



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR MOBILITY COMMAND

DAFI91-225\_AMCSUP\_AMCGM2026-01

17 March 2026

MEMORANDUM FOR AIR MOBILITY COMMAND

FROM: HQ AMC/SEF  
861 South Drive  
Scott AFB, IL 62225

SUBJECT: Air Mobility Command Guidance Memorandum to DAFI91-225\_AMCSUP, *Aviation Safety Programs*.

1. By Order of the Commander, Air Mobility Command, this Guidance Memorandum immediately implements changes to DAFI 91-225\_AMCSUP to require digital availability of data source documentation for safety program management. Compliance with this memorandum is mandatory. To the extent its directions are inconsistent with other AMC publications, the information herein prevails, in accordance with DAFI 90-160, *Publications and Forms Management*. This guidance is applicable to all AMC and AMC tenet units including all safety disciplines conducting safety program management and oversight in accordance with DAFI 91-225.
2. Safety Offices will ensure all records generated as a result of this guidance adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule which is located in the Air Force Records Information Management System.
3. Safety Offices will ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition schedule which is located in the Air Force Records Information Management System.
4. Please direct any questions or comments to Mr. Daniel Hernandez at DSN 779-0936, Comm 618-229-0936, email at [daniel.hernandez.2@us.af.mil](mailto:daniel.hernandez.2@us.af.mil) or Maj Benjamin Dickter at DSN 779-4397, Comm 618-229-4397, email at [benjamin.dickter@us.af.mil](mailto:benjamin.dickter@us.af.mil).
5. This Memorandum becomes void after one year has elapsed from the date of this Memorandum, or upon incorporation by interim change to, or rewrite of DAFI91-225\_AMCSUP, whichever is earlier.

JOHN B. KELLEY, Col, USAF  
Director of Safety

Attachment:

1. Guidance Changes

## **Attachment Guidance Changes**

**(Changed) 2.6.3.1. (Added-AMC)** The overarching concept of Ops RAMS includes the fusion of Tactics/Training, Standardization/Evaluation, and Safety with cross-functional representation from the AMC staff, 618th Air Operations Center (618 AOC), other MAJCOMs, ANG, and AFRC staffs. Key relationship linkages and functions provide a framework for corporate governance structure and delineation of roles for program execution. Communication and coordination among organizations enables the continuous search for overlapping indicators from multiple sources.

**(Changed) 2.6.3.2. (Added-AMC)** Composition. Ops RAMS includes MFOQA, ASAP, and Crew Resource Management/Threat and Error Management (CRM/TEM). Ops RAMS is the Office of Primary Responsibility (OPR) to AMC/CD and AMC/A3 on issues defined by the flight proactive safety analytical process. Ops RAMS collects, consolidates, and reports data from its component programs, reviews them at the Ops RAMS Working Group, and communicates them directly to AMC/A3. They vet the working group actionable tasks, gather information, and search for trends and indicators from multiple sources to identify and mitigate risks.

**(Deleted) 2.6.3.2.1. (Added-AMC)**

**(Deleted) 2.6.3.2.2. (Added-AMC)**

**(Deleted) 2.6.3.2.3. (Added-AMC)**

**(Changed) 2.6.3.3. (Added-AMC)** Event Review Committee (ERC). The ERC reviews all ASAP reports received and recommends action as needed to improve operational efficiency and safety in AMC operations. Effectively, the ERC enables staff evaluation of Mobility Airmen-submitted data to orient attention to MAF operations issues. Recommended actions are communicated by Ops RAMS to the appropriate staff office/Subject Matter Expert (SME) and monitored for action.

**(Add) 2.6.3.3.1. (Added-AMC)** Membership. The Ops RAMS Chief chairs the ERC. Voting members include representatives from Tactics/Training, Standardization/Evaluation, and other subject matter experts as appropriate. For example, a maintenance SME may be asked to vote on necessary actions for ASAP reports focused on maintenance concerns. Additional consultation may be provided by MFOQA, AMC Human Performance professionals, and etc. An ASAP Analyst is present to take notes regarding committee decisions.

**(Add) 2.6.3.3.2. (Added-AMC)** Timing. The ERC meets weekly and is expected to review all ASAP reports from the previous week. ASAP reports with definitive or high impact concerns may be fast-tracked to the appropriate office for action (for example airfield operations).

**(Changed) 2.6.3.4. (Added-AMC)** Ops RAMS Working Group. Ops RAMS Branch Chief is the chairperson. This working group is the core analysis and action body of Ops RAMS. The group receives, accepts, validates, and investigates inputs from a variety of information sources. They analyze the inputs and develop appropriate courses of action that may include trending for later analysis. The working group reports their findings, actions and recommendations to the AMC/A3 for review, direction and action. The Ops RAMS Working Group chairperson is responsible for the daily operations of Ops RAMS and distributes slides for all Ops RAMS Working Group meetings, directs the actions of individual working group members, schedules the Ops RAMS working group and semiannual AMC/A3 update.

**(Changed) 2.6.3.4.1. (Added-AMC) Membership.** The working group includes MFOQA, ASAP, CRM/TEM, Standardization/Evaluation (AMC/A3V), AMC Flight Safety (AMC/SEF), and AMC Wing Safety Offices. Additional consultation from various staff SMEs may be invited as appropriate. All MAF MAJCOMs are encouraged to participate in Working Group proceedings when possible.

**(Changed) 2.6.3.4.2. (Added-AMC) Timing.** The Ops RAMS Working Group meets monthly.

**(Deleted) 2.6.3.4.3. (Added-AMC)**

**(Deleted) 2.6.3.4.4. (Added-AMC)**

**(Changed) 2.6.3.5. (Added-AMC) Senior Leader Review (SLR).** The SLR is the principal directive body of Ops RAMS. It provides Ops RAMS Working Group findings, actions taken, and recommendations for further action to AMC/A3, AMC/A4, and AMC/SE. Effectively, the SLR does two things: focuses attention on proactive safety concerns within AMC operations and validates actions taken.

**(Changed) 2.6.3.5.1. (Added-AMC) Timing.** The SLR occurs twice a year (at a minimum).

**(Deleted) 2.6.3.5.2. (Added-AMC)**

**(Deleted) 2.6.3.5.3. (Added-AMC)**

**(Deleted) 2.6.3.5.4. (Added-AMC)**

**(Deleted) 2.6.3.5.5. (Added-AMC)**

**(Deleted) 2.6.3.5.6. (Added-AMC)**

**(Deleted) 2.6.3.5.7. (Added-AMC)**

**(Deleted) 2.6.3.5.8. (Added-AMC)**

**(Deleted) 2.6.3.5.9. (Added-AMC)**

**(Deleted) 2.6.3.5.10. (Added-AMC)**

**(Add) 2.6.3.6. (Added-AMC) Trend Review and Action Committee (TRAC).** By request, the TRAC convenes MAF representatives to provide briefings and recommendations from the Ops RAMS Working Group to the AMC Deputy Commander (AMC/CD) as needed to improve operational efficiency and safety.

**(Add) 2.6.3.6.1. (Added-AMC) Membership.** The AMC Deputy Commander (AMC/CD) chairs the TRAC. Members include, but not limited to, representatives from AMC/A3/A4/A5/A6/SE/SG, Eighteenth Air Force (18 AF), 618 AOC, and AMC Wings. MAF MAJCOMs (ANG, AFRC, PACAF, USAFE-AFAFRICA, AETC), MAF Councils, Weapon System Councils (WSC), and MAF Weapons Instructor Courses (WIC) from Air Combat Command (ACC) are invited and encouraged to participate. Additional organizations may attend as required.

**(Add) 2.6.3.6.2. (Added-AMC) Timing.** The TRAC convenes by request from the AMC/CD or on the recommendation of the AMC/A3.

**(Add) 2.9.1.1. (Added-AMC) Develop a process at the Wing level to identify and communicate effective corrective actions and recommendations for aircrew deviations identified in ASAP reports and report findings back to Ops RAMS.**

**(Add)** 2.10.6. **(Added-AMC)** Shall not use information obtained via ASAP for punitive actions for aircrew deviations. Official training records and personnel files should not reflect corrective actions associated with the ASAP.

**(Changed)** 3.4. **(Added-AMC)** AMC Implementation. Ops RAMS should meet the expectations outlined in FAA Advisory Circular 120-66C, Aviation Safety Action Program to the maximum extent allowable.

**(Deleted)** 3.4.1. **(Added-AMC)**

**(Deleted)** 3.4.2. **(Added-AMC)**

**(Deleted)** 3.4.3. **(Added-AMC)**

**(Deleted)** 3.4.4. **(Added-AMC)**

**(Deleted)** 3.4.4.1. **(Added-AMC)**

**(Deleted)** 3.4.4.2. **(Added-AMC)**

**BY ORDER OF THE  
SECRETARY OF THE AIR FORCE**



**DEPARTMENT OF THE AIR FORCE  
INSTRUCTION 91-225**

**31 JANUARY 2022**

*Incorporating Change 1, 1 AUGUST 2023*

**AIR MOBILITY COMMAND  
Supplement**

**25 JANUARY 2024**

*Corrective Action applied on 2 FEBRUARY  
2024*

**Safety**

**AVIATION SAFETY PROGRAMS**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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**RELEASABILITY:** There are no releasability restrictions on this publication.

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This publication implements Air Force Policy Directive (AFPD) 91-2, *Safety Programs*. It prescribes guidance and responsibilities for Department of the Air Force (DAF) employment of data-driven, proactive aviation safety programs. This instruction applies to all civilian employees and uniformed members of the United States Space Force, Regular Air Force, the Air Force Reserve, the Air National Guard, and contractors if included in the applicable contract. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the DAF Form 847,

*Recommendation for Change of Publication*; route DAF Forms 847 through the appropriate functional chain of command. This publication may be supplemented at any level, but all supplements will be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/delta level requirements in this publication are identified with a Tier (“T-0, T-1, T-2, T-3”) number following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items.

**(AMC)** This publication supplements Department of the Air Force Instruction (DAFI) 91-225, *Aviation Safety Programs*. This publication provides Air Mobility Command guidance on aviation safety programs. It applies to all active-duty organizations subordinate to Air Mobility Command (AMC). It applies to Air Force Reserve Command (AFRC) units and Air National Guard (ANG) mobility units. It does not apply to United States Space Force. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the DAF Form 847, *Recommendation for Change of Publication*. This publication may be supplemented at wing level, but all supplements that directly implement this publication must be routed to AMC Flight Safety (HQ AMC/SEF) for coordination prior to certification and approval. The authorities to waive wing, and unit level requirements in this publication are identified with a tier number (“T-0, T-1, T-2, T-3”) following the compliance statement. See Department of the Air Force Manual (DAFMAN) 90-161, *Publication Processes and Procedures*, for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items.

## **SUMMARY OF CHANGES**

This document has been substantially revised and should be completely reviewed. Changes include: (1) Renaming of the Airman Safety Action Program (ASAP) to Aviation Safety Action Program; (2) Clarifies identity protection policy, exclusion policy, and Gatekeeper duties; (3) Adds a detailed description of “just culture”; (4) Specifies training for personnel performing ASAP processing and ASAP-derived hazard reporting duties; (5) Provides further guidance on which events should be reported via ASAP; (6) Codifies the “hazard working group” as a proactive safety best practice; (7) Provides detailed ASAP processing guidance and an ASAP processing flowchart; (8) Adds definitions of key ASAP terms not previously defined in this publication. An asterisk ( \* ) indicates newly revised material.

**(AMC)** This revision aligns previous edition to DAFI 91-225 Change 1, 1 Aug 23.

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## Chapter 1

### PROACTIVE AVIATION SAFETY OVERVIEW AND EMPLOYMENT

#### 1.1. Overview.

1.1.1. This instruction provides guidance and assigns responsibilities for the following data-driven aviation safety programs: Aviation Safety Action Program (ASAP), Military Flight Operations Quality Assurance (MFOQA), and Line Operations Safety Audit (LOSA). These proactive programs deliver identity-protected, aggregate analysis to identify hazards, trends, human factors issues, and mishap precursors, resulting in a reduction in mishaps. This instruction does not apply to mishaps or mishap investigations.

1.1.1.1. Proactive aviation safety programs enhance operations, training, safety, and maintenance through the integration of self-reported hazard and error data, recorded aircraft system data, flight performance data, and observation data. Analysis of these data sources and the derived information is used to develop and implement actions to control or mitigate risk.

1.1.1.2. Analysis of self-reported data, recorded data, and observed inflight behaviors identifies threats, errors, and hazards that could initiate a mishap sequence, and assists in the identification of mitigation measures.

1.1.1.3. Commanders employ proactive aviation safety programs in risk management activities and assess and accept the risk necessary for mission accomplishment.

1.1.2. Aviation safety data analysis facilitates the risk management process as described in AFPD 90-8, *Environmental, Safety & Occupational Health Management and Risk Management*.

1.1.3. ASAP, MFOQA, and LOSA fall under the ‘Risk Management’ and ‘Assurance’ pillars of the Safety Management System, as described in AFI 91-202, *The US Air Force Mishap Prevention Program*. These programs are fundamental to a safety reporting culture where commanders do not punish Airmen and Guardians for mistakes, but also do not tolerate intentional violations. This underscores the importance of a just culture approach to hazard resolution and builds a safety focused reporting culture.

#### 1.2. Proactive Aviation Safety Employment.

1.2.1. United States Air Force (USAF) Major Commands (MAJCOMs) and United States Space Force (USSF) Field Commands (FLDCOMs) will use the information derived from ASAP, MFOQA, and LOSA programs to identify, trend, and mitigate threats, errors, and hazards. (T-0)

1.2.2. Lead MAJCOMs will include an aircraft flight data collection and distribution process that supports the MFOQA program as a standard requirement in all current aircraft sustainment and future aircraft acquisition efforts. (T-0) This includes Groups 3, 4, and 5 unmanned aerial systems as defined in Department of Defense Instruction (DoDI) 6055.07, *Mishap Notification, Investigation, Reporting, and Recordkeeping*. (T-0) Ensure data sources meet the requirements of AFI 63-101/20-101, *Integrated Life Cycle Management*, and Air Force Pamphlet (AFPAM) 63-129, *Air System Development and Sustainment Engineering Processes and Procedures*. Lead MAJCOMs will utilize the MFOQA Cost-Benefit Analysis (see **Attachment 2**) when

contemplating MFOQA exclusion decisions (**Attachment 3**). (T-1) Lead MAJCOMs will program funding for data collection and distribution processes that support MFOQA unless a cost-benefit analysis substantiates an exclusion decision. (T-0)

1.2.3. MAJCOMs/FLDCOMs will establish procedures for handling the data collected for and releasing the analysis results generated by proactive aviation safety programs, based on the following:

1.2.3.1. Airmen and Guardians participating in (or identified by) these safety programs are identity-protected. This fosters and sustains a just organizational culture, encourages hazard and error reporting, and prevents coercion, discrimination, and/or reprisal. Names and other identity-revealing information are protected from release outside of safety channels except when authorized by the affected individual(s) and/or in the circumstances described in **paragraph 1.2.9**. (T-0)

1.2.3.2. MAJCOMs/FLDCOMs will develop processes to employ gatekeepers. (T-0) A gatekeeper is an individual authorized access to unit and aircrew information, if available, to gather the details necessary to adequately assess and mitigate a hazard or error to support mishap prevention, not punitive action. Occasionally, an ASAP report or MFOQA analysis is insufficient to thoroughly understand an event or hazard. If the contact information is known, gatekeepers may be utilized to identify and contact the pilot, crew, or report submitter to gather additional details related to the event that are necessary to initiate hazard resolution. Gatekeepers may also contact other individual(s) referenced in an ASAP report as needed. As proactive aviation safety programs detect and mitigate hazards and identify errors before they result in a mishap, a gatekeeper's fact-finding interview(s) are not eligible for the extension of a promise of confidentiality.

