scheduled inspections, TCTOs, assembly or repair operations.

3.6.6.7. Engine in-shop inspections and maintenance needs.

3.6.6.8. Munitions, photo, electronic countermeasures and other mission loading or configuration requirements, including ammunition changes.

3.6.6.9. Total ordnance requirements for aircraft support listed by quantity and type. Include the following statement in the schedule for units with munitions: "The types and quantities of munitions listed in this schedule, plus previous expenditures, do not exceed AFI 36-2217, *Munitions Requirements for Aircrew Training*, authorized allowances."

3.6.6.10. Tanks, racks, adapters, and pylons and war reserve materiel scheduled inspections, TCTOs, assembly, or repair operations.

3.6.6.11. Quality Assurance (QA) scheduled inspections listed by type and quantity unless published separately by QA.

3.6.6.12. If known as confirmed requirements, include special activities, such as commander's calls, group TDYs, unit physical training program and other unit formations.

3.6.6.13. Monthly training schedules, if not published separately.

3.6.6.14. Detailed support requirements, as applicable, including:

3.6.6.14.1. Petroleum, oil, and lubricants (POL) servicing.

3.6.6.14.2. Supply requirements.

3.6.6.14.3. Food service requirements.

3.6.6.14.4. Fire department requirements.

3.6.6.14.5. Security requirements.

3.6.6.14.6. Civil engineer requirements.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
-----	-----	-----	-----	-----	-----	-----

3.6.6.14.7. Airfield operations requirements

3.6.6.14.8. Nuclear munitions maintenance schedule

Table 3.1. Unit Planning/Scheduling Meeting Example Month.

					Ops provide next week's requirement to maintenance (2 duty days before OG/MXG meeting).	1
2 Week 1	3	4 OG/MXG Weekly Scheduling Meeting. Ops provides requirements for next month/quarter to AMU OIC/NCOIC AMXS maintenance operations/MUNS Control NCOIC/Munitions Officer.	5	6 WG/CC approves next week's plan.	7 Distribute next week's plan. Ops provide AMU OIC/NCOIC & AMXS maintenance Operations/MUNS Control NCOIC/Munitions Officer with following quarter/ week ops requirements.	8
9 Week 2	10	11 OG/MXG Weekly-Scheduling Meeting. Quarterly plan briefed. AMU OIC/NCOIC/AMXS maintenance Operations/MUNS Control NCOIC/Munitions Officer tells ops if next month's/quarter's requirements can be met.	12	13 WG/CC approves next week's plan.	14 Distribute next week's plan. Ops provides following week's requirements to maintenance.	15
16 Week 3	17	18 OG/MXG Weekly Scheduling Meeting. Monthly/Quarterly plan briefed.	19	20 WG/CC approves next week's/month's plan.	21 Distribute next week's plan. Ops provide following week's requirements to maintenance.	22
23 Week 4	24	25 OG/MXG Weekly Scheduling Meeting. Distribute next month's plan.	26	27 WG/CC approves next week's plan.	28 Distribute next week's plan. Ops provide following week's requirements to	29

					maintenance.	
30	31					
<p>NOTE: The calendar above is an example month and represents when group and wing level quarterly, monthly, and weekly scheduling meetings should be conducted and when maintenance and operations requirements must be met. Each unit may hold scheduling meetings at times during the week/month convenient to the organization, as long as the timelines in this instruction are met.</p>						

3.7. Weekly Scheduling:

3.7.1. Weekly scheduling is the final refinement to the monthly plan and results in the weekly flying and maintenance schedule. Its execution is measured by the procedures outlined in this instruction. The OS operations officer, AMU OIC/NCOIC, and AMXS Maintenance Operations review the proposed weekly flying and maintenance schedule with OS, AMXS, MXS and MUNS Control/Munitions officer prior to presenting it to the OG/MXG commanders. The group approved schedule will be submitted to the MOF PS&D for consolidation prior to submission to the wing commander. MOF PS&D reviews the schedules for adequate utilization of aircraft and proper scheduling of maintenance requirements. Weekly scheduling meetings will be conducted at the group and wing level as follows:

3.7.1.1. The OG/CC and MXG/CC, or their designated representatives, will chair the group meeting to consolidate and review proposed flying and maintenance plans. The OG and MXG will review the past week's accomplishments, negotiate alternatives, and approve refinements to the coming week's schedule.

3.7.1.2. The WG/CC will chair a weekly scheduling meeting at which the groups (OG and MXG) the MSG/CC will also attend this meeting, will present the flying and maintenance plan for approval. MOF PS&D ensures a completed (paper or electronic) copy is submitted to the WG/CC (or equivalent) at the weekly scheduling meeting.

3.7.1.2.1. At the scheduling meeting, evaluate the past week's accomplishments, to include Flying and Maintenance Scheduling Effectiveness, and refinements to the coming week's schedule.

3.7.2. NLT 2 duty days before the weekly scheduling meeting, the flying squadron operations officer gives the AMU OIC/NCOIC, AMU PS&D, EMS/CMS/MXS maintenance operations and MUNS Control/Munitions Officer the following information:

- 3.7.2.1. Aircraft take-off and landing times.
- 3.7.2.2. Configuration requirements.
- 3.7.2.3. Munitions requirements by quantity and type.
- 3.7.2.4. Fuel loads.
- 3.7.2.5. Special or peculiar mission support requirements.
- 3.7.2.6. Alert requirements.
- 3.7.2.7. Exercise vulnerability.

3.7.2.8. Deployments.

3.7.2.9. Off base sorties.

3.7.2.10. On-equipment training requirements.

3.7.2.11. Other special requirements.

3.7.2.12. Nuclear munitions maintenance schedule. **NOTE:** When one maintenance unit supports more than one flying unit at a base, the OS operations officers will consolidate and de-conflict those requirements and submit a single operational requirement to maintenance. This will ensure operational requirements do not exceed aircraft availability and maintenance capability.

3.7.3. Operations and maintenance schedulers discuss weekly needs and arrive at an acceptable, coordinated schedule for group commanders' review.

3.7.4. OG/CC and MXG/CC present the proposed flying schedule to the WG/CC for approval. If an agreement cannot be reached before the weekly scheduling meeting, the problem is referred to the WG/CC for decision. Once approved and signed by the WG/CC, OG/CC, and MXG/CC, the flying schedule is the final planning guide for both operations and maintenance and is a contract and every effort will be made to execute the schedule as printed.

3.7.4.1. **(Added-DAVISMONTHANAFB) NOTE:** AMU PS&D submits the weekly schedule to include, as a minimum, checkerboard, scheduled maintenance pages, and flying pages, to 355 MOS/MXOOP NLT 1200 Thursday for next week's schedule for 355 FW/CC's signature.

3.7.5. MOF PS&D ensures distribution of the schedule to each appropriate activity and workcenter NLT 1200L Friday morning. Units conducting night flying operations should distribute the schedule as soon as possible but NLT 1400L Friday. Automated methods are acceptable (ensure security requirements are met). Once printed in the weekly flying and maintenance schedule, the aircraft or equipment is made available to meet that schedule. MOF PS&D records maintenance scheduling deviations and forwards computations to MDSA weekly for publication in the monthly maintenance summary as outlined in Chapter 5. The maintenance operations center (MOC) reports flying scheduling deviations.

3.7.6. Units publish a weekly schedule for normal home base operations, deployments, (to include a printed schedule at the deployed locations, weapons training or detached site), and planned sortie surges. Units operating by daily ATOs will publish a schedule IAW paragraph 3.7 and filed as a weekly schedule after execution. Included in the weekly flying and maintenance schedule are:

3.7.6.1. Sortie sequence numbers, aircraft tail numbers (primary and spares), scheduled take-off and landing times, aircraft or equipment scheduled use times, configurations, fuel loads and special equipment requirements. **NOTE:** Units will publish landing times.

3.7.6.2. Spare aircraft requirements are based on projected aircraft first sortie logistics losses. Spare requirements are computed and printed by day for each unit in the weekly flying and maintenance schedule. See Chapter 8 for factors used to determine spares.

3.7.6.3. Scheduled maintenance actions by aircraft and equipment serial number to include inspections, TCTOs, time changes, contract and depot inputs, engine changes, washes or corrosion control, documents review, deferred discrepancies and hours remaining to phase/ISO. A job control number/event ID will be printed in the weekly flying schedule for each scheduled maintenance event.

3.7.6.4. Required pre-inspection and other maintenance meeting schedules to include minimum attendees.

3.7.6.5. Wash facility use.

3.7.6.6. Training requirements plus aircraft and equipment in support of these requirements.

3.7.6.7. Aerospace Ground Equipment inspection/maintenance schedule by type, serial number or identification.

3.7.6.8. Include the following statement in the schedule for units with munitions: "The types and quantities of munitions listed in this schedule, plus previous expenditures, do not exceed AFI 36-2217 authorized allowances." This statement eliminates the need for submitting certificates of authorization when ordering munitions to support the flying schedule.

3.7.6.9. A list of new or revised publications, T.O. indexes, inspection work cards, checklists and -6 codebooks, including release/change dates. Automated systems will be used, if available. **NOTE:** The AF Form 2402, *Weekly Equipment Utilization and Maintenance Schedule*, is used as a summary of the week. The AF Form 2403, *Weekly Aircraft Utilization/ Maintenance Schedule*, is more finite in the depiction of aircraft utilization and maintenance. Electronic versions of the above forms are authorized. Whatever forms are used, all requirements must be entered. Weekly schedules may be published electronically provided local security requirements are met.

3.7.6.10. **(Added-DAVISMONTANAFB)** Local demonstration team practice takeoff and land times, which will be printed in the weekly schedule flying pages. Print "as required" when takeoff times cannot be determined ahead of time. Takeoff times will be determined prior to pen and ink changes preceding the effective week, or normal deviation reporting applies (i.e. sorties without takeoff times will be considered an "Ops Add").

3.8. Changes to the Weekly Schedule:

3.8.1. Types:

3.8.1.1. Para Change - Pen-and-Ink. **The pen-and-ink AF Form 2407 is not intended to be used as a tool to extend the scheduling process by another day.** Pen-and-ink changes made to next week's schedule, submitted to the MOC by 1600 hours Friday or at the daily maintenance scheduling/production meeting, whichever occurs first are authorized (exception: NLT 2 hours after the last landing during printed wing night flying weeks). They are non-reportable and become part of the printed weekly flying schedule. An AF Form 2407 is required stating the changes are pen-and-ink. **NOTE:** The intent of the pen-and-ink AF Form 2407 is to correct minor errors and not complete revisions of the previously Wing/CC approved schedule.

3.8.1.1.1. Unit Training Assembly (UTA) Weekends. During scheduled UTA Weekend flying for classic Association units are allowed to accomplish pen-and-inks on the last scheduled fly-day (Saturday or Sunday). Approved pen-and-ink changes will be made to next week's schedule prior to 1600 hours local or 2 hours after the last landing during scheduled/published night flying.

3.8.1.2. Approved pen-and ink changes are non-reportable and become part of the printed weekly flying and maintenance schedule. An AF Form 2407 or electronic substitution is required stating the changes are pen-and-ink.

3.8.1.3. Tail Number Swaps. Tail number swaps should be used to prevent reconfigurations and unnecessary expenditures of work hours when the primary aircraft is not mission-capable by its scheduled take-off time. Every effort is made to make the aircraft tail number swaps at the daily maintenance production meeting the day prior to the aircraft scheduled flight and entered on the AF Form 2407. All tail number swaps made at the daily maintenance production meeting are entered on an AF Form 2407 for audit and analysis purposes.

3.8.1.4. Configuration. Configurations will be finalized at the daily maintenance production meeting and documented on an AF Form 2407. To prevent excessive expenditures of work hours, configuration changes made after the daily maintenance production meeting and prior to the first crew ready time the next day, require an AF Form 2407 coordinated through the required agencies.

3.8.1.5. **(Added-DAVISMONTHANAFB)** An AF 2407, *Weekly/Daily Flying Schedule Coordination*, or computer generated product is required for FCF/OCF sorties and will be approved by MXG/CC and OG/CC (or designated group-level representative). The 355 OG group-level representative is OG/CD, and the MXG group-level representatives are 355 MXG/CD and 355 MXG/MA. The FS representatives are as directed by the FS/CC. 355 AMXS representatives will come from 355 AMXS/MXA , and 355 EMS and 355 CMS representatives will come from the squadrons' MXM. Each AF 2407 is good for multiple FCF/OCF sorties or sortie attempts for one day. Multiple/subsequent FCF/OCF sorties or sortie attempts will be identified with different sortie sequence numbers.

3.8.2. **Procedures.** The initiator of AF Form 2407 will include the specific reason for each change. Any change to the printed schedule will require an AF Form 2407 with the following exceptions:

A change to the original printed take-off or landing time of 15 minutes or less.

A change of aircrew names, ranges, or airspace.

Any change arising after the first crew ready time for the affected AMU for that day unless adding aircraft or sorties, or expanding the flying window.

3.8.2.1. Changes made during the daily maintenance production meeting also require an AF Form 2407. The agency requesting the change initiates the AF Form 2407 and coordinates it through the affected production superintendent, AMU OIC/NCOIC, AMXS maintenance operations, operations squadron operations officer, operations group, Munitions Control, maintenance group, and wing staff agencies, as applicable (i.e. MOC, PS&D, etc.). Coordinate changes affecting munitions requirements with Munitions Control to ensure proposed munitions changes can be met. The requested

changes should be coordinated prior to the daily maintenance production meeting to allow sufficient time to determine supportability of the change.

3.8.2.2. Changes arising after the first crew ready time for the remainder of the flying day, such as tail number swaps, do not require an AF Form 2407; however, these changes will be coordinated by telephone or radio with all affected agencies. **EXCEPTION: Any aircraft, sortie added to the flying schedule and any sortie duration changes that extends flying or landing beyond the flying hour window will be coordinated using an AF Form 2407.**

3.8.2.3. After coordination, a copy of the AF Form 2407 is filed in the MOC. The MOC will ensure MDSA receives all AF Form 2407s for deviation accounting. AF Forms 2407 will be disposed of IAW RDS.

3.8.2.4. MOF PS&D will input all pen-and-ink changes in IMDS operational events subsystem using procedures in AFCSM 21-565V2, *Operational Event Subsystem*. After the Friday daily maintenance production meeting, MOC will input all changes (non-pen-and-ink). Maintenance Debrief will input utilization data for all sorties considered "flown as scheduled" (i.e. FCF/OCF, X/C returns, surge second and subsequent goes). Any AF Form 2407 coordinated changes made after pen-and-inks have been made and posted to IMDS by MOF PS&D will be input by MOC into the Maintenance Information System (MIS). **NOTE:** Use of the AF Form 2407 does not negate the recording of deviations.

3.8.3. **AF Form 2407 Approval Authority.** All AF Form 2407 changes that add aircraft and/or sorties or increase the flying window require both OG and MXG commander (or group level representative, designated in writing by group commander) approval. All other AF Form 2407 changes will be approved by the affected squadron commander(s) (or designated representative). The MOC will coordinate higher headquarters directed taskings that require immediate execution. Electronic coordination is acceptable provided receipt is acknowledged and the sender enters the name of the person notified and the date/time on the AF Form 2407.

3.8.3.1. Pen-and-ink AF Form 2407 also require OG and MXG approval. The group approved pen-and-ink AF Form 2407 is required because pen-and-ink AF Form 2407 change the schedule/contract signed at the weekly scheduling meeting and becomes the new basis for deviation recording.

Chapter 4

FLYING SCHEDULING EFFECTIVENESS

4.1. Purpose. This chapter defines flying schedule deviations and provides formulas for computing FSE. FSE is a tool to identify those processes within the wing's control that can be improved to help drive down turbulence for both the operator and maintainer.

4.1.1. A cornerstone of successful flying scheduling and execution is an understanding of how the schedule is executed versus how it was planned to be executed. These differences in scheduled versus actual events are only recorded in the execution phase of the scheduling process and are called deviations. Deviation data must be recorded so that follow-up analysis can identify the appropriate corrective actions if any are needed. Without deviation data, this analysis is impossible. Deviation data recording and analysis is the beginning of the process that will in the end, improve unit's flying operations. The unit is responsible for documenting deviations to the weekly flying and maintenance schedule and determining the cause for each deviation. Deviations must be coordinated with the appropriate squadron/AMU before being assigned to a specific category. Schedule deviations that result from a sequence of events will be assigned a primary cause. A determination of the primary cause will be made by the parties involved to arrive at a unit position. The OS operations officer and the AMU OIC/AMXS maintenance operations, along with MOF maintenance operations, will monitor deviations to ensure they meet the criteria in this publication. When conflicts arise, leadership of involved units will resolve them at the lowest level. All deviations will be recorded as described in this publication.

