

**BY ORDER OF THE COMMANDER
OGDEN AIR LOGISTICS COMPLEX**

**OGDEN AIR LOGISTICS COMPLEX
INSTRUCTION 90-801**



29 MARCH 2023

Special Management

***INDUSTRIAL PROCESS
CONTROL RISK MANAGEMENT***

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This publication implements the policies and requirements that define the Ogden Air Logistics Complex (OO-ALC) Industrial Process Control (IPC) Risk Management (RM) Program. This instruction applies to all military and civilian personnel in the OO-ALC, to include geographically separated units. It incorporates Risk Management principles from AFI 90-802, *Risk Management*. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and are disposed of in accordance with (IAW) the Air Force (AF) Records Disposition Schedule which is located in the AF Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command.

1. Overview.

1.1. This document instructs all OO-ALC personnel on the utilization and mechanics of the Industrial Process Control Risk Management Process. It incorporates IPC RM principles from AFI 90-802, Air Force Sustainment Center Manual (AFSCMAN) 21-102, *Depot Maintenance Management*, AFSCMAN 21-102 OO-ALCSUP, AFSC Pamphlet (AFSCPAM) 63-128, *Risk Management*, and MIL STD 896.

1.2. The purpose of IPC RM is to identify potential problems before they occur. RM should be utilized such that risk-handling activities can be planned and invoked as needed across the life of the work to mitigate adverse impacts on achieving objectives. Safety risks, including but not limited to e.g., loss of life, injury, and property damage, will be managed through the OO-ALC Safety office. Other risks identified may be managed and handled within the maintenance group or by an external office (e.g., Bio-Environmental). Risks that affect work, but are managed by an external source, may be monitored and tracked as part of this process.

1.3. IPC RM must be addressed throughout the work life cycle. Risks need to be identified, documented, analyzed, and communicated to appropriate stakeholders. Risks are worked by order of risk level.

2. Risk Responsibilities.

Table 1. Risk Assessment Levels and Acceptance Authority.

RISK ASSESSMENT LEVEL	ACCEPTANCE AUTHORITY
LOW	FLIGHT CHIEF
MEDIUM	SQUADRON CC/DIRECTOR
HIGH	GROUP CC/DIRECTOR
EXTREMELY HIGH	OO-ALC/CC

2.1. IPC Risk Program Manager. (As assigned by group director)

2.1.1. Works with stakeholders to validate risks. Reports to leadership the status of risks and oversees the risk management process.

2.1.2. Facilitates the IPC RM meeting. Stakeholders should be invited to discuss their identified risk.

2.1.3. Using Maintenance One (MX1), compiles a list of identified risks and tracks status for each risk.

2.1.4. Must email risk status report at least quarterly to risk owners.

2.1.5. Will be available for meetings requested by risk owners to discuss identified risks.

2.2. OO-ALC Commander (OO-ALC/CC).

2.2.1. Risk Owner for validated Extremely High risks in the complex.

2.2.2. Approves risk mitigation plans for risks ranked as Extremely High at validation and accepts residual risks after mitigation.

2.2.3. Directs IPC Risk Program Manager to continue tracking or not to track closed risks validated as extremely high.

2.3. Group Director/Group Deputy Director.

2.3.1. IPC risk owner for all risks validated as High within their group and elevates all Extremely High risks to OO-ALC/CC.

2.3.2. Assigns or delegates the assignment of risk program manager in his/her group.

2.3.3. Reviews risk report from risk program manager at least quarterly to review risks ranked as High in their group. May request meetings with risk program manager as needed.

2.3.4. Approves risk mitigation plans for risks ranked as High at validation and accepts residual risks after mitigation.

2.3.5. Directs risk program manager to either continue tracking or to not track closed risks validated as High.

2.4. Squadron Director.

2.4.1. IPC Risk Owner for all risks that are validated as Medium.

2.4.2. Reviews risk report from risk program manager at least quarterly to review risks ranked as Medium in their group.

2.4.3. Approves risk mitigation plans for risks ranked as Medium at validation and accepts residual risks after mitigation.

2.4.4. May instruct risk program manager to either continue tracking, or to not track closed risks.

2.5. Flight Chief.

2.5.1. IPC Risk Owner for all risks that are validated as Low.

2.5.2. Reviews risk report from risk program manager at least quarterly to review risks ranked as low in their group.

2.5.3. Approves risk mitigation plans for risks ranked as Low at validation and accepts residual risks after mitigation.

2.5.4. May instruct risk program manager to either continue tracking, or to not track closed risks.

3. IPC Risk Management Process Overview.

3.1. IPC RM meetings should be held monthly for the purpose of updating risk records. Meetings should be held to review newly reported risks, current state of open risks, and to identify risk handling steps.

