

# Leadplane Training Lesson Plan

## Checklists

04-01-N9065-HO

### Objective:

To familiarize the student with the use of checklists (Phase 1).

To develop the student's proficiency with the use of checklists (Phase 2).

### Content:

The use of checklists is a vital component of single pilot resource management. The single pilot leadplane mission puts a heavy workload on the pilot and proper use of checklists is important.

The improper use, or the non-use, of checklists by pilots is often cited as a major contributing factor to aircraft accidents and incidents.

The various ways of conducting a checklist are influenced not only by the checklist device and the method of using it, but also by its "philosophy of use." The first is the redundancy between configuring the aircraft from memory and only then using the checklist procedure to verify that all items have been accomplished properly (set-up redundancy). The second is the redundancy between two crew members monitoring each other while conducting the checklist procedure (mutual redundancy).

Using a checklist as a do list can be slow and there is no redundancy to catch items that are inadvertently skipped. These items can go unnoticed after the checklist is thought to be completed. Using a flow to set up an aircraft from memory and then using the checklist to confirm the items have been addressed sets up redundancy in a single pilot situation.

Challenge and response is another way of running checklists in a two crewmember environment. Challenge and response also uses a flow to set up an aircraft from memory and then uses the checklist and second crewmember to confirm the items have been addressed. This is not recommended in a student and evaluator situation so as to prepare the student for single pilot operations. Challenge and response can be incorporated later during ASM operations as needed.

Many pilots use internal as well as external cues to aid in the initiating of checklists. This has disadvantages in that the pilot is relying on the cues to start the checklist. If the cues are removed or are missed due to distractions, a checklist item could be omitted.

There have been instances where experienced pilots have memorized flows and didn't back the flow up with a checklist. Pilots also have been observed completing memorized flows and then picking up the physical checklist but not reading it. This removes the redundancy and increases the chance of an accident or incident.

The proper use of checklists is vital to the continued success and historic high level of safety in the leadplane mission.

### **Completion Standards:**

The lesson is complete when the student can demonstrate the use of checklists with minimal deficiencies noted in a training environment for Phase 1 and in a fire environment for Phase 2. Safety will never be in question and the checklist use will be accomplished without the reliance on the evaluator.