4.1.2. Flying Scheduling Effectiveness (FSE). This leading indicator is a measure of how well the unit planned and executed the weekly flying schedule. The flying scheduled developed by tail number is the baseline upon which the FSE is derived by comparing each day's deviations. Deviations that decrease the FSE from 100% include: Scheduled sorties not flown because of maintenance, supply, operations adds, deletes, and ground aborts; scheduled sorties that take-off more than 30 minutes prior to scheduled take-off; scheduled sorties that take-off more than 15 minutes after their scheduled take-off time. Disruptions to the flying schedule can cause turmoil on the flightline, send a ripple effect throughout other agencies, and adversely impact scheduled maintenance actions. [Adjusted Sorties Scheduled = Total Sorties Scheduled - Sorties Cancelled for Monthly/Yearly Utilization Rate Achievement + Sorties Added for End of Fiscal Year UTE Close Out]. Reference ACCI 21-118, *Logistics Maintenance Performance Indicator Reporting Procedures*, for FSE computations.

4.2. Requirements. Flying scheduling effectiveness computation and deviation recording are required for all CAF assigned aircraft. Reporting procedures are contained in Chapter 7 of this publication.

4.3. Flying Schedule Deviations.

4.3.1. Schedule deviations apply to the printed weekly flying and maintenance schedule, even though a coordinated change is accomplished using an AF Form 2407. When a unit coordinates a change to the printed weekly flying schedule, using an AF Form 2407, the unit is informing everyone of the changed information and deviations will be recorded as

appropriate. **Multiple deviations against a single line entry will not count towards FSE except for (a) additions that air or ground abort, (b) additions that cancel, (c) added aircraft/sorties that take-off late, and (d) late take-offs that air abort.** The AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*, is the official source document for take-off and landing data. For all deviations, the person recording the deviations in IMDS will provide a detailed explanation in the remarks section and a Job Control Number/Event ID in IMDS screen 350 for all maintenance CX, GAA, GAB, GAC, AA, AI, and FE. Flying schedule deviations fall into one of the following categories (See Table 4.1 for common deviations):

4.3.2. Ground Deviations. Ground deviations are events occurring before aircraft take-off. All ground deviations are recorded in IMDS and used in flying scheduling effectiveness calculations unless otherwise noted. Specific ground deviations are:

4.3.2.1. Addition (AD). A sortie or aircraft added to the schedule not previously printed on the weekly schedule, will be recorded against the agency (OP, MX, HQ) requesting the additional sortie or aircraft. Sorties added to the schedule will be used in Total Sorties Scheduled for Flying Scheduling Effectiveness computation. Aircraft added to the schedule will not be used as a part of the Total Sorties Scheduled for Flying Scheduling Effectiveness computation; however, aircraft adds (i.e. added spares) will be captured in the FSE Calculated-Deviations computation.

4.3.2.1.1. Functional Check Flights (FCF) and Operational Check Flights (OCF) whose primary purpose is to perform maintenance checks are not addition deviations but will be coordinated using AF Form 2407. FCF/OCF sorties and sorties originating off-station without home-unit support will be considered "flown as scheduled" without recording deviations. FCF "chase" aircraft, when accompanying FCF/OCF training or checkout sortie for single seat MDS only (i.e. A-10) will be considered "flown as scheduled" without recording deviations. The FCF "chase" is for FCF qualified operator to conduct and/or evaluate training/checkout only. **NOTE:** All additions will be coordinated using the AF Form 2407 and approved IAW paragraph 3.8.3.

4.3.2.2. Cancellation (CX). An aircraft or sortie removed from the printed schedule for any reason prior to crew show. **For hard line sorties (sorties supporting other defense customers), cancellations occur when it is determined the originally scheduled mission cannot be met.** For training sorties, if the sortie can launch and recover during the squadron's flying window and perform its original mission, a cancellation is not recorded. If any sortie does not launch within the late take-off criteria, a late take-off is recorded.

4.3.2.3. Early Take-off (ET). An early take-off is a scheduled sortie launching more than 30 minutes prior to the published take-off time. **EXCEPTION:** Do not record early take-off deviations for hot pit turn sorties.

4.3.2.4. Late Take-off (LT). A late take-off occurs when a scheduled sortie becomes airborne more than 15 minutes after the scheduled take-off time. If the printed tail number is a ground abort and is replaced with a spare that takes off late, only the late take-off is computed in FSE. Another example is if an aircraft landed late, after the published landing time, and subsequently takes off late due to insufficient time to turn the

aircraft, the late take-off deviation is recorded to the original cause for the late landing, such as, operations. Commanders must consider the impact when a sortie takes off late and the aircraft is scheduled to turn to another sortie that day. It may be best to shorten the sortie duration after a late take-off and land at the scheduled landing time, rather than fly the scheduled duration, due to a higher priority mission later in the day.

4.3.2.4.1. **EXCEPTION:** RQ-4, U-2, C-130 series, C-135 series, E-3, E-4, E-8, B-1, B-2, and B-52 weapon systems will use 30 minutes for late take-off.

4.3.2.5. Spare (SP). A spare is a designated aircraft on the printed schedule to be used in case a scheduled primary aircraft cannot fly its scheduled sortie. Spare aircraft can also include aircraft that are scheduled to fly in sorties later in the day, have aborted from an earlier sortie, have flown earlier or released after FCF/OCF. Do not count printed spares flown in scheduled lines as deviations when computing FSE.

4.3.2.6. Tail Number Swap (TS). Tail swaps are changes to the printed flying schedule involving aircraft tail numbers printed on that day's schedule. Tail swaps may be made up to crew show time. Tail swaps made after crew show are recorded as spare. The MOC must be notified of all tail swaps and record all tail swaps in IMDS. Do not count Tail Number Swaps as deviations when computing FSE. Below are specific examples of tail swaps:

4.3.2.6.1. Changing aircraft in printed line numbers with printed spare aircraft.

4.3.2.6.2. Changing aircraft in printed line numbers to different printed line numbers.

4.3.2.6.3. Changing aircraft in printed line numbers to any previously flown aircraft. For example, tail swaps are allowed for aircraft after release from OCF/FCF or XC return aircraft.

4.3.3. **Air Deviations.** Air deviations are events occurring after take-off. They are recorded in IMDS but are not included in FSE calculations. Ground deviations take precedence over air deviations when only one deviation can be loaded in IMDS. Air deviations fall into the following categories:

4.3.3.1. Air Abort (AA). An air abort is an aircraft/sortie that cannot complete its mission for any reason. Air aborts are considered a sortie flown against the flying hour program when reporting total sorties flown, but may not be considered a successful sortie based on mission effectiveness by operations to meet RAP/training/contingency requirements. Air aborts will be coded to the agency or condition that caused the aborted mission. **NOTE:** Effective mission decisions will be made by operations; however, a non-effective mission decision by operations does not necessarily mean an air abort occurred as defined in ACCI 21-118. For example, if one planned mission task out of a planned five tasks is not completed or operations flies an alternate mission (adversary, drone, etc..) and does not return the aircraft immediately to maintenance, the sortie should not be coded as an air abort if operations later determines, based on the original mission profile, the sortie was non-effective. The Air Abort rate is used as a maintenance reliability indicator and as a measure of re-work (sorties reflight).

4.3.3.2. Air Abort, IFE (AI). An air aborted aircraft/sortie with a situation resulting in an in-flight emergency declared by the aircrew.

4.3.3.3. Early Landing (EL). An early landing is an aircraft/sortie landing more than 30 minutes before the scheduled landing time. Early Landing deviations are not used when computing FSE.

4.3.3.4. IFE (FE). An aircraft/sortie with a situation resulting in an in-flight emergency declared by the aircrew after the mission is accomplished.

4.3.3.5. Late Landing (LL). A late landing is an aircraft/sortie landing more than 15 minutes after the scheduled landing time. If the sortie originated on time, record any subsequent late take-off or cancellation against the agency that caused the late landing. If the extended sortie did not originate on time, record any subsequent sortie deviation against the agency that caused the original delay. Late landings are not included in FSE calculations.

4.3.4. **Ground Aborts.** A ground abort by itself is not a deviation from the flying schedule, but can cause a deviation such as lost sortie or late take-off. A ground abort is an event after crew show time preventing a “crew ready” aircraft from becoming airborne. Ground aborts will be recorded to the responsible agency or condition that caused the aircraft to abort. Ground aborts are categorized as GAA, GAB, GAC, operations, HHQ, weather, sympathy, other, etc. For maintenance ground aborts do not use cause code MTx, only use GAA, GAB, or GAC. For example, if an aircraft ground aborts and the sortie is not replaced by a spare, the lost sortie is a deviation towards FSE. Ground aborts on FCFs or OCFs will be recorded in IMDS, but not used when computing FSE.

4.3.4.1. If a ground aborted aircraft is replaced by a spare, and the spare can meet the mission requirements, the original aircraft will be coded as a “**spare ground abort.**” **NOTE:** This is not used in computing FSE.

4.3.4.2. If the original aborted aircraft is launched on the original scheduled mission, but exceeds the 15-minute late take-off criteria, the sortie will be recorded as a late take-off.

4.3.4.3. If the aircraft lands, takes fuel via the hot pits, incurs an NMC condition after completion of hot pit refueling (receptacle disconnected) and can no longer continue, a ground abort is recorded.

4.3.4.4. If an aircraft ground aborts and is replaced by a spare and the spare ground aborts causing the sortie not to be flown, both ground aborts will be counted in the overall ground abort rate, the lost sortie will be considered cancelled and included as the deviation in FSE. The first ground abort would not be used in computing FSE.

Table 4.1. Common Flying Scheduling Effectiveness Deviation Determination Matrix.

Event	Is the deviation		Remarks
	Recorded in IMDS?	Calculated in FSE?	
Pen-and-Ink changes to the schedule are made on an AF Form 2407 (IAW paragraph 3.10.1.1)	No	No	Pen-and-Ink changes are not deviations and are considered part of the printed schedule. See paragraph 3.8.1.1
Take-off or landing time is	Yes	Yes	See paragraphs 3.8.1.

changed after approved Pen-and-Ink submissions via AF Form 2407			Calculation in FSE is determined by late and early criteria in paragraphs 4.3.2.3 and 4.3.2.4.
Aircraft configuration is changed after approved Pen-and-Ink submissions via AF Form 2407	No	No	These changes will be tracked locally to prevent reoccurrence and get a true picture of the total scheduling turmoil.
A sortie is added to the flying schedule (excluding OCFs/FCFs, XC return)	Yes	Yes	Para 4.3.2.1
A sortie is added for an OCF/FCF/OCF/FCF "Chase"	No	No	These are considered flown as scheduled, paragraph 4.3.2.1.1
A sortie is canceled	Yes	Yes	Once the decision is made to cancel the sortie, it is a cancel. If a decision is made after the cancel to go ahead and fly the sortie, it becomes an added line. Para 4.3.2.2.
A sortie is determined to be non-effective	No	No	Not a deviation. The determination is made by operations and has no bearing on FSE. Para 4.3.3.1
A take-off is determined to be late	Yes	Yes	Para 4.3.2.4
A take-off is determined to be early	Yes	Yes	Para 4.3.2.3
A landing is determined to be early or late	Yes	No	A late landing may result in a late take-off on a subsequent sortie. See paragraph 4.3.3.5. to determine the cause of the subsequent late take-off.
During a surge, more sorties are flown than were printed and the statement "Sortie Surge" is NOT printed in the remarks section of the affected day's flying schedule	Yes	Yes	Sorties printed in the weekly schedule will be flown as printed. Additional sorties not printed will be considered added lines. Para 4.3.2.1. & 4.10.1

During a surge, more sorties are flown than were printed and the weekly schedule contains "Sortie Surge" in the remarks section of the affected day	No	No	During planned and printed surges and combat sortie generations, additional lines are considered flown as scheduled. Para 4.10.1.5.
During a surge, an aircraft turn sortie takes off early or late	No	No	Units should track late take-offs of turn sorties locally during surges to prevent reoccurrence. Late take-offs are recorded for surge first go sorties. Para 4.10.1.4
Maintenance is performed during a stop in a continuation sortie and the mission continues	Yes	Yes	An "add" is recorded for the subsequent sortie. Be sure the added line is designated as a continuation sortie to prevent further deviations for other scheduled stops. Para 4.10.2.
A sortie is added to the schedule for weather attrition	Yes	No	Para 4.5.2.
A sortie is canceled at any time due to weather	Yes	Yes	Prior to crew show it is a cancel, after crew show, it is a weather abort. Paras 4.3.2.2 & 4.3.4
A spare aircraft printed on the flying schedule is used in a printed line.	Yes	No	Para 4.3.2.6
An aircraft in the printed schedule is swapped with an aircraft in another printed line	Yes	No	Para 4.3.2.6.2
An aircraft not printed in the flying schedule is used in a printed line. (excluding aircraft already flown that day such as OCF/FCF, X-Country returns)	Yes	Yes	One deviation is recorded for the added aircraft. The result is the same as adding an aircraft as a spare, then tail swapping it into a printed line. Para 4.3.2.1
An aircraft not on the printed flying schedule is added as a spare.	No	Yes	Counts as a FSE deviation even if the aircraft does not fly. This has to be manually done by MDSA because there is no required IMDS

			transaction that captures this. Para 4.3.2.1
An aircraft not printed in the flying schedule that has flown that day is flown/used in a printed line	Yes	No	Examples include previously flown FCF/OCF aircraft as well as cross country returns. Para 4.3.2.6.3
A ground abort is replaced with a another aircraft/spare on the printed schedule	Yes	No	Both the ground abort and spare action will be recorded in IMDS. If the replacement aircraft takes-off on time, no deviation is recorded. Para 4.3.4.1
A printed aircraft ground aborts and is replaced with an aircraft NOT on the printed schedule and the second aircraft also ground aborts and the original aircraft is fixed, takes off late, and flies the sortie.	Yes	Yes	The original aircraft is recorded as a ground abort and late take-off. The second aircraft is recorded as an “add” and a ground abort. Ground aborts in themselves are not deviations calculated in the FSE rate, but are calculated in the ground abort rate. Paras 4.3.2.2; 4.3.2.4 & 4.3.4.4

4.4. Deviation Causes. Deviations will be assigned a primary cause. See guidance in paragraph 4.1.1. to resolve questions concerning assigning deviations between maintenance and operations. Deviations will be assigned one of the following causes:

4.4.1. Maintenance (MT_). Deviations resulting from aircraft discrepancies, unscheduled maintenance, or for actions taken for maintenance consideration.

4.4.2. Operations (OP_). Deviations resulting from operations/aircrew actions, mission changes causing an early/late take-off, or cancellation including substitution/aircrew illness (including short notice aircrew physical/mental disqualification), and over-stressing the aircraft. OP_ are also deviations resulting from unit controlled operations factors including those caused by mission/load planning, life support, intelligence, base operations, range scheduling, and passengers.

4.4.3. Supply (SU_). Deviations resulting from a Partially Mission Capable Supply or Not Mission Capable Supply condition or for late Supply or POL delivery. See AFMAN 23-110, *USAF Supply Manual*. **NOTE:** The actual time required for installation will be considered.

4.4.4. Higher Headquarters (HHQ). Deviations resulting from a higher headquarters tasking including closing of low level routes/ranges or external customer driven mission change. When an aircraft that was scheduled for a higher headquarters directed alert or off-base mission is replaced by a spare refer to paragraph 6.5 for unit options.

4.4.5. Weather (WX). Deviations resulting from weather conditions such as sorties canceled because of severe weather conditions. For example, if an aircraft taxied to the end of runway and the wing commander cancels all flying due to weather, the deviation is a weather abort. Sorties/Aircraft cancelled prior to crew show are weather cancels.

4.4.6. Sympathy (SY). Deviations occurring when a flight of two or more aircraft, under the command of a flight leader or instructor pilot are canceled, aborted, or late due to a cancellation, abort, or delay of one of the aircraft in the flight or a supporting flight. Flights engaged in Dissimilar Air Combat Tactics training that are delayed by the other flight will record the delay as sympathy. Sorties, which are to replace sympathy aborts or cancellations on the same day, will be recorded as sympathy additions. Sorties lost caused by the aircraft's scheduled mated tanker/receiver/mission event will be recorded as sympathy. Examples of mission events are: loss of release times, tanker support, Minimum Interval Take-Off causing take-off delay or cancellation, deviations caused by another unit's or command's support should be coded as SY deviations. **NOTE:** Deviations caused by aircraft/missions earlier scheduled lines will be assigned to the cause of the earlier deviation, not SY.

4.4.7. Air Traffic Control (AT). Deviations resulting from air traffic control problems (for example, flight clearance delays, tower communication failure, conflicting air traffic, runway change, or runway closure).