1.2.3.3. Data collected for, or analysis generated from, aviation safety programs must not be used to initiate crew qualification downgrade, take adverse personnel action, or monitor personnel performance. (T-0) Prohibited actions include qualification actions (e.g., decertification, or Q2 or Q3 evaluation ratings as defined by Air Force Manual (AFMAN) 11-202v2, *Aircrew Standardization and Evaluation Program*), administrative discipline (e.g., letter of counseling, reports of survey, line of duty determination, or flight evaluation board), non-judicial punishment (e.g., Uniform Code of Military Justice Article 15 action) or judicial action, except as described in **paragraph 1.2.3.4**. Additional training programs or requirements are not considered punitive or adverse.

1.2.3.4. If data collected for, or analyses generated from, aviation safety programs indicate the activity or event appears to involve an intentional disregard for safety, or that an intentionally false statement was made, the analysis or report no longer meets the criteria of proactive aviation safety. In these cases, the protections of **paragraph 1.2.3.3** are not applicable, and commanders may utilize the specific MFOQA analyses or ASAP reports containing the questioned activity as necessary to investigate the event and take qualification, administrative, non-judicial or judicial action. See **paragraph 1.2.9**.

1.2.4. The flight data files used for MFOQA analyses are factual information and are not privileged safety information, as defined in Department of the Air Force Instruction (DAFI) 91-204, *Safety Investigations and Reports*.

1.2.4.1. DoDI 6055.19, *Aviation Hazard Identification and Risk Assessment Programs (AHIRAPs)*, implements Title 10, United States Code (USC), Section 2254a, *Data Files of Military Flight Operations Quality Assurance Systems*, and exempts certain information contained in the data files and the subsequent MFOQA analyses from release through Freedom of Information Act requests (see Department of Defense Manual (DoDM) 5400.07\_AFMAN 33-302, *Freedom of Information Act Program*). Submit Freedom of Information Act requests for MFOQA information to the Air Force Safety Center (AFSEC) Office of the Staff Judge Advocate (AFSEC/JA). **(T-0)** Submit DAF official-use MFOQA requests to the AFSEC Aviation Safety Division, Engineering Branch (AFSEC/SEFE). **(T-1)**

1.2.4.2. MFOQA analysis reports produced on a regular basis and used by a DAF safety investigation are not privileged documents. MFOQA analyses requested by safety investigators for specific data (e.g., unstable approaches at a particular location) reveal the investigator's deliberative process and are privileged safety information in accordance with DAFI 91-204. The safety investigation board will mark MFOQA analysis reports used in event investigations appropriately and include in the Engineering and Technical Reports exhibit group. **(T-1)**

1.2.5. ASAP reports are not privileged safety information in accordance with DAFI 91-204.

1.2.6. A proactive safety study of a hazardous event(s) may be initiated by commanders, safety, operations, or logistics staff, in accordance with DAFI 91-204. ASAP reports and MFOQA analyses accomplished specifically for the safety study and used in the deliberative process may be privileged safety information in accordance with DAFI 91-204. The AFSEC/JA makes these determinations on a case-by-case basis.

1.2.7. The LOSA program consists of anonymous observations and a consolidated report of trends and conclusions regarding day-to-day operations. This report may identify hazards or trends warranting further investigation. LOSA observation forms and annotated data are not safety privileged information. A safety study may be completed to address potential hazards or trends identified through LOSA reports. The resultant findings and recommendations are not safety privileged information unless safety privileged information was included in the analysis or in the final report.

1.2.8. MAJCOMs/FLDCOMs will document, in a supplement to this instruction or in separate guidance, how proactive aviation safety programs will be incorporated into their existing risk management and hazard mitigation processes. Include command-specific processes that: Support the aviation safety concept for safety, operations, training, and maintenance customers; identify platform or command-wide trends; develop corrective measures; and evaluate control measure effectiveness. These activities may include realistic training review boards, aircraft modification requirements development, funding rack and stacks, publication reviews, airfield operations boards, flight safety meetings, and hazard review boards.

1.2.8.1. **(Added-AMC)** This supplement establishes AMC guidance for Ops RAMS (Operations Risk Assessment and Management System) and defines authority to guide proactive mishap reduction and operations/training improvement throughout the Mobility Air Forces (MAF). This includes AMC-gained Air National Guard (ANG) and Air Force Reserve Command (AFRC) aircraft and aircrew and fulfills lead command responsibilities to MAF in other major commands (MAJCOMs): Pacific Air Forces (PACAF), United

States Air Forces in Europe/Africa (USAFE-AFAFRICA), and Air Education and Training Command (AETC). The overarching goal of Ops RAMS is to improve MAF aviation operations in a way that increases effectiveness by ensuring safe mission accomplishment. Ops RAMS neither replaces current aircrew training and standardization and evaluation (stan/eval) oversight responsibilities nor takes the place of established processes such as mishap or hazard investigations. Rather, Ops RAMS augments these existing processes by incorporating legacy and emerging data sources into a structure of regular review to adjust training, procedures, and guidance to meet the dynamic nature of MAF aviation.

1.2.8.2. **(Added-AMC)** Two basic assumptions underpin Ops RAMS: First, aircrew, air traffic control, ground crew, etc. conduct themselves professionally and always strive for safe mission accomplishment, and second, people make mistakes. Ops RAMS provides an avenue for cultivating a Just Culture environment to address system issues and errors. Just Culture functions on trust by the submitter that punishment does not occur for honest mistakes and a clear understanding by unit leadership that Higher Headquarters (HHQ) is not usurping their authority or micromanaging their operations. All Ops RAMS information sources look for trends and significant single events – “outliers.” Ops RAMS seeks system-wide improvements. Information presented within Ops RAMS is submitter sanitized and is Mission Design Series (MDS)-specific only to promote full, honest, and open feedback at all times. Ops RAMS regularly meets with AMC senior leaders to look at the MAF system and address/correct issues.

1.2.9. Events that fall outside of the proactive aviation safety arena. ASAP submissions, flight data analysis, or event details provided during gatekeeper contact may indicate an event involved an intentional disregard for safety, an intentionally false statement, or met other exclusion criteria. ASAP reports may also describe other facts or circumstances that could remove it from the proactive safety domain. Under these circumstances, the MAJCOM/FLDCOM and associated wing/delta safety staff will collaborate with AFSEC/SEF as needed to obtain additional information concerning the event(s). **(T-1) Note:** Intentional disregard for safety is not the same concept as criminal action in a mishap investigation. For more information about the differences between intentional disregard for safety and criminal conduct in a mishap investigation, see “exclusion criteria” in [paragraph 1.2.9.2.2](#), the definition of “intentional disregard for safety” in [Attachment 1](#) of this publication, and DAFI 91-204.

#### 1.2.9.1. MFOQA

1.2.9.1.1. If interviews or additional analysis validates or continues to indicate an intentional disregard for safety, the associated wing/delta chief of safety will consult with wing/delta leadership and determine the appropriate course of action (such as further safety investigation, commander directed investigation, or administrative actions). **(T-1)** AFSEC will not perform further MFOQA analysis on the event; **(T-1)** however, raw flight data files may be provided to the investigator on a case-by-case basis.

1.2.9.1.2. The wing chief of safety should also evaluate the event(s) in question for damage, injury, or safety hazards that warrant continuing a mishap or other investigation. Units may conduct a hazard or mishap investigation in accordance with DAFI 91-204, as appropriate, to support mishap prevention. If criminal action is

suspected or confirmed, suspend the investigation in accordance with DAFI 91-204. **(T-1)**

1.2.9.2. ASAP. Do not apply identity protection to ASAP submissions that involve a mishap (see [paragraph 1.2.9.2.1](#)), involve an intentional disregard for safety, or an intentionally false statement, **(T-0)** or other exclusion criteria listed in [paragraph 1.2.9.2.2](#). **(T-1)** In any of these cases, do not apply the non-punitive protections of [paragraph 1.2.3.3](#).

1.2.9.2.1. An event submitted via ASAP indicating damage, injury, or occupational illness, is a mishap. The submission is treated as a non-confidential, non-privileged statement in a mishap investigation. MAJCOM/FLDCOM safety offices will establish procedures to ensure the report is forwarded to the mishap convening authority's safety staff. **(T-1)** A mishap investigator may contact the submitter for further information.

1.2.9.2.1. **(AMC)** If an ASAP submission reveals that a mishap has occurred and the identity of the ASAP submitter is known, Ops RAMS will contact the submitter to verify that mishap has been reported to their chain of command and local safety office. Additionally, Ops RAMS will confirm with the submitter that ASAP submission will be treated as a non-confidential, non-privileged statement in a mishap investigation. All information will be forwarded to the mishap convening authority's safety staff to conduct the safety investigation.

1.2.9.2.2. Exclusion Criteria. In keeping with "just culture" principles that permit personnel and organizations to quickly identify hazards and learn from mistakes, yet allow intentional violators to be held accountable, ASAPs that meet the below criteria are "excluded" from identity protection policy and may be made available outside of safety channels.

1.2.9.2.2.1. The activity or event appears to describe an intentional disregard for safety. **(T-0)**

1.2.9.2.2.2. An intentionally false statement was made in the ASAP report or during Gatekeeper contact. **(T-0)**

1.2.9.2.2.3. Criminal activity, including substance abuse, or the use of illicit substances. **(T-1)**

1.2.9.2.2.4. Violations of force protection, physical security, or information security policy, instructions, or regulations. **(T-1)**

1.2.9.2.2.5. Alcohol consumption when such use violates DAF policy, public law, or statute. **(T-1)**

1.2.9.2.3. If, during ASAP processing, investigation, or gatekeeper contact, it becomes apparent that the reported activity or event meets (or may meet) exclusion criteria, stop immediately and contact the processing/investigating office's chief of safety for further guidance. **(T-2)** Consultation with AFSEC/JA is strongly encouraged. Organizational chiefs of safety may elect to continue processing the ASAP report or pursue exclusion through safety channels to the MAJCOM/FLDCOM safety office.

1.2.9.2.4. Excluding ASAPs. MAJCOM/FLDCOM directors of safety are the final decision authority for excluding ASAP reports. **(T-1)** Consultation with AFSEC/JA

prior to exclusion is strongly encouraged. Ensure mishaps and/or hazards are documented in the Air Force Safety Automated System (AFSAS) and process the ASAP submission in accordance with **Attachment 4. (T-1)**

1.2.9.2.4. (AMC) If an ASAP is received that should be excluded, the Chief of Ops RAMS will coordinate with the AMC Chief of Safety.

1.2.9.2.5. Inspector General (IG) Matters. ASAP reports may, in whole or in part, contain issues that are more appropriately resolved by an Inspector General. Unless exclusion criteria are met, identity protection policy applies to the submitter and all persons identified in the report.

1.2.9.2.5.1. If the submitter is known, instruct the submitter to contact the IG directly. (T-2)

1.2.9.2.5.2. If the submitter is unknown, apply identity protection policy to the report and turn over the sanitized narrative to the appropriate IG for action. (T-1)

1.2.9.2.5.3. In both cases, inspect the submission for valid, safety-actionable hazards. Document hazards in AFSAS and process the ASAP submission in accordance with **Attachment 4. (T-1)**

#### 1.2.10. DELETED

1.2.10.1. DELETED

1.2.10.2. DELETED

**1.3. Just Culture.** A just culture is the foundation of the Informed Safety Culture construct (explained in greater detail in AFI 91-202) and is a necessary component of a healthy organizational safety culture that actively seeks to identify hazards and mitigate risks.

1.3.1. Description. In a just culture, commanders understand human beings will make honest mistakes in the performance of their duties. Additionally, commanders actively encourage their personnel to voluntarily report hazards or errors without fear of reprisal or adverse action, thus actively contributing to operational safety. Furthermore, just culture enables organizations to examine the performance of the organization holistically, and scrutinize the role of supervision, policies, training, leadership, and equipment design in the initiation and outcome of an event.

1.3.2. Accountability in a just culture environment. In a just culture, accountability is realized when Airmen and Guardians are willing to accept responsibility for their actions. They share their honest errors and lessons learned with others in the organization. This in turn promotes safety and reduces risk through the combined effect of open identification of issues and a willingness and ability to change and learn.

1.3.3. Leadership's responsibilities in a just culture. Responsibility for establishing a culture that encourages reporting and eliminates unjustified worry about adverse action resides with commanders and supervision. Commanders must define and differentiate between acceptable behaviors, such as honest mistakes, and unacceptable behaviors, such as intentional disregard for safety. Furthermore, commanders must encourage reporting, reward those who do, and champion root cause analysis, and refrain from taking punitive action against those who report honest mistakes. Yet they must also take disciplinary action when unacceptable behaviors are identified. This balance is crucial to the sustainment of a just culture.

1.3.4. Airmen and Guardians' responsibility in a just culture. In a just culture environment where commanders accept honest mistakes, Airmen and Guardians have a complementary responsibility to report errors and hazards when they occur or are observed.

**1.4. (Added-AMC) Tier Waiver Authority Delegation.** In accordance with DAFMAN 90-161 delegation guidance, AMC Commander (AMC/CC) delegates waiver authority for all "T-1" and "T-2" compliance requirements contained in this instruction to the Director of Safety (AMC/SE).

## Chapter 2

### ROLES AND RESPONSIBILITIES

#### 2.1. The Air Force Chief of Safety (AF/SE). AF/SE will:

2.1.1. Issue safety program policy and oversee aviation safety program development throughout the DAF.

2.1.2. Support aviation safety program collaboration with other Department of Defense (DoD) components on joint programs and in joint operating environments.

2.1.3. Staff a MFOQA implementation update memorandum to the Vice Chief of Staff of the Air Force by 1 March each year, based on input from the lead MAJCOMs ([paragraph 2.7.9.](#))

#### 2.2. The Air Force Deputy Chief of Staff, Operations (AF/A3). AF/A3 will ensure MAJCOM OPRs for each fleet's 11-2 mission design series (MDS) Volume 1, Training, and Volume 3, Operations Procedures, address overall safety issues for the specific platform. Incorporate aviation safety program hazard analysis results in risk management processes, and in aircrew operational procedures.

#### 2.3. Commander, Air Force Materiel Command (AFMC/CC). AFMC/CC will ensure AFMC acts as a focal point and liaison for aircraft data acquisition compliance with AFI 63-101/20-101, in support of MFOQA programs.

