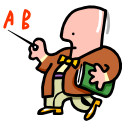
Interactive Sea Story



Note to the Instructor: The following case is a fictitious account of a CG Auxiliary vessel on a multi-mission patrol. The goal of this exercise is to examine the factors and decisions involved in risk management and team coordination.

Although the crew, facility, missions, and patrol are fictional, the basis for concern is not. Participants are encouraged to focus on the team coordination issues when discussing this case and avoid focusing on more technical concerns.

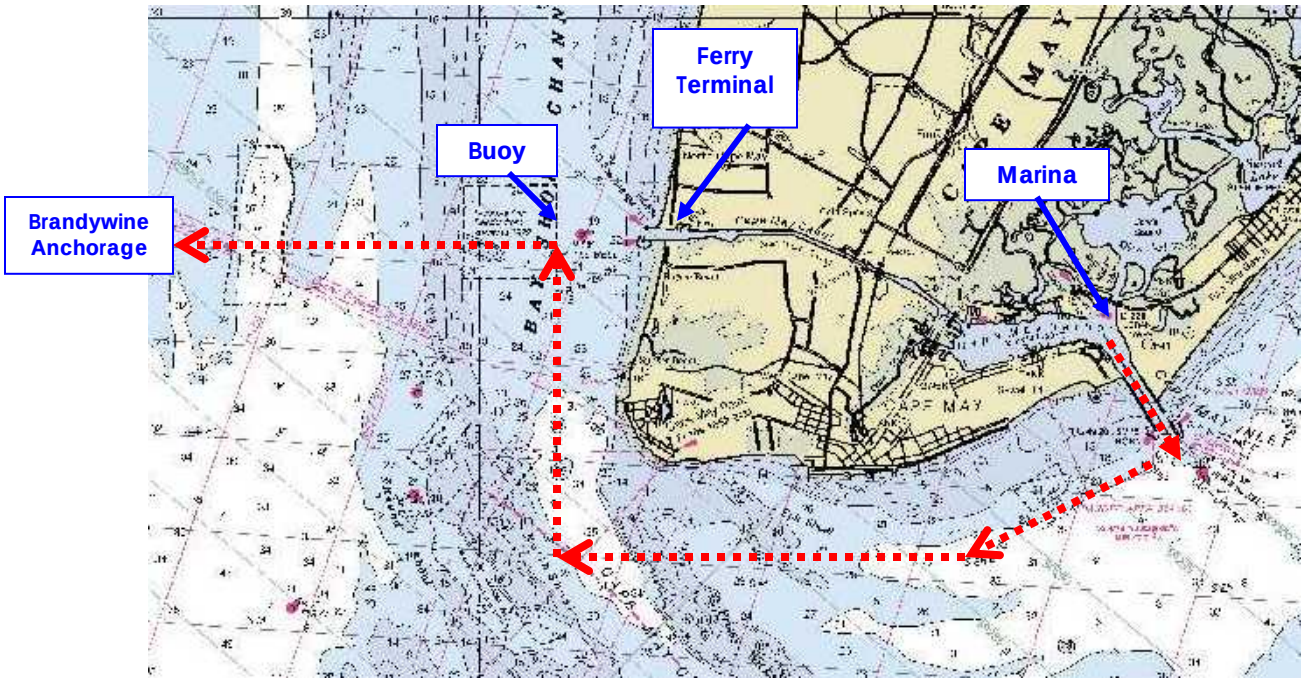
While this fictional case is loosely based on the area of the Delaware Bay (D5), no assumption should be made that this case reflects actual facilities in that area or local operating procedures.

Learning Objectives: At the conclusion of the 2006 Operations Workshop, the participant will:

- Describe the importance of good planning and preparation prior to underway operations.
- Explain the key elements of leadership and decision making needed for mission execution.
- Discuss the importance of establishing clear and accurate communication at every level during a patrol.
- Demonstrate the seven skills of Team Coordination Training during ordered patrols.

