Single-Pilot Resource Management

So what is single-pilot resource management? The FAA Risk Management Handbook notes that SRM is defined as the art of managing all the resources (both onboard the aircraft and from outside sources) available to a pilot prior to and during flight to ensure a successful flight. It is about how to gather information, analyze it, and make decisions. It requires the pilot to competently perform a number of mental tasks in addition to the physical task of basic aircraft control. These include: Situational awareness, Task management, Automation management, Risk management, Aeronautical decision-making, and CFIT (controlled-flight-into-terrain) awareness. That is no small challenge, especially for GA pilots whose aeronautical experience may be limited.

The incorporation of SRM into GA pilot training curricula is an important step forward in aviation safety. A structured approach to SRM helps pilots learn to gather information, analyze it, and make decisions on the conduct of the flight.

When it comes to gathering information, SRM training emphasizes that even though the flight is operated by an individual pilot and not an onboard crew, the pilot has a number of inside and outside resources available to assist with the flight. A key skill is how to identify and effectively use these resources.

For example, internal resources might include passengers, even if they have no flying experience. The pilot can ask them to assist by reading checklist items and watching for traffic. With a little instruction, passengers can also help listen for radio calls and assist with switching radio frequencies. It could also be helpful to teach frequent passengers some basic programming skills for moving map and multifunction displays, if the aircraft is so equipped. Internal resources might also include the pilot's use of verbal briefings. Many solo pilots read the checklist out loud, and make it a point to touch the appropriate switch or control.

Your onboard equipment, which can include both panel-mounted and hand-held devices, constitutes another important internal resource. Today's technology offers an incredible range of information to assist with overall situational awareness, navigation, weather information, and much more. The key to benefiting from this resource is to know your devices: long before you leave the ground, know what information is available and make sure you know how to access it without unduly diverting your attention from essential aircraft control duties.

Reference:

- FAA's Risk Management Handbook (FAA-H-8083-2), chapter 6
  www.faa.gov/regulations_policies/handbooks_manuals/aviation/risk_management_handbook/
- Advisory Circular 120-51E, Crew Resource Management Training
  http://go.usa.gov/ZECw
- "Whither and Whether of Flying in Weather" (FAA Safety Briefing – July/August 2010)
  www.faa.gov/news/safety_briefing/2010/media/julaug2010.pdf

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