



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS UNITED STATES AIR FORCE  
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16 February 2016

MEMORANDUM FOR DISTRIBUTION\_\_\_\_\_ MAJCOMs/FOAs/DRUs

FROM: AF/SE

SUBJECT: Air Force Guidance Memorandum to AFI 91-202, *The US Air Force Mishap Prevention Program*

By Order of the Secretary of the Air Force, this is an AF Guidance Memorandum immediately implementing changes to AFI 91-202. This AFGM updates the risk assessment codes analysis information and its associated risk assessment tables, and changes any reference of Ground Safety to Occupational Safety. To the extent its directions are inconsistent with other Air Force publications, the information herein prevails, in accordance with AFI 33-360, *Publications and Forms Management*.

In advance of a rewrite of AFI 91-202, the Attachment to this Memorandum is updated to provide guidance changes that are effective immediately. An asterisk (\*) indicates newly revised material.

The Memorandum becomes void after one-year has elapsed from the date of this Memorandum, or upon incorporation of an Interim Change or rewrite of AFI 91-202, whichever is earlier.

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Chief of Safety

Attachment:  
Guidance Changes

## Attachment

### *Guidance Changes*

**The below changes to AFI 91-202, dated 24 June 2015, are effective immediately.**

1.7.1.2. AFOSH Standards and Guidance. Air Force published guidance is located at <http://www.e-publishing.af.mil>. The Air Force publishes industrial and general occupational safety guidance as Air Force instructions, which implement applicable OSHA standards. In some cases, AFOSH guidance supplement OSHA standards or cover areas not addressed by OSHA, e.g., uniquely military equipment, systems and operations. Area- specific instructions and technical data include other safety criteria. When AFOSH guidance or safety criteria do not cover a situation, use non-Air Force standards including national consensus standards, professional safety and health standards, and other federal agency standards. When there is conflicting guidance, use the guidance that provides the most protection. Refer conflicts between OSHA, AFI, AFOSH guidelines and TOs to AFSEC/SE through the appropriate MAJCOM/FOA/DRU safety office for resolution. **(T-0)**

1.7.1.4. Reference library maintained by the installation occupational safety manager to include national consensus standards and other technical and safety guidance.

1.7.4.1.1. Affected work center personnel shall implement interim control measures and notify the installation occupational safety (or tenant unit safety, if applicable), fire or health officials to validate the effectiveness of interim controls. With effective controls in place, the work center will coordinate the variance/exemption package with installation occupational safety (or tenant unit safety, if applicable), fire and health officials. **(T-0)**

1.7.4.1.4. The MAJCOM/FOA/DRU/installation occupational safety manager maintains a master file of approved variances or exemptions that apply respectively to the entire Air Force or MAJCOM/FOA/DRU/AF/installation as long as they are in effect and for one year thereafter. The safety manager distributes copies of variances and exemptions to fire protection, health and functional managers, as needed. Select variances can be found at the AFSEC/SEG website: <https://cs3.eis.af.mil/sites/OO-SE-AF-18/SEGS/default.aspx>. Functional managers or supervisors, as appropriate, must train affected employees and employee representatives on approved variances, exemptions or any special procedures required; such training will be documented. Post copies of approved variances and exemptions in affected work areas until integrated into the Job Safety Training Outline (JSTO). **(T-0)**

1.8.10.25. Conducts the AF Occupational Safety Corporate Committee.

1.8.12.7. Represent the cross-functional interest of their command during applicable councils, committees and meetings, e.g., Senior Safety Advisory Council (SSAC), Occupational Safety Corporate Committee (OSCC), Non-Nuclear Munitions Safety Board, Explosives Safety Committee.

1.8.15.21. Review annual (CY) OSHA 300, *Log of Work-Related Injuries and Illness*, and sign the OSHA Form 300A, *Summary of Work-Related Injuries and Illness*, for the OSHA establishment delineated in AFSAS NLT 31 January each year. This task may be delegated to the

vice commander or executive director. AFSEC/SEG will collect all reports for submission to the Bureau of Labor and Statistics by 30 May each year. **(T-0)**

1.8.16.25. The Occupational Safety Manager (OSM) will act as initial Evaluating Agent for retraining applicants. See [Attachment 14](#). **(T-3)**

1.8.16.26. Using AFSAS, create annual (CY) OSHA 300 and OSHA Form 300A summaries for commander signature for each OSHA establishment delineated in AFSAS NLT 31 January each year. This may be delegated to the vice commander or executive director. AFSEC/SEG will collect all reports from AFSAS for submission to the Bureau of Labor and Statistics by 30 May each year. **(T-0)**

1.8.18.10.4. Assist in targeted occupational safety improvements, training of wing occupational safety managers and unit safety representatives in human factors and human factors hazard mitigation strategies. Provide consultant services for occupational safety activities and investigations. **(T-2)**

1.8.18.12.2. Reports cases of occupational illness to the installation occupational safety office through AFSAS. **(T-1)**

1.8.20.4. Upon request from COS or occupational safety (host or tenant unit), liaison with local or state law enforcement to obtain off-base traffic accident reports and/or data. **(T- 1)**

1.8.21.2. Implement a safety and health program in their unit or area of responsibility. Where commanders are not authorized full-time safety personnel, they will appoint a primary and alternate Unit Safety Representative (USR) to assist them in implementing their safety program. USR responsibilities for managing the commander's program are identified in paragraph [2.2](#). Notify the host safety office, in writing, of the appointment of USRs in order to schedule USRs for training. **(T-2)**

1.8.22.5. Develop a work center specific JSTO based on [Attachment 4](#), *Job Safety Training Outline (JSTO)*, on safety, fire protection/prevention and health requirements. Documents will be maintained and centrally located, readily available to supervisor and individual. The 14 mandatory items can be documented as one item, i.e., course code for JSTO mandatory training. Job specific items and any additional training identified in a BE survey will be documented individually, as appropriate. **(T-0)**

1.8.22.5.1. Methods of documentation may include, but are not limited to, the AF Form 55, *Employee Safety and Health Record*, electronic mediums such as AFFORMs/MAF LOG C2/G081 or locally developed products. If the AF IMT 55 is mandated for use as the training documentation device, the entity that mandated the form usage will prescribe the requirement in writing to include entries that require signatures, e.g., HAZCOM, respirator, powered industrial trucks, lockout/tagout, fall protection, confined spaces, radiation safety, laser safety, etc. **Note:** Training requirements vary, i.e., some documents may require the signature of the supervisor or the person who conducted the training, while other documents may require the initials of the individual (trainee) and trainer/supervisor. **(T-0)**

2.1.2.1. Professional Continuing Education and Training. Fulltime safety professionals working in authorized occupational safety positions as depicted in the Unit Manning Document, must complete at least three safety-related CEUs per year. For courses with no assigned CEU value, one CEU is the equivalent of ten hours of course participation. **Note:** This also applies to persons such as over-hires, career broadeners, interns or similar positions working within occupational safety. Other fulltime safety professionals in weapons, space and flight safety disciplines should consider similar continuing education to remain up to date in their specialty. MAJCOM/SEs or their designee may grant waivers for this requirement for reasons to include personnel on extended deployments, manning shortfalls and funding limitations. The COS will document specific circumstances and conditions when this training cannot be met.

**(T-3)**

2.1.2.1.2. College, OPM and other safety professional development courses that do not award CEUs, e.g., on-line training, seminars, webinars may be used to satisfy this requirement, if approved by the MAJCOM Occupational Safety Manager. **(T-3)**

2.1.3. Occupational Safety Manager (OSM). The OSM manages the occupational safety program for the Director/Chief of Safety and the commander (e.g., installation, center, NAF/MAJCOM/FOA/DRU commanders). The OSM must be fully qualified to advise and execute decisions on safety matters for the primary mission of the unit. The OSM should complete the Safety Managers Course (AFSEC Course WCIP05D) prior to assuming an OSM position. If this is not possible they will complete the course within one year of assuming the OSM position. **Note:** Previous courses such as the Senior Safety Professional's Course or the Occupational Safety Manager's Course meet this requirement. **(T-2)**

2.1.10. Non-Typical Safety Staffs. Throughout the Air Force there are an assorted number of one-deep safety positions and other small atypical safety staffs which are centric in nature to a specific safety function – occupational safety, lab safety, hospital safety, etc. These may exist at FOAs, Groups (Civil Engineering, Medical, etc.) or other organizational levels outside of or below a standard wing organization. They may reside as a host or tenant unit function on an installation. Individuals assigned to these positions, or those similar in nature, fulfill the role and responsibility of keeping their respective Commanders/Directors informed of safety issues and executing the mishap prevention program for their Commander. Since their duties and responsibilities are those of the senior safety advisor within their organization, they will report to their Commander/Director as they manage the commander's mishap prevention program. This is consistent with the principles set forth in AFI 38-101, *Air Force Organization*.

2.3.2.2. Administration. Unit commanders identify eligible personnel and arrange course scheduling with the installation occupational safety office. Safety offices will use the AF Form 1286, *Safety Education/Training Class Roster*, or another equivalent product for attendee sign-in. **(T-3)**

**3.2. Safety Evaluations.** HQ AFSEC will conduct Safety Evaluations of MAJCOM Headquarters Staffs at intervals not to exceed 36 months. These evaluations are conducted IAW DoDI, OSHA Standards and federal law. At the direction of AF/SE they will be rated with a two-tier (Satisfactory/Unsatisfactory) grading criteria.

3.6.1. Scope. At least annually (12 month cycle), qualified safety personnel shall inspect every installation workplace/facility where Airmen are regularly employed at fixed installations. Inspections are to be conducted more frequently based on factors such as the exposure to and potential severity of hazards, actual accident experience, special emphasis programs, changes in the organization's staffing or workplaces or other events that increase risk in the workplace. Procedures shall be established to document and follow-up on the correction of hazards/deficiencies identified during inspections every 30 days (see spot inspection follow-up and/or hazard abatement program). **Note:** Chiefs of Safety may extend the hazards/deficiencies 30 day follow-ups, not to exceed 90 days. Conduct inspections of all workplaces and operations where Airmen are regularly employed at fixed installations. Inspections of workplaces and operations in contractor facilities (Government-Owned Contractor Operated (GOCO) or contractor owned/operated) where fewer than 25 Airmen are employed shall be at the discretion of the Chief of Safety, based on existing conditions and potential risks. Assist the contract management multi-functional team, upon request, to resolve any issues related to the safety of the contractor's facilities. **(T-0)**

3.6.2.2. Provide an out-brief to the commander within three duty days and a formal written report to the squadron/unit commander within 15 calendar days after completion of inspection. When either of these timeframes cannot be met, the safety staff will create a memorandum for record justifying the delay. Ensure these reports along with the unit's corrective actions are staffed through the installation commander as their policy prescribes. When the host base safety office conducts inspections of tenant units, the host base safety office will send a copy of the report to the parent safety office. Formal inspection reports must contain: **(T-1)**

**3.9. Administrative Areas.** Task-qualified unit occupational safety representatives may conduct inspections of administrative work areas (not permissible for entire facility inspections) when the safety staff determines the mishap potential is minimal. The applicable occupational safety staff develops specific provisions to ensure the USR has sufficient documented training and/or experience in the safety hazards of the administrative area to recognize and evaluate those particular hazards and to suggest general abatement procedures, as required by 29 CFR 1960.25. Any specific provisions beyond what may already be addressed in the required USR training may be added to that training process. Periodic over-the-shoulder assessments of these USR responsibilities will be accomplished and documented.

5.5.1.1. Conduct an annual analysis and develop specific actions to reverse adverse trends. Analysis should target specific problem areas with recommendations for commander approval and appropriate actions. This analysis complements the data required in [Attachment 17](#).

**6.1. Deployment and Contingency Safety Program.** The purpose of this chapter is to provide Commander, Air Force Forces (COMAFFOR) a tool to preserve combat capability and manage risk to U.S. based and deployed Air Force units supporting U.S. homeland and worldwide contingency operations. The rotational nature of forces within an Area of Responsibility (AOR) necessitates an active program and commander involvement at all levels. Pre-planning, training, and preparation prior to deployments are essential to mission success. **Note:** This instruction also applies to Air Force Forces (AFFOR).

**Delete 6.1.1.4.**

6.3.2.3. Expeditionary Squadron Commanders will appoint a USR for occupational safety. Designate, by signed memo, USRs to the AEW/AEG safety office prior to departure of the current USR or within two weeks of arrival of new appointee. Newly appointed USRs must coordinate with the AEW/AEG Safety Office for training so that training may be accomplished within seven days of appointment notification. **(T-3)**

6.3.3.10. Occupational Safety Managers (OSMs) are responsible for:

**7.4. Aero Club Operations.** The host unit commander appoints an FSO as a safety advisor to the base Aero Club. If the host unit does not have an assigned FSO, the commander will obtain the assistance of a tenant unit FSO to provide safety assistance to the Aero Club. The host safety office may investigate Aero Club mishaps IAW AFI 91-204. However, the National Transportation Safety Board (NTSB) or host nation civil aviation authority has primary responsibility for investigating and reporting. Refer to AFI 34-117, *Air Force Aero Club Program*, for further guidance on Aero Club support. The wing safety advisor should attend the monthly aero club safety meetings.

7.5.2.6.1.3. To support the top of the ladder at a window opening, a board shall be attached across the back of the ladder, extending across the window to provide firm support against the building walls or window frames. Refer to ANSI A14.1., *Ladders - Wood Safety Requirements*, for additional information.

## **Chapter 8**

### **OCCUPATIONAL SAFETY**

**8.1. Program Management.** This chapter contains the minimum requirements for safety offices at all command levels. Occupational safety mishap prevention efforts include both on-duty and off-duty activities.

8.1.1. Each installation occupational safety manager will implement and manage a base-wide occupational safety program IAW applicable AFPD/AFI 90-8xx and 91-series guidance, and other applicable regulatory guidance in conformance with the AFSMS. Newly assigned ground safety managers will conduct a occupational safety program self-assessment within 90 days of taking the position. **(T-2)**

**8.2. Oversight Requirements.** Occupational safety personnel will conduct inspections of all assigned units. (See **Chapter 3**) **(T-2)**

**8.3. Host Occupational Safety Staff Responsibilities.** Train managers, supervisors and employees to identify, evaluate and control workplace hazards. Ensure mishaps are investigated and reported IAW AFI 91-204 and AFMAN 91-224. **(T-2)**

8.3.1. Manage the US Air Force installation occupational safety program, including operational, occupational, off-duty and traffic safety. **(T-2)**

8.3.1.2. Work cooperatively with other installation functions to include tenant units safety staff, Security Forces, Personnel, Civil Engineering, Contracting, Logistics Readiness Squadron (LRS), FSS, BE, Environmental, Public Health, FES Flight and AOP/AOPT personnel to provide an effective occupational safety program. **(T-2)**

8.3.11. Maintain a master list or file of approved safety, fire protection and occupational health variances or exemptions to AFI 91-203 and any variances to AFOSH requirements that apply to the installation. The current approved variances/exemptions are available at the AFSEC/SEG SharePoint® website: <https://cs3.eis.af.mil/sites/OO-SE-AF-18/default.aspx>. Evaluate and process new AFI/AFOSH standard variances IAW paragraph **1.7.4**. **(T-2)**

8.3.14. Provide fully qualified occupational safety personnel in support of AEF deployment taskings. Occupational safety managers will know the current deployment status of all assigned military personnel and ensure the proper status information is provided for the Airman Readiness Tool Report. **(T-2)**

8.3.14.1. To ensure personnel are familiar with occupational safety program responsibilities, the OSM or their supervisor will conduct a review of all appropriate skill level core tasks with individuals prior to their deployment. **(T-3)**

8.3.14.2. Individuals who do not meet required core tasks for appropriate skill level requirements will be required to receive appropriate training from their supervisor and/or OSM prior to deployment. **(T-3)**

8.3.18. Administer the ground safety awards program IAW AFI 36-2833. **(T-3)**



**8.5. Unit Safety Representative (USR) Responsibilities.** The commander is responsible for the unit safety program as referenced in paragraph [1.8.21](#). The USR assists the unit commander by being knowledgeable of safety requirements, by assisting unit personnel and by keeping the commander informed on how effective safety and health requirements are carried out throughout the unit. USRs, in addition to the responsibilities listed in paragraph [2.2](#), will: **(T-3)**

**8.7. Hazard Identification and Abatement.** The host ground safety manager will: **(T-1)**

**8.8. Department of Labor (DoL) Inspections and Investigations of DoD Working Conditions.** IAW 29 CFR 1960.31 and 1960.35, OSHA and NIOSH officials, acting as representatives of the Secretary of Labor, are authorized to conduct announced or unannounced inspections of DoD workplaces, except uniquely military workplaces and operations, and nonmilitary-unique workplaces staffed exclusively by military personnel. The DoD Components are authorized to request through the DUSD (I&E) that NIOSH perform hazard evaluations. OSHA inspection procedures for federal agency workplaces are provided in OSHA Directive Number CPL 02-00-150 (Reference (u)).

8.8.4. Ensure that DoL personnel conducting the inspection receive a coordinated response to DoL inspection reports as required and prescribed by the OSHA Citation instructions. If an OSHA inspection team visits the installation and it appears there may be possible notices of safety or unhealthy workplace violations, the installation commander's staff, to include IG, JA, PA, Contracting Office and others as appropriate, should be notified and involved in abatement plan establishment. Although a unit will be cited individually at a particular location, the identified hazard may, in fact, be classified a "Repeat" citation, because a similar finding was previously cited at another installation. This practice is because OSHA is treating the Air Force as an "Enterprise" organization. Therefore, the finding is considered a corporate matter rather than a singular installation matter. In such cases, notify AFSEC. AFSEC needs to be involved in the tracking of the hazard(s) from identification through proposed response to OSHA and subsequent closure. Upon receiving a citation, the cited unit will draft a proposed official response to the violation, which will be sent simultaneously to the applicable MAJCOM/DRU/FOA safety office and the AFSEC Occupational Safety Office (SEG) for review prior to releasing the response to OSHA. Units will need to build this additional coordination into the time frame allowed for the suspense to OSHA. Provide copies of the inspection report, replies to DoL, and related correspondence through command channels to the addressees listed in paragraphs [8.8.5.1](#) – [8.8.5.9](#) **(T-1)**

8.8.5.8. [hqafica.workflow@us.af.mil](mailto:hqafica.workflow@us.af.mil) (HQ AFICA).

8.8.5.9. Applicable MAJCOM/FOA/DRU/SEG/SGP/SGPB/CE.

8.8.5.10. Applicable Intermediate Command/SEG/SGP/CE.

9.4.10. With the assistance of Occupational Safety, assign RACs to weapons safety hazards. **(T-2)**

**10.9. Space Safety Training.** Assigned Space Safety personnel shall receive training in all applicable aspects of Space Safety according to the unit's specific operations (e.g., risk analysis



and management, System Safety, space environment hazards, testing, and conjunction assessment). Space Safety personnel shall receive training in mission specific safety tasks, as applicable: test safety, human factors, risk management, design, range systems and operations, launch systems and operations (including conjunction on-launch assessment and upper stage disposal), orbital systems and operations (including debris minimization, conjunction assessment, collision avoidance and end-of-life actions), and ground-based space systems and operations (including space control and warning systems/operations). Space Safety personnel may also need to be trained on occupational safety concerns (e.g., fall protection, safety inspections, respiratory protection) to support mission operations. (T-3)

12.5.1.3. Engineering controls, such as removing or isolating hazards, redesigning workstations, etc.

12.5.1.4. Administrative controls, such as warnings, buddy system, limiting exposure to hazards, etc.

12.5.1.5. PPE as determined by an hazard analysis. **Note:** PPE should be used when all other hazard controls have been exhausted or more significant hazard controls are not feasible.

**Delete 12.5.1.6.**

12.9.5. Annually, the COS will send a written copy of the MHAP to the installation commander for review and approval of priorities for projects. The copy sent to the commander will include a cover letter addressing the purpose of the review and description of the request for the commander's review and signature. The package will include a list of all open plan entries and those closed since the last annual review. The open list will be prioritized by RAC and Abatement Priority number (APN). See [Attachment 7](#). **Note:** Locations utilizing the AF and MAJCOM/FOA/DRU level Risk models which are included in scheduled Facilities Boards (FBs) and ESOHC meets the intent of this paragraph and that of [Attachment 12.9.2.4](#) (T-2)

## Attachment 6

### RISK ASSESSMENT CODES (RAC)

**Note:** This attachment is not for use for Systems Safety processes. Those are addressed in MIL-STD-882E.

**A6.1.** Risk Assessment Codes are an expression of the degree of risk associated with a hazard or occupational deficiency that combines hazard severity and mishap probability into a single numeric identifier. RACs are tools used by fire, safety and health professionals and commanders to prioritize abatement plans and mitigate hazards. It may not be possible to assign a RAC to every hazard or circumstance and the lack of a RAC should not dissuade efforts to mitigate hazards.

A6.1.1. This instruction describes the basic RACs and provides some guidelines for assigning priorities based on cost, effectiveness and exposure. The discipline specific chapters also provide additional guidance for assessing the risks of the applicable hazards.

A6.1.2. Risk Assessment Codes. Only qualified occupational safety, fire protection and health personnel may assign a RAC to each hazard after an evaluation of the concern. There are two methods for calculating RACs. Which method is used depends on what type of hazard is present. Safety, fire and ergonomic hazards use one calculation method and health-related hazards use another. **(T-2)**

**A6.2.** Safety, fire and ergonomic RACs are determined by plotting the probability (A, B, C or D) that a mishap will occur and the potential mishap severity (I, II, III or IV) if it does happen (**Table A6.1**). Fire safety deficiencies will not be assigned a RAC. Fire safety deficiencies are addressed in AFI 32-10141, *Planning and Programming Fire Safety Deficiency Correction Projects*.

**A6.3.** Health-related RACs are determined by plotting the health hazard severity and illness probability categories (**Table A6.8**).

A6.3.1. Health Hazard Severity Category (HHSC). The HHSC reflects the magnitude of exposure to a single physical, chemical, or biological agent and the medical effects of exposure.

A6.3.1.1. Determine the HHSC by totaling the exposure and medical effects points and use the following table: **(T-2)**

A6.3.2. Illness Probability Category (IPC). The IPC is a function of the duration of exposure and the number of exposed personnel.

A6.3.2.1. Determine the IPC for health hazards by totaling the exposure duration and number of personnel exposed points and use the following guide: **(T-2)**

**A6.4.** Commanders will consider this RAC system when determining which hazards/deficiencies warrant the expenditure of limited resources. **(T-2)**

**A6.5.** Assigned RACs will continue to be tracked in the installation hazard abatement plan until completely abated even when interim control measures are in place. **(T-2)**

**Table A6.1. Safety and Ergonomic Hazard Risk Assessment Code Matrix.**

Hazard Severity		Mishap Probability			
Description	Code	A Likely to occur immediately	B Probably will occur in time	C Possible to occur in time	D Unlikely to occur
Death, permanent total disability, or loss of facility or asset of \$2,000,000 or more	I	1 Critical/Imminent	1 Critical/Imminent	2 Serious	4 Minor
Permanent partial disability or major property damage of \$500,000 up to \$2,000,000	II	1 Critical/Imminent	2 Serious	3 Moderate	4 Minor
Lost workday injury or compensable injury, or minor property damage \$50,000 up to \$500,000	III	2 Serious	3 Moderate	4 Minor	5 Negligible
Injury involving first aid or minor supportive medical treatment, a minimal threat to personnel or property (damage up to \$50,000), or a violation of a standard	IV	4 Minor	4 Minor	5 Negligible	5 Negligible

**Table A6.2. Exposure Points.**

Alternate Route Exposure?	Exposure Conditions			
	< Action Level	Occasionally > Action Level; Always < Occupational and Environmental Exposure Limit (OEEL)	> Action Level; < OEEL	> OEEL
No	0	3	5	7
Yes	2	4	6	9

**Table A6.3. Medical Effects Points.**

<b>Alternate Route Exposure?</b>	<b>Exposure Conditions</b>			
	< Action Level	Occasionally > Action Level; Always < Occupational and Environmental Exposure Limit (OEEL)	> Action Level; < OEEL	> OEEL
No	0	3	5	7
Yes	2	4	6	9

**Table A6.4. Health Hazard Severity Category (HHSC).**

<b>Sum of Exposure and Medical Effects points</b>	<b>HHSC</b>
13-17	I
9-12	II
5-8	III
0-4	IV

**Table A6.5. Duration of Exposure Points.**

<b>Type of Exposure</b>	<b>Exposure Duration</b>		
	<b>1-8 hours/week</b>	<b>&gt; 8 hours/week, not continuous</b>	<b>Continuous</b>
Irregular, Intermittent with <b>low</b> probability	1	4	--
Irregular, Intermittent with <b>high</b> probability	2	6	--
Regular, Periodic with <b>low</b> probability	2	5	8
Regular, Periodic with <b>high</b> probability	3	7	8

**Table A6.6. Number of Exposed Personnel Points.**

<b>Number of workers in the similar exposure group (SEG) who perform the process(es) that produce the hazard</b>	<b>Exposed Personnel Points</b>
1-2	1
3-4	2
5-6	3
7-9	4
10-29	5
30-49	6
49-100	7
>100	8

**Table A6.7. Illness Probability Category (IPC).**

<b>Sum Exposure Duration and Exposed Personnel Points</b>	<b>IPC</b>
14-16	A
10-13	B
5-9	C
0-4	D

**Table A6.8. Health-Related RAC Matrix.**

<b>HHSC</b>	<b>IPC</b>			
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>I</b>	1	1	2	3
<b>II</b>	1	2	3	4
<b>III</b>	2	3	4	5
<b>IV</b>	3	4	5	5

## Attachment 8

### INSTRUCTIONS FOR COMPLETING AF FORM 1118, *NOTICE OF HAZARD*

**A8.1. AF Form 1118.** Qualified occupational safety, fire protection, and health (BE, PH, flight surgeon and (or) occupational medicine physician) officials are the sole issuing authorities for AF Form 1118.

**A8.2. Control Number.** The control number for the AF Form 1118 will be the agency code (S, F, H), date of hazard identification, and sequential number, e.g., S-20061201-1. The numbering system will coincide with the corresponding Hazard Abatement Plan (AF Form 3). **(T-2)**

**A8.3. Location.** Note the building number, room number and function involved where the hazard is located, and nomenclature of the hazardous item or procedure, e.g., Building 18, Room 217, Civil Engineering Carpenter Shop, Table Saw. **(T-2)**

**A8.4. Hazardous Condition.** Describe in detail the nature of the hazard, including a reference to the standard or requirement violated, if any. **(T-2)**

**A8.5. Risk Assessment Code.** List RAC, followed by RAC description, e.g., "1 (Imminent Danger)." **(T-2)**

**A8.6. Interim Control Measures.** Identify temporary measures needed to reduce the degree of risk associated with the hazard to an "acceptable degree" until permanent corrective actions are implemented. Assigned RAC will remain until completely abated even though interim control measures are in effect. **(T-2)**

**A8.7. Permanent Corrective Action.** List the action that will permanently eliminate the identified hazard. Include associated document number, e.g., install new exhaust system; CE work order and project number. **(T-2)**

**A8.8. Contact Point.** Name, grade, office symbol and telephone number of individual responsible for elimination of the hazard. **(T-2)**

**A8.9. Estimated Completion Date.** Self-explanatory. **(T-2)**

## Attachment 10

### PRE-DEPARTURE TRAVEL SAFETY (EXAMPLES ONLY)

**A10.1. Purpose.** The Pre-Departure Travel Safety Program is a recommended management tool for commanders and supervisors. It helps military and civilian employees on orders, especially those under the age of 26, reduce the potential for a traffic mishap by identifying and mitigating risks involving travel by private motor vehicle for leave, PCS and temporary duty assignments.