Instructions	What to Say to the Participants
Say or read to the participants 	This patrol is conducted in the Cape May, New Jersey area of responsibility (AOR). This area includes the Cape May Inlet that connects Cape May Harbor and the Atlantic Ocean, the Atlantic coastline including the sea resort of Cape May, the Delaware Bay which leads to the Ports of Philadelphia and Wilmington, and the Cape May canal which leads back to Cape May harbor from the Delaware Bay. While on patrol, the three person crew mans a 24' "walk around cuddy cabin" Coast Guard Auxiliary Facility. ▪ *Coxswain:* 20 years of experience as a local boater who is very familiar with the patrol area, 12 years experience with the CG Auxiliary and 10 years as a Coxswain. ▪ *Crewmember*: 10 years of boating experience, but has retired to this area only within the last year and is a new member of the CG Auxiliary, having just completed boat crew training. ▪ *Crewmember Trainee*: 5 years of experience in this area, confined to small 16 ' skiffs used only in the back bays for fishing and crabbing. Just joined the CG Auxiliary. Coxswain is this trainee's father. The Facility: ▪ 24 foot "walk around cuddy cabin" Grady White (1998) ▪ Additional Equipment O/B: 2 radios, GPS chart plotter, no pump ▪ Fiberglass construction ▪ 250 HP Mercury Outboard Engine

Instructions	What to Say to the Participants
Say or read to the participants 	 Location Data: ▪ Cape May, NJ is located between the Atlantic Ocean and the lower Delaware Bay. ▪ CG STA Cape May is the nearest operational unit, located on the TRACEN Cape May grounds. ▪ The Brandywine anchorage area is a major check point for ships transporting up the Delaware River to the Ports of Wilmington, DE and Philadelphia, PA.



Instructions	What to Say to the Participants
Say or read to the participants 	Environmental Conditions: This data was obtained at 1600 hr the day prior to the patrol. NOAA forecast: ▪ Marine forecast for Delaware Bay Area: Air temperatures range between 85-90 degrees F, seas 2 to 4 feet; 1 to 2 feet on the bay. Visibility 4 to 6 miles with some haze. ▪ Water temperature: ocean, 71 degrees ▪ Local Sunset: 1920 hours The Patrol Route: The patrol will begin at Cape May Harbor, and then travel through the Cape May Inlet to the Atlantic Ocean. Proceed south along the coast parallel to Cape May City. Enter the Delaware Bay at Cape May Point through the prime fishing areas at the convergence of the bay and the ocean, then proceed north & west into the Delaware Bay to Brandywine Shoals Light (7 miles west of the canal), where large tankers and container ships await river pilots. The patrol will return to Cape May Harbor via the Cape May Canal, passing the Cape May Lewes Ferry Terminal from the Delaware Bay. Standing orders for the patrol from the CG duty officer (OD): *Keep all boaters out of a clearly marked restricted area (down range of Coast Guard TRACEN rifle range impact area), off the coast and just northeast of the resort of Cape May, near the Cape May Inlet.* *Monitor pleasure and recreational fishing boat activities for possible SAR incidents along the coast and Delaware Bay fishing areas, as well as the congested area of the Cape May Lewes Ferry Terminal at the canal.* *Maintain 'Marine Domain Awareness' in the Brandywine Light area of the commercial shipping lanes for potential threats to this sensitive gateway to the ports of Philadelphia and Wilmington, as well as the Ferry Terminal area at the Canal.* *Monitor environmental conditions off the wildlife preserve at Cape May Point, especially because of recent reports of petroleum spills from older commercial fishing vessels in that area.* **Patrol Day at 0800 hr, Mill Creek Marina** The crew gathers at 0800 at the local marina; a morning haze and high humidity cloaks the entire area as crewmembers begin to arrive. The coxswain remarks "We have a long day ahead of us, it's going to be hot today, so lets get underway right now and maybe we can get back before it gets really unbearable out here. Is everybody ready to go?" The coxswain then immediately contacts the Station Cape May OD requesting permission to begin the patrol and they clear the marina by 0810 and head for the inlet leading to the Atlantic Ocean.

