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Engaged Leaders
CNO needs leaders and operators to proactively manage the risks they face

INSIDE  TCRM: The Beginnings • Lessons For a Long Cruise • It Starts in Boot Camp
Leadership Essentials is the second special issue focused on operational risk management published by the Naval Safety Center. The first edition, ORM: The Essentials, was published in 2007. It introduced you to ORM and its basic principles. ORM: The Essentials also focused on the time-critical level of ORM, exploring the personal and team skills needed to effectively use the ORM process.

This special issue of Leadership Essentials is timely as we face tough fiscal challenges, evolving world threats and force draw-downs. These factors may cause our intended plans to change, and managing risks associated with those changes is what leaders do.

Leadership Essentials looks at risk management from a supervisory and leadership perspective. It spotlights responsibilities of leaders and tools to more effectively manage the risks to their people and to their mission.

From RADM Brian Prindle’s article on “10 Ways to Get ORM Wrong” to Maj. Kevin Grindel’s “Effects of the A-Team and B-Team Concept” to Mr. Denis Komornik’s “Is Our ORM Program Working?,” leaders from all communities can take the lessons and concepts presented here to improve the way they view and apply risk management principles and processes.

History has taught us that human error is causal in 85 percent of our peacetime losses. Therefore it’s imperative that both our young and old leaders mentor and model the risk management tools promoted in this issue.

We thank our contributors for helping us make this issue full of ORM tools and resources that can help you manage a risky world out there.

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Time-Critical Risk Management

Because conditions can change with little or no warning, being ready and alert can manage that change and minimize risks associated with it.

- A - Assess the situation.
- B - Balance resources.
- C - Communicate to others.
- D - Do and Debrief the event.
Shipmates,

Focus on safety and risk management is important!

We are in the business of training and preparing for warfighting. Accordingly, there are elements of risk in our business, every day.

I need each of you, as leaders and operators, to proactively manage the risks you face. Our proven means to do this is operational risk management (ORM) – tools and resources explained in this issue to reduce unnecessary risk to Sailors and Marines. Using ORM, we can reduce risk to a level that gives our Sailors and Marines the best means to safely execute their duties.

“Be Ready ... but first, Be Safe” – use ORM tools and resources. I’ll see you out there in the Fleet!

ADM Jonathan Greenert
Chief of Naval Operations
In a way, ORM is like safety in general. When it works, you may not notice, because nothing bad happens. Your team accomplishes its particular mission without a hitch, which is the way it should be. However, we still have mishaps, and each one is a signal that ORM can be improved.

Here are 10 errors to look for:

1. The After-Thought. This occurs when command leaders face a challenging, unusual operation. They busily do their planning, and when they’re done, someone says, “Does anyone have anything to add about ORM?”

2. Day Late and Dollar Short Time-Critical Risk Management. This occurs when someone isn’t fully aware of impending risks and thus isn’t considering how to control them. The classic case (that we read about in mishap reports all too often) is the motorcycle rider coming into a curve or an intersection. The rider should think, “I can’t see the road ahead, I better slow down, it looks like there’s some gravel,” not “What a great descending right turn ahead, I love this bike, oh nooo, gravel, I’m too fast…”,

FROM COMMANDER, NAVAL SAFETY CENTER

10 Ways to Get ORM Wrong

Naval Safety Center Photo
3. “I’ve Got a Secret” Deliberate ORM. “Looks like we can safely conduct this mission,” someone says. “I’m sure the Ops O would agree.” But later on the Mission Commander finds out that the Ops O not only didn’t agree but wants to know why the MC didn’t take two minutes to ensure the risk decision was a coordinated effort.

4. Participation Not Desired. “We’ve planned this evolution down to the last detail. Everything is in order and in accordance with the book. Since I’m sure no one has any questions, let’s get going!”

5. Top Heavy. Everyone involved in the task or operation isn’t given a chance to fully understand the plan. Often only supervisors are present at a brief and don’t ask the same questions that a junior person might ask.

6. No Time To Chat, Gotta Run! Important players don’t take time to de-brief an evolution. At a minimum, controlling watch station supervisors must de-brief the event. Observations and critiques often apply to more than just one watch station.

7. Silence Isn’t Golden. Leaders at all levels fail to ask questions and get clarification for fear of “looking stupid.”

8. Written in Stone. Leaders just follow procedures without any critical look to improve the process. Before and after the evolution, little input is requested or received from personnel carrying out the task. Some leaders resist process improvement because “they’ve always done it that way.”

9. The Waiting Game. Making risk decisions at the right level takes a certain amount of communication and patience. However, mid-level leaders need not always wait for guidance—they should take charge of their areas of responsibility.

10. Say What? ORM presentations must be in clear and concise English and use examples so that all participants fully understand the risks involved. Participants should be able to clearly brief the evolution. “Severity B, Probability C, RAC 2” isn’t easily digested by 100 percent of an audience.

You’ve probably experienced one or more of these bad examples. So how do you know that ORM at your command is effective and used appropriately on a day-to-day basis? Here are some examples of effective Deliberate and Time-Critical ORM.

For starters, ask: Do the mission and planning briefs include the hazards and mitigations for them? Are participants discussing hazards, reviewing previous lessons learned and best practices, and understanding various available resources? Are questions encouraged?

Whether you’re getting a ship underway, taking a squadron on a detachment, or preparing to perform surgery, everyone who is involved has to get on the same sheet of music before the action starts. ORM is intrinsic to the entire planning process, not an oh-by-the-way slide at the end of the brief.

Once you start executing the mission, it’s time for time-critical risk management (TCRM). That doesn’t mean a mission or task has gone awry. It means you’re executing the briefed plan and conditions may change. This is where the ABCD mnemonic comes into play.

Executing a mission, you consistently Assess what is going on around your team. Is the weather getting worse? Is your equipment working? You continually Balance your resources. Are people using the controls (publications, checklists, assigned personnel) that were identified? Also continuous is Communication, both verbal and nonverbal.

Finally, don’t overlook the Do and Debrief part of the ABCD loop, even when everything seems to have gone off without a hitch. There is always something to learn from the event that was just completed.

TCRM enables individuals to focus, to increase their situational awareness and to improve their performance. It is a critical process as leadership marshals and coordinates the experience of all personnel involved in a mission or a task.

ORM isn’t a safety “program,” with rules and requirements, SOPs and references. That’s a good starting point, but what we really need to strive for is a safety culture in which everyone manages risk through active communication and planning efforts designed to address risk in any new situation before we encounter it. Remember, ORM is not just for work. It should also be used while off-duty and at home, where a significant number of our mishaps take place.

ORM is “how” professionals do their jobs. It means following the procedures no matter how much pressure there is to get a job done. It means taking the time to think about what we’re about to do before we do it, especially during an unfamiliar, demanding activity that involves some risk. It is about how we think, communicate and work together to proactively identify and safely navigate around and through risky situations. ▲

RADM Brian”BC” Prindle

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Fellow Chief Petty Officers,

We all recognize the primary function of any command is to successfully and professionally perform its mission. To do so safely and efficiently, we have a proven tool that has served us well: operational risk management (ORM). Used correctly, ORM allows us to effectively accomplish our objectives without accepting undue hazards that may jeopardize the health and welfare of Sailors or readiness of equipment.

As a Mess, we must continue to model engaged leadership by adapting and flexing to change rather than being unwilling to adjust course simply because something is unfamiliar to us. As our Navy’s missions continue to evolve, we are compelled to rely on programs and procedures that enable us to complete our missions, whatever they may be.

For that reason, applying time critical risk management (TCRM), the process of mitigating risk quickly when rapidly changing conditions confront us during a mission or task, either on- or off-duty, is paramount. During the execution stage, where time and resources are most limited, we must be proactive and responsive to ensure mission success while preserving our assets. Success depends on knowing up-front how to employ TCRM, because there is no time to stop and learn it when you are executing the task or mission.

The TCRM tool, ABCD Model, is now being trained at all accession commands, and has been proven to help people focus, increase their situational awareness and improve their performance in the time-critical environment.

