U.S. Department of Homeland Security
United States Coast Guard Auxiliary

National Response Directorate

Team Coordination Training
Initial & Recurrent

Participant Resource Guide

Introduction

Team Coordination Training (TCT) is focused on the principle that improved decision-making through better leadership, preparation and attention to detail will result in fewer casualties and less property damage throughout the U.S. Coast Guard Auxiliary. TCT provides the means and framework for employing Operational Risk Management principles that will accomplish that goal.

Operational Risk Management Principles

a. Accept no unnecessary risk.
b. Make risk decisions at the appropriate level.
c. Accept risk when benefits outweigh the costs.
d. Integrate ORM into CGA doctrine and planning at all levels.

TCT Human Factors Elements

The "team" approach to reducing injuries and property damage while accomplishing the mission incorporates pre mission crew briefings, post mission crew debriefings and understanding and applying the seven elements of team coordination training. Those seven elements are:

1. Mission Analysis
2. Leadership
3. Communication
4. Assertiveness
5. Decision-Making
6. Adaptability and Flexibility
7. Situational Awareness

Those Human Factors elements can be summarized as follows:

Mission Analysis
Always conduct a risk assessment prior to a patrol, no matter how routine you believe the mission to be. Every mission is unique: contingency planning based on experience should include complexity of mission, environmental factors, crew fitness factors and any other circumstance that could impact the mission & your safety.

Leadership
Leadership is not about giving orders. Leaders do find ways to obtain the willing participation of others towards accomplishing a goal. That goal, in this case, must be consistent with the Coast Guard's core values as well as consistent with the mission at hand. Since we cannot "order" anyone to do anything, we must strive to achieve the respect, confidence and loyalty of those entrusted to our care…all Auxiliarists have this opportunity to lead, regardless of their position.

Communication
Communication takes many forms. We have verbal and non-verbal (facial expressions, etc.) communication that everyone uses to convey thoughts and ideas. The key of course is to ensure that the person or persons we communicate with have a clear understanding of what we wish to convey. This involves closing the "feedback" loop. We can ask for feedback, or we can observe behavior to be sure the message was received. The key is a two way expression, either verbally or non-verbally, that confirms the communication process was completed.

Assertiveness
The Coast Guard values people who are assertive, but not aggressive. The difference between these two characteristics is sometimes hard to see. The aggressive person seeks to bully his/her way though situations for their own ego or self image….while an assertive person cares about the "mission" more than themselves and their ego. They always communicate their concerns but they also try to get a reasonable resolution when ideas are in conflict without stepping on top of those who may disagree.

Decision Making
Making good decisions is really at the heart of TCT. How do we ensure that we act or perform in a manner that maximizes mission success and minimizes risk to ourselves, our crew, the public, etc.? The other elements of TCT all play a role in improving those decisions. We define a problem or condition, seek information about that problem, analyze that information, identify alternatives and select one or a range of alternatives. Then we measure our success or failure in order to adjust our course of action. This process can take us 20 seconds in the case of routine decisions, or 20 months in the case of large complex problems. The process is the same … the depth of analysis and level of importance is always changing.

Adaptability
Adaptability is the ability to react to changes in conditions, crew fitness, equipment failures, etc. and is based on the "situational awareness" we mentioned above. How flexible are we? How receptive are we to different opinions? Leaders do not necessarily have "all the answers". Leaders do take advantage of everyone's ideas and experience and remain adaptable to new conditions and challenges.

Situational Awareness
We must know what is going on around us to make good decisions. Plans are critical to success, that is for sure…but we must be ready to change those plans, use contingency plans if necessary, based on what we encounter during the mission. Stressful situations, complacency and boredom will inhibit our situational awareness and increase the likelihood of poor decision making.

Format

The activities in this program are all based on the use of scenarios, or "sea stories", to illustrate the training objectives. The scenarios used in this program provide a general story containing several sub-plots that describe problems, incidents or situations. The scenario paints a picture that, with some analysis, will lead you to recognize important TCT issues and elements that relate to assessing and managing risk. You will analyze these scenarios in small groups, or "crews", much as if you were participating on a mission. Your Facilitator will direct you to share and discuss your findings with the group. Everyone is encouraged to participate in the discussions.

Scenario # 1

Facility: 1963, 36 foot Chris Craft cabin cruiser, twin-screw inboard engines, wood construction.
Weather: Hot & humid, little wind.
Crew:

Coxswain: Jack, 55 year old with 12 years experience with his own 20 foot center console, no experience with facility used in this patrol.

Crewmember: Joe, 82 year old "retired Cox'n who offered his 36 footer for use since a heart ailment forced him to drop back to "crew" status earlier this year. Joe now takes heart medicine that causes an occasional dizzy spell in hot weather

Crewmember: Ed, 64 year old with 4 years experience as an outstanding crewmember and helmsman.

The patrol is a MOM conducted under orders and communications maintained by the local CG boat station. The coxswain considered this to be a routine patrol that posed no special problems and advised his crew of that finding.

