Facilitator Resource Guide

Introduction

The 2017 Operations Team Coordination Training Refresher continues the practice of focusing on group, or “crew” problem solving activities rather than a lecture presentation format. The 7 components of TCT will be the guiding principle to emphasize as you lead this problem solving session. The facilitator should be a trained instructor, someone familiar with the operations program and familiar with the TCT program (but does NOT have to be a TCT Facilitator).

This Team Coordination Training (TCT) Refresher reflects an emphasis on the 7 components of Team Coordination;
- Leadership
- Mission Analysis
- Adaptability
- Situational Awareness
- Decision Making
- Communication
- Assertiveness.

This training is part of the mandatory annual currency maintenance requirements for the USCG Auxiliary Boat Crew program, and must be completed by 31 Dec 2017 to avoid going into REYR status.

The format, takes the form of a group problem solving session, rather than facilitated discussion. This approach will emphasize your role as a facilitator and, hopefully, make the training interesting for both you and your participants.

IMPORTANT: Do not deliver this as a straight lecture, the key learning objective is the interaction of small ‘crews’ (3-5 members) solving the problem presented and discussing what worked right and what went wrong.

Facilitators – TCT principles cover a lot of ground. This refresher course is to do just that “refresh” those key learnings not reteach them. Additionally the refresher needs to bring into the sharpest focus the critical part that Operational Risk Management and GAR scores play in EVERY patrol both in planning and during the mission. Safety of the Crew is priority 1. The mission is executed ONLY when risks (which are always present) are reduced/eliminated to an acceptable and safe level. Routine MOM, Safety, and Training patrols are NOT mission critical and can be rescheduled when known risks are lower or eliminated.

See end of this guide for sample GAR form with instructions.
Facilitator’s Role

As facilitator, your role is to help participants discover new knowledge or discover new applications for knowledge they already have. This is not accomplished by lecturing. Lecturing is one of the least effective ways to promote learning. If you find yourself talking a lot and teaching numerous techniques and required actions in detail, you are probably talking too much. Trust that the participants have the answers, and you are there to help them discover new relevance for a familiar concept.

A facilitator creates a positive, interesting and challenging environment for the participants in the classroom so they, as a crew, can learn to solve problems and make better decisions for crew safety, the public’s safety, and accomplishing the mission.

A facilitator leads the learning, but allows the participants to go their own way…to a point, always gently steering the process so learning objectives are met…but also insuring that participants learn to make decisions in a “team format”, similar to the “crew” onboard our air and surface facilities. Let the discussions happen, but do not hesitate to step if they get “off topic”.

Note:
The patrol story presents a scenario with several sub-plots describing problems, incidents or situations. This scenario paints a picture that, with some analysis, will lead the team to recognize core problems or issues among the crews in the scenario. The process is similar to what a physician goes through while diagnosing the disease in a patient from a list of specific “symptoms.” In this case we want the participant groups to identify the symptoms (incidents or situations) pointing to the underlying TCT missing or dysfunctional components and therefore threatens the success and/or safety of the patrol. In addition participants are to suggest a course of action for the scenario group to take to correct this deficiency.

Note that the crew may appear less efficient and effective than normal to help stimulate the discussion. The baseline idea for this scenario was a real life incident with an Auxiliary crew.

Facilitator Responsibilities – Estimated timings below are just that “estimates” Do not rush it this refresher is VERY important which is why it is required every year. Take whatever time is needed to reinforce the principles of TCT and help avoid complacency in all we do. The safety of you, the general public, and your shipmates is key to this exercise.

1. (10 min) At the outset of the session, organize the participants into “crews” of 3-5 members who will work together on the patrol story (case study). Ask them to appoint a recorder/reporter to take notes.

2. (5 min) Provide each group with a piece of paper, pencil, and 2 blank GAR forms. Tell them that the group is to:
   - Describe the elements in the story where they feel the principles of TCT were not followed.
   - Suggest a course of action or change in behavior that might correct the problem(s) or align this crew’s activity with TCT principles.
3. (10 min) Present the patrol scenario (see page 6-8). Be sure that everyone is clear on the scenario, but be careful not to give away answers. If possible hand a copy of the story to each group. Be sure to have them complete the first GAR form, after reading page 6 but before reading/discussing the scenario itself. Have them complete a second GAR score as noted on page 7 in the scenario.