ABCD is an easy-to-remember mnemonic that stands for: Assess the situation; Balance resources; Communicate to others; and Do and Debrief the event. Our young Sailors know this process and they use it. Our Mess must be familiar with the latest terminology and methodology so that we can continue mentoring our Sailors from a position of knowledge.

Our challenge is to embrace and model effective TCRM in our Mess. We must use the hands-on leadership skills of the Mess and maximize the use of this effective tool to ensure our Navy’s continued success.

Stay Safe and I’ll see you in the Fleet.

Very Respectfully,
MCPON Mike Stevens
How a Leader Manages Risk

By Cmdr. Allen McCoy, USN (Ret.)

From day one in the service, you are constantly reminded that the Navy is about developing leaders, officer and enlisted alike. It isn’t just the top end of the spectrum: senior officers intimately involved in planning and executing complex operations involving a myriad of units over a long period of time. The seaman in charge of a small work detail, doing routine daily maintenance, is equally a leader.

In all cases and nearly every day, you are given chances to exercise and develop your leadership skills. As you gain knowledge and experience, your skills mature. You start making the sound decisions essential to high-quality leadership. Not all decisions revolve around hazards, yet understanding hazards and the risk they present is a central part of what you do every day.

Risk is inherent in any job. Whether you are doing the task or assigning it to someone else, as a leader you must assess the hazards and manage the risk. One of the simplest ways to do that is to be an engaged leader. There are three hallmarks of this kind of leader:

1. They teach risk-management techniques to the people who work for them.
2. They clearly define acceptable risk and the consequences of not managing that risk effectively.
3. They find the resources required to support decisions about acceptable and unacceptable risk.

Everyone is responsible for identifying hazards and communicating the risks. Therefore, you must take every opportunity to educate those who work for you in this process. ORM provides the framework and some tools that can make this process easier, but it is not a stand-alone “program.” It must be integrated into the basic tactics, techniques and procedures taught at all levels across the Fleet, both in formal classroom settings and on the job.

Often individuals or small groups must make risk decisions within the context of tasking or orders. They must understand the risk-management process and be able to communicate information about those hazards through the chain of command. If you tolerate a situation where junior personnel are unaware of hazards — or underestimate those hazards — you’re asking for trouble.

Good 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. Communication is critical to ensure you have the resources necessary for you to manage risk and implement controls.

Asking questions is perhaps the single most powerful and easiest technique to opening the lines of communication. Remember that risk is inherent in action; action has consequences; and consequences drive behavior. The consequences, good and bad, of decisions about risk should be spelled out and individuals held accountable for their decisions.

Resources are always limited, but as leaders it is your responsibility to ensure that the people working for you have everything they need to do the job. They need formal and informal education. You have to provide personal protective gear and monitor whether they’re using it. You also have to make sure that your workers have the tools they need to manage risk off-duty, as well.

You are operating in a world full of hazards, but you have the opportunity every day to practice engaged leadership and hone your skills at managing the risk those hazards present. We can’t prove how many accidents or mishaps have been prevented by good risk management, but you can see the consequences of not managing it. Perhaps it’s the guy who usually wears a seat belt but didn’t do it for that short drive to the grocery store, and that was the time he got in a wreck. Maybe it was a pilot’s unusual decision to fly low through a canyon for the sake of the thrill—a flight that ended in a Class A mishap.

Take the time to accept the philosophy of risk management, lead by example and make managing risk an essential element of all that you do. Provide the tools and resources required to do the job. Communicate the expectation that risk management is everyone’s responsibility. Educate those who work for you in the techniques and procedures that are the tools of risk management. Making good decisions based on an understanding of risk is a learned skill. Cultivate it in yourself and others. Live it on and off duty, whether someone is watching or not. Make it personal. Stay engaged.

Cmdr. McCoy was formerly the ORM division head at the Naval Safety Center.
What techniques separate a true leader from a bureaucratic manager? A seasoned Navy captain talks about the difference between leading and managing.

RISK-MANAGEMENT TECHNIQUES FOR LEADERSHIP

By Capt. Lee Mandel, USN, MC

One of the distinct benefits of being a senior officer — the “old man” — is that you can share all that you have learned with younger Sailors. I first came on active duty in 1979. I have 33 years of post-residency medical experience along with a nearly 10-year sojourn into the private sector. I’ve worked for many different leaders and served in various leadership positions myself. My accumulated experiences have left me with definite opinions on what constitutes a good leader and the techniques that a good leader uses. These techniques separate a true leader from a faceless, bureaucratic “manager.”

Starting with the “hollow military” of the President Carter years, through the buildup of the President Reagan years, and to the present, the faces changed and sometimes the mission changed. The basics of leadership didn’t. The tools used by an effective leader can assure mission accomplishment, as well as empower the people who work for that leader. Mission accomplishment should be a win-win scenario.

Here are some of the leadership techniques that I have observed over the past thirty years:

1: There is no limit to what a person can achieve, as long as he/she doesn’t care who gets the credit.

This nugget of wisdom is attributed to Ronald Reagan and illustrates his style of leadership. Complex mission accomplishment is rarely the result of only one person’s efforts, and senior leadership can motivate and empower their subordinates by allowing them to share in the accolades of a job well done. This can take many forms, such as public recognition and individual decorations. If an organization receives praise for a job well done, the leadership is already getting the kudos as a result; it is the troops who made it happen, and it is the troops who deserve the recognition.
Under this category are several corollaries. These include “Praise in public, chew butt in private.” Another is to assume an active role in mentoring your troops and supporting their efforts at promotion and advanced education. These roles are intuitive to the good leader. Notice I said leader, not manager.

2: True power is getting people to do what you want them to do by making them feel that it is in their best interest to do what you want them to do.

Any person of a more senior rank can scream orders at a subordinate. How satisfactory will the job completion be under those circumstances? Are the Sailors completing the job simply to shut up their superior, or do they really want to do a good job? The best leaders are not screamers or tyrants. They lead from the front and by example. Their Sailors want to emulate them. A true leader can inspire his people to get the job done because of him, not in spite of him.

3: The leader will inspire his troops by taking care of them.

Whereas managers often have a cold, bureaucratic approach to task completion, the good leader will always have his people’s best interest at heart when approaching his work. I was fortunate to serve as personal physician to the late Vice Adm. John Bulkeley the last two years he served on active duty. He told me that as the head of the Board of Inspection and Survey (INSURV), he delayed the commissioning of USS John F. Kennedy (CV 67) by eight months because the ship failed its INSURV inspection.

His reasons were simple: He did not approve of the work done by the shipbuilders, feeling it was substandard. When it was pointed out to him that contractors wouldn’t be paid, his response (as he told it to me) was, “I don’t give a damn. I will not put one Sailor’s life in jeopardy because of substandard work!” How can you not admire a leader who butts heads with the establishment for that reason?

4: Beware of the “leader” who doesn’t know how to say these two, three-word sentences.

The first is, “I don’t know.” People who won’t use this sentence always pretend to have an answer, no matter how absurd. Their insecurities do not allow them to admit that they don’t know. Their subordinates can spot the BS a mile away. These people have no credibility.

The second is, “I was wrong.” Pseudo-leaders who can’t bring themselves to admit this are great at placing the blame for their failures on their subordinates. They are unable to accept responsibility for their mistake, no matter how trivial. These people receive no respect.

The above-listed techniques are only a few that a good leader can embrace to make his job both rewarding and enjoyable. Just as importantly, these techniques can empower people to work to their fullest potential, while taking pride in all they have accomplished. There is a difference between leading and managing.

Capt. Mandel is head of the Naval Safety Center’s Aeromedical Division.

Master Chief Yenhung Duberek, Command Master Chief of Navy Medicine West, addresses chief petty officer selectees during the leadership training. U.S. Navy photo by MCC John Lill
As leaders in today’s Navy, we’ve all felt the effects of Perform to Serve (PTS) and Enlisted Retention Boards (ERB) in our ranks. We have watched our journeyman (E-5 and E-6) numbers drop to as low as 60 percent, and our commands are getting apprentices (E-1 through E-4) to fill the holes.

This means that our seasoned supervisors, collateral duty inspectors, and quality assurance representatives are being replaced by personnel straight out of boot camp and “C” school. We have also started to cannibalize personnel through UIC swaps and TAD assignments in an effort to get deploying commands up to 90 percent.