4.4.8. Other (OT). Deviations resulting from unusual circumstances not covered by other causes listed. OT may include:

4.4.8.1. Malfunctions, failures, or necessary adjustments to equipment undergoing tests or evaluations associated with Operational Testing and Evaluation (OT&E), Development Testing and Evaluation (DT&E), or Initial Operational Testing and Evaluation (IOT&E).

4.4.8.2. Unusual circumstances such as bird strikes, damage during air refueling, and unscheduled alert swap out.

4.4.8.3. Equipment, non-CAF. Deviations caused by National Airborne Operations Center or Air Intelligence Agency or Air Force Material Command equipment, and other non-CAF support and equipment.

4.4.9. Utilization Day (UTE). Commander's authorized management deletions IAW paragraph 4.5.3.

4.4.10. Exercise, Higher Headquarters (XEH). Deviations resulting from higher headquarters directed exercises, including alarm/force protection conditions.

4.4.11. Exercise, Local (XEL). Deviations resulting from wing/unit directed exercises, including alarm/force protection conditions.

4.5. Scheduling Exceptions:

4.5.1. **Limited Number of Possessed Aircraft.** AMUs with 11 or fewer possessed aircraft of a particular MDS, or 50% of their possessed aircraft deployed, are authorized to schedule tail numbers daily. Units may consider alert/IR aircraft and aircraft in possession code PJ or PR as non-possessed when applying the 11 or less rules. Units will print aircraft tail numbers in the weekly schedule. Aircraft tail numbers may be changed at the daily maintenance production meeting using AF Form 2407 without recording deviations (**sorties added or**

canceled are chargeable). Immediately following the daily maintenance production meeting, the selected aircraft tail numbers for the next day's flying schedule will be entered in IMDS. Once tail numbers are selected at the daily maintenance production meeting, normal deviations will be recorded. Although aircraft tail numbers may be changed at the daily meeting, maintenance and flying scheduling effectiveness is measured against the printed weekly schedule. **Aircraft tail number changes will be chargeable against FSE after tail numbers are confirmed during the daily maintenance production meeting.** **NOTE:** No additional sorties may be added under this scheduling option without addition deviation rules being applied as applicable in paragraph 4.3.2.1.

4.5.2. Adverse Weather. Units may add sorties to the flying schedule to make up for weather losses. Sorties will only be added to the schedule when the planned weather attrition for the month, prorated daily, has been exceeded for that month. The number of sorties added will not exceed the difference between the planned weather attrition and actual weather losses. Sorties added for weather that do not exceed prorated weather attrition, are not included in OP-MT-FES-Rate. **(EXAMPLE:** Planned weather attrition for the month equals 30 sorties. On the 10th O&M day of the month (of 20) a unit's weather losses are already 30 sorties. The unit may add 15 sorties (weather "adds"). The maintenance schedule and the ability of maintenance to support the additional requirements must be carefully considered before adding sorties. Under no circumstances will the number of sorties added for weather exceed the difference between actual weather losses and the prorated expected weather losses for the month. See Chapter 8 for example of computing weather attrition for the flying schedule.)

4.5.3. Achievement of Utilization (UTE) Rate. Utilization management is accomplished throughout the month. Attrition should be closely monitored and a determination to adjust the number of sorties required should be made before each weekly schedule is developed. This practice ensures an even sortie flow, eliminates excessive maintenance actions and limits the number of sorties canceled. The operations group commander is responsible for the flying program and, in coordination with the maintenance group commander, can add or cancel sorties anytime during the month. However, flying scheduling effectiveness will be recorded when changing the weekly schedule. The operations group commander, in coordination with MXG/CC and MSG/CC, is encouraged to modify or cancel all or part of the schedule when they are reasonably assured the UTE rate goal for the month will be met. Sorties may be cancelled for UTE management during the last five O&M days of the month and will be recorded as "UTE." Sorties cancelled for UTE are not included in FSE. See AFI 11-103, *Aircraft Standard Utilization Rate Procedures*, and AFI 11-102 ACCSUP for UTE rate development policy.

4.5.4. Achievement of Student Training Goals (TF coded and Flying Training Units only). The squadron commander may, when an OS has achieved its monthly training goal, adjust the weekly printed flying schedule. Mission take-off times, configurations, etc., may be changed without incurring deviations. All changes will be made at the daily maintenance production meeting and will be documented on an AF Form 2407. Once the schedule has been changed, normal deviation reporting applies. This option allows units the flexibility to maximize use of those sorties originally scheduled for student training.

4.5.5. Year End Closeout. During the last 15 O&M days of the fiscal year, units are permitted to selectively add/cancel scheduled sorties to manage the end-of-year flying hour

closeout. These additions/cancellations will be recorded as "UTE." This provision is intended to help units gradually close out end-of-year flying without creating hangar queen aircraft and unintentionally exceeding the UTE rate. Sorties cancelled for UTE are not included in FSE. However, sorties requiring munitions support should be evenly distributed throughout the fiscal year to preclude a high demand for munitions support during the month of September. IAW AFI 21-201, *Conventional Munitions Maintenance Management*, semi-annual inventories must be started and finished in the months of March and September.

4.6. Combat Sortie Generation. Combat sortie generations are conducted to exercise the wing's ability to meet to the unit's combat sortie generation tasking under current war plans and contingency operations.

4.6.1. For scheduled combat sortie generations, publish the weekly flying schedule as a normal schedule. On the days the unit plans to exercise annotate scheduled exercise on the flying schedule and AF Form 2402, AF Form 2403 or electronic version. If an unannounced exercise is initiated, the remainder of the printed weekly schedule may be canceled and may be deleted from IMDS by the AMU PS&D.

4.6.2. Combat sortie generation will usually include operations using Air Tasking Orders. See paragraph 4.7 for ATO procedures.

4.6.3. When a scramble launch scenario is used, a launch "window" will be established for each line number or block of line numbers. Normal deviations will be assessed against all sorties.

4.6.4. Sorties lost due to required scenario responses such as chemical warfare condition black, airfield attacks, etc., will be recorded as "XEH or XEL."

4.6.5. If more sorties are flown than line numbers printed, those sorties will be considered flown as scheduled.

4.6.6. Once the objectives established by higher headquarters or the commander have been met, the remainder of that day's schedule may be canceled/deleted from IMDS by the MOF PS&D.

4.6.7. At the termination of the combat sortie generation, the unit's originally printed weekly flying schedule may be revised, canceled, or replaced with a new weekly schedule without recording deviations. Normal deviation reporting procedures will apply once finalized.

4.7. Air Tasking Order. The Air Tasking Order (ATO) can contain mission numbers, on-status time/time on target and configurations. A daily flying schedule, including aircraft tail numbers for the first lines and spares, will be finalized and confirmed to operations and the maintenance operations center not later than 2 hours prior to the first on-status/take-off time. The new published schedule derived from the ATO, is applicable to all affected organizations and no AF Form 2407 is required to implement the new schedule. All changes after the new schedule has been published, up to the first unit crew show time, will be documented and coordinated on an AF Form 2407. Unlike a planned sortie surge, early and late take-offs are recorded on second and subsequent sorties, unless an ops change is made to the ATO. Normal deviations will be recorded against all sorties using the new published schedule derived from the ATO. **NOTE:** All sorties launched under "Classified ATOs" will be considered flown as scheduled. Classified ATO lines that are missed will be recorded as cancels in the MIS. Cancellations will be loaded

into the MIS once the sortie is declared cancelled regardless of actual scheduled take-off time and ground aborts will be recorded in MIS.

4.7.1. **Alert Sorties.** Sorties flown from alert because of a higher headquarters exercise, active air or practice scramble, or committed to fly from alert on the printed weekly schedule will be considered sorties flown as scheduled. Ground aborts will be recorded in MIS however no deviation is recorded against FSE, but the ground abort is recorded in MIS.

4.8. Unscheduled Tasking. When a unit is tasked with an unscheduled higher headquarters tasking or self-initiated tasking (mobility exercises or weather evacuations), or other services tasking which significantly impacts the printed weekly flying schedule, the printed schedule may be revised or deleted from IMDS by MOF PS&D and replaced with a new weekly schedule without recording deviations. For weather evacuations, the schedule will be cancelled in IMDS, not deleted, so the data is available for historical attrition.

4.8.1. If the schedule is revised or canceled and reprinted, the following procedures will be used:

4.8.1.1. Normal deviation reporting procedures will be followed once the revised/reprinted schedule has been finalized. The revised schedule will be finalized a minimum of 2 hours before the first scheduled launch.

4.8.1.2. Once the tasking terminates, the original schedule may be used or it may be revised or reprinted for the tasking period, as required. Normal deviation reporting is used once the revised or reprinted schedule is finalized.

4.8.1.3. Normal deviation reporting procedures will be followed after a take-off time is established to a tasking by higher headquarters or other services.

4.8.2. If the unscheduled tasking has an adverse impact on the monthly UTE rate goal, the commander has the option to adjust the monthly sortie UTE rate goal.

4.8.3. An unscheduled tasking or actual combat operations may include use of an ATO. Deviations for all aircraft will be recorded IAW this instruction. For AMC aircraft assigned to a CENTAF AOR/CAF base for contingency support, deviations will be reported IAW AMC guidance.

4.9. Test and Evaluation. Wings responsible for the scheduling of OT&E, DT&E, or IOT&E aircraft are authorized to deviate from the published schedule for aircraft, which are engaged in these programs without incurring a deviation. They may adjust, formalize the test requirements, and select aircraft tail numbers up to 12 hours before the first scheduled OT&E/DT&E/IOT&E launch of the day. Deviations will be recorded based on the adjusted daily test schedule and as prescribed in this publication.

4.10. Scheduling Options to Maximize Sortie Production.

4.10.1. **Planned Sortie Surge.** Units may plan to produce sorties at a higher than normal rate. A unit may also use a planned sortie surge when the rest of the unit is deployed to a different location. A planned sortie surge is not considered a combat sortie generation or an unscheduled tasking. It should be conducted in a manner that takes full advantage of training opportunities inherent in a period of increased operations and maintenance activity. The number of sorties will be determined by training objectives and established by the OS and AMXS commanders. Printed sortie surge rates will exceed the daily sortie rate (average

contracted sortie per O&M day based on the applicable monthly sortie/flying hour contract) of the unit by at least 50 percent, but not less than the contract required sorties scheduled on the monthly contract/plan. For example, if a unit normally flies 22 sorties in a day, to qualify for a surge, that same unit would schedule at least 33 sorties for the surge day. The statement "Sortie Surge" must be printed in the remarks section of the affected day's flying schedule to add sorties without incurring deviations.

4.10.1.1. Surge scheduling scenarios should task maintenance and flying organizations realistically. For example, flat lining a surge is often not a feasible option. For example, scheduling a 12-ship to reach 60 sorties by turning the same 12 aircraft to fly 5 goes (12-ship turned 5 times) is often an unfeasible plan. Units should plan to get the maximum number of sorties possible from each aircraft committed to the schedule.

4.10.1.1.1. Units should be cognizant of historical break rates and spare constraints when scheduling surges. Spares are quickly used up during surges and once spares are exhausted the capability to meet surge goals is severely limited.

4.10.1.2. Extreme care must be exercised to avoid creating a backlog of unscheduled maintenance actions when scheduling sortie surges.

4.10.1.3. Aircraft tail numbers, take-off times, line numbers, and configurations will be printed in the weekly schedule for each aircraft's first sorties of each day. Include the statement "sortie surge" in the remarks section for each affected day.

4.10.1.4. Only line numbers are required on the weekly schedule for subsequent sorties (i.e., the total number of sorties/line numbers the unit intends to fly). Other data such as take-off times, configurations, and missions may be printed as required by the unit. To the greatest extent possible, the day prior, units should try to confirm subsequent sorties NLT the daily maintenance production meeting,.

4.10.1.4.1. However, early and late take-offs are not recorded on second and subsequent sorties. For all other deviations, normal deviation reporting applies.

4.10.1.5. If more sorties are flown than what was intended (i.e., line numbers printed), these sorties will be considered flown as scheduled.

4.10.2. **Continuation Sortie.** A continuation sortie is a sortie containing scheduled operations stops. Maintenance provides support limited to chocking the aircraft and fire/safety observer and the aircraft engines/Auxiliary Power Unit (APU) must remain running. **EXCEPTION:** C-130 aircraft, engines may be shut down to upload/download aircrew. Continuation sorties are designed to accommodate training events, optimize aircraft use and minimize maintenance manpower expenditure. Continuation sorties will be clearly identified in the published weekly flying schedule. This scheduling option is intended to allow the exchange of aircrew/passengers with minimal maintenance participation and aircraft possession does not return to maintenance. The initial crew on the sortie will brief the follow-on crew at the aircraft. Units may add continuation sorties onto scheduled sorties to make up for sorties lost earlier in the same week without recording deviations. Do not include these added continuation sorties in FSE unless there were no lost sorties earlier in the week. If no sorties were lost in the same week, the added continuation sortie will be an "add" deviation in FSE. **NOTE:** No maintenance or servicing is performed during the stop.

Returning the aircraft to maintenance terminates the continuation sortie. This scheduling option is not applicable to fighter and attack aircraft.

4.10.3. Engine Running Crew Change (ERCC). The ERCC sortie is used to optimize aircraft use. It involves turnaround of an aircraft incorporating partial or full crew change between two separate sorties. **The difference between ERCC and continuation sorties is minor maintenance and servicing can be performed between sorties and since each is a separate sortie, deviations apply to each sortie.** An aircraft is scheduled to fly an ERCC sortie in the published weekly schedule, upon landing, crew members are changed at the aircraft with at least one engine running. Minimum ground time should be scheduled between sorties. The crew of the first sortie must brief the crew of the second sortie at the aircraft. Other aircraft on the published flying schedule or previously flown aircraft not on the flying schedule (OCF, FCF, adds) can be tail swapped into the second sortie. For example, if two aircraft are scheduled to land at approximately the same time, either aircraft could ERCC to the later sortie. **EXCEPTION:** C-130 aircraft, engines may be shut down to upload/download aircrew and B-52 aircraft, engines may be shut down to re-pack drag chutes and upload/download aircrew. **NOTE:** This scheduling option is not applicable to fighter and attack aircraft.

4.11. Flying Scheduling Effectiveness Computations. Compute monthly flying scheduling effectiveness rate by aircraft mission and design using the formulas below: AFRC CAF-gained units will follow CAF instructions for scheduling effectiveness computation.

4.11.1. Total Sorties Scheduled = Total sorties flown plus (+) cancellations minus (-) Additions (added sorties only).

4.11.2. (*) Adjusted-Sorties-Scheduled = Sum of total sorties scheduled (home base, off station or deployed) minus (-) UTE cancellations.

4.11.3. (*) Calculated-Deviations = Sum of all deviations (including added aircraft) minus (-) air deviations, aircraft tail swaps, aircraft printed spare actions, ground aborted sorties flown by spare aircraft (on-time), and UTE cancellations/additions.

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

4.11.5. Overall-FSE-Rate = Adjusted-Sorties-Scheduled minus (-) Calculated-Deviations divided by Adjusted-Sorties-Scheduled times 100.

4.11.6. (*) OP-MT-FSE-Rate = OP/MT-Deviations divided (/) by Adjusted-Sorties-Scheduled times (*) 100.

4.11.7. **(Added-DAVISMONTHANAFB)** The “daily sortie rate” is determined by dividing a month’s contracted sorties by the number of O&M days in that same month.

Chapter 5

MAINTENANCE SCHEDULING EFFECTIVENESS

5.1. Purpose. Maintenance Schedule Effectiveness (MSE). This is a leading indicator that measures the unit's ability to plan and complete scheduled maintenance events (i.e. inspections, periodic maintenance, etc.) and scheduled use of maintenance resources (Static/IR/Alert Prep, Training Aircraft, etc.) on-time per the maintenance plan. ACC goal for MSE is 95 percent. A low MSE rate may indicate a unit is experiencing a high rate of turbulence on the flightline or in the back shops. This indicator is primarily used as reliability indicator for maintenance managers assessing the unit's capacity to execute the scheduled maintenance plan.

5.1.1. A cornerstone of successful maintenance scheduling and execution is an understanding of how the schedule is executed versus how it was scheduled to be executed. These differences in scheduled versus actual events are only recorded in the execution phase of the scheduling process and are called deviations. Deviation data must be recorded so that follow-up analysis can identify the appropriate corrective actions if any are needed. Without deviation data, analysis is impossible. Deviation data recording and analysis is the beginning of the process to continually improve the scheduling and execution process that leads to improved unit flying operations. The unit is responsible for documenting deviations to the weekly flying and maintenance schedule and determining the cause for each deviation. Deviations must be coordinated with the appropriate squadron/AMU before being assigned to a specific category. Schedule deviations that result from a sequence of events will be assigned a primary cause. A determination of the primary cause will be made by the parties involved to arrive at a unit position. The squadron operations officer and the AMU OIC/AMXS maintenance operations, along with MOF maintenance operations, will monitor deviations to ensure they meet the criteria in this publication. When conflicts arise, leadership of involved units will resolve them at the lowest level. All deviations will be recorded as described in this publication.