4. (15-20 min) Redirect the session into small groups. During the small group work, circulate among the crews and listen. Make notes for yourself, if needed. Allow the groups to struggle (discuss/disagree) a little in making their lists. They are developing a problem solving relationship with their fellow crewmembers. Leaders may emerge in the groups (they usually do). Your job is to keep the groups focused on their question list and the determination of dysfunctional TCT components, and to assist them by asking questions if and when they get off track or bogged down. Use the definitions of the TCT components below, your knowledge of the boat crew program and the targeted questions that accompany the scenario (see pages 7 - 9) to refocus groups that have gone astray. Try to ensure that everyone participates, and that no one “hijacks” the process because they are more experienced, or louder, or because others seem willing to just go along. If you hear something that is inappropriate or not consistent with good practice, intervene with a gentle comment so that the group recognizes the problem. Try not to take control of the session away from the crew, but get them “back on course,” then let them continue.

Now have them complete a final GAR form as a crew and review any differences in scoring based on the scenario conditions after reading page 8.

5. (15-20 min) Lead a focus session during which the participant crew reporters present their crew solutions to the other participants. Don’t indicate how you feel about one solution versus another! Only act as a clerk and record, in brief, the reports. When all crews have reported, ask the group, at large, to choose the better three solutions (there’s rarely one “right” answer) or to rank order the best solutions. Use the last 2-3 minutes to summarize the crew results (crews almost always find good answers, as a group) and, if necessary, interject one or two considerations that may have been missed.

6. (5 min) Thank the participants for their participation in the TCT refresher, and assist with any final questions or concerns. If there are suggestions from the group on how to improve the course, jot those down as well and forward them to the Chief, Response Projects and Educational Outreach email address found at the end of this guide.

**Review of TCT Basics**

This is the annual refresher course; materials for the Initial/5-Year Currency (4 hour) TCT class can be found at the Response Directorate web site [http://rdept.wow.uscgaux.info/](http://rdept.wow.uscgaux.info/) under the “What’s New” tab in the left navigation column (reference is half way down the what’s new page. Or download the documents from our Workshop Archives page at [http://www.rdept.wow.uscgaux.info/content.php?unit=R-DEPT&category=workshop-archives](http://www.rdept.wow.uscgaux.info/content.php?unit=R-DEPT&category=workshop-archives)

**Mission Analysis**

1. Always conduct a risk assessment (and complete a GAR form) 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 which could impact the mission & your safety.

2. Develop escape/contingency plans for any potential risk scenarios.
3. Reassess risk AND GAR score throughout the mission when conditions change.

**Situational Awareness**

1. To make good decisions we must **know what is going on around us**. Plans are critical to success, that is for sure…but we must be ready, based on what we encounter during the mission, to change those plans, and/or use contingency plans as necessary.
2. Stressful situations, complacency and boredom will inhibit our situational awareness and increase the likelihood of poor decision making. Remember the 3 levels of human error:
   a. Slips ..... Misspeak
   b. Mistakes ..... Bad Plan
   c. Errors .... Flawed execution
3. Catch the slip before it becomes a mistake. Catch the mistake before it becomes an error.

**Adaptability & Flexibility**

1. 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 differing opinions? Leaders do not necessarily have “all the answers”. Leaders do take advantage of everyone’s ideas and experience and they remain adaptable to new conditions and challenges.

**Communication**

1. Communication takes many forms. There are verbal and non-verbal (facial expressions, voice inflection, etc.) communication everyone uses to convey thoughts and ideas.
2. The key is to ensure that the person or persons we communicate with have a **clear** understanding of what we wish to convey. This is the ‘senders’ responsibility.
3. Good communication involves closing the “**feedback**” loop. We can ask for feedback, or we can observe behavior to be sure the message was received.
4. This feedback is a two-way expression, either verbally or non-verbally, which confirms the communication process was completed. Both parties are responsible for insuring the message received is accurate, understood, and effective.

**Leadership**

1. Leadership is not about giving orders. Good 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.
2. Since we cannot “order” anyone to do anything, we must strive to achieve the respect, confidence, collaboration and loyalty of those entrusted to our care.
3. Remember all Auxiliarists have the opportunity to lead, regardless of their position.
Assertiveness
1. The Coast Guard values people who are assertive, but not aggressive.
2. Know where the dividing line is. 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.
3. The assertive person will 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
1. Making good decisions is at the heart of TCT. How do we ensure that we act or perform in a manner that maximizes mission safety and success and minimizes risk to ourselves, our crew, the public, etc.?
2. The elements of TCT all play a role in improving decision making. We define a problem or condition, seek information about that problem, analyze that information, identify alternatives and select one or a range of alternatives.
3. 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.
4. There is always time to consider other actions, use that time before you act.