**A10.2. Overview.** Commanders, managers and supervisors will help guide and mentor employees in applying personal RM when planning for a trip. Consider the following factors to guide the discussion on assessing risk and identifying mitigating strategies, but also consider and address other factors based on the unique nature of each situation. This interactive briefing may be documented on AF Form 4392, *Pre-Departure Safety Briefing Form*. Another tool for commanders and supervisors to consider is use of the Travel Risk Planning System (TRiPS) program to assist in travel planning for all personnel. TRiPS is accessed through the Air Force portal (<https://trips.safety.army.mil/>).

A10.2.1. Urge the driver to carefully and thoroughly plan the trip, allowing time for rest prior to departure and to take a break at least every two hours.

A10.2.2. Travelers are not to drive more than 10 hours during any 24-hour period. Motorcyclists are highly encouraged to travel fewer hours. Highly recommend that travelers get a good night's sleep (7-8 hours) while traveling.

A10.2.3. Airmen must ensure they have sufficient funds available to cover expenses (a shortage of funds often leads to exhausting, marathon driving).

A10.2.4. Travelers must check the weather forecast and road conditions for the intended route of travel.

A10.2.5. Discourage driving during late night hours. Remind the traveler that there is a greater chance to encounter impaired (intoxicated, fatigued) drivers on the road at night than during the day.

A10.2.6. Stress the value of occupant restraint devices (mandatory for military personnel), including child restraints and the use of helmets and personal protective equipment by motorcyclists; review the hazard of reduced visibility due to factors such as darkness, weather, sun glare; and touch on the issue of being alert for road hazards such as animals crossing the roadway, stalled or slow-moving vehicles, and so forth.

A10.2.7. Stress the importance of vehicle condition — vehicle defects also contribute to mishaps.

A10.2.8. Discuss the main causes of injury and death by vehicle mishaps in the Air Force, which include speeding or excessive speed for conditions, fatigue, inattention or distraction, not wearing seatbelts and the effects of medication and alcohol.



**A10.3. Additional Information.** Advise the member to contact their unit commander, first sergeant, flight commander, immediate supervisor or command post in the event of a mishap or if an emergency situation arises. Ensure the individual is provided the phone numbers of the points of contact.

## Attachment 14

### 1S0X1 RETRAINEE EVALUATION PROCESS

**A14.1.** The local Occupational Safety Manager (OSM) or designated representative will act as initial Evaluating Agent for retraining applicants. **(T-3)**

**A14.2.** The Evaluating Agent will: **(T-3)**

A14.2.1. Ask the applicant's immediate supervisor to appraise his or her work performance, attitude and overall character.

A14.2.2. Provide applicant a briefing on Safety programs and responsibilities. Discuss the safety career field and answer any questions. Determine if applicant has problems which would preclude working nights, holidays, standby, TDY, overseas assignments or deployments. Also, problems with prolonged standing or walking or other medical problems which would affect work performance.

A14.2.3. Establish and document an observation period for all applicants under consideration for retraining. The applicant must complete up to a 10 duty-day assessment period with the local Safety office before the Evaluating Agent can make a recommendation. **(T-3)**

A14.2.4. Provide meaningful, structured activities which assist in assessing the applicant's suitability for the Safety career field. The activities will consist of:

A14.2.4.1. Assessment of applicant's communication skills: Abilities to write and speak clearly and distinctly.

A14.2.4.1.1. Applicant will write a memorandum stating their reasons for wanting to retrain into the career field. Memorandum will include strengths, areas for improvement and what the applicant can contribute to improve the safety program. **(T-3)**

A14.2.4.1.2. Applicant will instruct/lead some portion of a safety class, i.e., Course II, Course IIIB, SST, FTAC. **(T-3)**

A14.2.4.2. Introduction to inspection/spot inspection process.

A14.2.4.2.1. Applicant will review annual reports, conduct follow up for the open write-ups AND conduct spot inspections. **(T-3)**

A14.2.4.3. Familiarization to Flight line/maintenance/industrial areas.

A14.2.4.3.1. Applicant will visit flight line/maintenance/industrial areas as deemed appropriate by the Evaluating agent. **Note:** This may be incorporated into paragraph [A14.2.4.2.1](#). **(T-3)**

A14.2.4.4. Introduction to mishap investigation.

A14.2.4.4.1. Applicant will partake in the investigation and processing of a mishap. Preferably a real mishap, but a training scenario may be used. This includes an AFSAS familiarization session, reviewing mishap findings to establish causal factors and a mishap summary/out-brief to

the Chief of Safety. **Note:** This activity will include briefing applicant on what to expect at a mishap scene. **(T-3)**

#### A14.2.4.5. Introduction to Hazard Abatement Program.

A14.2.4.5.1. Applicant will assign a Risk Assessment Code to a hazard (actual or simulated) based on an assessment of the mishap potential and its severity. Applicant will also process AF Forms 457, *USAF Hazard Report*, and 1118, *Notice of Hazard*. **(T-3)**

A14.2.5. Provide the servicing FSS with a memorandum summarizing the following areas based on research and structured activities:

A14.2.5.1. Approval/Disapproval of applicant's request for retraining. A14.2.5.2. Assessment of applicant's structured activities.

A14.2.5.3. Assessment of applicant's communication skills, both written and verbal.

A14.2.5.4. Overall assessment of the appearance, moral standards, military conduct and bearing.

A14.2.6. Complete the Safety 101 CBT.

### **Figure A14.1. 1S0 Safety Retraining Memorandum (Example).**

MEMORANDUM FOR FROM:

SUBJECT: 1S0 Safety Retraining Memorandum

1. I approve/disapprove

2. Applicant:

(Applicant's Rank and name) request for retraining.

- a. (Did/did not) complete the 10 duty-day assessment period.
- b. (Has/does not have) ability to communicate: write, and speak clearly and distinctly.
- c. (Has/does not have) ability to meet the needs of the Safety career field.
- d. (Has/does not have) appearance, moral standards, military conduct and bearing to meet the needs of the Safety career field.

Explain:

3. I interviewed applicant's immediate supervisor and foresee no problems OR have reason for concern. Explain:

4. Applicant received a briefing on Safety programs and responsibilities and has/has no problems which would preclude working nights, holidays, standby, TDY, overseas assignments or deployments.

Explain:

5. If you have questions please contact me at DSN: xxx-xxxx.

SIGNATURE BLOCK

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

**AIR FORCE INSTRUCTION 91-202**

**24 JUNE 2015**



**Safety**

**THE US AIR FORCE MISHAP  
PREVENTION PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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This instruction implements Air Force Policy Directive (AFPD) 91-2, *Safety Programs*. It establishes mishap prevention program requirements, assigns responsibilities for program elements and contains program management information. Requirements in this publication are mandatory, unless indicated otherwise. It applies to all Regular Air Force (RegAF), Air Force Reserve Command (AFRC) and Air National Guard (ANG) military and civilian personnel. For the purposes of this instruction, ANG and Air Force Reserve Command (AFRC) are included in all references to Major Commands (MAJCOMs). At enduring and contingency locations outside the United States, follow the requirements in this instruction so long as they do not conflict with applicable requirements from any of the following: host nation requirements made applicable by international agreement, Overseas Environmental Baseline Guidance Document (OEBGD) standards, country-specific Final Governing Standards (FGS), Geographic Combatant Command policy, environmental annex to operational order (OPORD), operational plan (OPLAN) or other operational directive. This instruction implements North Atlantic Treaty Organization (NATO) Standardization Agreements (STANAGs) 3101, *Exchange of Safety Information Concerning Aircraft and Missiles*, 3102, *Flight Safety Cooperation in Common Ground/Air Space*, 3531, *Safety Investigation and Reporting of Accident/Incidents Involving Military Aircraft and/or Missiles*. Send major command, field operating agency and direct reporting unit (MAJCOM/FOA/DRU) supplements to HQ Air Force Safety Center (HQ AFSEC)/SE Org Box, 9700 G Avenue, Kirtland AFB NM 87117-5670, for coordination and approval before publication. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847s from the field through the appropriate functional's chain of command. All requests for changes, interpretations or clarifications concerning this publication must be forwarded through the MAJCOM/FOA/DRU safety organization, who, in turn, as

applicable, will forward to HQ AFSEC. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (T-0, T-1, T-2, T-3) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, 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. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Disposition Schedule (RDS). This instruction requires collecting and maintaining information protected by the Privacy Act of 1974 (5 U.S.C. 552a, DoDD 5400.11 and DoD 5400.11-R, *DoD Privacy Program*) and AFI 33-332, *Air Force Privacy and Civil Liberties Program*.

No Technical Order (TO), Instruction or Operating Instruction can address every hazard or potential hazard that may arise from a specific task or combination of tasks. Where situations exist that are not covered by existing directives, use a Risk Management (RM) process to assess risk associated with those situations and determine adequate safeguards or procedures to manage the risk. Refer to AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*, for guidance on using the RM process.

**Note 1:** The RM process may not be used to violate any laws, directives or other regulatory guidance. Normal waiver or variance procedures must be followed in all cases (refer to this instruction). Outside of Air Force guidance, the Air Force does not have authority to grant exemptions and waivers for statutory and regulatory requirements that have risk-related exposure elements or standards. All other waivers, variances or change requests must be properly vetted through appropriate agencies for approval.

**Note 2:** The use of the name or mark of any specific manufacturer, commercial product, commodity or service in this publication does not imply endorsement by the Air Force.

## ***SUMMARY OF CHANGES***

This document is substantially revised and must be completely reviewed. This revision establishes the Air Force Safety Management System (AFSMS) as the framework for the mishap prevention program. **Chapter 1**, *Program Overview*, introduces and provides the interface of the AFSMS within the mishap prevention program. **Chapter 3**, *Safety Assurance*, has been rewritten to ensure cohesion of the Air Force Inspection System and the required safety oversight process as it relates to Air Force safety assurance. **Attachment 17**, *Annual AFSMS Review Plan*, has been added identifying the annual review requirements for the AFSMS. Additionally, this revision incorporates Inspector General-driven waiver/tier classification throughout the publication.

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## Chapter 1

### PROGRAM OVERVIEW

**1.1. Purpose.** The purpose of the Air Force Mishap Prevention Program is to minimize the loss of Air Force (AF) resources and protect Air Force personnel from death, injuries or occupational illnesses by managing risks on- and off-duty. This program is aligned and framed using the Air Force Safety Management System (AFSMS) as the core structure. It applies to all AF organizations. **Note:** While Occupational Safety and Health Administration's (OSHA) Voluntary Protection Program (VPP) is recognized as a form of the Safety Management System (SMS), and it is closely aligned with the AFSMS, units employing VPP will still follow the USAF mishap prevention program guidance contained within this instruction.

**1.2. AFSMS Vision.** The AFSMS vision is for the Air Force to be a world leader in safety management and provide care for our Airmen and our environment to meet our air, space and cyberspace missions. Accordingly, the Air Force is committed to the following three priorities:

1.2.1. Compliance. Comply with all safety and regulatory guidelines.

1.2.2. Risk Reduction. Protect our assets, personnel and material by effectively identifying and managing risks.

1.2.3. Continuous Improvement. Instill a culture that encourages and supports continuous improvement.

**1.3. Use of AFSMS in the Mishap Prevention Program.** Mishap prevention activities are assigned to one of the four Safety Management System (SMS) pillars as depicted in **Figure 1.1**. Commanders at all levels are responsible for developing and implementing a mishap prevention program utilizing the AFSMS Pillars.

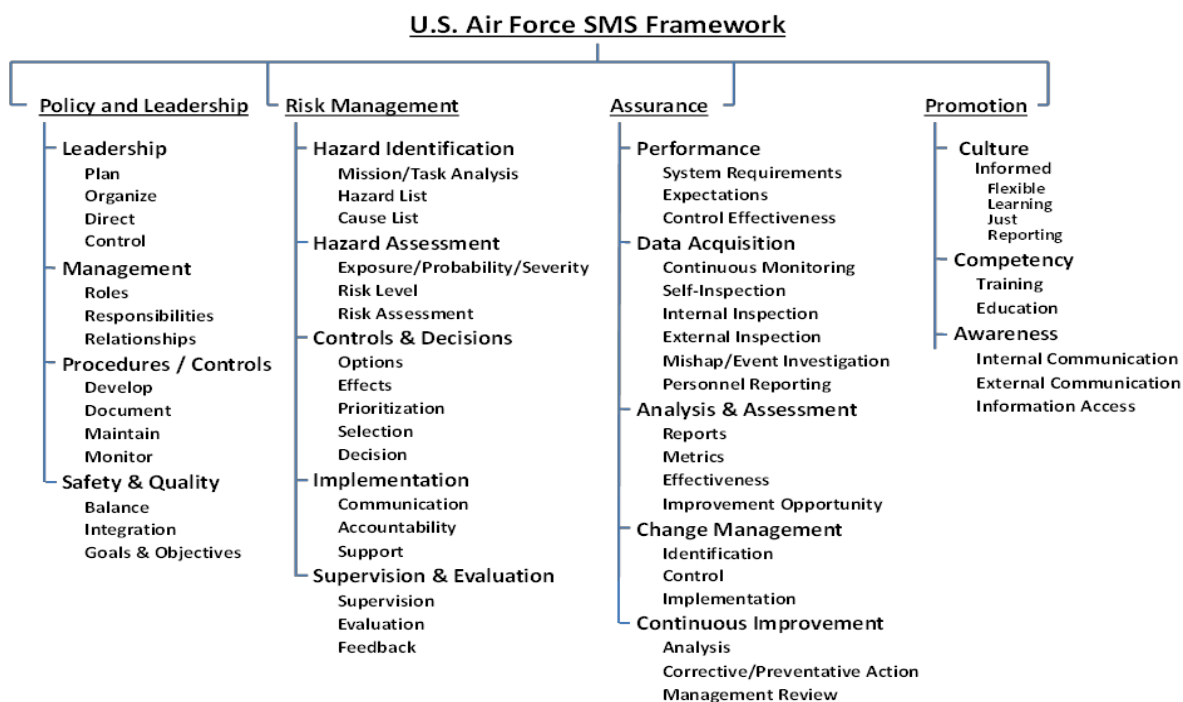
**Figure 1.1. AFSMS Pillars.**



1.3.1. The purpose of the AFSMS is to utilize the four pillars as depicted in [Figure 1.2](#) as a framework for structuring the AF mishap prevention programs and activities used to minimize risk and reduce the occurrence and cost of injuries, illnesses, fatalities and property damage. Managing mishap prevention activities requires goal setting, planning, executing and measuring performance utilizing continuous improvement processes such as described in [paragraph 1.5](#)

1.3.2. Leadership implements the AFSMS by providing guidance and goals, establishing safety responsibility and accountability, applying risk management to all activities, and promoting the AFSMS throughout the organization. This implementation establishes the AFSMS pillars that prevent mishaps and preserve combat capability.

**Figure 1.2. The AFSMS Framework.**



## 1.4. AFSMS Pillars.

1.4.1. Policy and Leadership. Safety policy provides the framework to build a sound and proactive mishap prevention program. Active leadership involvement in the implementation and execution of the AFSMS supported at all levels of command is critical. The following are a description of policy and examples of leadership engagement:

1.4.1.1. Safety Policy. Policies form the foundation for the AFSMS, providing expectations and requirements for integrating AFSMS into the Air Force safety mission, vision, goals and objectives. Air Force Safety Policy is established through Air Force Policy Directives, and implementation is directed through Air Force Instructions (AFIs), Manuals (AFMANs) and Pamphlets (AFPAMs), defining the directives, policies, procedures and organizational structures necessary to implement the AFSMS vision.

1.4.1.2. Leaders have overall responsibility for safe operations and must clearly establish safety responsibility and accountability throughout the organization, communicating their

commitment to the safety and health of our Airmen. Safety staffs at all levels assist commanders with the implementation and integration of safety management elements into all activities.

1.4.1.3. Leaders will set safety policies and goals, and lead the mishap prevention program SMS implementation, communicating safety management throughout the organization by identifying and controlling safety risk, applying management principles and promoting a strong safety culture.

1.4.1.4. Leadership engagement examples include, but are not limited to:

1.4.1.4.1. Commitment and Responsibility.

1.4.1.4.1.1. Directing the organization to implement and maintain an AFSMS.

1.4.1.4.1.2. Providing leadership and assuming overall responsibility.

1.4.1.4.2. Accountability and Authority.

1.4.1.4.2.1. Establishing a documented safety policy and ensure the policy is communicated to Airmen.

1.4.1.4.2.2. Holding Airmen at all levels accountable for effective AFSMS implementation.

1.4.1.5. Airmen Participation. Airmen are required to be actively engaged in the mishap prevention program. The organization shall establish and implement processes to ensure effective participation by its Airmen at all levels. Proper use of the AFSMS elements ensures Airmen engagement enhances the systems' effectiveness and drives continuous improvement. Examples include but are not limited to:

1.4.1.5.1. Encouraging and supporting Airmen participation in the AFSMS.

1.4.1.5.2. Providing input to safety committees.

1.4.1.5.3. Conducting safety briefings.

1.4.1.5.4. Conducting safety-related inspections and assessments through recurring unit-level safety inspections and briefings.

1.4.1.5.5. Hazard identification and risk assessments.

1.4.1.5.6. Safety and health-related training.

1.4.1.5.7. Job Safety Analyses.

1.4.1.5.8. Utilizing safety feedback mechanisms to communicate unit safety concerns to leadership.

1.4.2. Risk Management (RM). Risk management is the key to mishap prevention. The Air Force's five-step deliberate RM process (**Figure 1.3**) is the core of the Air Force safety and mishap prevention program. RM will be utilized to the maximum extent possible to identify and assess hazards from which mitigating controls are developed. Control measures selected for implementation are then continuously monitored and analyzed to assess their effectiveness. Should there be deviations from expectations, new control measures will be implemented and the process continues. The Real-time RM (RTRM) Process, also known as the ABCD Model, is founded on the 5-Step RM Process. Streamlining the steps is essential



in situations where risk decisions need to be made quickly and in real-time. The RTRM Process provides individuals with an easy to remember mnemonic that walks them through the essential steps of the RM wheel to: Assess the situation, Balance controls, Communicate, and Decide and debrief the RM decision; hence, ABCD Model. Much more detail is available in AFI 90-802, *Risk Management*, and AFPAM 90-803, *Risk Management (RM) Guidelines and Tools*.

**Figure 1.3. The Air Force 5-Step RM Process.**



1.4.3. Assurance. Safety assurance is the evaluation, review and monitoring that assures commanders the elements of the mishap prevention program are being implemented, and guides continuous improvement efforts. Assurance programs measure whether organizations conform to standards and are making progress toward established goals. Assurance is enhanced using the following elements:

1.4.3.1. Evaluation and Reporting Action. Evaluate AFSMS conformance and performance through monitoring, measurements, mishap or near miss investigations, inspections, assessments and evaluations. Corrective action must be taken when non-conformance with AFSMS processes or execution of the AFSMS is identified.

1.4.3.1.1. Inspection and Assessment Process. Identify potential hazards and confirm risks during inspections and self-assessments. The Inspection and Assessment Processes focus on compliance and conformance with AFSMS and performance results achieved.

1.4.3.1.2. Safety assurance processes will concentrate on validating, through collection and analysis of objective evidence and/or data (i.e., documents, records, metrics, inspection, evaluation), that operation, process, or system expectations continue to be met or exceeded.

1.4.3.1.3. Safety assurance data acquisition will be obtained from numerous sources, including continuous program monitoring/measurement, self-inspection, independent internal process/program evaluation, external inspection/evaluation (Unit Effectiveness Inspection [UEI], Management Inspection [MI], etc.), mishap/event investigation and internal reporting systems (Hazard Reports, Airman Safety Action

Program [ASAP] reports, High Accident Potential Reports, Management Internal Control Toolset [MICT], etc.). Ensure acquired data is actionable and adequately measures operation, program process and/or system performance.

1.4.3.2. Monitoring. Commanders will determine whether the system is performing effectively and meeting regulatory requirements by monitoring the status of corrective and preventive actions, injury/illness metrics, findings of incident investigations (including near misses and close calls), inspections, assessments, audits activities, performance measures and trend analysis.

1.4.3.2.1. Sustained and Continuous Improvement Expectations. To be effective, monitoring should ensure the necessary information is available for leadership to evaluate the continuing suitability, adequacy, and effectiveness of the AFSMS. It should also help commanders set improvement targets.

1.4.3.3. Leadership Review (AFSMS Management Review). The review is for leadership and applicable process owners to conduct a strategic and critical evaluation of the conformance and performance of the AFSMS and to recommend improvements. Results and action items from this review shall be documented, prioritized, communicated to affected organizations and tracked to completion. See [Attachment 17](#).

1.4.3.3.1. Implementation Expectations. After reviews, communicate expectations to each Airman and incorporate these expectations into actionable tasks with clear deliverables, and estimated completion dates. Additionally, revise program and/or system requirements, as needed.

1.4.3.4. Miscellaneous safety assurance considerations:

1.4.3.4.1. Design Review and Management of Change. This process to identify and take appropriate steps to prevent or otherwise control hazards at the design and redesign stages using tools such as System Safety or RM. Commanders, supervisors and planners will utilize change management tools, such as Plan, Do, Check, Act (PDCA), RM or AFSO21 to assess and address change-induced risks associated with operations and contingencies.

1.4.3.4.2. Procurement. Identify and evaluate potential hazards prior to purchasing products, goods and/or services. Ensure procedures and requirements are communicated to suppliers and service providers.

1.4.3.4.3. Contracts. As appropriate, include safety processes in the Performance-Based Work Statement (PWS) for contracted work.

1.4.3.4.4. Emergency Preparedness. Periodically evaluate plans IAW AFI 10-2501, *Air Force Emergency Management Program Planning and Operations*.

1.4.3.4.5. Early Intervention of Hazards. Participate in existing Air Force proactive safety programs, such as Air Force Combined Mishap Reduction System (AFCMRS) and ASAP, that provide early identification and intervention for hazards. Use such programs to identify, measure and mitigate hazards; revisit existing risk controls; and determine the effectiveness of newly implemented risk mitigations. Jointly use traditional mishap investigation data sources, i.e., Air Force Safety Automated

System (AFSAS), and proactive safety data sources, e.g., Military Flight Operations Quality Assurance (MFOQA), to measure the risk posed by hazards to operations.

1.4.3.4.6. Consultation. Safety professionals provide consultation services in regards to all aspects of safety. This includes by request, through assurance processes and/or any other opportunities.

1.4.4. Promotion, Training and Education. Ensure Airmen are provided safety awareness information, organizations have embedded ongoing training into the AFSMS, and organizations have implemented effective risk control measures.

1.4.4.1. Training and Competence. AF personnel (military, civilian) and advisory and assistance services contractors shall know the mishap prevention program requirements that apply to their daily duties. Records of training are generated and maintained as directed by this instruction and other guidance.

1.4.4.2. Communications and Awareness. AF personnel shall understand AFSMS practices regarding possible hazard identification, control and reporting procedures. Additionally, they shall understand where and how they can practically participate in the AFSMS.

1.4.4.3. Safety Culture. The ideal safety context for maximizing mishap reduction through the AFSMS should be defined as an Informed Culture; comprised of a Just Culture, Reporting Culture, Learning Culture and Flexible Culture, as described in the elements of this section.

1.4.4.3.1. The foundation of an Informed Culture is a Just Culture, which encourages personnel to provide safety-related information without fear of reprisal. A Just Culture should be continuously promoted and reinforced through leadership actions throughout organizations by encouraging members to address hazards and mitigate risk without fear of adverse actions. Commanders must encourage reporting for safety analysis and mishap prevention purposes, while establishing clear guidelines on acceptable and unacceptable behavior. In a Just Culture, the immediate response by personnel who become aware of a hazard should be to find “what happened and why,” versus “who to blame and punish.” Leaders in a Just Culture should understand and promote the notion that more can be learned through full reporting and detailed investigation than blame and punishment. A Just Culture fosters partnerships for identifying hazards and the root causes of events where safety was diminished. All personnel must clearly understand and recognize that it is unacceptable to punish all errors and unsafe acts regardless of their origins and circumstances while it is equally unacceptable to give blanket immunity from sanctions to all actions that could, or did, contribute to diminished safety. Commanders may not use safety investigation reports for any purpose except mishap prevention, but other investigations may be used as a basis for command disciplinary action, as appropriate.

1.4.4.3.2. As the second component of an Informed Culture, a Reporting Culture should be continuously promoted and reinforced by leadership actions throughout organizations by understanding the importance of voluntary reporting of safety threats and errors in ensuring the persistent capability of airpower.

1.4.4.3.3. As the third component of an Informed Culture, a Learning Culture should be continuously promoted and reinforced by leadership actions throughout organizations by showing a willingness to change procedures and practices based on uncovered hazards and mistakes before a mishap results.

1.4.4.3.4. As the fourth component of an Informed Culture, a Flexible Culture should be continuously promoted and reinforced by leadership actions throughout organizations by empowering personnel to recommend procedural and behavioral changes to manage risk.

1.4.4.4. Airmen Participation. Airmen must be actively engaged in the mishap prevention program. Each organization shall establish and implement processes to ensure effective participation by its Airmen at all levels. The AFSMS ensures Airmen engagement enhances the systems' effectiveness and drives continuous improvement.

**1.5. Continuous Improvement.** The AFSMS implements and supports a continuous improvement process by creating the framework to review safety conformance and performance. It creates deliberate opportunities to refine and refocus suboptimal elements as trends develop, interventions are successful or fail, new technology is introduced. While **Figure 1.2** depicts continuous improvement under the Assurance pillar, there is, in fact, a benefit of continuous improvement through execution of the mishap prevention program using all pillars of the SMS. Leaders from the squadron to the headquarters will use the PDCA methodology to ensure that continuous improvement is being accomplished. PDCA is an iterative four-step management method used for the control and continuous improvement of processes and products.

1.5.1. Plan. Establish the objectives and desired end state. Study programmatic shortfalls, emerging trends and/or changing conditions. Outline possible countermeasures and the necessary policy, programs, processes and actions necessary to deliver results IAW the expected outcome (the target or goals). By establishing output expectations, the completeness and accuracy of the specification becomes a part of the targeted improvement.

1.5.2. Do. Implement the plan, execute the process and make the product. Collect data for charting and analysis in the following "CHECK" and "ACT" steps.

1.5.3. Check. Study the actual results (measured and collected in "DO" above) and compare against the expected results (targets or goals from the "PLAN") to ascertain any differences. Look for deviations in implementation from the "PLAN" and "DO" parts of the cycle that may have affected execution. Charting data can make it much easier to see trends over several PDCA cycles and convert the collected data into information. Information is what you need for the next step "ACT."

1.5.4. Act. Request corrective actions on significant differences between actual and planned results. Analyze the differences to determine their root causes. Determine where to apply changes that will include improvement of the process or product. At the conclusion of the reviews in this part of the cycle, there should be evidence of the future direction of the SMS and any needed changes to the policy, priorities objectives, resources or other SMS elements.

**1.6. Mishap Prevention Program Disciplines (Aviation, Ground, Weapons, Space, etc. ).** Each mishap prevention program discipline will direct more specific functional management responsibilities and RM processes via AFIs, standards and manuals. Air Force Host and Tenant safety offices will implement these programs IAW this instruction. Any inter-organization and

inter-service agreements will be addressed in formal support documents. Regardless of any support agreement or executive agency guidelines, requirements for this instruction must be satisfied. The mishap prevention program will address: **(T-1)**

- 1.6.1. Target groups at increased risk for mishaps, injury or illness as directed by the commander.
- 1.6.2. Processes for tracking and trending incidents, as well as methods for determining program effectiveness.
- 1.6.3. Funding for safety programs.
- 1.6.4. Metrics for measuring performance (See examples in **Chapter 5**).
- 1.6.5. Safety goals, objectives and milestones that support Air Force established goals.
- 1.6.6. Methods to identify and disseminate safety “best practices.”