In the aviation community, when we tell commands that the number one contributing factor to maintenance-related mishaps is lack of or improper supervision, no one seems surprised.

As our aviation safety survey team members talk with maintainers on the flight line, we constantly hear that there’s not enough time to do maintenance (or training) by the book. We’ve allowed ourselves to use our lack of manpower as an excuse to cut corners and skip training, so we can meet the flight-schedule requirements.

I believe this behavior directly contributes to the fact that we cost the Navy more than $13 million in aviation-maintenance-related Class B and C mishaps in FY11. This doesn’t take into account the amount of injuries and lost work days we have brought upon ourselves through improper maintenance and poor decision-making.

As leaders, we need to make sure our personnel are making maintenance and training worthwhile. Make your people shut off their cell phones, turn off the email and internet, and put their cigarettes and geedunk away. We manage risk by planning, so make them prepare for main-
What can we do about it?

1. Are our personnel setting the standard by using the book for all maintenance and training?
2. Are LPOs and shift supervisors conveying their manpower challenges to maintenance control at every maintenance meeting?
3. Are division officers and chiefs enforcing by-the-book training and maintenance? Are they engaged on the manpower challenges of their work centers?
4. Is maintenance control setting realistic priorities for the work center based on their manning?
5. Is quality assurance being proactive and actively enforcing by-the-book training and maintenance?
6. Are they conducting maintenance and safety trend analysis?
7. Are the MO/AMO/MMCO/MMCPO enforcing by-the-book training and maintenance? Are they conveying their manpower challenges to the operations department and the front office?
8. Have you conveyed your concerns to the CO via Anymouse or the CO's suggestion box?

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OSH: From a Safety Manager’s Perspective
By Joseph Perfetto, B.Sc.

Most people associate ORM with scenarios that will cause major trauma or injury. But what about tasks that are routine and usually don’t cause major injuries such as everyday cleanup or office work? When doing a task there is always a risk involved no matter how routine.

If an injury occurs, one of the first questions asked by upper management is, “Was a risk assessment conducted?” As the safety manager ask yourself, “Does it even have to be a risk assessment?” What about a Job Hazard Analysis (JHA) (OSHA 3071), an Activity Hazard Analysis (AHA) (EM 385-1-1) or a Job Safety Analysis (JSA) (National Safety Council)?

A number of safety offices have adopted the Job Hazard Analysis Program. Although this program is different from a standard risk assessment, the two can easily be tied together. Risk assessments are usually related to hazardous duties. However, the individual can get hurt even if the task is not considered hazardous or involves a recreational activity. The analysis programs mentioned above focus on job tasks as a way to identify hazards before they occur. Emphasis is on the relationship between the worker, the task, the tools, and the work or recreational environment. Workers and supervisors should use it to identify uncontrolled hazards. Then take steps to eliminate or reduce them to an acceptable risk level.

Why is this assessment important? It allows you to identify hazards and prioritize them in criticality of risk assessment codes, i.e., prioritize them. It enables you to identify the possible finite resources available. It prevents workplace injuries and illnesses by looking at workplace operations, and ensuring that all employees are trained properly by establishing proper job and work procedures.

What jobs are appropriate for a hazard analysis? It is applicable on any job in the workplace from cleaning a room, sanding a floor or deck, changing a tire, replacing a blade or while exercising. Is the exercise track free of pot holes? Is a helmet required while riding a bicycle or inside a batting cage? When was the last time you did that task? The possibilities are endless to reduce human error.

Supervisors can walk around the shop. See what the employees are doing and how they are doing it. Is the process being accomplished the best way? Or do you hear, “That’s the way it’s always been done.” Just because it has always been done that way does not make it the best or the right way. As leaders we need use all the tools available to address even our smallest tasks.

Mr. Perfetto is a safety and occupational health specialist with the Naval Safety Center.

RESOURCES:

Chief Warrant Officer 3 Bruce Asberry is the aircraft maintenance branch head at the Naval Safety Center.
While performing safety surveys throughout the fleet, our Naval Safety Center team often witness junior personnel performing maintenance by memory (no publication or checklist), not wearing PPE and having a lack of basic rating knowledge.

Mech magazine has great articles by mostly junior personnel who write about their mistakes, (often writing about the issues addressed above) the same mistakes we see on the surveys. I often wonder where the leadership was when I read these articles. We all have heard the term “deckplate” leader, it’s in our evals or fitreps expounding on leadership prowess. I know this term is addressed over and over again in packages submitted for promotion boards for I’ve sat on five of them.

Junior personnel are gaining the knowledge and possibly applying the concept, the officers practice it for their flight planning and missions, but our senior enlisted and more junior LDOs and CWOS still need to get up to speed. I refer to this group as the “frozen middle,” stuck in their ways and not learning new ideas or concepts.

We label many supervisors as deckplate leaders, so why is inadequate supervision a major causal factor in mishaps? Class B and C mishaps totaled more than $13 million in FY11, and we have exceeded that amount in FY12. Better supervision would equate to savings.

Leadership is more than wearing a rank device on your collar or sleeve; it is being able to recognize or assess situations and then mitigating and managing the risk associated with them. Who do we want to identify and assess the hazards and risks, an E-3 or a more seasoned leader who has “been there and done that?” One of the principles of ORM is making risk decisions at the right level. Who is making risk decisions in your maintenance department? Is it a leader who is active and is constantly assessing the situation, or one that is just wearing the title?
Leadership is being totally involved in every aspect of your production effort and personnel issues. Standing in the hangar doesn’t automatically make you a deckplate leader. Get involved in what your personnel are doing. Do you know who is having problems at home, financial problems, illness or death, lack of sleep or is sick. Do we want a Sailor having problems working on an engine or flight controls? Do they know the basic publications for their rate? When was the last time you led training or taught them how to perform a maintenance task? When was the last time you observed or provided training to a maintenance evolution that was going wrong? Are you mitigating or eliminating hazards that can lead to a mishap within your division on a daily basis?

A leader needs to know what tools are available and how to use them. ORM is one of those tools and includes TCRM, which is being taught in boot camp to recruits. I often ask our maintenance leaders about TCRM and it’s not unusual to find someone with no knowledge of it. We become antiquated when our young Sailors know more about it than us.

"Leadership is being totally involved in every aspect of your production effort and personnel issues."

The CNO, MCPON and all force MCPOs have released PODcasts on TCRM, but I’m amazed it is not known by most fleet units. Junior personnel are gaining the knowledge and possibly applying the concept, the officers practice it for their flight planning and missions, but our senior enlisted and more junior LDOs and CWOs still need to get up to speed. I refer to this group as the “frozen middle,” stuck in their ways and not learning new ideas or concepts. ORM is not TQL or any other common buzzword that flies around the Navy. ORM can greatly benefit your maintenance-production efforts if you use it. If you need to brush up on the latest information on ORM or need to review the ORM OPNAV Instruction 3500.39C look at the Naval Safety Center’s website under the ORM tab.

My fellow LDOs, CWOs and Chiefs, we need your help to prevent future mishaps and successfully complete the mission. I know that we can do it by being engaged. There is not a problem a well-run Chiefs mess can’t solve along with the LDO and CWO community. When we are promoted to CPO, the first two letters of our rate remain such as AEC, ADC and AMC. We continue to be the subject matter experts in our field. Reach down to the junior folks and pull them up to your knowledge level and show them how to properly perform maintenance. Most of all make professional aviation-maintenance technicians out of them.

Chief Warrant Officer 5 Kissel is the maintenance officer with the Naval Safety Center.
Lessons for a Long Cruise

By Sam Fellman - Staff Writer, as first appeared in Navy Times

Your greatest risk on deployment — especially one that stretches beyond what the crew expects or is used to — comes from succumbing to the sense that dangerous things aren’t. The key to combating complacency as a cruise stretches on is asking yourself before each hazardous event, “What’s different this time?” said Capt. Erik Ross, CO of USS Bataan (LHD 5). “We’ve done this 39 times. This is time No. 40. Do we have different watch standers? Do we have different environmentals?” Ross studied the crew’s most common mishaps, typically mundane things like falling down ladders or bumping into knee-knockers.
Each week, during a 30-minute videotaped session, a chief reminded the crew about these hazards and others to avoid. That chief dressed as “Complacency Cow” and occasionally had skits to make the lesson more fun for viewers. “I think we pay more attention and have heightened awareness when we’re doing more dangerous things and when we’re in the middle of an operation,” Ross said. “But when you do things so often that they become routine, that’s where the danger of complacency is the greatest.”