5.2. Computations:

5.2.1. Compute the aircraft MSE using scheduled maintenance events in the printed weekly schedule. In order to make this data valuable it is important that the integrity of the data be maintained. Additionally do not discard standard accepted scheduling practices in order to improve rates, i.e., scheduling all inspections on Friday or not including hourly inspections in the weekly schedule. The IMDS database will be used to determine whether or not the maintenance actions were completed on time. For example, if a maintenance event is scheduled in the weekly flying and maintenance schedule for Monday through Wednesday, IMDS must show completed before Thursday for credit. For maintenance events extending into the next week, credit for completion is based on the last day of the scheduled event. **NOTE:** Periodic, Phase and ISO inspection completion will be measured using the completion date of the inspection. AMXS and MXS supervision will standardize the scheduled duration of the inspection for each MDS based upon the work card deck and fix phase critical path data determined from historical data provided by MDSA and Phase/ISO supervision assessments. Standardized durations will be documented and forwarded to MOS PS&D.

5.2.2. The MXG/CCs may select additional areas (such as Aerospace Ground Equipment, Avionics Intermediate Shop, Alternate Mission Equipment, etc.) for local scheduling effectiveness tracking. The unit will establish standards for these programs. When reported to HHQ these locally selected areas will not be included in aircraft MSE rates.

5.2.3. MOF PS&D will implement procedures for reviewing and recording scheduled maintenance actions daily, forward this data to maintenance analysis weekly for computation and publication. Daily review will be accomplished by MOF PS&D and will not be delegated.

5.2.3. **(DAVISMONTANAFB)** 355 FW procedures for computing maintenance scheduling effectiveness are:

5.2.3.1. **(Added-DAVISMONTANAFB)** AMU PS&D will include a list of scheduled maintenance events for known maintenance actions in the Weekly/Daily Flying and Maintenance Schedule.

5.2.3.2. **(Added-DAVISMONTANAFB)** MOF PS&D will:

5.2.3.2.1. **(Added-DAVISMONTANAFB)** Review IMDS screen 122 NLT 0730 daily for the previous day's maintenance to determine if maintenance actions were completed.

5.2.3.2.2. **(Added-DAVISMONTANAFB)** Print and file screen 122 daily on maintenance not completed.

5.2.3.2.3. **(Added-DAVISMONTANAFB)** Notify AMU (PS&D and Supervision), and brief at the daily production meeting on all maintenance actions not completed.

5.2.3.2.4. **(Added-DAVISMONTANAFB)** Compute maintenance scheduling effectiveness rates on the first duty day after each effective week and post on the Air Force Portal on the 355 MXG webpage under the MOCTRAX link.

5.2.4. When a unit is tasked with a combat sortie generation, unscheduled tasking, unannounced exercise/real world contingency, or HHQ exercise that significantly impacts the printed weekly maintenance schedule, the plan may be revised or reprinted without incurring deviations. Utilizing MSE deviation Table 5.1., normal deviation reporting procedures will be followed once the revised or reprinted plan is finalized. The unaccomplished portion of the original maintenance schedule that was revised will not be included in the scheduling effectiveness formula.

5.2.4.1. Units may revise or reprint the following day's or remainder of that week's maintenance schedule to compensate for adverse weather. This adjustment should be used only in extreme cases and recorded on an AF Form 2407. Once changed, normal deviation reporting procedures will apply.

5.2.5. Squadron commanders will coordinate to cancel and reschedule maintenance actions to coincide with the portion of the flying schedule that was canceled after the unit or OS has achieved the UTE rate goal for the month. These canceled maintenance actions will not be included in MSE computations.

Table 5.1. MSE Deviations and Functions.

DEVIATION	FUNCTION
Maintenance (MT)	Actions canceled to adding aircraft to the flying schedule, lack of manpower, equipment or as a result of mismanagement.
Operations (OP)	Actions cancelled or not completed on-time for operational considerations or as a result of adding aircraft to the flying and maintenance schedule to meet operations requirements. This also includes maintenance events not completed due to operations group actions. For example, Life Support Section not completing scheduled maintenance as published in the wing weekly flying and maintenance schedule.
Higher headquarters (HHQ)	Actions canceled or not completed as a result of higher headquarters tasking from outside of the wing.
Weather (WX)	Actions canceled or not completed as a result of weather conditions.
Supply (SU)	Deviations that result from verified parts back order condition.
Other (OT).	Aircraft impounded after publication of the weekly schedule, unscheduled major maintenance where the scheduled maintenance action cannot be accomplished because of tech data restrictions, aircraft off base and unable to return or as a result of Productivity/Utilization Goal Days. Reference ACCI 21-118 for MSE computations.
EXCEPTION: Any scheduled maintenance for an aircraft that is possessed by depot/PDM/Contract Field Team (CFT), that is not complied with because the aircraft is not released for possession as scheduled to the owning unit does not count toward MSE computations.	

5.2.5.1. Formula: Overall Maintenance Scheduling Effectiveness Rate = Total Points Earned Divide by Total Points Possible x 100

5.2.5.1.1. **To obtain only the OP-MX MSE rate**, treat events with deviations in categories other than OP or MX as if they were not missed.

5.2.5.1.2. **Create generic IMDS JSTs (profiles)** to capture completion or preparation of aircraft used for trainers, static displays (SD), Alert Prep, and Immediate Response (IR). These actions although they are not maintenance actions in the traditional definition (phase, TCTOs, Special Inspections, etc.) do consume maintenance capacity/resources and should be captured to show the complete use of maintenance resources.

Table 5.2. Maintenance Scheduling Effectiveness Computation.

SCHEDULED EVENT	A WEIGHTED POINTS	B NUMBER OF EVENTS	C POSSIBLE POINTS (A x B)	D COMPLETED SCHEDULED	E POINTS EARNED (A x D)
Periodic/Isochronal/ Phase Inspections	5				
Home Station Checks/Hourly Post Flights	5				
Engine Changes	5				
Time Changes	4				
TCTOs	4				
Corrosion Control/ Paint	4				
Transfer/Acceptance Inspections	3				
Training Aircraft	3				
Static/IR/Alert Prep	3				
Special Inspections	3				
Delayed Discrepancies	3				
Document Reviews	2				
Delayed Discrepancies	3				
Total Points Possible: _____			Total Points Earned: _____		
Total O&M Points Possible: _____			Total O&M Points Earned: _____		

Chapter 6

DEPLOYED OPERATIONS AND OFF-STATION SORTIES

6.1. Purpose. This chapter establishes rules and procedures used in planning, executing, evaluating, and reporting of unit flying and maintenance schedules at deployed locations where unit maintenance is provided. Sorties flown at deployed locations where no parent unit maintenance is provided are considered off-station sorties. If parent unit support is deployed, this is considered the same as home station support and normal deviation reporting applies. Limited launch support is not considered parent unit maintenance.

6.2. General. Normal deviation reporting applies to deployed operations except as noted in this chapter. Data from deployed operations will be transmitted or forwarded back to home station and included in unit totals IAW ACCI 21-118.

6.3. Scheduling. In addition to the procedures for home station scheduling and reporting, deployed units will use the following procedures when developing a weekly flying schedule and reporting deviations:

6.3.1. Separate block(s) of sortie sequence numbers will be assigned for deployment location(s).

6.3.2. When a spare aircraft is launched for a scheduled deployment to a Forward Operating Location (FOL), the options in paragraph 6.5.1 apply to the home station and deployment location flying and maintenance schedules.

6.3.3. Additions and cancellations at deployed locations, which are required to accomplish specific aircrew training requirements and make optimum use of available range time, are considered flown as scheduled. This does not relieve operations and maintenance from developing a viable and realistic flying schedule at the deployed location. The primary purpose of this flexibility is to allow the unit to make up non-effective sorties to ensure accomplishment of the deployment training plan. Procedures for changing the weekly schedule in Chapter 2 apply to deployment location flying and maintenance schedules. Additions and cancellations caused by ineffective planning are recorded.

6.3.3. **(DAVISMONTHANAFB)** See AFI 21-101ACCSUP/DMAFBS Figure 15.1 for sortie sequence line numbers.

6.3.4. When operating at a deployed location using a daily ATO, follow procedures outlined in paragraph 3.7 of this instruction.

6.4. Deployed Daily Activity Report. Required information for deployed ACC units will be transmitted to home station IAW applicable unit deployment plans. See ACCI 21-118, Chapter 4, for required data.

6.5. Off-Station Sorties. Off - station sorties are those sorties flown from other than home station and parent unit maintenance is not provided (e.g., cross-country sorties). Units will publish sorties planned while off station. Take off and landing times may be TBD when supporting another unit and the specific times are unknown at the time of publishing. The following paragraphs outline the rules that apply to higher headquarters alert or off-station sorties:

6.5.1. When a spare is launched to the off-station/cross country location in place of the originally intended aircraft, one of the following options applies.

6.5.1.1. Option 1. The originally scheduled prime aircraft, which remained on base, may fly the sorties of the departed aircraft for the remainder of the week without recording FSE deviations. However, maintenance scheduling effectiveness is based on the published weekly schedule.

6.5.1.2. Option 2. The sorties may be tail-swapped with a printed spare aircraft on each day's schedule.

6.5.2. When an aircraft is off-station and cannot return to home station for its scheduled sortie, a deviation will be recorded for the reason the aircraft was unable to return. The reasons will be specific, i.e., maintenance, operations, weather, etc. **NOTE:** If the off-station aircraft can fly its scheduled mission from its location, no deviation is recorded.

6.5.3. **(Added-DAVISMONTHANAFB)** Any assigned aircraft departing from DM is considered a local sortie. Cross Country (XC) departure times will be printed with local line numbers when available. Cross Country returns are "flown as scheduled" with (XC) line numbers.

6.6. Deployed MOF PS&D Support Operations.

6.6.1. NLT 7 days after arrival of a new units arrival, MOF PS&D Superintendent will visit all decentralized scheduling activities and provide technical assistance as needed.

6.6.2. Units will follow home station guidance.

6.6.3. Homestation AVDOs will perform AVDO duties on deployed aircraft unless the possession changes to the deployed location. With homestation AVDO approval, CENTAF MOF PS&D will make MIS inventory/status transactions and coordinate message requirements with homestation AVDOs. If possession changes, CENTAF, MOF PS&D will perform all AVDO duties.

6.6.4. Units will use CAF/MAF supplement to AFI 21-101 and ACCI 21-165 to develop weekly schedules and for FSE/MSE reporting.

6.6.5. When deploying or deployed to the CENTAF AOR, units in addition to ACCI 21-165 guidance will also follow AFI 21-101_USCENTAFSUP1 pre-deployment and deployment guidance.

Chapter 7

FLYING SCHEDULING REPORTING PROCEDURES

7.1. Purpose. This chapter provides instructions on flying scheduling reporting procedures. The flying schedule must be loaded in IMDS to track scheduling and deviation data. Once loaded, the IMDS Daily Mission Schedule background report (IMDS screen 361) or proposed maintenance plan background report (IMDS screen 361) provides detailed base-level retrieval of flying and maintenance schedule retrieved from IMDS. IMDS will also be used to provide higher headquarters reporting of aircraft utilization.

7.2. Responsibilities:

7.2.1. The MXG/CC will ensure procedures are established to verify the accuracy of all scheduling and deviation data.

7.2.2. MOF PS&D section will publish the weekly flying schedule IAW Chapter 3 of this publication on AF Forms 2400 series or computer generated forms. The MOF PS&D will load the weekly flying schedule into IMDS by 1600L Friday (exception: 2 hours after the squadrons last landing during printed wing night flying weeks) for the following week using the procedures in AFCSM 21-565V2. Refer to paragraph 4.5.1. of this instruction for daily tail number scheduling procedures.

7.2.3. The MOC will review the on-line IMDS debriefed sortie recap, screen 174, and the IMDS background products daily *Accomplishment Utilization Report (Screen 362)*, *Deviation Detail Listing (Screen 181)*, *Deviation Summary Inquiry (Screen 173)* and *Uncompleted Operational Events (Screen 719)*, daily to ensure accuracy of deviation reporting. The MOC will also review Uncompleted Operational Events, IMDS screen 719, daily to ensure uncompleted sortie lines are deleted using Operational Events Delete IMDS screen 883, if necessary after coordination with debrief section and MOF PS&D. The MOC will record additions, cancellations before crew show, late and early take-offs and landings, and Tail Swaps in IMDS as deviations occur.

7.2.3.1. The debrief section will record aborts and in-flight emergency incidents in IMDS during the IMDS automated debriefing process. After a primary aircraft ground aborts and is replaced by a spare, debrief sections will ensure that the deviation code is recorded as a Spare deviation with the appropriate cause code {SP/GAA (GAB, GAC)} against the original aircraft; debrief sections will not record the deviation as a Ground Abort {GA/GAA (GAB, GAC)} against the original aircraft that was replaced by a spare. Analysis will count SP/GAA (GAB, GAC) as one ground abort deviation but will not count this against FSE (see paragraphs 4.3.2.5 and 4.3.4). For all other spare and ground abort deviations procedures debrief will follow procedures in paragraph 4.3.

7.2.3.2. The MOC will coordinate with both the flying squadron and AMU on all changes and deviations to the daily flying schedule to assist in determining correct debriefing status codes. The MOC will provide sortie sequence numbers and sortie numbers to the squadron/AMU for all additions and cross-country sorties. Sortie numbers assigned to a specific tail number must be in sequential order (for example sortie number 101 must be used on a specific tail number before sortie number 102). Unique sortie sequence numbers will be developed for deployed sorties.

7.2.4. The following instructions apply to IMDS screen 474, *Cause Code Table*; 342, *Operational Event Cancellation*; 343, *Operational Event Tail Number Swap/Tail Number Spare*; and 350, *Deviation, Start/Stop/Correction Abort/Delete*. The Ground Deviation Code block cannot be blank. Enter one of the following codes or one of the ground deviation codes in AFCSM 21-565V2:

Table 7.1. Ground Deviation Codes and Functions.

CODE	FUNCTION
AD	Addition
CX	Cancellation
ET	Early Take-off
GA	Ground Abort
LT	Late Take-off
SP	Spare
TS	Tail Number Swap

7.2.5. All deviations should be recorded and should have the following code to indicate the deviation:

Table 7.2. Category Codes and Functions.

CODE	FUNCTION
C	Recorded Deviation (all deviations are recorded, but not all are chargeable against the FSE see paragraph 4.11)
N	Do not use N code (all deviations are recorded). Code is available for use in IMDS but CAF units will not use this code.

7.2.6. Cause Code. Enter one of the following codes to indicate the reason for a deviation or the agency, which caused a deviation. These codes must be entered into the IMDS Cause Code table as outlined in AFCSM 21-565V2. The maintenance indicator block is left blank when loading the following Cause Codes. For maintenance ground aborts do not use cause code MTx, only use GAA, GAB, or GAC.

Table 7.3. Cause Codes and Functions.

CODE	FUNCTION
ATx	Air Traffic
XEH	Exercise, HHQ
XEL	Exercise, Local
GAA	Ground Abort, before engine start, maintenance
GAB	Ground Abort, after engine start, before taxi, maintenance
GAC	Ground Abort, after taxi, maintenance
HQT	Higher Headquarters, MAJCOM (non-exercise)
HQN	Higher Headquarters, NAF (non-exercise)
HQP	Higher Headquarters, other (non-exercise)
MTx	Maintenance
OPx	Operations
SUx	Supply

SYx	Sympathy
XUT	UTE Cancel
WXx	Weather
OTx	Other
xxx	Local Option
NOTE: Use x for any character for local use.	

7.2.7. Air Deviation Code. Enter one of the following codes or one of the air deviation codes in AFCSM 21-565V2 for each deviation that occurs after aircraft take-off: Air Deviations are not included in FSE rate computations, but must be recorded.

Table 7.4. Air Deviation Codes and Functions.

CODE	FUNCTION
AA	Air Abort (includes operations, weather, sympathy, ATC, Non-IFE, and other)
AI	Air Abort, IFE
EL	Early Landing
FE	IFE
FI	In-flight Incident
LL	Late Landing

Chapter 8

ATTRITION AND SPARES

8.1. Attrition. Attrition factors represent historical percentage of scheduled sorties lost to causes outside unit control. Maintenance and operations schedulers add attrition sorties to monthly contracts to ensure mission goals are met. Units may make a conscious decision, with HQ ACC/A4J approval, to use different attrition factors from statistical attrition rates calculated by MDSA.