3.2. IPC risks are assessed for validation as a risk and whether the risk should be handled within the group or from an external office (e.g., Safety, Bio-Environmental).

3.3. Validated risks that will be handled within the group will have a risk Point of Contact (POC) assigned by IPC Risk Owner and a plan developed.

3.4. Once a risk handling plan has been developed, the risk owner is informed, and approval is sought for the proposed course of action.

3.5. Updates on the risk handling status will be presented in the IPC RM meeting.

3.6. IPC Risk program manager will update risk status in MX1 database.

4. IPC Risk Management Procedures.

4.1. IPC Risk Identification.

4.1.1. Risks may be identified by anyone. The individual who identifies a risk is referred to as the risk identifier.

4.1.2. Risks may be identified through a planned event, or spontaneously through day-to-day observations. Process Failure Mode Effects Analysis (PFMEA) completed as part of industrial process control is an example of a planned event.

4.1.3. The risk identifier may request updates about their reported risk from the risk program manager throughout the process.

4.1.4. Risk identifier shall report the identified risk using the AF Form 4437, *Deliberate Risk Assessment Worksheet*, or equivalent and send it to the risk program manager for upload into the MX1 database.

4.1.5. Risk identifier completes sections 1-4 on the AF Form 4437 or equivalent, with the supervisor if necessary.

4.1.5.1. If more assistance is required to complete these steps, coordinate with the risk program manager to establish course of action for completion.

4.1.6. Upon completion of AF Form 4437 or equivalent, send the completed document to the risk program manager for upload to MX1. The risk program manager shall add information from AF Form 4437 or equivalent and attach initial documentation into MX1 database.

4.2. IPC Risk Validation.

4.2.1. IPC risk program manager will facilitate the validation of all risks.

4.2.1.1. Validation is performed to determine if a risk on an AF Form 4437, or equivalent, shall be identified as a risk (concern has not occurred yet) verses a corrective action (concern has occurred).

4.2.2. Validation also entails determining owning organization for a risk.

4.2.3. Justification for validation determination shall be recorded in MX1.

4.2.4. IPC risk identifier shall be notified if the risk is invalidated and the reasoning for this change.

4.2.5. If determined to be a risk.

- 4.2.5.1. Determine if it is a process risk.
 - 4.2.5.1.1. If it is a process risk, route it to the risk program manager.
 - 4.2.5.1.2. IPC risk program manager will route it to the risk owner for risk acceptance and/or to assign resources for risk mitigation.
 - 4.2.5.1.3. IPC risk owner assigns a risk POC for mitigation plan creation or accepts risk as is.
- 4.2.5.2. If it is not a process risk, risk program manager will route to owning organization (e.g., Safety, Bio-Environmental).
 - 4.2.5.2.1. Record the owning organization's tracking reference (e.g., risk assessment code), in the comments section of MX1.
- 4.2.5.3. If it is determined to be an invalid risk:
 - 4.2.5.3.1. Change risk status to "Closed" and annotate justification in MX1.
 - 4.2.5.3.2. Communicate the risk status change to invalid with justification to affected squadron director, engineering director, flight chief and risk identifier.
 - 4.2.5.3.3. Save all objective evidence in MX1.
- 4.3. IPC Risk Assessment.
 - 4.3.1. Risks will be scored by process engineers during a planned event. IPC risk program manager may schedule IPC RM meetings with stakeholders to score spontaneously identified risks, IAW AFI 90-802.
 - 4.3.2. After considering the source/cause of the risk and the scoring of the risk, the method of handling the risk will be determined. (Reference AFI 63-101/20-101, *Integrated Life Cycle Management*, Attachment 3, *Life Cycle RM Risk Matrix*). Below are the methods for handling risk:
 - 4.3.2.1. Risk Assumption
 - 4.3.2.2. Risk Avoidance
 - 4.3.2.3. Risk Control
 - 4.3.2.4. Risk Transfer
 - 4.3.2.5. Risk Elimination
 - 4.3.3. Some identified risks may not be mitigated based on risk level and/or as a result of management decision.
 - 4.3.4. For risks deemed high enough in scoring or ranking, an IPC RM handling plan for this risk item will be developed with cost estimates and timeframe (as applicable) for the risk handling activities.
 - 4.3.5. An IPC Risk POC will be assigned by the risk owner for planning and handling the risk, along with establishing a due date.

