BY ORDER OF THE COMMANDER,
AIR FORCE MATERIEL COMMAND

AFMC INSTRUCTION 90-902

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Command Policy

OPERATIONAL RISK MANAGEMENT

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFPD 90-9, *Operational Risk Management*, and AFI 90-901, *Operational Risk Management*, which establish requirements to integrate and sustain an Operational Risk Management (ORM) program. This instruction establishes requirements for implementing an integrated ORM program throughout Air Force Materiel Command (AFMC). It assigns responsibilities for program elements and contains program management information. AFMC centers and subordinate units are responsible for establishing and sustaining their respective programs according to the program elements described in this instruction and AFI 90-901. This instruction applies to AFMC Headquarters and to all AFMC product centers, air logistics centers (ALC), Air Force Research Laboratory (AFRL), test centers, field operating agencies (FOA) and direct reporting units (DRU), and may be supplemented as needed to support local ORM programs. It does not apply to Air National Guard or US Air Force Reserve units and members. Consistent with a paperless office approach, all reports, plans, checklists and other ORM related documentation may be maintained or submitted as electronic documents unless prohibited by other regulations.

Section A—ORM Process Description

1. Definition, Purpose and Scope. ORM is a decision-making process to systematically evaluate possible courses of action, identify risks and benefits, and determine the best course of action for any given situation. ORM enables commanders, functional managers, supervisors, and individuals to maximize operational capabilities while minimizing risks, all dimensions of risk, by applying a systematic process. It is appropriate for use by all organizations and personnel, both on- and off-duty. Successful mission accomplishment requires use of risk management processes and application of the ORM process ensures more consistent results. ORM techniques and tools add both structure and thoroughness to the traditional approach to mission accomplishment, thereby directly strengthening AFMC's support to the Air Force's warfighting posture.

2. HQ AFMC, Center and Organizational ORM program implementation should support the following CSAF goals:

2.1. Enhance mission effectiveness at all levels, with due consideration for preserving assets and safeguarding the health and welfare of personnel.

2.2. Integrate ORM into mission processes so decisions are based upon assessments of risk integral to the activity and mission.

2.3. Create an Air Force in which every leader, airman, and employee is trained and motivated to manage risk in all they do, both on- and off-duty.

2.4. Identify opportunities to widen the gap between what the Air Force can do in battle and what its adversaries can do, helping to ensure decisive victory in any future conflict at the least possible cost.

3. ORM Process Principles. Collectively, four principles govern all actions associated with managing risk. These principles apply before, during, and after all tasks and operations. Consistent application requires training on the ORM processes.

3.1. Accept no unnecessary risk. Unnecessary risk comes without an equal or greater return in terms of real benefits or available opportunities. All AFMC missions and daily routines involve risk. The most logical procedures for accomplishing a mission are those that meet all mission requirements while exposing personnel and resources to the lowest acceptable risk.

3.2. Make risk decisions at the appropriate level. Making risk decisions at the appropriate level establishes clear accountability. Those accountable for the success or failure of the mission must be included in the risk decision process.

3.3. Accept risk when benefits outweigh the costs. All potential benefits should be compared to all potential costs. The process of weighing risks against opportunities and benefits helps to maximize unit capability. Even high-risk endeavors may be undertaken when there is clear knowledge that the sum of the benefits exceeds the sum of the costs.

3.4. Integrate ORM into operations and planning at all levels. To effectively apply risk management, commanders must dedicate time and resources to integrate ORM principles into planning and operational processes. Risk assessments of operations are most mission supportive when they are done as a normal way of conducting a mission, not an add-on process performed by people not otherwise involved.

4. ORM Fundamentals. All AFMC ORM programs will include the essential concepts outlined below:

4.1. Comprise a comprehensive system for improving individual and organizational risk management performance in all functional areas and operations.

4.2. Be tailored to meet the unique mission needs and operational requirements of each organization.

4.3. Provide the process and tools to develop and enhance awareness and understanding of at-risk activities and behavior for all personnel, both on- and off-duty.