Learning Objectives
- Participants will understand the importance of crew complement as it relates to mission activities (Mission analysis).
- Participants will understand the importance of understanding your AOR and local hazards and plotting a safe course. (Situational Awareness, Mission Analysis)
- Participants will understand the need to remain alert to all conditions during the mission both operational and crew related. (Communication and situational awareness).
- Participants must understand the effects of fatigue on a long patrol (Situational Awareness, Mission Analysis, Decision Making)
- Participants must understand the importance of assigned roles for all crew during the entire mission. (Mission Analysis, Situational Awareness, Communication, Decision Making)

Participants will identify at least three examples of good decision making by this crew and others.

Participants will identify at least three examples of poor decision making by this crew & others.
The Patrol

Mission: Routine MOM/Training patrol with night patrol training in prep for a Coxswain signoff check ride.

Facility: 30 ft. cabin cruiser with twin 225hp gas outboard engines.

Weather: Visibility was 10 nm or better
Winds 5-10KT
Seas 1-2 ft.
Air temp 80F, Water temp 84F
High tide of 0.8 ft expected at 1823
Sunset at 2042
Moonrise at 0020, waning full moon going on to last quarter

CREW
Coxswain Mac 3 years as a Coxswain
Crew #1, Alex 2 years as certified Crew. Also the owner of the vessel and training for Coxswain

Crew #2, Lois 7 years as certified crew
Crew #3, Tim 3 years as certified crew (Tim has a problem with night vision, that all the other crew are aware of)

All crew members were qualified and maintained currency, with the exception that Alex who had not yet had his required TCT refresher. The Ops workshop was not required that year, and only Mac and Lois had taken it.

Venue: Port Aranas, TX
Scenario: - The mission was to be a routine MOM (Maritime Observation Mission) in support of station Port Aransas. Its secondary purpose was to serve as the required night patrol prior to Alex’s coxswain check ride.

All four crew members had just put in a full day’s work — Lois as an ICU nurse, Alex as a trial lawyer, Mac as a rigger in a local boatyard, and Tim as a teacher at a local Middle School — before coming home, changing into ODUs, and immediately driving 20-40 miles to the marina.

At 1730 on the evening of Monday 8JUN 2015, four Auxiliarists met at a Port Aransas TX marina for a pre-patrol briefing on board CGAUX facility 014302. On board vessel 014302, Mac conducted a short but comprehensive pre-patrol briefing.

(Here, instructors may ask students what sort of things, including PPE, equipment, and Comms checks, WX, crew assignments etc., should be covered in these briefings. Let participants come up with suggestions themselves.)

As part of this briefing, Mac presented a GAR (General Assessment of Risk, commonly referred to as the Green-Amber-Red) sheet to the crew that he had completed the night before.

Complete First GAR form

(Instructors should show slide and pass out blank GAR sheets at this time and review how scores are calculated and how they are used to determine go-no go decisions and mitigate risks, who has input, and what happens if crew members disagree. Note that calculating GAR is not an exact mathematical equation, and that, given similar weather, fitness, complexity, etc., different crews may come up with somewhat different scores. If students do not question the practice of calculating GAR the night before a patrol to save time getting under way, Instructors might want to ask what they think about it. Leadership, Planning).

First Exercise: Given this information students should each calculate their own GAR score for conditions at the commencement of this mission. Instructors should then break class into 4-6 person teams, and have them compare scores — what was the highest score, what was the lowest, and what were the differences between them based on? — and come up with a single agreed-upon score that takes into account any objections or reservations that may have been expressed. Then give participants the following information:)

The GAR score Alex came up with (the night before) was 18, having given a score of 2 each for supervision, planning, and, team selection and 4 each for environment, event complexity and team fitness, partly because a good portion of the patrol would be under conditions of darkness, and Tim has just received news that his night vision had deteriorated to the point where he was legally blind in low light. This score was well in the Green.

