

## **NAVAL SAFETY COMMAND** SAFETY AWARENESS

# DISPATCH



### Bridge Resource Management

Effective Bridge Resource Management (BRM) is foundational in safe navigation and mission execution afloat. Despite procedural controls and advanced technology, several recent incidents demonstrate how communication failures, poor coordination and human factors continue to erode safe operations afloat. These mishaps, though distinct in circumstance, share strikingly similar fundamental lapses in BRM, with patterns of degraded communication, ineffective team dynamics and loss of situational awareness ultimately leading to collision or grounding. BRM requires synergy among essential human elements impacting the outcome of safe navigation. Key elements include principles such as



communication, assertiveness, situational awareness, decision making, leadership, authority and responsibility, and teamwork. This dispatch aims to examine shared breakdowns in those elements to identify actionable lessons for all mariners and watch teams.

- Communication. In every mishap reviewed, poor communication within the bridge team was a leading contributor to the sequence of errors preceding the mishap. In one example, the bridge and lookouts failed to maintain clear, continuous communication due to task saturation, preventing early detection of risk and decisive corrective action. And while redundant comms avenues existed, they weren't utilized and therefore didn't improve upon the compromised condition. During other incidents, watchstanders neglected to share vital traffic information or clarify intentions, leaving the officer of the deck (OOD) without situational backup or verbal confirmation from the team. In another incident, junior watchstanders recognized the danger of the commander's proposed track but failed to re-assert those concerns when they were initially dismissed, allowing the ship to proceed toward shallow water. —Missing or ineffective communication prevented these teams from developing a shared and accurate understanding of the situation; enabling minor confusion of individuals to compound and escalate, culminating in catastrophic error by the team.
- Resource Management. Fundamental lapses in resource management were found in each incident reviewed. Bridge, Combat Information Center (CIC) and navigation teams often operated in silos, failing to exchange critical inputs or verify the ship's status as a cohesive unit. Watchstanders deferred to senior personnel without question, suppressing their own observations and contributing to a culture of passive compliance rather than active teamwork. In one incident, indecision and conflicting rudder orders highlighted the absence of a unified command structure (i.e., Who are we taking orders from?). In another incident, the commander made a unilateral decision to override administrative controls and subordinate recommendations and proceeded on his own course, bypassing multiple resources that should have influenced his decisions, but instead were disregarded, ultimately ending in a mishap. —The inability to coordinate roles, share workload and integrate information from all stations prevented the synergy needed to benefit from each input. In every case, BRM principles of communication, coordination and assertive backup were compromised, proving even highly qualified personnel can fail when team dynamics and role clarity break down.
- Situational Awareness. Another shared element across grounding and collision mishaps was the gradual loss or degradation of situational awareness caused by distraction, fatigue and overreliance on routine. In one example, the navigator was focused on administrative tasks instead of the emerging collision scenario, while simultaneously watchstanders failed to register the ship's position relative to nearby traffic. In multiple incidents, bridge teams misidentified vessels, misinterpreted radar data and reacted far too late to avoid collision. Meanwhile, overconfidence in electronic systems, as happened in another incident, can be

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equally dangerous. The team relied on an Electronic Chart Display Information System (ECDIS) set to an improper scale, silenced repetitive navigation alarms without due diligence and failed to verify chart accuracy, removing critical cues that could have alerted them to shoal proximity. —Collectively, these cases illustrate how complacency and inattentiveness degrade performance over time, allowing simple navigational corrections to become crises.

- <u>Decision Making</u>. Command influence and operational pressures are factors that affect decision making. Across the cases, operational tempo and <u>perceived</u> command pressure undermined sound decision making and risk management. In one such case, prior to the mishap, the ship's schedule was compressed by multiple high-demand events including the addition of unscheduled events added to the day's plan. The schedule requirements drove significant fatigue in key positions and a sense of urgency that resulted in the crew pressing on without reassessing risk and was inconsistent with deliberate navigation. In another event, the commander's self-imposed pressure to arrive at a predetermined point on time drove the decision to forgo a safer deep-water route in favor of a shortcut through shoal water, despite the crew's reservations. —*These decisions demonstrate how "get-there-itis" can take root in a culture where mission success is prioritized over safety. When leaders fail to pause and reassess operational risk in the face of schedule changes, they unintentionally signal to their teams that speed outweighs caution, fostering shortcuts and incomplete risk evaluations that invite mishaps.*
- Assertiveness and Forceful Backup. Perhaps the most pervasive theme across all events was the absence of assertive communication and "forceful backup." Junior personnel routinely observed warning signs, such as unsafe proximity, unclear helm orders or misaligned navigation data, but hesitated to challenge authority or raise concerns. Hierarchical barriers, social conformity and fear of being wrong inhibited open dialogue on the bridge. In one mishap, no one questioned deviation from the briefed plan despite clear inconsistencies with actual course and speed. In others, subordinates deferred to OOD decisions until it was too late to act or they voiced safer alternatives but withdrew when overruled. —These examples reveal the cultural challenge of achieving true BRM: a team where every member feels both empowered and obligated to speak up. Without that empowerment, a watch team cannot function as the "last line of defense" against human error.

#### **Key Takeaways**

These lessons underscore a simple truth: when communication fails, so does the ship's last defense against preventable mishaps. Here are some key points to take to your daily operations:

- **1. Strong communication a cornerstone of risk management.** Bridge teams must maintain clear, continuous dialogue, verifying orders and cross-checking information across bridge, CIC and navigation. Every watch stander has the authority and responsibility to speak up, regardless of rank or role. Blind compliance, the opposite of forceful backup and speaking up against questionable decisions, negates the value each team member brings to the operation, compromising the potential for safe passage. Leadership sets the tone for effective communication.
- 2. Assertive backup trained reflex, not an act of courage. BRM fundamentals, shared situational awareness, role clarity and teamwork, should be reinforced through regular drills and realistic training. Formality in bridge communication, which includes standard communication and repeat back, should be practiced in training and carried out in normal operations. When formal protocols are the expectation, it keeps the team on task and reduces complacency when fatigue, distractions and high-demand evolutions take place.
- **3. Navigation technology an aid, not a crutch.** Alarms, ECDIS scales, and chart data accuracy must be actively verified and cross checked, not assumed. Not knowing how to effectively use the tools and functionality has potential to give a false sense of security while increasing risk as in one of the examples.