4.4. Ensure application of ORM processes identifies areas where regulatory guidance is overly restrictive or otherwise not consistent with mission requirements. In this event, the risk assessment may be used to support requests for appropriate level waivers, variances or changes, but will not in itself constitute authority to violate any directive, policy, standard, or other applicable regulatory guidance.

4.5. Incorporate a continuous, systematic decision-making tool as explained in AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*, consisting of the following steps: Identify the Threats or Hazards, Assess the Risk, Analyze Risk Control Measures, Make Control Decisions, Implement Risk Controls then Supervise and Review.

Section B—Program Management

5. Responsibilities.

5.1. AFMC ORM Program Manager will:

5.1.1. Handle day-to-day activities of the AFMC ORM program, including support of the Air Force ORM Steering Committee, development of command specific ORM policy, requirements, and an overall strategy necessary to facilitate integration and sustainment of ORM within the command.

5.1.2. Work with the Air Force ORM Program Manager to ensure continuity with the overall Air Force ORM program

5.1.3. Arrange staff assistance visits as necessary to ensure viable programs in all AFMC operations.

5.1.4. Make changes to ORM program guidance as necessary to sustain the AFMC ORM program.

5.1.5. Support the Air Force ORM Integrated Product Team (IPT), as required.

5.1.6. Represent AFMC at the Air Force Safety Center (AFSC) ORM Steering Committee.

5.1.7. Represent AFMC on the ORM Working Group (ORMWG) to assist the Air Force ORM IPT in developing the Air Force ORM policy, requirements, and overall strategy. Additionally, the ORMWG assists by identifying line organization requirements and facilitating the exchange of crosstell and lessons-learned information among the commands. (The working group is chaired by the Air Force ORM Program Manager, is comprised of representatives from each MAJCOM and reports to the Air Force ORM IPT).

5.2. HQ AFMC ORM Steering Committee. This committee will facilitate implementing a comprehensive, mission supportive ORM program within AFMC as required by AF and AFMC guidance.

5.2.1. The chairperson of the AFMC ORM Steering Committee will oversee the development, implementation and sustainment of the AFMC ORM program. The chairperson will also represent AFMC/CC on the steering committee.

5.2.2. Membership includes all HQ AFMC directorates and AFRL.

5.2.3. To work more detailed issues, the AFMC ORM Steering Committee chairperson may form ORM Working Groups and/or IPTs. These working groups/IPTs, consisting of select steering committee members and individuals from AFMC centers/wings, will address problems and concerns in implementing and sustaining the command ORM program.

5.2.4. The AFMC ORM Steering Committee will meet at least annually.

5.3. HQ AFMC directors and Center, DRU, and FOA commanders will:

5.3.1. Serve as principal advocates for ORM and key decision-makers in allocating assets to control risk and/or accept it when mission benefits dictate and are responsible for implementing an ORM program within their activities/operations.

5.3.2. Center/Wing Commanders will support the center/wing ORM steering committee chairperson.

5.3.3. HQ AFMC directors and center commanders will:

5.3.3.1. Ensure ORM principles are integrated, to the extent that they are possible and mission supportive, in strategic planning, fiscal guidance, training and educational programs.

5.3.3.2. Provide overall leadership and management of the AFMC ORM Program within their areas of responsibility.

5.3.3.3. Ensure ORM implementation within functional areas by specifying types of tasks and operations for which ORM processes are required.

5.4. Center ORM steering committees will:

5.4.1. Include sufficient directorate representation to assure all center personnel are included in the ORM program. (The role of safety office, ORM training personnel and steering committee members is one of instructor/facilitator/advisor supporting organizational ORM process implementation.).

5.4.2. Develop a center ORM implementation plan and monitor implementation progress.

5.4.3. Provide ORM tools, education and training, guidance, and other initiatives necessary to support ORM integration and sustainment specific to their center, organizations and functional areas.