During a 10½-month deployment, there are more opportunities for complacency to set in. The Bataan’s workload, for example, included recovering hovercraft 123 times, running 10 Close-In Weapon System gun shoots, and conducting 39 underway replenishments and 18,404 flight deck evolutions, according to figures compiled by the ship.
I joined my first fleet squadron before they returned from deployment. Six of us recently minted helicopter second pilots joined the O-4 from the advance party to welcome the unit as they sailed home. I was excited to learn all I could from the “one pump” captains, who would be returning from what was then a rare combat tour.

The squadron had a great reputation. It also had a stacked-deck of experience, with the least qualified pilot being at minimum a division leader. The squadron had more than the fleet average of pilots qualified as air mission commanders and assault flight leaders. This was because before Sept. 11, 2001, squadrons had much more time—in this case, several years—to prepare for whatever a deployment might bring. That was just the type of organization I wanted to be a part of: one that maximized training and qualifications right down to the lowest level.

My first flight in the squadron was with the outgoing CO. During the brief, the CO commented, “For this flight, you can just sit on your hands and pick up the sight picture by watching me fly.”

Little did I realize at the time that these words would come to encapsulate my peer group’s experience for years to come. Welcome to the B-team.

I did eventually get to touch the controls of a fleet aircraft. Following the change of command, our training began in earnest, and we learned much from our experienced mentors, the A-team. When it came time to apply these skills, such as carrying troops during predeployment training, it seemed to be an unwritten rule that a member of the A-team would be in every pilot seat, even that of Dash-4 copilot. The best the B-team could hope for was to be the operations duty officer (ODO) for the big missions and gain experience in that way.

What was the logic behind these crew combination decisions? The question was asked and the answer was forthright: “safety.”

Risk was the driving factor, and who could argue that? Placing a more experienced flight crew in all positions decreases overall short-term risk. The policy was effective, resulting in a mishap rate that was exactly zero. There were some obvious side effects however, and the hog board (a report that shows the running totals of pilot flight time on a rolling 30-, 90-, and 365-day basis) reflected what could be called a great divide. The A-team, all had a 25-plus hour average in the 30-day block, while the B-team, could not seem to break the 15-hour glass ceiling.

Many such months came and went, and the ink had barely had time to dry on several helicopter aircraft commander (HAC) designations, including mine, when it was time to begin our deployment. Of course, the B-team could forget about actually commanding an aircraft for quite some time.

Finally, at about the midway point, I got my chance. My first flight as aircraft commander listed me for a 1.0 shipboard currency repunch flight with the squadron’s operations officer as my copilot. We hot-seated in, I did two landings, he did two and then we hot-seated out. Cherry HAC ride complete. This was
minimum risk as always. My next flight would find me back in the now familiar copilot position.

As with most squadrons returning from deployment, our A-team pilots who had just completed their second deployment received PCS orders and would depart within two months. The B-team was now going to have to fill the A-team shoes as the new “experienced instructors.” The problem was that we lacked important experience. We were more experienced than when we left on deployment, but for the instructor requirement, well, none of us were qualified beyond aircraft commander.

The squadron suffered A-team attrition and conducted a change of command shortly upon return. Our new CO, trying to get a sense of his stable of pilots, asked me who the most experienced pilot in the squadron would be following all these outbound PCS moves. The inbound field grade department heads would not arrive for several more months, and they would require requalification upon arrival. I told the new CO that I was as qualified as any of the pilots he had remaining. The CO inquired what my highest qualification was. I told him, knowing he would be both surprised and disappointed, that I was only an aircraft commander.

I witnessed a visible reaction as the reality set in. He would, for some time, be our only section leader, division leader, terrain flight instructor, well, you get the picture. He said, “Well, we will just have to start you and your peers in the section-leader syllabus tomorrow.”

It takes 50 hours of aircraft-commander time just to begin section-leader training. I told the CO that we were all at least 30 hours short of this flight-hour benchmark. We were well behind the power curve to start this phase of the squadron’s life cycle.

We did get the needed flight hours, and we progressed through the training. Pre-deployment training was the first time most of us had ever flown in those mission types, and we were now stepping in at a much higher level of expectation as the aircraft commanders or element leaders.

There were lessons learned then and in the deployment to follow like any other, but many of those were “lessons relearned.” They might have been avoided if experience had been passed on during the prior workup and deployment cycle.

How long does it take to make a pilot with years of experience? It takes more than just the passage of years. It matters what you do, and what your command does to maximize safe training opportunities during that time. How often do we as leaders and decision makers run from risk today, not realizing that we are running headlong into greater risk tomorrow? How often do we consciously make decisions to minimize risk in the short term knowing that the bill for our decisions will be paid by our successors?

The next time you make a decision in the name of risk reduction, ask yourself this question, “Am I really mitigating risk, or am I simply deferring it, allowing it to grow until I pass the situation on to those who come after?”

Maj. Grindel is with 3MAW FWD DOSS.

““There are times when running from risk can lead you headlong into it.””
Human Factor’s Psychology

... but it’s not just for aviation

By Capt. Lee Mandel, USN, MC

In the Sept. 29, 1944 issue of Navy Department Bureau of Medicine and Surgery newsletter Aviation Supplement, an article appeared entitled, “The Flight Surgeon in 1918.” In this reprinted article from World War I, the author wrote in 1918: “Wonderful has been the development of the airplane — inconceivable has been the neglect of the man in the airplane.”

The author concluded that the three means by which a flier’s usefulness may be terminated were 1) The Hun (a typical World War I term for the Germans), 2) Failure of the engine or plane, and 3) Failure of the flier himself. He pointed out that 2% of the fliers were lost in combat to “the Hun,” 8% of fliers were lost due to aircraft failures, and “the remaining 90% looms large, when it is realized that this proportion represents troubles in the flier himself.”

Although he never used the term “human factors” in the article, the author was giving an excellent look into the current status of human systems integration in aviation, where human factors, or “troubles with the flier himself,” still are a factor in about 85 percent of aviation mishaps.

We currently use the Human Factors Analysis and Classification System (HFACS) as a means to determine potential ORM hazards and detect human error trends. Our HFACS model is built around James Reason’s “Swiss Cheese Model,” where we consider four barriers that prevent mishaps: Acts (by aviation personnel), Preconditions, Supervision, and Organizational Influences. It is only when the proverbial holes in each slice of the Swiss cheese are lined up that human factor mishaps occur.

The “Act” describes what happened. Acts are broadly divided into Errors and Violations, with several subcategories in each. The “Precondition” attempts to answer why they did it. The three broad categories that can explain why a certain act occurred are: inadequate supervision, the condition of the individuals, and personnel factors. Again these broad categories are further subdivided into more specific causes to hone in on. “Supervision” addresses what errors did the command might have made. The subdivisions of this level are inadequate supervision, planned inappropriate actions, failed to correct a known problem and supervisory violations. The last slice of cheese is “Organizational Influences.” The subdivisions are resource/acquisition management, organizational climate, and organizational processes.

It is sound risk management practice to learn from our past mishaps to prevent future ones. Hence, in every aviation mishap, the human factors expert, the flight surgeon, will do an aeromedical analysis and frame his findings around the above-described HFACS framework. Starting with the “Act” and working through the other slices of Swiss cheese, can often provide insights for future performance improvement at all levels of the naval aviation enterprise. It is critical to state unequivocally that these Safety Investigative Reports (SIRS) are done purely for safety, ORM and lessons-learned purposes, not for punitive purposes. To that end, the aeromedical analysis is a privileged document.

The sound techniques of ORM used in aviation, such as HFACS analysis, are now being disseminated to other industries throughout the world. Industries such as healthcare, can benefit from the pioneering work that has been done and is continually refined in the aviation community.