**1.7. Air Force Occupational Safety and Health (AFOSH) Guidance and Applying Standards.** AFOSH guidance must be followed at all times and is the minimum guidance necessary to provide a safe and healthful work environment for all Airmen and other Department of Defense (DoD)/government personnel working on Air Force installations. Air Force activities must comply with OSHA requirements at all times unless the military-unique exemption applies according to DoDI 6055.1, *DoD Safety and Occupational Health Program*, paragraph E3.4.5. AFOSH requirements shall provide equal or greater protection than applicable federal regulatory standards. All Air Force units must comply with applicable safety guidance during all Air Force operations. The Air Force may develop supplementary or alternative guidance where inadequate or no federal regulatory standards are applicable. MAJCOMs, DRUs and FOAs may supplement AFOSH guidance when additional or more stringent safety, fire prevention or health criteria are required. When there is conflicting guidance, apply that guidance which provides the most protection. **Note:** Individual 91-series safety AFOSH Standards were consolidated into AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*. However, occupational health-related standards remain documented in the 48-series AFOSH Standards. Safety offices will maintain (or have access to) a reference library to include national consensus standards and other mission-related technical and safety guidance. **(T-1)**

1.7.1. AFOSH guidance sources include:

1.7.1.1. Regulatory Federal Standards. The Air Force complies with applicable Department of Labor (DoL) OSHA , Nuclear Regulatory Commission and Department of Transportation standards incorporating specific requirements by reference into AFOSH guidance or technical orders (TOs).

1.7.1.2. AFOSH Standards and Guidance. Air Force published guidance is located at <http://www.e-publishing.af.mil>. The Air Force publishes industrial and general ground safety guidance as Air Force instructions, which implement applicable OSHA standards. In some cases, AFOSH guidance supplement OSHA standards or cover areas not addressed by OSHA, e.g., uniquely military equipment, systems and operations. Area-specific instructions and technical data include other safety criteria. When AFOSH guidance or safety criteria do not cover a situation, use non-Air Force standards including national consensus standards, professional safety and health standards, and other federal agency standards. When there is conflicting guidance, use the guidance that provides the

most protection. Refer conflicts between OSHA, AFI, AFOSH guidelines and TOs to AFSEC/SE through the appropriate MAJCOM/FOA/DRU safety office for resolution. **(T-0)**

1.7.1.3. TOs and manufacturers' guidance (e.g., Safety Data Sheets [SDS]) for specific processes, aircraft and equipment.

1.7.1.4. Reference library maintained by the installation ground safety manager to include national consensus standards and other technical and safety guidance.

1.7.2. Joint-Use Workplaces. Personnel from different DoD Components or other federal agencies working in the same workplace shall be governed by OSHA standards and any applicable alternate standards or host-agency standards, e.g., Air Force safety requirements.

1.7.3. Military-Unique Situations. OSHA standards do not apply to military-unique workplaces, operations, equipment and systems. However, DoD and Air Force policy is that OSHA standards shall apply when practicable and consistent with military requirements, unless HQ AFSEC or AFMSA/SG3P approves a variance or exemption.

1.7.4. Variances and Exemptions. The affected work center shall process a request for variance when it is impractical or impossible to meet OSHA standards or AFOSH requirements due to operational needs, mission impact or technical reasons. Variances are temporary and are normally granted for periods not to exceed five years. Exemptions grant permanent relief from a requirement and may be approved when the applicant can substantiate that their proposed methods, equipment or facilities protect the worker as well or better than the AFOSH requirements or applicable OSHA Standards. AFSEC and Air Force Medical Support Agency (AFMSA) may grant variances or exemptions to AFOSH and environmental requirements, and AFI 91-203 guidance that are more stringent than applicable OSHA requirements. Neither AFSEC nor AFMSA has the authority to grant a variance or exemption to an applicable OSHA standard. Only OSHA can grant waivers or exemptions to applicable Title 29 (OSHA) requirements, even if they are included in AFOSH guidance. AFSEC will serve as the liaison between OSHA and the Air Force when seeking OSHA safety-related waivers or exemptions. **Note:** A unit's inability to fund corrective actions does not constitute sufficient justification to request a waiver, variance or exemption. Request extensions for variances through MAJCOM/FOA/DRUs to HQ AFSEC/SEG or AFMSA/SG3/5, as applicable and appropriate. **(T-0)**

1.7.4.1. Variance/Exemption Process.

1.7.4.1.1. Affected work center personnel shall implement interim control measures and notify the installation ground safety (or tenant unit safety, if applicable), fire or health officials to validate the effectiveness of interim controls. With effective controls in place, the work center will coordinate the variance/exemption package with installation ground safety (or tenant unit safety, if applicable), fire and health officials. **(T-0)**

1.7.4.1.2. The installation safety office (or tenant unit safety, if applicable) will assemble a detailed staff package that identifies the request, rationale why the standard cannot be followed, interim control measures, drawing, maps, etc., and forward the request to MAJCOM/FOA/DRU headquarters through appropriate command safety, fire or health channels. Any tenant unit safety staff working a

variance or exemption will coordinate the product with the host safety office before sending it forward to the tenant unit's higher headquarters. **(T-0)**

1.7.4.1.3. The MAJCOM/FOA/DRU safety staff reviews and, if recommended for approval, forwards requests to AFSEC/SEG (safety-related issues), Air Force Civil Engineering Center (AFCEC)/CC (fire prevention and facilities-related issues) or AFMSA/SG3/5 (health-related issues), as appropriate, for final approval. **Note:** Requests received without MAJCOM/FOA/DRU coordination will be returned to requestor without action.

1.7.4.1.4. The MAJCOM/FOA/DRU/installation ground safety manager maintains a master file of approved variances or exemptions that apply respectively to the entire Air Force or MAJCOM/FOA/DRU/AF/installation as long as they are in effect and for one year thereafter. The safety manager distributes copies of variances and exemptions to fire protection, health and functional managers, as needed. Select variances can be found at the AFSEC/SEG website: <https://cs3.eis.af.mil/sites/OO-SE-AF-18/SEGS/default.aspx>. Functional managers or supervisors, as appropriate, must train affected employees and employee representatives on approved variances, exemptions or any special procedures required; such training will be documented. Post copies of approved variances and exemptions in affected work areas until integrated into the Job Safety Training Outline (JSTO). **(T-0)**

1.7.4.2. Written variance or exemption requests must contain: **(T-0)**

1.7.4.2.1. A description of the situation identifying the OSHA standard, AFOSH requirement or AFI 91-203 paragraph and specific reason(s) compliance is not possible or practical.

1.7.4.2.2. The number of personnel exposed to the operation or condition on a regular basis and any major items of Air Force property involved.

1.7.4.2.3. The description and risk assessment of permanent control measures planned, date they will be in place and any interim control measures used to protect personnel, equipment or property.

1.7.5. Safety Changes to Technical Orders. Process recommended changes to TOs IAW TO 00-5-1, *Air Force Technical Order System*. Send a copy of recommended changes to AFMC/SEG and AFSEC/SEG.

1.7.6. Changes to Directives. Submit requests for changes to occupational safety and health (OSH) guidelines in Air Force instructions through command channels to the directive OPR. Safety, fire and health reviews, as appropriate, shall be accomplished at each level of command between the requester and the directive OPR. Send a copy of recommended changes to HQ AFSEC/SEG, AFCEC/CEXF, and/or AFMSA/SG3/5, as applicable. **(T-0)**

1.7.7. Occupational Health. Ensure commanders, supervisors, workers and occupational environmental health subject matter experts utilize a Plan, Do, Check, Act system to assess health risks in the workplace.

## 1.8. Program Responsibilities.

1.8.1. The Assistant Secretary of the Air Force for Installations, Environment and Energy (SAF/IE).



1.8.1.1. The SAF/IE is the Department of the Air Force's Designated Agency Safety and Health Officer (DASHO). The SAF/IE delegates program responsibilities, except the DASHO duties, to the Deputy Assistant Secretary for Environment, Safety and Infrastructure (SAF/IEE).

1.8.1.2. Provides policy, guidance, direction and oversight of all matters pertaining to the formulation, review and execution of plans, policies, programs and budgets relative to the mishap prevention and ESOH programs.

1.8.1.3. Conducts program management reviews (PMR) of the Air Force ESOH programs, at least annually, with AF/SE and AF/SG. Reports the progress of the Air Force ESOH programs to the Deputy Undersecretary of Defense (Installations and Environment) (DUSD [I&E]), as requested.

1.8.1.4. Establishes AFSMS strategic goals and objectives, develops performance measures and assigns responsibilities in coordination with AF/SE.

1.8.1.5. Conducts Headquarters United States Air Force (HQ USAF) Environment, Safety, and Occupational Health Council (ESOHC) meetings IAW AFI 90-801, *Environment, Safety, and Occupational Health Councils*.

1.8.1.6. Collects, analyzes and reports AF-wide performance information to Office of the Secretary of Defense (OSD) IAW DoDI 6055.01, *DoD Safety and Occupational Health (SOH) Program*, DoDI 6055.04, *DoD Traffic Safety Program*, and DoDI 6055.07, *Mishap Notification, Investigation, Reporting, and Record Keeping*, as applicable.

1.8.1.7. Establish procedures for communication with interested external parties.

1.8.1.8. IAW Headquarters AF Mission Directive (HAFMD) 1-18, has authority over the AF RM Process as described in DODI 6055.01, *DoD Safety and Occupational Health (SOH) Program*, and AFI 90-802.

1.8.2. The Assistant Secretary of the Air Force for Acquisition (SAF/AQ):

1.8.2.1. Develops policy and provides guidance to ensure that technical and engineering criteria for developing and acquiring Air Force systems and equipment that conforms with OSHA standards, and AFI, AFOSH, explosives and system safety requirements as well as other applicable safety criteria to ensure safe systems and equipment are developed by the Air Force.

1.8.2.2. Coordinates guidance and federal acquisition regulations involving AFOSH matters with AF/SE, SAF/IE and Air Force Surgeon General (AF/SG).

1.8.2.3. Ensures program developmental and sustaining engineering activities include the identification and elimination of hazards when possible and the mitigation of risks for hazards that cannot be eliminated throughout the life cycle of a system or facility including operational experience, mission changes, environmental effects or system modifications.

1.8.2.4. Provides policy guidance to ensure hazards associated with decommissioning or disposal of a system are identified.

1.8.2.5. Develops Air Force policy and guidance for the implementation of safety and health requirements during acquisition and sustainment life cycle management. Ensures

contracts include applicable Federal Acquisition Regulation/DoD Federal Acquisition Regulation Supplement/Air Force Federal Acquisition Regulation Supplement (FAR/DFARS/AFFARS) safety clauses..

1.8.2.6. Includes ESOH RM concepts and responsibilities in the education and training of acquisition personnel.

1.8.3. The Assistant Secretary of the Air Force for Financial Management and Comptroller (SAF/FM):

1.8.3.1. Determines process for Risk Assessment Code (RAC) funding visibility, priority and implementation procedures for funding the abatement of safety, fire and health hazards.

1.8.3.2. Encourages use of the RAC system on Resource Allocation Programming Information Decision System (RAPIDS) used during the corporate budgeting process.

1.8.3.3. Includes ESOH RM concepts and responsibilities in the education and training of financial management/comptroller personnel.

1.8.3.4. Ensures scoring of ESOH risk data analysis for financial project management and programming.

1.8.4. The Air Force Surgeon General (AF/SG):

1.8.4.1. Establishes goals, objectives, policy and standards for occupational and environmental health.

1.8.4.2. Ensures Air Force occupational and environmental health policies meet or exceed OSHA and other applicable requirements.

1.8.4.3. Develops health-related policies which support the Air Force mishap prevention program.

1.8.4.4. Develops and facilitates use of human factors standards in mishap prevention. Ensures use of tools that address human error identification and reduction related to fatigue, stress and other emotional, psychological or physiological factors.

1.8.4.5. Provides subject matter experts (SMEs) in human factors.

1.8.5. The Deputy Chief of Staff Logistics, Installations and Mission Support (AF/A4):

1.8.5.1. Ensures maintenance and logistics policy address and comply with all applicable safety and health standards.

1.8.5.2. Ensures Air Force procedures for storing, handling, using and transporting hazardous materials and disposing of wastes comply with transportation regulations environmental statutes and occupational regulations.

1.8.5.3. Ensures civil engineering procedures, operations, technical publications and designs for new construction meet or exceed OSHA and AFOSH standards, as well as explosives and other safety criteria.

1.8.5.4. Ensures that policy addresses and mitigates the potential for human error associated with logistics and engineering activities.

1.8.5.5. Integrates ESOH RM and risk reduction into the sustainment decision-making process.

1.8.5.6. Incorporates AFSMS principles in policies, procedures and training.

1.8.5.7. Determines process for RAC funding visibility, priority and implementation procedures within the Integrated Priority List corporate process for funding safety, fire and health hazards abatements.

1.8.6. The Deputy Chief of Staff Personnel (AF/A1):

1.8.6.1. Develops policy on personnel matters relating to safety.

1.8.6.2. Provides guidance for commanders and supervisory personnel to meet accountability and performance requirements for the AFOSH program.

1.8.6.3. Serves as the OPR for Federal Employees' Compensation Act (FECA) at the Air Staff level.

1.8.6.4. Establishes a process through which Airmen are evaluated on Safety and Occupational Health (SOH) duties and responsibilities within the applicable appraisal system.

1.8.6.5. Provides guidance to ensure supervisory personnel appraisals address SOH conformance and reflect responsibility for the management of SOH programs in their area of responsibility. Such appraisals should specifically include an evaluation of their SOH program management performance.

1.8.6.6. Incorporates AFOSH program orientation into training programs for new civilian employees.

1.8.7. Headquarters, Air Force Directorate of Test and Evaluation (AF/TE). Provides direction and guidance to ensure test organizations assess safety standards and hazards prior to testing.

1.8.8. The Deputy Chief of Staff for Operations (AF/A3).

1.8.8.1. Develops policy and guidance for use and management of AF-operated operational ranges.

1.8.8.2. Ensures applicable environmental, safety and operation health programs and requirements are incorporated within operational range AFPDs and AFIs.

1.8.9. The Air Force Chief of Safety (AF/SE):

1.8.9.1. Is the OPR for Air Force safety programs.

1.8.9.2. Directs implementation of Public Law, Executive Orders, Department of Defense Directives (DoDD) and Department of Defense Instructions (DoDI) on safety.

1.8.9.3. Directs implementation of the Air Force Mishap Prevention Program within the framework of the AFSMS.

1.8.9.4. Emphasizes safety management strategies to drive safety management system requirements.

- 1.8.9.5. Provides direct liaison with MAJCOM Directors of Safety on safety management system implementation by providing training, SMEs and incorporating AFSMS principles into existing training courses.
- 1.8.9.6. Serves as the lead agent for the overall cross-functional integration and sustainment effort of AF RM processes and procedures IAW AFI 90-802 requirements.
- 1.8.9.7. Attends or delegates attendance to the Joint Service Safety Council.
- 1.8.9.8. Chairs or delegates chairmanship of the AF Senior Safety Advisory Council.
- 1.8.10. The Air Force Safety Center (HQ AFSEC), under the command of the AF/SE:
  - 1.8.10.1. Develops, implements and oversees Air Force Mishap Prevention Programs within the framework of the AFSMS.
  - 1.8.10.2. Develops safety programs, policies, goals, objectives and establishes guidelines to support and assess effectiveness of the AFSMS.
  - 1.8.10.3. Acts as liaison for safety matters with DoD components, federal agencies and private sector groups.
  - 1.8.10.4. Prepares and publishes Air Force Instructions covering Air Force-unique operations and provides implementation guidance for applicable standards.
  - 1.8.10.5. In conjunction with AF/SG, develops special guidance for Air Force operations where OSHA, AFI and AFOSH guidance is not available or is inadequate.
  - 1.8.10.6. Serves as the approving authority and repository for all safety-related variances within the Air Force.
  - 1.8.10.7. Coordinates testing to ensure Air Force compliance with DoD Explosives Safety standards.
  - 1.8.10.8. Develops procedural rules to ensure compliance with DoD and Department of Energy (DOE) rules related to nuclear systems.
  - 1.8.10.9. Coordinates, facilitates, develops and provides safety education and training where appropriate.
  - 1.8.10.10. In coordination with MAJCOMs, ensures identified safety hazards and deficiencies are managed within the hazard abatement program ([Chapter 12](#)).
  - 1.8.10.11. Performs safety evaluations of MAJCOMs at least every 36 months.
  - 1.8.10.12. Conducts Safety Program Evaluations of FOAs and DRUs with a safety staff at least once every 24 months. In conjunction with a Unit Effectiveness Inspection (UEI), qualified safety personnel must evaluate safety program management. The “boots on the ground” portion of the evaluations will be conducted as a UEI or Management Inspection (MI) IAW AFI 90-201. During the UEI, the Air Force Inspection Agency (AFIA) will sample inspection areas where there is the most risk to mission accomplishment. All safety inspection areas marked as “mandatory” in Attachment 3 of AFI 90-201 will be evaluated during all UEIs. At the discretion of AFIA leadership, AFSEC may accompany MI teams to conduct the safety checklist for a SPE. If this is to be the case, the affected safety office will be notified prior to the MI that the MI will include the SPE. Additional

information should be reviewed as needed to conduct a more complete safety program management evaluation. These items include, the annual AFSMS Management Review, trends in MICT and mishaps, results of OSHA inspections, and results of any commander-requested safety staff assistance visits conducted since the last safety program evaluation. (T-0)

1.8.10.13. Conducts Organizational Safety Assessments (OSA) of organizations or wings, as requested by commanders.

1.8.10.14. Reviews records disposition for functional records IAW AFMAN 33-363, *Management of Records*.

1.8.10.15. Provides and maintains a centralized suite of mishap reporting, data collection and analytical tools or resources for use at all levels of the Air Force Safety enterprise.

1.8.10.16. Conducts specialized analyses and studies at the request of the Congress, Chief of Staff, Air Force Chief of Safety, Headquarters Air Force and MAJCOM Commanders.

1.8.10.17. Provides discipline specific SME in safety and the AFSMS.

1.8.10.18. Coordinates with applicable agencies to ensure safety requirements and issues (e.g., safety related FAR clauses) are addressed in guidance and directives.

1.8.10.19. Serves as consultants on assessments, evaluations and mitigation of human factors and human performance hazards.

1.8.10.20. Performs Air Force level trend analysis and publishes results.

1.8.10.21. Serves as safety consultants for safety related investigations.

1.8.10.22. Maintains and upgrades AFSAS program, database and all associated information technology (IT) tools necessary for AFSAS operation and maintenance.

1.8.10.23. IAW AFI 90-802, serves as the lead agent for the overall cross-functional integration and sustainment effort of AF RM processes and procedures.

1.8.10.24. Conducts the AF Senior Safety Advisory Council.

1.8.10.25. Conducts the AF Ground Safety Corporate Committee.

1.8.10.26. Conducts the AF Space Safety Councils.

1.8.11. MAJCOM/DRU/FOA/Numbered Air Force (NAF)/Center Commanders:

1.8.11.1. Direct implementation and provide resources for the mishap prevention program within the framework of the AFSMS.

1.8.11.2. Establish and maintain a safety program that provides a safe and healthful workplace. Ensure command guidelines meet or exceed applicable safety program requirements.

1.8.11.3. Ensure subordinate commanders enforce compliance with safety requirements.

1.8.11.4. Ensure a process is in place for new commanders to receive training on their safety responsibilities.

1.8.11.5. Develop procedures to identify command mishap trends and direct actions and resources in order to establish goals and objectives to reverse identified adverse mishap trends.

1.8.11.6. Ensure safety program performance is included in rating of subordinate commanders, and senior civilian supervisory personnel's performance using guidance provided by AF/A1.

1.8.11.7. Establish funding priorities for hazard abatement projects during the MAJCOM corporate planning, programming and budgeting process.

1.8.11.8. Coordinate safety directives, instructions and supplements with HQ AFSEC. Subordinate unit supplements will be approved by their parent command. MAJCOM programming plans, safety annexes, CONOPs, etc., should be shared with HQ AFSEC and MAJCOM safety staffs as cross-feed items. When such documents impact other commands, coordination with HQ AFSEC is required. (T-1)

1.8.11.9. Ensure command personnel are aware of commander's goals and related expectations for safety.

1.8.11.10. Ensure contracts include provisions requiring contractors to maintain an effective safety and health program on Air Force-owned sites that complies with applicable DoL, DoD and Air Force safety standards.

1.8.11.11. Ensure all personnel are provided requisite formal and informal training courses, educational programs and other activities to enable them to meet their respective mishap prevention responsibilities.

1.8.11.12. Chair the MAJCOM Environment, Safety and Occupational Health Council according to AFI 90-801.

1.8.11.13. Support and ensure installations execute cooperative efforts to reduce injuries and illness across the Air Force by implementing safety and occupational health management systems throughout the Air Force.

1.8.12. MAJCOM/DRU/FOA/NAF/Center Safety Staffs:

1.8.12.1. Oversee implementation for the mishap prevention program within the framework of the AFSMS.

1.8.12.2. Evaluate management, implementation and effectiveness of the Air Force Mishap Prevention Program within the command IAW AFI 90-201, *The Air Force Inspection System*, and **Chapter 3** of this instruction. Ensure the evaluation criteria includes a qualitative rating system (e.g., 2-tier, 5-tier, etc.) with written criteria, to measure compliance, conformance and performance of the safety programs and AFSMS.

1.8.12.3. Report results directly to MAJCOM/DRU/FOA/NAF/Center Commander. Based on assessment/evaluation result, identify opportunities for continuous improvement.

1.8.12.4. Track program evaluation deficiencies and monitor corrective actions until closure.

1.8.12.5. Review and analyze applicable mishap reports from other organizations for lessons learned. Distribute mishap prevention data and other safety related communications to subordinate units. **Note:** Lessons learned can be viewed via AFSAS.

1.8.12.6. Assist and advise commanders and supervisors at all levels to understand their responsibility to ensure plans, procedures, facilities, equipment modifications/acquisitions, hardware, software and operations receive a safety review and incorporate effective RM, hazard elimination/mitigation and mishap reduction features.

1.8.12.7. Represent the cross-functional interest of their command during applicable councils, committees and meetings, e.g., Senior Safety Advisory Council (SSAC), Ground Safety Corporate Committee (GSCC), Non-Nuclear Munitions Safety Board, Explosives Safety Committee.

1.8.12.8. Coordinate with appropriate staff agencies to ensure explosives site plans comply with explosives and other safety criteria. Forwards explosives site plans for review and coordination to HQ AFSEC/SEW IAW AFMAN 91-201, *Explosives Safety Standards*.

1.8.12.9. Advocate for funding of safety training for command safety personnel. Maintain a current list of safety training courses required/completed by each career safety professional, as defined by paragraph 2.1.2, to include name of course(s), date courses completed and courses required. MAJCOMs/FOAs/DRUs can delegate tracking of training.

1.8.12.10. Advocate safety training and required funding to assist command safety personnel in meeting their continuing education unit (CEU) requirements through various funding sources available, i.e., civilian personnel, base level civilian training, AFPC, Federal Safety and Health councils, as well as organizational funding.

1.8.12.11. Evaluate local On-the-Job Training (OJT) and continuation training of safety personnel during program evaluations.

1.8.12.12. For all mishap investigations conducted by subordinate units, safety investigation boards or a single investigating officer, ensure compliance with the reporting criteria outlined in AFI 91-204, *Safety Investigations and Reports*, and the applicable manuals: AFMAN 91-221, *Weapons Safety Investigations and Reports*, AFMAN 91-222, *Space Safety Investigations and Reports*, AFMAN 91-223, *Aviation Safety Investigations and Reports*, and AFMAN 91-224, *Ground Safety Investigations and Reports*.

1.8.12.13. Review mishap investigation reports for thoroughness and accuracy, to include Class A and B mishaps investigated below the MAJCOM level. Ensure the findings, causes and recommendations of reports comply with the direction in AFI 91-204.

1.8.12.14. Ensure a process is in place to identify, train and track training of potential safety investigation board members within the MAJCOM staff.

1.8.12.15. Ensure individuals on the MAJCOM staff with access to privileged safety information receive annual training on the proper handling procedures and document the training.

1.8.12.16. Assist commanders and functional managers on implementation and integration of RM language into command operations and instructions to include RM and risk assessment processes.

1.8.12.17. Develop supplements for AFI and AFOSH guidance when command-unique operations exist. Submit supplements to HQ AFSEC for approval prior to publication. Supplements should delineate methods for accomplishing safety program management responsibilities to include, at a minimum, guidance on:

1.8.12.17.1. The process for scheduling and conducting commander-requested Staff Assistance Visits (SAVs) for subordinate units.

1.8.12.17.2. Conducting analysis at the installation level and below; resources available to identify and analyze mishap trends and guidance on how to present this data to subordinate units and commanders for mishap prevention.

1.8.12.17.3. Command mishap reporting procedures. Tracking of all open Class A/B mishap safety recommendations with OPR within their command to closure IAW AFI 91-204. For Class C and D mishaps, and Class E events, the MAJCOM/FOA/DRU will develop internal procedures IAW AFI 91-204 for units to effectively manage final disposition of recommendations.

1.8.12.17.4. Reviewing safety alert messages (which could come from a number of sources, e.g., manufactures, users, Program Managers) and ensuring all subordinate units take appropriate actions.

1.8.12.17.5. Coordinating and processing annual and recurring safety awards IAW AFI 36-2833, *Safety Awards*.

1.8.12.17.6. Providing command unique training to subordinate units' safety staff.

1.8.12.17.7. Responsibilities and/or expectations of the NAFs in regards to the management and implementation of the Air Force Mishap Prevention Program.

1.8.12.17.8. Providing unique requirements to subordinate units for implementation into local Air Force Supervisor Safety Training (SST) classes.

1.8.12.18. Provide direction and guidance identifying documentation, by discipline, that must be uploaded in unit MICT. Refer to AFI 90-201 and AFI 33-360, *Publications and Forms Management*, for additional guidance.

1.8.13. Air Force Materiel Command (AFMC) and Air Force Space Command (AFSPC):

1.8.13.1. Develops policy and provides guidance on applying System Safety management and engineering.

1.8.13.2. Identifies and corrects product safety deficiencies, gives technical assistance to mishap investigation boards, and implements corrective action involving materiel safety aspects of mishap reports as required by AFI 91-204. Manages budgets provided for mishap investigation support.

1.8.13.3. Ensures system, aviation, space, ground, directed energy and weapons/explosives safety experts are consulted very early in the life cycles of acquisition programs.



1.8.13.4. Maintains a master hazard abatement program for centrally procured systems and equipment applied to end products.

1.8.13.5. Ensures design criteria complies with: commercial standards, military requirements and joint standards, as well as applicable AFOSH and/or OSHA requirements.

1.8.13.6. Periodically reviews design handbooks, TOs, military specifications, military standards and allowance standards (AS) to ensure safety and health criteria and procedures in those documents comply with safety guidance. Ensures human factors and reduction of human error potential are factored into the system design, through the use of System Safety Groups, Human Factors review, etc., and based upon inputs from System Safety and Human Systems Integration (HSI) activities.

1.8.13.7. Monitors the Government Industry Data Exchange Program, distributes information and corrective action to eliminate or reduce use of hazardous products.

1.8.13.8. Develops and encourages use of human factors standards in mishap prevention.

1.8.13.9. Ensures use of tools that address human error identification and reduction related to fatigue, stress and other emotional, psychological or physiological factors.

1.8.14. Air Education and Training Command (AETC):

1.8.14.1. Reviews new and revised technical training course specialty and job qualification training objectives and outlines to ensure safety requirements are being met.

