## Risk Management at a Glance

### Terms

- Hazard
- Risk
- Probability
- Severity
- Estimating
- Exposure

Risk Assessment
Risk Decision
Risk Management
Risk Management Integration
Gambling

## Hazard

Any actual or potential condition that can cause injury, illness, or death of personnel, damage to or loss equipment, property or mission degradation.



## Hazard

Any real or potential condition that can cause injury, illness, or death to personnel or damage to or loss or equipment or property, mission degradation, or damage to the environment.



### Hazard

A condition or activity with potential to cause damage, loss or mission degradation.



Chance of a hazard or bad consequences; the probability of exposure to chance of injury or loss from a hazard; risk level is expressed in terms of hazard probability and severity.





Chance of adverse outcome or bad consequence; such as injury, illness, or loss. Risk level is expressed in terms of hazard probability and severity.

### **Types of Risks**

TacticalAccidentResidual



## **Tactical Risk**

Risk concerned with a hazard that exists because of the presence of either the enemy or adversary. It applies to all levels of war and across the spectrum of operations.

### Accident Risk

All operational risks other than tactical risk including:

- Risks to the friendly force
- Risks posed to civilians by an operation
- Risks to the environment
- Risks to equipment readiness

## **Residual Risk**

The level of risk remaining after controls have been identified and selected for hazards that may result in loss of combat power.



## **Residual Risk**

Risk remaining after controls have been identified and selected.

## Probability

#### The likelihood that an event will occur.



## Probability

An assessment of the likelihood that, given exposure to a hazard, an accident will result.

## Severity

The expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors that could occur.



## Severity

An assessment of the expected consequence, defined by degree of injury or occupational illness that could occur from exposure to the hazard.



## Severity

The expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors.

## Estimating

## Follows from examining both probability and severity of hazardous incidents.

## Exposure

The frequency and length of time personnel and equipment are subjected to a hazard.



## Exposure

An expression of personnel exposure that considers the number of persons exposed and the frequency duration of the exposure.

## Risk Assessment

Identification and assessment of hazards; an identified hazard is assessed to determine the risk of a hazardous incident due to the presence of the hazard.



### **Risk Assessment**

A structured process to identify and assess hazards. An expression of potential harm, described in terms of hazard severity, accident probability, and exposure to hazard.

## **Risk Decision**

The decision to accept or not accept the risk(s) associated with an action. Made by the commander, supervisor, or individual performing the action within the constraints of the law.

## Risk Management

The process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk cost with mission benefits.



## Risk Management

The Department of Defense's principal structured risk reduction process to assist leaders in identifying and controlling safety and health hazards and making informed decisions.

### Risk Management Assists

#### The commander or leader in -

- Conserving lives and resources and avoiding unnecessary risk.
- Making an informed decision to implement a course of action.
- Identifying feasible and effective control measures where specific standards do not exist.
- Providing reasonable alternatives for mission accomplishment.
  Safety Training 2002

### Risk Management Does Not

- Inhibit the commander's and leader's flexibility and initiative.
- Remove risk altogether, or support a zero defects mindset.
- Require a GO/NO-GO decision.
- Sanction or justify violating the law.
- Remove the necessity for standard drills, tactics, techniques, and procedures.

## Risk Management Integration

The embedding of risk management principles and practices into Army operations, culture, organizations, systems, and individual behavior.

## Gambling

Making risk decisions without reasonable or prudent assessment or management of the risks involved.

### **Base Operations**

- Concerns include prioritizing the execution of base operations functions to get the most benefit from available resources.
- Examples include:
  - Allocating resources for pollution prevention
  - Correcting safety and health hazards
  - Correcting violations of environmental protection regulations

### The Process

#### The Five Steps

- 1. Identify hazards.
- 2. Assess hazards to determine risks.
- 3. Develop controls and make risk decisions.
- 4. Implement controls.
- 5. Supervise and evaluate.

### Riding a Bicycle

## Step 1

#### Identify Hazards



#### Asssess Hazards

#### Assess Hazards

Probability – The likelihood that an event will occur.

Frequent
Likely
Occasional
Seldom Unlikely

### Assess Hazards

- Severity The expected consequence of an event in terms of degree of injury, property damage, or other mission-impairing factors.
  Catastrophic
  Critical
  Marginal
  - Marginal
  - Negligible

#### Assess Hazards

	PROBABILITY				
SEVERIT Y	Frequent A	Likely B	Occasional C	Seldom D	Unlikely E
Catastrophic I	Е	Е	Н	Н	М
Critical II	Е	Н	Н	М	L
Marginal III	Н	М	М	L	L
Negligible IV	М	L	L	L	L
Risk Level: E-Extreme; H-High; M-Moderate; L-Low					



#### Develop Controls and Make Risk Decisions

## Step 4

#### Implement Controls

## Step 5

#### Supervise and Evaluate

### The Process

Steps 1 and 2 make up the assessment.Steps 3 through 5 are the follow through.



### Principles

- Integrate into planning.
- Accept no unnecessary risks.
- Make risk decisions at the proper level.
- Accept risk if benefits outweigh the cost.

## Risk Management

Conclusion

### **Risk Management**



# Risk Management at a Glance

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