8.1.1. Attrition sorties are not substitutes for unit capability shortfalls, they are added to the contract to mitigate scheduling turbulence to facilitate that unit's mission goals are met. Attrition sorties are planned for based on historical sortie losses captured and measured by MDSA. The monthly flying and maintenance plan will clearly identify attrition sorties for planning purposes. If attrition is less or more than planned, adjustments to the weekly flying and maintenance schedule will be made to prevent over-extending maintenance or exceeding the unit's contract. A sortie lost will normally be flown in the same month the loss occurred. If at the end of a quarter combined losses exceed attrition figures, the OG and MXG/CCs will negotiate a resolution to the shortfall.

8.1.2. The factors used to compute attrition will be MX_x, OP_x, SU_x, WX_x, AT_x, SY_x, OT_x, EXH, EXL, and HQ_x cancels. Attrition and spare factors will be computed for and applied to each flying squadron. Monthly statistical attrition anomalies should be identified, documented and factored out of attrition calculations if necessary. MDSA will compute attrition factors monthly for each OS/AMU and provide the results to MOF PS&D and OSS Current Operations. During the annual "Proposed FHP", MDSA will provide attrition factors by month for the entire next fiscal year. **NOTE:** Attrition and spare factors need not be developed for test and evaluation (CB) possession identifier coded aircraft.

8.2. Attrition Factor Application:

8.2.1. Attrition computation is based on unit historical data from previous similar flying months. For example, when computing attrition for Jan 06, use historical data for Jan 05, Jan 04, Jan 03, Jan 02, Jan 01, etc. Use as much historical data as required ensuring seasonal variations are considered to determine a basis for attrition. When computing attrition, use the total sorties lost in a particular category. Do not use the difference between the sorties lost and those sorties added to make up for the losses. The formula for computing the attrition factor is Historical Sorties Lost divided by Historical Sorties Scheduled.

Attrition Computation Example:

Cancels:

MX Cancels	.02
OP Cancels	.01
SU Cancels	.01
OT Cancels	.01
AT Cancels:	.01
SY Cancels:	.01
EXH Cancels:	.00
EXL Cancels:	.01

HQ Cancels: .01
 Cancels attrition factor: .09
 WX Cancels: .03
 Total attrition factor: .12
 Overall attrition factor is .12 or 12%

8.2.2. Sample Application of Total Attrition Factor:

Sorties Required 1000
 Subtract attrition factor from 1: $(1-.12) = .88$
 Divide 1000 by .88
 Required sorties to schedule 1,136.36, round up to 1137.
 Based on historical attrition of .12%, the unit can expect to lose 137 sorties to meet the required 1000 sorties.

8.3. Prorated Weather Attrition:

8.3.1. Computation. Weather attrition sorties will only be used when sorties are lost because of weather. Weather attrition sorties will not be carried over into another month. Using the weather attrition factor, compute the number of anticipated sortie losses for weather. Divide the number of weather losses by the O&M days. This will determine the prorated weather attrition.

8.3.1.1. Sample Application of Prorated Weather Attrition Factor:

Sorties Required 1000
 Subtract the weather attrition factor from 1 $(1-.03) = .97$
 Divide 1000 by .97 1000/.97
 Equals Required Sorties to Schedule 1031
 Minus Sorties Required 1000
 Expected Weather Losses 31
 Divide 31 by O&M Days (20 for this exercise) 31/20
 Expected Sortie Losses per O&M Day 1.55

A unit would expect 1.55 sorties lost each O&M day in the month for weather. Thus, a total of 31 sortie losses (1.55 sorties x 20 O&M days) would be expected for that month. Whenever weather losses exceed the total projected weather losses (number of O&M days to date x 1.55, round up to the next whole number), a unit may add sorties not to exceed the difference between the sorties lost due to weather and the total projected weather losses. For example on the 11th O&M day of the month, a unit lost a total of 30 sorties to-date due to weather. The expected prorated weather sorties lost to-date is 18 (1.55 times 11 equal 17.05, round up). The unit also added 4 weather sorties earlier in the month. The unit could add up to 8 sorties. (30 sorties lost to date due to weather minus 18 prorated losses minus 4 weather adds equals 8 weather adds available)

8.4. Spares. The spare requirements will not exceed 20 percent (30 percent for training units owning TF coded aircraft) of aircraft committed to the flying schedule, rounded up to the next whole aircraft. **NOTE:** During Planned Sortie Surges the MXG/CC determines the amount of spares that will be committed. However, leadership must consider health of the fleet when scheduled spares above 40 percent during surges. **NOTE:** Units should be cognizant of their historical break rates and spare constraints when scheduling surges. Spares can be quickly used

during surges and once spares are exhausted the capability to meet surge goals is severely limited.

8.4.1. MDSA computes annual spare aircraft requirements by month, using historical aircraft first sortie logistics losses and provides this information to the MOF PS&D for use in computing spare aircraft requirements. Spare computation is based on unit historical data from previous similar flying months. For example, when computing spares for Jan 06, use historical data for Jan 05, Jan 04, Jan 03, Jan 02, Jan 01, etc. Use as much historical data as required ensuring seasonal variations are considered to determine a basis. The formula for computing spare factors is Historical First Sortie Deletions/Cancellation divided by historical first sorties scheduled.

8.4.1.1. A first sortie is defined as a sortie flown by an aircraft that has not previously flown for the day (0001-2400 flying period). For example, if 8 aircraft are committed to the schedule and there are 14 total sorties scheduled, the first 8 sortie line numbers (i.e. 101-108) should reflect all 8 committed aircraft tail numbers before they are re-scheduled (turned) against the last 6 (i.e. 109-114). This would be reflected as an 8 x 6 and should not be reflected as a 6 x 8 because of scheduled take-off times.

8.4.1.1.1. Operations may define first sorties or turns by mission profile, take-off times, but for the purposes of this instruction the sortie turn pattern is defined against initial aircraft flown and scheduled turns of the same or a portion of the same aircraft.

8.4.1.2. Sample Application of Spare Factors.

1st Sortie Maintenance Cancellations	.10
1st Sortie Supply Cancellations	.03
1st Sortie Ground Aborts	<u>.05</u>
Spare factor	.18 or 18%

A sample figure of 12 first sorties is used in the following computation:

Spare aircraft required equals 1st sorties scheduled times the spare factor and rounded up to the next whole number.

$$12 \times .18 = 2.16 \quad \text{Spares Required is } 3$$

8.4.2. The computed spare requirement may be adjusted to compensate for multiple configurations and syllabus constraints. When additional spares are added for multiple configurations, units will not exceed one spare per configuration.

8.4.2.1. Additional spares are authorized to support higher headquarters taskings and special missions (if required by the tasking).

8.4.2.2. At least one spare aircraft is authorized per MDS for each flying day.

8.4.2.3. Unmanned Aerial Systems training missions are authorized an additional spare to support increased aircrew training requirements due to crew size ratio.

Chapter 9 (Added-DAVISMONTHANAFB)

LOCAL PROCEDURES

9.1. (Added-DAVISMONTHANAFB) Purpose. These procedures establish policies and assign responsibilities for planning and scheduling flying operations and maintenance in the 355 FW.

9.2. (Added-DAVISMONTHANAFB) Annual Planning Functions.

9.2.1. (Added-DAVISMONTHANAFB) Exercise/real world tasking (ET). FSs will integrate known exercises and contingencies (AEFs, Air Warrior, Red Flag, ORE, etc.) into their FYxx FHP to include a legitimate estimate of required sorties and hours. 355 FW/XP will provide annual ORE dates for incorporation in the weekly wing scheduling slides. **Note:** Contingency hours are separate and not incorporated into the FY program.

9.2.2. (Added-DAVISMONTHANAFB) Ready Aircrew Program (RAP). 355 OSS/OSOT will provide RAP training requirements.

9.2.3. (Added-DAVISMONTHANAFB) Programmed Flying Training (PFT). ACC/DOT will provide PFT class loads and requirements prior to the FHP first look message. Use these inputs in building the FTU FSs FYxx flying hour program.

9.2.4. (Added-DAVISMONTHANAFB) Operation and Maintenance (O&M) days. O&M days are dates set aside for the year as available flying days. 355 OSS/OSOS will build a yearly calendar with O&M days annotated for planning purposes. FSs will input O&M days directly into PEX when building the schedule.

9.2.5. (Added-DAVISMONTHANAFB) Safety days, training days, readiness days, and any other known activity that will impact O&M days will be forecast and considered when building the annual flying hour program. All wing agencies' requirements will be validated through 355 OG and 355 MXG to 355 FW/CC and to the maximum extent possible, combined on the same days, to minimize impact on O&M days.

9.3. (Added-DAVISMONTHANAFB) QUARTERLY PLANNING FUNCTIONS.

9.3.1. (Added-DAVISMONTHANAFB) Safety days, training days, readiness days, etc. will be finalized NLT the third Thursday of the second month of the preceding quarter.

9.3.2. (Added-DAVISMONTHANAFB) Air Refueling Quarterly Plan. 355 OSS/OSOS will coordinate and contract for all air refueling by 355 FW assigned aircraft by providing inputs to the quarterly air refueling contract (horse blanket).

9.3.3. (Added-DAVISMONTHANAFB) 355 OSS/OSOS will distribute the 355 FW FS refueling events at the beginning of each quarter.

9.3.4. (Added-DAVISMONTHANAFB) The FSs will sign up for refueling events on a first come, first served basis NLT three weeks prior to the desired refueling date.

9.3.5. (Added-DAVISMONTHANAFB) 355 OSS/OSOS will coordinate daily refueling events for 355 FW assigned aircraft and annotate on the wing horse blanket. The horse blanket is on the Air Force Portal.

9.3.6. **(Added-DAVISMONTANAFB)** Short Notice Air Refueling Request. FSs will forward air refueling requirements, not identified in time to schedule on the horse blanket, to 355 OSS/OSOS. 355 OSS/OSOS will attempt to fill these requests by making requests directly with tanker units or sending a short-notice request to ACC/AOS for high priority missions. 355 OSS/OSOS will work directly with FS schedulers and exercise planners for air refueling requirements and flight information. Units which require air refueling to complete high priority missions (exercises or long-range deployment) will forward their request to 355 OSS/OSOS NLT forty five days prior to the event.

9.3.7. **(Added-DAVISMONTANAFB)** Units desiring air refueling for missions that can be accomplished with or without a tanker will forward their request NLT thirty days prior to the event.

9.3.8. **(Added-DAVISMONTANAFB)** Units desiring extra air refueling for the sole purpose of enhancing training currencies and not for mission completion may forward their request to 355 OSS/OSOS NLT one week prior.

9.4. (Added-DAVISMONTANAFB) MONTHLY PLANNING FUNCTIONS

9.4.1. **(Added-DAVISMONTANAFB)** 355 OSS/OSOS, in cooperation with 355 MOS/MXOOP will publish the monthly ops plan and include it in the operations and maintenance plan. This plan updates and refines the quarterly plan in greater detail, i.e. turn schemes, deployments, XCs.

9.4.2. **(Added-DAVISMONTANAFB)** FSs will submit a copy of the revised FHP to 355 OSS/OSOS anytime the FS monthly contract plan changes from their agreed upon FHP (NLT the 15 of the preceding month).

9.4.3. **(Added-DAVISMONTANAFB)** The 355 OG/CC and 355 MXG/CC must approve revised monthly contract plan changes before forwarding the plan to ACC/DO (NLT 20th of the month).

9.4.4. **(Added-DAVISMONTANAFB)** Wing scheduling will notify the FS of any changes to the FHP.

9.4.5. **(Added-DAVISMONTANAFB)** 355 OSS/OSOS will conduct an audit (while preparing 12 AF monthly FHP reports) on the first week of the month to check the progress of the FS FHPs. 355 OSS/OSOS will notify the affected FS if they discover problems in PEX, and will notify the AMU if they discover any problems in IMDS. Notification of any general problems will be sent to both the FS and AMU.

9.5. (Added-DAVISMONTANAFB) WEEKLY PLANNING FUNCTIONS.

9.5.1. **(Added-DAVISMONTANAFB)** FS Operations Schedulers will:

9.5.1.1. **(Added-DAVISMONTANAFB)** Ensure weekly schedules are loaded in PEX NLT 0900 Tuesday, six days prior to the weekly scheduling meeting.

9.5.1.2. **(Added-DAVISMONTANAFB)** Submit their next week's schedule to wing scheduling NLT 1200 Tuesday prior to affected week.

9.5.1.3. **(Added-DAVISMONTANAFB)** Forward any updates to planned off-station sorties, exercises, deployments, local static, etc., to wing scheduling for inclusion on the

OG schedule. This schedule reflects activities from the present month out to one year ahead.

9.5.2. **(Added-DAVISMONTHANAFB)** AMU Maintenance Schedulers will provide the next three weeks of unit aircraft availability slides to 355 MOS/MXOOP and OSOS NLT COB Tuesday.

9.5.3. **(Added-DAVISMONTHANAFB)** Once published, this weekly schedule becomes the 355th Fighter Wing Weekly Flying and Maintenance Plan. Evaluate and report operations and maintenance performance relative to this schedule IAW Chapter 3 and 6. Make every reasonable effort to fly the weekly schedule as planned. The weekly schedule can be found on the Air Force Portal on the 355 MXG webpage under the MOCTRAX link.

9.5.4. **(Added-DAVISMONTHANAFB)** Scheduling meeting: Wing scheduling (OSOS) and the maintenance operations flight (MXOO) co-host two weekly meetings, the pre-scheduling meeting and the wing scheduling meeting:

9.5.4.1. **(Added-DAVISMONTHANAFB)** Pre-scheduling Meeting: This meeting is every Wednesday normally held after the daily standup meeting or at a time and location agreed upon between the 355 OG/CC and 355 MXG/CC. This meeting is co-chaired by the 355 OG/CC and 355 MXG/CC or their representative. As a minimum, each squadron will send the squadron DO, AMU/OIC, or designated representatives. The briefing will include the following: next week's schedule to include turn schemes, off-station flights, flying windows, unique mission requirements such as air refueling and live loads, aircraft availability, long range scheduling events, and status of monthly and yearly flying hour programs.

9.5.4.2. **(Added-DAVISMONTHANAFB)** Wing scheduling meeting: Meeting is held after the daily standup meeting at 1500 every Thursday, or as specified, and is chaired by the 355 FW/CC or his/her representative. Squadrons will send the SQ/CC/DO or designated representative and 355 AMXS/CC or MXA.

9.5.5. **(Added-DAVISMONTHANAFB)** Supervisor of Flying (SOF) Scheduling: SOF tours are allocated based on the FSs flying windows, number of scheduled sorties, number of SOF qualified personnel on station. FSs with a flying period significantly earlier/later than the rest of the wing will cover for the extended period. Occasionally, a FS will be assigned a tour length, which requires splitting their shift. The FS that changes the published SOF schedule will track the change and then brief to wing scheduling. Wing scheduling is responsible for tracking SOF tour assignments by FS and ensures equity and fairness is maintained. Maximum SOF tour length is 6 hours, unless waived by 355 OG/CC.

9.5.6. **(Added-DAVISMONTHANAFB)** Range Scheduling: Wing scheduling is responsible for coordination and delivers the 355th Fighter Wing consolidated range request to Luke range scheduling. FSs will contact Luke range scheduling directly for any changes to their range request after the range pre-wars are published.

9.5.6.1. **(Added-DAVISMONTHANAFB)** Range Scheduling with a Tanker: The range request process begins by allocating tanker assets.