During the patrol, a passing boater informs them that they saw a lone fisherman fall off a small skiff after a large wake violently rocked his boat caused by a passing party fishing boat.

Jack is at the helm and proceeds to the location approximately 500 yards away to assess the situation before notifying the CG duty officer.

At about 100 yards from the scene, they see a male struggling in the water some 20 yards from a small skiff with no one aboard.

Ed immediately yells "Man Overboard", points to the port side and yells again, "Man overboard… 100 yards at 270 degrees relative".

Jack immediately powers down and begins approaching the PIW (person in the water). Joe goes below and begins rummaging through his cabin, looking for his

throwable life ring (several minutes pass), while Jack tries to maneuver the 36 footer closer to the struggling man.

As the facility approaches the PIW, Joe finally emerges from the cabin, but seems unsteady and a little pale as he tries to untangle the line attached to the life ring.

Jack sees Joe's difficulty and realizes that Joe cannot heave the ring, nor will he be able to assist retrieving the man from the water due to his weakness and instability on deck.

Due to the size & configuration of the large cabin cruiser & his inexperience with this vessel, Jack has been having trouble maneuvering the twin screw vessel close in, without losing sight of the person in the water. He feels helpless to assist with the retrieval.

Jack then realizes that Joe must take the helm, while he heaves the life ring. Ed waits to help Jack lift the exhausted man from the water.

Jack reluctantly orders Joe to the helm, and throws the ring. Ed has stood by since the PIW event started awaiting orders.

As the PIW grabs onto the ring, Jack notices the facility, still under power, moving further away from the man as he hauls in on the life ring line with the man hanging on.

They begin to inadvertently tow the man through the water, which causes the man to lose his grasp on the ring. Jack retrieves the ring and throws it again to the PIW.

Jack then quickly re-takes the helm from Joe and places the facility in reverse to stop its forward motion and begins to close the gap between man in water & the facility.

As the facility comes up to the man, he places both engines into neutral and then leaves the helm to assist Ed in retrieving the man according to proper procedure. They call the CG station and request immediate assistance, unsure of the medical condition of the man just retrieved.

Scenario # 2, Part A

Mission : Fireworks Display Safety and Crowd Control:– Routine

Facility: # AUX-224345; a 24 foot walk around cuddy cabin, 175 HP outboard

Crew:

Coxswain: Ed - 14 years experience as boatcrew, 10 of those years as coxswain

Crew#1: Bill - 7 years experience, some medical history includes loss of night vision, and high blood pressure.

Crew#2: Howard – 3 months experience, 1st night mission.

Crew #3: Doris - 15 years experience, history of broken hip within the last year.

Weather:

- 93F and hazy
- wind: W at 5 mph
- Humidity: 82%
- 60 % Chance of T-storms predicted after 9PM

Venue: Fireworks barge; Mississippi River, St. Louis Mo.
This Auxiliary facility was assigned to assist in maintaining safety during a July 4th fireworks display on the river that normally draws over 150 recreational spectator boats to the fireworks area located in St. Louis.

Three Auxiliary vessels and one A/D CG 25 footer were tasked with securing a safe perimeter around the fireworks barge so that recreational boaters are kept at a safe distance.

After the fireworks, at about 2200 hrs, the AUX crews were to help with traffic control on the river as a large number of vessels attempt to leave the area all at once, at night. This mass egress has caused minor collisions in the past; drinking on the part of a few boaters has added to the problem in previous years.

Four hours prior to getting underway, Ed quickly fills out the GAR; he is confident he and his crew can handle this mission with ease and he looks forward to watching a great display.
Underway at 2000 hours, Ed, contacts the duty officer at the CG Small Boat Station on the CG working channel 23A

The noise of the boat and the lively conversations of the crew, plus the stormy weather in the area makes the radio difficult to hear.

After several attempts, the watch stander at the Station instructs Ed, “When on station, contact PATCOM on channel 81A”.

Scenario #2 Part B

At 2000 hrs, the facility arrives at their designated station on the river on the east side of the perimeter.

The coxswain begins patrolling his area on the east side of the perimeter, between the barge and the anchorage area for spectators. Once the boats in the "front row" of the observation area have anchored, they stand off to the side, within their assigned post and monitor the situation as darkness began to fall at 2100 hrs..

At 2145 hrs, another facility, AUX 36454, arrives on scene. The Cox'n shouts…"Hey, you guys! Is your radio broken? PATCOM has been trying to reach you for over an hour!"

As Ed listens to the crew of the 36454, it sinks in that the instructions from the station (which he didn't hear very well) were to contact PATCOM on another channel. He had not been in contact since 2000 hours.

Ed and crew all realize that they should be embarrassed that a SAR case had almost been initiated because of their "disappearing act"…but "no harm done" he smiles to his crew.

Ed assures the AUX 36454 that they were all OK. He contacts the PATCOM by phone and confesses the mistake.