#### 2.4. System program managers responsible for aircraft development will:

2.4.1. Perform the roles and responsibilities identified in AFI 63-101/20-101, to collect flight data generated by the aircraft. **(T-1)**

2.4.2. Respond to lead MAJCOM data collection capability and process requirements.

2.4.2.1. For aircraft in development, ensure data collection requirements, as specified in capabilities documents authorized by the lead MAJCOM, are met through compliance with AFI 63-101/20-101. Aircraft should enter full-rate production meeting the MFOQA data collection requirements.

2.4.2.2. When aircraft undergo modification, evaluate the potential to incorporate missing data collection and distribution requirements that support the MFOQA data analysis process. **(T-1)**

2.4.2.3. Support lead MAJCOM development of the MFOQA Cost-Benefit Analysis (**Attachment 2**) by providing updated engineering service life estimates, fly-away cost data, and estimated cost (if any) to provide flight data files to the MFOQA analysis process. **(T-1)**

2.4.3. Use integrated product teams to incorporate MFOQA data collection with similar processes for other system monitoring equipment. This combined effort may maximize capability while minimizing cost.

#### 2.5. The Air Force Safety Center (AFSEC). AFSEC will:

2.5.1. Develop policy for proactive aviation safety program implementation.

2.5.2. Fund MFOQA and ASAP reporting and analysis software management and sustainment, and digital flight data analysis manpower requirements. Software capabilities include the receiving, storing, processing, analyzing, and protecting of the data collected for, and analysis generated by, MFOQA and ASAP processes and reports, and the storage of LOSA-generated safety studies.

2.5.2.1. Integrate ASAP components into the Air Force Safety Automated System (AFSAS), including the mobile reporting application or website (for reporting), a Scoreboard (for messaging), and ASAP management documents.

2.5.2.2. Provide MFOQA program managers at the lead MAJCOMs to facilitate program integration and oversee the assigned MFOQA analysts.

2.5.2.3. Procure, deploy, and sustain a standardized MFOQA analysis system. Provide aircraft analysts to lead MAJCOMs, based on the types and number of aircraft in the fleet and the capabilities of the analysis system.

2.5.3. Support the lead MAJCOM MFOQA cost-benefit analysis and program exclusion memorandum staffing processes.

2.5.3.1. Provide information and options for establishing a MFOQA capability with the available data set.

2.5.3.2. Review exclusion memoranda for accuracy, compliance, and sufficient documentation.

2.5.4. Provide guidance to system program managers and lead MAJCOM requirements personnel on the MFOQA data requirements, including required and desired parameters, data collection, download, and distribution capabilities, data analysis, and analysis distribution.

2.5.5. Review MAJCOM proactive safety products and analyses, and disseminate hazards found across multiple platforms and aviation functional areas. Facilitate compatibility and cross-communication between MAJCOMs, other DoD components, federal agencies, foreign militaries, and civil aviation communities.

2.5.6. Document and disseminate proactive aviation safety program benefits, such as improved training efficiency, maintenance savings, and risk reduction, within the DAF, and with other DoD components, federal agencies, foreign militaries, and civil aviation communities.

2.5.7. Educate and train MAJCOM/FLDCOM, numbered air force, and wing/delta safety personnel on proactive aviation safety program processes, benefits, and promotion of outcomes.

## **2.6. All MAJCOMs/FLDCOMs.** All MAJCOMs/FLDCOMs will:

2.6.1. Develop and implement activities and strategies to employ proactive aviation safety programs in their unique operational and training environments. Document in a supplement to this instruction or in separate guidance.

2.6.2. DELETED

2.6.3. Identify the staff organization that will facilitate the resolution of MFOQA-identified issues, such as to investigate 'one-off' type events (e.g., MAJCOM A3 training), to validate

and resolve data anomalies (e.g., aircraft program office or MAJCOM A6), or to report aircraft exceedances to ensure timely aircraft inspections are accomplished (e.g., MAJCOM A4.)

2.6.3. **(AMC)** Ops RAMS Organizational Elements. The organizational structural elements identified below apply to all MAF proactive safety programs.

2.6.3.1. **(Added-AMC)** The overarching concept of Ops RAMS includes the fusion of Training, Standardization/Evaluation, Safety and Tactics with cross-functional representation from the AMC staff, 618th Air Operations Center (618 AOC), other MAJCOMs, ANG, and AFRC staffs. Key relationship linkages and functions provide a framework for corporate governance structure and delineation of roles for program execution. Communication and coordination among organizations enables the continuous search for overlapping indicators from multiple sources.

2.6.3.2. **(Added-AMC)** Trend Review and Action Committee (TRAC). The TRAC reviews working group inputs and takes action as needed to improve operational efficiency and safety in coordination with other participating MAF MAJCOMs. Effectively, the TRAC does two things: focuses attention on MAF operations issues and validates actions taken.

2.6.3.2.1. **(Added-AMC)** Scope. The TRAC is the principal directive body of Ops RAMS. It receives briefings and recommendations from the working group and provides return guidance to the same. Additionally, it makes decisions affecting procedures, guidance, and training and manages action items.

2.6.3.2.2. **(Added-AMC)** Membership. The AMC Deputy Commander (AMC/CD) chairs the TRAC. Members include, but not limited to, representatives from AMC/A3/A4/A5/A6/SE/SG, Eighteenth Air Force (18 AF), 618 AOC, and AMC Wings. MAF MAJCOMs (ANG, AFRC, PACAF, USAFE-AFAFRICA, AETC), MAF Councils, Weapon System Councils (WSC), and MAF Weapons Instructor Courses (WIC) from Air Combat Command (ACC) are invited and encouraged to participate. Additional organizations may attend as required.

2.6.3.2.3. **(Added-AMC)** Timing. The TRAC convenes twice a year (at a minimum).

2.6.3.3. **(Added-AMC)** Ops RAMS Branch (AMC/A3TO). The Ops RAMS Branch includes MFOQA, ASAP, and Crew Resource Management/Threat and Error Management (CRM/TEM). Branch is the Office of Primary Responsibility (OPR) to AMC/CD on issues defined by the TRAC. Ops RAMS collects, consolidates, and reports data from the Ops RAMS working group directly to the TRAC chairperson. They vet the working group actionable tasks, gather information, and search for trends and indicators from multiple sources to identify and mitigate risks. Ops RAMS tracks action items for the TRAC.

2.6.3.4. **(Added-AMC)** Ops RAMS Working Group. Ops RAMS Branch Chief is the chairperson. This working group is the core analysis and action body of Ops RAMS. The group receives, accepts, validates, and investigates inputs from a variety of information sources. They analyze the inputs and develop appropriate courses of action that may include trending for later analysis. The working group reports their findings, actions and recommendations to the TRAC for review, direction and action. The working group includes MFOQA, ASAP, CRM/TEM, and Aeromedical Evacuation.

- 2.6.3.4.1. **(Added-AMC)** The working group collaborates and works in concert to identify and solve issues. They manage data sources to be as relevant and dynamic as possible, focusing on multi-data source trending, information sharing, and action. The TRAC establishes additional elements as required to address MAF issues.
- 2.6.3.4.2. **(Added-AMC)** All MAF MAJCOMs are encouraged to participate in Working Group proceedings when possible.
- 2.6.3.4.3. **(Added-AMC)** The Ops RAMS Working Group chairperson is responsible to the TRAC chairperson (AMC/CD) for the daily operations of the Ops RAMS and distributes an agenda and slides for all Ops RAMS Working Group meetings, directs the actions of individual working group members, schedules the Ops RAMS working group and semiannual TRAC. He also publishes a Teams and “meet me” phone number for the monthly meetings and publishes minutes for all TRAC meetings.
- 2.6.3.4.4. **(Added-AMC)** Air Mobility Command Instruction (AMCI) 90-903, *Aviation Operational Risk Management (AvORM) Program*, contains guidance on the MAF Aviation Fatigue Management Program (A-FMP) and the Aviation Fatigue Management Working Group (A-FMWG).
- 2.6.3.5. **(Added-AMC)** Data Sources. Ops RAMS is a coordinated, proactive risk mitigation system. Ops RAMS relies on many data sources to integrate and cross-reference with one another in an effort to enhance the proactive search of risk mitigation opportunities. The following is a list of known data sources.
- 2.6.3.5.1. **(Added-AMC)** Safety, OPR: AMC/SEF. The Safety Point of Contact (POC) to Ops RAMS is AMC Flight Safety. Their personnel analyze data generated by all reportable mishaps, hazards, safety investigation boards (SIBs), AvORM, A-FMP, and other safety sources. They monitor LOSA recommendations and reports open recommendations at the Hazard Review Board (HRB) per DAFI 91-204.
- 2.6.3.5.2. **(Added-AMC)** Standardization and Evaluation (AMC/A3V). The Standardization and Evaluation POCs to Ops RAMS are an A3V Deputy and members from each A3V branch and appropriate branch experts from other A3 divisions as required. They analyze data from Standardization and Evaluation flight evaluation data, Unit Effectiveness Inspections (UEIs), and the Stan/Eval Board (SEB).
- 2.6.3.5.3. **(Added-AMC)** Airfield Operations (AMC/A3A). The Airfield Operations POC to Ops RAMS analyzes data from a variety of sources for trend analysis and lessons learned. Sources include air traffic control (ATC), airspace, and airfield incident reports (e.g., pilot deviation, navigation error, Federal Aviation Regulation (FAR) violation, communication loss, runway incursion, controlled movement area violation (CMAV)); ASAPs; hazardous air traffic reports (HATRs); and Global Decision Support System (GDSS) Airfield Detail and/or AMC Giant Report (includes Terminal Instrument Procedures (TERPS) reviews and airfield suitability assessments).
- 2.6.3.5.4. **(Added-AMC)** Training (AMC/A3T). The Training POC to Ops RAMS is the A3T division chief who analyzes data gathered from Training Review Panels, UEIs, and aircrew surveys. A3T conducts a Realistic Training Review Board (RTRB) biennially (or more frequently as required) to highlight and address aircrew training issues.

- 2.6.3.5.5. **(Added-AMC)** Crew Resource Management/Threat and Error Management (CRM/TEM), OPR: AMC/A3TO. The CRM/TEM Program Manager is a member of the Ops RAMS Branch who participates in the working group and collects/analyzes AF Form 4031, *CRM/TEM Skills Criteria Training/Evaluation* data to identify CRM/TEM trends.
- 2.6.3.5.6. **(Added-AMC)** Aeromedical Evacuation (AE), OPRs: AMC/SG. OPR for AE Patient safety is aligned under the Manpower and Equipment Force Packaging System (MEFPAK). AMC/SG appoints an AMC AE Patient Safety Program (PSP) Director. AMC/SG is the repository and process owner for AE PSP data, trend analysis, Medical Incident Investigations/Healthcare Event Response Team, Root Cause Analysis, etc. Ops RAMS is not the appropriate venue to address clinical and/or patient care. Those issues should not be shared in Ops RAMS processes so as to not violate 10 U.S. Code Sec 1102 and Health Information and Portability Accountability Act (HIPAA) regulations.
- 2.6.3.5.7. **(Added-AMC)** 618 Air Operations Center Safety (618 AOC/SE). The 618 AOC POC to Ops RAMS analyzes data from a variety of sources to include safety of flight, Operational Risk Management (ORM) waivers, and spot inspections, and provides trend data as necessary to support ASAP and LOSA.
- 2.6.3.5.8. **(Added-AMC)** Maintenance (AMC/A4MP). The maintenance POC to Ops RAMS processes ASAPs specific to aviation maintenance.
- 2.6.3.5.9. **(Added-AMC)** Aerial Port (AMC/A4TP). The aerial port POC to Ops RAMS processes ASAPs specific to aerial port functions at AMC manned aerial ports.
- 2.6.3.5.10. **(Added-AMC)** Federal Aviation Administration (FAA) Confidential Information Sharing Program (CISP), OPR: AMC/A3TO. Through Memorandum of Agreement (MOA), Ops RAMS provides ASAPs to CISP that involve FAA's ATC controllers / facilities. The FAA provides Air Traffic Safety Action Program (ATSAP) reports with Ops RAMS if involving MAF aircrew. The non-punitive information sharing provides to opportunity to share additional details from both the pilot and ATC perspectives, and ultimately lessons learned for mishap prevention purposes.
- 2.6.4. Educate assigned personnel on proactive aviation safety program benefits, and promote outcomes such as risk reduction, improved training efficiency, and maintenance savings.
- 2.6.5. Ensure any command-hosted "app stores" used to provision the mobile reporting application onto electronic flight bags and other government issued mobile devices, host a current version of the mobile reporting application.
- 2.6.6. Establish procedures to highlight ASAPs identifying a hazard, error, or other issue that may benefit from follow-on MFOQA analysis.
- 2.6.7. Provide assigned MFOQA program managers access to technical orders relevant to participating aircraft for developing and sustaining valid MFOQA parameters and measures needed to identify operational flight trends.

**2.7. Lead MAJCOMs.** Lead MAJCOMs will:

2.7.1. Incorporate proactive aviation safety program input and analysis results in MAJCOM safety, operations, training, and maintenance risk management processes for each MDS under their responsibility.

2.7.2. Identify risks common to the lead MAJCOM, using MAJCOMs or equivalents, and the DAF.

2.7.2.1. Evaluate proactive aviation safety data to uncover fleet or MAJCOM-wide trends, develop corrective measures to control adverse trends, and evaluate control measure effectiveness over time, utilizing the expertise of safety, operations, training, and maintenance personnel.

2.7.2.2. Incorporate proactive aviation safety products in aircrew tactics, training, and procedures such as those found in each fleet's 11-2 MDS Volume 1, Training, and Volume 3, Operations.

2.7.3. Establish protocols within the lead MAJCOM and between the lead and using MAJCOMs or equivalents to disseminate proactive aviation safety analysis results.

2.7.4. Educate wings, MAJCOM staff, and using MAJCOMs or equivalents on ASAP program execution and reporting capabilities. Establish protocols outlining the assignment of submission investigation and hazard resolution responsibilities with wings and using MAJCOMs or equivalents.

2.7.4.1. DELETED

2.7.4.2. DELETED

2.7.5. Ensure integration of AFI 63-101/20-101 and AFPAM 63-129, *Air System Development and Sustainment Engineering Processes and Procedures*, data collection and distribution requirements into platforms under their responsibility. Include these requirements in initial acquisition documents for aircraft in development, and advocate for resources to improve data collection capabilities when the opportunity arises during aircraft modifications.

2.7.6. Establish data download, distribution, and storage procedures that enable MFOQA data analysis processes. Establish procedures for routine download of recorded data on a schedule that provides timely data analysis and results in minimal loss of flight operations data due to recorder capacity limitations. Coordinate data download frequency with using MAJCOMs.

2.7.7. Perform a cost-benefit analysis for platforms that do not employ MFOQA analysis capabilities to determine potential cost-effectiveness, in accordance with the methodology outlined in [Attachment 2](#). The cost benefit analysis will be retained at the MAJCOM.

