
ORM

What is ORM?

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Operational Risk Management (ORM) is a logic-based, common sense approach to making calculated decisions on human, material, and environmental factors before, during, and after Air Force operations.

Common Excuses for avoiding ORM???

- You've carefully thought out all the angles.
- You've done it a thousand times.
- It comes naturally to you.
- You know what you're doing, its what you've been trained to do your whole life.
- Nothing could possibly go wrong, right ?

Think Again…

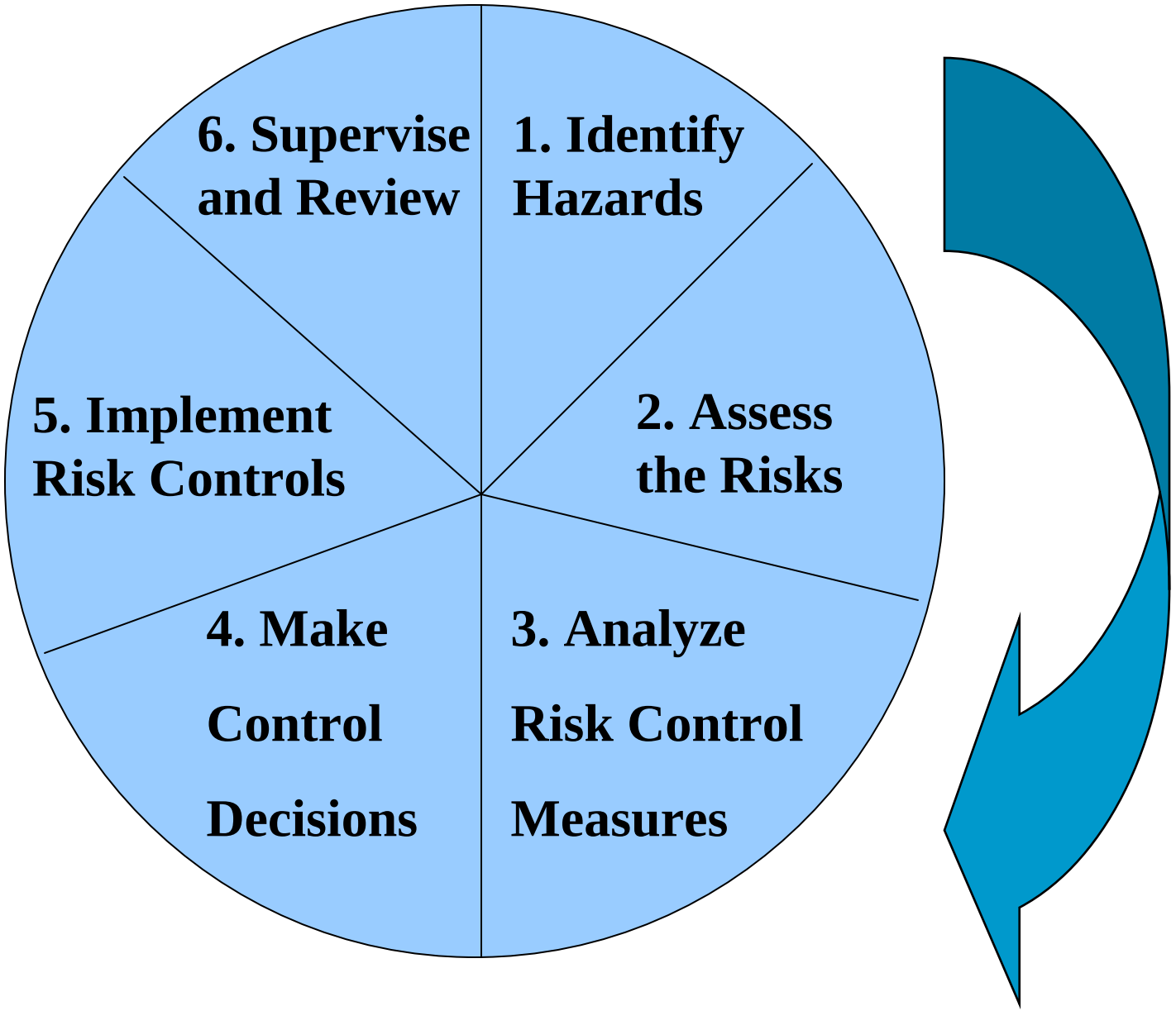
Why ORM?