(Instructors should bring up the question of whether a score of 4 for crew fitness was high enough in view of the fact that all crew members had reported on board directly following a full (8hr) workday without any break for rest. Note: Studies have shown that higher level thinking processes, like judgment and decision making, are seriously degraded by even moderate fatigue, and the CG routinely factors it into fitness for AIROPS — see the SC&E instructor’s manual on this subject. How would a higher score have changed the GAR score?)
At 1755 AUX014302 got underway from its berth at the marina with Alex at the helm under Mac's supervision. From 1800-2000 they conducted VS, or Vector SAR (small area search and rescue) patterns and MOB (man overboard) drills. At 2025 they put in at station to refuel, and suspended patrol to eat dinner at a restaurant ashore. While at dinner, Lois informed her crew mates that during their transit to station, she had taken the opportunity to compare 014302's GPS with a new GPS application she'd just installed on her cell phone. The results were cause for concern — not only was the heading on 014302's GPS erratic, but it displayed a discrepancy of at least 15 degrees from her phone app, most noticeably at slow speeds (Situational Awareness, Adaptability and Flexibility, Communication, Assertiveness). Alex said he had noticed his GPS's erratic behavior on his last trip out on her the week before, but there hadn't been time to get it repaired before the night patrol he needed before he could take his scheduled check ride, and he didn't want to inconvenience everyone by rescheduling. Anyway, the weather was predicted to be clear tonight with a full moon, and he knew this AOR well enough to navigate by eye

(Leadership, Planning. Something we don't include in the 7 TCT factors is Complacency. Even though it is not usually identified as such, it comes up again and again as a contributing factor to mishaps).

Lois didn't want to insult Alex by saying that she believed that operating without a reliable GPS might be cause for suspending the patrol (after all it was Alex's boat, and he claimed to know the area 'by heart'). She also remembered that Alex had Radar on his boat, but it had not been turned on and she had never been trained on how to use it. So she offered to help install the new app on her crew mates' phones while they were eating dinner.

(Instructors might ask how else this could be handled, specifically how would they tell a coxswain that you believe that something he seems to be ok with is dangerous in your opinion? If time permits, have students act out this kind of scenario).

Because there was a long wait to be seated, their break was approximately 2 hours long. During this time, the sun had set, and it was full dark by the time they returned to the boat.

(What would the effect of adding another hour to a long patrol have been on an already fatigued crew? How could such a long break have been avoided?)

Complete a second GAR

At 2200, AUX 014302's crew updated its GAR adding 2 points each to environment and complexity for a total of 22, still in the Green but bordering on the Amber, or moderate risk bracket, to take reduced visibility after dark into account, though no mention was made of Tim's deteriorated night vision in order not to hurt his feelings

(Instructors might point out that, because there are no physical fitness requirements for Auxiliarists, it is all the more important that they inform the coxswain when they are not up to going on patrol or performing certain evolutions. Ask if any participants have ever had to bow out of a patrol. Point out that there is no shame in this, it just demonstrates good judgment. Ask what the coxswain ought to do if one of his crew is clearly unfit to be on a patrol)

and resumed patrol enroute to her mooring at the marina at an average speed of 30 KT.
(Here Instructors can start a brief discussion of how GAR scores are fluid and change with changing conditions, and also what the NAV Rules say about safe speed, and how reduced visibility should affect that decision).

During this transit, Lois was the designated bow lookout. Tim, the stern lookout (because Alex didn't want to make him feel useless, and the stern lookout ‘wasn't that important, anyway’) was seated on the stern, port side. Alex resumed the helm, while Mac, the coxswain, was seated on the stern, starboard side while they fiddled with Tim's phone, trying to get the new GPS app to work.

(There are several issues for discussion here —

1. That the coxswain's place was beside the helmsman, not elsewhere on the facility, and that Mac seems to have not only abandoned his role of supervisor, but delegated the role of coxswain to Alex, who was not yet qualified,
2. That CG policy is that when a crew member is allowed to use a phone or text the coxswain must ensure that there is a proper look out posted,
3. The question of what constitutes a proper lookout anyway. Have a copy of the NAV Rules on hand. Read Rule 5 Proper Lookout, and discuss how this decision also falls under Rule 2a, known as the Prudential Rule, which boiled down to the essentials is that a coxswain must display good judgment at all times. Ask, what is the purpose of a lookout, and can a distracted lookout perform his duties properly, that is, so that no mishaps occur? What about one who cannot see well in the dark?
4. Was all the distraction with the phone apps even necessary? Wasn't there something else, required in the Facility Offer for Use, that should have been on board a facility according to the inspection form, namely a magnetic compass, that they could have used without the distraction of trying to install a new GPS app? The case can be made that we are becoming too dependent on technology, and have lost facility with tried and true piloting devices and techniques that every mariner should be familiar with. N.B. Both the CG and the Navy are placing renewed emphasis on celestial navigation, because 'sextants can't be hacked.' The point is, that while it is unsafe to put out to sea without a reliable means of navigation, that means does not necessarily have to be electronic).