Capt. Mandel is head of the Naval Safety Center’s Aeromedical Division.

There is a movement to incorporate HFACS analysis into afloat, ashore and off-duty mishap analysis. Information on the DoD Human Factors Analysis and Classification System (DOD HFACS) can be found in OPNAVINST 3750.6R, appendix O. The OPNAVINST 3750.6S will be published in January 2013, and the HFACS information will be in appendix D. The HFACS flipbook is also available for download at http://www.public.navymil/navsafecen/Documents/aviation/aeromedical/HFAC/HF_anlys_flp-bk.pdf — Editor
TCRM: The Beginnings

By Evelyn Odango and Ted Wirginis, Naval Safety Center

We have conducted numerous studies on ORM and its effectiveness in the fleet, and have a firm grasp on in-depth and deliberate-level ORM actions. However, when it comes to time critical risk management (TCRM) — when time and resources are limited — we are lacking. Why? Our surveys and assessments determined that the five steps are too complicated for on-the-fly application.

How did we fix the situation?

We adopted the ABCD Model for TCRM from the Marine Corps MV-22 community. It was developed by Ms. KD VanDrie and derived from her Volant Model. Below are segments of an interview with her that begins with her research.

What’s the science behind TCRM? KD VanDrie, developer of the ABCD Model explains

Research related to risk management has grown by leaps and bounds in the past decade and has led to the development of our ABCD Model which consists of a mnemonic, icons, resource blocks and a three colored target. We refer to the ABCD Model as a set of tools because it’s a framework to help managers ensure that they don’t expose their organization to any more risk than is acceptable.

Behind the ABCD mnemonic and icons (which captures the basic skills of situational awareness, decision making, communications and active learning), there is a wealth of science. This includes the phases of situational awareness, complexity theory, risk assessment, development of expertise, habit formation, decision making styles, communication and education.

The ABCD Model toolbox is there to help mitigate the effects of stress on the brain and to provide a mental model that can be shared by everyone.

The first icon is the resource blocks which are based on extensive experience in the design and development of operational guidance, instructional design, use of automation, and operations research in both civilian and DoD applications. Additionally we have drawn from NASA Human Factors research. The model has been used extensively in the design of scenario-based training and was further validated through data collection and analysis of those events. The resource blocks are consistent with widely accepted mishap causal-factor research and exist to visually show how to stop a chain of errors before it becomes a consequence, even if we’ve lost track of the errors.

The second icon is the target which helps to quickly evaluate and communicate your level of risk, from the green area where everything is optimal, through the yellow area where stress begins to take its toll, or in the red area where there is a significant chance goals may not be met, or where the risk exceeds the reward. It can also be used as a lens for situational awareness from green (good) to red (poor).

The framework of the ABCD Model is meant to make all of this science easily accessible in real-time to people that need to get a job done in a dynamic, time-critical, and often high-risk environment. At its core, the ABCD Model is about dealing with the physical and psychological effects of stress on the brain. When we are under stress from any source, it affects our ability to effectively manage risk.

We designed the ABCD Model to make complex ideas intuitive, to get the core concepts into the habit and instinct part of the brain as quickly as possible. With the ABCD mnemonic loop, we built a continuous improvement process that is just as instinctive as the rest of the tools, and effective whether done informally with personal evaluation or formally with organization wide data collection and analysis.

The solution begins here and now with you. What is your knowledge of TCRM? Have you provided your people with the necessary resources, tools and training to successfully do their jobs? The leader’s role is a decisive factor in the successful integration of TCRM. This is a Navy team effort and as teammates, they must know their responsibilities and consequences of a loss of a teammate. We still have to measure up and TCRM assists us. TCRM, it’s for on- and off-duty. Learn it. Use it.

For more on KD VanDrie’s interview, the ABCD Model, and risk management, visit www.public.navy.mil/navsafecen/pages/orm/ORM.aspx or www.volantmodel.com.
As Gen. George Patton’s character in the movie said, “Now I want you to remember that no bastard ever won a war by dying for his country. You won it by making the other poor dumb bastard die for his country.”

If we agree with this concept, then each one of us must ensure we do all in our power to preserve the best weapons of our nation: ourselves. If you’re injured or dead, you certainly are not maximizing the pain and fear that you could be delivering upon our enemies.

Each one of us must assume primary responsibility for our individual combat effectiveness. Unit commanders must embrace safety leadership to the same degree they do tactical proficiency and readiness. Safety is your job, and everyone is the safety officer.

The goal of safety isn’t to just create a program, with a checklist and a manager. If it were, then we could successfully defend our country by sitting idle in garrison, or pierside, or in the hangar, instilling fear in our enemies by just looking mean.

Too often, we have reactionary safety standdowns after something goes wrong, or to kickoff a holiday. We hear those who we perceive as “B” team guys tell us not to do things — not to have fun, not to do what we plan on liberty, not to take risks, not to push the envelope, and not to train like we are going to fight. That’s what gives safety a bad name. We joined the military to do things, not to be spectators and watch the grass grow.

During these standdowns, where are the “A” team operators? Doesn’t this stuff apply to them? They are clearly the best and brightest, so if it really were important, like tactics and operations, maintenance or engineering, they would be teaching it.
Safety is much more about how to do things successfully and professionally. It is a “tactic” that enables us to accomplish the most challenging, difficult and dangerous missions — on and off duty. We operate on the blackest of nights, land aircraft on small ships in rough seas, clear entire cities of enemy fighters hiding among noncombatants, and operate submerged for six months while circling the world without seeing the sky. We rely on time-tested tactics, techniques, and procedures (TTPs), standard operating procedures (SOPs), planning, communication, preparation and leadership. We don’t get these dangerous things done by just saying, “No” or “That isn’t safe.”

The best, brightest, and most professional among us do things well without exposing themselves and their team to unnecessary risks. While they might not like the title, they are our best safety officers. It is everyone’s job and duty to maximize their combat capability by minimizing the risks associated with whatever they do.

Preventable losses are unacceptable, whether self-inflicted or as a result of enemy action. Arguably, a self-inflicted loss is even more heinous as it requires no expense or action by the enemy. Our efforts to eliminate combat-degrading mishaps must be as robust as those toward collecting enemy intelligence, tactical training and maintaining our equipment. All efforts must be made to accomplish the mission. The best and most professional among us accomplish that while preserving combat capability.

The commander, ultimately responsible for combat readiness of the unit, is the de facto senior safety officer, whose efforts must be supported by all of the professionals within the command to be most effective. This is especially true off duty, where you don’t have a formal Plan of the Day, flight schedule or mission briefing, and you aren’t under the chain of command’s direct supervision. That doesn’t mean you have a green light to be irresponsible. The transition between acting professionally on duty and off duty must be seamless.

Often, our culture seems to tell us that someone else is responsible for what happens to us. Teachers are responsible for making sure our kids learn. Banks shouldn’t have given us loans we couldn’t pay back. Our government will take care of us and save us from ourselves. Someone else will correct that hazard. The safety officer will keep us safe.

This mindset gives too much responsibility to others, and implies that unexpected things that happen to us are beyond our control. It gives others too much credit, as well as too much power over us. Others can’t force this mindset on us. It only happens when we make excuses for our own behavior, when we refuse to take responsibility for things we do have control over, and when we lack the will to determine our own future. External factors always influence outcomes, but successful people and commands make their own “luck.” They position themselves with professionalism and knowledge, consistently applying risk management, to make the best out of every situation they encounter both on and off duty. ▲

Col. Erb served as the deputy commander at Naval Safety Center, and has recently retired from the United States Marine Corps.
Recruits at Recruit Training Command (RTC), Great Lakes, have received training in ORM since it was first introduced over 15 years ago. Recently, with support and guidance from the Naval Safety Center, the additional concept of TCRM was added to the curriculum. This additional tool gives our young Sailors a better capability to make good risk decisions as they embark on their careers.

The TCRM process is a four-step model which is introduced as the mnemonic ABCD, which stands for Assess the situation, Balance your resources, Communicate, Do and Debrief. This concept is an adaptation to the traditional ORM five-step process, and makes the principles easier to remember during operational exercises or tasks. This risk-management concept is especially beneficial to recruits whose time and resources are consistently limited and tested during their eight weeks of basic training.