- Enables commanders, managers, and supervisors to maximize operational capabilities while minimizing risks
- Enhances mission effectiveness at all levels while preserving assets and safeguarding health and welfare
- Key is to be PROACTIVE

ORM Goals and Objectives

1. Integrate ORM into the AF Doctrine and Planning at all levels
2. Execute mission and tasks using ORM
3. Do not accept unnecessary risk
4. Make risk decisions at appropriate level
5. Accept risk when benefits outweigh costs

ORM 6-Step Process



Step 1: Identify the Hazard

* **Hazard**-- any real or potential condition that can cause injury, illness, or death to personnel, or damage to or loss of equipment and property

* Use the **5-M Model** to identify hazards related to your overall mission

*Man

* Machine

*Media (Environment)

* Management

*Mission/Mishap

5M Model Explanation

***MAN:** *Selection, Performance, Personal Factors*

***MACHINE:** *Design, Maintenance, Logistics, Tech Data*

***MEDIA:** *Climactic, Operational, Hygienic, Vehicular, Pedestrian*

***MANAGEMENT:** *Standards, Procedures, Controls, Procurement*

*****Management is often the controlling factor in mission success or failure!!!**

Tools to Identify Hazards

- **Operational Analysis** - *list the major phases or functions of the mission or operation*
- **Preliminary Hazard Analysis** - *list hazards for each major task or operation*
- **"What If" Tool** - *brainstorm "what if" scenarios and list their hazards*
- **Map Tool** - *sketch a simple picture of the operation and list associated hazards*
- **Other Tools: Logic Diagram, Change Analysis, Cause and Effect Tool**

Step 2: Assess the Risk

*Use the RISK MATRIX to combine **Severity** and **Probability** estimates to rank and form assessments for each hazard

Severity

PROBABILITY		Frequent	Likely	Occasional	Seldom	Unlikely
		A	B	C	D	E
Catastrophic	I	Extreme	Extreme	High	High	Medium
Critical	II	Extreme	High	High	Medium	Low
Moderate	III	High	Medium	Medium	Low	Low
Negligible	IV	Medium	Low	Low	Low	Low

Step 2 cont'd

Severity Definitions

Catastrophic: complete mission failure, death, or loss of system

Critical: major mission degradation, severe injury, occupational illness, or major system damage

Moderate: Minor mission degradation, injury, minor occupational illness, or minor system damage

Negligible: less than minor mission degradation, injury, occupational illness, or minor system damage

Step 2 cont'd

Probability Definitions

Frequent: Occurs often in career (individual)/equipment's (item) service life. Everyone exposed. Continuously experienced

Likely: Occurs several times in career/equipment service life. All members exposed. Occurs frequently

Occasional: Occurs sometime in career/equipment service life. All members exposed. Occurs sporadically, or several times in inventory/service life

Seldom: Possible to occur in career/equipment service life. All members exposed. Remote chance of occurrence; expected to occur sometime in inventory service life

Unlikely: Can assume will not occur in career/equipment service life. All members exposed. Possible, but improbable; occurs only very rarely

Step 3: Analyze Risk Control Measures

*Investigate specific strategies and tools that reduce, mitigate, or eliminate the risk. Effective control measures reduce or eliminate the severity and/or probability of risk.

***Approaches for Controlling Risk with Examples:**

Reject: don't do it because it is too dangerous
Avoid: cancel the job
Delay: wait until daylight
Transfer: let a private contractor do the work
Spread: two person lift vs. one person
Compensate: pay additional money to workers or back-up plan
Accept: must do it so brief personnel on risks
Modify: alter procedures or equipment

Step 3: Analyze Risk Control Measures

***Approaches for Controlling Risk with Examples Cont'd:**

Reduce (most often used):

1. Plan or design for Minimum Risk
2. Incorporate Safety Devices
3. Provide Warning Devices
4. Develop Procedures and Training

Reduce Options:

Engineer- limit speed, lower voltage
Guard- increase distance, prevent access
Improve Task Design- realign tasks, ergonomics
Limit Exposure- essential personnel only
Selection of Personnel- set minimum qualifications, experience
Train & Educate- core and leadership tasks
Warn- signs, visual alarms, briefings
Motivate- measurable standards, incentives
Reduce Effects- emergence equipment, rescue capabilities
Rehabilitate- personnel, refurbish facilities and equipment

Step 4: Make Control Decisions

*After controls have been selected to eliminate hazards or reduce risks, determine the level of residual risk for the selected tasking, mission, or course of action.

OPTIONS:

-Accept plan as is

-Reject the plan out-of-hand

-Modify the plan to develop measures to control risk

-Elevate the decision to a higher authority

Step 4 cont'd

Factors to Make Risk Decisions at the Appropriate Level:

-Who possesses the best insight to the benefits and costs of a risk?

-Who has the resources to mitigate a risk?

-Who answer in the event of a mishap?

-What level makes the most operational sense?

-Who is the senior person at the scene?

-Who makes these decisions in other activities?

-Who will make decisions in combat operations?

Step 5: Implement Risk Controls

- Make assets available to implement controls
- Inform personnel in the system of ORM process results and subsequent decisions
- Careful documentation
- Make implementation clear
- Establish accountability
- Provide Support

Step 6: Supervise and Review

•Use measurements and indicators to monitor risk control effectiveness:

Measures	Examples	Indicators
Behavior	people's behavior	survey
Condition	spot check equipment	break rates
Attitude	ask workers opinion	survey
Knowledge	baseline qualifications	AF Form 797
Program	collect data- reference	charts
Mission	monitor metrics	reliability rates

What is Expected…

- All are responsible for using ORM
- Understand the ORM Process
- Proper Use of the ORM Process On & Off Duty
- More Emphasis by Commanders/Supervisors