Operational Risk Management
Introduction

Managing Your Risk

This is the first in a series of four risk management modules designed to explain the principles of personal risk management and its use in task or mission success. As the foundation course, *Managing Your Risk* introduces risk and resource management; human factors and practical tools for managing risk; and places emphasis on understanding and applying Time Critical Risk Management (TCRM).

This module emphasizes individual responsibility in making informed risk decisions as an essential element for success on- and off-duty. This module is applicable to all Department of Navy personnel.
Upon completion of this topic, you will be able to:

- Describe the origin and benefits of ORM
- Describe human factors and behavioral skills which impact decision making during risk management
- Define why your role in ORM is vital to mission success
- Describe proper ORM communication
- Describe the ties between managing risks and Navy Core Values
Origin and Benefits of ORM

ORM Origins

In 1994, The US Navy and Marine Corps team made ORM an integral part of planning, training, and operations. This stemmed from a need to improve operational readiness in peacetime—and to achieve success in combat—during a period of reduced resources and personnel.

ORM Benefits

Applying the ORM process ensures mission or task success by providing more effective use of resources, improving on- and off-duty risk decision making, reducing injury and property damage, and improving the readiness of all personnel.
Human Factors Impacting Decision Making

Before getting into the specifics of ORM, let’s discuss what impacts decision making and why we make particular risk management decisions.

Factors influencing the decisions you make include:

- Level of training
- Experience
- Attitudes
- Personality

These factors influence the risk you encounter daily; they vary as the roles and the tasks you perform change throughout the day.

Keep in mind that these are only a few of the more obvious factors that affect your ability to make decisions.
Warning Signs of Individual Risk

How do you know there is a risk?
What are some of the signs of danger?

Risk may be present when you find yourself:

- Confused
- Making errors
- Distracted
- Using improper procedures
- Losing focus
- Getting complacent
- Falling behind on your goals
- Getting overconfident in your abilities

It is also important not to ignore your instincts and gut feelings.
Behavioral Skills

Numerous influences affect the accomplishment of your day-to-day activities. The most common and variable influence is the human behavior of you or your team members. Understanding how these behaviors will affect you in accomplishing your task or mission is important. The following seven behavioral skills are:

- Decision-Making
- Assertiveness
- Mission analysis
- Communication
- Leadership
- Adaptability and Flexibility
- Situational Awareness

By understanding and practicing these behavioral skills, you will improve your task or mission effectiveness.
Communication Icons

This target figure is a visual representation of different levels of team communication during an event. Use the target during team communications to focus one or more individuals into an understanding of situational awareness conditions. An individual can use it as a self-assessment tool to monitor their own situational awareness.

Green indicates errors may occur, but the individual will catch most errors.

"In the Green"

Good situational awareness permits you to catch consequential errors.

Red indicates errors may occur that cannot be caught, and therefore they become consequential to the task or mission.

"In the Red"

Tunnel vision may lead to an unsuccessful outcome.

Yellow indicates the potential for consequential errors have increased.

"In the Yellow"

When under high stress a decrease in situational awareness can occur. Not using available resources may also decrease situational awareness. The swooping arrow represents the return to good situational awareness. This can be accomplished through teamwork and effective communication.

Getting Back into the Green

Teamwork and effective communication results in increased situational awareness.
Communication Icons (cont.)

People have interesting reactions when they get into the yellow and the red. They tend to "share the experience". In other words, when your actions are closely linked to another person, as in a teammate, there is a tendency for them to draw you into the yellow or red with them.

The ability to "see the big picture" greatly diminishes as you approach the red. In fact, one of the signs of being in the red is "tunnel vision". Communications patterns change when in the yellow and red. It needs to be more precise and directive to penetrate the tendency toward "tunnel vision".

One of the most dangerous aspects of being in the red is that it is can be difficult to self diagnose where you are, and at the same time, there is a natural tendency to "block out" communication.

It certainly helps to remain aware of your own small errors, and use them as a signal to determine when you may be reaching your personal limits.
Communication Icons (cont.)

