

## **Crew Resource Management (CAPT 117, Part 2)**

Effective performance depends on both technical proficiency and interpersonal skills. To qualify to serve in emergency services specialties you are tested as an individual against a set of standards to see if you can do the job the way CAP needs you to. But there is more to it. You have to be able to work as part of the entire team. No one member can accomplish the CAP mission alone. It takes a well-trained team working together. That is what crew resource management (CRM) is all about. The focus of CRM is on team coordination, crewmembers' interaction, attitudes, and behavior. CRM is not just the pilot in command's responsibility - it is the responsibility of the rest of the scanners, the observers, even the staff on the flightline.

Over the next few pages several concepts for CRM will be discussed in the hopes that mission operations will be safer in the future.

### **Area of Responsibility**

Each person involved in mission operations should have a clearly defined area of responsibility or job description, and it should be clearly understood by all involved. Know what you are going to accomplish the mission in not only ideal circumstances, but less than ideal circumstances, including emergencies. Determine beforehand what the operating limitations are for the crew and the aircraft, what risks are acceptable to the crew and what aren't, and how you will mitigate those risks. If crew members are taking on new or different responsibilities than normal make sure that the entire crew knows what is different.

### **Task Sharing**

It is not just the pilot in command's responsibility to fly the mission safely. Everyone involved holds a piece of the puzzle. The flightline staff often assists the crew with aircraft inspections. If multiple pilots are on board they could transfer control of the aircraft. And observers and scanners often operate aircraft radios and other equipment during the mission both on the ground and in the air. There is no reason for one crew member to do everything. Split the workload where possible to avoid unnecessary fatigue and extend the crew's usefulness.

## **Communication**

Communication is key. To avoid problems, be sure that everyone understands the rules and signals.

Try to convey information in a clear and timely manner. There is often not much time to make a decision, especially in flight, so get your point across quickly.

Use standard terminology and signals. If the flightline staff doesn't use the correct signal, a crew could taxi into an obstacle. If the aircrew isn't watching for the signals they may not know there is a problem like an engine fire until it is too late.

Ask for clarification when needed. It is better to ask what you're thinking is a dumb question, than to go into a potentially dangerous situation unprepared and risk the lives of those around you.

Announce your intentions before or while taking action. Mission operations can be tense situations, and everyone needs to know what is happening so that they can do their jobs effectively. By announcing your intentions you are not only reminding yourself of the proper steps and procedures, but also preparing those around you for what they must do too.

Use standard calls. Tell the crew when you are entering the pattern, when you have reached or are descending or ascending through critical altitudes, or when you have reached other critical points in your mission like when you reach or leave your search area.

## **Monitoring Tasks**

People are lousy monitors of instruments and the conditions around them. By having a trained crew familiar with each others tasks and the equipment, you are much safer because other members of the crew should point out when something is wrong or isn't done correctly. It has already been discussed that delegating certain responsibilities is acceptable, but you must be sure the job is still accomplished. To do this, it is recommended that crew members confirm responses with actions. If the pilot asks you to do something, acknowledge it, let him or her know when it is complete, and be sure that he or she understood.

## **Decision Making**

How decisions are made is crucial. It is imperative that the crew gather the information they need, evaluate the alternatives effectively, and make a decision. For this to happen crew members need to communicate with each other, and the crew member responsible for the decision has to make it. If that is not happening, then errors will be made. Accidents typically don't occur because of one poor decision alone. It is normally a chain of events that could have been broken if the crew had been working together to solve the problem. Don't be afraid to ask someone to check your work or to get their opinion. It may be the one thing that saves your life.

## **Workload Management**

Serving on the mission staff in any capacity is challenging, but serving as part of an aircrew or even on ground in close proximity to moving aircraft can be dangerous.

There are challenges in both high and low workload environments. When there is too much to do, people often skip steps that could have helped keep them safe. When there is too little to do, people become complacent and less vigilant to the tasks that keep them safe.

In order to avoid becoming distracted in a low or high workload environment you must have plan ahead. Prioritize your work so that the items that must be accomplished are, and those that aren't are done in a manner that will hopefully meet with mission success. Think through the entire mission beforehand - you may not be busy now, but you could be later. Do those things that you can early so that you aren't overworked later. And if certain parts of the mission are not accomplished - don't worry about it. Missions are often delayed or changed for reasons beyond the crews' control - just do what you can safely accomplish.

Finally, remove any unnecessary distractions so that you can pay attention to your primary responsibilities. Whether it be flying the airplane, marshalling an aircraft, talking on the radio or any number of the other jobs involved in the CAP flying mission, be sure you are focused on your job and do it well so that others don't get hurt. Aircrews should consider sterile cockpit rules. During certain phases of flight it is absolutely necessary for crew members to concentrate on aircraft operations. Making a sterile cockpit means that all onboard, passengers and crew alike, avoid anything that could hinder a crew member from safely operating the aircraft. Members of the flightline staff should consider similar procedures to avoid distracting personnel marshalling aircraft or putting others at risk that are on or near the flightline.

## **Leadership / Followership**

Aircrews and flightlines have specific rules and lines of authority for a variety of reasons.

The first reason is to regulate information flow. Those making decisions need the correct information, not just any information, and that means they need to have some control over what they are looking at.

Second, certain personnel are given the responsibility of directing and coordinating crew activities because they have demonstrated that they can make those decisions and accomplish the mission. They can motivate crew members to do those things that are not always easy.

Finally, those in charge are supposed to be situationally aware. They know where they are what they are supposed to do to reach their objective. They announce their intentions, give directions, and make everyone aware of their progress.