Leadplane Training Lesson Plan

Situational Awareness

08-01-N9065-HO

Objective:

To familiarize the student with situational awareness in a training environment (Phase 1).

To develop the student's proficiency in situational awareness in the fire environment (Phase 2).

To develop the student's mastery of situational awareness in a fire environment (Phase 3).

Content:

Situational awareness (SA) is a term used to describe a person's awareness of their surroundings, the meaning of these surroundings, a prediction of what these surroundings may look like in the future, and then using this information to act.

Leadplane situational awareness can be broken down into ground and flight situational awareness.

Ground situational awareness mainly involves information gathering prior to a mission. Consider the following:

- Look at AFF each morning to see where the tankers and leadplane/ASM aircraft are. This will help in anticipating resources responding to an incident or availability of resources when requested.
- Review the leadplane and tanker status sheets sent out by the leadplane/airtanker coordinator. This will help with SA with regards to days off and maintenance. Keep the leadplane coordinator informed of your status.
- Review current and forecasted weather.
- Review airspace in the current geographic area and surrounding geographic areas.
- Review aircraft performance for the current and anticipated conditions.

Flight situational awareness is a learned skill that will improve as it is practiced. Flight situational awareness is the ability to keep a mental picture of where the leadplane is in the FTA and above the fire and terrain while also keeping a mental picture of other resources relative to the leadplanes position.

This can be difficult due to the constant movement of the leadplane and other resources. Most of the resources will be moving at different speeds within the mental picture. Some of the resources, like firefighters and helicopters, can stop or change direction abruptly. This is one reason it is important to manage and perceive the flow of resources within the FTA and strive for predictability. Clear and concise communications are the key to maintaining this mental picture.

- Be clear on fire anatomy and division breaks. Know where individual contacts are on the ground.
- Insure the use of proper direction descriptors. Say “left” when you mean left. Say “nine o’clock” when you mean nine o’clock.
- Keep track of where the leadplane is relative to the surrounding terrain.
- When flying a high recon, pick out major landmarks to keep orientated once the leadplane is at lower altitudes.
- Know what direction the tankers will be coming from when entering the FTA.
- Establish reporting points for helicopters.
- Periodically check in with resources that stay within the FTA.
- Establish routes when needed.
- Monitor as many radios/frequencies as safely possible to maximize understanding of resource movements and locations.
- Maintain eyes outside the aircraft as much as practical and scan for other aircraft.
- Use the TCAS.

Initially it is easy to lose track of the mental picture due to workload and the distraction of flying the aircraft. Practicing an accurate mental picture is the only way to improve this skill. When time allows, compare the student’s mental picture with that of the evaluators and the actual environment. This will help to learn time frames for different resources.

Completion Standards:

The lesson is complete when the student can maintain situational awareness of the aircraft over terrain and other training aircraft while in a training environment for Phase 1. The lesson is complete when the student can maintain situational awareness of changes in the fire and resources assigned to the fire throughout the mission while in a fire environment for Phase 2.

The lesson is complete when the student can demonstrate mastery of situational awareness in a fire environment for Phase 3. Safety will never be in question and maintaining situational awareness will be accomplished without the reliance on the evaluator.