Think about your daily life:
What affects your ability to catch errors?
What makes catching errors difficult?
The task itself rarely causes us to go into the red; it is other factors, such as:

- Task loading
- Additive conditions
- Human factors
Mission Success

Adm. Michael G. Mullen once said that: "Managing risk is a continuous and developing process that pervades our strategy ... it must be integrated into our culture, our approach to problem solving, and our decision making."

The Naval ORM vision is to develop an environment in which each individual is trained and motivated to take personal responsibility for managing risk in everything they do, both on- and off-duty, enabling successful completion of all operations and activities with a minimum amount of risk.

Every Sailor must understand, accept, and implement risk management in order to achieve mission success while maintaining a constant awareness of the changing risks associated with an operation or task.
ORM

A Sailor’s level of expertise and maturity influences their risk management proficiency. Inexperienced personnel are routinely charged with implementing risk controls and executing risk reduction measures. A Sailor’s complacency, overconfidence, or willingness to complete the mission at any cost can lead to a failure to consider risks. Sailors must be aware of overestimating or underestimating risk:

- Overestimating - Believing the risk level is higher than what you perceive it to be.
- Underestimating - Believing the risk level is less than what it actually is.

Sailors should develop a “can-do” versus a “will-do” attitude. A “can-do” attitude acknowledges that risk is a necessary part of action. It is an approach to accepting risks only when the benefits outweigh the costs. This attitude manages risk before pressing on with the action. A “will-do” attitude leaves no room for managing risk because the mentality is to press on with the action regardless of the risk involved. Do not blindly accept risk. Strive to understand controls developed by leaders, and utilize these controls to mitigate risk during mission execution.
Communication is essential to risk management. Everyone must understand they have a role to play. Knowing about a hazard isn't enough. It must be communicated to the right people so that the risk may be assessed and appropriate decisions made.

During the execution of an evolution, communication is important because most evolutions don't happen completely as scripted. It's critical that the individual know who to report to when things change, and if possible, while these changes are occurring.

After the evolution, it's very important to conduct a formal debrief so lessons learned can be compiled (and any formal reports filed, as necessary). A debrief is an honest review and assessment of the evolution.
Communication needs to work up and down the chain of command. Your responsibility is to ensure everyone involved in the evolution is kept informed of any changing risks associated with the operation or task you are performing.

After an informal event debrief, notes need to be written as soon as possible. These notes will provide guidance the next time the event occurs. Make these notes available to command personnel for future event planning and guidance.
Navy Core Values

We are dedicated to the Core Values of Honor, Courage, and Commitment to build the foundation of trust and leadership upon which our strength is based and victory is achieved. These values should serve as the basis for all decisions made and actions taken every day, both on- and off-duty.
Navy Core Values and ORM

Navy Core Values support the ORM process. Here is how these values apply to ORM:

- **Honor**: A keen sense of ethical conduct.
  
  You must have an uncompromising code of integrity, take responsibility for your actions, and keep your word. You must make honest recommendations to seniors and peers, and seek honest recommendations from junior personnel. You must encourage new ideas and deliver bad news forthrightly.

- **Courage**: The mental and moral strength to do what is right, even in the face of personal or professional adversity.
  
  You are expected to meet the challenges of your profession and mission, whether hazardous, demanding, or otherwise difficult. Risk decisions should be in the best interest of the Navy and your command. You must display fortitude in notifying your chain-of-command when benefits do not outweigh the costs.

- **Commitment**: The day-to-day duty of every Navy man and woman to work together as a team to improve the quality of their work, their people, and themselves.
  
  You must strive for positive change and personal improvement. You must exhibit the highest degree of moral character, professional excellence, quality, and competence in all that you do.
Summary

As professionals on a Navy team, we are required to exercise risk management during a task or mission for the safety of our teammates and ourselves. Remember, even simple off-duty tasks can pose a problem. Our decisions, made in seconds, may have consequences that last a lifetime.

Take a second to analyze the situation; ask yourself "What's different today?", and plan for the "what-if?" situation in the event something goes unexpectedly wrong.

