Leadplane Training Lesson Plan

Safety

01-02-N9065-HO

Objective:

To familiarize the student with the importance of safety in the leadplane mission (Phase 1).

To develop the student's safety mindset in the leadplane mission (Phase 2).

Content:

Aviation safety is the primary goal of the leadplane position. The low-level capabilities of a leadplane enhance the safety of airtanker operations in the fire environment.

When safety of flight is or may be compromised, water or retardant drops become ineffective, or at pilot recommendation, aerial operations should cease.

Communication between all airborne incident aircraft is critical to safety.

Safety is the principal consideration in all aspects of aerial supervision. A safe aviation operation depends on accurate risk assessment and informed decision making. Assessing risk identifies the hazard, the associated risk, and places the hazard in a relationship to the mission. A decision to conduct a mission requires weighing the risk against the benefit of the mission and deciding whether the risks are acceptable.

Risk Mitigation Considerations

- Monitor the overall aviation operation for human factors related issues.
  - Task saturation.
  - Fatigue, burnout and stress.
  - Acceptance of risk as normal.
  - Lack of situational awareness.
- Monitor effectiveness of the overall air operation.
  - Ensure suppression objectives are truly obtainable.
    - Risk versus reward – is the mission worth it?

Are there adequate aerial resources?

Are there adequate ground resources?

Is there enough time in the operational period?

Monitor weather conditions for increasing winds, turbulence, thunderstorms or decreasing visibility.

Be proactive in communicating current fire and fire weather conditions.

Provide realistic input regarding resource needs relative to incident objectives.

System Safety Assessment

The effectiveness of risk assessment and management can be increased through utilization of the current System Safety Assessment for Aerial Supervision Operations. See the System Safety Assessment for Aerial Supervision matrix in the NWCG SAS. It identifies hazards, the likelihood of encountering them and the risk associated with exposure to the hazard. Mitigations are listed for hazards as well as the post mitigation risk. System Safety utilization is standard operating procedure and covers all aspects of aerial supervision. It should be used for incident operations, training, and review by agency air crewmembers.

The Aviation Safety Communiqué (SAFECOM) system is used to report any condition, observance, act, maintenance problem, or circumstance that has potential to cause an aviation-related mishap. Submitting a SAFECOM is not a substitute for "on-the-spot" correction(s) to a safety concern, rather it is a tool used in the documentation, tracking, and follow up corrective action(s) related to a safety issue.

Conservative Safety Mindset

The leadplane pilot must have a safety mindset during all operations. The leadplane pilot should continuously reevaluate flight conditions, feasibility of retardant delivery and retardant effectiveness. The leadplane pilot must communicate any concerns to the ATGS, IC or dispatch and any mitigation measures. It is easy for all participants in suppression operations to become mission focused and lose track of a more strategic view of the operation. The leadplane mission puts the leadplane pilot in an excellent position to evaluate multiple operations. The leadplane pilot must communicate concerns about the operations to the ATGS or IC.

Everyone engaged in fire suppression operations is taught to have a safety mindset and hold safety as the primary objective. People can get so focused on tactics that they lose sight of potential safety issues. The leadplane can fill the role as a safety regulator for

aviation operations. It is important for the leadplane pilot to question the safety of continued operations when conditions change.

When to Say No, How to Refuse Risk Properly

Accepting risk is part of the job of being a firefighter. But no employer has the right to force you to take an unacceptable risk, particularly if there are safe alternatives for completing the assignment.

The guidelines published by the National Wildfire Coordinating Group spell out the proper way to exercise your right to refuse risk that you believe extends beyond the boundaries of the job.

NWCG Guidelines, How to Refuse Risk Properly

Every individual has the right and obligation to report safety problems and contribute ideas regarding their safety. Supervisors are expected to give these concerns and ideas serious consideration.

When an individual feels an assignment is unsafe, they also have the obligation to identify, to the degree possible, safe alternatives for completing that assignment. Turning down an assignment is one possible outcome of managing risk.

A “turn down” is a situation where an individual has determined they cannot undertake an assignment as given and they are unable to negotiate an alternative solution. The turn down of an assignment must be based on an assessment of risks and the ability of the individual or organization to control those risks. Individuals may turn down an assignment as unsafe when:

- There is a violation of safe work practices.
- Environmental conditions make the work unsafe.
- They lack the necessary qualifications or experience.
- Defective equipment is being used.

If a turn down situation presents itself, the process for resolving it in the field is as follows:

- Individual will directly inform their supervisor that they are turning down the assignment as given. The most appropriate means to document the turn down is using the criteria (The Firefighting Orders, the Watch Out Situations, etc.) outlined in the Risk Management Process.
- Supervisor will notify the Safety Officer immediately upon being informed of the turn down. If there is no Safety Officer, notification shall go to the appropriate Section Chief or to the Incident Commander. This provides accountability for

decisions and initiates communication of safety concerns within the incident organization.

If the supervisor asks another resource to perform the assignment, they are responsible to inform the new resource that the assignment has been turned down and the reasons that it was turned down.

If an unresolved safety hazard exists or an unsafe act was committed, the individual should also document the turn down by submitting a SAFENET (ground hazard) or SAFECOM (aviation hazard) form in a timely manner.

These actions do not stop an operation from being carried out. This protocol is integral to the effective management of risk as it provides timely identification of hazards to the chain of command, raises risk awareness for both leaders and subordinates, and promotes accountability.

Completion Standards:

The lesson is complete when the student can demonstrate that safety is the highest priority and will not be in question in a training environment for Phase 1 and in a fire environment for Phase 2.

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