4.4. IPC Risk Mitigation Plan Approval Process.

4.4.1. The developed plan will be given to the risk program manager for entry into MX1 and routed to appropriate leadership level for approval.

4.4.2. Once a mitigation plan has been approved, the risk program manager will attach the approved plan and update the status to “Mitigation Plan Approved” in MX1.

4.4.3. If mitigation plan is not approved, appropriate adjustments as recommended by leadership are implemented in the plan and the plan is resubmitted for approval.

4.4.4. Once the mitigation plan has been completed, attach evidence and update status to “Mitigation Plan Complete” in MX1.

4.5. IPC Risk Mitigation Implementation.

4.5.1. IPC Risk POC will ensure that the steps outlined in the plan are implemented.

4.5.2. IPC Risk POC will present status updates concerning their risk in the IPC RM meetings.

4.5.3. After completing all mitigation plan steps, there may be some residual risk that must be accepted. Only the risk owner may accept residual risk.

4.5.4. All objective evidence pertaining to the risk will be documented in MX1 as either attachments or notes (e.g., emails, memorandum for record).

4.5.5. When risk has been mitigated and residual accepted, the risk program manager will annotate in MX1 and change the risk Status to “Closed.”

4.6. Leadership Reporting.

4.6.1. IPC risk program manager will report all validated risks to the appropriate level of leadership.

4.6.2. A quarterly report must be submitted to the group director, or their delegate to review open risks at their level of ownership (risks rated as High or Extremely High).

4.6.3. A quarterly report must be submitted to the squadron director, or their delegate to review open risks at their level of ownership (risks rated as Medium or higher that pertain to their squadron).

4.6.4. The flight chief shall be cc'd on reports submitted that pertain to their flight.

4.6.5. Risks rated as Extremely High must be routed through the group director for routing to the OO-ALC/CC. Risks rated as High must be reported to the group director or group deputy director.

4.6.6. Risks may only be accepted by the risk owner, even if the residual risk level drops to a lower level.

5. Purpose of Objective Evidence.

5.1. Objective Evidence.

5.2. Objective evidence can be referenced in the future to prove an action or outcome was accomplished at a specific time. It is NOT your memory of details after the event has occurred.

5.3. Objective evidence consists of but are not limited to emails, memos, signed forms, and meeting minutes.

RICHARD W. GIBBS,
Brigadier General, USAF
Commander, Ogden Air Logistics Complex

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 33-332, *Records Management and Information Governance Program*, 23 March 2020

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

AFI 90-802, *Risk Management*, 1 April 2019

AFSCMAN 21-102_OO-ALCSUP, *Depot Maintenance Management*, 25 August 2021

AFSCPAM 63-128, *Risk Management*, 12 December 2019

MIL *HDBK* 896, 25 August 2016

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

AF Form 4437, *Deliberate Risk Assessment Worksheet*

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFSCMAN—Air Force Sustainment Center Manual