2.7.7.1. Aircraft whose initial operational capability date was prior to issuance of this publication: Complete the cost-benefit analysis within 180 days of publication of this issuance.

2.7.7.2. Aircraft whose initial operational capability date is after publication of this issuance: complete the cost-benefit analysis within 90 days of initial operational capability date.

2.7.8. Document in a memorandum ([Attachment 3](#)) the justification for MFOQA exclusion or delayed implementation. Include the computation of the cost benefit analysis criterion valuation. The MDS lead MAJCOM commander will sign the exclusion memorandum.

2.7.8.1. If the cost-benefit analysis indicates a cost-benefit will not result from MFOQA implementation, include the computation of criterion value in the exclusion memorandum.

2.7.8.2. If a cost-benefit exists, but MFOQA capability will not be or has not been established within two years of initial operational capability, include in the memorandum the criterion values, the actions that will occur to facilitate the establishment of MFOQA analysis, and the planned date for initiation.

2.7.8.3. When a decision is made not to pursue a MFOQA capability, even when a cost benefit analysis indicates it may be beneficial, include the criterion values and provide the justification for the decision in the memorandum. An exclusion based on this scenario does not prohibit future course reversal and fielding of MFOQA.

2.7.8.4. Lead MAJCOM directors of safety staff the exclusion memoranda to the AF/SE within 30 days of signature. Include the cost-benefit analysis and other justification documents used in the exclusion decision. Lead MAJCOM exclusion memoranda extend to all MAJCOMs utilizing the affected MDS.

2.7.9. No later than 15 December each year, lead MAJCOM directors of safety provide AF/SE the current and planned status of MFOQA implementation. Document which fleets have fielded MFOQA analyses, and which have signed exclusion memos. Include required actions and planned fielding date for fleets with analysis capabilities in development.

2.7.10. Collaborate with AFSEC to determine flight data analysis manpower requirements, based on MAJCOM-level centralized analysis for each fleet. Provide local sponsorship, workspace, and logistical support for AFSEC-provided MFOQA program managers and analyst(s).

2.7.10.1. Any MFOQA analytical processes, software, or products generated outside the established AFSEC-managed MFOQA program for USAF fleets will be coordinated through the AFSEC MFOQA program manager. This optimizes resources, prevents duplication, and maintains quality of effort. AFSEC MFOQA subject matter experts, flight data analysts, and program managers are responsive to lead commands, maintain DAF-wide awareness of hazards identified through analyses, and support MAJCOM requirements consistent with DoD and USAF MFOQA mishap prevention policy.

2.7.10.2. Identify and submit to AFSEC any proposed MFOQA process improvements, such as analysis algorithm enhancements or events, for trending. Provide opportunities for using MAJCOMs or equivalents to provide input.

2.7.11. Establish and document protocols within the lead MAJCOM and between the lead and using MAJCOM or equivalents for gatekeeper contact with ASAP report submitters, or MFOQA analyst contact with aircrew.

2.7.11. (AMC) If additional information is needed, crew contact will be made by the MFOQA analyst directly with the aircraft commander (AC) if approved by the Ops RAMS branch chief. If the aircrew identity cannot be determined, the Ops RAMS branch chief will go through AMC Safety, and through the applicable MAJCOM Safety, to the Wing/Unit Safety offices to ask the aircrew to contact the MFOQA analyst. The reason for the crew contact will only be known by the analyst and the Ops RAMS branch chief to protect the aircrew from scrutiny.

2.7.12. Establish protocols with using MAJCOMs concerning ASAP submissions transferred to using MAJCOMs or to wings within using MAJCOMs.

**2.8. Using MAJCOM or equivalents.** Using MAJCOMs or equivalents will:

2.8.1. Collaborate with lead MAJCOMs to disseminate proactive aviation safety analysis results, and to address hazards and trends specific to the using MAJCOM or equivalent area of responsibility.

2.8.2. Collaborate with lead MAJCOMs to identify operations, training, and logistics units that may benefit from MFOQA analysis results. Consider user needs and desires.

2.8.3. Coordinate with lead MAJCOM(s) to establish protocol(s) concerning ASAPs submissions transferred to the command, or to wings within their command.

**2.9. All MAJCOMs, FLDCOMs, wings, and deltas.** All MAJCOMs, FLDCOMs, wings, and deltas will:

2.9.1. Process ASAP reports in accordance with [Attachment 4](#) of this publication and applicable command policy.

2.9.2. Accomplish and manage ASAP-derived event reports and recommendations in accordance with DAFI 91-204 and DAFMAN 91-223, *Aviation Safety Investigations and Reports*, as applicable.

2.9.3. At their discretion, establish a hazard working group (HWG) on behalf of their organization to more efficiently mitigate, abate, or recommend risk acceptance of identified hazards.

2.9.3.1. HWG membership is at the discretion of the constituting organization, but typically includes safety personnel as well as functional experts from standards and evaluation, quality assurance, training, fire, medical, security forces, or other operations, maintenance, or support activities as applicable to the hazard or error under consideration.

2.9.3.2. The use of a HWG is strongly encouraged for any MAJCOM, FLDCOM, or wing/delta investigating hazards detected via ASAP, MFOQA, LOSA, or any other hazard identification method.

**2.10. Commanders.** Commanders will:

2.10.1. Create a command climate that:

2.10.1.1. Incorporates regular and unbiased communication across all functional areas in support of risk management processes. **(T-0)**

2.10.1.2. Uses safety information to assess and identify areas for improvement in the safety culture amongst leaders, supervisors, and Airmen/Guardians. **(T-0)**

2.10.1.3. Encourages reporting in a just culture environment designed to learn from errors and is free from fear of reprisal. **(T-0)**

2.10.2. Encourage and promote the use of ASAP to identify hazardous situations and safety related issues as a method of preventing future mishaps and ensuring safe, effective mission accomplishment. **(T-1)**

- 2.10.3. Encourage the reporting of “near-miss” events, as they have the potential to provide as much information on causes and associated hazards as a mishap investigation. **(T-1)**
- 2.10.4. Encourage and support Airman and Guardian participation in ASAP or MFOQA Gatekeeper interviews. **(T-1)**
- 2.10.5. Facilitate LOSA observation flights and encourage aircrew participation as needed. **(T-1)**

## Chapter 3

### AVIATION SAFETY ACTION PROGRAM (ASAP)

#### 3.1. Purpose.

3.1.1. ASAP is an identity protected, self-reporting program designed to encourage and simplify the reporting of hazards and errors that increase the risk experienced in flight operations. Submissions augment existing safety reporting programs by capturing self-reported issues and events not normally disclosed through traditional mishap prevention programs.

3.1.2. ASAP hazard and error reporting involve Airmen, Guardians, and leaders in the aviation mishap reduction process. This occurs through report submissions, analyzing the resulting information for trends, educating personnel, and developing and implementing risk reduction or mitigation strategies. By enhancing situational awareness and improving risk management, ASAP hazard reporting protects people, preserves aircraft, maximizes efficiency, and improves readiness.

3.1.3. Airmen and Guardians have several avenues to report hazards they encounter or observe. For instance, in accordance with AFI 91-202 and without fear of coercion, discrimination or reprisal, Airmen and Guardians should first contact a supervisor, unit safety representative, facility manager, or local safety staff to address encountered hazards. They may also report hazards via an AF Form 457, *USAF Hazard Report*, and do so anonymously if desired. Finally, Airmen and Guardians always have the option to submit an identity-protected ASAP report, especially for hazards that may have more than localized impact or hazards that may have fleet-wide implications.

3.1.4. Personnel maximize the effectiveness of ASAP by:

3.1.4.1. Clearly describing the hazard or error. Submit reports that identify the hazards or errors detected or observed. This facilitates the rapid mitigation or elimination of the hazard. In addition, providing a complete situational narrative allows others to learn from any errors made by a person, crew, or team.

3.1.4.2. Taking advantage of the opportunity to suggest hazard resolution measures when drafting an ASAP report.

3.1.4.3. Being involved. Fully participate in the hazard resolution process, to include supporting fact-finding gatekeeper interviews.

3.1.4.4. Providing contact information in the ASAP report. This enables trusted gatekeepers to contact submitters to gather further information on the identified hazard or error. Gatekeeper interviews are identity-protected communications in accordance with [paragraph 1.2.3.1](#).

3.1.4.5. Avoiding using ASAP for purposes other than hazard and error reporting. This includes initial mishap notification, reporting personnel misconduct, alleging fraud, waste, abuse, retaliation, or retribution (i.e., matters for an Inspector General inquiry), or reporting Uniform Code of Military Justice violations.

### 3.2. ASAP Implementation.

3.2.1. ASAP reports are submitted via a mobile reporting application or via the website at <https://asap.safety.af.mil>. Required fields include the event date, aircraft type (if applicable), wing/delta, and a narrative of the event. Additional data fields, such as recommended corrective action, are at the discretion of the submitter.

3.2.2. ASAP Report Submission: Any person who experiences or observes a hazardous situation or error may submit a report. This initiates the risk management process for any hazardous action, event, or condition encountered during aviation-related activities, and more widely communicates individual, crew, or team errors.

3.2.2.1. Examples of unsafe actions, events, or conditions suitable for an ASAP report include, but are not limited to:

3.2.2.1.1. Hazards or errors associated with mission planning, crew rest, operations, or mission management and execution.

3.2.2.1.2. Observed hazards and errors that may not have directly affected the particular operation but may affect other operations or activities.

3.2.2.1.3. Hazards caused by defective materials.

3.2.2.1.4. Problems with policies or instructions, or hazards resulting from inaccurate or poorly written technical orders or flight manuals. For defective technical orders or flight manuals, consider initiating a DAF Form 847 through standardization/evaluation or quality assurance channels in accordance with AFI 11-215, *Flight Manuals Program (FMP)*, or Technical Order 00-5-1, *AF Technical Order System*. As the DAF Form 847 process could be time-consuming, an ASAP may also be submitted to provide an immediate communication and/or broader communication of the problem or hazard.

3.2.2.1.5. Aircraft systems or equipment design issues that create a hazard.

3.2.2.1.6. Personal errors or errors by others that could have led to a mishap or other safety event.

3.2.2.1.7. Errors committed by other individuals or organizations that adversely affected or could have affected operations, including procedural errors.

3.2.2.1.8. Any other event that could affect the safety of personnel or resources.

3.2.2.2. Events not suitable for reporting via ASAP:

3.2.2.2.1. Imminent danger or other potentially serious situations. Airmen and Guardians will report these hazards directly to supervisors, commanders, or installation safety personnel. **(T-1)** Offices that receive an ASAP that appears to describe an imminent danger situation will take immediate action. **(T-0)** Comply with AFI 91-202 hazard processing requirements. **(T-1) Note:** Airmen and Guardians may submit after-the-fact ASAP reports about these situations to more broadly communicate the nature of the hazard and actions taken in response to the hazard.

3.2.2.2.2. Mishaps. ASAP is not designed to facilitate reporting of events involving damage, injury, or occupational illness. Airmen or Guardians will instead make mishap notifications in accordance with AFI 91-202.

3.2.2.2.3. Unless explicitly permitted by MAJCOM/FLDCOM supplement to this instruction, the ASAP system will not be used to report non-hazardous situations, circumstances, or events (**Exception:** Individual, crew, or team errors). Examples include, but are not limited to:

3.2.2.2.3.1. Suggesting system design improvements when a hazardous condition is not present.

3.2.2.2.3.2. Documenting routine post-mission maintenance discrepancies.

3.2.2.2.3.3. (**Added-AMC**) An ASAP can be submitted to increase efficiencies/effectiveness, thus making operations safer.

3.2.2.3. The ASAP system will not be used at any time for the following:

3.2.2.3.1. To make allegations of personnel misconduct when no hazard is present. (**T-1**) Report these occurrences to the Inspector General.

3.2.2.3.2. To report violations of punitive written directives, including the Uniform Code of Military Justice. (**T-1**) Report these issues to the chain of command.

3.2.3. DELETED

3.2.4. The Scoreboard displays the report narrative, submitter-recommended actions, and the MAJCOM/FLDCOM or wing/delta's resolution. The purpose is to share aviation hazards and errors within and across multiple communities. This provides aircrew, operations and logistics staff, and leadership with a reference of hazards and errors experienced and the response to the associated risks. The Scoreboard is found at <https://afsas.safety.af.mil/asap>. Access requires a Common Access Card but does not require an AFSAS account. ASAP submissions marked as a duplicate of a previously received ASAP submission are not displayed on the Scoreboard.

3.2.4.1. As the triage process includes de-identification, the names of personnel and other information that may enable identification of the event or personnel involved will not be visible on the Scoreboard. (**T-1**)

3.2.4.2. The Scoreboard is searchable by various posted data fields, such as event month and year, location, and aircraft type.

3.2.4.3. Investigating officers will update the Scoreboard as necessary to message recent staff action and risk mitigation measures. (**T-1**)

3.2.5. MAJCOM/FLDCOM and wing/delta operations and safety staff will use hazard and error reports submitted through ASAP for investigation and trending of hazards and mishaps. (**T-0**)

3.2.5.1. ASAP submissions initiate an investigation tailored to the nature and type of the event. Record all hazards and required-reportable events in AFSAS. (**T-1**) Investigative procedures and requirements are described in AFI 91-202, DAFI 91-204, and DAFMAN 91-223. MAJCOM/FLDCOM and wing/delta staffs should utilize established hazard review and risk management processes, to include a HWG if one is established, to research operations, logistics, maintenance, training, or safety issues revealed by an ASAP report. Incorporate additional sources of information such as MFOQA analyses, training or evaluation trends, and policy and guidance review. MAJCOMs/FLDCOMs will coordinate hazard review and resolution with wings/deltas when appropriate.

3.2.5.2. Reports that include damage or injury are mishap reports and are investigated and reported in accordance with DAFI 91-204. Protections from punitive or adverse action described in [paragraph 1.2.3.3](#) do not apply.

3.2.5.3. Sanitized ASAP reports are limited-use safety products but are not privileged safety information. In addition, hazard reports are not privileged, and gatekeeper interviews are not eligible for the promise of confidentiality. See DAFI 91-204 for more information about privileged safety information and promises of confidentiality.

3.2.6. Though the submission narrative is de-identified prior to posting on the Scoreboard, additional information may benefit the hazard resolution process. In this case, names in the narrative or submitted with the report may be made available to an ASAP gatekeeper.

3.2.6.1. [Paragraph 1.2.3.3](#) and [paragraph 1.2.3.4](#) apply to all personnel described in the report.

3.2.6.2. When an individual other than the reporting individual is named in an ASAP report, gatekeepers may, on a case-by-case basis, contact the identified individual and invite them to submit an ASAP report. The purpose of such contact is strictly limited to enhancing understanding of the reported event and supporting fact-finding and investigation of hazards.

3.2.7. DELETED

3.2.7.1. DELETED

3.2.7.2. DELETED

**3.3. ASAP Training.** MAJCOM/FLDCOM safety offices will ensure personnel conducting ASAP triage, gatekeeper functions, and/or investigating ASAP-derived events within the scope of their command are adequately trained. **(T-1)** Use AFSEC-provided or locally produced courseware.