5.4.4. Establish procedures to ensure all personnel receive ORM education and training tailored to their needs, with additional training when warranted by mission changes.

5.4.5. Review all ORM training programs periodically to assure ORM training is tailored to the needs of personnel.

5.4.6. Monitor use of ORM processes by center organizations to ensure sustainment of active programs.

5.4.7. Establish working groups and IPTs as needed to support and guide implementation of ORM processes throughout all AFMC organizations.

5.4.8. Recommend support requirements to the center/wing commander for funding or manning.

5.4.9. The committee chair will provide an annual summary report to the center/wing commander for endorsement and forwarding to the HQ AFMC ORM program manager within 30 calendar days of the end of the fiscal year. Sample report guidance is included in **Attachment 2**.

5.4.10. Ensure the HQ AFMC ORM program manager is added to the distribution list for center/wing ORM steering committee minutes. (Note: To minimize organizational impact, ORM steering committee meetings may be held in conjunction with other meetings.)

5.4.11. Ensure opportunities identified by ORM processes and noteworthy ORM applications are forwarded to the HQ AFMC ORM program manager for lessons learned/crosstell purposes.

5.4.12. Center ORM steering committees will meet at least annually.

5.5. HQ AFMC and center directorates/functionals responsible for educational and training programs will:

5.5.1. For AETC provided training, ensure appropriate inputs are provided to AETC for ORM related course development and integration. Integrate ORM principles, concepts, and techniques into all center and command level education and training programs (i.e., squadron commanders' and supervisors' courses), as appropriate.

5.6. Training. Center/wing commanders and HQ AFMC and center/wing directors will assure all personnel receive appropriate ORM training. ORM training may be provided by functional area instructors, contractor or installation level instructors, or via computer-based training software (when such becomes available), as commanders/directors determine appropriate. Sample course materials for the following courses are available for download and tailoring at the AFSC ORM web site - **https://rmis.saia.af.mil/training.asp**. **Attachment 4** identifies the topics required for each level of training. ORM training shall be documented locally.

5.6.1. Training will be tailored to the functions being performed and will be divided into four levels:

Level 1 - ORM Applications Course for Instructors/Advisors/Facilitators - Highest level of training, consists of attendance at the AFSC ORM applications trainer course, or as taught locally using tailored AFSC course materials, AFPAM 90-902, Operational Risk Management, and Level 1 trained instructors. Completion qualifies an individual as an advisor/facilitator/instructor on ORM processes.

Note: An acceptable alternative training approach is to use the ORM Essentials for Leaders course (listed below) as a training baseline, then add one or more "modules" of additional information (covering the information in the AFSC applications trainer course). This approach allows supervisors and managers to enhance their knowledge of ORM processes and participate as instructors/facilitators/advisors.

Level 2 - ORM Essentials for Leaders – This training uses the AFSC developed course materials or locally developed equivalent, tailored for supervisors and managers, on applying ORM processes to their operations. After an appropriate period of applying ORM processes to daily activities, Level 2 trained individuals may provide Level 3 fundamental ORM training to their workforce.

Level 3 - Fundamentals Course - This course provides basic ORM training for non-supervisory personnel, and is typically provided by supervisors/managers. Accompanied by simplified examples applicable to the employee's job, this training is designed to provide non-supervisory personnel a working knowledge of ORM processes. Course materials should be tailored to mission needs.

Level 4 - ORM Executive Leaders Session - Materials designed to assist with executive level ORM training for senior executives (typically commanders, deputies, and branch chiefs at O-6/GS-15 or above) as an aid to: understanding the processes in use within their organizations, the benefits and limitations of current processes, and the opportunities possible with enhanced risk management processes. Senior executives are not expected to train others in ORM processes. Completion of ORM Applications Course for Instructors/Advisors/Facilitators or ORM Essentials for Leaders course (Level 1 or 2 training, respectively) also satisfies the requirement for Level 4 training.

