Single-Pilot Crew Resource Management

There is no one right answer in aeronautical decision-making. Each pilot is expected to analyze each situation in light of experience level, personal minimums, and current physical and mental readiness level, and make his or her own decision.

Single-pilot resource management (SRM) is the art of managing all onboard and outside resources available to a pilot before and during a flight to help ensure a safe and successful outcome. Incorporating SRM into GA pilot training is an important step forward in aviation safety. A structured approach to SRM helps pilots learn to gather information, analyze it, and make sound decisions on the conduct of the flight.

Five-P Approach to SRM

To get the greatest benefit from SRM, you also need a practical framework for application in day-to-day flying. One such approach involves regular evaluation of: ***Plan***, ***Plane***, ***Pilot***, ***Passengers***, and ***Programming***.

The point of the Five-P approach is not to memorize yet another aviation mnemonic. You might simply write these words on your kneeboard, or add a reference to the Five Ps to your checklist for key decision points during the flight. These include preflight, pre-takeoff, cruise, pre-descent, and just prior to the final approach fix or, for VFR operations, just prior to entering the traffic pattern.

Items to consider in association with the Five Ps might include the following:

Plan

The plan includes the basic elements of cross-country planning: weather, route, fuel, current publications, etc. The plan also includes all the events that surround the flight and allow the pilot to accomplish the mission. The pilot should review and update the plan at regular intervals in the flight, bearing in mind that any of the factors in the original plan can change at any time.



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Plane

The plane includes the airframe, systems, and equipment, including avionics. The pilot should be proficient in the use of all installed equipment as well as familiar with the aircraft/equipment's performance characteristics and limitations. As the flight proceeds, the pilot should monitor the aircraft's systems and instruments in order to detect any abnormal indications at the earliest opportunity.

Pilot

The pilot needs to pass the traditional "IMSAFE" checklist (see below). This part of the Five-P process helps a pilot identify and mitigate physiological hazards at all stages of the flight.

Passengers

The passengers can be a great help to the pilot by performing tasks such as those listed earlier. However, passenger needs — e.g., physiological discomfort, anxiety about the flight, or desire to reach the destination — can create potentially dangerous distractions. If the passenger is a pilot, it is also important to establish who is doing what. The Five-P approach reminds the pilot-in-command to consider and account for these factors.

Programming

The programming can refer to both panel-mounted and hand-held equipment. Today's electronic instrument displays, moving map navigators, and autopilots can reduce pilot workload and increase pilot situational awareness. However, the task of programming or operating both installed and handheld equipment (e.g., tablets) can create a serious distraction from other flight duties. This part of the Five-P approach reminds the pilot to mitigate this risk by having a thorough understanding of the equipment long before takeoff, and by planning in advance when and where the programming for approaches, route changes, and airport information gathering should be accomplished, as well as times it should not be attempted.

Whatever SRM approach you choose, use it consistently and remember that solid SRM skills can significantly enhance the safety of "crew of you" flights.



Resources

- **FAA Risk Management Handbook (Chapter 6)** http://1.usa.gov/18ioRba
- **Advisory Circular 120-51E, *Crew Resource Management Training*** http://go.usa.gov/ZECw
- **"Say Ahh — A Pilot's Guide to Self-Assessing Risk," Jan/Feb 2017 *FAA Safety Briefing*** https://adobe.ly/2ibKIH0