Two of the most beneficial aspects of this training have proven to be the teaching of decision-making skills and reinforcing the concept of situational awareness. For example, during the first step of TCRM, “Assess the situation,” recruits learn the importance of having increased situational awareness. They are taught to identify human factors that may limit their ability to safely adapt to a work environment such as stress, fatigue, or willfully violating a regulation. These decision-making and awareness skills have helped recruits adapt to several phases of training, especially those challenges posed by high-risk events such as water survival, fire fighting and weapons live-fire.

Our high-risk instructors use the TCRM tool to educate recruits on the potential for consequential error. In the TCRM concept, the potential for error is represented by a colored target: Green comprises the center, an area where errors may occur but are readily perceived; yellow is the secondary ring or zone where the potential for errors is increased, resources are failing and a need to reprioritize exists; red is the outer ring where errors readily occur due to lack of perception and a need to “Balance resources” is required.

This concept assists recruits by training them to think under stressful situations and teaching them to use their teammates for assistance. They then need to “Communicate” those concerns to the right people: their Recruit Division Commanders (RDCs) or instructors. Since the introduction of TCRM at RTC, an increased emphasis has also been placed on recruit critiques and debriefs to improve training. This process of “Do and Debrief” has proven to be not only beneficial to recruits, but an invaluable learning tool for the staff.

Another important aspect of TCRM training at RTC is the emphasis on using these principles off-duty as well as on-duty. Recruits are introduced to scenarios in which TCRM can be applied to everyday situations such as riding a bicycle or crossing the street. Our goal is to educate and provide the recruits the tools to reduce risks in all aspects of their lives. The ABCD model provides a quick reference and an easy-to-remember mental tool that recruits can effectively carry with them into the fleet. RDCs may not always be pleased when recruits decide to think for themselves, but TCRM is a decision-making tool that is not only being taught, but is highly encouraged at the Navy’s only boot camp.

Lt. Cmdr. Gesaman is with the Recruit Training Command, Great Lakes, Ill.
A
s I visit commands around the fleet discussing ORM with junior and senior personnel, one question always seems to come up: “Man, this ORM thing seems like an additional burden, so what’s in it for me?”

How do you answer that?

Let’s relate operational risk management to sports. We enjoy watching our favorite teams, especially when they’re winning. What makes a winning team successful? They develop plays (deliberate ORM) during preseason. They study them over and over while integrating them into practice. This effort goes on hourly, daily, and weekly until they have it down pat. The athletes then take their skills to the game and execute (time critical risk management) what they’ve practiced.

Each player has to Assess the situation and adapt to the changes, Balance their resources (changing the play or players), Communicate to each other and Do the play. When they execute to the standards they trained to then success is measured by winning games. They then Debrief and review the game. Winning earns accolades from sportswriters, fans and even the opposing team. Key players also may get recognized through awards and money.

How does ORM relate to the junior Sailor in the fleet? I suggest that when you walk around your command (aka leadership by walking around or LBWA) ask your junior Sailors if they use ORM/TCRM, and what benefits they see from using this tool. If you get a deer-in-the-headlights response, relate ORM to a familiar subject, such as sports, as we did above.

Our Navy has a mission to accomplish, no matter if it’s training or at the tip of the spear. We need to integrate risk management processes to effectively meet mission requirements.

Mr. Komornik is an ORM education and training specialist with the Naval Safety Center.
Leaders, Get on Board

By Don Borkoski

During the past months, Naval Safety Center staff visited numerous fleet concentration areas, interacting with hundreds of leaders, motorcycle riders and Motorcycle Safety Representatives. This was both eye-opening and extremely informative. Many of the policy changes drafted in to the revised OPNAVINST 5100.12J were a result of symposium comments.

Here are the top 10 issues:
1. Shortage of trainer motorcycles
2. Inadequate communication between riders and their command
3. Lack of support for training by command middle management
4. Need for more advanced-level training
5. Desire for a classroom MSR course
6. Improvements to ESAMS
7. Need for dirt-bike and 3-wheeler training
8. Rider groups, clubs and mentors need encouragement
9. Extreme rules from command leadership driving riders “underground”
10. Inconsistent policies for base access

We’re working to improve policy, training delivery, command involvement and funding. Some areas will take time to improve, but many were immediately corrected.

The visits shed light on the biggest hindrance to process improvement: Communication. This is a common area of weakness, and all stakeholders must make improvements.

► Region Commanders are encouraged to standardize base-access rules between installations.
► COs and OICs are required to train their riders, appoint an MSR and support mentorship.
► Safety managers must schedule quarterly motorcycle safety/MSR meetings.
► CMCs and MSRs must work together to identify and train all military riders.
► Contractors are working to adapt training hours to meet local needs.
► CNIC is funding improvements/increases to the pool of trainer motorcycles and motorcycle ranges where needed.
► Riders must help mentor fellow riders, take ownership of their own risk management, and get trained.
► Naval Safety Center will:
  • Conduct regional quality-assessment visits to work with the enterprise in order to improve/adapt training, awareness, and policies.
  • Improve the rider-related content on the NSC website.
  • Communicate more effectively with stakeholders.
  • Work with other services to standardize installation access and training delivery.

• Publish statistical data to help identify areas needing improvement.
• Work with national agencies and businesses to improve the safety of motorcyclists.

Riding a motorcycle continues to be one of the most dangerous activities our personnel do in their lifetime. Riders must personally manage the risks and exercise self-control. Failure in either area can be deadly. While riding is a personal choice, commands must be involved to make sure their riders are trained because training has proven to be the most effective method to reduce motorcycle mishaps. The injuries and losses of military personnel from motorcycle mishaps have a significant negative impact on readiness. The personal trauma and tragedy are paramount, of course, but there are also extremely high financial costs both to the military, to the victims and to their families.

Food for Thought

The safer automobiles become, the more dangerous the roads become for riders because of driver complacency. Motorcycles are often not seen by drivers of 4-wheel vehicles; riders must assume responsibility for staying out of harm’s way or positioning themselves to be seen. Most riders involved in mishaps had not completed the required training. Personal protective equipment always reduces injuries in survivable crashes. Trained riders are much more risk aware on the job and in other vehicles. Commands with the most untrained riders generally had not corrected training-availability issues. It’s not an accident that commands with leadership involvement have the least mishaps. ▲

Mr. Borkoski is a motorcycle safety specialist in the Shore/Ground Safety Programs Directorate.

ORM NOTE: There was no mention of ORM in this article, yet it outlined controls for successful motorcycle riders and command programs.

RESOURCES

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION: www.nhtsa.gov/driving+safety
## Organize Your Command’s ORM Program

### Roles and Responsibilities

(Reference OPNAVINST 3500.39C)

### Commanders, Commanding Officers (COS), or Officers in Charge (OICs):

1. Establish command policy and expectations for on- and off-duty ORM.

2. Designate your command ORM manager. This person will oversee command ORM implementation and training, and will measure ORM effectiveness within the unit. Recommend the XO or department head fill this role.

3. Address the ORM process in mission, training, safety, and lessons-learned reports. Reports should comment on hazards, risk assessments, and effectiveness of risk-mitigation efforts.

4. Inform the chain of command of hazards identified by the ORM process that cannot be controlled at the command level.

5. Ensure ORM risk decisions are being made at the appropriate level within the command.

### Command ORM Manager:

1. Ensure the ORM process is applied to all aspects of command operations and activities.

2. Designate at least one officer and one senior enlisted person (or a civilian equivalent) as ORM assistants. Additional senior personnel may be designated based on command mission or unit size.
   - Ensure the command ORM assistants complete at least one of the following courses: the instructor-led ORM Application and Integration Course, Aviation Safety Officer Course, Aviation Safety Command Course, Surface Warfare Officer School, or the Submarine Officer Advanced Course.

3. Direct the use of tools and resources such as Total Risk Assessment and Control System (TRACS). Assist with hazard identification and risk prioritization. Assist with hazard controls for ORM assessments on common tasks and evolutions. Help develop ORM assessments for unique tasks or evolutions.