5.6.2. As an ORM program matures and ORM processes are fully integrated in all operations within an organization, newcomers to the organization will learn to effectively manage risk through exposure to day to day processes and operations. At this point, organizations should

assess the need to continue separate ORM training courses. ORM training courses can be reinstated when warranted.

5.7. Organizational requirements (Center/Wing/Directorate and subordinate units. Includes HQ AFMC Directorates):

5.7.1. Support commander involvement as described in **paragraph 5.3.1.**

5.7.2. Integrate an ORM program, consistent with the center implementation plan, throughout the organization. Document the program and monitor integration progress.

5.7.3. Appoint and train ORM Facilitators/Advisors as necessary (at least one per organization) to oversee and assist with ORM implementation within the organization. Exception: Extremely small organizations, i.e., Historian, Chaplain, etc., may request an exemption to this requirement from the center or HQ AFMC ORM steering committee, as appropriate.

5.7.4. Inform the commander of any program shortfalls within the organization and document corrective action.

5.7.5. Ensure organization policies for making risk decisions at the appropriate level are in place and readily available and that policy, guidance and taskings require and support ORM processes.

5.7.6. Ensure all personnel receive appropriate ORM training.

5.7.7. Ensure all personnel understand and apply ORM processes to manage risk in daily activities, both on- and off-duty, as appropriate.

5.7.8. Ensure supervisors provide supplemental mission and workplace specific ORM training to personnel on an as-needed basis (i.e. for job or mission changes).

5.7.9. Assess organizational ORM program, at least annually, using attached checklist (**Attachment 3**). **Note:** Organizations may add items to the checklist as needed to assure a thorough assessment.

5.8. Program Sustainment - The goal of ORM is to reach a point where every leader, airman and employee effectively manages risk in all they do, both on- and off-duty. A successful ORM program will accomplish the following four general tasks by the end of FY 2005:

5.8.1. ORM will be institutionalized.

5.8.2. All personnel will be appropriately trained.

5.8.3. ORM will be integrated into all aspects of all operations.

5.8.4. ORM will be applied in both peacetime and deployed operations. Center ORM programs shall be designed to sustain the use of ORM processes as the normal, accepted way of managing risk.

VANCE E. LINEBERGER, Colonel, USAF
Director of Safety

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 90-9, *Operational Risk Management*

AFI 90-901, *Operational Risk Management*

AFPAM 90-902, *Operational Risk Management (ORM) Guidelines and Tools*

Abbreviations and Acronyms

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFSC—Air Force Safety Center

ANG—Air National Guard

DRU—Direct Reporting Unit

FOA—Field Operating Agency

HQ—Headquarters

IPT—Integrated Product Team

MAJCOM—Major Command

ORM—Operational Risk Management

PDO—Publications Distribution Office

USAF—United States Air Force

WWW—World-wide Web

Terms

Operational Risk Management (ORM)—The systematic process of identifying threats, hazards or impediments, assessing risk, analyzing risk control options and measures, making control decisions, implementing control decisions, accepting residual risks, and supervising/reviewing actions for effectiveness.

Risk—The probability and severity of loss or adverse impact from exposure to various threats or hazards.

Risk Assessment—The process of detecting threats or hazards and their causes, and systematically evaluating the probably of occurrence and the potential severity, should they occur.

System—A composite, at any level of complexity, of personnel, procedures, materials, tools, equipment, facilities, and software. The elements of this composite entity are used together in the intended operational or support environment to perform a given task or achieve a specific mission requirement.

Attachment 2

RECOMMENDED ORM ANNUAL SUMMARY REPORT ITEMS

A2.1. AFMCI 90-902, Paragraph **5.4.9.**, requires the Center ORM Steering Committee chairperson to provide an annual summary report to the center/wing commander. The report, when endorsed by the center/wing command section, is then forwarded to the AFMC ORM Program Manager within 30 calendar days of the end of the fiscal year. The following list is provided to assist centers in developing complete and uniform reports, yet allow centers the most flexibility in implementing an ORM program. To provide a complete picture of a center's ORM program, the report should include, but is not limited to, the following items:

A2.1.1. Center Steering committee actions and accomplishments.