Now that you have completed this topic, you should be able to:

- Describe the origin and benefits of ORM
- Describe human factors and behavioral skills which impact decision making during risk management
- Define why your role in ORM is vital to mission success
- Describe proper ORM communication
- Describe the ties between managing risks and Navy Core Values
Introduction

This topic describes the fundamentals of Operational Risk Management (ORM): A decision making tool used by personnel at all levels to increase effectiveness by identifying, assessing, and managing risks.

ORM is a process that assists organizations and individuals in making informed risk decisions in order to reduce or offset risk, thereby increasing operational effectiveness and the probability of mission success.

The ORM process is applicable across the spectrum of operations and tasks. It should be used by everyone **ALL OF THE TIME**, whether on- or off-duty.
Upon completion of this topic, you will be able to:

- Describe the ORM process
- Describe risk management resources
- Describe the four principles of ORM
- Describe the three levels of ORM
- Identify the five steps in the Deliberate ORM process
- Describe the Time Critical Risk Management process in detail, (A-B-C-D), for both on and off duty applications
- Describe the importance of feedback to managing risk
ORM Fundamentals

The ORM process assists you in making smart and informed decisions. Actually, you apply ORM every day. At times, you may not even be aware of it as you carry out a task or mission. An example of this is as simple as crossing the street; you look both ways because you were taught this at a young age. However, today you don’t even look at this as risk management, but something that you know is the right thing to do before crossing the street.

Every Sailor has a role to play in managing risk during a command’s task or mission, and every Sailor is vital to the success of the Navy “team”.

- ORM Process
- ORM Purpose
- ORM Goal
Risk management is a continuous process that is integral from the strategic level of planning through the tactical level and execution. It is a tool to help improve mission readiness and mission accomplishment.

The figure shows the three levels of ORM defined primarily by time. There is no definitive separating line between the three levels (in-depth, deliberate, and time critical) represented by the transition in color flowing from one level to another as you approach the task or event.

It is important to know we have resources to tap into. At each level of the planning process, hazards and associated risks are identified and appropriate controls are developed and implemented. These controls become resources upon which you can draw for the next level of planning and ultimately for execution.
Five Steps

The ORM process is a systematic, continuous, and repeatable process that consists of five basic steps.

The first two steps comprise the risk assessment portion of ORM and provide enhanced awareness and understanding of a given situation. This awareness builds confidence and allows for timely, efficient, and effective protective measures. The remaining three steps are the essential follow-through actions to either eliminate the hazard or mitigate the risks.
Four Principles

ORM incorporates the following four principles:

- Accept Risk When Benefits Outweigh the Cost
- Accept No Unnecessary Risk
- Anticipate and Manage Risk by Planning
- Make Risk Decisions at the Right Level

Accept Risk when Benefits Outweigh the Cost

Accept No Unnecessary Risk

Anticipate and Manage Risk by Planning

Make Risk Decisions at the Right Level
The risk management process is applied on three levels: in-depth, deliberate, and time critical. The basic factor that differentiates each level is time; that is the amount of time available to dedicate to the preparation and planning of missions or tasks.

The graphic illustrates the levels of ORM and how they relate to each other. Note that there is no defined line where one level stops and the next begins.
**In-Depth**

The in-depth level refers to situations when time is not a limiting factor and you need to get the right answer for a successful mission or task.

Thorough research and analysis of available data; use of diagrams and analysis tools; and formal testing or long-term tracking of associated hazards are some of the tools used at this level. Other examples of ORM application at the in-depth level include, but are not limited to: long term planning of complex operations; acquisition of new equipment; development of tactics and training curricula; and a permanent change of station (PCS) move.

**Deliberate**

The deliberate level refers to situations when there is ample time to apply the risk management process in the planning of a mission or task.

At this level, the planning primarily uses experienced personnel and brainstorming and is most effective when done in a group. Examples of deliberate applications include planning of unit missions or tasks, off-duty activities, review of maintenance or training procedures, and training events.

**Time Critical**

This is the level at which personnel operate on a daily basis both on- and off-duty. The time critical level is best described as being at the point of commencing or during execution of a mission or task. At this level there is little or no time to plan. An on-the-run mental or verbal assessment of the new or changed/changing situation is the best one can do. The rest of this lesson will explain TCRM (Time Critical Risk Management) and the ABCD mnemonic.

