

Doing Business

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A high-explosive round rips through the air toward its target. Meanwhile, the Mk-92 fire-control system takes aim again at the “killer tomato,” and another 76mm projectile streaks through the air. This barrage of fire continues as a three-man gun crew readies a .50-caliber machine gun and takes aim to finish off the target. Several hundred rounds strike the target and the surrounding water, as remnants of the “killer tomato” disappear below the surface of the sea.

Was this a dangerous exercise? Yes. Anytime live ordnance is involved, you have a high-risk event. In this case, however, Sailors aboard USS *Elrod* (FFG 55) knew the dangers and had prepared themselves, starting with a pre-fire brief. This brief addressed all the safety issues: hot gun, hang-fire, misfire, and equipment casualties.

The gunnery officer also held an operational risk management (ORM) brief. He talked about the amount of sleep (less than six hours) the gunner’s mates would have, the length of their workday (more than 12 hours) at the start of the exercise, and the human factors (recent deployment, personal relationships, recent disciplinary action). Other areas of discussion included the complexity of the exercise, the weather, sea state, and how often the crew had held this type of event. The answer to each of these factors had a point value assigned, and the sum of these points placed the exercise in the high-risk category. The gunnery officer then asked, “Given this risk assessment, shall the event continue as scheduled?”

The gunner’s mates replied, “Yes,” and they felt comfortable, knowing they were aware of all

the risks involved and the factors contributing to those risks.

With help from our detachment, ORM is part of all daily operating procedures and exercises like this aboard *Elrod*. The goal is to reduce the mishap rate and improve mission performance. Does ORM work? It does for the officer in charge of our detachment. “It gets people thinking...thinking about circumstances that may not be readily apparent,” he said. “I like what it’s done for the squadron, and I’m very glad to help the ship implement it.” Several years ago, HSL-44 spearheaded a drive to bring ORM to the East Coast LAMPS helicopter community. An ORM brief is now a standard element in a LAMPS pilot’s pre-flight brief, both ashore and at sea, and the ORM process is continued in the air as real-time events unfold.

Teamwork has been the foundation of the relationship between the ship and its air department. Close coordination and understanding of the unique demands placed upon the ship’s crew and the aircrews during flight operations have been the hallmark of the integration between the two.

When *Elrod*’s CO learned about the risk assessment being practiced by our squadron pilots, he wanted to know more about it and how it could be modified for use aboard his ship. “I saw a concept in action that appeared to apply to the types of operations we conduct every day,” he explained. “We always have managed risk for safety’s sake, but the ORM process gives us more. It allows the commander to look at factors that may not have been presented, to look at them from diverse points of view, to make pragmatic

ORM the Right Way

Navy photo by PH3 Lou Messing

decisions, and mitigate risk. ORM minimizes risks to our Sailors and makes us keenly aware of those risks that remain.”

Under the leadership of the CO, an analysis was done on the types of operations and exercises involving *Elrod*. The detachment OinC then helped develop individualized risk-assessment forms for the ship’s various departments. These forms are used to brief everyone before underway replenishment, live-fire exercises, entering and leaving port, engineering-casualty-control drills, and various deck operations.

Specific risk factors have been tailored to each department’s operations. For anchoring, a transit through straits, and entering or leaving port, *Elrod*’s navigator assigns points for shipping density, tides and currents, wind, background lights (at night), visual aides, the pilot’s competency (including English-speaking ability if in foreign waters), and moonlight. The ship’s ordnance officer considers topside winds, weather and temperatures, if people are using hand-held weapons, the potential for a hot-gun condition, and how many evolutions are happening at the same time. In all cases, an excessive number of points will prompt a division officer to think about ways to reduce the risks.



Anytime you use live ordnance, you have a dangerous event. You can minimize the risk, though, by applying the five steps of ORM.

As anyone familiar with ORM will tell you, it isn’t enough just to brief potential risks before an operation. The final step in the process is supervision. When ordnance is fired on a target or the ship navigates a channel or replenishes alongside, you have to constantly supervise (e.g., evaluate the hazards and monitor the effectiveness of the risk-control measures). ORM doesn’t stop until the “killer tomato” has disappeared below the surface of the sea and the “cease fire” order has been given.

[This idea is just another example of how a ship applied the principles of ORM to reduce the mishap rate and improve mission performance. Perhaps you use a different but equally successful version of ORM. If so, why not share it with us, so we can pass it along to all our readers. The goal is to get everyone using this proven process.—Ed.]