4. Include ORM in the orientation and training of all military and civilian command personnel. The level of training should be commensurate with rank, experience and leadership position.

5. Include ORM training in individual development training course plans and individual development plans for civilian personnel.

6. Incorporate identified hazards, assessments, and controls into briefs, notices and written plans.

7. Conduct a thorough risk assessment for all command operations, tasks, and activities including new or complex evolutions, defining acceptable risk, and possible contingencies for the evolution.

8. Ensure periodic command ORM evolution and program evaluations are completed and logged.

9. Submit ORM lessons learned and best practices to the ORM model manager for annual dissemination.

### ORM Assistants:

1. As the command’s subject matter experts (SME), the ORM assistants assist command personnel in doing risk assessments. They also train command personnel using resources such as ORM assessments, general military training (GMT), ORM training, videos, and lesson guides and materials provided by the ORM model manager, school houses, or other sources. Suggested venues for this training include training in work centers, at stand downs, indoctrination classes, and training syllabus events.

2. Include ORM in the orientation and training of all military and civilian command personnel. The level of training should be commensurate with rank, experience and leadership position.

3. Include ORM training in individual development training course plans and individual development plans for civilian personnel.

4. Incorporate identified hazards, assessments, and controls into briefs, notices and written plans.

5. Conduct a thorough risk assessment for all command operations, tasks, and activities including new or complex evolutions, defining acceptable risk, and possible contingencies for the evolution.

6. Ensure periodic command ORM evolution and program evaluations are completed and logged.

7. Submit ORM lessons learned and best practices to the ORM model manager for annual dissemination.
This familiar card has been around a long time, but this current version addresses a major change to the way we look at risk management. It’s the MISSION and how severity and probability impacts the accomplishment of it.

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<th>Severity</th>
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<th>PROBABILITY</th>
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<td>I</td>
<td>Loss of Mission Capability, Unit Readiness; Asset, Fatality</td>
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<td>Significantly Degraded Mission Capability or Unit Readiness; Severe Injury or Damage</td>
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<td>III</td>
<td>Degraded Mission Capability or Unit Readiness; Minor Injury or Damage</td>
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<td>IV</td>
<td>Little or No Impact to Mission Capability or Unit Readiness; Minimal Injury or Damage</td>
<td>Unlikely</td>
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Risk Assessment Codes

1 - Critical  2 - Serious  3 - Moderate  4 - Minor  5 - Negligible
Is Our **ORM Program** Working?

**Assessment Tools**

By Denis Komornik

As our Naval Safety Center ORM team travels around the fleet, one question is continually asked: “How do I know if my command’s ORM program is working?”

To help you answer this question, we’ve partnered with the fleet assessment commands to develop two tools to help evaluate your programs. First, the Evolution ORM Assessment Sheet, which looks at how well a unit applies the ORM process during operations. Second, the ORM Program Assessment Sheet, which measures how well a unit complies with the guiding OPNAVINST 3500.39C (Series).

These tools help measure the implementation of your program and provide feedback on the effectiveness of your command’s ORM training. They were designed to be integrated within existing command-level assessments and to be used by outside evaluation commands.

The Evolution ORM Assessment Sheet is an evaluation of your unit, staff, or group’s application of the ORM principles and processes during execution of a complex event. A Tailorable Evolution ORM Assessment Sheet is also available to focus on your command’s individual requirements.

The ORM program assessment sheet is an evaluation of ORM integration of your command’s policies, training and the compliance of OPNAVINST 3500.39 (Series).

These assessment sheets enable you to analyze your command’s program strengths and weaknesses. The Naval Safety Center, along with assessment commands, has found a strong correlation between the task scores for ORM planning and the scores for execution. The better you plan, brief and use ORM, the more likely your performance will improve.

These ORM Assessment sheets are available at: https://navalforms.daps.dla.mil. Click the tab for “Forms” in the top nav bar, select “Keyword Search,” and enter the form name in the box for “Search Criteria.” Local reproduction of the forms is authorized.

1. OPNAV 3502/1 (JAN 2010) Evolution ORM Assessment Sheet.
2. OPNAV 3502/2 (JAN 2010) Tailorable Evolution ORM Assessment Sheet.
3. OPNAV 3502/3 (JAN 2010) ORM Program Assessment Sheet.

Mr. Komornik is an ORM training and education specialist with the Naval Safety Center.
Many people get wrapped around the axle and create confusion and distaste for ORM when they overthink the principles and steps of this process.

For me, ORM doesn’t take a 200-page instruction or a 50-slide PowerPoint presentation to explain what it is. I break it down to just common sense, no matter what you do.

Ask yourself a few questions before you engage in your next activity. “What am I going to do? Will I be skiing the slopes? Changing the oil in my car? Moving an aircraft?”

Then progress to more questions. What could I do to make sure nothing goes wrong? What procedures could I put in place so nothing gets damaged or breaks? How do I prepare? These questions help you brainstorm to identify risks involved in the activity.

For example, let’s say you’re going skiing. Consider how you’ll get to the ski area. Is your vehicle prepared for winter-driving conditions? Will you need tire chains? Do you even have any chains? Is your car full of gas, oil, and wiper fluid?

Then start asking about how you could get hurt. Do you have proper equipment? How are the conditions?

After brainstorming to identify the risks, figure out how can you minimize or manage them. Check the weather forecast. Also, check your route and ride with a buddy. Besides those precautions, you should take a cell phone; carry extra food, water, a blanket, and other clothing; and let someone know your schedule. Finally, you should identify the protective equipment you will need. Sounds like common sense. Well, that’s what ORM is all about.

To complete the risk-management loop, you must analyze the risks and your risk-control measures to see if they are appropriate and are working. If not, you must modify your controls. The risk may be too great to accept without changing your control measures.

After the trip, ask yourself if you encountered anything that wasn’t expected. Were you prepared for contingencies? If you successfully managed the risks, you have a great starting point for your next adventure. If you ran into problems, then you need to do more planning and better manage the risks for the next trip.
You have to identify the threshold you are comfortable with accepting when engaging in recreational or other off-duty activities. Someone in your chain of command usually will dictate the level of risk that is acceptable for on-duty activities. In either case, you must strive to reduce the risk’s probability or severity, or both. If your control measures don’t accomplish that goal, you must modify the measures or reconsider the activity altogether.

Remember, ORM is not an additional requirement. It’s a process that should be integral to all activities. It’s a philosophy — a way of life. It does you no good just to read about it, attend lectures and briefs about it, and keep a laminated card in your wallet. The key to success is to do all those things, then accept it as a tool and put it into everyday mainstream use. Think of ORM as an “Obligation to Reduce Mishaps,” using an “Old-fashioned Right-thing-to-do Mindset.”

In its simplest form, ORM is based on common sense, so don’t overcomplicate it. Learn to think of it in terms of these questions: What am I doing? How can it bite me? What am I going to do to protect myself? How did it turn out? What have I learned? How can I do it better and safer next time? And most importantly, ask how to compute the task or mission without errors.

Lt. Cdr. Tomga flew with VAQ-130.

It’s All About Risk Management

By Ted Wirginis

Not long ago, I was told by a commander that they did not use risk management at the Pentagon! I cringed to think that a senior officer did not understand ORM enough to correlate that the Pentagon uses ORM daily. That led me to reflect on how risk management became very personal to me ... again.

A few months ago, I had open heart surgery, an experience that I would not wish upon anyone. Leading up to the actual surgery, my physician, the surgical team and I had decisions to make about such things as the type of heart valve (tissue, prosthetic or cadaver) methodology and pre-op evaluations. It was all about risk management; there was not an obvious answer to any question.

We looked at the probability of longevity or surgery success, and severity of any consequence. These considerations are directly at the core of risk management. All of my conversations with the surgeon were about risk, but we never used the word risk.

As time goes on, I will continue to realize the success or failure of my risk decisions. I’m thrilled to report that so far, so good. My doctors told me that I’m progressing very well.

Don’t be that officer who not only doesn’t recognize or understand risk management, but who also fails to understand it is inherent in every thoughtful decision that we make.