The fireworks display was just beginning at 2200 hrs. when he notices that Doris was unusually quiet and seemed detached from the others who were watching the fireworks.

Ed shrugs this off and continues watching the display; he tunes his marine radio to channel 81 Alpha as the fireworks became even louder; Ed notices that thunder and lightning in the area is causing static on the radio.

Part B – Epilogue

As the fireworks explode, Coxswain Ed has a nagging feeling that something isn't right. Still stung by the embarrassing communications error, it finally dawns on him that he may have lost Situational Awareness. He asks Doris if she is OK. Doris replies that she has some unexpected pain in her "bum" hip and that it is really bothering her. As flashes of lightning provide a counterpoint to the fireworks, Ed a light also goes on in Ed's mind. He finally thinks about his GAR score and decided that it's about time to re-evaluate the mission. "Hey, crew!" he yells. "Let's take a look at our GAR."

Are there any thoughts on what their new GAR score might be? Although this was discussed in the earlier activity, this is a great opportunity to have a final discussion of this topic now that we know that "Ed" is actually going to involve the crew in taking another look at the GAR Risk Assessment.

Surface Operations Risk Calculation Worksheet

Calculating Risk Using the **GAR** Model

(GREEN-AMBER-RED)

This Worksheet should be used for all surface operations unless other GAR forms have been mandated by local OIAs.

GAR IS BASED ON A TEAM DISCUSSION TO UNDERSTAND AND EVALUATE THE RISKS ATTENDANT TO A MISSION AND HOW THEY WILL BE MANAGED.
RISK MANAGEMENT IS WHAT IS IMPORTANT; NOT THE ABILITY TO ASSIGN NUMERICAL VALUES OR COLORS TO RISK ELEMENTS.

Assign a risk code of 0 (For No Risk) through 10 (For Maximum Risk) to each of the six elements below. The discussion should start with the junior (least experienced) members first on each category.

Supervision -qualifications / experience / communications	
Planning – details / clarity / vessel selection and condition	
Team Selection – qualifications / experience	
Team Fitness – physical / mental state	
Environment - seas / visibility / wind / current / temperatures	
Event/Evolution Complexity –details / tasks	

Total Risk Score	

GAR Evaluation Scale - Color Coding the Level 0f Risk

0	23	44	60
10 20	30 40	50	
GREEN (Low Risk)	**AMBER (Caution)**	**RED (High Risk)**	

If the total falls in the green zone, risk is at a minimum. If the total falls in the amber zone, risk is moderate and you should consider adopting procedures to minimize risk.

IF THE TOTAL FALLS IN THE RED ZONE, YOU NEED TO IMPLEMENT MEASURES TO REDUCE THE RISK PRIOR TO STARTING THE EVENT/EVOLUTION.

THE GAR MODEL SHOULD BE USED AS PART OF PLANNING OPERATIONS, AND SHOULD BE CONTINUALLY REASSESSED AS WE REACH MILESTONES WITHIN OUR PLANS, OR AS ELEMENTS CHANGE.

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Afloat Risk Assessment and Management Instructions

It is vital to the safety of the crew and to the success of the mission that the coxswain and crew understand and evaluate the full impact of risk versus gain for each tasking. This must be a continuous, systematic process of identifying and detecting hazards, assessing risk, and implementing and monitoring risk controls.

1. Using the worksheet on the opposite side, review each of the Risk Factors and assign a numerical score as indicated. Score each element according to currently available information. Score items according to the examples given and your instincts. Absence of data automatically sets the score to maximum point value. To identify hazards, consider:

   P*lanning*
   E*vent* Complexity
   A*sset* Selection (including Personnel and Equipment)
   C*ommunications* (and Supervision)
   E*nvironmental* Conditions

2. Consider the effects of environment on the ability to maintain communications throughout mission, both internal w/crew and external w/unit. Consider the condition of the vessel and associated equipment as factors in the mission environment.

3. If Risk Assessment is determined to be excessive, review the *Control Options* and determine if the risks can be reduced or controlled.

   Below are *Control Options* to assist in risk control or reduction. Review the options and reassess the risks as appropriate.

   Spread-out – Disperse the risk by increasing the time between events or using additional assets.

   Transfer – If practical, locate a better-suited asset to conduct the mission (i.e. different type of asset or crew).

   Avoid – Circumvent hazard: Wait for risk to subside (i.e. wait until daylight or weather passes).

   Accept – In some cases the benefit might justify the assumption of risk. In these cases a decision to accept risk may be made with the stipulation that risk is reevaluated as the mission progress. (No adjustment to Risk Assessment)

   Reduce – Reduce or limit risk exposure, use of PPE, additional training or rest, stress reduction.

4. Although one could selectively evaluate Risk Factors with a mind toward achieving an acceptable Risk Factor score, doing that would subvert the intent of this tool. This is intended to help everyone on the crew shift their thinking from a land based mindset, to the hazards of the maritime environment. All members of the crew should participate in the Risk Assessment scoring. This Risk Assessment process should continue throughout the mission as conditions evolve.