AFSCPAM—Air Force Sustainment Center Pamphlet

DAF—Department of the Air Force

IAW—In Accordance With

IPC—Industrial Process Control

MX1—Maintenance One

OO-ALC—Ogden Air Logistics Complex

OO-ALC/CC—Ogden Air Logistics Complex Commander

OPR—Office of Primary Responsibility

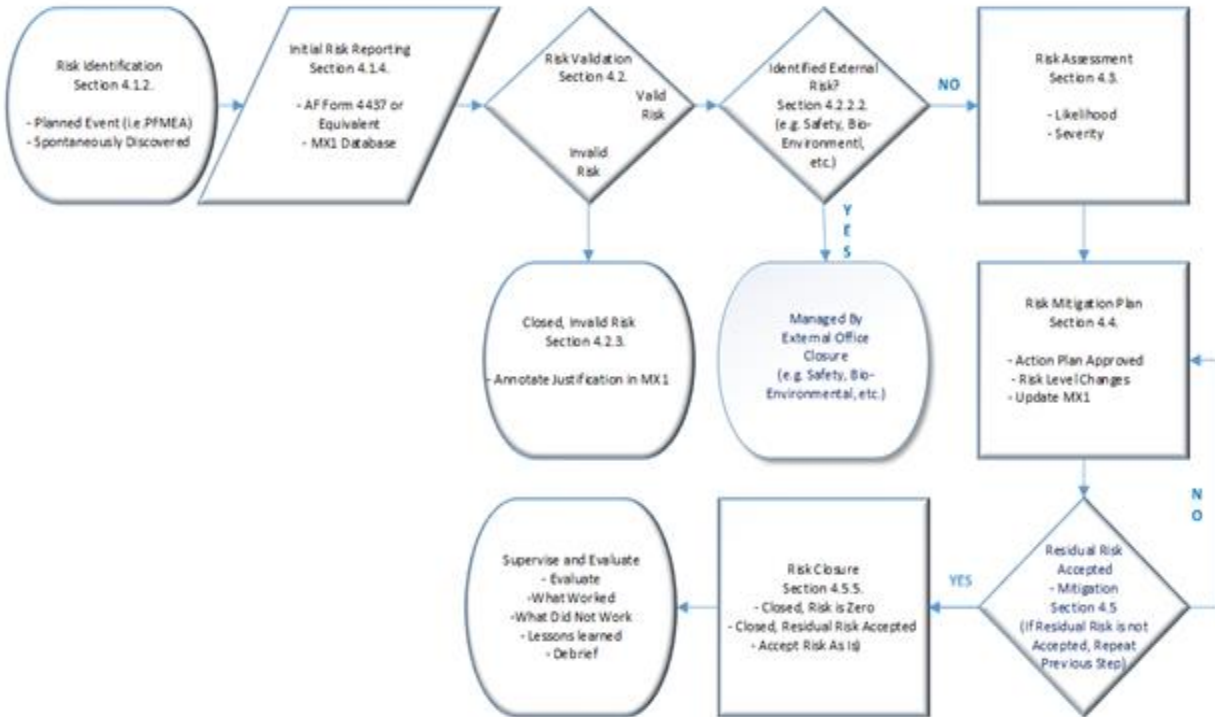
PFMEA—Process Failure Mode Effects Analysis

POC—Point of Contact

RM—Risk Management

Attachment 2 RISK MANAGEMENT FLOW

Figure A2.1. IPC RM Flowchart.



Attachment 3
SAMPLE AF FORM 4437

Figure A3.1. AF FORM 4437 with Instructions.