- 9.5.6.1.1. **(Added-DAVISMONTANAFB)** 355 OSS/OSOS distributes the quarterly tanker schedule to the FSs at the start of each fiscal quarter.
- 9.5.6.1.2. **(Added-DAVISMONTANAFB)** 355 OSS/OSOS schedules the air refueling events on a first come basis for the FSs.
- 9.5.6.1.3. **(Added-DAVISMONTANAFB)** The FSs will make every effort to fill the air refueling events that are coordinated with the tanker units.
- 9.5.6.1.4. **(Added-DAVISMONTANAFB)** The FSs build the range requests for the lines associated with the tanker Air Refueling Control Times (ARCT). The FSs then e-mail their range request to wing scheduling for consolidation by COB Friday. It is then forwarded to Luke Range Scheduling on Monday NLT 0900 (previous Friday if Monday is on a night week or holiday), three weeks prior to the affected week.
- 9.5.6.1.5. **(Added-DAVISMONTANAFB)** **Attachment 4** is an example of a completed range request associated with tanker ARCTs.
- 9.5.6.2. **(Added-DAVISMONTANAFB)** Pre-wars/Post-wars Range Scheduling: Once Luke range scheduling receives all range requests (with or without tanker request), they publish the pre-wars for the affected week by 1200 Wednesday, one week and five days prior to the affected week.
- 9.5.6.2.1. **(Added-DAVISMONTANAFB)** FSs desiring ranges review the pre-wars and give Luke range scheduling all changes prior to 1000 the next morning.
- 9.5.6.2.2. **(Added-DAVISMONTANAFB)** Luke range scheduling starts the range wars at 1000, Thursday morning, one week and four days prior to the affected week.
- 9.5.6.2.3. **(Added-DAVISMONTANAFB)** Luke publishes the post-wars by 1400 on the same day as the range wars. Wing scheduling/FSs obtain the pre-wars and post-wars schedule via the <https://www.luke.af.mil/rmo/aros/index.html>
- 9.5.6.3. **(Added-DAVISMONTANAFB)** Luke Range Coordination: FSs will confirm their next day's ranges with Luke range scheduling by 1000 the day prior to affected day. Daily range confirmation can be accomplished either by phone or fax. If the FS is night flying, they may confirm schedules two days prior.
- 9.5.7. **(Added-DAVISMONTANAFB)** Air Refueling Coordination: Wing scheduling will finalize the weekly tanker schedule for the following week.
- 9.5.7.1. **(Added-DAVISMONTANAFB)** FSs will fill Air Refueling tasking: FSs can obtain tanker information by COB Wednesday, one week prior to affected week on the Air Force Portal.
- 9.5.7.2. **(Added-DAVISMONTANAFB)** Wing scheduling forwards the tanker track times to LA Center for AR-649. Wing scheduling coordinates weekly with Albuquerque Center and Kirtland OSS regarding AR-674. Wing scheduling coordinates weekly with Yuma Range Control and Los Angeles center regarding use of the Turtle MOA and AR-649.
- 9.5.7.3. **(Added-DAVISMONTANAFB)** Canceling air refueling: FSs will make every effort to fulfill the horse blanket including coordinating with other FSs before

canceling an air refueling sortie. When canceling other than the same day, FSs will contact 355 OSS/OSOS as early as possible prior to canceling an air refueling sortie.

9.5.8. **(Added-DAVISMONTHANAFB)** Cross Country Itineraries: 355th Fighter Wing FSs proceeding on off-station proficiency sorties will process an OG FL88, **Cross Country Request**, located on the Air Force Portal. FS operations schedulers will coordinate for aircraft availability through the appropriate AMU. FS commanders must ensure the cross-country form is signed by all agencies and delivered to the 355 OG/CC. This form is due to the OG at least 14 days prior to departure. The 355 OG/CC approves the cross country request. Wing scheduling will forward the approved itinerary to the Command Post prior to departure. Aircraft departing on unit deployments, depot inputs, and demonstration team sorties are exempt from filing an OG FL88. FS operations scheduling will load all sorties not being tracked via an OG FL88 into PEX for tracking purposes and the Flight Lead/Aircraft Commander will inform Command Post of all aircraft movements.

9.5.9. **(Added-DAVISMONTHANAFB)** Night Flying: 355 OSS/OSOS determine night weeks from FS yearly calendar inputs and PFT.

9.5.10. **(Added-DAVISMONTHANAFB)** Exercises: FSs wishing to add or subtract deployments from ACC's consolidated planning order (CPO) will complete a CPO change request and submit the completed form to wing scheduling for coordination and submission to ACC. Request forms are located on the Air Force Portal. FS operations and the associated AMU will coordinate all CPO issues. 355 OSS/OSOS will seek 355 OG/CC and 355 MXG/CC concurrence before submission to ACC. 355 FW/CC is the final approving authority.

9.5.11. **(Added-DAVISMONTHANAFB)** Daily Briefing Slides: MOC maintains the daily Operation and Maintenance Meeting slides on the MXG Shared Drive (FW CC 1600/Daily Standup/1500 slides New). MOC combines products from command post, PEX, FS/AMU input, analysis, OSOS and others to provide the wing commander a daily brief on maintenance and operational activities. Accuracy of information provided in this brief is the unit's responsibility. The following time line ensures accuracy:

9.5.11.1. **(Added-DAVISMONTHANAFB)** MOC distributes aircraft status display (ASD), prior days deviations, and Colonel's Brief electronically to all squadrons NLT 0630 daily.

9.5.11.2. **(Added-DAVISMONTHANAFB)** MOC compiles daily briefing slides with all corrections and forwards them to all affected agencies for review NLT 1300.

9.5.11.3. **(Added-DAVISMONTHANAFB)** Squadrons review the daily briefing slides and phone corrections to MOC and/or update their special subject slide NLT 1430.

9.5.11.4. **(Added-DAVISMONTHANAFB)** MOC will prepare briefing slides NLT 1445 for viewing by the wing commander (or designated representative) at 1500.

9.5.12. **(Added-DAVISMONTHANAFB)** Wing fly window: All squadrons will adhere to the fly window as set by wing scheduling (OSOS). All DMAFB C-130 squadrons will fly within a 14-hour window. All A-10 FSs will remain within a 12-hour wing window. The fly window becomes firm four weeks prior to execution. The 355 OG/CC and 355 MXG/CC or their designated representative must approve all deviations outside of the wing's flying

window. **Note:** Minimum maintenance recovery time between last land and first take off of next day's flying will be 10 hours.

9.6. (Added-DAVISMONTHANAFB) Daily Planning Functions/Flying Schedule. The daily flying schedule is a refinement of the weekly schedule. Wing scheduling FIRMS the daily flying schedule in PEX for the next flying day at 1530. All agencies requiring access to the daily flying schedule will use PEX.

9.6.1. **(Added-DAVISMONTHANAFB)** Wing scheduling activates the Tombstone MOAs, AR-639, and AR-639A, as applicable with Albuquerque Center.

9.6.2. **(Added-DAVISMONTHANAFB)** VR Route Scheduling: Wing scheduling schedules VR routes IAW AP/1B. IAW AP/1B, VR routes can only be scheduled on the same day and NLT two hours prior to entry time. After normal duty hours (0730L-1630L, Monday - Friday, and weekends) or by operational exception, Command Post schedules VR routes. Wing scheduling/Command Post de-conflicts and forwards VR route information to base operations.

9.6.3. **(Added-DAVISMONTHANAFB)** Hazard Reporting and Restriction of Airspace: The wing airspace manager (OSTA) is the point of contact for wing controlled airspace and routes. The wing airspace manager informs wing scheduling of safety hazards and restrictions affecting wing controlled airspace and routes. Wing scheduling forwards this information to the airspace users. In addition, wing scheduling will not schedule airspace and routes if so restricted.

9.6.4. **(Added-DAVISMONTHANAFB)** Canceling Air Refueling the same day as the event: Squadrons will immediately notify the wing command post and the tanker unit affected ASAP. The squadron will notify 355 OSS/OSOS NLT the next business day.

9.7. (Added-DAVISMONTHANAFB) FHP Program Updates.

9.7.1. **(Added-DAVISMONTHANAFB)** Wing scheduling is the single point of contact for all wing FHP changes.

9.7.2. **(Added-DAVISMONTHANAFB)** FSs and AMUs have until the 15 of the current month to coordinate changes their monthly UTE goal.

9.7.2.1. **(Added-DAVISMONTHANAFB)** Changes to the FHP must be submitted in writing to 355 OSS/OSOS, and signed by the FS commander or operations officer, the AMU/OIC and the 355 AMXS/CC. A reflow that does not include a change to the yearly goal does not affect the current yearly delta.

9.7.2.2. **(Added-DAVISMONTHANAFB)** If a FSs yearly goal changes, they must reflow the entire year using actual flown data for the months already flown. This in effect starts the yearly plan over and zeros the year to date delta. Reference paragraph 7.6.2

9.8. (Added-DAVISMONTHANAFB) Aircraft Utilization Reporting and Verification.

9.8.1. **(Added-DAVISMONTHANAFB)** It is the responsibility of each FS/AMU to verify the number of sorties and hours flown for the month. Each FS/AMU will verify this information between operations and maintenance using the AFTO Form 781, *ARMS*

Aircrew/Mission Flight Data Document, as the source document and ensuring it matches IMDS and PEX.

9.8.1.1. **(Added-DAVISMONTHANAFB)** FSs/AMUs will forward a copy of the AFTO Form 781 to 355 MOS/MXOOP to input aircraft possession changes in IMDS.

9.8.1.2. **(Added-DAVISMONTHANAFB)** FSs/AMUs will report their monthly verified hours and sortie totals in IMDS and PEX to OSOS NLT the 5th of the following month.

9.8.1.3. **(Added-DAVISMONTHANAFB)** OSOS will then report the data to ACC/DOSBB NLT the 7th of the following month.

9.8.2. **(Added-DAVISMONTHANAFB)** Responsibilities:

9.8.2.1. **(Added-DAVISMONTHANAFB)** AMU Debriefing sections will:

9.8.2.1.1. **(Added-DAVISMONTHANAFB)** Ensure Aircraft Utilization Data (AUD) on AFTO Forms 781 is accurate and legible.

9.8.2.1.2. **(Added-DAVISMONTHANAFB)** Accurately input AUD into IMDS.

9.8.2.1.3. **(Added-DAVISMONTHANAFB)** Correct IMDS AUD errors when identified.

9.8.2.1.4. **(Added-DAVISMONTHANAFB)** Notify MOC if the land time of a Code-3 sortie changes.

9.8.2.2. **(Added-DAVISMONTHANAFB)** OSOS will:

9.8.2.2.1. **(Added-DAVISMONTHANAFB)** Coordinate with AMU and FS operations personnel to ensure FS FHP database (PEX) is correct.

9.8.2.2.2. **(Added-DAVISMONTHANAFB)** Use IMDS or an Excel program (or equivalent) to verify AUD and advise applicable AMU(s) of any discrepancies that exist.

9.8.2.2.3. **(Added-DAVISMONTHANAFB)** Submit all required flying hour program reports to ACC/DOSBB monthly NLT the seventh of the following month.

9.8.2.2.4. **(Added-DAVISMONTHANAFB)** Act as single point of contact for dissemination of AUD within the wing.

9.8.2.2.5. **(Added-DAVISMONTHANAFB)** Maintain daily and cumulative totals of AUD existing in IMDS with a locally devised excel data sheet, which is posted every Monday by 1300 hrs on the Air Force Portal on the 355 MXG webpage under the MOCTRAX link

9.8.2.3. **(Added-DAVISMONTHANAFB)** FS flight management/current operations will:

9.8.2.3.1. **(Added-DAVISMONTHANAFB)** Perform daily reconciliation of IMDS and PEX with AMU debrief.

9.8.2.3.2. **(Added-DAVISMONTHANAFB)** Resolve any discrepancies on the spot that exist between IMDS, AFTO Form 781 and PEX with AMU debrief IAW ACCI 11-103, paragraph [1.1.4](#)

- 9.8.2.3.3. **(Added-DAVISMONTANAFB)** Ensure AUD on AFTO Forms 781 is legible and correct.
 - 9.8.2.3.4. **(Added-DAVISMONTANAFB)** Maintain daily and cumulative totals of AUD existing in their respective databases.
 - 9.8.2.3.5. **(Added-DAVISMONTANAFB)** Coordinate with OSOS to ensure database is correct.
 - 9.8.2.3.6. **(Added-DAVISMONTANAFB)** In coordination with Debrief, provide a copy of the AFTO Form 781 to the wing Aerospace Vehicle Distribution Officer (AVDO) to provide proper time and date receipt for the departure and return of aircraft temporarily transferred (i.e., PDM). White out AFTO Form 781, blocks 19 and 20.
- 9.8.3. **(Added-DAVISMONTANAFB)** Current aircraft possession status must be maintained in IMDS to support accurate utilization reporting. Aircraft scheduled for gain, loss, or possession indicator change must have possession status verified in IMDS by AMU schedulers within one duty day of scheduled transaction. Aircraft found with incorrect possession status in IMDS must be reported to MXOOP immediately.

9.9. (Added-DAVISMONTANAFB) Hosting Off-Station Units.

- 9.9.1. **(Added-DAVISMONTANAFB)** Off-Station units wishing to deploy to Davis-Monthan AFB must coordinate with OSOS. Wing scheduling will obtain their written request with the following information (this list is not all inclusive):
- 9.9.1.1. **(Added-DAVISMONTANAFB)** Number and type of aircraft
 - 9.9.1.2. **(Added-DAVISMONTANAFB)** Number of sorties per day
 - 9.9.1.3. **(Added-DAVISMONTANAFB)** *Airspace requirements*
 - 9.9.1.4. **(Added-DAVISMONTANAFB)** Range requirements
 - 9.9.1.5. **(Added-DAVISMONTANAFB)** Any live load requirements
 - 9.9.1.6. **(Added-DAVISMONTANAFB)** POC and phone number (Refer the POC to wing weapons if necessary)
 - 9.9.1.7. **(Added-DAVISMONTANAFB)** Required turn times
- 9.9.2. **(Added-DAVISMONTANAFB)** 355 OG/CC is the approval authority for foreign aircraft landing clearance.
- 9.9.3. **(Added-DAVISMONTANAFB)** Wing scheduling will:
- 9.9.3.1. **(Added-DAVISMONTANAFB)** Inform off-station units that wing quiet hours are from 2230-0600L. 355 OG/CC and 355 MXG/CC approval is required to fly outside of these times.
 - 9.9.3.2. **(Added-DAVISMONTANAFB)** Discourage all flying during wing quiet hours.
 - 9.9.3.3. **(Added-DAVISMONTANAFB)** Coordinate parking requirements with Airfield Operations (355 OSS/OSA).

9.9.3.4. **(Added-DAVISMONTANAFB)** Inform the incoming unit POC that the Detachment Commander must meet the 355 OG/CC prior to commencing operations from Davis-Monthan. Single aircraft deploying to DMAFB are exempt from the requirement to meet the OG/CC.

9.9.3.5. **(Added-DAVISMONTANAFB)** Explain the SOF requirements and direct the off-station POC to contact OSTT for further details.

9.9.3.6. **(Added-DAVISMONTANAFB)** Assemble all deployed unit information from the requesting unit. The following information must be collected:

9.9.3.6.1. **(Added-DAVISMONTANAFB)** Unit, POC, phone/FAX Reason for Visit

9.9.3.6.2. **(Added-DAVISMONTANAFB)** Deployment dates to DMAFB Billeting (Officers, Enlisted, Females)

9.9.3.6.3. **(Added-DAVISMONTANAFB)** Aerospace Ground Equipment (AGE) Special parking requirements

9.9.3.6.4. **(Added-DAVISMONTANAFB)** Fuel, Supply Accounts Facility, Security

9.9.3.6.5. **(Added-DAVISMONTANAFB)** Transportation requirements
Airspace requirements

9.9.3.6.6. **(Added-DAVISMONTANAFB)** Munitions requirements

9.9.3.6.7. **(Added-DAVISMONTANAFB)** The information is then forwarded to the airfield manager for his initial assessment of Davis-Monthan's ability to fulfill the request. If the airfield manager has no problems with the request, it is then forwarded to the 355 OG/CC and 355 MXG/CC for approval or disapproval. If the request is approved, the information is then forwarded to the airfield manager, Logistics Plans (355 LRS/LGRRX, the POC for receptions), and any other wing agency involved. Wing scheduling will then add the request to the wing slides and brief the 355 FW/CC on the approved request.

9.9.3.7. **(Added-DAVISMONTANAFB)** Explain the range and airspace scheduling process to the requesting unit and direct them to contact Luke Range Scheduling. Off-station units flying local missions at DMAFB schedule their ranges directly with Luke Range Scheduling. Overseas units deploying to DMAFB are an exception to this policy. Wing scheduling will accomplish their range request until they arrive on station and are able to take over the process for themselves. Off-station units must annotate live ordnance drops with Luke Range Scheduling IAW Luke AFB Supplement 1 to AFI 13-212V1, *Range Planning and Operations*.

9.9.4. **(Added-DAVISMONTANAFB)** Local Area Orientation (LAO) Briefing: Operations Group Standardization and Evaluation (OGV) is the POC for LAO briefings. Wing scheduling will notify OGV when an off-station unit is scheduled to come to Davis-Monthan. OGV will present a local area orientation brief to the off-station unit or will coordinate with a FS to do so. The local area briefer is responsible for contacting the incoming unit POC and establishing a local area briefing time and location. Single aircraft

deployed to DM that will land from an instrument approach procedure are exempt from receiving an LAO.

9.10. (Added-DAVISMONTANAFB) Snowbirds.

9.10.1. (Added-DAVISMONTANAFB) Wing scheduling coordinates with snowbird operations regarding the snowbird schedule. Snowbird operations will load the next day's schedule into PEX no later than 1530.

9.10.2. (Added-DAVISMONTANAFB) Snowbird operations handles most of the support concerns for snowbird units. Wing scheduling will confirm this support and assist the snowbird unit in coordinating additional needs and requirements with other wing agencies IAW paragraph [8.12](#)

9.11. (Added-DAVISMONTANAFB) Air Refueling Tanker Business Efforts And Orientation Flights.