1.8.14.2. Ensures mishap prevention programs and RM concepts are embedded in technical training and Professional Military Education (PME).

1.8.14.3. Incorporates AFOSH program orientation into training programs for officer and enlisted accessions and new civilian employees.

1.8.14.4. Develops and oversees safety training guidance for the development and management of formal technical training (non-flying), OJT, ancillary and additional duty training, automated training record and learning management systems, and Mission Readiness Training (MRT).

1.8.15. Installation Commanders (Host):

1.8.15.1. Direct implementation and provide resources for the mishap prevention program within the framework of the AFSMS. **(T-1)**

1.8.15.2. Provide safe and healthful workplaces for all installation personnel. **(T-0)**

1.8.15.3. Ensure leadership at all levels is held accountable for enforcing safety and occupational health standards. Based on assessment/evaluation results, identify continuous improvement opportunities, goals and objectives via the Annual AFSMS Plan. **(T-1)**

1.8.15.4. Promote safety and occupational health awareness (e.g. culture, environment and atmosphere) and enforce personal accountability. **(T-2)**

1.8.15.5. Encourage and support Airmen participation in safety and health program activities.

1.8.15.6. When appropriate, provide incentives to Airmen for participation in Airmen-led safety and health program activities. See AFI 65-601 V1, *Budget Guidance and Procedures*, for guidance regarding promotional or incentive gifts and awards, including exceptions. (T-2)

1.8.15.7. Develop and implement safety and health programs and RM processes that integrate hazard reduction and safety policy into on-duty and off-duty operations and activities. (T-1)

1.8.15.8. Serve as chairperson of the ESOHC, but may delegate to the vice wing commander. (T-1)

1.8.15.9. Review interim control measures and establish funding priorities for hazard abatement projects. (T-2)

1.8.15.10. Ensure safety and occupational health program requirements and mishap prevention are part of the measurement of group/squadron commanders and senior civilian supervisory personnel's performance appraisals using guidance provided by AF/A1. (T-0)

1.8.15.11. Minimize assigning full-time safety personnel additional duties not directly associated with duties described in 91-series directives and their supplements. (T-3)

1.8.15.12. Ensure functional managers and supervisors (rather than the safety staff) take actions to mitigate hazards and reduce risk. (T-2)

1.8.15.13. Integrate safety and occupational health into all operations and missions of the installation's organizations. (T-1)

1.8.15.14. Emphasize RM and personal accountability. (T-2)

1.8.15.15. Ensure the installation safety office has established written procedures to define how to support OSHA representative(s) during official installation visits or inquiries. These procedures will be approved by the installation commander. (T-1)

1.8.15.16. Publish guidance informing command personnel of expectations for safety and occupational health. (T-1)

1.8.15.17. Ensure commanders, functional managers, and requirements generators work with the base contracting office and the installation safety staff to ensure all contracts require contractors and subcontractors (e.g., contract aircraft maintenance and grounds maintenance) to provide a contractor safety and health plan (as applicable) and to promptly report pertinent facts regarding mishaps involving government personnel or property coincident to work performed as part of the Statement of Work that occur on or off an Air Force installation IAW AFI 91-204. (T-1)

1.8.15.18. Provide adequate funding and support for safety and occupational health program (e.g., funding for required safety training). See 29 CFR 1960.7, *Financial Management*. (T-1)

1.8.15.19. Ensure an annual AFSMS Management Review is performed by the safety staff IAW this instruction to determine AFSMS effectiveness and changes to the future program elements as a means of continual improvement. (T-1)

1.8.15.20. Ensure deployable safety personnel are properly trained prior to deployment.

1.8.15.21. Review and digitally sign annual (CY) OSHA 300 Log summaries for the OSHA establishment delineated in AFSAS NLT 30 April each year. This task may be delegated to the vice commander or executive director. AFSEC/SEG will collect all reports for submission to the Bureau of Labor and Statistics by 30 May each year. **(T-0)**

1.8.16. Installation Safety Office (host):

1.8.16.1. Oversees implementation of the mishap prevention program within the framework of the AFSMS. **(T-2)**

1.8.16.2. Advises commanders, functional managers, supervisors and workers on safety matters. **(T-2)**

1.8.16.3. Provides safety office member as an active participant of the FECA working group if one is held at the installation. Lends support to specific issues and assists with problem solving at other base meetings (e.g., Aerospace Medicine Council, Occupational and Environmental Health Working Group, Sports Councils). **(T-2)**

1.8.16.4. Manages proactive on-duty and off-duty safety programs. **(T-2)**

1.8.16.5. Conducts safety program assessments and inspections of their command subordinate units, both local and geographically separated. Conducts inspections of tenant units without an assigned safety staff or as otherwise specified IAW Support Agreements. The tenant unit inspection will include a validation of job safety training and documentation. Tracks open findings and discrepancies until closure. **Note:** Host will not perform safety program assessments or inspections of tenant organizations with full-time safety staffs, unless otherwise specified in host tenant support agreement. HAF, MAJCOM, Air Force Operational Test Evaluation Center (AFOTEC), NAF and Center safety offices are not configured as a traditional safety office IAW AFMS 106AXX and are, therefore, treated as a tenant unit without an assigned safety staff. They will follow the host program unless otherwise specified in a host tenant support agreement. Special consideration may also be needed for Guard or Reserve safety offices with only traditional Guardsmen or Reservists. **(T-2)**

1.8.16.6. Ensures appropriate assignment of OPRs or OCRs for mishap recommendations and that they are notified and actively manage the recommendations through closure, providing status updates as outlined in AFI 91-204. **(T-1)**

1.8.16.7. Manages installation master hazard abatement program. Assigns RACs to hazards and coordinates with health and fire protection officials when required. **(T-1)**

1.8.16.8. Processes hazard reports and manages the hazard reporting process. **(T-1)**

1.8.16.9. Conducts safety education programs and provides assistance to supervisors in developing Job Safety Training Outlines (JSTOs) and Job Safety Analyses (JSAs). Completes Part 4 of AF Form 1754, *Job Capability and Safety Analysis*, when submitted by Medical Treatment Facility (MTF). **(T-1)**

1.8.16.10. Reviews airfield waiver packages, to include airfield construction phasing/safety plans. **(T-2)**

1.8.16.11. Oversees Bird/Wildlife Aircraft Strike Hazard (BASH) programs in coordination with Airfield Manager, Operations and CE. **(T-2)**

1.8.16.12. Ensures mishaps are properly investigated and reported in accordance with AFI 91-204 and discipline specific manuals (e.g., AFMANs 91-221, 222, 223, 224). **(T-1)**

1.8.16.13. Ensures all personnel with access to privileged safety information are trained annually on the proper handling procedures and maintain training documentation. **(T-1)**

1.8.16.14. Maintains a list of potential Safety Investigation Board (SIB) members who have completed the formal training requirements according to AFI 91-204 and discipline specific manuals (e.g., AFMANs 91-221, 222, 223, 224), and provides a copy to MAJCOM/SE when requested, through the NAF or Center safety office, as applicable. In addition, maintains a list of potential medical consultants for SIBs such as Psychologists, Flight Surgeons, and Aerospace and Operational Physiologists (AOP)/Aerospace and Operational Physiology Training (AOPT) team personnel who have completed Aircraft Mishap Investigation and Prevention (AMIP), Aircraft Mishap Investigation Course (AMIC), Mishap Investigation Non-Aviation (MINA) or the Aviation Safety Program Manager (ASPM) course. **(T-2)**

1.8.16.15. Provides identified potential Interim Safety Board (ISB) and SIB members training annually on the basics of mishap investigation. In addition, this annual training is also required for Operational Psychologists and AOPs/AOPT personnel who have completed the AMIP course, AMIC, MINA or ASPM. **(T-1)**

1.8.16.16. Develops and coordinates the Mishap Response Plan, addressing all disciplines, in conjunction with Installation Emergency Manager for integration with the overall Installation Emergency Management Plan (IEMP). Ensures the plan defines roles, responsibilities and notification requirements for leadership and all involved agencies. Reviews other emergency plans and procedures to include, but not limited to: SAFE HAVEN, SAFE PARKING, HAZMAT and disaster response required by AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*. Ensures safety concerns, procedures, notification, etc., are addressed. The IEMP should include elements of and reference existing plans concerning the following (**Attachment 3**): **(T-2)**

1.8.16.16.1. Disaster response required by AFI 10-2501.

1.8.16.16.2. HAZMAT response required by AFI 10-2501.

1.8.16.16.3. Response to aircraft in-flight and ground emergencies.

1.8.16.16.4. Response to severe weather watches and warnings.

1.8.16.16.5. Crash recovery plans.

1.8.16.16.6. Notifying and convening investigation boards.

1.8.16.16.7. Procedures for missing aircraft.

1.8.16.16.8. Procedures and training for extracting crewmembers from local and common transient aircraft.

1.8.16.17. Provides mishap prevention and education material to subordinate and tenant units. **(T-1)**

1.8.16.18. Accomplishes explosives siting requirements according to AFMAN 91-201, *Explosives Safety Standards*. Conducts review of base comprehensive plan map in conjunction with civil engineering. **(T-1)**

1.8.16.19. Assists responsible commanders and supervisors to ensure plans, procedures, facility and equipment modifications/acquisitions, hardware, software and operations receive a safety review based on RM and hazard elimination/mitigation. **Note:** Safety staff qualifications may preclude hardware and software safety reviews. **(T-2)**

1.8.16.20. Functions as primary point of contact for all federal and state OSHA visits to the installation. **(T-1)**

1.8.16.21. In collaboration with Bioenvironmental Engineering (BE), assists the contracting officer through the Multi-Functional Team (MFT) as needed to ensure that the contractor safety and health plan includes all required elements identified in the Performance Work Statement (PWS). The contractor is directly responsible for complying with federal and state OSHA standards for its employees. **(T-1)**

1.8.16.22. Administers the Safety Awards Program IAW AFI 36-2833. **(T-2)**

1.8.16.23. Prepares and briefs wing/installation commander's annual AFSMS Management Review to determine AFSMS effectiveness and changes to the future program elements as a means of continual improvement. This brief will, at a minimum, address the AFSMS effectiveness and any changes to the future program elements. This briefing may be conducted as part of the first ESOH Council of the new fiscal year, or at a minimum, it may be briefed by the Chief of Safety with the commander. Optimally, it should be briefed in November or December of the fiscal year. **(T-1)**

1.8.16.24. Delegated duties between host and tenants must be documented in a Memorandum of Agreement (MOA) or similar document, with tenant/joint base organizations' responsibilities spelled out. **(T-2)**

1.8.16.25. The Ground Safety Manager (GSM) will act as initial Evaluating Agent for retraining applicants. See [Attachment 14](#). **(T-3)**

1.8.16.26. Prepare digital annual (CY) OSHA 300 Log summaries for commander signature for each OSHA establishment delineated in AFSAS NLT 30 April each year. This may be delegated to the vice commander or executive director. AFSEC/SEG will collect all reports from AFSAS for submission to the Bureau of Labor and Statistics by 30 May each year. **(T-0)**

#### 1.8.17. Installation Contracting Office:

1.8.17.1. Directs implementation and provides resources to support the installation contracting role within the mishap prevention program. **(T-2)**

1.8.17.2. Ensures provisions of AFFARS Clause 5352.223-9001, *Health and Safety on Government Installations*, are included in and solicitations IAW AFFARS. **(T-1)**

1.8.17.3. Ensures contractor's past performance in safety is a consideration during the selection process for those contractors whose employees are expected to work on a

government installation(s) more than 1,000 hours per quarter (this may include a comparison of the contractor's 3 year total case incident rate (TCIR) and 3 year days away, restricted and/or transfer case incident rate (DART) to the most recently published Bureau of Labor Statistics (BLS) national average for the specific National American Industry Classification System (NAICS) or other similar information). **(T-2)**

1.8.18. Medical Wing/Group Commanders:

1.8.18.1. Direct implementation and provide resources to support the installation medical role within the mishap prevention program. **(T-1)**

1.8.18.2. Ensure comprehensive and coordinated occupational and environmental health surveillance and education programs are established and implemented. **(T-1)**

1.8.18.3. Ensure patient safety programs are developed and fully implemented in compliance with DoD 6025.13-R, *Military Health System (MHS) Clinical Quality Assurance (CQA) Program Regulation*, AFI 44-119, *Medical Quality Operations*, and appropriate civilian standards. **(T-0)**

1.8.18.4. Ensure timely notification to installation safety office for any injury producing events that occurred to military members (both on duty and off duty), and DoD civilians on duty IAW AFI 44-102, *Medical Care Management*. At a minimum, the following medical information will be released to fulfill requirements for OSHA injury reporting as defined in DoDI 6055.07, *Accident Investigation, Reporting, and Record Keeping*, and AFI 91-204: **(T-0)**

1.8.18.4.1. Name of the injured individual,

1.8.18.4.2. Social security number,

1.8.18.4.3. Organization,

1.8.18.4.4. Date of injury,

1.8.18.4.5. Date of treatment,

1.8.18.4.6. ICD-9 diagnosis of injury, a brief description of the nature of the injury,

1.8.18.4.7. Severity of injury, whether the treatment given was greater than first aid (as defined by 29 CFR 1904.7 (b) (5) (i)), if the individual was placed on quarters (and how long) and if the individual was hospitalized and the estimated hospital duration.

1.8.18.5. Medical information will be released to safety personnel for military members treated in the MTF for on-duty or off-duty injuries, and for civilian members treated in the MTF for on-duty injuries. **(T-0)**

1.8.18.6. When the MTF discovers that injured individuals (military on duty or off duty and civilian on duty) are seen at a civilian hospital or clinic, as much injury information listed above that is obtained will be reported to safety. IAW DoD 6025.18-R, *DoD Health Information Privacy Regulation*, all disclosures to the safety office must be documented by the MTF and kept by the MTF for a period of six years. **(T-0)**

1.8.18.7. MTF Covered Entities should develop local policy in coordination with their assigned Medical Law Consultant (MLC).

1.8.18.8. Ensure occupational illnesses are thoroughly investigated and reported using the Occupational Illness Module and AFSAS. **(T-1)**

1.8.18.9. The Chief of Aerospace Medicine (SGP) or Occupational Medicine physician:

1.8.18.9.1. Provides oversight for the occupational health program and ensures medically appropriate risk assessment and medical surveillance activities are conducted IAW AFI 48-101, *Aerospace Medicine Operations*, AFI 48-145, *Occupational and Environmental Health Program*, DoD 6055.05-M, *Occupational Medical Examinations and Surveillance Manual*, and CFR Title 5 Part 339, *Medical Qualification Determinations*. **(T-0)**

1.8.18.9.2. Provides consultative services on occupational and environmental health and safety issues that affect the framework of the AFSMS. **(T-2)**

1.8.18.9.3. Provides urgent clinical services for occupational injuries and occupational illnesses in DoD civilian employees. Performs routine surveillance, periodic evaluation, fitness for duty evaluations, pre-placement evaluations and disability evaluations IAW AFI 48-101, AFI 48-145, DoD 6055.5-M and CFR Title 5 Part 339. **(T-0)**

1.8.18.9.4. Maintains a list of Flight Surgeons who are potential medical officers on ISBs or SIBs and track the dates of the AMIP training and previous SIB experience. In addition, tracks AOPs/AOPT personnel and Psychologists who have completed AMIP, AMIC, MINA or ASPM courses. Provides a list to installation Chief of Safety (COS) and MAJCOM SGP. Ensures Flight Surgeons, trained Aerospace and Operational Physiologists, AOPT personnel and Aviation Psychologists are trained annually on the basics of mishap investigation and privilege by the installation safety staff or flight safety officer (FSO). **(T-2)**

1.8.18.9.5. Attends the FECA Working Group if one is held at the installation. Medical participation in FECA program will be IAW DoD 1400.25-M, *DoD Civilian Personnel Manual*, Subchapter 810, *Injury Compensation*. Participates in military and civilian lost work/duty time initiatives. **(T-1)**

1.8.18.9.6. Accomplishes additional occupational health and safety responsibilities as delineated in AFI 48-101. **(T-2)**

1.8.18.10. Flight Surgeons/AOP/AOPT Teams.

1.8.18.10.1. Direct implementation and provides resources to support the installation medical role within the mishap prevention program. **(T-2)**

1.8.18.10.2. Provide human performance and human factors analysis on identified hazards and evaluate controls to reduce or mitigate risks. **(T-2)**

1.8.18.10.3. Support the wing's aircrew flight equipment and flying safety programs. **(T-2)**

1.8.18.10.4. Assist in targeted ground safety improvements, training of wing ground safety managers and unit safety representatives in human factors and human factors hazard mitigation strategies. Provide consultant services for ground safety activities and investigations. **(T-2)**

- 1.8.18.10.5. Support wing RM, crew resource management, and maintenance resource management programs to optimize war fighter performance and safety in the operational environment. (T-2)
- 1.8.18.10.6. Act as Human Systems Integration consultants for aircraft, space, weapons and Warfare Centers at the wing level. (T-2)
- 1.8.18.10.7. Provide ISB/SIB members for military mishaps IAW AFI 91-204, *Safety Investigations and Reports*, and its related AF Manuals. (T-1)
- 1.8.18.11. Bioenvironmental Engineering (BE):
  - 1.8.18.11.1. Manages the occupational and environmental health surveillance programs according to AFI 48-145, AFMAN 48-146, *Occupational and Environmental Health Program Management*, AFMAN 48-154 *Occupational and Environmental Health Site Assessment*, and AFMAN 48-155 *Occupational and Environmental Health Exposure Controls*. Identify health-related deficiencies and assign health-related RACs. (T-1)
  - 1.8.18.11.2. Conducts occupational and environmental health evaluations and health risk assessments of workplaces, maintains survey reports, as required (IAW DoDI 6055.5), and provides access to all documents at request by the worker, supervisor or union representative as permitted by governance such as the Privacy Act, FOIA, etc. (T-0)
  - 1.8.18.11.3. Performs health risk assessments and notifies safety office of assigned RACs within the framework of the AFSMS. (T-1)
  - 1.8.18.11.4. Maintains access to pertinent health-related OSHA standards/guidelines, AF requirements, and other OSHA guidelines pertaining to occupational health. (T-0)
  - 1.8.18.11.5. Attends all DoL OSHA inspector in-briefs and out-briefs, and accompanies inspectors during all health-related inspections. (T-1)
  - 1.8.18.11.6. Determines the need for and adequacy of occupational health-related personal protective equipment (PPE), engineering controls and administrative controls to reduce exposures. (T-1)
  - 1.8.18.11.7. Maintains the ability to provide SDSs upon request for all hazardous materials used in the industrial workplaces on the installation. (T-1)
  - 1.8.18.11.8. Provides radiological protection program management as the installation radiation safety officer, when appointed, IAW AFI 40-201. (T-1)
  - 1.8.18.11.9. As needed, provides a representative to the FECA Working Group to offer BE-rated expertise. (T-2)

**Note:** At non-collocated AFRC installations BE is the fulltime BE/Public Health Office that is aligned under the Mission Support Group. At collocated AFRC Wings/Groups, where active duty is host and AFRC units are tenant, BE is aligned under the active duty Military Treatment Facility (MTF). A Host-Tenant Support Agreement (HTSA) between the active duty host and AFRC tenant shall outline support provided by the active duty BE Flight to AFRC units.



1.8.18.11.10. Identify health-related RACs using the Defense Occupational and Environmental Health Readiness System (DOEHRs).

1.8.18.12. Public Health (PH):

1.8.18.12.1. Communicates occupational health education requirements and available resources to supervisors. Responsible as the initial point of contact for occupational medical monitoring. **(T-1)**

1.8.18.12.2. Reports cases of occupational illness to the installation ground safety office through AFSAS. **(T-1)**

**Note:** At non-located AFRC installations PH is the fulltime BE/PH Office that is aligned under the Mission Support Group. At located AFRC Wings/Groups, where active duty is host and AFRC units are tenant, PH is aligned under the active duty MTF. A HTSA between the active duty host and AFRC tenant shall outline support provided by the active duty PH Flight to AFRC units.

1.8.18.12.3. Investigates and reports occupational illness IAW AFI 91-204 within the framework of the AFSMS. **(T-1)**

1.8.18.12.4. Provides a representative to actively participate in the FECA working group and the ESOHC to provide consultation on epidemiology, occupational illnesses and other occupational health program areas, where applicable IAW AFIs 48-145 and 48-101. **(T-1)**

1.8.18.13. Psychologists who are AMIP, AMIC or ASPM trained or have completed a post-doctoral fellowship in operational psychology will work in conjunction with Flight Surgeons to provide consultant services on human factors investigations and analysis of military aircraft mishaps. **(T-2)**

1.8.19. Installation Civil Engineers:

1.8.19.1. Direct implementation and provide resources in support of the civil engineering role within the mishap prevention program. **(T-1)**

1.8.19.2. Provide cost data and status information on hazard abatement actions associated with real property facilities and real property installed equipment. Coordinate corrective actions with installation safety. **(T-2)**

1.8.19.3. Coordinate siting and construction plans with the installation safety office and ensure explosives site plans have been approved before beginning construction as required in AFMAN 91-201. **(T-1)**

1.8.19.4. Ensure an environmental review and coordinate new construction, facility modification projects or work request documents with installation safety, fire protection, environmental management and BE officials. Also, ensure they are included in associated project approval, design review meetings and acceptance inspections. **(T-2)**

1.8.19.5. Notify safety, environmental management, BE and fire protection of major base maintenance projects (e.g., digging permits, road markings, welding projects outside the civil engineering shops). **(T-2)**

1.8.19.6. Ensure RACs are incorporated into project prioritization for corrective actions. (T-2)

1.8.19.7. Coordinate airfield waiver packages with airfield manager, installation safety office and installation commander. (T-2)

1.8.19.8. Perform fire investigations IAW DoDI 6055.07 and AFI 91-204. For incidents that meet the Class C thresholds, the installation Fire Chief determines the most probable cause. For incidents that meet the Class A and B thresholds, the SIB President will request support from the MAJCOM Fire Emergency Services (FES) staff to conduct the fire investigation. Any time FES tactics or competency is at issue, the convening authority will request investigative support from the MAJCOM FES staff. (T-2)

1.8.19.9. Provide traffic engineering expertise. (T-2)

1.8.19.10. Team with the multi-functional team (MFT) to ensure contractor operations are compliant with safety and health requirements of the contract. (T-2)

1.8.19.11. Provide a foundation informational map and facility data (common installation picture [CIP] and real property inventory [RPI]) for safety users to apply and publish their unique map(s). Any changes to CIP or RPI data must be coordinated with the installation safety office. (T-1)

1.8.20. Security Forces (SF Commander):

1.8.20.1. Direct implementation and provide resources to support the security forces role within mishap prevention program. (T-1)

1.8.20.2. Provide a copy of SF blotter entries involving injury or death resulting from a mishap, motor vehicle mishaps (GMV/PMV), property damage as a result of a mishap, and any others as deemed appropriate by the SF commander. Provide completed investigation reports when requested by COS or GSM. Blotter entries may be retrieved electronically or through the appropriate SF office after they have been processed. (T-1)

1.8.20.3. Notify command post on all safety related issues as determined in a locally devised installation notification matrix. **Note:** Report those incidents which require immediate response or follow-up action by safety or other personnel. Command Post will, in-turn, immediately notify the appropriate safety office and other agencies as required. (T-1)

1.8.20.4. Upon request from COS or ground safety (host or tenant unit), liaison with local or state law enforcement to obtain off-base traffic accident reports and/or data. (T-1)

1.8.20.4.1. Traffic accident reports may include vehicle accident involving death or serious injury to a military member, DoD civilian or dependent of active duty member.

1.8.20.4.2. Traffic accident data may include areas which are identified as high traffic incident areas or areas which travel is deemed unsafe (as deemed by the installation commander) under certain conditions.

1.8.21. Commanders below installation level:

1.8.21.1. Direct implementation and provide resources for the mishap prevention program within the framework of the AFSMS. **(T-1)**

1.8.21.2. Implement a safety and health program in their unit or area of responsibility. Where commanders are not authorized full-time safety personnel, they will appoint a primary and alternate Unit Safety Representative (USR) to assist them in implementing their safety program. USR responsibilities for managing the commander's program are identified in paragraph 2.2 Notify the host safety office, in writing, of the appointment of USRs in order to schedule USRs for training. **(T-1)**

1.8.21.3. Ensure safety and health training and off-duty safety information and briefings are provided to all personnel based on requirements from other regulatory guidance and the specific needs of the organization. **(T-1)**

1.8.21.4. Actively implement and use RM principles at all levels within the unit. **(T-2)**

1.8.21.5. Ensure a proactive mishap prevention program is implemented to include procurement and proper use of PPE, and facility compliance with AFOSH and OSHA standards. **Note:** Overseas installations may need to apply host nation standards versus OSHA standards. **(T-2)**

1.8.21.6. Ensure all appropriate hazard abatement actions needed to control identified hazards are implemented and follow-up actions are complete. Keep fire, safety and BE offices, as appropriate, updated on all abatement actions with updates every 30 days until hazard is abated. **(T-1)**

1.8.21.7. Ensure request for equipment, products and services using purchase orders and/or Government Purchase Card are reviewed for potential safety and health impact IAW AFI 64-117, *Air Force Government-Wide Purchase Card (GPC) Program*, and AFI 32-7086, *Hazardous Materials Management*. **Note:** Ensure government purchase card program addresses requirement to coordinate purchase of hazardous chemicals, munitions and industry equipment through installation safety offices. **(T-2)**

1.8.21.8. Ensure all personnel are trained on the objectives and principles of RM in accordance with AFI 90-802. Use RM to identify, reduce or eliminate risk in all activities. **(T-1)**

1.8.21.9. Establish a management strategy integrating safety and health into all operations and missions and ensure functional managers and supervisors take actions to mitigate hazards and reduce risk. **(T-1)**

1.8.21.10. Ensure all personnel are briefed on the findings and recommendations contained in occupational and environmental health risk assessments and reports. A copy of the survey report will be posted in a conspicuous location in the work place for a period of 10 days after receipt to allow all workers free access to the findings. These reports will be maintained on file in the work place for a minimum of two years. **(T-0)**

1.8.21.11. Provide the opportunity for Airmen to participate in safety and health program activities and/or committees. **(T-1)**

1.8.21.12. Communicate safety and health expectations to personnel in their command. Hold personnel accountable for compliance with applicable standards. **(T-1)**

1.8.21.13. Are encouraged to establish an off-duty High Risk Activities (HRA) Program to ensure personnel participating or planning to participate in high-risk activities take appropriate safety measures to reduce the likelihood of their involvement in a mishap. High risk activities are defined in [Attachment 1](#), while [Attachment 11](#) contains sample guidance for those units that may adopt the optional program. **Note:** MAJCOMs can define their own list of high risk activities. Briefings may be documented on AF Form 4391, High Risk Activities Worksheet. See [Attachment 11](#) for example guidance. If commanders or supervisors at any level choose to make this program mandatory it will apply only to military personnel on active duty.

1.8.21.14. Commanders of units with motorcycle riders appoint, in writing, at least one motorcycle safety representative to coordinate the motorcycle safety program IAW AFI 91-207, *The US Air Force Traffic Safety Program*.

1.8.21.15. Where commanders below the installation level, including tenant unit commanders, have an assigned safety staff, ensure an annual AFSMS Management Review is performed by the safety staff IAW this instruction to determine AFSMS effectiveness and changes to the future program elements as a means of continual improvement.