There will be many changes in the next few years that will raise risks to our mission, as well as our Sailors and Marines. Be thoughtful. Be diligent.

Mr. Wirginis is the ORM manager and Leadership Essentials content manager.
ORM Application and Integration Course (2 Days)

Course Registrations: All Quota requests are made in the ENTRS System. Access to ENTRS may be obtained by logging onto: https://mainprod.cetars.training.navy.mil. Select ENTRS then request access from the initial login screen and fill out the application. For ENTRS training email cetarstraining_request@navy.mil. When requesting a seat for the ORM A&I course CIN: A-570-0100, use CDP 09GE for Dam Neck, Va., use 09GJ for San Diego, Calif., and use 03PS for all other locations.

eLearning Courses

First, register for an online account at https://wwwa.NKO.navy.mil/. Follow the instructions for “New Users.” Then select “Navy e-Learning” under the horizontal “Learning” tab at the top of the page. On that page, in the left navigation bar under “Content,” select “Browse Categories,” then select “Department of the Navy,” then “ORM” (in the right-hand column).

Other ORM training is available by selecting the “Personal Development” tab along the top, then clicking “Risk Management/Safety” in the left navigation bar (the fourth item down). You will find eight traffic-safety items (two are specifically ORM-related), as well as two ORM topics (FY05 GM Topic 1-1, an introduction to the operational risk management process and principles, with a practical application to a long-distance driving scenario), with a facilitator’s guide and a large zip file to download.

ORM Courses (on the Navy e-Learning)

Operational Risk Management - Time-Critical Risk Management
Manager - Directing Your Command Risk Management
Assistant - Leading Risk Management Integration
Individual - Managing Your Risk
Supervisor - Managing Your Team’s Risk
Time Critical Risk Management
CPPD-GMT-ORMTC-1.0
CPPD-ORM-DYCRM-1.0
CPPD-ORM-LRMI-1.0
CPPD-ORM-MYR-1.0
CPPD-ORM-MYTR-1.0
CPPD-TCRM09-02

Note: Refer to OPNAVINST 3500.39C, Encl (3) for periodicity.
Naval Safety Center Website
► http://www.public.navy.mil/navsafecen/Pages/orm/ORM.aspx

ORM Model. This is a multi-faceted explanation of ORM, with expanded versions of many of the sections contained in this magazine, as well as others (for example, tools and methods). These web pages will continue to be updated and to grow.
► http://www.public.navy.mil/navsafecen/Pages/orm/ExplanationofORM.aspx

OPNAVINST 3500.39C. The online documents in the Department of the Navy Issuances System have been grouped by instruction. On the navigation menu, go to the “Directives” tab, and click on “All Instructions.”
► http://doni.daps.dla.mil

Presentations. The ORM Fleet Brief is a customizable presentation which includes various types and levels of training.
► http://www.public.navy.mil/navsafecen/Documents/presentations/orm/ORM_general.pptx

Application and Integration Training
► http://www.public.navy.mil/navsafecen/Documents/ORM_data/ORM_Applic_Integ_Info/FY12_ORM_A-I_Alsafe.docx

Safety Center Links to the Army and Air Force ORM sites, as well as the Army, Air Force and Coast Guard RMIS (risk management information system) sites.

Army CRM site
The Army calls it “Composite Risk Management.” This site contains basic information, training tools, traffic-safety initiatives and news. It contains a PDF version of its 108-page Field Manual 5-19 (“Composite Risk Management”); an appendix contains some excellent examples of applying risk management to specific kinds of operations.
► https://safety.army.mil

Air Force ORM site
The Air Force Safety Center offers the ORM A&I (Course Number WCIP 05E, PDS Code WEI). The course provides “how-to” instruction in applying primary and select ORM tools and techniques. In addition, the integration of ORM into organizational activities is covered. The course is intended for personnel serving as organizational ORM focal points, ORM trainers, lead planners and others requiring a more in-depth understanding of ORM principles, tools and application. The site also has sections devoted to ORM training, guidance, media, tools and lessons learned.
Who is responsible for ORM in my unit?

Commanding officers and OICs are responsible for ORM within their commands. The executive officer, chief of staff, or civilian equivalent is the unit ORM manager and primary agent of ORM implementation.

What's the best way to implement ORM at my command?

Make sure you meet the existing requirements of OPNAVINST 3500.39 series. You need at least one officer and one senior enlisted trained as ORM assistants (we previously called them “instructors”). Train all command personnel commensurate with their rank and experience. Identify new and complex evolutions at your command, assemble a planning team made up of operators from the various functional areas necessary to complete the evolution, and conduct a deliberate or in-depth Risk Assessment. Brief the hazards, controls and individual risk-control supervision responsibilities to all evolution participants prior to execution. Identify root causes of conditions that led to failures, recommend actionable solutions to the chain of command to prevent future failures, then retain internally and disseminate externally lessons learned, best practices, and the risk assessments for future planners.

How do I sign up for ORM training?

The ORM training is available on Navy Knowledge Online (NKO). There is also the ORM Application and Integration (A&I) course, which is two days long and led by an instructor. You can also sign up for the A&I course on ENTRS. It is intended for your ORM manager and assistants.

I've heard ORM described as both a program and a process. What exactly is it?

ORM is both a program and a process. An ORM program refers to a command’s compliance with ORM instructions directives, with regard to its organization, training, implementation, and feedback mechanisms. The ORM process is a systematic approach to managing risks to increase mission success with minimal losses. This involves identifying and assessing hazards, controlling risks, supervising and revising as needed. When commands are assessed for ORM, it will either be an ORM program assessment (compliance-based) or an ORM application assessment (process-based).

How should I document my ORM training?

Document ORM training in both individual training jackets [or Relational Administration (RADM) folders] and at the command-level. A typical entry might be “Last ORM GMT training occurred on …”

How often should service members and civilian employees receive ORM training?

At least annually, commensurate with their rank or experience level, according to OPNAVINST 3500.39 series. ORM training is also directed to be included in command orientation, as well. Currently, everyone is required to receive annual refresher training.

What is a risk assessment?

A risk assessment is a documented five-step ORM process. Minimally, this involves a list of hazards assessed for risk, the risk controls for those hazards, the residual risks, and who is responsible for supervising the risk controls.

What is time-critical risk management?

This level of ORM is when you are in the execution of the event or do not have time to plan. You have to make risk decisions on the fly. It is using the ORM process when limited by time constraints.

How do you order ORM business Cards?

You may download the files off of our website at www.public.navy.mil/navsafecen/pages/orm/orm_businesscards.aspx.
Final Thoughts ...

By Ted Wirginis

This Leadership Essentials issue got me thinking about something else from back in my Navy days.

TOPGUN continues as the epitome of naval aviation warfighters. The TOPGUN program makes our best aviators even better. I recall that TOPGUN flights typically consisted of a two hour brief, a one hour flight and a three hour debrief. Wow, five hours of ground discussion for a one hour flight!

Some folks thought that five hours was overkill. What was the real intent of this training process? It was to create aircrew warfighting expertise faster. The five hours spent on each event during the six week school created the elite warfighter they sought. Obviously, the aircrews started with some talent and were not complete “cones.” Instructors demanded perfection and for the most part, got it.

Why do I mention this? Today’s supervisors are younger and have less expertise and maturity. To maintain our military superiority, we have to be the best at our jobs, from the most junior person to the most senior leaders. How do we become the best that we can be? By using the tools of risk management – the same tools that our experts use. TOPGUN is the best at what they do because a group of folks in 1968 decided that the level of losses in air combat was unacceptable. They are the best, and produce the best, because they demand the best out of their staff and students.

Don’t sit on the sidelines and let good enough be the enemy of great. Get involved and work with your less experienced folks and demand more out of them. Make them the experts that we know they can be.

Teddy “Ballgame” Wirginis is the Naval Safety Center’s ORM manager. He served as an F-14 RIO in VF-84 and VF-32 in the 1980s and 1990s.
“Recruits are introduced to scenarios in which TCRM can be applied to everyday situations such as riding a bicycle or crossing the street.”

“Our goal is to educate and provide the recruits the tools to reduce risks in all aspects of their lives.”