9.11.1. (Added-DAVISMONTANAFB) References: For references to Orientation Flights see AFI 11-401, *Aviation Management*, AFI 11-401 ANG Sup 1, and ACCI 11-450, *Orientation Flight Program*.

9.11.1.1. (Added-DAVISMONTANAFB) A **business effort tanker** is defined as a tanker deployed to Davis-Monthan for a period, typically one week, to support the wing's air refueling training requirements.

9.11.1.2. (Added-DAVISMONTANAFB) An **orientation flight** is defined as a continuous flight performed within the local flying area (or other designated, approved location) terminating at the point of origin.

9.11.1.2.1. (Added-DAVISMONTANAFB) An **active duty orientation flight** is defined as a continuous flight performed within the local flying area (or other designated, approved location) that carries active duty members of DMAFB and terminates at the point of origin.

9.11.1.2.2. (Added-DAVISMONTANAFB) A **spouse orientation flight** is defined as a continuous flight performed within the local flying area (or other designated, approved location) that carries spouses of DMAFB active duty members and terminates at the point of origin.

9.11.1.2.3. (Added-DAVISMONTANAFB) A **public affairs orientation flight** is defined as a continuous flight performed within the local flying area (or other designated, approved location) that carries only members of the local community civil leadership or local media for the purpose of community relations or media coverage of the DMAFB mission and terminates at the point of origin.

9.11.2. (Added-DAVISMONTANAFB) POLICY:

9.11.2.1. (Added-DAVISMONTANAFB) 355 FW/CC and the Business Effort Tanker Wing Commander are approval authority for all active duty USAF and USAFR orientation flights. The State Adjutant General is the approval authority for orientation flights by Air National Guard (ANG) units. To obtain approval for news media on ANG aircraft, forward approval letter to NGB-PA (Pentagon).

9.11.2.2. **(Added-DAVISMONTANAFB)** The tanker aircraft commander will work with a flying squadron POC on passenger manifest, incentive flight publicity, and morale issues.

9.11.2.3. **(Added-DAVISMONTANAFB)** Wing scheduling publishes all planned business efforts on the operations group schedule spreadsheet and the quarterly horse blanket. A business effort offers dedicated tanker support to the wing for a period of approximately one week.

9.11.2.4. **(Added-DAVISMONTANAFB)** Wing scheduling will follow the procedures in paragraph 8.12 for hosting business effort tankers.

9.11.3. **(Added-DAVISMONTANAFB)** Responsibilities:

9.11.3.1. **(Added-DAVISMONTANAFB)** 355 OSS/OSOS and 755 OSS/OSOOT will coordinate a business effort tanker schedule that meets the air refueling needs of both the 355 FW and tenant units. 355 OSS/OSOS and 755 OSS/OSOOT will act as the wing scheduling POC for business effort tankers on a rotating basis. The wing scheduling POC will:

9.11.3.1.1. **(Added-DAVISMONTANAFB)** Oversee the business effort program and solicit a Host Unit and POC for each business effort orientation flight as determined by the rotating business effort host list. The host list is as follows: 12 AF, 355 MXG, 355 MSG, 355 MDG, 355 OG, 55 ECG, 563 RQG, and 355 FW Staff. A Host Unit is the DM unit that will provide the bulk of the orientation passengers. Wing scheduling will maintain the rotation schedule.

9.11.3.1.2. **(Added-DAVISMONTANAFB)** Coordinate through the 355 FW/PA office to gain approval for orientation and spouse orientation flights from the 355 FW/CC, the tanker unit commander, and the appropriate approval authority.

9.11.3.1.3. **(Added-DAVISMONTANAFB)** Ensure appropriate coordination for completion of "wing scheduling checklist."

9.11.3.1.4. **(Added-DAVISMONTANAFB)** Send the welcome letter to the tanker squadron POC upon identification of the POC and draft a 355 FW transient request worksheet for the 355 OG approval.

9.11.3.1.5. **(Added-DAVISMONTANAFB)** Provide the tanker unit with the flying schedule and photocopies of pertinent information from current 355 FW/55 ECG in-flight guides.

9.11.3.1.6. **(Added-DAVISMONTANAFB)** Handle arrival, deployment, and departure issues as requested by the tanker unit.

9.11.3.1.7. **(Added-DAVISMONTANAFB)** Draft a letter of appreciation endorsed by the 355 FW/CC to the Business Effort tanker unit FW/CC for appropriate routing.

9.11.3.1.8. **(Added-DAVISMONTANAFB)** Manage rotating 355 FW unit business effort host list.

9.11.3.1.9. **(Added-DAVISMONTANAFB)** All appropriate approval, coordination, after action reports, and welcome letters, as well as all appropriate

checklists will be maintained at wing scheduling. Wing scheduling will be responsible for delivering appropriate material to the participants in the business effort.

9.11.3.2. **(Added-DAVISMONTANAFB)** 355 FW/PA will:

9.11.3.2.1. **(Added-DAVISMONTANAFB)** Complete 355 FW/PA Checklist for PA-specific orientation flights involving community relations, i.e. civic leaders, media flights.

9.11.3.2.2. **(Added-DAVISMONTANAFB)** Coordinate approval for PA-specific orientation flight requests through the 355 FW/CC and the appropriate approval authority per AFI 35-101, *Public Affairs Policies and Procedures*.

9.11.3.2.3. **(Added-DAVISMONTANAFB)** For PA-specific orientation flight requests, coordinate for an escort (O-4 or above) for all civilian personnel, before, during, and after the scheduled sortie.

9.11.3.2.4. **(Added-DAVISMONTANAFB)** For PA-specific orientation flight requests, coordinate all issues required to obtain access for civilian personnel onto DMAFB and notification of their schedule for all DV orientation riders.

9.11.3.2.5. **(Added-DAVISMONTANAFB)** For PA-specific orientation flight requests, provide transportation or access requirements for POVs for all DVs to and from the point of embarkation for the orientation ride (normally the PAX terminal)

9.11.3.2.6. **(Added-DAVISMONTANAFB)** For PA-specific orientation flight requests, submit an after action report to the host unit POC within five days after each Public Affairs Orientation Flight.

9.11.3.3. **(Added-DAVISMONTANAFB)** Host unit POC will:

9.11.3.3.1. **(Added-DAVISMONTANAFB)** Ensure unit "POC Checklist" is completed.

9.11.3.3.2. **(Added-DAVISMONTANAFB)** Solicit potential passengers from the host unit and FS POCs involved in the business effort tanker trip.

9.11.3.3.3. **(Added-DAVISMONTANAFB)** Coordinate orientation rider information with the wing scheduling POC, 355 FW/PA and the FS POCs.

9.11.3.3.4. **(Added-DAVISMONTANAFB)** Coordinate the management of passengers before, during, and after an orientation flight and assist the wing scheduling POC in handling all PAX processing requirements at Base operations on the days scheduled for an Orientation Flight.

9.11.3.3.5. **(Added-DAVISMONTANAFB)** Compile and submit an after action report from all units involved with the business effort trip to wing scheduling POC within five days after the business effort is completed.

9.11.3.3.6. **(Added-DAVISMONTANAFB)** Handle arrival, deployment, and departure issues as requested by the tanker unit to include the accomplishment of a DD Form 2131, *Passenger Manifest*, prior to each orientation flight.

9.11.3.4. **(Added-DAVISMONTANAFB)** FS POC will:

9.11.3.4.1. **(Added-DAVISMONTHANAFB)** Coordinate with the FS scheduling office and CC to ensure orientation riders are identified from each of the receiver squadrons that are refueling with the business effort tanker unit for each orientation ride sortie scheduled.

9.11.3.4.2. **(Added-DAVISMONTHANAFB)** Coordinate with the host unit POC to ensure all FS orientation riders names, ranks and SSNs are passed to the host unit POC, the wing scheduling POC and 355 FW/PA as required NLT two weeks prior to the first orientation ride scheduled.

9.11.3.5. **(Added-DAVISMONTHANAFB)** 355 OG/OGV will meet the business effort tanker crew upon arrival at DMAFB and provide a local area orientation briefing to the crew prior to its first local flight as directed in BI 11-250, *Airfield Operations*.

9.12. (Added-DAVISMONTHANAFB) Airspace Scheduling.

9.12.1. **(Added-DAVISMONTHANAFB)** 355 FW controls the Tombstone MOA, AR-639, AR-639A, and AR-649. Scheduling for all these areas is on a first come, first served basis. When previously scheduled, AR-639 and 639A activities will take precedence over use of Tombstone MOA. There is no simultaneous air refueling in AR-639 and 639A without prior coordination and approval of Albuquerque Center. Information and restrictions for these tracks are contained in FLIP.

9.12.2. **(Added-DAVISMONTHANAFB)** MCAS Yuma controls the airspace (Turtle MOA) for track AR-649. AR-649 is the primary C-130 air refueling track and one of two low altitude tracks in the southwestern United States. Wing scheduling will schedule the air refueling track and coordinate for Turtle MOA with Yuma. Wing scheduling will coordinate for AR-649 airspace, whether it is for 355th Wing aircraft or off-station aircraft.

9.12.3. **(Added-DAVISMONTHANAFB)** Scheduling of Ruby/Fuzzy, and Jackal High/Low should be conducted directly with Tucson ANG, DSN 844-6366/6069.

9.13. (Added-DAVISMONTHANAFB) Live Load Scheduling. Wing scheduling will schedule the live load area on a first come, first served basis for both unit and transient aircraft. Wing scheduling will handle any conflicts that arise and use higher headquarters missions as priority over PFT missions. Units will schedule the live load area as early as possible to preclude conflicts arising from last minute scheduling. The live load schedule is available at <https://oss355/OSOS.htm>, but units must call OSOS to get on that schedule. IAW weapons safety guidelines, one empty space will be maintained between 355 FW A-10s and other squadrons using the LOLA. Every attempt will be made to leave spots 1-3 of live load area vacant to ensure Trim Pad 1 is usable for A-10 engine runs.

9.14. (DAVISMONTHANAFB) Static Displays/Flyovers.

9.14.1. **(Added-DAVISMONTHANAFB)** All approved static displays will be executed IAW BI 21-117, *Procedures for Static Display Aircraft*

9.14.1.1. **(Added-DAVISMONTHANAFB)** Once wing scheduling is notified that the wing will support with wing assets and has 355 FW/CC, 355 OG/CC, and 355 MXG/CC approval, wing scheduling will ask FSs to volunteer and wing scheduling will act as the POC until a FS is selected. If no FS volunteers to support the event, OSOS will ask the

355 OG/CC, in coordination with 355 MXG/CC, to direct a FS to support the event or cancel the request.

9.14.1.2. **(Added-DAVISMONTANAFB)** Once a FS is selected, responsibility for fulfilling the event will shift to the FS. Wing scheduling will assist in fulfilling the request, and will ensure procedures in AFI 11-209, *Air Force Aerial Events*, are followed. For off-base support, the FS will complete cross-country requests. For most flyovers, ACC/DO approval is required. Wing scheduling will assist the FS with the approval process and submit the request NLT seven days prior to the event.

9.14.2. **(Added-DAVISMONTANAFB)** Unit requests: Units can check <http://www.pa.hq.af.mil/airshows> for OASD/PA approved events. FSs will contact the POC of the event for details. 355 FW/CC, 355 OG/CC, and 355 MXG/CC approval is required. In addition, the squadron will submit a cross country request. For flyover, ACC/DO approval is usually required and must be submitted to ACC/DOOA NLT seven days prior to the event. Wing scheduling will assist the FS in submitting the request.

9.15. (Added-DAVISMONTANAFB) GILA BEND/FT HUACHUCA EGRESS TRAINING.

9.15.1. **(Added-DAVISMONTANAFB)** Gila Bend AFAF and Ft Huachuca fire departments have a quarterly requirement for egress training on A/OA-10 aircraft. Under separate agreement, Davis-Monthan provides aircraft and personnel for this training. The aircraft is required for 2 days so that both shifts of fire department personnel can be trained. Ft Huachuca and Gila Bend fire departments provide wing scheduling with a list of suggested training dates. With this information, wing scheduling assigns FSs and AMUs to support those dates.

9.15.2. **(Added-DAVISMONTANAFB)** FSs and AMUs contact the fire department POCs at Fort Huachuca, DSN 821-1535 and Gila Bend DSN 896-5241 to finalize dates and times for training. AMUs will pass this information to the 355 CMS egress shop, 4982/4907. Egress shop personnel are required to be there to safe the ejection seat.

9.15.3. **(Added-DAVISMONTANAFB)** FSs will contact the appropriate agencies for PPR, fuel, billeting, and transportation requirements.

9.15.4. **(Added-DAVISMONTANAFB)** AMU personnel must recover and launch the aircraft at Fort Huachuca since there is no transient alert. The maintenance personnel will safe the aircraft and roll the 30mm ammo into the drum as required by Fort Huachuca Military Police.

9.16. (Added-DAVISMONTANAFB) Demo Team Operations. Demo team operations will be scheduled and conducted IAW AFI 11-246v1 DM Sup 1, *Air Force Aircraft Demonstrations (A-10, F-15, F16)*, paragraph **1.5**

9.17. (Added-DAVISMONTANAFB) Paratroop Procedures. Paratroop procedures will be scheduled and conducted IAW BI 11-250 paragraph **11.2**

9.18. (Added-DAVISMONTANAFB) Quiet Hours.

9.18.1. **(Added-DAVISMONTANAFB)** Quiet hours will be conducted IAW BI 11-250 paragraphs **1.3** and **1.4**, and IAW AFI 13-213 ACC Sup 1, *Airfield Management*, paragraph **6.1.1.7**

9.18.2. **(Added-DAVISMONTANAFB)** Additionally, for maintenance engine runs, refer to AFI 21-101 Base Sup 1, paragraph **18.23.13.1.5**, unless specifically approved by 355 MXG/CC or designee.

9.19. Adopted Forms:

AF Form 847, *Recommendation for Change of Publication*

AF Form 2401, *Equipment Utilization and Maintenance Schedule*

AF Form 2402, *Weekly Equipment Utilization and Maintenance Schedule*

AF Form 2403, *Weekly Aircraft Utilization/Maintenance Schedule*

AF Form 2407, *Weekly/Daily Flying Schedule Coordination*

AFTO Form 781, *ARMS Aircrew/Mission Flight Data Document*

JOHN D. W. CORLEY (ACC)
General, USAF
Commander

PAUL V HESTER (PACAF)
General, USAF
Commander

WILLIAM T. HOBBS (USAFE)
General, USAF
Commander

(DAVISMONTANAFB)

PAUL T. JOHNSON, Colonel, USAF
Commander, 355th Fighter Wing

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION***Abbreviations and Acronyms*

AA—Air abort

ACC—Air Combat Command

ACCI—Air Combat Command Instruction

AD—Addition (see definition of terms in this attachment)

AF—Air Force

AFCSM—Air Force Computer Systems Manual

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFPD—Air Force Policy Directive

AFRC—Air Force Reserve Command

AFTO—Air Force Technical Order

AI—Air abort, IFE

AMU—Aircraft Maintenance Unit

AMXS—Aircraft Maintenance Squadron

ANG—Air National Guard

AOR—Area of Responsibility

APU—Auxiliary Power Unit

AR—Allocations

ASD—Average Sortie Duration

AT or ATC—Air Traffic Control

ATO—Air Tasking Order

ATx—Air Traffic

AVDO—Aerospace Vehicle Distribution Office

BAI—Backup Aerospace Vehicle Inventory

C—Chargeable recorded deviation

CAF—Combat Air Forces

CC—Commander

CHRG—Chargeable

CX—Cancellation (see definition of terms in this attachment)

DD—Delayed Discrepancy
DT&E—Development Testing and Evaluation
EL—Early Landing
ERCC—Engine Running Crew Change
ET—Early Take-off (see definition of terms in this attachment)
FCF—Functional Check Flight (see definition of terms in this attachment)
FE—IFE
FHP—Flying Hour Program
FI—In-flight Incident
FOL—Forward Operating Location
(Added-DAVISMONTHANAFB) FS—Fighter Squadron
FSE—Flying Scheduling Effectiveness
GA—Ground Abort
GAA—Ground abort, before engine start, maintenance
GAB—Ground abort, after engine start, before taxi, maintenance
GAC—Ground abort, after taxi, maintenance
HHQ—Higher Headquarters (see definition of terms in this attachment)
HQ—Headquarters
HQN—Higher Headquarters, NAF
HQP—Higher Headquarters, other
HQT—Higher Headquarters, MAJCOM
HUTE—Hourly Utilization
IAW—In Accordance With
IFE—In-flight Emergency (see definition of terms in this attachment)
IMDS—Integrated Maintenance Data System
IOT&E—Initial Operational Testing and Evaluation
IR—Immediate Response
ISO—Isochronal
JA/ATT—Joint Airborne Air Transportability Training
LG—Logistics Group
LL—Late Landing
LSS—Logistics Support Squadron

LT—Late Take-off (see definition of terms in this attachment)

MAF—Mobility Air Forces

MAJCOM—Major Command

MDS—Mission Design Series

MDSA—Maintenance Data Systems Analysis

MIS—Maintenance Information Systems

MOC—Maintenance Operations Center

MOF—Maintenance Operations Flight

MOO—Maintenance Operations Officer

MOS—Maintenance Operations Squadron

MSE—Maintenance Scheduling Efficiency

MSG—Mission Support group

MT—Maintenance

MTx—Maintenance

MXG—Maintenance Group

N—Not used (all deviations are recorded)

NCO—Noncommissioned Officer

NLT—No Later Than

OCF—Operational Check Flight (see definition of terms in this attachment)

OG—Operations Group

O&M—Operations and Maintenance (see definition of terms in this attachment)

OIC—Officer in Charge

OP or OPS—Operations

OPx—Operations

OS—Operations Squadron

OSS—Operations Support Squadron

OT—Other

OTx—Other

OT&E—Operational Testing and Evaluation

PACAF—Pacific Air Forces

PAI—Primary Aerospace Vehicle Inventory

PDM—Programmed Depot Maintenance

PE—Periodic
PH—Phase
PMAI—Primary Mission Aircraft Inventory
POL—Petroleum, Oil, and Lubricants
PRA—Planning Requirements
PS&D—Plans, Scheduling, and Documentation
RAP—Ready Aircrew Program
ROE—Rules of Engagement
QA—Quality Assurance
SAAM—Special Assignment Airlift Mission
SE—Support Equipment
SP—Spare (see definition of terms in this attachment)
SU—Supply
SUTE—Sortie Utilization
SU_x—Supply
SY—Sympathy
SY_x—Sympathy
TCTO—Time Compliance Technical Order
TDI—Time Distribution Index
TDY—Temporary Duty
TF—Aircraft possessed for training
T.O.-—Technical Order
TR—Training Range
TS—Tail number Swap or Exchange
USAF—United States Air Force
USAFE—United States Air Forces in Europe
UTA—Unit Training Assembly
UTE—Utilization
WX—Weather
W_{xx}—Weather
XC—Cross Country
xxx—Local option

XEH—Exercise, Higher Headquarters

XEL—Exercise, Local

Terms

Active Associate—ARC/ANG component unit retains principal responsibility for weapon system or systems; shares with one or more AD units.

