

# Tool You Can Use?

The AOPA Air Safety Institute (AOPA ASI) and its predecessor, the Air Safety Foundation, have long been at the forefront of developing new ways to look at the data and facts of safe personal aircraft operations. Earlier this year, the AOPA ASI announced its Mobile Flight Risk Evaluator, an app for iOS and Android devices and a complement to its online version. According to AOPA ASI, "By taking into account your total flying experience, including recent flight hours, how much experience in a given aircraft, weather, terrain, and runway information, this app gives you an assessment of how much risk you may be undertaking for a particular flight." We installed it and used it to assess a hypothetical flight. The results are captured in the images below.

Does this have any value? We think so. It acknowledges the traditional means of evaluating a proposed flight's risk as recommended by the FAA is a lengthy process made worse by two factors. The first is the need for a pilot to use pen and paper to record his or her responses to the questions posed in a risk assessment form like the one at right, which is found in the FAA's *Risk Management Handbook* (FAA-H-8083-2). We would judge the odds of a busy pilot completing a form like this during his or her pre-flight preparations as slim and none, especially in a busy pilot's lounge or FBO, where prying eyes abound.

Put another way, running an assessment like this in public doesn't evince the "right stuff," and opens up the pilot to ridicule and the wrong kind of peer pressure. We'd wager it simply isn't used that way, but we're happy to be proven wrong.

The second factor is the app's "wow" quotient. Smartphones and tablets are still new enough to impress users and observers, and using them to assess the risk of a proposed flight can bring out the "safety geek" in all of us. Further, stabbing at a phone or tablet during pre-flight is expected and won't raise eyebrows in the FBO.

| RISK ASSESSMENT  |                |
|--|----------------|
| Pilot's Name   | Flight From To |
| <b>SLEEP</b>   |                |
| 1. Did not sleep well or less than 8 hours   | 2              |
| 2. Slept well  | 0              |
| <b>HOW IS THE DAY GOING?</b>   |                |
| 1. Seems like you're doing better than usual (rain, making errors, out of sync)                                | 2              |
| 2. Great day   | 0              |
| <b>HOW DO YOU FEEL?</b>  |                |
| 1. Have a cold or ill  | 4              |
| 2. Feel great  | 0              |
| 3. Feel a bit off  | 2              |
| <b>IS THE FLIGHT?</b>  |                |
| 1. Day?  | 1              |
| 2. Night?  | 2              |
| <b>WEATHER AT TERMINATION</b>  |                |
| 1. Greater than 5 mile visibility and 3,000 feet ceilings  | 1              |
| 2. At least 3 mile visibility and 1,000 feet ceilings, but less than 3,000 feet ceilings and 5 mile visibility | 2              |
| 3. IFR conditions  | 4              |
| <b>PLANNING</b>  |                |
| 1. Plan to get off ground?   | 2              |
| 2. No hurry  | 1              |
| 3. Used charts and computer to assist  | 0              |
| 4. Used computer program for all planning  | Yes 2<br>No 0  |
| 5. Did you verify weight and balance?  | Yes 0<br>No 2  |
| 6. Do you evaluate performance?  | Yes 0<br>No 2  |
| 7. Do you brief your passengers on the ground and in flight?   | Yes 0<br>No 2  |
| Column total   |                |
| LEFT COLUMN TOTAL + RIGHT COLUMN TOTAL = TOTAL SCORE   |                |

ASI FRE 4/5

- Departure ceiling ✓
- Takeoff runway ✗
- Departure visibility ✓
- Departure wind ✓
- Destination ceiling ✓
- Landing runway ✓
- Destination visibility ✓
- Destination wind !
- Fuel ✓
- Icing ✗
- Pilot recent experience !

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ASI FRE 5/5

YOUR RESULTS

**Aircraft**  
You have a good amount of time in make/model. Use caution, however, if it's been a while since you've flown the aircraft.

**Connection**  
Although no convective activity is forecast, be prepared to alter your plans if conditions change en route.

**Departure ceiling**  
The ceiling should be adequate for a safe departure. If nearby terrain is obscured, however, we recommend following the published obstacle departure procedure for the runway (if applicable).

**Takeoff runway**  
The runway is either too small, has surface contamination, or both. We do not recommend using it.

**Departure visibility**  
The visibility should be adequate for a safe departure. If nearby terrain is obscured, however, we recommend following the published obstacle departure procedure for the runway (if applicable).

**Departure wind**  
The total wind and crosswind component are within recommended guidelines. Use caution, however, if conditions are gusty, or if you are not proficient in crosswind takeoffs/landings.

**Destination ceiling**

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