3.3.1. Triage training. This training ensures that personnel performing triage or gatekeeper duties are familiar with the ASAP triage process. This training will include, as a minimum, a review of applicable DoD and DAF ASAP policies and procedures, identity protection requirements and procedures, and exclusion criteria. **(T-1)** Graduates of the AFSEC Aviation Safety Program Management (ASPM) course or Air Combat Command (ACC)'s Flight Safety Program Management (FSPM) course are exempt from this requirement.

3.3.2. Training for personnel accomplishing ASAP-derived hazard event reports in AFSAS. This training will include an AFSAS orientation (to include data field entry and validation), a review of the hazard event reporting requirements outlined in DAFI 91-204 and DAFMAN 91-223, and a review of the event type tiers in AFSAS. **(T-2)** Graduates of the Aircraft Mishap Investigation Course (AMIC), ACC's command-hosted AMIC, the Mishap Investigation – Non-Aviation (MINA) course, or the legacy flight safety officer course, are not required to complete this training.

3.3.3. Commands are encouraged to send personnel performing ASAP triage and investigating/reporting of ASAP-derived hazards to ASPM or FSPM, as quotas and funding are available.

### **3.4. (Added-AMC) AMC Implementation.**

3.4.1. **(Added-AMC)** Gatekeepers. If the ASAP submitter provides contact information, Ops RAMS personnel will serve as the Gatekeeper. The submitter's identity will be protected and only be released outside of the Ops RAMS office with the consent of the submitter. If consent is given, the submitter can be put in direct contact with the individual requiring additional information or Ops RAMS will act as the go-between. This same stipulation applies should an ASAP submission contain information that requires an DAFMAN 91-223, Chapter 3-required aviation safety investigation.

3.4.2. **(Added-AMC)** Commercial Contract operators are encouraged to report hazard and error reports via ASAP if the issue concerns any item under DoD control, such as cargo/passenger manifests or processing or airfield facilities.

3.4.3. **(Added-AMC)** 618 AOC. The 618 AOC Chief of Safety serves as the primary liaison to process ASAPs related to 618 AOC-directed missions.

3.4.4. **(Added-AMC)** Aviation Maintenance ASAPs.

3.4.4.1. **(Added-AMC)** AMC/A4MP personnel serve as gatekeeper and staff liaison for aviation maintenance related ASAPs.

3.4.4.2. **(Added-AMC)** Maintenance unit personnel shall cover the use and benefit of ASAP in briefings required by DAFI 91-202 (T-2).

## Chapter 4

### MILITARY FLIGHT OPERATIONS QUALITY ASSURANCE (MFOQA)

#### 4.1. Purpose.

4.1.1. MFOQA is the analysis and trending of aircraft system and flight performance data to identify and quantify normal and hazardous flight environments.

4.1.2. MAJCOM and wing safety staffs employ MFOQA in operations, training, and maintenance risk management activities. This increases awareness of operational flight risk, enables training feedback, and improves aircraft lifecycle activity. MFOQA is used to identify negative trends and mishap precursors, identify hazards, and evaluate effectiveness of mitigation measures.

#### 4.2. MFOQA Implementation.

4.2.1. The MFOQA analysis process depends upon comprehensive aircraft data recording and regular data retrieval and distribution.

4.2.2. Data collection and analysis processes vary between MAJCOMs, organizations, and individual fleets due to technological and mission differences. The flight data files are either uploaded directly to the MFOQA web server, or automatically retrieved from existing USAF data repositories.

4.2.3. MAJCOMs employ the following steps when planning and implementing a MFOQA capability:

4.2.3.1. Record aircraft data. Aircraft system program managers and lead MAJCOM requirements personnel collaborate on the requirements for a flight data collection process. Follow the guidance in AFI 63-101/20-101 and the flight data parameter lists found in AFPAM 63-129. The data collection solution may also support other data-centric users, such as the Aircraft Structural Integrity Program, Engine Structural Integrity Program, and mishap investigations.

4.2.3.2. Download the aircraft flight data and distribute to users. The data should be downloaded on a schedule that ensures timely data analysis and results in minimal loss of flight operations data due to recorder capacity limitations. Make the flight data files available to the MFOQA analysis website.

4.2.3.3. Process and analyze data.

4.2.3.3.1. MFOQA analysis results depend on the quality of the flight data available and the desired depth of analysis.

4.2.3.3.2. AFSEC provides a trained MFOQA analyst to manage the analysis process for one or more fleets. The analyst will conduct initial data validation, provide regular reports for lead and using MAJCOM or equivalent hazard identification and mitigations purposes, and provide MFOQA trend analysis.

4.2.3.4. Distribute analysis results. Provide routine analysis results to MAJCOM representatives from safety, operations, training, maintenance, and engineering functions

for review of fleet trends. MAJCOMs establish processes for further distribution of analyses.

4.2.3.5. Assess risk, identify mitigation measures, and monitor effectiveness.

4.2.3.5.1. Identify hazards using MFOQA in conjunction with other data sources. Assess the risk associated with the hazards, identify mitigation measures, and monitor effectiveness.

4.2.3.5.2. Mitigation measures vary depending on the hazard and available options to mitigate, ranging from modification of procedures, aircraft limitations, tactics, or training syllabi, to simple aircrew, maintainer, or commander awareness efforts.

4.2.3.5.3. Utilize further MFOQA analysis to monitor effectiveness and determine if further modifications or additional measures are necessary.

4.2.4. MAJCOMs without assigned aircraft are not required to implement the MFOQA analysis processes, but when applicable must support a resolution of the identified hazards.

**4.3. (Added-AMC) MFOQA Support.** Ops RAMS (AMC/A3TO) personnel will:

4.3.1. **(Added-AMC)** Provide local sponsorship, workspace, and logistical support for AFSEC-provided MFOQA analysts.

4.3.2. **(Added-AMC)** Assist the AFSEC office to determine analyst manpower requirements, based on AMC-level, centralized analysis for each MDS.

4.3.3. **(Added-AMC)** Establish data download, distribution, and storage procedures for each MDS and coordinate download frequency.

4.3.4. **(Added-AMC)** Develop analytical processes to trend aggregated flight data for each MDS.

4.3.5. **(Added-AMC)** Develop procedures to resolve data inconsistencies with other MAJCOM users.

4.3.6. **(Added-AMC)** Establish protocols for analyst contact with maintenance personnel to initiate resolution of MFOQA-discovered discrepancies (e.g., over-g, flap overspeed, engine overtemp, etc.). At a minimum, Ops RAMS will maintain a point of contact in Maintenance (AMC/A4M) who is familiar with MFOQA processes to facilitate reporting and documenting MFOQA-identified write-ups.

4.3.7. **(Added-AMC)** Identify organizations that will benefit from MFOQA analysis results. Identify user needs and desires, and design a feedback process to meet user needs as the program implements and continues to mature.

4.3.8. **(Added-AMC)** Develop specific employment concepts by working with AMC/A3/A4 Directorates to implement MFOQA analysis results within operational units.

**4.4. (Added-AMC) Operations Group Training Offices will:**

4.4.1. **(Added-AMC)** Include proactive safety program analysis (ASAP, MFOQA, and LOSA) discussions at the semiannual Operations Group Training Review Panels (**T-2**). Units can access MDS MFOQA analysis in the aircrew electronic flight bags (EFBs), ASAPs from the ASAP Scoreboard, and LOSAs from AFSAS.

4.4.2. **(Added-AMC)** Ensure squadron training offices receive the monthly MFOQA analysis **(T-2)**.

**4.5. (Added-AMC) Gatekeepers.**

4.5.1. **(Added-AMC)** Occasionally analysis from MFOQA will be insufficient to thoroughly understand the contributing factors to an event or hazard. MFOQA only tells "what" happened; "why" it happened provides additional context. This additional information may provide additional insight and be beneficial or even essential to the hazard resolution process.

4.5.2. **(Added-AMC)** If additional information is needed, crew contact will be made by the MFOQA analyst directly with the aircraft commander (AC) if approved by the Ops RAMS branch chief. If the aircrew identity cannot be determined, the Ops RAMS branch chief will go through AMC Safety, and through the applicable MAJCOM Safety, to the Wing/Unit Safety offices to ask the aircrew to contact the MFOQA analyst. The reason for the crew contact will only be known by the analyst and the Ops RAMS branch chief to protect the aircrew from scrutiny.

## Chapter 5

### LINE OPERATIONS SAFETY AUDIT (LOSA)

#### 5.1. Purpose.

5.1.1. LOSA is an observation program developed to gather safety-related data on environmental conditions, operational complexity, and human factors issues during every day flying operations. MAJCOMs may choose to conduct LOSAs within their organization to collect data confidentially on situational factors and personnel behavior encountered in day-to-day operations.

5.1.2. LOSA is based on threat and error management as described in AFMAN 11-290, *Cockpit/Crew Resource Management and Threat & Error Management Program*. This document conceptualizes operational activity as a series of ongoing threats and errors that personnel manage to maintain adequate safety margins.

5.1.3. LOSA contributes to proactive safety by identifying the threats personnel face, common errors, and the best practices employed to trap, mitigate, and manage those threats and errors. The LOSA process provides a thorough and methodical assessment of strengths and weaknesses across the aviation community. With this information, MAJCOMs make improvements to training, technical orders, DAF guidance, and processes to make the environment safer and more efficient.

5.1.4. LOSAs are not check rides or evaluations; instead, silent observers document operational threats and errors and how they are mitigated or managed. The LOSA provides a snapshot of operational performance across the community, which is then used to make proactive safety changes to prevent future accidents or incidents and improve efficiency.

5.1.5. LOSAs work in concert with MFOQA and ASAP to fully develop a proactive safety culture without fear of retribution. Participation and trust in the process are essential for success.

**5.2. Scope.** Because a LOSA is an operations audit, it encompasses all operations areas that impact personnel. Many threats and errors before takeoff and after landing affect a mission and can be as detrimental to safety as those in the cockpit during flight. Observations can be conducted on the flight crew, other crew positions, maintenance, airfield operations, and various key personnel.

#### 5.3. LOSA Implementation.

5.3.1. LOSAs may be conducted by a commercial vendor or may be developed and conducted in-house utilizing Federal Aviation Administration Advisory Circular 120-90, *Line Operations Safety Audits*, as a guide.

5.3.2. Major steps in developing and implementing a LOSA include:

5.3.2.1. Create an observation form that captures multiple aspects of normal operations, including the operating environment and expected performance.

5.3.2.2. Select and train the LOSA observer force for standardization and confidence in the integrity of the data collection process. LOSA observers should be current and qualified in the position they are observing.

5.3.2.3. Observers gather threat and error data on a pre-determined number of sorties or activities.

5.3.2.4. Subject matter experts review and verify each observation to validate threat and error annotations prior to analysis.

5.3.3. Develop the analysis report, detailing the prevalence and management of different threats and errors. Errors that occur more frequently than others, standard operating procedures that are routinely ignored or modified, and actions that pose greater difficulty for adherence can help identify targets for improvement.

5.3.4. The MAJCOM should initiate a safety study in AFSAS to transform the LOSA analysis into actionable findings and recommendations. LOSA findings and recommendations are not privileged, nor do observers have the authority to grant a promise of confidentiality.

5.3.5. Brief the LOSA analysis, findings, and recommendations to leadership for acceptance and implementation.

5.3.6. Communicate significant LOSA results, findings, and planned system changes to applicable personnel.

#### **5.4. (Added-AMC) AMC LOSA.**

5.4.1. **(Added-AMC)** Conduct LOSA observations on aircrew members. Aircraft commanders or commanders at higher levels (wing, operations group, squadron) may deny or terminate a planned observation at any time for any reason; however, participation is highly encouraged. Because a LOSA is an operations audit, it encompasses all areas involving operations, which affect the aircrew from mission acceptance through completion. There are many factors before takeoff and after landing that affect a crew and their mission. Since these factors can be as detrimental to safety as cockpit factors during flight, MAF LOSAs attempt to encompass as many of those additional system threats as possible. A LOSA observation is not an aircrew evaluation; all crew information is de-identified and a secure database contains all observation data. Following the collection and analysis of the observation data, AMC forms a Safety Investigation Board (SIB). The SIB uses the contractor's final report to produce findings and recommendations briefed to AMC leadership (see [paragraph 5.6.6.](#)).

5.4.2. **(Added-AMC)** The LOSA program will take place worldwide, on all participating MAF aircraft (AFRC, ANG, PACAF, USAFE-AFAFRICA, and chopped assets in the US Central Command (USAFCENT) Area of Responsibility (AOR)) including air-land, air-refuel and air-drop missions in and outside of any AOR. Each LOSA observation period lasts approximately six to eight weeks. These observation periods will be coordinated well in advance.

5.4.3. **(Added-AMC)** Scheduling observations is the primary responsibility of the individual observers. Due to the rigorous demands and time limit of a LOSA, each observer will conduct 12 to 14 observations during an operation. During LOSA observation periods, consider observers as aircrew regarding lodging, mess, and crew transportation. Grant observers complete access to observe flight deck and cabin operations on all MAF aircraft in Mission Essential Personnel (MEP) status in accordance with DAFMAN 11-401, *Aviation Management*. Prior to riding along on missions with remarks in the Mission Detail paperwork restricting flight evaluation/observation, LOSA observers must gain approval from the on-duty

Senior Controller prior to commencing his/her observation duties. LOSA observers are not considered part of the crew and will not provide input or assistance except in the case of safety of flight.

**5.5. (Added-AMC) Non-Aviation LOSA.** AMC may initiate LOSAs not specific to aviation. Procedures will parallel those in [paragraph 5.4](#) but involve appropriate agencies for the observed function.

**5.6. (Added-AMC) Roles and Responsibilities.**

5.6.1. **(Added-AMC) AMC Safety (SE).** AMC/SE is the overall program manager for LOSA, responsible for scheduling the LOSA program for each applicable function and establishing the Safety Investigation Board (SIB) following receipt of the contractor's report. LOSA SIB open recommendations appear before the semi-annual LOSA Hazard Review Board (HRB) chaired by the AMC/CD.

5.6.2. **(Added-AMC) Contractor.** The contractor is an independent organization and an industry expert concerning TEM. One of the contractor's primary duties is to maintain a database of MAF LOSA aircraft observation data. The contractor is responsible to tailor the threat and error codebook, conduct observer training, collect and review observations in real-time, and provide software tailored to each MAF crew position being analyzed. The contractor collects observer data, validates, verifies, analyzes the data, and provides a detailed report of the results to AMC/SE.

5.6.3. **(Added-AMC) Observers.** Observers should be current and qualified instructors or evaluators in their respective MDS. External observers (not qualified in the MDS being audited) are also desired. These observers are a control group for observations and add value by providing observations not constrained by preconceived notions of how a particular MDS operates. Observers will observe real-world missions and will avoid training and evaluations. They strive to observe a particular crew only once during the observation period. A single crew can be observed more than once by separate observers but limit the number of repeat crew observations whenever possible. The Aircraft Commander is the final approval authority for LOSA observations. Though the observer may ride with a particular crew for multiple legs, it is recommended that only two of those legs should be observed for entry into the LOSA database. Observer Temporary Duty (TDY) expenses are funded by AMC/SE.