1.8.21.16. Ensure applicable OSH guidance for the workplace and operations are available to personnel.

1.8.22. Workcenter/Shop Supervisors:

1.8.22.1. Direct implementation and provide resources for the mishap prevention program within the framework of the AFSMS. **(T-1)**

1.8.22.2. Understand and enforce the safety and health standards that apply to their areas, operations and operations involving their subordinates. Demonstrate knowledge of their roles and responsibilities with relation to risk management and mishap prevention. **(T-1)**

1.8.22.3. Use RM techniques to analyze work environment and job tasks for hazards. Conduct a JSA for each work task not governed by TO or other definitive guidance and anytime a new work task or process is introduced into the workplace to determine potential hazards. Refer to [Attachment 5](#), *Job Safety Analysis (JSA)*, for additional guidance. **(T-1)**

1.8.22.4. Provide and document work area specific safety, fire protection and health on-the-job training to all Air Force military and civilian employees before assigning them duty tasks requiring this specific training. Review work processes annually, when new tasks or equipment are added, or when existing tasks change, whichever comes first. **(T-0)**

1.8.22.5. Develop a work center specific JSTO based on [Attachment 4](#), *Job Safety Training Outline (JSTO)*, on safety, fire protection/prevention and health requirements. Documents will be maintained and centrally located, readily available to supervisor and individual. The 16 mandatory items can be documented as one item, i.e., course code for JSTO mandatory training. Job specific items and any additional training identified in a BE survey will be documented individually, as appropriate. **(T-0)**

1.8.22.5.1. Methods of documentation may include, but are not limited to, the AF IMT 55, *Employee Safety and Health Record*, electronic mediums such as AFFORMs/MAF LOG C2/G081 or locally developed products. If the AF IMT 55 is mandated for use as the training documentation device, the entity that mandated the form usage will prescribe the requirement in writing to include entries that require signatures, e.g., HAZCOM, respirator, powered industrial trucks, lockout/tagout, fall protection, confined spaces, radiation safety, laser safety, etc. **Note:** Training requirements vary, i.e., some documents may require the signature of the supervisor or the person who conducted the training, while other documents may require the initials of the individual (trainee) and trainer/supervisor. **(T-0)**

1.8.22.5.2. Documentation will contain the following minimum data: trainee name (last, first, middle initial), type of training and date of training. Neither the trainer or trainee signature is required unless specified in writing by the applicable chain of authority. **Note:** If the Integrated Maintenance Data System (IMDS), Core Automated Maintenance System (CAMS), etc., cannot support minimum documentation requirements, then they are not suitable as a documentation product. **(T-0)**

1.8.22.6. Provide and document additional training when there is a change in equipment, procedures or processes that affect the safety, health or work environment of personnel. **(T-0)**

1.8.22.7. Exercise control over job tasks to ensure personnel follow all precautions and safety measures, including the proper use of PPE. **(T-1)**

1.8.22.8. Report all mishaps that occur on duty and all off duty mishaps involving assigned military personnel, and related subsequent Airmen absences to the supporting safety office IAW AFI 91-204. Inform the Civilian Personnel Office if a mishap involves a civilian employee and complete the required CA/LS form. **(T-1)**

1.8.22.9. Ensure AF Form 1118, *Notice of Hazard*, issued by safety, fire protection or BE officials is posted to alert Airmen to the hazardous conditions, interim control measures, and ensure actions are taken to promptly eliminate hazards and correct deficiencies. Ensure any hazards identified by an AF Form 1118 are added to the JSTO and employees are trained on the interim control measures and documented IAW [Attachment 4](#), Section [A4.4](#) **(T-1)**

1.8.22.10. At the deployed or temporary duty (TDY) location ensure subordinates receive a safety briefing from the deployed location safety staff on known hazards associated with TDY location. **(T-1)**

1.8.22.11. At deployed locations provide and document Job Safety Training as specified in paragraph [1.8.22.5](#) Supervisors shall ensure copies of documented training arrive and leave with deployed personnel. **(T-1)**

1.8.22.12. Are encouraged to provide an interactive pre-departure safety briefing to all active duty military personnel, reserve component personnel in a duty status and civilian personnel performing official duties scheduled for travel outside the local area. Additionally, they are recommended to provide and encourage a departing member to complete a TRiPS survey prior to departure at

<https://trips.safety.army.mil/airforce/Home.aspx>. While potentially effective for all ages, the briefing is especially targeted for personnel under the age of 26. This briefing may be documented on AF Form 4392, *Pre-Departure Safety Briefing*. See **Attachment 10** for recommended guidance.

1.8.22.13. Attend Air Force Supervisor Safety Training (SST). **(T-1)**

1.8.22.14. Conduct and document spot inspections of their work areas IAW paragraph **3.7** of this instruction. **(T-1)**

1.8.22.15. Upon notification that a military worker is pregnant, ensure that worker reports to Public Health immediately in order to ensure she receives appropriate education and a workplace evaluation. Advise pregnant civilian workers of the same opportunities, and allow her to go to Public Health if she desires to take advantage of the program **(T-1)**

1.8.22.16. Encourage and support employee participation in safety and health program activities and/or committees. **(T-2)**

1.8.22.17. Ensure personnel requiring occupational health medical examinations attend scheduled medical appointments. **(T-2)**

1.8.22.18. Ensure safety program requirements are part of measurement of non-supervisory personnel's performance appraisals using guidance provided by AF/A1. **(T-2)**

1.8.22.19. Ensure applicable OSH guidance for the workplace and operations are available to personnel.

1.8.23. Individuals:

1.8.23.1. Comply with all safety instructions, technical orders, job guides and operating procedures. Demonstrate knowledge of their roles and responsibilities with relation to risk management and mishap prevention. **(T-1)**

1.8.23.2. Consider personal safety and the safety of coworkers while performing assigned tasks as well as off-duty activities. Identify and report hazardous conditions that place Airmen or property at risk. Use the AF Form 457, *USAF Hazard Report*, when necessary. **(T-2)**

1.8.23.3. Report personal injury, property damage and any suspected exposure to biological, chemical or nuclear hazardous materials to their supervisor as soon as possible, but not to exceed 24 hours. **(T-1)**

1.8.23.4. Immediately report to their supervisor if they believe that they have a physical or mental condition that they feel may impact safe job performance. **(T-1)**

1.8.23.5. Use and maintain recommended and appropriate PPE for job tasks. Inspect and maintain PPE in accordance with TO, manufacturer's instructions or BE guidance. **(T-0)**

1.8.23.6. Apply RM principles in both on-duty and off-duty activities to enhance the safety and well-being of themselves and other personnel. **(T-2)**

1.8.23.7. Decline to perform an assigned task if they reasonably believe the task poses an imminent risk of death or serious bodily harm to themselves or others (except in a combat

environment). The individual and/or local management may request an assessment by installation safety, fire protection or health professionals before proceeding. **(T-1)**

1.8.23.8. Military members will immediately notify their primary care managers of a known pregnancy and make an appointment with Public Health to initiate a workplace evaluation for exposures that may be hazardous to the fetus and determination of work restrictions. Government civilian employees are encouraged to notify their supervisor and make an appointment with Public Health for a workplace evaluation, but are not required to do so. Any worker with questions regarding how their worksite exposures can affect immediate family members (e.g. spouse, children) should contact Public Health. **(T-1)**

1.8.23.9. Have the opportunity to participate in safety and health programs without fear of coercion, discrimination or reprisal. Participation in safety committees is encouraged.

1.8.23.10. Use official on-duty time to take part in safety activities. **(T-2)**

1.8.23.11. Hand-carry or electronically transfer safety training documentation as specified in paragraph [1.8.22.5](#) to the new supervisor when deploying or transferring to another Air Force position/location. **(T-1)**

**1.9. Waivers.** When complying with official policy, guidance and/or procedures that have been designated with a Tier Waiver Authority number, i.e., T-1, T-2 or T-3 (Refer to [Attachment 1](#) for definitions), the unit may request a waiver IAW AFI 33-360, *Publications and Forms Management*. In addition to the waiver requirements of AFI 33-360, the following are included for this instruction:

1.9.1. Reevaluate risk throughout the waiver period and adjust risk controls as necessary IAW AFI 90-802. **(T-1)**

1.9.2. Each commander/director will keep, at a minimum, the previous commander's/director's waivers on file IAW their file plan. **(T-1)**

1.9.3. Ensure a copy of the approved waiver is sent to the OPR of the affected AFI. **(T-1)**

1.9.4. Waivers related to explosive safety must be processed IAW AFMAN 91-201. **(T-1)**

## Chapter 2

### SAFETY ORGANIZATION

**2.1. Safety Staff.** All safety disciplines will be consolidated under a single Director or COS, as applicable. Full-time safety personnel must be trained and qualified to manage safety programs, and be able to function at the staff level. Use the Air Force Manpower Standard (AFMS) 106AXX to determine the size of the safety staff. AFRC units use applicable AFRC Command Manpower Standard or Guides to determine safety staff size. All safety manpower requests or changes will be coordinated with the MAJCOM/SE before submission to the local management engineering team. Manpower variances can be submitted for safety staffs that conduct special programs IAW AFMS 106AXX. **Note:** The size of safety staffs for Joint Bases and other non-host units excluded by the AFMS 106AXX will be determined in a collaborative effort between the unit involved, the MAJCOM safety office and the applicable manpower staffs. **(T-2)**

2.1.1. Chief of Safety. The COS (or Director in a civilian-led unit or MAJCOM/FOA/DRU) reports directly to the commander and manages the mishap prevention program for the commander (e.g., installation, center, NAF/MAJCOM/FOA/DRU commanders). The COS must be qualified in a primary mission weapons system of the unit or if the COS is a civilian position, have a Safety Officer who is qualified in a primary mission weapon system. Civilian COS must meet the qualification standards for Occupational and Health professional stated in the Office of Personnel Management (OPM) classification series, GS-0018 or GS-0803. MAJCOM/FOA/DRU Directors of Safety will have previous safety experience. The AFRC equivalents to the above are AFRC Air Reserve Technician (ART) COS which are 2181-series (pilot)/2183-series (navigator) civilians. **(T-2)**

2.1.1.1. Active duty military COS will be selected from a current or previous Squadron Commander/Director of Operations/Chief of Safety list; or be a former Squadron Commander. MAJCOM/CV or above has waiver authority for this requirement. **(T-2)**

2.1.1.2. Assigned individuals must complete the Chief of Safety Course (WCIP05B) within 90 days of assuming the COS position. Air Force Reserve and ANG COSs may substitute the Air Reserve Component Chief of Safety course (ARCCOS101) and should make every effort to complete the requirement within 90 days of assuming the COS position. However, in no case will Air Force Reserve and ANG components exceed a 180 day limit. Waiver authority for this requirement is HQ AFSEC/SEF. **(T-1)**

2.1.1.3. Assigned individuals must be available to serve as COS for a minimum of one year after completion of training. **(T-1)**

2.1.2. Career Safety Professional. The Air Force has an enlisted safety career field (Air Force Specialty Code (AFSC) 1S0X1) and a civilian safety career field (GS-0018, Occupational Safety and Health Manager or Specialist; GS-0019, Safety Technician; GS-0017, Weapons Safety Specialist; GS-1815, Air Safety Investigator; and GS-0803, Safety Engineer). These career safety personnel are assigned to positions authorized by the Unit Manning Document. The safety career field is addressed in AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, and described in the Air Force Enlisted Classification Directory (AFECD). The civilian safety career program is described in AFMAN 36-606, *Civilian Career Management and Development*.



2.1.2.1. Professional Continuing Education and Training. Fulltime safety professionals working in authorized ground safety positions as depicted in the Unit Manning Document, must complete at least three safety-related CEUs per year. For courses with no assigned CEU value, one CEU is the equivalent of ten hours of course participation. **Note:** This also applies to persons such as over-hires, career broadeners, interns or similar positions working within ground safety. Other fulltime safety professionals in weapons, space and flight safety disciplines should consider similar continuing education to remain up to date in their specialty. MAJCOM/SEs or their designee may grant waivers for this requirement for reasons to include personnel on extended deployments, manning shortfalls and funding limitations. The COS will document specific circumstances and conditions when this training cannot be met. (T-3)

2.1.2.1.1. Professional continuing education and training is not the same as qualification training where an individual could be decertified, downgraded or unable to deploy, etc., if not trained to a specific level. The purpose of continuing education and training is to help safety professionals expand their knowledge base and stay informed on the latest technical and behavioral developments in the field of safety.

2.1.2.1.2. College, OPM and other safety professional development courses that do not award CEUs, e.g., on-line training, seminars, webinars may be used to satisfy this requirement, if approved by the MAJCOM Ground Safety Manager. (T-3)

2.1.2.2. **Attachment 12** and **13** contain a partial list of recommended safety courses that safety professionals should consider when meeting CEU requirements. Additionally, **Table A12.2** contains a list of AFSEC courses that will satisfy CEU requirements. Safety managers will plan, program and budget for safety resources (e.g., to include sufficient safety training to meet CEU requirements). (T-3)

2.1.2.3. It is highly desirable for safety professionals to obtain Occupational Health and Safety Technologist (general industry), Construction Health and Safety Technician (construction) and Certified Safety Professional certifications from the Board of Certified Safety Professionals ([www.bcsp.org](http://www.bcsp.org)) or other recognized national/international organizations.

2.1.2.4. Ensure safety and health personnel are properly trained. 29 CFR 1960.56, *Training of Safety and Health Specialists*, DoDI 6055.1, E3.3, *Safety and Occupational Health Training, Education, and Qualifications*, 29 CFR 1960.7, *Financial Management*, AFI 36-401, *Employee Training and Development*, and AFI 36-2201, *Air Force Training Program*, discuss responsibilities for funding and ensuring safety and health personnel are properly trained to function effectively as safety and health advisors to commanders and management officials. (T-0)

2.1.3. Ground Safety Manager (GSM). The GSM manages the ground safety program for the Director/Chief of Safety and the commander (e.g., installation, center, NAF/MAJCOM/FOA/DRU commanders). The GSM must be fully qualified to advise and execute decisions on safety matters for the primary mission of the unit. The GSM should complete the Safety Managers Course (AFSEC Course WCIP05D) prior to assuming a GSM position. If this is not possible they will complete the course within one year of assuming the GSM position. **Note:** Previous courses such as the Senior Safety Professional's Course or the Ground Safety Manager's Course meet this requirement. (T-2)

2.1.4. Flight Safety Officer (FSO). FSOs in higher headquarters positions will be rated officers or prior rated officers with experience in headquarters managed mission aircraft (not applicable [N/A] for Flight Safety Managers [FSMs]). FSOs/FSMs manage flight safety programs for Director/Chief of Safety and the commander, e.g., installation, Center, NAF/MAJCOM/FOA/DRU commanders. FSOs at squadron and installation-level must be current in a unit mission aircraft (N/A for FSMs). Once trained, individuals will fill the position for a minimum of 12 months unless waived by the MAJCOM/FOA/DRU SE. FSMs will not be assigned to fill FSO billets on bases where there are primary active flying missions and only one FSO billet. **Note:** This requirement does not apply to deployed operations. **(T-2)**

2.1.4.1. Full-time FSOs (wing level and above) must complete the Aircraft Mishap Investigation Course (AMIC, WCIP05A) and Aviation Safety Program Management course (ASPM, WCIP09B), or AFSEC-certified MAJCOM equivalent courses. FSMs will have graduated from at least one or more of the following courses: AMIC, ASPM or legacy FSO. This training should be completed within 90 days of appointment, but must be completed no later than 180 days from appointment. AFRC and ANG FSOs may fulfill this requirement by attending Aircraft Mishap Investigation Course (AMIC, WCIP05A) and the Air National Guard Chief of Safety/Air Reserve Component Chief of Safety course (ARCCOS101). **(T-3)**

2.1.4.2. Commanders of flying squadrons without an authorized FSO will appoint a Squadron Assigned Flight Safety Officer (SAFSO) as an additional duty. **(T-3)**

2.1.4.3. SAFSO should attend the ASPM course or AMIC course in conjunction with MAJCOM/FOA/DRU supplemental training.

2.1.5. Flight Safety Noncommissioned Officer (FSNCO). The FSNCO is an integral part of the flight safety program. Their primary duties will focus on aviation maintenance safety. Individuals selected to fill the position should be, as a minimum, a Master Sergeant or civilian equivalent, GS-0018 or GS-0803, with maintenance experience on a unit-assigned aircraft type but no less than a 7-level with two years' experience as a 7-level. Primary consideration will be to select individuals in the 2A37X (tactical aircraft maintenance) or 2A57X (aircraft maintenance) or Flight Engineer career fields. Selecting from the propulsion AFSC 2A671 is acceptable with a minimum of two years flightline experience in the unit assigned aircraft. Other maintenance career fields are not acceptable for the FSNCO position without MAJCOM/FOA/DRU SE approval. Refer to AFRC and ANG supplements to this AFI for ARC FSNCO and FSM manning descriptions. **(T-1)**

2.1.5.1. For units with assigned enlisted aircrew, the FSNCO may be an aircrew member if their flying duties do not detract from their FSNCO duties, they have prior flightline maintenance or Flight Engineer experience, they are current in a unit mission aircraft, and receive MAJCOM/FOA/DRU SE approval.

2.1.5.2. Individuals will complete the FSNCO course (L3AZR1S071-0S5A), or AFSEC-certified MAJCOM equivalent course, and attend the AMIC (WCIP05A) within 120 days of appointment. **(T-3)**

2.1.5.3. The FSNCO will be assigned the Special Experience Identifier (SEI) code of 307 and AFPC personnel records will assign a code 39 to ensure they serve in this capacity

for a minimum of two years, as appropriate. Designated individuals must meet criteria IAW AFI 36-2101. **(T-3)**

2.1.6. Weapons Safety Managers (WSM). Full-time WSMs are assigned to positions authorized by the Unit Manning Document (UMD).

2.1.6.1. WSMs must be qualified in their AFSC 2WXXX, 2MXXX, or OPM 017/018 or 803 standards and should have experience in the maintenance or operation of nuclear weapons, missiles or non-nuclear munitions. Airmen selected as WSMs will be at least a 7-level in their Air Force Specialty Code. **(T-2)**

2.1.6.2. Full-time WSMs and ANG WSMs in UTC positions must complete the Weapons Safety Course (L3AZR2W071-0C2A) within six months of appointment. **(T-2)**

2.1.6.3. The COS should initiate a two-year assignment deferment through the Military Personnel Flight for Weapons Safety personnel upon completion of the Weapons Safety training course (Not applicable for ANG). It is desirable that individuals not deploy in WSM positions prior to six months satisfactory experience in Weapons Safety tasks (Chiefs of Safety will make final deployment determinations based on proven duty performance). **(T-3)**

2.1.7. System Safety Officers, Managers and Engineers. According to their particular job requirements, individuals in System Safety positions will complete a MAJCOM-approved System Safety Course within 120 days of assignment. Safety offices must document reasons for assigned individuals who have not completed training within 120 days of assignment. **(T-3)**

2.1.8. Space Safety Officer (SSO). These positions can be filled by System Safety Manager, Mission Safety Officers, Mission Flight Control Officers, Launch Safety Officers (LSOs) and/or Orbital Safety Officers, as applicable to the program's mission. These individuals will be trained in space mishap prevention and investigation within 120 days (or first available course). The Mishap Investigation Non-Aviation course (WCIP 059) or equivalent is a suitable mishap investigation course. The AMIC (WCIP 05A) is recommended for LSOs with some knowledge of aircraft. NASA courses may be substituted for greater applicability if basic mishap prevention and investigation material is covered. **(T-3)**

2.1.8.1. As appropriate for the assigned mission, each wing (or equivalent) will have at least one SSO for each program. These individuals may be assigned to subordinate units. With approval from the NAF/Center Safety Office, these positions may be assigned as an additional duty or multiple programs may be covered by the same SSO. **(T-2)**

2.1.8.2. Safety Offices must document reasons for assigned individuals who have not completed training within 120 days (or first available course) of assignment. **(T-3)**

2.1.9. Safety Palace Acquire Interns (0018/0803) and Pathways Student Internships (0099/0899). The Safety Palace Acquire Intern and Pathways Student Internships programs provide a unique opportunity for recent graduates and/or students to gain valuable work experience in the Safety career field. These programs offer rewarding opportunities to contribute to the Air Force mission while providing workplace safety and health for Airmen. These programs afford opportunities for personal and professional growth in addition to development.

2.1.9.1. Supervisors of Safety Palace Acquire Interns and Student Internships are required to complete and submit a training progress report to the AFPC Safety Civilian Career Field Team (email: [afpc.safety.cft@us.af.mil](mailto:afpc.safety.cft@us.af.mil)) as directed by AFI 36-601, *Air Force Civilian Career Program Management*, AFI 36-602, *Civilian Intern Programs*, and the *Civilian Force Renewal PAQ/COP Guide*.

2.1.9.1.1. The AFPC Safety Career Field Team will distribute a *Pathways Training Status Log* to the gaining supervisor within 30 days of assignment to aid tracking of such items as program report submission, training, promotions, supervisors, etc. A copy of the log must be submitted with the progress report(s).

2.1.9.1.2. The initial progress report must be submitted at 90 and 180 day intervals for the first year, semiannually for the remainder of the training period.

2.1.9.1.3. The AF Form 860B, *Civilian Progress Review Worksheet*, may be used for this progress report. The AFPC Safety Career Field Team will distribute a template to the gaining supervisor within 30 days of the member's assignment.

2.1.9.2. The supervisor must ensure promotion action is initiated no later than 60 days prior to the promotion effective date (for the first promotion—scheduled for the 1-year point in the program). **(T-3)**

2.1.9.3. The supervisor must serve as mentor or work with assigned mentor IAW AFI 36-602, paragraph 2.15.7.

2.1.10. Non-Typical Safety Staffs. Throughout the Air Force there are an assorted number of one-deep safety positions and other small atypical safety staffs which are centric in nature to a specific safety function – ground safety, lab safety, hospital safety, etc. These may exist at FOAs, Groups (Civil Engineering, Medical, etc.) or other organizational levels outside of or below a standard wing organization. They may reside as a host or tenant unit function on an installation. Individuals assigned to these positions, or those similar in nature, fulfill the role and responsibility of keeping their respective Commanders/Directors informed of safety issues and executing the mishap prevention program for their Commander. Since their duties and responsibilities are those of the senior safety advisor within their organization, they will report to their Commander/Director as they manage the commander's mishap prevention program. This is consistent with the principles set forth in AFI 38-101, *Air Force Organization*.

**2.2. Unit Safety Representative (USR).** Each unit will have a primary and alternate USR, Additional Duty Weapons Safety Representative (ADWSR) and SAFSO, as applicable. When possible, these individuals will have one-year retainability in the assigned additional duty position. Each installation safety discipline or assigned safety staff (if different than the installation safety office) will train their respective USRs within 30 working days after appointment. Air Reserve Component primary and alternate USR will complete initial training within two unit training assemblies of appointment. **Note:** Units with fulltime safety personnel are not required to have a USR. **(T-3)**

2.2.1. Organizations may augment the primary and alternate safety representatives using a "team concept" by adding representatives at the flight level (or equivalent organizational levels). However, the primary and alternate representation will serve as the primary points of

contact for all unit safety issues. If the team concept is used, each member, beyond the primary and alternate, will be trained by the organization for their responsibilities. **(T-3)**

2.2.2. For specific USR responsibilities, see the discipline-specific chapters. USRs will, as a minimum: **(T-3)**

2.2.2.1. Advise the commander on safety matters.

2.2.2.2. Conduct and document spot inspections in conjunction with facility managers when possible and IAW paragraph 3.7 of this instruction.

2.2.2.3. Assist unit personnel with mishap reporting requirements. Assist unit commander and supervisors in mishap investigation when required. **(T-3)**

2.2.2.4. Assist supervisors who develop JSTOs.

2.2.2.5. Conduct safety briefings and provide unit personnel with educational safety materials. **Note:** MAJCOM/Wing Safety websites should be accessed to get briefing topics/material (e.g., Quest for Zero).

2.2.2.6. Assist the unit commander and supervisors with hazard abatement processes.

2.2.2.7. Facilitate the inspection process for their unit and accompany safety office personnel on the formal inspection and assessment.

**2.3. Safety Education/Training.** Education and training prepares Airmen to meet their safety and health responsibilities. Each installation shall develop, implement and integrate safety guidelines and standards into existing local level training programs. Commanders will promote safety awareness at all appropriate venues such as commander calls, holiday safety briefings and other events or functions. **(T-3)**

2.3.1. Commander Orientation. The COS will provide face-to-face training on the safety and health of the organization to new commanders within their organizational chain within 60 days of their arrival or appointment. Air Reserve Components will complete this requirement within 90 days (3 Unit Training Assemblies). Telephonic training is satisfactory for units that support commanders at operating locations away from the COS's home base. The training will be documented and include, but is not limited to the following items: **(T-3)**

2.3.1.1. Launch vehicle operations and concerns (if applicable).

2.3.1.2. Safety responsibilities.

2.3.1.3. Last annual inspection results and open recommendations, unabated hazards and hazard abatement plan.

2.3.1.4. Unit specific mishap rates, trends and open mishap recommendations.

2.3.1.5. Special interest issues (e.g., motorcycle safety/motorcycle unit tracking tool [MUSTT], high risk activities, hazardous air traffic, AFSMS, OSHA Voluntary Protection Programs).

2.3.1.6. Explosives site plans and licensed facilities.

2.3.1.7. Airfield operations and concerns.

2.3.1.8. Safety Awards Program.

2.3.1.9. Air Force Combined Mishap Reduction System (AFCMRS). Website: <https://www.afcmrs.org>.

2.3.2. Supervisor Safety Training (SST). Supervisors are the key to the safety program because they are responsible for maintaining a safe and healthful environment. The course trains supervisors in management skills needed to implement safety policies and programs. The course provides basic skills for fostering a workplace where hazards are identified and risks managed. It also develops skills to recognize, control, report and eliminate hazards. MAJCOMs/FOAs/DRUs and installations with unique requirements will supplement this training with those requirements. **(T-0)**

2.3.2.1. Personnel required to attend:

2.3.2.1.1. Noncommissioned officers and Senior Airmen when first assigned a supervisory position. **(T-2)**

2.3.2.1.2. Commissioned officers when first assigned as a supervisor. **(T-2)**

2.3.2.1.3. Civilian personnel (DAF, NAF, foreign national) upon initial assignment to a supervisory position. **(T-2)**

2.3.2.1.4. Any supervisor needing refresher training or who demonstrates a lack of safety knowledge. **(T-2)**

2.3.2.2. Administration. Unit commanders identify eligible personnel and arrange course scheduling with the installation ground safety office. Safety offices will use the AF Form 1286, *Safety Education/Training Class Roster*, or another equivalent product for attendee sign-in. **(T-3)**

2.3.2.3. Documenting Training. The safety staff allocates quotas, giving priority to newly assigned supervisory personnel. Safety staffs will update training completion in the Military Personnel Data System. Supervisors of civilian personnel will document this training in the employee's AF Form 971, *Supervisor's Employee Brief*, or equivalent product. **(T-3)**

2.3.3. Safety, Fire Protection and Health Training. Supervisors will develop a JSTO specifically tailored to address safety, fire protection and health concerns of the work environment. The outline will encompass both safety awareness and job specific safety training. See listed mandatory training items in **Attachment 4**. **(T-3)**

2.3.3.1. Training Requirements. Supervisors will provide and document safety training to all newly assigned individuals (i.e., PCS, PCA or work center change to include deployment) on the hazards of their job before they start work and immediately when there is a change in equipment, processes, work environment or safety, fire and health requirements. Refresher training will be conducted and documented when workers demonstrate a lack of understanding of their required safety responsibilities or training such as is called for in AFI 91-203, Chapter 21, *Hazardous Energy Control*, has a specified frequency for recurrence. **(T-3)**

2.3.3.2. Supervisors will review and update the JSTO annually and/or when there is a change in equipment, processes or safety, fire and health requirements, to include procedural input as a result of a completed JSA. JSTO reviews will be accomplished by the supervisor and documented with the date of review and the person conducting the

review. Safety, fire protection and health personnel will provide technical assistance to supervisors in developing a training outline to meet AFI/AFOSH requirements. JSTOs will be reviewed by safety inspectors during the scheduled safety assessment. (T-3)

2.3.3.3. Document safety, fire and health training as specified in paragraph [1.8.22.5.2](#). Documentation will be maintained by the supervisor within the work center. (T-3)

2.3.4. Designated Employee Representatives. The civilian personnel flight will schedule and monitor safety, fire protection and health training for employee representatives. Upon request, coordinate training for designated representatives of civilian employees to assist in maintaining safe and healthful workplaces. The extent of such training will depend on local needs. (T-3)

2.3.5. General Safety Education and Training Courses are listed in [Attachment 13](#). Supervisors/instructors will document employee training. Documentation may be accomplished using the **AF Form 1286, Safety Education/Training Roster**, or another equivalent product.