Instructions	What to Say to the Participants
Ask the participants the following question. Be sure to listen closely to the responses. Remember, all responses to your question have value! 	Well, the patrol has begun. What do you think that the crew might have done better as they get underway? **Anticipated responses:** ▪ It is not known if the coxswain had prepared the facility for the patrol. ▪ The crew may not be aware of the day's activities or duties. ▪ Crew member and the trainee were not briefed to the location of navigation, safety and emergency gear. ▪ The coxswain may not be familiar with the strengths, weakness or other issues that the crew member brings to the patrol. He may feel that he knows the capabilities of the trainee. ▪ Weather forecast is not current to morning of patrol. ▪ Standard operating procedures not followed. ▪ There was no risk management assessment (GAR Model) performed.
Say or read to the participants 	Great! In point of fact, there was no pre-mission brief. A successful and safe patrol can be traced to good preparation, a thorough mission analysis, good judgment, effective communication and leadership. Let's break down this crew's deficiencies by area. First, let's take equipment and standard procedures. Each operational facility is different and the procedures and can vary depending upon the configuration. What should not vary is the review of all equipment and procedures. Check lists are very helpful in this regard, so that the brief is consistent week after week. It doesn't matter if this is a crewman's first or fiftieth patrol on the facility, the underway checks must be done. Secondly, let's talk abut personnel. The coxswain may not know about the experience level of the crew member, or if he/she has any relative strengths or areas needing improvement. This impedes effective task assignment and a training program can't be crafted for the patrol. There was no discussion if the crew had enough water, sunscreen, cover, etc. for a long day in the sun. The coxswain didn't inquire about health, medication or other factors that might affect personnel performance. The third issue is planning. Proper planning prevents poor performance as they say. The day's mission profile was not reviewed with the crew. The weather report is now 16 hours old, and the coxswain should have obtained an update. The coxswain needs to plan for the crew's rotation, rest, hydration and other physical factors so that they can complete the missions as required. *Well, of course, this did not happen. Let's see what happens next.* The patrol proceeds normally from the marina in Cape May Harbor towards Cape May Inlet. The coxswain makes his initial status report by radio as the patrol nears the Atlantic Ocean, from the Cape May Inlet. Having traveled southwest along the coast of the City of Cape May without incident, at 0910 the patrol rounds Cape May Point and proceeds north towards the Cape May Canal and the Terminal for the Cape May-Lewes Ferry. This is a heavily

Instructions	What to Say to the Participants
Say or read to the participants 	traveled area that attracts small pleasure boats, charter fishing boats, commercial "party boats" crammed with dozens of day fishermen, and the large ferries that traverse the bay to Lewes, Delaware several times a day. As the patrol approaches the entrance to the canal and the ferry terminal area, the patrol turns west away from the terminal, and enters the Delaware Bay towards the Brandywine Shoals Light anchorage area (7 miles out from the terminal). The coxswain is busy watching the boat traffic during his turn adjusting the radio for static because it is annoying. Meanwhile, the crew try to relax and "beat the heat" by gathering under the canvas top to the rear of the helm position. They relax on seats that face directly astern. The coxswain notices a large shadow on the port side and turns just in time to see the Cape May Ferry heading on a course that will lead to a collision on the port forward quarter. At that moment, the ferry sounds five short blasts on the horn. The coxswain turns hard to starboard to avoid collision. The crewmen are tossed out of their chairs and wonder what in the world has happened.
Ask the participants the following question. Be sure to <u>listen</u> closely to the responses. Remember, all responses to your question have value! 	The coxswain was lucky enough to miss a near collision. How did he get into this situation? **Anticipated responses:** ▪ The crew was totally ineffective, relaxing in the cockpit. ▪ Crew should have been rotated from watch to rest so that someone was always keeping an eye out for hazards. ▪ The crew lost situational awareness. ▪ The standard operating procedure of maintaining a lookout was not followed. ▪ The coxswain did not show appropriate leadership in allowing his crew to dictate their own schedule of watches.
Say or read to the participants 	All good responses! Anytime you have a "near miss" like this crew just had, you need to go back and figure out where the breakdown occurred. Certainly, the heat, humidity and sun could have contributed to this situation. The crew felt that they needed some relief from the environmental conditions, but not everyone can take a break at once! If everyone needs a break, drop the hook or pull into a marina. While underway, you need to be engaged in the mission. Complacency and lack of situational awareness are at the root of this crew's problem. The other issue is an equipment issue. Professional mariners, such as the ferry boat captain, may have been attempting to hail the Auxiliary boat to warn of a "close quarters" situation. Was the radio still on? What frequency was being monitored? Was anyone maintaining a radio watch? Of course, this gets back to the proper planning of the patrol and leadership on the part of the coxswain. The environmental issues, the watch schedule and the procedures of preference to the coxswain were not communicated and therefore the crew acted independently...and took a break!