5.6.4. **(Added-AMC) Data Verification.** Once the observations are complete, the Data Verification Roundtable is scheduled. Representatives from AMC/A3 Standardization and Evaluation (A3V), AMC/A3 Training (A3T), AMC/SE, the Contractor, representatives from the observation team and any other representative deemed necessary will meet to verify the observation data. Subject matter experts analyze each observation collected against current manuals, technical orders, policies, procedures, and other applicable guidance. Their goal is to verify correct recording of events and consistency with policies and procedures. The process removes from the data set errors not substantiated as a violation of an approved procedure.

5.6.5. **(Added-AMC) Final Report.** Following the Data Verification Roundtable, the contractor provides a thorough, independent analysis and submits a comprehensive final report to AMC/SE.

5.6.6. **(Added-AMC) SIB.** Following the Contractor's final report presentation, AMC forms a SIB to protect data and crew information during development of a final report. This team

will consist of a select core of individuals from the original observer team, if available, and other qualified sources. They are responsible for interpreting the Contractor's final report, along with other relevant data sources, to produce a final written report. This report includes actionable findings and recommendations presented to AMC Commander and staff.

JEANNIE M. LEAVITT, Major General, DAF  
Chief of Safety

(AMC)

JOHN B. KELLEY, Col, USAF  
Director of Safety

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

*References*

Public Law 105-56, Title VIII, Sec 8053

10 USC § 2254a, *Data Files of Military Flight Operations Quality Assurance Systems*

(Added-AMC) 10 USC § 1102, *Confidentiality of Medical Quality Assurance Records: Qualified Immunity for Participants*

DoDI 6055.01, *DoD Safety and Occupational Health (SOH) Program*, 14 October 2014

DoDI 6055.07, *Mishap Investigation, Notification, Reporting, and Recordkeeping*, 6 June 2011

DoDI 6055.19, *Aviation Hazard Identification and Risk Assessment Programs (AHIRAPs)*, 11 April 2017

DoDM 5400.07\_AFMAN 33-302, *Freedom of Information Act Program*, 27 April 2018

AFMAN 11-202v2, *Aircrew Standardization and Evaluation Program*, 30 August 2021

AFMAN 11-290, *Cockpit/Crew Resource Management and Threat & Error Management Program*, 25 October 2021

AFI 11-215, *Flight Manuals Program*, 25 Mar 2019

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFI 63-101/20-101, *Integrated Life Cycle Management*, 30 June 2020

AFI 91-202, *The US Air Force Mishap Prevention Program*, 12 March 2020

AFPAM 63-129, *Air System Development and Sustainment Engineering Processes and Procedures*, 3 February 2020

AFPD 90-8, *Environmental, Safety & Occupational Health Management and Risk Management*, 23 December 2019

AFPD 91-2, *Safety Programs*, 3 September 2019

(Added-AMC) DAFMAN 11-401, *Aviation Management*, 27 October 2020

DAFMAN 90-161, *Publishing Processes and Procedures*, 15 April 2022

DAFI 91-204, *Safety Investigations and Reports*, 10 March 2021

DAFMAN 91-223, *Aviation Safety Investigations and Reports*, 20 September 2022

MIL STD 1530 (USAF), *Aircraft Structural Integrity Program*, 31 August 2016

Technical Order 00-5-1, *AF Technical Order System*, 16 July 2018

Federal Aviation Administration Advisory Circular 120-90, *Line Operations Safety Audits*, 27 April 2006

(Added-AMC) AMCI 90-903, *Aviation Operational Risk Management (AvORM) Program*, 4 August 2022

***Prescribed Forms***

None

***Adopted Forms***

AF Form 457, USAF Hazard Report

DAF Form 847, *Recommendation for Change of Publication*

(Added-AMC) AF Form 4031, *CRM/TEM Skills Criteria Training/Evaluation*

***Acronyms and Abbreviations***

(Added-AMC) **18 AF**—Eighteenth Air Force

(Added-AMC) **618 AOC**—618th Air Operations Center

(Added-AMC) **A-FMP**—Aviation Fatigue Management Program

(Added-AMC) **A-FMWG**—Aviation Fatigue Management Working Group

(Added-AMC) **AC**—Aircraft Commander

**ACC**—Air Combat Command

(Added-AMC) **AE**—Aeromedical Evacuation

(Added-AMC) **AETC**—Air Education and Training Command

**AFCAA**—Air Force Cost Analysis Agency

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFPAM**—Air Force Pamphlet

**AFPD**—Air Force Policy Directive

(Added-AMC) **AFRC**—Air Force Reserve Command

**AFSAS**—Air Force Safety Automated System

**AFSEC**—Air Force Safety Center

(Added-AMC) **AMC**—Air Mobility Command

(Added-AMC) **AMCI**—Air Mobility Command Instruction

**AMIC**—Aircraft Mishap Investigation Course

(Added-AMC) **ANG**—Air National Guard

(Added-AMC) **AOR**—Area of Responsibility

**ASAP**—Aviation Safety Action Program

(Added-AMC) **ATC**—Air Traffic Control

(Added-AMC) **ATSAP**—Air Traffic Safety Action Program

(Added-AMC) **AvORM**—Aviation Operational Risk Management

(Added-AMC) **CISP**—Confidential Information Sharing Program  
(Added-AMC) **CMAV**—Controlled Movement Area Violation  
(Added-AMC) **CRM**—Crew Resource Management  
**DAF**—Department of the Air Force  
**DAFI**—Department of the Air Force Instruction  
**DAFMAN**—Department of the Air Force Manual  
**DoD**—Department of Defense  
**DoDI**—Department of Defense Instruction  
**DoDM**—Department of Defense Manual  
(Added-AMC) **EFB**—Electronic Flight Bags  
(Added-AMC) **FAA**—Federal Aviation Administration  
(Added-AMC) **FAR**—Federal Aviation Regulation  
**FLDCOM**—Field Command (USSF)  
**FSPM**—Flight Safety Program Management Course  
(Added-AMC) **GDSS**—Global Decision Support System  
(Added-AMC) **HATR**—Hazardous Air Traffic Report  
(Added-AMC) **HHQ**—Higher Headquarters  
(Added-AMC) **HIPAA**—Health Information and Portability Accountability Act  
(Added-AMC) **HRB**—Hazard Review Board  
**HWG**—Hazard Working Group  
**ICAO**—International Civil Aviation Organization  
**IG**—Inspector General  
**LOSA**—Line Operations Safety Audit  
(Added-AMC) **MAF**—Mobility Air Forces  
**MAJCOM**—Major Command  
**MDS**—Mission Design Series  
(Added-AMC) **MEFPAK**—Manpower and Equipment Force Packaging System  
(Added-AMC) **MEP**—Mission Essential Personnel  
**MFOQA**—Military Flight Operations Quality Assurance  
**MIL-STD**—Military Standard  
**MINA**—Mishap Investigation, Non-Aviation Course  
(Added-AMC) **MOA**—Memorandum of Agreement

**NAF**—Numbered Air Force

**OPR**—Office of Primary Responsibility

**(Added-AMC) Ops RAMS**—Operations Risk Assessment and Management System

**OPSEC**—Operations Security

**(Added-AMC) ORM**—Operational Risk Management

**(Added-AMC) PACAF**—Pacific Air Forces

**(Added-AMC) POC**—Point of Contact

**(Added-AMC) PSP**—Patient Safety Program

**(Added-AMC) RTRB**—Realistic Training Review Board

**(Added-AMC) SEB**—Standardization/Evaluation (Stan/Eval) Board

**(Added-AMC) SIB**—Safety Investigation Board

**(Added-AMC) TDY**—Temporary Duty

**(Added-AMC) TEM**—Threat and Error Management

**(Added-AMC) TERPS**—Terminal Instrument Procedures

**(Added-AMC) TRAC**—Trend Review and Action Committee

**USAF**—United States Air Force

**(Added-AMC) USAFCENT**—US Central Command

**(Added-AMC) USAFE-AFAFRICA**—United States Air Forces in Europe/Africa

**USC**—United States Code

**USR**—Unit Safety Representative

**USSF**—United States Space Force

**(Added-AMC) WIC**—Weapons Instructor Courses

**(Added-AMC) WSC**—Weapon System Councils

### *Office Symbols*

**(Added-AMC) 618 AOC/SE**—618 Air Operations Center Safety

**AF/A3**—Director of Operations, Department of the Air Force

**AF/SE**—Chief of Safety, Department of the Air Force

**AFCAA/FMA**—Air Force Cost Analysis Agency Financial Management Administration

**AFLCMC/EN-EZ**—Air Force Life Cycle Management Center Engineering Directorate

**AFSEC/JA**—Air Force Safety Center, Staff Judge Advocate

**AFSEC/SEF**—Air Force Safety Center, Aviation Safety Division

**AFSEC/SEFE**—Air Force Safety Center, Aviation Safety Division, Engineering Branch

(Added-AMC) AMC/A3A—Airfield Operations  
(Added-AMC) AMC/A3T—Training  
(Added-AMC) AMC/A3TO—Ops RAMS Branch  
(Added-AMC) AMC/A3V—Standardization and Evaluation  
(Added-AMC) AMC/A4M—Maintenance  
(Added-AMC) AMC/A4MP—Maintenance  
(Added-AMC) AMC/A4TP—Aerial Port  
(Added-AMC) AMC/CC—Commander, Air Mobility Command  
(Added-AMC) AMC/CD—Deputy Commander, Air Mobility Command  
(Added-AMC) AMC/SE—Director of Safety, Air Mobility Command  
(Added-AMC) AMC/SEF—Flight Safety, Air Mobility Command  
(Added-AMC) AMC/SG—Surgeon General, Air Mobility Command  
IG—Inspector General  
MAJCOM/A3—MAJCOM Directorate of Operations  
MAJCOM/A4—MAJCOM Directorate of Logistics and Engineering  
MAJCOM/A6—MAJCOM Directorate of Communications  
SAF/FMC—Office of the Deputy Assistance Secretary for Cost and Economics

### *Terms*

**Aviation Safety Action Program (ASAP)**—A voluntary, identity protected program designed to encourage the reporting of hazards and errors that increase risk to operations. ASAP is designed to operate in a non-punitive environment for the open reporting of hazards and errors. Reported data is used to reduce mishaps through operational, logistic, maintenance, training, and procedural enhancements. By providing early identification of needed safety improvements, ASAP offers significant potential for mishap avoidance.

**De-identification**—The action to mask information that could potentially identify a hazard report submitter or the identity of others associated with the report. This may include equipment type, owning unit, location, and date.

**\*Duplicate**—An ASAP report where the text of the submission is identical, or nearly identical, to the text of a previously received submission. This may occur due to a software fault or individual error that results in multiple instances of the same report text being delivered to safety personnel for action. A submission tendered by another individual, for example, another crewmember, encountering the same hazard or error at the same time, is additional information and is not considered a duplicate ASAP. Additionally, a report received about a subsequent encounter with a hazard identified in a previous ASAP is also not a duplicate, but rather another data point that communicates Airmen's/Guardian's repeated exposure(s) to a known hazard.

**\*Error**—An action or inaction that leads to a deviation from intentions, expectations, policy, procedures, formal training standards, or regulatory guidance.

**\*Exclusion (ASAP)**—The act of disqualifying an ASAP submission from identity and/or non-retaliation protections according to exclusion criteria. May result in referral of the report outside of safety channels.

**\*Exclusion (MFOQA)**—The process of excluding an aircraft MDS from MFOQA program participation.

**Gatekeeper**—Individuals authorized access to unit, aircrew, or other identifying information (if available) may contact aircrew or ASAP report submitters to gather the detail necessary for adequate assessment and mitigation of the hazard or error. Occasionally aviation safety program information, whether the data is used for MFOQA analysis or the details provided in an ASAP report, is insufficient to thoroughly understand the contributing factors to an event or hazard. In these instances, gatekeeper contact with the crew or report submitter may provide additional insight and be beneficial to the hazard resolution process.

**Hazard**—Any real or potential condition, procedure, or practice that can cause mission degradation; damage to or loss of equipment or property; or illness or injury to personnel.

**Hazard Working Group (HWG)**—A hazard working group is a cross-functional group of subject matter experts brought together on a formal or *ad hoc* basis to aid in the organizational risk management process. HWGs help determine the most effective mitigation or abatement measures for a given hazard or error, or to provide information to support the appropriate commander's risk acceptance.

**(Added-AMC) Hazard Working Group (HWG)**—The Ops RAMS Working Group and the TRAC satisfy the HWG requirements.

**Identity Protection**—Measures taken to prevent the correlation of a particular MFOQA-identified event or ASAP report with a particular individual. Flight information used in the MFOQA analysis does not contain personal information and cannot identify an individual or crew. However, MAJCOMs may correlate the information contained in a digital flight data file with aircrew flight records if it wishes to use a gatekeeper to gather additional information, or to initiate a safety investigation of an event identified through the MFOQA analyses. Additionally, no personal information is required for ASAP report submission, and information that could identify a particular sortie or personal information voluntarily provided by a submitter is masked before the ASAP report is made available for hazard analysis.

**Intentional Disregard for Safety**—When an individual makes a conscious decision to take actions or handle equipment that knowingly and unreasonably increased risk (i.e., reckless), or in a manner not in accordance with flight manuals, job guides, technical orders, or other governing directives, for purposes other than preservation of equipment or personnel, or safety of flight. When evaluating whether an act exhibited intentional disregard for safety, consider whether another similarly trained, skilled, and situated individual would have acted in a similar manner.

**Just Culture**—Just Culture is an organizational environment where individual Airmen and Guardians are not punished for actions, omissions or decisions taken by them that are

commensurate with their experience and training, but where gross negligence, willful violations and destructive acts are not tolerated. Just culture focuses on improving system designs and employee procedures to include: better system operations; creating redundant safety systems to trap or mitigate errors; pre-identifying high-risk operations; and leadership actions designed to limit at-risk behaviors.

**Line Operations Safety Audit (LOSA)**—Use of highly trained observers to collect data about personnel behavior and situational factors during normal operations. The observer documents personnel behavior and strategies for managing threats, errors, and undesirable states. Analysis of the aggregated data identifies threats to safety and the development of mitigation measures.

**Military Flight Operations Quality Assurance (MFOQA)**—The proactive analysis and trending of aircraft system and flight performance data to both establish a baseline for normal operations and to detect precursors to aviation mishaps, thereby allowing the identification and monitoring of mitigation strategies. MFOQA allows commanders to quantify risk inherent in flight operations and to manage the risk at a level appropriate for mission accomplishment.

**MFOQA Information**—Any analysis, regardless of format or form, created from recorded flight data for the specific purpose of supporting a MFOQA program.

**Mishap**—An unplanned event or series of events that results in damage to DoD property; occupational illness to DoD personnel; injury to on- or off-duty DoD military personnel; injury to on-duty DoD civilian personnel; or damage to public or private property, or injury or illness to non-DoD personnel caused by DoD activities.