Meanwhile, Aux vessel 014302 was approaching the marina Inlet North Jetty at a speed of 30KT. Mac, the qualified coxswain, sensed how fast the vessel was going and thought it was excessive for safe operation at night. However, he reasoned, vessel 014302 was Alex’s boat, he knew how it handled at speed, and was more familiar with the approach to his home marina than Mac was. Also, because Alex tended to take criticism personally, Mac decided not to risk insulting him, especially when they were so close to the end of the patrol. For her part, Lois, who had taken the opportunity to review the chart, later recalled 014302 being aligned correctly between the number 1 flashing green and number 2 flashing red buoys as they entered the channel at approximately 2240, but then she saw the number 4 marker a few seconds later on the port side and realized they were no longer correctly aligned in the channel. Before she could yell “Rocks!” to Mac and Alex, facility 014302 had crashed into the North jetty at approximately 24 KT.

(Instructors should read the rule on safe speed, and ask what part speed played in the mishap, and could it have been prevented if 014302 were proceeding at a more prudent speed under the circumstances? Something we don’t much talk about is the Get-home-
itis or Channel Fever that may afflict crews after a long patrol and cause them to proceed at unsafe speeds).

Alex was able to make a Mayday call on VHS channel 16. Sea Tow responded and relayed the call to CG Sector. Sector then launched a 45 ft patrol boat, which evacuated all 4 victims to the pier where they were met by ambulances for transportation to local hospitals. All crew members sustained injuries that required hospital treatment, two of them (Lois and Alex) so serious that they may be disabled for the remainder of their lives. Sea Tow dewatered 014302 and towed her to a boatyard, where it was determined that the cost of repairing 014302 would amount to more than her estimated value.

(Second Exercise: Have students list the 7 TCT factors—Leadership, Mission analysis, Flexibility, Situational Awareness, Decision making, Communication, and Assertiveness. Then, in teams, have them analyze which of these were factors in this mishap and present their findings. Point out that few mishaps, if any are due to only one or two of these factors, that one or the other may dominate as a causal factor in any one part of a mishap, but that they have a way of snowballing together to make a disaster.)
What did the crew do correctly during this mission?
1. GAR was completed (however no/minimal input from the crew) It included complexity of night patrol and Tim’s night vision. (Mission analysis)
2. Vessel Briefing completed (although “in brief” but complete). This briefing should be complete with crew assignments and the known issue with GPS (Leadership)
3. Lookouts properly assigned with a second pair of eyes at the stern where Tim was with his night vision (Decision Making, Situational Awareness, Leadership)
4. Proper procedure “After” the grounding, i.e., issue of the MayDay call on 16. (Decision Making, communication)
5. GAR score updated during the mission.

What did this crew do incorrectly during this mission?
1. No mention that required PPE was inspected by coxswain (Mission analysis, Decision making, Leadership)
2. No real discussion on GAR with crew, should crew fatigue from full day of work have been given more focus or Tim’s night vision issue.
3. Obviously Lois was using her phone with the GPS app but no mention that she discussed that with the Coxswain.
4. With Tim’s known vision issues Mac should have been more focused as a second stern watch and not fiddling with a phone. Is the stern lookout “not that important”? Mac was the Coxswain and his place it at the helm or at least beside the helmsman. How often have you seen this happen when the coxswain is not the owner? (Situational Awareness, decision making by the coxswain, communication buy the coxswain)
5. No one questioned the 30K at night, and worse with a wonky GPS?? (Assertiveness, Decision Making, Leadership (coxswain))

Send your comments to:
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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 ATTENTANT 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.

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
<th>Risk Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>qualifications / experience / communications</td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td>details / clarity / vessel selection and condition</td>
<td></td>
</tr>
<tr>
<td>Team Selection</td>
<td>qualifications / experience</td>
<td></td>
</tr>
<tr>
<td>Team Fitness</td>
<td>physical / mental state</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>seas / visibility / wind / current / temperatures</td>
<td></td>
</tr>
<tr>
<td>Event/Evolution Complexity</td>
<td>details / tasks</td>
<td></td>
</tr>
</tbody>
</table>

**Total Risk Score**

GAR Evaluation Scale - Color Coding the Level of Risk

- **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 BEFORE 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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