Instructions	What to say to the Participants
Say or read to the participants 	After gathering themselves from their near collision with the ferry, the crew proceeds to the buoy located about one mile west of the Ferry Terminal. The crewman trainee shouts out that he sees a small vessel tied to the buoy. It is a small open cabin boat with no one visible on deck. Recognizing the violation, the coxswain heads in that direction. The coxswain has the crew deploy fenders and they prepare to come alongside the small boat. As they near within a couple of feet, the trainee decides to hop aboard the small boat. The coxswain is not pleased, but directs the trainee to call out. As he does, two young men suddenly emerge. They are tousled and smell of alcohol. They explain that they were out partying all night on the water and decided to tie up to the buoy because they were tired. The coxswain states that they cannot tie off to a federal aid to navigation and that they must move on immediately. The trainee climbs back on board the Auxiliary OPFAC, and they maintain station while the small boat frees itself of the buoy. Watching as they depart, the coxswain begins to head toward the anchorage.
Ask the participants the following question. Be sure to <u>listen</u> closely to the responses. Remember, all responses to your question have value! 	Well that didn't go as planned, did it? What went wrong? **Anticipated Responses:** ▪ There really wasn't a plan going into the evolution. ▪ The coxswain didn't have any "control" over the crew. ▪ The duty officer should have been notified of the violation. ▪ This event should be noted in the patrol log and communicated during the patrol debrief. ▪ Trainees in the Auxiliary boat crew program should be advised that they are not to take any action without receiving permission of the coxswain or being directed by a crew person. ▪ Risk management should continue to be applied during the patrol. Was any thought given to the issues involved with jumping on board another vessel without the owner/operator's permission?
Say or read to the participants 	Those are great answers. This crew could have done better, don't you think? Let's break down the crew's break down. First, it seems as though this evolution wasn't very well thought out. As the Auxiliary OPFAC approached a small, seemingly abandoned boat, was there any thought to what the consequence of this action could be? Did the coxswain try to gather as much information about the situation before getting close enough to have a crewmember jump on board? The coxswain had a few options, like using a loud hailer from a distance, circling the small boat to assess the situation, and recording information like the state registration numbers and a description of the boat. There wasn't much discussion about the best way to deal with the situation, either. The bottom line was that this situation didn't represent an emergency. There was plenty of time to gather information, discuss the situation and make a plan. The decisions made during the execution of a mission are only as good as the information that they are based upon. This evolution seemed to happen by default instead of by a plan.

Instructions	What to Say to the Participants
Say or read to the participants 	And who was in charge? It seems as though this crew wants to take action independently. Maybe that is because the coxswain isn't demonstrating any leadership. Leadership is important throughout the patrol, but as the crew encounters the unexpected event, there may not be a "standard procedure" to follow. The coxswain needs to step up and lead. This is even more important when individuals demonstrate what are called "hazardous thought processes". In this case, the crewman trainee seemed to let the "adrenaline rush" get to him. We all must guard against the "John Wayne" syndrome that may cause a crewmember to take action that may not be prudent and has not been approved by the coxswain. And what about after the crewman trainee jumped? Once again, the coxswain took no action. A few disgruntled comments later, the trainee is STILL on another person's boat! Communication is central to the problems on this patrol. Communication is central to team coordination. In this case, there is little communication between the crew and the coxswain. And we get the impression that the coxswain hasn't communicated with the Coast Guard duty officer, either. Poor communication has added to the level of risk in this situation. The key is to slow down, consider all risk factors, analyze and evaluate those factors, and communicate with your crew and the and, as needed, the Coast Guard, prior to taking action. This doesn't have to be a time consuming process...good decisions can be made within a very short time if we plan for the mission, establish an atmosphere of good team coordination and discipline, and take prudent steps to be sure we are aware of all risk factors before we act. *So let's continue with our story.* It is now 1135 and the crew is now heading to the anchorage at Brandywine Shoals. The trainee asks for permission to take the helm for a while. The coxswain directs him to head in the direction of the three vessels in the anchorage. The trainee is asked to steer a compass course of 260°M. Upon arrival at the anchorage area, the trainee is asked to slow down while the coxswain and the other crewmember gather the forms needed for patrol report. The crewmember trainee is told to pass alongside stern to bow of the first vessel while the coxswain records the necessary information, including name home of vessel, homeport, load line, draft, etc. The coxswain then directs the helmsman to proceed to the second vessel and heads below to grab the binoculars. It is located closer to shore and behind the first. The crewmember trainee brings the speed up and starts to make the turn around the bow of the first bow. Although he observes the large anchor chain coming from the port side of the vessel, his sharp turn takes him directly over the chain. There is a banging noise heard which brings the coxswain back into the cockpit of the boat. The trainee is furiously moving the throttle back and forth, but the engine does not answer. The coxswain replaces him at the helm station and tries to restart the engine without success. As the facility drifts between the ships in the anchorage, the coxswain directs the crewmember to drop anchor and reluctantly calls the station. The crewmember reports difficulty getting the anchor to set properly as the rode is too short for the Brandywine Anchorage depth.