**Privileged Safety Information**—Information that reflects the deliberative process of a safety investigation or given to a safety investigator pursuant to a promise of confidentiality, which the safety privilege protects from being released outside safety channels or from being used for any purpose except mishap prevention. It includes products such as draft and final findings, evaluations, opinions, preliminary discussions, conclusions, mishap causes, recommendations, analyses, and other material that would reveal the deliberations of safety investigators, including reviews and endorsements. It also includes information given to a safety investigator pursuant to a promise of confidentiality and any information derived from that information or direct or indirect references to that information.

**Risk Management**—DoD's structured risk reduction process to assist leaders in identifying and controlling safety and health hazards and making informed decisions. Risk management includes hazard identification and assessment, the development of controls, and leadership at the appropriate level of authority making an informed decision to either control the hazard or accept the risk, as described in DoDI 6055.01, *DoD Safety and Occupational Health (SOH) Program*.

**Safety**—The programs, risk management activities, and organizational and cultural values dedicated to preventing injuries and accidental loss of human and material resources, and to protecting the environment from the damaging effects of DoD mishaps.

**Triage**—The actions undertaken by safety personnel to review, sanitize, and decide upon the disposition of an ASAP submission. Triage ends with transferring the report to another agency (where triage begins anew), referring the report for hazard investigation and reporting in AFSAS, providing the report to a hazard investigator (for reports where the identified hazard is already the subject of an ongoing investigation), marking the report as already addressed by a pre-existing,

closed hazard investigation, marking an ASAP report as a duplicate of a previous report, or by exclusion. Triage may also end by processing reports to the Scoreboard.

Attachment 2

MILITARY FLIGHT OPERATIONS QUALITY ASSURANCE COST-BENEFIT ANALYSIS

Figure A2.1. Cost-Benefit Analysis Template.

Note: The following Cost-Benefit Analysis template is provided for stand-alone use by the lead MAJCOM and program offices, and thus does not follow the numbering formats used in the remainder of DAFI 91-225.

+++++

\*Military Flight Operations Quality Assurance (MFOQA) COST-BENEFIT ANALYSIS

\*I have reviewed the Cost-Benefit Analysis for the MFOQA process implementation on the <aircraft>.

NAME

DATE

NAME

DATE

NAME

DATE

NAME

DATE

< Recommended signatories: Lead MAJCOM A3, A5 and/or A8; Lead MAJCOM SE; and the Air Force Safety Center (AFSEC).>

GENERAL INFORMATION

Overview.

\*Military Flight Operations Quality Assurance (MFOQA) is the analysis and trending of aircraft performance and system data to identify adverse operational trends and system anomalies that may lead to an aviation mishap. MFOQA is not a defined technology, but rather a concept that exploits aircraft data and intelligent analysis systems to find and quantify risks.

Some aircraft can provide the needed data, whereas others may require modification. The complexity of the modification depends on the current capability and the desired level of analysis sophistication.

### **Purpose.**

\*DoDI 6055.19, *Aviation Hazard Identification and Risk Assessment Programs (AHIRAPs)*, directs the establishment of the MFOQA process in all Department of Defense (DoD) aircraft, and the Department of the Air Force defines the requirement in DAFI 91-225, *Aviation Safety Programs*. DoDI 6055.19 also allows an exclusion from the MFOQA implementation requirement for those aircraft where a cost-benefit analysis determines the program is not cost effective.

\*The simple Cost-Benefit Analysis outlined in this document provides lead MAJCOMs a format for an initial assessment. This Cost-Benefit Analysis was not designed to generate specific total cost savings; instead, it assigns a value to aircraft cost, remaining service life, mishap rate, fatality rate, and the cost to integrate the MFOQA process on a fleet. The total points assessed are used to determine if a benefit from MFOQA implementation is likely to exist. This format may be used both when MFOQA implementation is not considered cost-effective and to validate a decision to implement the MFOQA process. The aircraft lead MAJCOM will document the MFOQA program exclusion decisions in a memorandum and submit to AF/SE for review.

### **Exceptions.**

\*Generation of a Cost-Benefit Analysis is not required for those platforms whose recorded data is currently used to generate MFOQA analyses or those in the process of fielding an analysis process endorsed by the Air Force Safety Center (AFSEC). No Cost-Benefit Analysis is required when guidance waives the requirement for equipment age or retirement (e.g., Public Law 105-56, Title VIII, Sec 8053).

### **References.**

The following references and statistical reports may be used in the preparation of the MFOQA Cost-Benefit Analysis:

Air Force Safety Center Aircraft Mishap Statistics Charts  
DAFI 91-204, *Safety Investigations and Reports*, 10 Mar 2021  
DODI 6055.07, *Mishap Investigation, Reporting, and Recordkeeping*, 6 Jun 2011  
Aircraft Flyaway Cost Table, Air Force Cost Analysis Agency

## METHODOLOGY

\*This Cost-Benefit Analysis format defines five evaluation criteria and establishes value ranges for each; points are then assigned to each value range. The total point value determines if the aircraft is a viable MFOQA process candidate.

### **Aircraft Cost.**

Consult with the Air Force Cost Analysis Agency, Aircraft and Weapons Division (SAF/FMC- AFCAA/FMA) to determine the average unit flyaway cost. The unit flyaway cost provided by AFCAA represents the original purchase price of the aircraft. It does not include costs associated with any modifications that were performed after the initial purchase and does not account for the depreciation of the aircraft cost over time.

Average Unit Flyaway Cost. The average unit flyaway cost (equivalent to rollaway and sail away) relates to the production of a usable end-item of military hardware.

The following items are included in unit flyaway cost under Aircraft Procurement expenditures (Appropriation 3010):

- Airframe
- Propulsion
- Electronics
- Avionics
- Engineering Change Orders
- Government Furnished Equipment
- First destination transportation (unless a separate line item)
- System Engineering and Program Management if funded by 3010 Warranties
- Recurring costs
- Nonrecurring costs
- Advance buy costs

Unit flyaway cost does not include:

- Research, Development, Test and Evaluation expenditures (Appropriation 3600)
- Weapons and armaments (unless part of the airframe, e.g., the 30MM GAU- 81A gun on the A- 10)
- Peculiar ground support equipment
- Peculiar test equipment
- Technical data
- Initial and replenishment spares
- Modifications and upgrades

*Example:*

A-10A Flyaway Cost - \$13.0M

### **Service Life Remaining In Years.**

Service Life Remaining in years is determined by the lead MAJCOM and the platform program office, consulting MIL-STD-1530 (USAF), *Aircraft Structural Integrity Program*, service life guidelines, and the Air Force Technical Airworthiness Authority in AFLCMC/EN-EZ.

### **Fatality Rate.**

Utilize the statistical data available in the Flight Statistics sections of the Air Force Safety Center webpage to determine the total Fatality Rate per 100,000 hours for the most recent ten fiscal years available. (<https://www.safety.af.mil/Divisions/Aviation-Safety-Division/Aviation-Statistics/>)

*Example:*

A-10 Fatality Rate FY98-07 5 Fatalities

Flight Rate = Flight Hours/100K Hours = 1,161,725/100,000 = 11.6 Fatality Rate =

Fatalities/Flight Rate = 5/11.6 = **0.43**

### **Mishap Rate.**

Utilize the statistical data available in the Flight Statistics section of the Air Force Safety Center webpage to determine the Class A Flight Mishap Rate per 100,000 hours for the most recent ten fiscal years available. (<https://www.safety.af.mil/Divisions/Aviation-Safety-Division/Aviation-Statistics/>)

*Example:*

A-10 Mishap Rate FY98-07 14 Class A Mishaps

Flight Rate = Flight Hours/100K Hours = 1,161,725/100,000 = 11.6 Mishap Rate =

Mishaps/Flight Rate = 14/11.6 = **1.21**

### **Integration Cost.**

\*Integration cost is determined by the lead MAJCOM requirements office in collaboration with system program offices to determine possible aircraft modifications and associated costs which would provide the MFOQA parameters at the desired quality and quantity. The Aircraft Information Management Plan, generated to support the Recorded Aircraft Information data collection requirements outlined in AFI 63-101/20-101, *Integrated Life Cycle Management*, is a useful reference for determining integration costs.

### **Criterion Valuation.**

\*Use the Criterion Value Table below to assign a point value (left column) for each criterion. If the point total for all criteria is 12 or below, the cost likely outweighs the benefit, and the MFOQA implementation is not required. If the point total is 20 or above, implement the MFOQA process as the benefit likely outweighs the cost. If the point total falls within the 13-19 range, the lead MAJCOM will consider additional factors before making the final implementation decision. Factors such as a recent change to the aircraft mission, Class B, C, D, and E mishap rates, command or USAF corporate interest or the ease of process implementation may indicate a benefit from MFOQA can be derived.

Table A2.1. Criterion Value Table.

Criterion Value	Aircraft Cost (M\$)	Service Life Remaining (years)	Fatality Rate	Mishap Rate	Integration Cost (M\$)
1	0 – 25	1 – 5	0 - 0.25	0-.50	45 - Above
2	>25 – 50	>5 – 10	0.26 - 0.50	.51 - 1.00	>40 - 45
3	>50 – 75	>10 – 15	0.51 - 0.75	1.01 - 1.50	>35 - 40
4	>75 – 100	>15 – 20	0.76 - 1.00	1.51 - 2.00	>30 - 35
5	>100 – 125	>20 – 25	1.01 - 1.25	2.01 - 2.50	>25 - 30
6	>125 – 150	>25 – 30	1.26 - 1.50	2.51 - 3.00	>20 - 25
7	>150 - 175	>30 – 35	1.51 - 1.75	3.01 - 3.50	>15 - 20
8	>175 - 200	>35 – 40	1.76 - 2.00	3.51 - 4.00	>10 - 15
9	>200 - 250	>40 – 45	2.01 - 2.25	4.01 - 4.50	>5 – 10
10	>250 -	>45 - above	2.26 – Above	4.51 - Above	0 – 5

## Attachment 3

## MILITARY FLIGHT OPERATIONS QUALITY ASSURANCE

## Figure A3.1. Exclusion Memorandum Template.

**Note:** The following memorandum template is provided as a guide for the lead MAJCOM. This format may be modified for command writing styles, but the content included in this Attachment will be incorporated into the final memorandum. (T-1) It does not follow the numbering formats used in the remainder of DAFI 91-225.

++++  
MEMORANDUM FOR AF/SE

FROM: <Lead MAJCOM/CC>

SUBJECT: Document Exclusion of <subject aircraft> From Military Flight Operations Quality Assurance Program Participation

\*DoDI 6055.19, *Aviation Hazard Identification and Risk Assessment Programs (AHIRAPs)*, and DAFI 91-225, *Aviation Safety Programs*, require the incorporation of the MFOQA process requirements and analysis capability on all legacy and new weapon system procurements unless a cost benefit analysis indicates implementation is not cost effective. MFOQA is the analysis and trending of aircraft system and flight performance data to enhance combat readiness through improvements in operations, maintenance, training, and safety functions.

\*<Lead MAJCOM> documents an exclusion to MFOQA analysis processes on the <subject aircraft>. <Lead MAJCOM> utilized the following Cost-Benefit Analysis and determined MFOQA process implementation will not likely provide a cost benefit to the lifecycle of the <subject aircraft>.

OR

\*<Lead MAJCOM> documents a temporary exclusion to MFOQA analysis processes on the <subject aircraft>. The <subject aircraft> fleet met initial operational capability on <date>. <Lead MAJCOM> utilized the following Cost-Benefit Analysis and determined MFOQA process implementation will likely provide a cost benefit to the lifecycle of the <subject aircraft>. <Lead MAJCOM> expects initiation of MFOQA processes by <future date>, based on (describe actions that will occur to facilitate the fielding of MFOQA).

OR

\*<Lead MAJCOM> documents an exclusion to MFOQA analysis processes on the <subject aircraft>. <Lead MAJCOM> utilized the following Cost-Benefit Analysis and determined MFOQA process implementation will likely provide a cost benefit to the lifecycle of the <subject aircraft>. <Lead MAJCOM> based the decision to not implement MFOQA processes on <justification>.

## COST-BENEFIT ANALYSIS

\*Methodology - The MFOQA Cost-Benefit Analysis defines five evaluation criteria. Value ranges for each criterion are outlined in the Criterion Value Table below (left column), with points assigned to each value range. If the point total for all criteria is 12 or below, the cost likely outweighs the benefit. If the point total is between 13 and 19, the benefit may outweigh the cost and further research is needed. If the total is over 19, a benefit can be derived from the implementation of the MFOQA process.

## Criteria:

Aircraft Cost – Utilizing the established Air Force cost inflation methodology, the <aircraft> value in <previous calendar year> is approximately <dollar amount>.

Service Life – As determined by the <aircraft> program office, the <aircraft> has approximately <years> of its service life remaining.

Fatality Rate - Utilizing the statistics available in the Flight Statistics section of the Air Force Safety Center webpage, the fatality rate per 100,000 flight hours for the <aircraft> over the last ten years is <rate>.

Mishap Rate - Utilizing the statistics available in the Flight Statistics section of the Air Force Safety Center webpage, the Class A Mishap rate per 100,000 flight hours for the <aircraft> over the last ten years is <rate>.

\*Integration Cost/Effort - Working with MAJCOM requirements personnel, the <aircraft > program office, and referencing the Aircraft Information Management Plan, <outline potential modifications and costs which would enable the MFOQA process.>

**Table A3.1. Criterion Value Table.**

Criterion Value	Aircraft Cost (M\$)	Service Life Remaining (years)	Fatality Rate	Mishap Rate	Integration Cost (M\$)
1	0 – 25	1 – 5	0 - 0.25	0-.50	45 - Above
2	25 – 50	6 – 10	0.26 - 0.50	.51 - 1.00	40 – 45
3	50 – 75	11 – 15	0.51 - 0.75	1.01 - 1.50	35 – 40
4	75 – 100	16 – 20	0.76 - 1.00	1.51 - 2.00	30 – 35
5	100 – 125	21 – 25	1.01 - 1.25	2.01 - 2.50	25 – 30
6	125 – 150	26 – 30	1.26 - 1.50	2.51 - 3.00	20 – 25
7	150 – 175	31 – 35	1.51 - 1.75	3.01 - 3.50	15 – 20
8	175 – 200	36 – 40	1.76 - 2.00	3.51 - 4.00	10 – 15
9	200 – 250	41 – 45	2.01 - 2.25	4.01 - 4.50	5 – 10
10	250 – Above	45 - above	2.26 - Above	4.51 - Above	0 – 5

\*Valuation –Utilizing the valuation criteria, the <aircraft> scored <points>, and the implementation of the MFOQA process will likely not provide a cost benefit. <State additional factors for consideration if the criteria total fell between 13 and 20.>

OR

\*Valuation – Utilizing the valuation criteria, the <aircraft> scored <points>, and the implementation of the MFOQA process will likely provide a cost benefit. (Provide justification for the exclusion decision and/or a timeline for fielding of MFOQA analysis.)