A2.1.1.1. Current committee membership.

A2.1.1.2. Any subgroups or working groups established, and their progress.

A2.1.1.3. Describe the center implementation plan (include a copy with annual report) and subparts relating to implementing ORM at the center.

A2.1.1.4. Budgets – general accounting of funds allocated and how spent.

A2.1.1.5. Other accomplishments.

A2.1.2. Center training efforts.

A2.1.2.1. Training materials produced or in work (please include samples when available).

A2.1.2.2. Identify number of people trained, and level of training provided, broken out by organization. Also, as training is an extended process, include the rationale for selecting and scheduling training for these organizations.

A2.1.2.3. Training plan for current Fiscal Year (FY) and beyond (number of courses, by level, by quarter) and include the rationale for selecting and scheduling organizations/attendees.

A2.1.3. Successful applications.

A2.1.3.1. List a sampling of areas and topics where ORM processes have been successfully applied, and lessons learned from those applications.

A2.1.3.2. Number of successful applications passed on to, or received from, other centers. (Note: A successful application need not have originated at your center. We encourage crosstalk with other centers and adoption of applications from other centers where appropriate.)

A2.1.3.3. Side benefits noted, like productivity enhancements, fewer mishaps, or environmental improvements.

A2.1.4. Problem areas.

A2.1.4.1. Difficulties affecting development and implementation of center ORM program.

A2.1.4.2. Impeding organizational, center or higher headquarter guidance.

A2.1.4.3. Training deficiencies or lack of training capabilities.

A2.1.4.4. Funding shortfalls.

A2.1.4.5. Other areas posing problems which could impact complete program implementation by end of FY-05. (**Note:** Include corrective action, either planned or implemented, for each problem.)

A2.1.5. Resource needs.

A2.1.5.1. Resource requirements as determined by the center ORM steering committee and could involve funding, facilities, people, or guidance.

A2.1.5.2. As centers are in various stages of implementing ORM programs, another facet would be any surplus resources which could be used by another organization or center.

A2.1.6. Future plans.

A2.1.6.1. Describe expected changes or enhancements to the center implementation plan or program, and the approximate dates, if known.

A2.1.7. Miscellaneous.

A2.1.7.1. Center CC, wing, or directorate comments, if any.

A2.1.7.2. Summary of feedback from facilitators/supervisors/workers, or metrics.

A2.1.7.3. Questions or requests for AFMC assistance.

A2.1.7.4. Interfaces with other commands or services.

A2.2. This report should provide the center commander and HQ AFMC ORM Steering Committee a complete picture of ORM implementation at the center. It should enable HQ AFMC to determine if any changes to the AFMC ORM program are necessary and to assist individual centers with local issues. Please feel free to add other information as necessary to describe your program.

Attachment 3

OPERATIONAL RISK MANAGEMENT (ORM)