**2.4. Safety Office Vehicles and Equipment.** The following information should be used when establishing equipment requirements.

2.4.1. Vehicles and Communication. Safety disciplines must be mobile to accomplish their job on/off-installation program management responsibilities. Safety staffs perform day-to-day safety functions installation-wide, including off-base responses to conduct mishap investigations. In flying units, missile units, units operating a range and units with host base responsibilities who support these activities or as designated by the installation commander, the safety staff must have the immediate use of a two-way radio (UHF/VHF)-equipped 4-wheel drive vehicle capable of transporting a minimum of four people and their associated mishap investigation equipment. Any radio net, appropriate to the mission, that allows the vehicle to move freely around the airfield or missile complex is acceptable. (T-3)

2.4.2. Allowance Standards (AS). The following AS prescribe the equipment items and quantities required to perform safety missions, functions, and duties. The standards can be found at <https://earms2.wpafb.af.mil/sites/asrs/home.asp>. (T-3)

2.4.2.1. AS 006, Organizational and Administrative Equipment.

2.4.2.2. Vehicles.

2.4.2.2.1. AS 037, Vehicles – Contract.

2.4.2.2.2. AS 457, Vehicles – Operations/Maintenance.

2.4.2.2.3. AS 010, Vehicles – Air Force Owned.

2.4.2.2.4. AS 012, Vehicles – Air Force Leased.

2.4.2.3. AS 014, Training Devices.

2.4.2.4. AS 016, Special Purpose Clothing and Personal Protective Equipment.

2.4.2.5. AS 453, Safety Offices.

2.4.2.6. AS 629, Visual Information (VI) Support.



2.4.2.7. AS 660, Equipment Allowances for Non-Weapon Systems Communications Requirements.

2.4.3. Mishap Investigation Kits. Each MAJCOM/FOA/DRU determines the minimum contents of investigation kits for host installations to maintain and have available to meet initial response and ISB requirements for flight, ground and weapons mishaps. Wing safety offices will have available all the items that are required to conduct a safety investigation IAW AFI 91-204. Coordinate the medical member contents of the kit with the medical treatment facility. Mishap investigation kits are optional for AFRC units. (T-2)

**2.5. Safety Library.** Air Force safety offices will establish a library with publications that specifically apply to the safety program. Electronic access through the internet meets the intent of this requirement; maintain hard copies of publications that are not available electronically. However, paper copies of applicable publications that are not available electronically must be obtained and maintained within the safety office. The library will include as a minimum: (T-3)

2.5.1. DoD Safety standards and handbooks and applicable host country's governing safety standards, rules and regulations.

2.5.2. Air Force policy directives, instructions, pamphlets, manuals and appropriate technical orders.

2.5.3. Applicable (based on organizational mission) OSHA, AFOSH guidance/standards, National Fire Protection Association, American National Standard Institute standards and other national consensus standards (e.g. Compressed Gas Association, Pressure Vessel and Boilermaker, etc.).

2.5.4. MAJCOMs/FOAs/DRUs will provide a means to disseminate command-specific safety information to subordinate units.

**2.6. Environment, Safety and Occupational Health Councils (ESOHC).** In accordance with AFI 90-801, the Air Force utilizes the ESOHC to achieve ESOH goals throughout the Air Force and to provide senior leadership involvement and direction at all levels of command. This interdisciplinary approach includes aviation, ground, weapons and space safety. (T-2)

2.6.1. AFI 90-801 governs the rules regarding the conduct of Environment, Safety, and Occupational Health Councils. The ESOHC reviews policies and programs, establishes goals, monitors progress and advises leadership. IAW AFI 90-801, the ESOHC Chair may charter an ESOHC Safety Sub-Group to ensure full review and oversight of all safety related matters. (T-2)

2.6.1.1. If established, Safety Sub-Groups will be chaired by the commander or commander's designee and will convene at the commander's discretion. The Safety Sub-Group will be represented at a minimum by group and squadron commanders from the host base, representatives from each 2-letter office and commanders (or their designee) from tenant organizations. Union representatives will be invited and encouraged to participate. (T-3)

2.6.1.2. The safety staff will make all Safety Sub-Group arrangements; develop the agenda and distribute it in advance; and record and publish council meeting minutes. The Safety Sub-Group agenda and minutes will consider safety-related items addressed in the previous ESOHC and the meeting outcomes will be added to the agenda and proceedings



of the following ESOHC. The chief of safety will ensure the minutes are prepared within 30 days following a Safety Sub-Group meeting. The Sub-Group chair will approve the minutes and all Sub-Group members will be furnished a copy. OPRs will be identified for items requiring action. (T-3)

2.6.2. Attachment 2 of AFI 90-801 identifies topics that can be addressed, as appropriate, at the ESOH Council. Hazard report analysis will include AF Form 457, AFSAS-generated Hazard reports, as well as Hazardous Air Traffic Reports (HATRs). Units may address flight safety BASH, HATR and MACA issues through the Airfield Operations Board meetings.

**2.7. Non-USAF Councils and Committees.** The Air Force supports federal, state, and local safety councils and committees and encourages safety staffs to take part in them.

**2.8. Major Range and Test Facility Base (MRTFB) Safety Programs.** MAJCOMs will establish safety policy for MRTFB and other range activities. The overall goal of the range safety program is to ensure safety consistent with operational requirements, which includes preventing test objects, space launch vehicles or their hazardous effects from violating established limits. Units operating any range facility or conducting “range activities” as defined by AFI 13-212, *Range Planning and Operations*, shall establish a range safety program to ensure public safety and protection of government resources and personnel. The installation commander of the unit operating the range is considered the Range Operating Authority (ROA). Under the direction of the MAJCOM concerned, the ROA will:

2.8.1. Appoint a Range Safety Officer (RSO). RSOs appointed to the ROA typically monitor daily activity and implement the safety program. Range safety duties vary from installation-level program management (RSO assigned to the installation/wing) to on-site safety oversight performed by the RSO, Range Control Officer (RCO) or activity manager during execution.

2.8.2. Institute a RM program that quantifies risk and sets requirements for risk acceptance. High residual risk range events are typically accepted by the installation commander or ROA. MAJCOM/A3 and SE will establish guidance regarding high risk activities. Approval authorities in coordination with the installation safety office may issue local OIs for select or repetitious activities. (T-2)

2.8.3. Determine safety requirements and ensure all range users are in compliance. (T-2)

2.8.4. Establish allowable ground and flight safety conditions and take appropriate action to ensure that test articles do not violate the conditions. Where reliability of the test object is not established, appropriate measures should be taken to ensure it will not endanger the public or their property. (T-1)

2.8.5. Ensure weapon safety footprints exist for all aircraft, weapons and tactics (including those from other services and countries) authorized for a given target and event on the range. Otherwise, employment is restricted IAW AFI 13-212. (T-1)

2.8.6. The installation safety office assists the ROA with the development and publication of a standardized safety and RM program. An installation-level RSO may be appointed within the safety office.

## Chapter 3

## SAFETY ASSURANCE

**3.1. General.** Under the AFSMS, safety assurance is largely achieved through safety program evaluations, assessments and inspections that measure program conformance, performance and effectiveness of DoL, DoD and AFOSH requirements. See [Table 3.1](#) for a summary of minimum evaluation, assessment and inspection requirements.

**Table 3.1. Safety Evaluations, Assessments and Inspections.**

Level	Frequency	Type	By	Report	Note
MAJCOM	36 Months	Safety Evaluation	AFSEC	Formal	<b>Note 1</b>
DRU/FOA	24 Months	Safety Program Evaluation	AFSEC	Formal	<b>Note 4</b>
NAF/Center/Wing	24 Months	Safety Program Evaluation	MAJCOM	Formal	<b>Note 2, 3</b>
Wing or Wing Equivalent	12 Months	AFSMS Management Review	Wing	Formal	<b>Note 12</b>
Squadron, Standalone Group	24/12 Months	Program Assessment & Safety Inspection		Formal	<b>Notes 5, 7, 11</b>
Wing and below	Monthly	Spot		Informal	<b>Notes 6, 9, 10</b>
Wing and below	Monthly	High Interest		Informal	<b>Notes 7, 10</b>
Wing and below	Varies	Special		Formal	<b>Notes 7, 8</b>

**Note 1:** HQ AFSEC will conduct Safety Evaluations of MAJCOM Headquarters Staffs.

**Note 2:** Conducted IAW AFI 90-201. MAJCOM/SEs will work with their IGs to ensure safety programs receive an external verification/validation conducted by qualified IG safety inspectors or MAJCOM safety staff at required intervals.

**Note 3:** These Program Evaluations will be conducted for wing, wing-equivalent or higher with an assigned safety staff, by qualified IG safety inspectors or MAJCOM safety staff as part of the IG inspection process as defined within AFI 90-201. MAJCOM safety offices are not authorized to perform these independent of the IG process.

**Note 4:** DRU and FOA Safety Programs where there is an assigned safety staff will have a Safety Program Evaluation. DRU and FOA program evaluations will be done as part of AFIA-led inspections. **(T-1)**

**Note 5:** Program Assessments are specified at a 24 month frequency, while safety inspections are at a 12 month frequency. Annual safety program assessments and inspections should be combined when conducted the same year to reduce the footprint within the affected organization.

**Note 6:** Spot inspections will be used to identify hazards and check compliance with applicable safety standards to compliment rather than rely solely on annual inspections. **(T-1)**

**Note 7:** Accomplished by full-time professional safety staff. (T-1)

**Note 8:** Special inspections include seasonal activities and special events. (T-1)

**Note 9:** USRs and shop level supervisors ensure spot inspections are conducted and documented at least monthly. Documentation of spot inspections will be IAW paragraph 3.7.4. (T-1)

**Note 10:** Accomplish and document high interest inspections IAW paragraph 3.7.3. (T-1)

**Note 11:** Program assessments are required for all organizations below installation level, but not lower than squadron level. (T-1)

**Note 12:** Wing or Wing Equivalent as defined in AFI 90-201, with a full time safety staff. However, if there is a subordinate command level with a full time safety staff, for instance, some Medical Groups, or large tenant detachments, etc., then they will also prepare an AFSMS Management Review. Provide a copy to the NAF/Center and MAJCOM/FOA/DRU SE. (T-1)

**3.2. Safety Evaluations.** HQ AFSEC will conduct Safety Evaluations of MAJCOM Headquarters Staffs at intervals not to exceed 36 months. These evaluations are conducted IAW DoDI, OSHA Standards and federal law. At the direction of AF/SE they will be rated with a two-tier (Satisfactory/Unsatisfactory) grading criteria. (T-2)

3.2.1. Safety evaluations evaluate MAJCOM/SE program management compliance and oversight of subordinate organizations' safety programs. The evaluation provides the MAJCOM/CC/CV an independent perspective of the effectiveness and efficiency of the evaluated organization's safety program.

3.2.2. A written report will be prepared for each evaluation and sent to the commander and the safety staff of the MAJCOM being evaluated. This report will contain a statement declaring the safety program under the systemic processes of the AFSMS was either satisfactory or unsatisfactory.

**3.3. Safety Program Evaluation (SPE).** In conjunction with a UEI, qualified safety personnel from MAJCOMs/FOAs/DRUs must evaluate the safety management system conformance and performance of each organization at wing (or wing-equivalent level), as appropriate, and higher. The SPE will be conducted as part of a Unit Effectiveness Inspection Capstone Event IAW AFI 90-201. During the UEI Capstone Event, MAJCOM/IG or AFIA-led inspectors will sample inspection areas where there is the most risk to mission accomplishment. All safety inspection areas marked as "mandatory" in Attachment 3 of AFI 90-201 will be evaluated during all UEIs. A complete safety program evaluation must incorporate a continuous evaluation methodology that reviews all aspects of an effective safety management system. In addition to the UEI Capstone Event, additional information should be reviewed annually. These items include the annual AFSMS Management Review, trends in MICT, mishap trends, results of OSHA inspections, local training of safety personnel during program evaluations, to include OJT master training plan for assigned ISOs, and results of any commander-requested safety staff assistance visits that were conducted since the last safety program evaluation. MAJCOM/FOA/DRU SEs will work with their IGs to ensure safety programs at all levels of command receive an external verification/validation conducted by qualified IG safety inspectors or MAJCOM/FOA/DRU safety staff at required intervals. Either the IG report will contain a statement or a standalone safety report will be generated to declare the mishap prevention program conformance and performance under the systemic processes of the AFSMS was either, met and effective, met but needs minor improvement(s), met but needs significant improvement(s), or was not effective.

Waiver requests from MAJCOMs/FOAs/DRUs will be processed through AFSEC and, in turn, to SAF/IE to DUSD (ATL). **(T-0)**

**3.4. Safety Program Assessments.** Qualified safety personnel assess the safety program of each standalone group and squadron on the installation every 24 months as a minimum. **Exception:** For subordinate Geographically Separated Units (GSUs), Detachments or Operating Locations (OLs), recommend on-site safety program management assessment be accomplished at intervals not to exceed 36 months. MAJCOM/SEs may allow a virtual assessment in lieu of on-site visits. **(T-1)**

3.4.1. The assessment will cover all safety disciplines. Safety assessments address the areas of commander and supervisory support, compliance with program directives and the effectiveness of mishap prevention programs (performance). Assessments may be conducted in conjunction with the annual safety inspection. Assessments may include safety related data found in the Commander's Inspection Program (CCIP) IAW AFI 90-201. **(T-1)**

3.4.2. The Safety Program Assessment is not an IG-led process, but is core to the safety program and authorized in Attachment 2 of AFI 90-201. Commanders and Chiefs of Safety are encouraged to use information from the CCIP as part of the assessment. Details of the CCIP are in AFI 90-201. Results of the most recent Safety Program Assessments should be summarized and included as part of the annual AFSMS Management Review.

3.4.3. Prepare a written report for each assessment. Send a copy of the report to the commander of the organization. The assessment report may be combined with the annual inspection report. This report must contain: **(T-1)**

3.4.3.1. A statement declaring the mishap prevention program conformance and performance under the systemic processes of the AFSMS was either met and effective, met but needs minor improvement(s), met but needs significant improvement(s), or was not effective.

3.4.3.2. Unit assessed.

3.4.3.3. Date of assessment.

3.4.3.4. Management and supervisory support for safety.

3.4.3.5. Mishap experience and trends.

3.4.3.6. Compliance with safety program directives.

3.4.3.7. Description of any program deficiencies or policy shortfalls and references.

3.4.3.8. Recommendations for improvement/compliance.

3.4.4. Safety staffs will develop assessment checklists to assess compliance and performance of core program elements. Conduct assessments with prior notice. Related MICT self-assessment communicators will be a part of the composite assessment checklist. **(T-1)**

3.4.5. When prescribed by MAJCOM safety guidance, subordinate safety staffs will upload documentation in unit MICT (or hyperlink to suitable electronic medium, such as SharePoint®) to permit oversight of assessments by the MAJCOM. **(T-3)**

3.4.6. Follow-up Procedures and Actions. The assessed unit will submit to the safety staff corrective actions taken/planned. For long term or complex actions, use of AFSO21

processes is highly encouraged. Safety personnel will track and monitor the status of all open assessment findings until closed. (T-1)

**3.5. Annual AFSMS Management Review.** The management review provides leadership and applicable process owners a strategic and critical evaluation of the conformance and performance of the AFSMS and an opportunity to recommend improvements. Results and action items from this review shall be documented, prioritized, communicated to affected organizations and tracked to completion. Results of the annual AFSMS Management Review inform the commander on the health and effectiveness of the organization's safety program and will contain a statement declaring the mishap prevention program conformance and performance under the systemic processes of the AFSMS was either, met and effective, met but needs minor improvement(s), met but needs significant improvement(s), or was not effective. The Chief of Safety will brief the commander on the results of the annual AFSMS Management Review. This brief may be conducted during the first ESOHC of the fiscal year. Optimally, it will be briefed in the first quarter of the fiscal year (November or December). Refer to [Attachment 17](#). (T-1)

**3.6. Annual Safety Inspections.** Safety inspections help identify hazards and measure compliance with applicable safety guidance and standards. Annual inspections may be combined with the scheduled program assessment and CCIP IAW AFI 90-201. The annual safety inspection is not an IG-led inspection, but part of core safety duties and can only be accomplished by a qualified safety professional.

3.6.1. Scope. At least annually (12 month cycle), qualified safety personnel shall inspect every installation workplace/facility where Airmen are regularly employed at fixed installations. Inspections are to be conducted more frequently based on factors such as the exposure to and potential severity of hazards, actual accident experience, special emphasis programs, changes in the organization's staffing or workplaces or other events that increase risk in the workplace. Procedures shall be established to document and follow-up on the correction of hazards/deficiencies identified during inspections every 30 days (see spot inspection follow-up and/or hazard abatement program). **Note:** Chiefs of Safety may extend the hazards/deficiencies 30 day follow-ups, not to exceed 90 days. Conduct inspections of all workplaces and operations where Airmen are regularly employed at fixed installations. Inspections of workplaces and operations in contractor facilities (Government-Owned Contractor Operated (GOCO) or contractor owned/operated) where fewer than 25 Airmen are employed shall be at the discretion of the Chief of Safety, based on existing conditions and potential risks. Assist the contract management multi-functional team, upon request, to resolve any issues related to the safety of the contractor's facilities. (T-3)

3.6.1.1. Facility, workplace and operational inspections. The safety manager will ensure safety personnel are properly qualified and/or have been task certified to perform all aspects of the inspection, and all facilities assigned to the unit are inspected/documented. The inspection report will identify all workplaces and facilities inspected regardless of whether there were findings or not. (T-0)

3.6.1.2. All hazards/deficiencies identified during the inspections will be assigned a RAC. The safety staff conducting the inspection will assist the responsible supervisor in developing hazard abatement actions. **Note:** Occupational deficiency RACs should not normally exceed a RAC 5. (T-1)

3.6.1.3. Checklists will be used to help identify hazards, deficiencies and other work related violations. The safety staff will ensure checklists are available to all assigned personnel. These checklists will be reviewed at least annually for accuracy and relevancy by the safety staff. Method of documentation of the review is determined by the safety staff. (T-1)

3.6.1.4. The host safety staff inspects units that do not have an authorized full-time safety position in a particular discipline. **Exception:** The host safety staff inspects HAF, MAJCOM, NAF and AFOTEC safety offices as specified in paragraph 1.8.16.5 Host/tenant/associate support agreements will define who will conduct inspections.

3.6.1.5. GSUs with full-time safety personnel will inspect workplaces annually and keep a copy of report on file until the next annual inspection. For GSUs without a full-time safety staff, the host base safety office conducts the annual workplace's inspection (unless a support agreement specifies otherwise) and forwards a copy of report to the GSU and the GSU's parent organization. (T-1)

3.6.1.6. Tenant/Associate units with a full-time safety staff (by discipline) will conduct annual inspections except as exempted in paragraph 1.8.16.5 (T-1)

3.6.1.7. Inspect at least 20 percent of unmanned missile and space launch facilities once a year. Select these launch work areas to ensure that a representative segment of the unit's assets are inspected annually. Inspections must be scheduled to ensure all launch work areas will be inspected over a 5-year cycle. (T-1)

3.6.2. Procedures. Safety staffs will conduct multi-discipline (e.g. Aviation, Ground, etc.) inspections when feasible. The safety staff will develop and publish an annual fiscal year inspection schedule and distribute to units no later than 15 September for the upcoming fiscal year. A copy shall also be provided to union(s), as applicable. Coordinate assessments and inspections with the Wing/IG gatekeeper. When possible, conduct as much of the required inspection as possible as part of the Wing's inspection team. (T-3)

3.6.2.1. Inspectors must consult with workplace personnel and their union representatives on matters affecting their safety and health and give them the opportunity to identify unsafe and unhealthy working conditions, equipment and practices. Conduct such consultations privately and do not identify employees who want to remain anonymous. (T-0)

3.6.2.2. Provide an out brief to the commander within three duty days and a formal written report to the squadron/unit commander within 15 calendar days after completion of inspection. When either of these timeframes cannot be met, the safety staff will create a memorandum for record justifying the delay. Ensure these reports along with the unit's corrective actions are staffed through the installation commander as their policy prescribes. When the host base safety office conducts inspections of tenant units, the tenant unit USR will send a copy of the report to the parent safety office. Formal inspection reports must contain: (T-1)

3.6.2.2.1. The unit, activity or work areas inspected.

3.6.2.2.2. The date of the inspection.

3.6.2.2.3. Facilities and/or work areas inspected.

3.6.2.2.4. Description of any hazards, deficiencies or unsafe work practices with risk assessment codes (as applicable) and references.

3.6.2.2.5. Causes of deficiencies and hazards noted, if known.

3.6.2.2.6. Recommendations for improvement/compliance.

3.6.2.2.7. Instructions for follow-up actions such as requiring units to provide monthly updates on open items until closure.

3.6.2.3. Follow-up procedures and actions. The inspected unit will submit to the safety staff corrective actions taken. For long term or complex actions, use of AFSO21 processes is highly encouraged. Safety personnel will track and monitor the status of all open inspection findings until closed. Use spot inspections and follow-up reporting to ensure corrective action(s) are taken and hazards are mitigated. Transfer hazards identified during annual inspections (RACs 1, 2 and 3) not corrected within 30 days to the Master Hazard Abatement Plan. RACs 4 or 5 are addressed in **Chapter 12** and should also be tracked using the hazard abatement program. **(T-1)**

**3.7. Spot Inspections.** Spot inspections are an effective way to find and eliminate transitory hazards and ensure compliance with safety requirements. Supervisors, USRs and safety personnel will perform spot inspections to check the day-to-day safety and health of an organization, work center, facility, etc. Workcenter/shop supervisors, USRs and ADWSRs will conduct and document monthly spot inspections. See discipline specific chapters for additional operations and areas that need to be inspected or monitored. **(T-3)**

3.7.1. The Chief of Safety will develop a spot inspection program for safety staff to ensure coverage of on-duty and off-duty activities that occur on, or are controlled by, the installation. **(T-3)**

3.7.2. Documentation of spot inspections by safety staffs will include the following: **(T-3)**

3.7.2.1. The organization, unit, activity or work area inspected.

3.7.2.2. The date and time of the inspection.

3.7.2.3. The inspector's name and their organization or office symbol.

3.7.2.4. A brief description of the areas, equipment or processes/procedures reviewed as well as observations (may also include positive findings), hazards or unsafe work practices. When qualified safety personnel identify hazards, assign RACs as applicable.

3.7.2.5. Causes of deficiencies and hazards, as noted.

3.7.2.6. Recommendations for corrective action.

3.7.2.7. Name and phone number of responsible person.

3.7.2.8. Ensure appropriate follow-up actions (every 30 days) are conducted and documented until findings are closed. **(T-0)**

3.7.3. Documentation of spot inspections by supervisors and USRs will include the following as a minimum. Local safety staffs may prescribe additional items. **(T-3)**

3.7.3.1. The activity or work area inspected.

3.7.3.2. The date and time of the inspection.



3.7.3.3. The name of the person conducting the spot inspection.

3.7.3.4. A brief description of the area, equipment or process/procedure reviewed as well as observations of hazards or unsafe work practices. The description may also include positive findings.

3.7.3.5. The applicable RAC, if assigned by a qualified fire, safety or health person after contact by the USR or supervisor.

3.7.3.6. Corrective action taken or planned. Ensure appropriate follow-up actions (every 30 days) are conducted and documented until findings are closed. **(T-0)**

**3.8. High Interest Areas.** High interest areas are those areas having the greatest risk to life or property, have experienced repeated mishaps or in the judgment of the wing commander and/or safety office require added monitoring. While designation should usually be based on trends, analysis or command interest, they can also be work areas or operations that need additional attention or inspections because of increased mishap potential due to the nature of the work performed, physical conditions, or type of materials handled. High interest areas, if identified, will be designated by the Chief of Safety in writing. Inspections will be accomplished and documented at least monthly. Documentation of High Interest Area inspections will be IAW paragraph **3.7.3 (T-3)**

**3.9. Administrative Areas.** Task-qualified unit ground safety representatives may conduct inspections of administrative work areas (not permissible for entire facility inspections) when the safety staff determines the mishap potential is minimal. The applicable ground safety staff develops specific provisions to ensure the USR has sufficient documented training and/or experience in the safety hazards of the administrative area to recognize and evaluate those particular hazards and to suggest general abatement procedures, as required by 29 CFR 1960.25. Any specific provisions beyond what may already be addressed in the required USR training may be added to that training process. Periodic over-the-shoulder assessments of these USR responsibilities will be accomplished and documented.

**3.10. Special and Seasonal Inspections.** Inspections are conducted to ensure work and recreational environments are safe and healthy.

3.10.1. Special inspections include seasonal, targeted mishap preventive activities, special events and mission readiness operations/exercises. Special inspections will be conducted of installation child development centers, approved day care homes and play grounds that are part of real property. Force Support Squadrons (FSSs) will coordinate with the safety staff to inspect at least 10 percent of all approved home-daycare providers annually. Daycare providers in privatized housing will not be inspected. **(T-3)**

3.10.2. Seasonal inspections will be conducted of recreational areas (e.g., sports fields, swimming pools, camp grounds, and recreational vehicle parks and other recreational areas). FSS will coordinate with the safety staff to jointly conduct pre-season inspections of seasonal areas. **(T-3)**

**3.11. Staff Assistance Visits (SAV).** The purpose of the SAV program is to help develop solutions, not to inspect or evaluate, and to provide observations and recommendations for improvement. SAVs may be conducted at any level at any time, but only when requested by the commander who is receiving the SAV. Provide a written report to the commander. Do not



require replies unless an action started during the visit needs monitoring by the higher headquarters safety staff or requires further staff action above the level of the visited unit.

**3.12. Department of Labor (DoL) Inspections.** OSHA officials may conduct inspections of nonmilitary-unique workplaces and operations where Air Force civilian personnel work (inspections may be unannounced). Refer to [Chapter 8](#) for specific requirements.

**3.13. Contract Performance Assessment.** Installation or tenant unit safety offices, as applicable, will assist the MFT in validating that contractors are meeting the safety requirements of the contract. If the installation is pursuing VPP certification, the contracting officer is responsible for notifying contractors in writing who are performing work on the installation.

**(T-3)**

3.13.1. The MFT will ensure contractors perform IAW the terms and conditions of the contract. Discrepancies will be reported to the MFT via contracting officer's representative (COR). Commanders will ensure CORs that are required to monitor safety requirements are trained in the recognition of hazardous conditions/environments, the use of safety and health standards, and in other areas of safety, as necessary. The appropriate safety office will assist commanders and CORs in specialized safety training requirements to ensure the COR is properly trained to provide oversight of the contract. **(T-3)**

3.13.2. Airmen who note potential safety violation(s) will report the hazard to the COR. CORs notify the multi-functional team, and initiate the appropriate actions related to violations. Unless there is critical/imminent danger, Airmen should avoid reporting safety violations directly to the contractor, but should immediately report observed violations to the contracting officer or the installation safety office. **(T-3)**

3.13.3. Inspection of Contractor Work Areas and GOCO Work Areas. When Airmen conduct safety inspections in contractor work areas their primary concern is the potential risks to Airmen and government property. Hazardous conditions or violations of safety standards should be reported to the contracting officer, the responsible commander or to the installation safety office. **Note:** Inspections of workplaces and operations in contractor installations where fewer than 25 DoD personnel are employed shall be at the COS's discretion, based on existing conditions and potential risks.