NOTE: Use of the Time Critical level of ORM does not necessarily mean the situation is an emergency or a life-or-death situation. Time Critical Risk Management (TCRM) is used in normal day-to-day activities where there is no time to plan or create additional controls.
Time Critical Risk Management (TCRM)

Why a new approach to ORM?

Personnel know ORM. They develop plans and brief the crew on task procedures. However, we often fail to execute the plans as briefed. We do not manage "change" as it occurs, and those changes affect the original plans. Usually, the personnel injured during a task are those who were not involved in the original planning.

Recent studies of the ORM process have found that personnel have a firm grasp of the In-Depth and Deliberate levels of ORM. Unfortunately, personnel fail to execute Time Critical Risk Management (TCRM) during tasks as events change.

You are accustomed to the 5-step process during In-Depth and Deliberate ORM processes; however, realistically it is difficult to execute the 5-step process during the time critical level effectively. Therefore, we are introducing a new tool for the execution of TCRM. This tool will help you improve communication, handle change, and manage risk to ensure mission success. We are NOT eliminating the 5-step process - rather, the five steps are incorporated into this new, easy-to-use tool.
TCRM Loop

This model consists of various graphic representations for situational awareness (target), stacked blocks (resources), a swooping arrow (a return to good SA) and a four letter box mnemonic (ABCD) that will help you improve communication, handle change, and manage risk to ensure mission or task success. It's called the ABCD model.

The ABCD mnemonic in the model is not a replacement for the 5-step ORM process or a different process of risk management, but it is the practical application of the 5-step process in a time-critical environment.
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**Assess**

Where am I?
What is going on?
What will happen

The "A" in the mnemonic combines the first two steps of the 5-Step ORM process.
In a real-time situation, it is essential for individuals to consider the event in which they are engaged and choose the appropriate resources or controls to meet the hazards they identify. In a time-critical situation, an assessment of the situation requires an accurate perception of what is happening in a relatively short time and projecting its effect, in other words, maintaining good situational awareness (SA). Unlike in-depth or deliberate ORM, where there is time to assess hazards, it is an individual’s ability to comprehend the situation and apply appropriate, available resources quickly and effectively that can mean the difference between success and failure.
TCRM Loop

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**Balance Resources**

- What are my options?
- How do I use them?

The "B" in the mnemonic is specifically tied to making risk decisions (step three of the 5-Step process) to mitigate risks. After assessing the situation, personnel must consider using the resources created for the mission or activity. Thorough planning prior to an event will increase the availability of the appropriate resources, or "blocks", to effectively mitigate hazards.

For example, the essential aspects of balancing resources for a particular task may be the understanding of the task, proper training, the use of personal protection equipment, and the knowledge of personal limitations.
There are many resources available for you to tap into during the execution of your job or mission. The blocks represent multiple levels of resources. The redundant alignment is designed to illustrate stacking resources to prevent errors that may become consequential, such as a resource improperly used or a problem within a resource (i.e., flawed checklist or missing procedure). Not all resources listed are required to complete the mission or task. The identified resources should be used to effectively mitigate the risks.

- Policies, procedures, and routines
- Checklist
- Automation
- Briefings and external resources
- Knowledge, skills, and techniques

General orders, Standard Operating Procedures (SOP), and guides are examples of resources that speed up coordination and increase predictability by standardizing operations and activities.
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- Policies, procedures, and routines
- Checklist
- Automation
- Briefings and external resources
- Knowledge, skills, and techniques

A checklist, Maintenance Instruction Manual (MIM), and shopping list are examples of resources which decrease potential errors and improve coordination.
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- **Policies, procedures, and routines**
- **Checklist**
- **Automation**
- **Briefings and external resources**
- **Knowledge, skills, and techniques**

Alarms, warning lights, automatic door locks, autopilots, and seatbelt warnings are examples of resources that provide a speedy interpretation of information and awareness.
There are many resources available for you to tap into during the execution of your job or mission. The blocks represent multiple levels of resources. The redundant alignment is designed to illustrate stacking resources to prevent errors that may become consequential, such as a resource improperly used or a problem within a resource (i.e., flawed checklist or missing procedure). Not all resources listed are required to complete the mission or task. The identified resources should be used to effectively mitigate the risks.