Figure A3.1. AF Form 2519

ALL PURPOSE CHECKLIST		PAGE 1 OF 2 PAGES		
TITLE/SUBJECT/ACTIVITY/FUNCTIONAL AREA **Organizational ORM Activities (Center/Wing/Directorate and subordinate units. Includes HQ AFMC Directorates)** (AFI 90-901/AFMCI 90-902)		OPR	DATE 1 Sep 01	
NO.	ITEM *(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph)*	YES	NO	N/A
1. AFMCI 90-902, paras 5.3.1./5.7.1. Is there evidence the organizational commander is an advocate for the ORM program?				
2. AFMCI 90-902, paras 5.3.3.1./5.7.2. Is integration of ORM into planning at all levels supported by the organizational commander?				
3. AFMCI 90-902, paras 5.7.2./5.7.4. Is implementation of ORM evident throughout the organization?				
	a. Can the organization show ORM integration in all levels in all functional areas down through shop level?			
	1. Is the program documented?			
	2. Is integration of ORM processes monitored?			
	3. Is integration of ORM processes stressed (to prevent superficial ORM programs)			
	b. If there are shortfalls in implementation, is there evidence the commander has been informed of these shortfalls and corrective action taken in a timely manner?			
4. AFMCI 90-902, para 5.7.5. Risk Decision Making.				
	a. Do policy, guidance and taskings require and support ORM processes?			
	b. Are there published center/organizational policies for elevating risk decisions?			
	c. Are risk decisions made at the appropriate level?			
5. AFMCI 90-902, para 5.7.3. Have sufficient ORM instructors/advisors/facilitators been appointed to assist with ORM implementation within the organization?				
6. AFMCI 90-902, para 5.7.3. Have the ORM instructors/advisors/facilitators attended the AFSC sponsored ORM applications course for instructors/advisors/facilitators, or locally taught equivalent?				
7. AFMCI 90-902, paras 5.6./5.7.6./5.7.8. ORM training.				
	a. Is there a program in place to provide all organization personnel appropriate ORM training?			
	b. Have 90% or more of organization supervisory personnel been trained?			
	c. Have 90% or more of organization worker-level personnel been trained?			

AF FORM 2519, NOV 91 (EF-V2) PREVIOUS EDITION WILL BE USED.

Figure A3.2. AF Form 2519 (Reverse)

NO.	ITEM *(Assign a paragraph number to each item. Draw a horizontal line between each major paragraph)*	YES	NO	N/A
	d. Is there a process for training new personnel soon (nominal 60 days) after assignment?			
	e. Are personnel who have not received ORM training scheduled to receive the appropriate training?			
	f. Is supplemental ORM training provided as warranted by job or mission changes?			
	8. AFMCI 90-902, para 5.7.6. Can personnel identify, in general terms, the six steps of the ORM process?			
	9. AFMCI 90-902, para 5.7.7. Do commanders and supervisors ensure personnel apply ORM to daily activities?			
	10. AFMCI 90-902, para 5.7.7. Is there evidence that personnel at all levels apply ORM principles, concepts, and techniques to assess the risks associated with their daily activities, both on- and off-duty, as appropriate?			
	11. AFMCI 90-902, para 5.7.9. Has the organization assessed its ORM program within the last 12 months?			
	12. AFMCI 90-902, para 5.8. Will the organization, following the current ORM program, meet all para 5.8. goals, by the end of FY 2005?			

Attachment 4

REQUIRED TOPICS FOR ORM TRAINING COURSES

A4.1. As a minimum, the following topics shall be covered for each of the indicated levels of ORM training.

Level 1 –ORM Instructor/Advisor/Facilitator Training

- ORM Concepts, Principles and Process
- The Six Step ORM Process
    - Identify the Hazards
    - Access the Risks
    - Analyze the Risk Control Measures
    - Make Control Decisions
    - Implement Risk Controls
    - Supervise and Review
- Introduce AFPAM 90-902, AFI 90-901, AFMCI 90-902
- USAF Implementation Strategy and Status
- Application of Tools
    - Identify the Hazards
    - Access the Risks
    - Risk Control Options
    - Decision Making
    - Implementation
    - Supervise and Review
- Strategic ORM
- Student Exercises Designed for Students to Apply the ORM Process

Level 2 (Supervisor and Manager) and Level 3 (Workforce) Training

- ORM Concepts, Principles and Process
- The Six Step ORM Process
    - Identify the Hazards

- Access the Risks
- Analyze the Risk Control Measures
- Make Control Decisions
- Implement Risk Controls
- Supervise and Review

- Introduce AFPAM 90-902, AFI 90-901, AFMCI 90-902
- ORM Applications Pertinent to the Organization's Work Environment
- Student Exercises Designed for Students to Apply the ORM Process (Level 2 only)

Level 4 – Executive Overview

- Overview of USAF ORM Program
- Overview of The Six Step ORM Process
  -.Identify the Hazards
  - Access the Risks
  - Analyze the Risk Control Measures
  - Make Control Decisions
  - Implement Risk Controls