Addition—An increase in sorties or aircraft added to the printed weekly flying schedule.

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

Air Deviation Code—A deviation from the scheduled sortie flight plan occurring after aircraft take-off.

Alert Sorties—Sorties flown from alert because of a higher headquarters exercise, active air or practice scramble, or committed to fly from alert on the printed weekly schedule will be considered sorties scheduled and flown as scheduled.

Attrition—Losses expected based on historical data. Sorties added by maintenance scheduling to a unit's sortie contract to allow for expected losses due to maintenance, operations, supply, air traffic control, sympathy, HHQ, other cancels, and weather cancels as computed IAW Attachment 2. If attrition is less or more than planned, adjustments to the schedule should be made to prevent overextending maintenance and/or to stay within the unit's sortie flying hour program. Attrition sorties are not substitutes for capability shortfalls; they are additive to the contract to ensure mission goals are met. A sortie lost will normally be flown in the week/month the loss occurred. If at the end of a quarter, losses exceed attrition figures, the OG/MXG CCs will come to an agreement on how the shortfall will be corrected.

Attrition Reserve—Reference AFI 16-402, *Aerospace Vehicle Programming, Assignment, Distribution, Accounting, and Termination*. Attrition reserve aircraft are those aircraft required to replace primary aircraft inventory losses in a given year projected over the life span of the weapons system. These aircraft are distributed to operational and training units to evenly spread life cycle fatigue and ensure all aircraft receive periodic systems upgrades and modifications. Assigned attrition reserves are occasionally realigned to maintain fleet balance.

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

Cancellation—An aircraft or sortie that is removed from the printed schedule for any reason.

Change—A recompilation of a unit's month-by-month flying hour plan, this is required when the unit's flying hour allocation changes.

Chargeable Aircraft (CHRG ACFT)—The number of aircraft against which units should build their programs. Except in cases where possessed aircraft is forecast to be significantly different from the PMAI such as in building or down-sizing units, chargeable aircraft will normally equal the unit's PMAI, PTAI, or PDAI, as applicable. In these cases, HQ ACC/DO/LG will assign a chargeable aircraft accountability for the unit in the ACC Flying Hour First Look and Baseline Messages.

Classic Associate— AD component unit retains principal responsibility for weapon system or systems; shares with one or more ARC/ANG units.

Combat Sortie Generation—A process by which aircraft are generated in a minimum time, during peacetime or wartime, through concurrent operations that may include refueling, munitions loading/unloading, aircraft reconfiguration, and -6 inspection and other servicing requirements. These exercises test a wing's ability to meet current war plans and contingency operations.

Continuation Sortie—A scheduled sortie containing scheduled operation stops. When a crew completes their training/mission and performs an operation stop, the engines/APU remains running and maintenance does not service the aircraft. The aircraft can subsequently be launched without the participation of maintenance personnel, except for a fire/safety observer. The prime purpose is to on/off load crew members. **EXCEPTION:** For safety, C-130 aircraft, engines may be shut down to upload/download personnel. **NOTE:** N/A to fighter and attack aircraft.

Crew Ready—An aircraft that has been properly inspected, fueled, required weapons loaded, necessary maintenance actions completed, the exceptional release signed off (for the first flight of the day) and the tail number passed to operations. **NOTE:** Units will develop and publish specific crew ready times for each assigned MDS as agreed upon by the OG/CC and MXG/CC.

Crew Show—The time that the aircrew arrives at the aircraft.

Deployed Sorties—Sorties launched away from home base or isolated areas at home base, with parent-unit maintenance provided. For the purpose of this instruction deployed sorties are considered home station sorties.

Daily Maintenance Production Meeting—Meeting required by AFI 21-101 and CAF Sup to review the previous day's accomplishments, verify aircraft and equipment utilization and scheduled maintenance requirements for the current and next day, establish work priorities, and coordinate schedule changes.

Deviation—A departure from the printed weekly flying schedule.

Early Landing—Scheduled sorties landing more than 15 minutes prior to scheduled landing time. Do not record early landing deviations for hot pit turn sorties launched more than 15 minutes prior to the scheduled take-off time. Early landing deviations are not included in FSE calculations.

Early Take-off—Scheduled sorties launched more than 30 minutes prior to scheduled take-off. **NOTE:** Do not record early take-off deviations for hot pit turn sorties.

Exercise—A unit or higher headquarters event designed to test or evaluate an organization's plans, procedures, and operational/maintenance capabilities. Exercises are a planned sortie surge, a combat sortie generation, or an unscheduled tasking. Operational readiness inspections and wing directed operational readiness evaluations are combat sortie generations.

Extended Sortie—Scheduled sorties that land more than 15 minutes past the scheduled landing time. If the extended sortie originated on time, record the subsequent late take-off or deletion against the agency that caused the late landing. If the extended sortie did not originate on time, record the subsequent sortie deviation against the agency that caused the original delay.

External Customer—Outside the control of the operational wing, a user of aircraft sorties that dictates, either partially or wholly, flying schedule execution (e.g., Joint Airborne Air Transportability Training (JA/ATT) users, Special Assignment Airlift Mission (SAAM) users or channel mission users.

Ferry Sortie—Those sorties flown to transfer an aircraft to or from a maintenance facility or to a new assignment, including inter-command, inter-unit transfers.

Flown as Scheduled Sortie—A sortie flown by a specific aircraft on the date and time indicated on the printed weekly schedule, and those aircraft that are defined as "flown as scheduled" elsewhere in this instruction.

(DAVISMONTHANAFB) Flown as Scheduled Sortie—Sorties defined as "flown as scheduled" are limited to XC returns, FCF/OCF sorties, FCF "chase" sorties, surge second and subsequent goes, and sorties originating off station without home unit support. Sorties originating off station with home unit support sorties are considered "scheduled sorties."

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.

FSE 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.

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.

Higher Headquarters—A controlling agency above wing level.

Home Station Sortie—Sorties launched from the home base or deployed locations where parent unit maintenance is provided.

Hot Pit Turn—Refueling aircraft with engines running between sorties at a designated location with approved equipment IAW T.O. 00-25-172. Hot pit refueling provides minimum aircraft turnaround time and reduces fueling personnel and equipment support requirements.

Immediate Response Aircraft—Mission capable aircraft postured to meet short-notice taskings which allow flexibility in meeting required Designed Operational Capability (DOC) timing.

In-Flight Emergency (IFE)—An airborne aircraft that encounters a situation or emergency that results in an IFE being declared by the aircrew. (Not a deviation, but will be recorded IAW Chapter 6.)

Tail Swap—Tail number swaps made to the daily flying schedule IAW paragraph 4.3.2.6. Aircraft tail swaps are swaps between printed aircraft on the same day, between printed aircraft and spare aircraft on the same day or between printed aircraft and aircraft that have previously

flown that day (cross country return, OCF, FCF, etc.) The term is synonymous with the previously used term “Interchange.”

Late Landing—Aircraft landing 15 minutes past its scheduled landing time. Does not apply to continuation sorties. If the sortie originated on time, record the subsequent late take-off or cancellation against the agency that caused the late landing. If the extended sortie did not originate on time, record the subsequent sortie deviation against the agency that caused the original delay. Late landings are not included in FSE calculations.

Late Take-off—Scheduled sortie launched more than 15 minutes after scheduled take-off time.

Maintenance Scheduling Effectiveness—A measurement used to determine what percent of the scheduled maintenance actions were actually completed as scheduled in the weekly flying schedule.

Mission, Design, and Series (MDS)—An acronym for aircraft mission, design, and series. For example: B052H, F015C, etc.

Off-Station Sorties—Sorties flown away from home base (cross-country) and parent unit maintenance is not provided. This includes aircraft that divert or break off-station and parent unit maintenance is sent to repair and launch the aircraft. **NOTE:** Off-station sorties are considered flown as scheduled. Deviations incurred are not used in scheduling effectiveness or abort rate computations.

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

Operations and Maintenance Day (O&M)—Monday through Friday, not including federal holidays or command directed family days.

Pen-and-Ink Changes—Changes made to next week's flying schedule on AF Form 2407 after the WG/CC has signed the schedule and prior to 1600 hours local Friday. **Exception: Pen-and-Ink changes are allowed 2 hours after the squadron's last landing during printed wing night flying weeks.**

Planned Sortie Surge—A scheduling option where a unit may plan to produce sorties at a higher than normal rate. To qualify as a surge, the number of planned sorties will exceed the normal daily sortie rate by at least 50 percent. This will be based on the monthly daily sortie rate as determined by MOF PS&D.

Possessed Aircraft—Aircraft under a wing commander's operational control and responsibility IAW AFI 21-103, *Equipment Inventory, Status and Utilization Reporting*.

Primary Aircraft Inventory (PAI)—Aircraft assigned to meet the primary aircraft authorization (includes PDAI, PMAI, POAI, PTAI). PMAI will not change except when approved by HQ USAF.

Primary Development/Test Aircraft Inventory (PDAI)—*Formerly CB or Test.* 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.

Primary Mission Aircraft Inventory (PMAI)—*Formerly CC/CA PAA Coded Aircraft.* Aircraft assigned to a unit for performance of its wartime mission.

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

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

Program Element (PE)—The PE is the smallest unit of military output controlled at the DOD level. It is identified by a six-digit alphanumeric program element code (PEC). The sixth character, "F", identifies the PE with the Air Force.

Program Element Code (PEC)—The six digit alphanumeric code used to identify the Program Element (see definition above).

Ready Aircrew Program (RAP)—Continuation training regulated under the AFI 11-2 MDS specific series for training of aircrews assigned to units primarily flying fighter, bomber, and LDHD PMAI. The ACC flying hour program centers around unit RAP tasking orders and the associated flying hours derived using the flying hour program models.

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 and Operational Check Flights are excluded.

Scheduled Maintenance Action—A maintenance requirement printed in the weekly schedule.

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.

Sortie Contract—A written agreement between operations and maintenance and approved by the WG/CC. It specifies the number of sorties and hours to be flown.

Spare Aircraft—An aircraft specifically designated on the flying schedule to replace aircraft that cannot fly its sortie. Spares can include aircraft that have been canceled, aborted, flown an earlier sortie, scheduled in a later sortie, or an aircraft that has been released after FCF/OCF. Do not count "Printed Spares" used as deviations when computing FSE.

Spare Ground Abort—Event after crew show time that prevents a "crew ready" aircraft from becoming airborne, but is replaced by a spare that meets the mission requirement. Spare ground aborts are categorized as maintenance (GAA, GAB, GAC). The difference between a ground abort and a spare ground abort is the scheduled line is accomplished, where the ground abort is not. A spare ground abort is not a deviation, but can cause a deviation such as late take-off. Spare ground aborts do not count towards FSE.

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).

Training Goal—The unit's completion of a formal course training syllabus and/or phase of instruction (TF coded units only).

(Added-DAVISMONTHANAFB) Unit(s)—An organization or group of organizations where a more specific designation is not required or is unknown (i.e., off-station "units").

Unscheduled Tasking—Tasking in which initial notification occurs after publication of the weekly schedule.

Unit Training Assembly (UTA)—A planned period when guard or reserve personnel participate in training duty, instruction, or test alert. For the purposes of this instruction, one UTA is considered a single Saturday through Sunday weekend. This is an authorized and scheduled training assembly lasting at a minimum of 4 hours. This assembly is mandatory for all troop program unit members. (AR 135-91)

Regularly scheduled unit training assembly (RSUTA)—Training time treated as a UTA or MUTA for which pay and retirement point credit are authorized. (AR 140-1)

UTE Remaining—A measurement of the UTE required to accomplish a unit's remaining flying hours with assigned aircraft over the remaining months of the fiscal year.

Utilization Rate (UTE)—For ACC aircraft, the UTE is expressed in the number of sorties flown per aircraft per month.

Weekly Flying and Maintenance Schedule—The schedule, agreed to by operations and maintenance, and signed by the OG/MXG/WG/CCs, to support the unit's flying and maintenance requirements. In this publication it is referred to as the "flying schedule."

Attachment 2**WAIVER/CHANGE REQUEST FORMAT**

The following format should be used in submitting waiver requests:

A2.1. Submitting Organization

A2.2. Date

A2.3. Subject (Waiver or Change Request)

A2.3.1. Priority of request (Urgent or Routine)

A2.4. Reference: include chapter, paragraph, and line number or table/figure number.

A2.5. Proposed waiver or change requested

A2.6. Background (unique circumstances or history leading up to request)

A2.7. Discussion (rationale for waiver or change and any workarounds)

A2.8. Recommendation (include unit(s) to which waiver/change applies and duration of waiver)

A2.9. POC (Name, office symbol, DSN, and e-mail)

ATTACHMENT 3 (Added-DAVISMONTANAFB)**LOCAL SCHEDULE INPUT AND PUBLISHING DEADLINES**

- Friday** Conduct pre-scheduling meeting between operations and maintenance units but NLT COB Monday preceding the effective week.
- Tuesday** AMUs and other agencies forward weekly (and monthly, as applicable) schedule input to MOF PS&D but NLT 1200 Thursday.
- Wednesday** 1500: MXG/OG pre-scheduling meeting.
- Thursday** 1200: MOF PS&D compiles weekly (and monthly, as applicable) schedule for FW/CC signature.
1500: FW/CC signs schedule.
- Friday** 1200: Signed schedule distributed and posted on Air Force Portal.
1600: Pen and ink changes on AF 2407 due to affected agencies.

ATTACHMENT 4 (Added-DAVISMONTANAFB)
SORTIE SEQUENCE LINE NUMBERS

Table A4.1. Sortie Sequence Line Numbers.

	C-130 & HH-60				A-10		
	<u>41 ECS</u>	<u>43 ECS</u>	<u>55 RQS</u>	<u>79 RQS</u>	<u>354</u> <u>AMU</u>	<u>357</u> <u>AMU</u>	<u>358</u> <u>AMU</u>
Home Station	101-119	301-319	501-519	901-919	401-459	701-759	801-859
FCF / OCF	120-124	320-324	520-524	920-924	460-464	760-764	860-864
X-Country / CONUS	125-144	325-344	525-544	925-944	465-499	765-799	865-899
Exercise	145-164	345-364	545-564	945-964	201-299	X	X
X-Country / O-CONUS	165-199	365-399	565-599	965-999	601-699	X	X

Note: To allow for accurate tracking of statistics, the above listed sortie sequence numbers will be used by all Aircraft Maintenance Units and Operating Squadrons assigned to Davis-Monthan AFB.