3.13.3.1. GOCO explosives activities must comply with the applicable portions of DoDI 4145.26, *DoD Contractor's Safety Requirements for Ammunition and Explosives*, to assure safety of the activity and the prevention of mishaps. **(T-0)**

3.13.3.2. The requirements documents will specify compliance with appropriate provisions of DoD Manual 6055.9-M, *DoD Ammunition and Explosives Safety Standards*, AFMAN 91-201, and this instruction. **(T-0)**

## Chapter 4

### HAZARD IDENTIFICATION AND REPORTING

**4.1. Hazard Identification.** Mishap prevention depends on personnel identifying, reporting and correcting hazards promptly and efficiently. Managers or supervisors will not allow coercion, discrimination or reprisal against an Airman who exercises their right to report hazards. Reports can be submitted anonymously.

**4.2. Reporting Criteria.** Submit hazard reports unless personnel can take corrective action under this instruction or any of these Air Force publications: **(T-3)**

4.2.1. AFI 11-215, *USAF Flight Manuals Program (FMP)*.

4.2.2. AFI 51-1101, *The Air Force Procurement Fraud Remedies Program*.

4.2.3. AFI 91-204, *Safety Investigations and Reports*.

4.2.4. TO 00-5-1, *Air Force Technical Order System*.

4.2.5. TO 00-35D-54, *USAF Deficiency Reporting, Investigation and Resolution*.

**4.3. Hazard Reporting Procedures.** Commanders must ensure an AF Form 457, *USAF Hazard Report (HR)*, or equivalent product is readily available to all personnel. Readily available is defined as not being under lock and key or only accessible through electronic means when a member does not have immediate access to a government computer. To ensure anonymity in reporting is preserved, commanders will consider that the form posting AF Forms 457 in readily available locations, may be submitted anonymously when choosing the method of making the form readily available. Recommended locations include, but are not limited to, commonly visited areas such as break rooms, training rooms, debrief rooms and safety bulletin boards, if used. Any person assigned, attached or under contract to the Air Force may report a hazard. A hazard report may be submitted on any event that includes hazards, unsafe procedures, practices or conditions that affects flight, ground, weapons, systems or space safety. Report hazards to the responsible supervisor or consult local SE office for guidance. This process is not designed for readdressing hazards that are already being managed for abatement through another process such as a civil engineering work request, job order, project or mishap investigation. **(T-1)**

4.3.1. If the hazard presents critical/imminent danger, the supervisor or individual responsible for that area will take immediate action to mitigate or eliminate the hazard to protect personnel or property. **(T-0)**

4.3.2. Report hazards that cannot be eliminated immediately to the installation safety office via the AF Form 457, by telephone, e-mail or in person. **(T-1)**

4.3.3. The Chief of Safety, in consultation with his staff, will determine the appropriate safety, fire or health discipline to investigate the HR. The assigned investigator will investigate the HR within one (1) duty day for critical/imminent danger situations, and three (3) duty days for potentially serious situations and 10 duty days for lesser conditions. The investigator discusses the HR with the member who submitted the report (if known), the responsible supervisor or manager and other parties involved to validate the hazard and determine the best interim control and corrective action. **(T-3)**

4.3.4. If the hazard is validated:

4.3.4.1. The investigator assigns a HR control number, a RAC as appropriate and monitors all corrective actions until complete. **(T-1)**

4.3.4.2. The investigator completes the HR's Part II, "Summary of Investigation," and sends it promptly to the individual responsible for making sure corrective action is completed and the hazard eliminated or controlled. **(T-1)**

4.3.4.3. The responsible individual completes Part II, "Action Taken," within 10 working days and returns the HR to the safety office for monitoring. **(T-1)**

4.3.4.4. The investigator informs the originator (if known) in writing about the corrective action or plans and conducts follow-up reviews until the action is completed. The investigator informs the originator, (if known), about the completed action within 10 workdays after the report is closed. If the originator is not known, inform the supervisor or manager of corrective actions. **(T-1)**

4.3.4.5. If the HR response is not satisfactory to the originator, the originator should resubmit the report and follow procedures in paragraph [4.5](#)

4.3.4.6. HRs that result in an assignment of a RAC may be closed and corrective action monitored through the hazard abatement process. **Note:** Transference of tracking from the hazard reporting program to that hazard abatement program does not relieve the investigator or the responsibilities called for in paragraph [4.3.4.4](#)

**4.4. Additional Reporting Procedures.** Transient personnel unable to report a hazard at a base where it is found should submit the HR to the next Air Force base they visit, or to the safety office at their home base. The receiving safety office will send the report to the responsible installation safety office. **(T-1)**

4.4.1. The safety office sends reports on hazards that cannot be corrected at the local level to the agencies that can take appropriate action. **(T-1)**

4.4.2. Tenant personnel send hazard reports involving activities for which the host is responsible to the host base safety office for processing. **(T-1)**

4.4.3. Hazard reports requiring urgent action should be transmitted by the most expeditious communication means available (overnight mail, official government e-mail, telephone). **(T-3)**

4.4.4. Persons identifying hazards involving weather forecasting must submit hazard reports as soon as possible to ensure that records are not destroyed. Promptly advise the appropriate agency providing weather forecasting services, i.e., installation weather flight/detachment supporting operational weather squadron, of their intention to submit a hazard report. Aircrews should consider using a Hazardous Air Traffic Report. **(T-3)**

4.4.5. Installation safety staffs send hazard reports that involve other military services, foreign nations or other agencies outside the Air Force to HQ AFSEC/SE, 9700 G Ave SE, Kirtland AFB, NM 87117-5670, and to the affected Air Force units and their chain of command as information addressees. Upon receipt, AFSEC will maintain tracking and subsequent closing action of the report and will report results to both the sending and affected unit. **(T-1)**

**4.5. Airmen Appeal Procedures.** If an Airman is dissatisfied with actions taken on a hazard report, he or she should resubmit the report to the appropriate installation safety, fire protection or BE office, and request the alleged hazard be reinvestigated. Reports can be submitted anonymously. The safety, fire and/or health representative must respond within 10 duty days. If the Airman is still dissatisfied, they may appeal to a higher level of safety, fire protection or health office in the following sequence: **(T-0)**

4.5.1. Intermediate headquarters.

4.5.2. MAJCOM headquarters.

4.5.3. AFSEC/SEG (safety hazards), AFCEC/CEXF (fire hazards), or AFMSA/SG3 (health hazards).

4.5.4. SAF/IE, Assistant Secretary of the Air Force for Installations, Environment and Logistics.

4.5.5. Deputy Under Secretary of Defense for Environmental Security. This is the final review for reports that originate at installations in foreign countries, from military personnel or involve military-unique operations or equipment.

4.5.6. Higher level appeals must be addressed promptly and a reply sent to the employee within 20 calendar days. If a reply is not received within 20 calendar days or if the employee is dissatisfied with the reply, they may appeal to the next higher level. Each reply to an appeal will advise the employee of this right and will include the office symbol and address of the next higher level of appeal. If requested, the appropriate agency will assist the employee in obtaining technical information for clarification or for processing the appeal.

**(T-3)**

4.5.7. Civilian employees may submit appeals directly to the Office of Federal Agency Safety Programs, Occupational Safety and Health Administration, US Department of Labor. However, the procedures outlined in the paragraphs above are encouraged as the most expeditious means of correcting hazardous conditions.

4.5.8. The procedures outlined above do not prevent the use of agency or negotiated grievance procedures.

**4.6. Risk Reduction and Mitigation.** Commanders and supervisors at all levels are expected to determine the level of acceptable risk required to preserve assets and safeguard health and welfare. They should incorporate RM into daily activities, on duty and off duty, IAW AFI 90-802. These principles are: **(T-1)**

4.6.1. Accept no unnecessary risk.

4.6.2. Make risk decisions at the appropriate level.

4.6.3. Integrate RM into operations, activities and planning at all levels.

4.6.4. Apply the process cyclically and continuously.

**4.7. Preparation of Risk Assessments.** A formal risk assessment succinctly documents the results of the Deliberate 5-Step RM process and supports follow-on decision-making processes. Decision options typically involve determining whether one or more particular courses of action should be pursued (e.g., implementing equipment improvements, safety or warning device

improvements, operational improvements, technical improvements, policy improvements), or whether a risk should be accepted. A risk assessment supports decision-making processes by objectively identifying a hazard, assessing its risk, thoroughly analyzing potential options for risk mitigation and making a recommendation. **Note:** The term “losses” also include fatalities, not just system losses. Refer to AFI 90-802 and AFPAM 90-803, Attachment 8, for additional guidance regarding the preparation of formal risk assessments and the use of the AF Form 4437, *Deliberate Risk Assessment Worksheet*, to assist in documenting formal risk assessments.

## Chapter 5

### INFORMATION AND DATA ANALYSIS

**5.1. Information Protection.** Safety investigation reports contain privileged safety information and are for mishap prevention purposes only; they are not releasable outside of safety channels. Portions of such reports, though, contain factual, non-privileged information, which may be released to the public, as well as information that is not releasable to the public. For example, information that is for official use only (FOUO), may be restricted from public release by the Freedom of Information Act (FOIA) (Title 5, U.S.C., Section 552), the Privacy Act (Title 5, U.S.C., Section 552a), Health Insurance Portability and Accountability Act (HIPAA) (Public Law 104-19, 21 August 1996), Arms Export Control Act (Title 22, U.S.C., Sections 2751 *et seq.*), Export Administration Act of 1979 (Title 50, U.S.C., Appendix Sections 2401 *et seq.*), and other pertinent laws, regulations and policies. For requests for release of non-privileged information in safety reports or databases, AFSEC/JA is the release authority for requests for release outside of the AF; AFSEC personnel or the installation chief of safety is the release authority for requests from AF organizations. **(T-0)**

### 5.2. Safety Information.

5.2.1. Forward reports of Air Force mishaps as directed by AFI 91-204. Some of these reports may contain recommendations requiring urgent action requirements by AF agencies. Treat these mishap reports as urgent action notices.

5.2.2. Urgent action notices will be forwarded to HQ AFSEC through the Air Force Service Watch Center (AFSWC) at DSN 227-6103 or [AFWatch@Pentagon.af.mil](mailto:AFWatch@Pentagon.af.mil). HQ AFSEC will distribute these notices to safety offices through electronic distribution as appropriate to organizations with applicable guidance/instructions.

**5.3. Recurring Publications.** The goal of these publications is to prevent mishaps By providing educational information and insights. These publications discuss topics like standards implementation as well as establishment/maintenance of nuclear surety, environment, safety and occupational health programs. The OPR for each publication will determine content and frequency. HQ AFSEC/SEF posts monthly Blue Four News on the Air Force Safety Automated System (AFSAS) website, summarizing the previous month's Class A and B aviation mishaps. This summary contains privileged information and will be protected IAW AFI 91-204, Chapter 3.

5.3.1. HQ AFSEC/SE will issue recurring publications pertaining to the Air Force mishap prevention program.

5.3.2. MAJCOM Publications. MAJCOMs/FOAs/DRUs will utilize a variety of media and mediums to disseminate command-specific safety information to subordinate units.

5.3.3. Periodic Summaries. HQ/AFSEC sends periodic mishap summaries to the MAJCOM/FOA/DRU safety staffs. These summaries include recent mishap experience, mishap statistics, analyses of current problem areas and proposed changes in safety policy. These summaries will be disseminated, as appropriate, to subordinate organizations for mishap prevention purposes.

**5.4. Methods of Information Distribution.** Select an appropriate distribution method by considering content, time available and audience. The MAJCOM/FOA/DRU safety office will determine the appropriate distribution methods for their subordinate organizations. Suggested methods of distribution are:

5.4.1. For privileged safety information (requires appropriate screening of attendees, marking of materials and reminders of the privileged nature of the information):

5.4.1.1. Safety meetings.

5.4.1.2. Supervisor safety briefings.

5.4.2. For non-privileged safety information:

5.4.2.1. Safety meetings

5.4.2.2. Supervisor safety briefings.

5.4.2.3. Base newspapers and bulletins.

5.4.2.4. Safety publications.

5.4.2.5. HQ/AFSEC or MAJCOM/FOA/DRU publications.

5.4.2.6. Electronic means via e-mail, web page or video.

**5.5. Mishap Analysis Program.** In order to reduce mishaps, Commanders and Chiefs of Safety must know the types of mishaps and mishap rates, and number of mishaps that occur in their command. Once the type and number are identified, commanders can take risk mitigation actions based on sound mishap analysis. This historical look-back approach should be complemented by a proactive, forward looking mishap prevention plan based on pre-identified hazards that haven't yet caused a mishap.

5.5.1. MAJCOM/FOA/DRU and Wing safety staffs will: **(T-2)**

5.5.1.1. Conduct an annual analysis and develop specific actions to reverse adverse trends. Analysis should target specific problem areas with recommendations for commander approval and appropriate actions. This analysis compliments the data required in [Attachment 17](#).

5.5.1.2. Identify successes or problem areas and trends, measure safety program effectiveness and guide prevention actions. **(T-2)**

5.5.2. HQ AFSEC will perform an Air Force-level trend analysis and publish results. In addition, AFSEC may conduct Safety Analysis Team (SAT) hazard and mishap trend analysis (as described in paragraph [5.8](#)) for MAJCOMs/FOAs/DRUs, as directed by AF/SE.

**5.6. Mishap Prevention Analysis Methods.** There are several ways to approach analysis of mishap data and proactive information for mishap prevention purposes. Program analysis functions are to target, monitor and/or study.

5.6.1. Target Approach. This approach is similar to the study method below. After determining causes of mishaps, recommendations are developed and prioritized based on the frequency and severity. Corrective actions are directed at the activities and mechanisms that result in the greatest number of injuries.

5.6.2. Study Approach. This is a detailed examination of a specific problem area through the use of a systematic process. A study should follow a systematic process. It typically follows the format of the Scientific Method. The researcher first drafts a problem statement that clearly defines the goals of the study. For example, a suitably specific research question might be “Determine a trend in the frequency of X and identify possible explanations for this trend.” The researcher will then conduct background research to identify factors and data relevant to the problem. Then the researcher must draft an objective statement that describes the problem and limits the study (the hypothesis or purpose). An example is “X is increasing because of Y.” Then the researcher develops a plan on how these factors and data are going to be collected, tabulated, compared, plotted and analyzed (methods). Finally, the data is collected and analyzed and results reported confirming or denying the hypotheses. Conclusions and implications regarding application of the results of the study are the most important outcome of the study. **(T-3)**

5.6.3. Additional Analysis Categories. In this method, the safety staff selects categories of raw data and reviews them regularly in the form of tabulations or rates. The object is to identify trends and problem areas. Selection of the areas to be monitored depends on the available data and the needs of the organization. Mishap reports are a good place to start, but other areas should not be overlooked. Some other categories that may be appropriate for analysis are: **(T-3)**

- 5.6.3.1. Hazardous Air Traffic Reports.
- 5.6.3.2. High Accident Potential Reports.
- 5.6.3.3. Deficiency Reports.
- 5.6.3.4. Inspection/Evaluation Reports.
- 5.6.3.5. Foreign Object Damage (FOD) Reports.
- 5.6.3.6. First-Aid Cases.
- 5.6.3.7. Maintenance Logs or Reports.
- 5.6.3.8. Hazard Reports.
- 5.6.3.9. Airman Safety Action Program (ASAP).
- 5.6.3.10. Military Flight Operations Quality Assurance (MFOQA) Analyses.
- 5.6.3.11. Line Operations Safety Audit (LOSA) Reports.

**5.7. Use of Analyzed Data.** The purpose of analysis is to help prevent mishaps and present conclusions drawn in a useful format that can be applied to prevention programs. Once corrective actions are taken, follow-up analysis may be required to determine effectiveness.

**5.8. Safety Analysis Team (SAT) Process.** The SAT process is an AFSEC Analysis and Integration Division (AFSEC/SEA) led proactive, data-driven process with the goal of providing commanders with unbiased, rank-ordered risk mitigation strategies to assist in resource allocation for the preservation of combat capability.

5.8.1. The SAT process focuses exclusively on SME analysis of mishap reports, identification of “documented” risk and development of risk mitigation strategies to meet these hazards. The process then considers the effectiveness of each of the strategies weighed



against real-world constraints, and through detailed mathematical analysis provides commanders with a rank-ordered list of qualified and quantified recommendations for implementation.

5.8.2. SAT assessments can be requested through the AFSEC/SEA. All requests are approved by AF/SE. HQ AFSEC/SEA will conduct the study and provide a final report and out-brief to the requesting commander. For additional information contact HQ AFSEC/SEA: DSN 246-1562, Commercial (505) 846-1562.

**5.9. Air Force Combined Mishap Reduction System (AFCMRS).** AFCMRS provides squadron commanders and above with web-based tools to survey aircrew, maintenance and support personnel regarding safety issues. AFCMRS also offers specialized surveys targeting Nuclear Surety operations, Nuclear Surety maintenance, Nuclear Surety support and Higher Headquarters. Additionally, a driving survey is available which addresses drinking and driving, private motor vehicle and motorcycle issues.

5.9.1. AFCMRS helps commanders identify safety concerns and hazards while highlighting where to focus their hazard assessment efforts. This tool's key goal is identification and correction of subtle organizational conditions that increase mishap potential. Commanders receive real-time feedback on attitudes and perceptions concerning safety climate and culture, resource availability, workload, progress of safety intervention programs and other operational factors relating to safety.

5.9.2. Commanders can request AFCMRS surveys by visiting <https://www.afcmrs.org/>. Other inquiries must be addressed to the HQ AFSEC Human Factors Division (HQ AFSEC/SEH): DSN 263-8454, Commercial (505) 853-8454.

**5.10. Military Flight Operations Quality Assurance (MFOQA).** The Air Force MFOQA Program is a proactive aviation safety initiative that analyzes routine flight data to detect, measure and mitigate mishap precursors while protecting crew identity.

5.10.1. Currently, the MFOQA Program uses former Air Force instructor pilots (IPs) under contract with the Safety Center to analyze the flight data and produce monthly reports for aircrew, operational leaders and safety officers. The MFOQA analysts study the aggregate data to establish a baseline of normal flight operations, detect trends toward operational limits, and examine exceedances of preset parameters. The result of such analyses allows leaders to intervene to correct adverse mission and safety trends before they lead to mishaps. Subsequent analyses of the same data allow leaders to objectively measure whether the corrective action was effective.

5.10.2. Commanders and safety professionals can utilize MFOQA to validate effectiveness of tactics, training and procedures by measuring what actually happens out in the system; compare actual versus calculated aircraft performance data; obtain insight on how effectively flights are following mission profiles; learn where unstable approaches and go-arounds are most likely to occur; detect exact parts of profiles where over/under-loads, over-speeds, and over-temps are most likely to occur; measure variations in mission accomplishment within pre-established limits in order to optimize processes; and assess whether a procedural change has had a positive or negative effect on operations. Also, safety professionals and leaders can request customized analyses that lend specific insights into their operations. Contact AFSEC/SEF at [AFSEC/sefe@us.afmil](mailto:AFSEC/sefe@us.afmil).

**5.11. Airman Safety Action Program (ASAP).** The Air Force ASAP initiative provides a voluntary, web-based reporting tool to report errors and hazards.

5.11.1. ASAP is designed to capture hazards and errors detected by airfield operations, aircrew and maintainers and to distribute that information throughout the aviation community so that all may benefit. ASAP also provides leadership with evidence of risk that may otherwise be invisible, so that risk management actions can be taken to improve safety.

5.11.2. Commanders and safety professionals utilize ASAP to uncover the latest hazards; obtain information needed to brief-up threats and errors related to airfields, terrain, or air traffic control (ATC); and identify seldom seen navigation or weather traps. The program allows decision-makers to look across different mission design series (MDS) to perceive system-wide problems, with command and control, or with non-U.S. transient alert. ASAP also enhances the self-learning, self-awareness and self-correction that take place as reporters are guided through a user-friendly interface that prompts reflection and analysis of what occurred.

5.11.3. ASAP reports can be filed and viewed by anyone with a Common Access Card (CAC) by accessing the following website: <http://www.safety-masap.com/>.

**5.12. Line Operations Safety Audit (LOSA).** The Air Force LOSA Program is a non-punitive, unobtrusive, peer-to-peer observation program that collects safety-related flight data during normal operations in order to assess safety margins and improvement measures.

5.12.1. LOSA is designed to provide early warnings of developing safety problems. The program works by selecting and training highly qualified crewmembers to ride on jump seats during routine flights to record the threats encountered by aircrew, the types of errors committed and how the crews managed those threats and errors in order to maintain safety. How crews manage threats and errors provides excellent insights into training and organizational culture. LOSA observers also study Crew Resource Management (CRM) performance and perform a carefully structured interview to collect aircrew input for safety improvement.

5.12.2. LOSA can be used by commanders and safety professionals to systematically and scientifically identify the strengths and weaknesses of normal operations, decrease the frequency of undesirable events, assess the quality and usability of procedures, detect inappropriate techniques, identify design issues with automation as evidenced through mode errors and aircrew use, and detect normalization of deviance in the form of workarounds and shortcuts used by aircrew, air traffic controllers and dispatchers.

**5.13. Organizational Safety Assessment (OSA).** OSA is a proactive, mishap prevention tool that aids commanders and other leaders in risk assessment and decision making.

5.13.1. The OSA program focuses on operations, maintenance, air traffic control, security forces and other areas directly related to safety. It assesses and quantifies personnel stress levels and perceptions. The OSA identifies organizational climate and culture factors with safety implications and provides base level senior leadership with proven safety recommendations tailored to specific situations.

5.13.2. Installation-level commanders may request an OSA through the AFSEC Human Factors Division (AFSEC/SEH). All requests are approved by AF/SE. HQ AFSEC will

conduct the assessment and provide an out-brief to the requesting commander. Contact AFSEC/SEHA DSN 246-3763 for information.

**5.14. Standard Mishap Metrics.** Mishap metrics (calculated as a number of events against some kind of exposure) are an effective way to compare the actions and accomplishments of your unit. Consideration must be given to the differences in operations, environment, equipment or other variables when comparing organizations or MAJCOMs/FOAs/DRUs. The metrics used by the safety community to this point have focused on results – the number of mishaps experienced over time relative to exposure. HQ AFSEC uses standardized rates for metrics below:

5.14.1. Aviation Mishaps.

5.14.1.1. Total USAF Aviation Class A/B Metric. This metric identifies the number of USAF aviation mishaps (to include flight, flight-related aircraft ground operations and remotely piloted aircraft [RPA]) and aircraft flight and RPA mishap rates per 100,000 flying hours. The Class A/B rate is calculated as the total number of Class A/B mishaps multiplied by 100,000 flying hours divided by the total number of flying hours.

5.14.1.2. USAF Class A Aviation Flight Mishap Metric. This metric identifies the number of USAF Class A aircraft flight mishaps per 100,000 flying hours.

5.14.1.3. Aviation-Related Fatalities Metric. This metric identifies the number of fatalities due to USAF aviation mishaps and mishap rates per 100,000 flying hours.

5.14.1.4. Destroyed USAF Aircraft Metric. This metric identifies the number of destroyed USAF aircraft due to aviation mishaps and mishap rates per 100,000 flying hours.

5.14.1.5. USAF RPA A/B Metric. This metric identifies the number of USAF RPA mishaps and the RPA mishap rate per 100,000 flying hours.

5.14.1.6. USAF RPA Destroyed Metric. This metric identifies the number of USAF destroyed RPA and the rate per 100,000 flying hours.

5.14.2. Class A & B Missile and Explosives Metric. This metric identifies the total Class A and B missile and explosives mishaps.

5.14.3. Class A & B Space Metric. This metric identifies the total Class A and B Space mishaps.

5.14.4. Ground Mishaps.

5.14.4.1. On Duty Ground Metric (Rate). This metric applies to both military and civilian personnel and is used to identify the number of mishaps, fatalities or injuries experienced by military and civilian personnel while on duty per 100,000 personnel per FY. To calculate daily, monthly or yearly on-duty rates, multiply the total number of military and civilian mishap, fatalities or injuries by 100,000 personnel divided by the military and civilian strength. **Note:** AFSEC calculates daily and yearly statistics based upon AFPC/ARPC strength numbers.

5.14.4.2. Off-Duty Ground Metric (Rate). This metric applies only to military personnel and is used to identify the number of mishaps, fatalities or injuries experienced by off-duty military personnel per 100,000 personnel per year. To calculate daily, monthly or

yearly off-duty rates, multiply the total number of military mishap, fatalities or injuries x 100,000 personnel divided by the military strength. **Note:** AFSEC calculates daily and yearly statistics based upon AFPC/ARPC strength numbers.

5.14.4.3. Private Motor Vehicle (PMV) Off-duty Metric (Rate). This metric applies only to military personnel and is used to identify the number of off-duty PMV fatalities experienced by off-duty military personnel per 100,000 personnel.

5.14.4.4. Total Case Incident Rate (TCIR). This metric applies only to civilian personnel and is used to identify the total number of recordable (Class A, B, C, and D) civilian injuries and illness cases per 100 full-time employees that a site has experienced per year. The TCIR is calculated as follows:  $TCIR = (Total\ number\ of\ injuries\ x\ 200,000) / Number\ of\ man\ -hours\ worked$ . Rationale: The 200,000 hours are based on 100 full-time workers working 40 hours per week, 50 weeks each year (100 x 40 hours per week x 50 weeks). Total man hours worked equals the personnel strength x 40 hours per week x 50 weeks per year plus overtime hours worked. **Note:** Actual hours to include overtime should be used for computing civilian hours worked.

5.14.4.5. Days Away, Restricted, and/or Transfer (DART) Case Incidence Rate. This metric applies only to civilian personnel and is used to identify the total number of recordable civilian injuries and illness cases per 100 full-time employees resulting in *days away from work, restricted work activity, and/or job transfer* that a site has experienced in a given time frame. The DART is calculated as follows:  $DART = (Total\ incidents\ resulting\ in\ days\ away,\ restricted\ work\ or\ transfer\ x\ 200,000) / Number\ of\ man\ -hours\ worked$ . Rationale: The 200,000 hours are based on 100 full-time workers working 40 hours per week, 50 weeks each year (100 x 40 hours per week x 50 weeks). Total man hours worked equals the personnel strength x 40 hours per week x 50 weeks per year plus overtime hours worked.

**Note:** Actual hours to include overtime should be used for computing civilian hours worked.

5.14.4.6. To compare your TCIR and DART rates go to the Bureau of Labor Statistics (BLS) website at <http://www.osha.gov/oshstats/work.html> for national averages.

**5.15. Calculating Federal Employee Compensation Metric (Rate).** This metric applies only to civilian personnel. These rates are related to civilian claims that result for on-duty civilian mishaps per 200,000 hours of exposure. To calculate the rates, multiply the number of civilian compensation claims by 200,000 hours divided by civilian strength multiplied by 2,000 hours plus overtime hours, e.g.,  $(Total\ number\ of\ civilian\ compensation\ claims\ x\ 200,000) / Number\ of\ man\ -hours\ worked$ . Rationale: The 2,000 hours equates to 40 hours per week x 50 weeks per year.

## **5.16. AFSAS Analysis and Query Tools.**

5.16.1. AFSAS Data Extraction Tool (DET). The DET was developed to supply AFSAS users with a quick and easy tool for obtaining historical mishap data. The DET will generally meet the majority of requests for raw data, with the added capability to extract the data to either MS-Excel, HTML or MS-Word.