CONCLUSION:

\*Exclude <aircraft fleet> from the MFOQA implementation requirements of DoDI 6055.19 and DAFI 91-225.

NAME  
Lead MAJCOM/CC

CC: USAF/System Program Manager for the Aircraft

## Attachment 4

### ASAP PROCESSING PROCEDURES

**A4.1. General.** Submissions are initially screened by mishap-prevention personnel at the desired level (i.e., MAJCOM/FLDCOM, wing/delta, or installation host safety offices) as specified by MAJCOM/FLDCOM supplement(s) to this instruction.

**A4.2. ASAP Report Review.** During this phase, the ASAP is reviewed to determine if the submission indicates a mishap, meets exclusion criteria, is a duplicate of another ASAP report, would be better processed by another organization, is the subject of a pre-existing or ongoing investigation in AFSAS, and identifies hazards and/or errors in the narrative.

A4.2.1. For those reports where another safety office or safety discipline is more appropriate to address the ASAP, process in accordance with [paragraph A4.4.1. \(T-1\)](#) These reports may be de-identified prior to transfer, at the discretion of the organization that initially received the ASAP.

A4.2.2. Excluded reports. If a report meets exclusion criteria, process in accordance with [paragraph A4.4.6.3.1. \(T-1\)](#)

A4.2.3. IG matters. If a report indicates a matter appropriate for an Inspector General investigation, process in accordance with [paragraph A4.4.6.3.2. \(T-1\)](#)

A4.2.4. Duplicate ASAP reports. De-identify the report and process the ASAP in accordance with [paragraph A4.4.2. \(T-1\)](#) Duplicate reports, while searchable in AFSAS, are not shown on the Scoreboard.

A4.2.5. Determine if the ASAP submission is already the subject of a pre-existing or in-progress AFSAS event investigation. This may require triage personnel to search the AFSAS database, and/or contact the accountable wing/delta (or group if no wing) safety office. Process these reports in accordance with [paragraph A4.4.3. or paragraph A4.4.4. as applicable. \(T-1\)](#)

A4.2.6. Mishaps. ASAP submissions indicating damage, injury, or occupational illness are mishap reports. They are non-confidential, non-privileged, factual item(s) of evidence for follow-on investigations. (See [paragraph 1.2.9.2.1.](#)) These submissions must be immediately transferred to the mishap convening authority's safety office for disposition. **(T-1)** See DAFI 91-204 for convening authority determination.

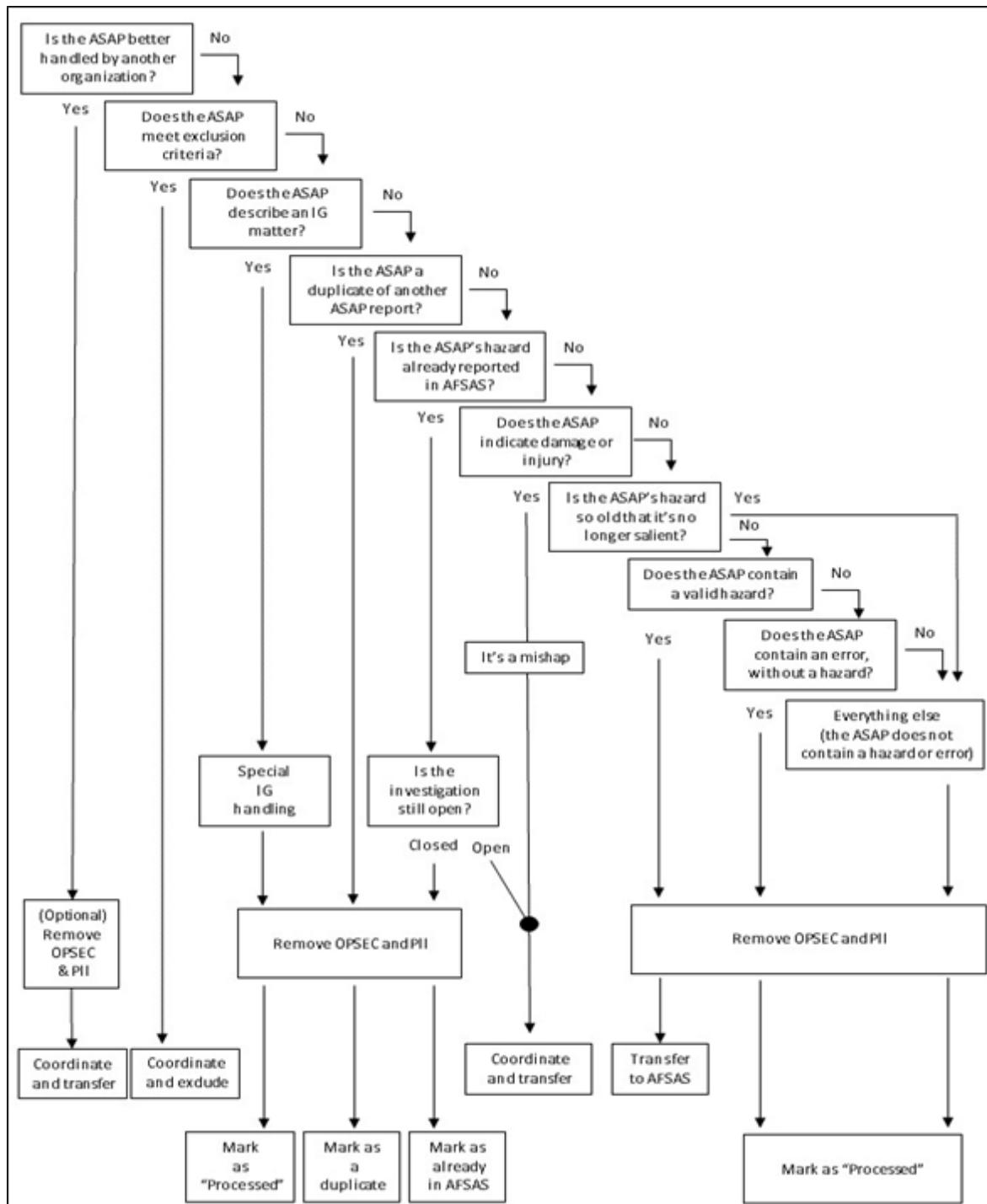
A4.2.6.1. To safeguard the integrity of the mishap investigation, promote evidence preservation, assure Safety Investigation Board or Single Investigating Officer independence, and comply with evidence handling directives, reports must be redacted before transferring the event into the AFSAS investigation module. **(T-1)** Create a report title in accordance with [paragraph A4.3.1 \(T-1\)](#) Ensure the report title does not contain any speculation as to mishap cause, investigator analysis, or other privileged safety information. **(T-0)** Completely replace the submitter's narrative, recommended corrective action, and location with text that informs the reader that the report indicated a mishap and that they should contact a safety office for more information. **(T-1) Note:** Personnel with the "ASAP Triage" AFSAS role retain access to the raw, unredacted ASAP narrative via the ASAP report's Data Viewer.

A4.2.6.1. (AMC) The summary and recommended action blocks will be replaced with "[Redacted]" and the text "This event resulted in a safety investigation. See AFSAS# xxxxxx" will be inserted into the action taken block.

A4.2.6.2. Additional non-privileged information, such as an AFSAS mishap event number, may be included in the redacted ASAP at the discretion of the processing agency.

A4.2.6.3. Complete processing of these reports in accordance with [paragraph A4.4.5](#).  
(T-1)

Figure A4.1. Model ASAP Triage Process Flowchart.



A4.2.7. Screen the submitter’s narrative for hazards and errors. Some reports may contain more than one hazard. The content of the report will drive the remainder of the ASAP process, with valid hazard(s) initiating hazard event report(s), and all other submissions (except duplicates) processed to the Scoreboard so that they may be more easily shared with the broader community.

**A4.3. De-identify.** During this phase, a descriptive report title is assigned and identifying information and OPSEC are removed.

A4.3.1. Report title. In general, report title format will follow prescribed one-liner formats for AFSAS aviation event investigations. Unless otherwise specified by MAJCOM/FLDCOM supplement, create a report title that indicates the mission-design series (if applicable) of the aircraft, equipment, or operation affected, a summary of the activity, the hazard or error present, and the outcome of the event (if known at the time the report title is drafted). Separate portions of the report title with semicolons. *Example: “KC-135; right pitot heat failure; erroneous cockpit indications; resetting circuit breaker restored normal operation.”*

A4.3.2. Redaction.

A4.3.2.1. Remove information that could identify an individual, crew, or team, to include those persons directly and indirectly referenced (for example, by office symbol) in the body of the report. **(T-0)**

A4.3.2.2. Remove OPSEC. Triage personnel will remove information or any other data that may, in their judgement, adversely impact the security of operations within their command **(T-0)**. Additionally, personnel will consider the security implications of data contained within the ASAP (or if aggregated with other ASAPs) when deciding what information to redact during triage. **(T-0)** MAJCOMs/FLDCOMs may specify types of redactable information in a supplement to this instruction.

A4.3.2.3. Avoid excessive redaction. Unnecessarily removing information after identity protection policy has been applied may impede follow-on investigation or hazard mitigation. Proactive safety and mishap prevention relies on sharing hazards for awareness and mitigation actions.

A4.3.2.4. Unless specified otherwise in a MAJCOM/FLDCOM supplement to this instruction, names, call signs, mission numbers, OPSEC, etc., removed from the submitter’s narrative, submitter’s recommended corrective action, or submitter-provided location, or any other alterations to the original submission, will be denoted with square brackets and capitalized letters, e.g., [NAME], [CALL SIGN], [ICAO], etc.

**A4.4. Decide.** In this final phase, ASAPs are marked as a duplicate of a pre-existing ASAP report, marked as a pre-existing event in AFSAS, transferred into AFSAS as a new investigation, sent to another organization, or ‘processed’ to the Scoreboard, as applicable.

A4.4.1. Transfer to another organization. If the ASAP is transferred, coordinate with the receiving organization prior to forwarding to ensure receipt. **(T-1)** Do not transfer an ASAP to an organization below wing/delta level. **(T-2)** ASAPs indicating a mishap will be transferred without delay to the convening authority’s safety office for investigation. **(T-0)** If transferring to a unit outside the lead MAJCOM, coordinate with the using MAJCOM and NAF, as appropriate. **(T-2)**

A4.4.2. Duplicate of a preceding ASAP report. Mark as a duplicate those reports for which an identical ASAP report has already been received. **(T-1)**

A4.4.3. Already in AFSAS (previous investigation closed). Another event investigation will not be initiated. **(T-1)** Mark as a pre-existing event in AFSAS with the applicable event number. **(T-1)** Ensure the report is de-identified, and enter remarks as desired.

A4.4.4. Already in AFSAS (previous investigation still open). A new event investigation will not be initiated in AFSAS. **(T-1)** Coordinate with the investigating safety office and transfer the ASAP report for potential inclusion into the ongoing investigation. **(T-1)**

A4.4.4.1. Mishaps. Investigating safety offices receiving an ASAP applicable to an ongoing mishap investigation will process the report in accordance with [paragraph A4.2.6](#). **(T-0)**

A4.4.4.2. All other event investigations. Investigating safety offices receiving an ASAP applicable to a non-mishap AFSAS event investigation will process the submission in accordance with [paragraph 4.4.3](#). **(T-1)**

A4.4.5. Transfer to the Investigation Module. ASAPs containing safety events as defined in DAFI 91-204 will be transferred to the investigation module. The two events usually reported via ASAP are mishaps and hazards.

A4.4.5.1. Mishaps. AFSAS is configured to enable the direct transfer of ASAP reports that describe a new (i.e., not already under investigation) mishap. Transfer reports of new mishaps into the investigation module for investigation and reporting. **(T-0)**

A4.4.5.2. Hazards. AFSAS is configured to enable the direct transfer of ASAP reports that indicate a new hazard, or another encounter with an existing hazard, directly into AFSAS. All ASAP reports containing hazards will be transferred into the investigation module for documentation in accordance with DAFI 91-204 and DAFMAN 91-223. **(T-1)** Draft a report title in accordance with [paragraph A4.3.1](#), ensure the report is de-identified, and annotate remarks as required. **(T-1)**

A4.4.6. Processed. Mark as ‘processed’ those reports:

A4.4.6.1. Containing an error. Select “valid error” for submissions that indicate crew, team, or individual mistakes or errors with no discernable, actionable hazard is evident and where no mishap occurred. **(T-1)**

A4.4.6.2. Where there is insufficient information to adequately investigate the submission. Select “insufficient information” when the submitter is unknown and there is not enough information to adequately investigate the ASAP, or the submitter does not respond to gatekeeper contact. **(T-1)**

A4.4.6.3. Where the narrative does not contain an actionable hazard or an error. Select “not a hazard or error” when no actionable hazard or error is present, or the report was excluded, described an IG matter, or was of an administrative nature.

A4.4.6.3.1. Excluded reports. Entirely redact the report title, submitter’s narrative, recommended corrective action, location, and replace with text that indicates the report was excluded in accordance with this instruction and provided to the chain of command. **(T-1)**

A4.4.6.3.2. IG matters.

A4.4.6.3.2.1. Submitter known. Apply identity protection policy **(T-0)** and redact those portions of the submission that do not specifically pertain to a hazard or error. **(T-1)** This may result in the redaction of the entire body of the ASAP. Insert text into the body of the ASAP submission that indicates the report identified an IG

matter, and that the submitter was referred to the appropriate IG for assistance.

A4.4.6.3.2.2. Submitter unknown or unresponsive. Apply identity protection policy **(T-0)** and redact those portions of the submission that do not pertain to a valid hazard. **(T-1)** This may result in the redaction of the entire body of the ASAP. Insert text into the body of the ASAP submission that indicates the report identified an IG matter, and that an identity-protected copy of the report was provided to the appropriate IG.

**A4.5. Finalize.** Enter remarks in the “Report Acknowledgement, Actions Taken” block to communicate to the submitter the status of the report, any actions already taken, and/or planned to be taken. **(T-2)** For anonymously submitted ASAPs, these remarks may be the only avenue of direct communication between the report submitter and the investigation office.

**A4.6. Post-triage actions.**

A4.6.1. Updating an ASAP submission after initial triage. AFSAS features the ability to update certain fields of an ASAP submission after initial triage, i.e., after transferring an ASAP to the investigation module, marking as a duplicate, or processing to the Scoreboard. Ensure the ASAP summary is updated to reflect the final actions taken on the report. **(T-2) Note:** Updating the “Actions Taken” block of an ASAP does not affect the “Event Status” of an ASAP on the Scoreboard; this field is automatically updated by AFSAS to reflect the disposition of the associated AFSAS event investigation for those ASAPs transferred into the investigation module.

A4.6.2. Investigating, reporting, and corrective actions. Ensure ASAP-derived AFSAS event reports are accomplished, closed, and final messages are released in accordance with this instruction, DAFI 91-204, and DAFMAN 91-223 **(T-1)**. Do not delay final message release while awaiting corrective action completion. **(T-1)** Manage ASAP-derived AFSAS recommendations in accordance with DAFI 91-204. **(T-1)**