DELIBERATE RISK ASSESSMENT WORKSHEET							
AGENCY DISCLOSURE NOTICE: Voluntary, however, failure to use may have a negative effect on mission effectiveness at all levels and lead to failure of preserving assets and safeguarding health and welfare.							
AUTHORITY: DoDI 6055.01, AFDP 90-8 and AFI 90-802. PRINCIPAL PURPOSE: Conduct a formal risk assessment and ensure the assessment is properly documented for future evaluation and reference. ROUTINE USES: Used to develop and enhance awareness and understanding of at-risk activities and behavior of personnel both on- and off-duty. SYSTEM OF RECORDS NOTICE: Not applicable.							
1. EVENT/MISSION/TASK OF RISK ASSESSMENT:							
A. EVENT DESCRIPTION:						B. EVENT DATE:	
2. PREPARED BY:							
A. LAST NAME, FIRST, MI			B. RANK/GRADE		C. DUTY TITLE/POSITION		
D. WORK EMAIL			E. PHONE DSN/COMM		F. UNIT		
G. UTC/CIN (as required)			H. TRAINING SUPPORT/LESSON PLAN OR OPORD (as required)				
RISK ASSESSMENT MATRIX	HAZARD	PROBABILITY	PROBABILITY				RISK MANAGEMENT
			A. Frequency (Annual/Quarterly)	B. Severity (Critical/High/Medium/Low)	C. Complexity (Simple/Complex)	D. Visibility (High/Low)	
			III	II	I	II	
			IV	III	II	I	
3. SUB-TASK/SUB-STEP AND RISK ASSESSMENT (Fields expand as needed, Add, Remove and Move Sub-Task/Steps with left side controls)							
#	A. SUB-TASK/SUB-STEP	B. HAZARD	C. INITIAL RISK LEVEL	D. CONTROL	E. HOW TO IMPLEMENT WHO WILL IMPLEMENT	F. RESIDUAL RISK LEVEL	
1							
2							
G. COURSE OF ACTION							
H. OVERALL RISK LEVEL AFTER CONTROLS ARE IMPLEMENTED						I. PREPARER SIGNATURE	
4. ATTACHMENTS (Once the preparer has signed files can be viewed only)							
ADD ATTACHMENTS							
ADD ATTACHMENTS (Include supporting files and/or photos to create a complete electronic file)							
REMOVE ATTACHMENTS (Remove File/Photo)							
OPEN ATTACHMENTS (Open File/Photo)							
5. RISK ACCEPTANCE AUTHORITY (Once the approver has signed, the form will lock except "Risk Assessment Review" and "Feedback and Lessons Learned")							
A. APPROVAL/DISAPPROVAL OF EVENT/MISSION			B. APPROVER LAST NAME, FIRST, MI		C. RANK/GRADE		
D. ADDITIONAL INFORMATION/APPROVER COMMENTS							
E. DUTY TITLE/POSITION			F. APPROVER SIGNATURE				
6. RISK ASSESSMENT REVIEW (To be conducted when Risk Assessment applies to on-going Operations Activities)							
A. DATE		B. LAST NAME, FIRST, MI		C. RANK/GRADE		D. DUTY TITLE/POSITION	
E. REVIEWER COMMENTS							
7. FEEDBACK AND LESSONS LEARNED							
INSTRUCTIONS FOR COMPLETING WORKSHEET							
This form has been designed to be completed digitally. Fields will expand automatically to allow for more rows, in addition some sections will allow instances as they are needed.							
1. Event/Mission/Task of Risk Assessment							
A. Event Description: Briefly describe overall Mission, or Task that the Risk Assessment is being conducted for.							
B. Event Date (YYYYMMDD)							
2. Preparer Information: This section shall be filled out by the individual completing the Deliberate Risk Assessment Worksheet:							
A. Preparer's Name:							
B. Preparer's Rank or Grade:							
C. Preparer's Duty Title or Position:							
D. Preparer's Work Email:							
E. Preparer's Phone (DSN or Commercial):							
F. Preparer's Unit/Station:							
G. Preparer's User Identification Code (UTC) or Common ID Number (CIN):							
H. Required Training Support/Lesson Plan(s) or OPORD:							
3. Sub-Task/Sub-Step and Risk Assessment: Entries on the left control the instances of Tasks/Steps, add, remove, move around as needed. Numbering will reorganize when clicking away from controls area.							
A. Sub-Task/Sub-Step of Mission/Task: Briefly describe any Sub-Tasks associated with Primary Task that warrant risk mitigation consideration.							
B. Hazard: Enter specific hazards related to the Sub-Task.							
C. Initial Risk Level: Using the Risk Assessment Matrix, determine probability, severity, and associated Risk Level, enter level into column.							
D. Controls: Enter risk mitigation resources/controls identified to abate or reduce risk relevant to the hazard identified in block C.							
E. How to Implement/Who Will Control: Provide brief description of sub-task means of employment (e.g., OPORD, Briefing, and rehearsal) and the name of the individual, such as officer that has primary responsibility for control implementation.							
F. Residual Risk Level: After controls are implemented, determine resulting probability, severity and residual Risk Level.							
G. Course of Action (COA): Identify specific tasks/levels of responsibility for supervisory personnel and provide the decision authority with a recommended COA for approval or disapproval based upon the overall risk assessment and impact to mission and personnel. "Risk vs. Reward" consideration based on mission intent.							
H. Overall Risk after Controls are Implemented: Assign an overall Risk Assessment Level. This is the highest Residual Risk Level (Block F).							
I. Signature of Preparer							
4. Add New Attachments							
5. Risk Acceptance Authority:							
A. Approval/Disapproval of Event/Mission							
B. Approver's Name:							
C. Approver's Rank/Grade:							
D. Additional Information/Approver Comments: Any comments or information the Decision Authority desires to add including additional guidance.							
E. Approver's Duty Title/Position:							
F. Approver's Signature:							
6. Risk Assessment Review: Should be conducted on a regular basis. Reviewers should have sufficient oversight of the mission/activity and controls to make valid remarks and inputs regarding needed changes or adjustments (as necessary). In the event "Residual Risk" rises above the level already approved, operations should cease until the appropriate approval authority is contacted and approves continued operations.							
A. Reviewer's Name:							
B. Reviewer's Rank/Grade:							
C. Reviewer's Duty Title/Position:							
D. Reviewer's Comments:							
7. Feedback and Lessons Learned: Provide specific inputs on the effectiveness of risk controls and their contribution to mission success or failure. Feedback/recommendations for control/mission/controls, actionable insights or alternate actions is essential for effective RMA. Training/valid lessons learned are submitted and included as necessary to affected personnel.							
AF FORM 4437, 20180122							
Prescribed by: AFI 90-802							