5.16.2. AFSAS Advanced Query Tool. AFSAS Advanced Query Tool is a Business Intelligence capability that provides users a repository of ready-to-go reports, formatted to

define requirements. Reports found within the repository were developed to fulfill the requirements of Air Force safety personnel to generate periodic dashboard-like briefings to senior leadership. Typically, these reports have specific, repetitive data and presentation requirements that change very little over time.

5.16.2.1. AFSAS Advanced Query Tool reports retrieve data directly from AFSAS and other systems automatically, on a daily basis, leaving safety professionals more time to focus on other important tasks other than building repetitive briefings.

5.16.2.2. In addition, the Tool also offers an advance query tool called Query Studio. Query Studio offers users the capability to the DET, to create simple queries, but with greater options to conform data into charts and graphs for presentations.

## Chapter 6

### DEPLOYMENT AND CONTINGENCY SAFETY

**6.1. Deployment and Contingency Safety Program.** The purpose of this chapter is to provide Commander, Air Force Forces (COMAFFOR) a tool to preserve combat capability and manage risk to U.S. based and deployed Air Force units supporting U.S. homeland and worldwide contingency operations. The rotational nature of forces within an Area of Responsibility (AOR) necessitates an active program and commander involvement at all levels. Pre-planning, training, and preparation prior to deployments are essential to mission success. See AFPAM 91-216, *USAF Safety Deployment and Contingency*, for further guidance. **Note:** This instruction also applies to Air Force Forces (AFFOR).

#### 6.1.1. Objectives:

6.1.1.1. Provide timely and accurate safety information to commanders.

6.1.1.2. Enhance deployed unit mishap prevention programs.

6.1.1.3. Recommend required mishap mitigation measures.

6.1.1.4. Recommend required mishap mitigation measures.

6.1.2. No aspect of this chapter is intended to conflict with existing AFPDs, AFIs or Tactics, Techniques, and Procedures (TTP). It is intended to clarify the duties and responsibilities of the AFFOR and deployed Air Force Safety office in the context of a unique deployment environment. In the event that this instruction conflicts with safety guidelines set forth by AOR governing/executive agency, the most restrictive guidance will apply. The requirements of the Deployed and Contingency Safety Program apply to all AFFOR assigned/gained/aligned units for the duration of their assignment or deployment. In specific areas where guidance is lacking in this instruction, good judgment and thorough communication throughout the chain of command must prevail.

#### 6.1.3. Bare Base Safety.

6.1.3.1. Risk Management. While establishing bare base and short term operations, the single most important action a deployed Chief of Safety can take is RTRM. Specific programs as listed in this instruction will be implemented as resources are available to establish and maintain them. Once in place, sustainment ops commanders, supervisors and functional managers at all levels will develop and implement safety, RM and health programs that integrate hazard reduction and safety policy into all on-duty and off-duty operations and activities. **(T-3)**

6.1.3.2. Key Programs. Bare base safety priorities must include a Spot Inspection Program (ensures safety is in the work areas), the Unit Safety Representative program (conduit for information to and from the unit), and Mishap Response Plans. As the location matures, the commander must evaluate the need for additional programs. **(T-3)**

## 6.2. AFFOR/SE.

6.2.1. AFFOR/SE elements will forward deploy as needed within the AOR in support of Air Expeditionary Force (AEF) tasking, Operational Plans (OPLANS), contingency operations, theater engagement or to perform assessments.

### 6.2.2. AFFOR/SE Responsibilities:

6.2.2.1. Guide the execution of the AFFOR Safety Program within the AOR.

6.2.2.2. Coordinate manpower requirements for staff safety functions in the AOR.

6.2.2.3. Coordinate and execute the AFFOR Hazard Review Board. See paragraph 6.7.

6.2.2.4. Coordinate with the COMAFFOR, geographic Combatant Commands (GCC) and other Component Commands of the GCC, Host Nations, sister services, MAJCOMs/NAFs, other governmental agencies and non-governmental agencies on safety-specific theater issues and safety investigations.

6.2.2.5. Author AOR OPLAN annexes, as required.

6.2.2.6. Conduct semi-annual evaluations to ensure continuity of AFFOR-gained units, observe execution of unit safety programs and provide feedback, as necessary.

**6.3. AFFOR Deployed Unit Safety Functions and Organizations.** Air Force Forces (AFFOR) deployed safety offices will establish and maintain all required mishap prevention programs as addressed in this instruction and applicable AOR procedures. AFFOR/SE will provide guidance and assistance as necessary. **(T-2)**

6.3.1. Scope. Most units are composed of an Air Expeditionary Wing (AEW) or Air Expeditionary Group (AEG), associated flying squadrons, maintenance units and mission support units. Where there is no parent AEW or AEG, squadrons/detachments will assume duties listed below, where applicable.

### 6.3.2. Air Expeditionary Wing/Group/Squadron Commander Responsibilities:

6.3.2.1. Coordinate/liaise with AFFOR/SE on requested manpower changes.

6.3.2.2. Provide guidance to the assigned safety staff on performing safety duties.

6.3.2.3. Expeditionary Squadron Commanders will appoint a USR for ground safety. Designate, by signed memo, USRs to the AEW/AEG safety office prior to departure of the current USR or within two weeks of arrival of new appointee. Newly appointed USRs must coordinate with the AEW/AEG Safety Office for training so that training may be accomplished within seven days of appointment notification. **(T-3)**

6.3.2.4. Expeditionary flying Squadron Commanders will designate, by signed memo, an Additional Duty Flight Safety Officer (ADFSO) to the AEW/AEG safety office prior to departure of the current ADFSOS or within two weeks of individual's arrival. Newly appointed ADFSOS must coordinate with the AEW/AEG Safety Office for training so that training may be accomplished within seven days of appointment notification. **(T-3)**

6.3.2.5. At operating locations where the unit stores, handles or transports explosives, the expeditionary unit commanders will designate, by signed memo, an ADWSR to the AEW/AEG safety office prior to departure of the current ADWSR or within two weeks

of arrival, if possible. Newly appointed ADWSRs must coordinate with the AEW/AEG Safety Office for training so that training may be accomplished within seven days of appointment notification. (T-3)

#### 6.3.3. Operating Location and Deployed Safety Office Responsibilities.

6.3.3.1. U.S. homeland based OLs and detachments supporting AFFOR AOR missions continue to employ safety program elements IAW their respective MAJCOM/FOA/DRU directives. U.S. homeland based AFFOR assigned/gained unit safety offices shall incorporate AFFOR/SE coordination into their programs as determined applicable by AFFOR/SE. (T-2)

6.3.3.2. Establish a semi-annual safety council to review recent safety events, items on the hazard abatement plan, hazard reports, SAV results, mishap experience and weapons and flight related issues of concern. This will be accomplished through the ESOH Council unless one is not conducted at a specific location. (T-2)

6.3.3.3. Subject to any GCC limitations, attempt to meet at least bi-monthly with host nation air force or local airfield authority counterparts concerning safety issues. Document meetings, or attempts, in writing and include agenda, attendees, discussion summary, agreements, recommendations, action items and proposed date of next meeting. (T-2)

6.3.3.4. Maintain a Mishap Response Plan (separately or as part of the Installation Emergency Management Plan) reflecting working relationships with local and host agencies. (T-2)

6.3.3.5. Track all identified hazards. RAC 1 – 3 items will be tracked in the Master Hazard Abatement Plan, while RAC 4 and 5 items will be tracked in a local tracking system. Forward all hazard abatement issues that require HHQ funding or involvement to AFFOR/SE for dissemination outside the AOR. In addition to established MAJCOM hazard abatement processes, U.S. based organizations supporting an AFFOR/AOR forward hazard abatement issues affecting AOR mission accomplishment to AFFOR/SE for additional coordination within the Combatant Command. (T-3)

6.3.3.6. Work with contracting officials to review procedures for procurement requests prior to purchase via the Government Purchase Card and AF Form 9, *Request for Purchase*, IAW AFPAM 91-210, *Contract Safety*, to assist purchase agents with procurement of items and equipment that meet or exceed safety requirements, depending on the location.

6.3.3.7. Continuity Books. Each safety office will maintain complete and thorough continuity books covering all duties required by the safety staff. The continuity books will contain at a minimum: End of Tour reports, Rotational Safety Councils, Confined Space Program team meetings, Flight Safety meetings, Airfield Operations Board meetings and USR meetings. (T-3)

6.3.3.8. End of Tour Reports. All individuals deployed into safety positions will submit end of tour comments to the deployed COS. All deployed COSs will consolidate inputs from each safety discipline and will submit a written report to AFFOR/SE before the completion of their deployment and maintain a copy in their continuity book. This report



should focus on lessons learned, positive and negative. Activities, actions and duties performed while deployed may be included but the primary focus of the report is to improve the Deployed Safety Program. These reports will be posted in AF-JLLIS Document Library (<https://www.illis.mil>) and forwarded or made available to other organizations (e.g. AFSEC, MAJCOMs/FOAs/DRUs, NAFs and wings), as appropriate. **(T-3)**

#### 6.3.3.9. Weapons Safety.

6.3.3.9.1. Explosives Site Planning. Site Planning will be accomplished IAW AFMAN 91-201. AFFOR/SEW is the MAJCOM-level coordination authority for deployed AOR base explosives site planning involving Air Force munitions assets. AFFOR/SEW will coordinate/liaise on similar issues in other AORs in order to keep COMAFFOR apprised of issues which may affect AFFOR combat capability. **(T-1)**

6.3.3.9.2. Deployed Weapons Safety Managers (WSM) are responsible for initiating action for the explosives site planning of potential explosives sites at their base. Deployed WSMs will direct any problems involving explosives site planning to AFFOR/SEW. AFFOR/SEW will review all AOR explosives site plans and provide guidance/technical assistance to theater operating location WSMs. Final approval must go through appropriate agencies as identified in AFMAN 91-201. **(T-2)**

6.3.3.9.3. Units that handle less than 1,000 rounds of small arms ammunition, and are not licensed, are not required to assign an ADWSR. Supervisors are responsible to monitor activities of these units. **(T-3)**

6.3.3.9.4. Radiation Hazard Zones. Ensure Radiation Hazard Zones are established with the focus on personnel, electro-explosive devices (EED) and petroleum, oils and lubricants (POL). Ensure interoperability with other systems deployed to the same location. Refer to AFI 48-9, *Radio Frequency Radiation (RFR) Safety Program*, AFI 48-139, *Laser and Optical Radiation Protection Program*, AFMAN 91-201, and AFI 91-208, *Hazards of Electromagnetic Radiation to Ordnance (HERO) Certification and Management*, for additional information. **(T-1)**

#### 6.3.3.10. Ground Safety Managers (GSMs) are responsible for:

6.3.3.10.1. Providing safety briefings for the Personnel Support for Contingency Operations (PERSCO) office's RIGHT START program. The RIGHT START safety briefing should address safety conditions/issues specific to that particular base/environment. **(T-2)**

6.3.3.10.2. Inspecting all assigned units and facilities annually. A report will be provided to the unit commander and all identified discrepancies will be tracked until closed. **(T-1)**

6.3.3.10.3. Reviewing project designs and plans for projects and construction. Coordinate with SEW on projects. **(T-2)**

6.3.3.11. Space Safety. For operationally deployed space assets, system-related safety issues will be directed through Wing Safety (or equivalent), NAF/Center Safety, MAJCOM Safety and HQ AFSEC/SES. Wing or equivalent-level safety offices responsible for deployed assets are responsible for the following: **(T-2)**

6.3.3.11.1. Directed Energy Systems. Ensure all directed energy systems are directed away from aircraft traffic patterns and personnel. Ensure coordination with local air traffic control to avoid development of flight patterns that may impinge upon Directed Energy clear zones. Directed energy systems aimed above the horizon must interface with the Laser Clearinghouse (per DoDI O-3100.11, *Illumination of Objects in Space by Lasers*). (T-2)

6.3.3.11.2. Frequency Management. Deploying units contact a Spectrum Manager at the squadron, wing or installation, who, in turn, will contact the MAJCOM and AFFOR frequency managers prior to their unit's arrival at the operating location to de-conflict potential interference issues. Upon arrival, deploying units contact the local frequency manager to follow up on any changes which may have occurred while en route. Ensure compliance with the published Joint Restricted Frequency List (JRFL). (T-2)

**6.4. Mishap Prevention Program.** AFFOR deployed safety offices will establish and maintain all required mishap prevention programs as addressed in this instruction and applicable AOR procedures. AFFOR/SE will provide guidance and assistance as necessary. (T-2)

6.4.1. Mishap Investigation. In general, COMAFFOR is not the convening authority for mishaps in the AOR. Convening authority falls to the home station MAJCOM/FOA/DRU IAW AFI 91-204. The convening authority may contact the COMAFFOR and/or AFFOR/SE to request local deployed safety office SIB support beyond ISB responsibilities, provided the deployed commander and AFFOR/SE support the request. Mishap Investigations should be accomplished IAW AFI 91-204 with the following caveats:

6.4.1.1. Aviation. The COMAFFOR is the convening authority for all Class E-BASH, Controlled Movement Aerial Violations (CMAVs), HATRs and appropriate HAPs to promote location-dependent trending and intervention. (T-1)

6.4.1.2. Ground. The COMAFFOR is the convening authority for mishaps related to War Readiness Materiel assets or injury/death of an AOR PCS member.

6.4.1.3. Explosives. The COMAFFOR is the convening authority for all munitions mishaps that don't involve improper weapons activation (not actuated from weapon/aircraft). For incidents involving accidental or improper weapons activation (misfire, jamming, etc.), the home station MAJCOM/FOA/DRU of the person/aircraft is convening authority.

6.4.2. Mishap Notification Procedures. AFFOR/SE will be notified immediately of any Class A or Class B mishaps and included as an addressee on all safety reports, e-mails and messages concerning mishaps, incidents or events that involve USAF assets in or supporting contingency operations in the AOR. In the event of a Class A or Class B aviation, ground or weapons mishap, AFFOR/SE will be the primary coordinator with MAJCOM/FOA/DRU convening authorities and/or the Air Force Safety Center. (T-1)

**6.5. Monthly, Quarterly and Annual Safety Awards.** Deployed individuals and units are eligible for MAJCOM/FOA/DRU and AF-level safety awards. Refer to AFI 36-2833, *Safety Awards*, for additional information regarding AF-level safety awards.

**6.6. AFFOR/SE Visits.** AFFOR/SE will conduct semi-annual visits to AOR Operating Locations and deployed units. Additionally, AFFOR safety will conduct interim visits as requested by AEW/G commanders. Due to the cyclical nature of deployed personnel, these visits are an important tool to reinforce safety presence with the subordinate units. SAVs will focus on areas requested by the AEW/AEG safety office or as determined by AFFOR/SE, based on previous PE reports and other correspondence.

## Chapter 7

### AVIATION SAFETY

**7.1. Program Management.** Each unit conducting or supporting flight operations must have an aviation safety program. The COS or senior installation safety representative will ensure an active safety presence at the installation through the plans, programs and training responsibilities outlined below. **(T-0)**

7.1.1. The host safety office is responsible for the base aviation safety program.

7.1.2. Tenant units coordinate their flight safety programs with the host to avoid duplication. If the host does not have an FSO allocation, the largest tenant with an allocation manages the base flight safety program. If neither the host nor the tenant has an FSO allocation, flight safety responsibilities revert to the host COS.

**7.2. Plans.** The FSO/FSM/ FSNCO will help develop and review appropriate emergency response plans and coordinate on any other installation plans involving flight safety or aircraft emergencies. These plans should include but are not limited to: **(T-3)**

7.2.1. Installation Emergency Management Plan (IEMP). The COS is responsible for ensuring that units develop an aviation specific portion of the IEMP. The COS ensures the plan defines roles, responsibilities and notification requirements for leadership and all involved agencies. The IEMP should include elements of or a reference to existing plans concerning the disaster response required by AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations*. **(T-3)**

7.2.2. Bird/Wildlife Aircraft Strike Hazard (BASH) Plan. The host safety office will establish the BASH plan, to include, defining the nature and extent of wildlife hazards and implementation of the plan. Plan implementation may require environmental controls and changes to bird/wildlife dispersal/removal techniques and operational procedures. Cooperative agreements for managing fish and wildlife resources require coordination with state and Federal conservation agencies prior to implementation. IAW AFI 32-7064, paragraph 14.1, the Integrated Natural Resource Management Plan must support the installation's BASH plan. The BASH plan must identify local procedures and permits for the proper collection, handling and disposal of wildlife carcasses and biological material discovered on the airfield and aircraft. **(T-3)**

**7.3. Programs.** The COS will ensure the following programs are established, maintained and reviewed at least annually. **(T-3)**

7.3.1. BASH Program. Responsibilities for establishing and administering the Air Force BASH Program:

7.3.1.1. HQ AFSEC/SEFW will:

7.3.1.1.1. Analyze wildlife strike data to provide baseline information to Air Force agencies.

7.3.1.1.2. Approve the exchange and distribution of Air Force wildlife strike data to US Government and foreign agencies.

- 7.3.1.1.3. Monitor MAJCOM BASH reduction programs.
  - 7.3.1.1.4. Instruct FSOs/FSMs/FSNCOs in BASH reduction and provide basic BASH training at AETC-sponsored training programs (i.e., FSNCO Safety Course, Airfield Management Course, etc.).
  - 7.3.1.1.5. Propose BASH reduction policies and guidelines to AF/SE.
  - 7.3.1.1.6. Review proposed conservation projects and federal legislation affecting the Air Force's BASH reduction program and coordinate the Air Force response with AF/SE and other agencies.
  - 7.3.1.1.7. Identify and develop programs to aid in evaluating potential bird strike hazards in low-level airspace.
    - 7.3.1.1.7.1. Avian radars are approved for use on Air Force airfields and ranges provided they are fielded IAW UFC 3-260-01, *Airfield and Heliport Planning and Design*, and in coordination with the Installation Radiation Safety Officer. Coordinate set up and use for inclusion in Airfield Operations Instruction and by Airfield personnel. **Note:** At OCONUS locations, use of and siting of avian radars is governed by Status of Forces Agreements (SOFA), Host Nation Funded Construction Agreement (HNFA), and in some instances, Bilateral Infrastructure Agreements (BIA).
    - 7.3.1.1.7.2. Avian radars are systems specifically designed to detect hazardous wildlife flying around an airfield environment or specified low-level airspace. Applications of the avian radar may include, but are not limited to, airborne wildlife movement monitoring; detection of attractive habitats for wildlife exclusion, harassment and depredation; Bird Watch Condition (BWC) determination; and flying window alteration.
  - 7.3.1.1.8. At installation request, coordinated through the respective MAJCOM, provide technical assistance to reduce wildlife hazards at bases with flying operations.
  - 7.3.1.1.9. At installation request, coordinated through the respective MAJCOM, provide technical assistance in evaluating installation BASH plans.
  - 7.3.1.1.10. Coordinate Air Force BASH program with other federal and host nation agencies, as applicable.
  - 7.3.1.1.11. Identify Air Force BASH research requirements, developing and managing research projects.
  - 7.3.1.1.12. Establish and maintain liaison with international, federal, state and private organizations regarding wildlife hazard reduction.
  - 7.3.1.1.13. Administer Air Force's wildlife hazard advisory systems and bird feather/wildlife strike remains identification program.
  - 7.3.1.1.14. Provide technical assistance to Safety Investigation Board president when a wildlife hazard may be a factor in a mishap.
  - 7.3.1.1.15. Chair the Air Force BASH Steering Group meetings, as needed.
- 7.3.1.2. Air Education Training Command (AETC) will:

- 7.3.1.2.1. Incorporate wildlife aircraft strike hazard reduction training into AETC-sponsored formal training courses used to educate base pest management specialists, safety technicians and airfield managers in wildlife aircraft strike hazard reduction.
- 7.3.1.2.2. Incorporate safety awareness of wildlife aircraft strike hazards into safety briefings provided at joint undergraduate navigator training, joint specialized undergraduate pilot training (JSUPT), and pilot instructor training (PIT) programs.
- 7.3.1.3. MAJCOMs will:
  - 7.3.1.3.1. Annually review BASH plans from each installation conducting or supporting flight operations. Ensure all tenant units are included in the base BASH plan.
  - 7.3.1.3.2. Conduct on-site reviews of installation BASH programs, to include potential hazards and mitigation techniques, at least every 36 months. Coordinate as needed with HQ AFSEC/SEFW. Tenant unit BASH programs will be reviewed by owning MAJCOMS and may be scheduled during reoccurring inspections or staff assistance visits.
  - 7.3.1.3.3. Consider potential wildlife strike hazards when developing or revising operational procedures, training routes, ranges, instrument approach and departure procedures, establishing MOA or low altitude tactical navigation areas.
- 7.3.1.4. National Guard Bureau (NGB) will:
  - 7.3.1.4.1. Ensure each ANG installation/unit conducting or supporting flight operations has an annually reviewed written BASH plan. Ensure all tenant units, where applicable, are included in the ANG base BASH plan.
  - 7.3.1.4.2. Conduct on-site reviews of installation BASH programs, to include potential hazards and mitigation techniques, at least every 72 months. Coordinate as needed with HQ AFSEC/SEFW. Non-ANG tenant unit BASH programs will be reviewed by owning MAJCOMs at least every 36 months and may be scheduled during recurring inspections or staff assistance visits.
  - 7.3.1.4.3. Consider potential wildlife strike hazards when developing or revising operational procedures, training routes, ranges, instrument approach and departure procedures, establishing MOA or low altitude tactical navigation areas.
- 7.3.1.5. Wing, Base and Installation Safety Offices are responsible for the following:
  - 7.3.1.5.1. Base Level BASH Program. Host Air Force, AFRC and ANG installations/units that support any type of Air Force flight operations at their airfield will establish a BASH program unless delegated to a different organization through a formal agreement (i.e., Contract, Host-Tenant Support Agreement, MOA). However, if a formal agreement cannot be reached that is amenable to all parties involved, primary responsibility for the BASH program will default to the organization responsible for management of the flight safety program. The BASH program will include all tenant flying units. The BASH program requires complete documentation of local wildlife hazards, effects on missions and possible solutions to include hazards surrounding ranges used by local flying units. Tenant units located on an airfield that is not hosted by the Air Force, AFRC or ANG will establish a BASH program with

the host authority (civilian airport, Naval Air Station, Federal airfield, etc.). Units that operate RPAs beyond line of sight, such as Contingency Operations, and have no other local physical flying assets assigned to them are not required to maintain a BASH plan for their geographically-separated operating location. **(T-3)**

7.3.1.5.2. Review the BASH plan annually for accuracy and compliance with current directives, revising as necessary. Ensure all tenant units are included in the base BASH plan. If applicable, document avian radar operational procedures in the unit's BASH Plan, Operational Instruction or local supplement prior to use. **(T-3)**

7.3.1.5.3. BASH programs at overseas locations depend on international agreement provisions, Geographic Combatant Command (GCC) policy and host nation support. MAJCOMs will evaluate those plans to ensure the spirit of this instruction is complied with to the maximum extent possible.

7.3.1.5.4. Each installation with flying operations must develop procedures within the BASH plan that lists responsibilities and methods for wildlife control. Due to the complexities of hazard abatement and potential for loss of aircraft and crew, it is strongly recommended that a dedicated wildlife hazard management specialist be retained on staff. **(T-3)**

7.3.1.5.5. Establish a Bird Hazard Working Group (BHWG) consisting of organizations involved in airfield wildlife control, natural resources management, operations and safety. The BHWG must meet at least semi-annually with minutes maintained. The Vice Wing Commander of AF Flight Assets or equivalent will chair this meeting. The BHWG will coordinate base improvement projects, e.g., grounds maintenance, wastewater treatment, golf courses, for BASH-related issues. **(T-3)**

7.3.1.5.6. Develop a Bird Hazard Warning System to inform aircrews of possible flight hazards due to wildlife activity in local areas. Bird Watch Condition (BWC) codes will be used to communicate local wildlife activity along with location, number and type of wildlife. Installation BASH plans will specify aircrew notification procedures for BWC changes. The most expeditious means of communicating the status change should be used, e.g., ATC or SOF radio transmissions combined with Automated Terminal Information Service (ATIS) updates or other broadcast medium. **Note:** BWC codes are based on observations of local airfield wildlife activity and are independent of Bird Avoidance Model (BAM) or Avian Hazard Advisory System (AHAS) risk hazard levels. **Note:** BWC SEVERE or MODERATE requires action from the installation's wildlife dispersal team to reduce the BWC to LOW as soon as possible. BWC codes are defined as: **(T-3)**

7.3.1.5.6.1. SEVERE. Wildlife activity on or immediately above the active runway or other specific location representing high potential for strikes. Supervision and aircrews must thoroughly evaluate mission need before conducting operations in areas under condition SEVERE.

7.3.1.5.6.2. MODERATE. Wildlife activity near the active runway or other specific location representing increased potential for strikes. BWC MODERATE requires increased vigilance by all agencies and supervisors and caution by aircrews.

7.3.1.5.6.3. LOW. Wildlife activity on and around the airfield representing low potential for strikes.

7.3.1.5.7. Designate Phase I and Phase II periods of wildlife activity based on historical wildlife activity information. Phase I represents normal, baseline wildlife activity. Phase II represents times of significant increases in local wildlife activity, normally associated with migratory movements, seasonal increases of local wildlife populations, or local land use practices (farming, ranching, or hunting). Establish flight and scheduling procedures to minimize risks based on local hazards associated with Phase I and II. Publish Phase I and II designations in the appropriate DoD Flight Information Publications. Critical updates may be made using Notice to Airman System.

7.3.1.5.8. Regardless of Phase designation, the highest levels of daily wildlife activity normally occur +/- one hour of sunrise/sunset as birds move to and from their roosts. Flight operations should be avoided during these periods unless mission essential. A risk analysis shall be completed to determine the potential risk to operations during these periods. Missions scheduled during +/- one hour of sunrise and sunset should be included in pre-mission risk management and analysis worksheets. Appropriate measures should be taken to mitigate the risk if required.

7.3.1.5.9. Maintain a zero-tolerance towards large free-roaming animals on or adjacent to the aircraft movement area. **Note:** Free-roaming animals are, but not limited to, deer, canines, geese, etc. (T-3)

7.3.1.5.10. Grass Height. Mow aircraft movement area (AMA) to maintain a grass height between 7 and 14 inches. The AMA is that area of the airfield encompassed by the Primary Surface and the Clear Zones, as well as apron areas and taxiways, regardless of their location. As a minimum, turf shall be maintained 500 feet outside the AMA boundary where able. Installations located in arid climates where growing grass is difficult may develop natural vegetation on the airfield to limit attractiveness to wildlife. These situations require comprehensive vegetation/wildlife hazard management and will be reviewed individually by HQ AFSEC/SEFW for approval. Installation safety offices may request a grass height restriction waiver from HQ AFSEC/SEFW after MAJCOM coordination. (T-1)

7.3.1.5.11. Technical Assistance. Technical assistance is available through the USAF BASH Team, HQ AFSEC/SEFW, 9700 G Avenue, Suite 266, Kirtland AFB, NM 87117-5670. DSN: 246-5674/5848/5673 or Commercial: (505) 846-5674/5848/5673, and electronically by accessing the Safety Center web page. Obtain additional information on wildlife strike hazard reduction from AFPAM 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH) Management Techniques*, and on wildlife strike reporting from AFI 91-204, *Safety Investigations and Reports*, and AFMAN 91-223, *Aviation Safety Investigations and Reports*.

7.3.2. Hazardous Air Traffic Reporting (HATR) and High Accident Potential (HAP) Programs. HATR and HAP information is vital to Air Force flight safety. Use of information taken from these reports is for mishap prevention, not to initiate disciplinary actions. HATR information is not privileged information and is releasable outside Air Force channels except