Personal Minimums

Personal minimums refer to an individual pilot’s set of procedures, rules, criteria, and guidelines for deciding whether and under what conditions to operate (or continue operating) in the National Airspace System. Personal minimums should be set so as to provide a solid safety buffer between the pilot skills and aircraft capability required for the specific flight you want to make, and the pilot skills and aircraft capability available to you through training, experience, currency, proficiency and, in the case of the airplane, performance characteristics.

What Should I Consider?

Step 1 – Review Weather Minimums. The regulations define weather flight conditions for visual flight rules (VFR) and instrument flight rules (IFR) in terms of specific values for ceiling and visibility. IFR means a ceiling less than 1,000 feet AGL and/or visibility less than three miles. Low IFR (LIFR) is a sub-category of IFR. VFR means a ceiling greater than 3,000 feet AGL and visibility greater than five miles. Marginal VFR (MVFR) is a sub-category of VFR.

Step 2 – Assess Your Experience and Comfort Level. Think through your recent flying experiences and make a note of the lowest weather conditions that you have comfortably experienced in VFR and, if applicable, IFR flying in the last six to twelve months. This exercise helps establish your personal “comfort level” for VFR, MVFR, IFR, and LIFR weather conditions.

Step 3 – Consider Other Conditions. It is also a good idea to have personal minimums for wind, turbulence, and operating conditions that involve things like high density altitude, challenging terrain, or short runways. Record the most challenging conditions you have comfortably experienced in the last six to twelve months. You can note these values for category and class, for specific make and model, or both.

**Consider following a personal minimums checklist like the one shown here and on the next page.**
Step 4 – Assemble and Evaluate. Next, combine these numbers to develop a set of baseline personal minimums.

Step 5 – Adjust for Specific Conditions. Any flight involves almost infinite combinations of pilot skill, experience, condition, and proficiency; aircraft equipment and performance; environmental conditions; and external influences. These factors can compress the baseline safety buffer, so you need a structured way to adjust for changing conditions. Consider developing a chart of adjustment factors based on changes in the PAVE checklist factors - Pilot, Aircraft, enVironment, and External Pressures.

When you have comfortably flown to your baseline personal minimums for several months, you can consider adjusting to lower values. Two important cautions:

1. Never adjust personal minimums to a lower value for a specific flight. The time to consider changes is when you are not under any pressure to fly, and when you have the time and objectivity to think honestly about your skill, performance, and comfort level.

2. Keep all other variables constant. If your goal is to lower your baseline personal minimums for visibility, don’t try to lower the ceiling, wind, or other values at the same time.

Step 6 – Stick to the Plan! Once you have established baseline personal minimums, “all” you need to do next is stick to the plan. That task is a lot harder than it sounds, especially when the flight is for a trip that you really want to make, or when you are staring into the faces of disappointed passengers.

Here’s where personal minimums can be an especially valuable tool. Professional pilots live by the numbers, and so should you. Pre-established numbers can make it a lot easier to make a smart no-go or divert decision. In addition, a written set of personal minimums can also make it easier to explain tough decisions to passengers who are entrusting their lives to your aeronautical skill and judgment.

Resources
FAA Risk Management Handbook, Chapter 8, Risk Management Training

www.faa.gov/regulations_policies/handbooks_manuals/aviation/