Ask the participants the following question. Be sure to <u>listen</u> closely to the responses. Remember, all responses to your question have value! 	Now we have an engine casualty and have left this facility in a potentially dangerous situation. How did this happen? **Anticipated Responses:** • The coxswain left the trainee unsupervised at the helm during a critical time at the anchorage. • The coxswain "assumed" that the trainee was capable of maneuvering the vessel safely. • The coxswain and crew lost situational awareness during a critical maneuver at the anchorage. • The coxswain failed in his/her primary responsibility to maintain control of the vessel and crew. • The coxswain/facility owner needs to have equipment available to perform all necessary actions as appropriate to the environment.
Say or read to the participants 	Yes, you're right on top of the important issues. Let's review some of the key points. The coxswain always bears the primary responsibility for the safety of his vessel and crew. When the coxswain left the helm position, he lost his focus. Both he and the other crewmember became absorbed in the forms and data collection for the group. They weren't paying attention to the position of the facility relative to the dangers in the area. As we find in many mishaps, the loss of situational awareness contributes to the outcome. Did they really need two guys recording the information? Could this task have been delegated to the crewmember allowing the coxswain to pay attention to what was happening at the helm? Could this incident have been prevented by paying attention to the things that really matter while underway? To paraphrase the old saying, familiarity breeds complacency. The coxswain over-estimated the ability of the trainee to maneuver in open water or around anchored vessels. Most of this person's experience was in smaller boats in confined areas. Although this crew candidate has some skills, he is there to learn the job and skills of a Coast Guard Auxiliary crewmember. The coxswain must be aware that training crew creates a liability and proper supervision is essential. Of course, the complacency is compounded by the fact that the trainee is the son of the coxswain, so there is a tendency to "assume" that an acceptable level of competence has been achieved. It boils down to a matter of good leadership on the part of the coxswain. The coxswain must be continuously assessing the situation and changing the plan as the situation warrants. This is called risk management and it is an ongoing process, not just something that happens at the dock. In order to do good risk management, the coxswain needs good information. Good information comes from good crew communication, good situational awareness and good planning. Very little of this "good stuff" happened through the course of this cruise. And as it turns out, very little good will come out of this cruise. Lastly, as we've mentioned already, the coxswain is also responsible for the mission planning including any possible problems. Now, they are in a dangerous position and unable to anchor, more evidence of this crew's lack of preparedness.

Concluding Remarks 	**Concluding our sea story…**The station duty officer dispatched the Coast Guard ready crew to get the CG Auxiliary facility. They find the CG Auxiliary facility hanging off the side of a tanker in the anchorage. The CG Auxiliary facility is towed to the marina where the boat is hauled. A quick inspection shows damage to the lower unit of the engine and some scratches to the hull. The Coast Guard crew takes some pictures for the investigation and claims process. The CG Auxiliary crew will meet with the Station Commanding Officer in the morning to debrief as they start to investigate this incident.

Thank you for facilitating the 2006 Operations Workshop. Hopefully, you and your participants benefited from the time spent together. If you have any questions, please contact:

James McCarty, BC-OEI
jimmcc@email.uophx.edu