Briefings of routine (morning and flight briefs, family discussions) and major events (ship movements, port calls, vacations) are examples of resources that provide a shared expectation of the activity. External resources (NATOPS, 3M, NAVOSH, vehicle owner's manual) provide support and/or guidance for the mission or task.
There are many resources available for you to tap into during the execution of your job or mission. The blocks represent multiple levels of resources. The redundant alignment is designed to illustrate stacking resources to prevent errors that may become consequential, such as a resource improperly used or a problem within a resource (i.e., flawed checklist or missing procedure). Not all resources listed are required to complete the mission or task. The identified resources should be used to effectively mitigate the risks.

Policies, procedures, and routines
Checklist
Automation
Briefings and external resources
Knowledge, skills, and techniques

These make up the experience of individuals and are resources brought to the task or mission. Obviously, the more knowledge and skills you bring to the activity, the better resource you are.
TCRM Loop

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**Communicate**

Who needs to know?  
Who can help?  
Who can provide back-up?  
*Revise if necessary*

Good communication is essential. The "C" is to remind us to explicitly communicate during the event and it is tied to all steps of the 5-Step process. Maintaining good SA of external (additive) conditions, task loading, and human factors is critical to communication. This is because an individual's perception and communication skills deteriorate as they lose SA. As stress increases or events become more time constrained, communication tends to become limited or non-existent. Individuals who understand this relationship are better able to adjust and mitigate additional risk when they recognize a loss of SA. Although communicating intentions works best when multiple individuals are involved in the event, situations may occur where individuals must weigh decisions on their own. It is crucial that self communication takes place.
TCRM Loop

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Do-Debrief

<table>
<thead>
<tr>
<th>Carry out the plan?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was mission successful?</td>
</tr>
<tr>
<td>Did actions reduce the risk?</td>
</tr>
</tbody>
</table>

The "D" in the mnemonic is tied to steps four and five of the 5-Step process. Do the mission. However, to be successful in the task or mission, the individual must select and use the appropriate resources while adjusting actions as required to ensure event success. A vital key to the process is ensuring that the feedback loop or "Debrief" aspect of the D is performed. It is beneficial for individuals to follow through and complete the ABCD mnemonic loop by identifying what worked, what did not, and ensuring documented lessons learned are disseminated. Debriefs will improve performance, mitigate risks in future activities, and are essential in completing the ABCD loop.
TCRM Off-Duty

Off-duty mishaps are extremely detrimental to the Navy’s operational capability.

Because we are part of the Navy "team" 24/7, the actions we take off-duty can affect the readiness and operational capability of our command’s mission or task, therefore affecting the Navy as a whole. Thus, we must constantly be aware of all risks involved in our everyday off-duty activities.

ORM applies off-duty the same as on-duty. By consistently using the A-B-C-D loop in our individual activities, we can reduce the number of off-duty mishaps; thereby improving the Navy’s readiness and operational capabilities. These fewer mishaps will also allow individuals to meet personal and professional challenges now and in the future.
Putting It All Together

ORM is essential in planning a task. However, during the execution of the task, we still need to assess the situation and reevaluate any changes to the plan. By utilizing on a regular basis this combination of graphics, icons, and the ABCD mnemonic, you will improve your performance in all tasks from the most routine to the most complex:

- Task loading, additive conditions, and crew factors impact the "potential for error" (Green-Yellow-Red)
- Communication pattern/styles change when in the green, yellow or Red
- "Resources" can reduce potential for consequential error
- Resources must be managed
Summary

Now that you have completed the Fundamentals topic, you should be able to:

- Describe the terms of ORM
- Describe risk management resources
- Describe the four principles of ORM
- Describe the three levels of ORM
- Identify the five steps in the Deliberate ORM process
- Describe the Time Critical Risk Management process (A-B-C-D model) for both on and off duty applications
- Describe the importance of feedback to managing risk
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