



Figure 1-18. Awareness of human factors and how it affects the decision-making process.

differences and additional information specific to WSC is provided in subsequent sections.

The differences in the more complex airplane requirement scenarios presented in the Pilot's Handbook of Aeronautical Knowledge versus WSC aircraft characteristics can easily be compared. Overall, the advantage of an LSA is the simpler design requiring less pilot attention than the complex requirements of more complicated designs that add to the pilot's workload, such as:

- Constant speed propellers
- Multiple engines
- Retractable landing gears
- Faster airspeeds

The unique characteristics on the WSC aircraft that increase ADM tasks are:

- Open flight deck where maps or other materials cannot be opened, shown, and discussed with passenger.
- Pusher propeller in the back, through which any loose item on the flight deck can be pulled, possibly producing severe damage, depending on the size of the object.
- More physical strength and endurance required to fly in turbulent conditions, which adds an additional risk element.

Avoiding Pilot Errors

Overall, WSC aircraft are flown for fun and not for transportation. Generally, it is determined that the pilot will not fly in instrument meteorological conditions (IMC) without the assistance and training of the attitude indicator. Pilots must make the decision to stay out of IMC conditions and turn back immediately if the situation occurs. This is what most pilots should do, but the information provided by the attitude indicator allows pilots to start the "error chain" that can lead to catastrophic consequences. The best immediate decision is always to turn back and not go into IMC conditions in a WSC aircraft.

With an open flight deck, the problem of items getting loose and hitting the propeller requires extra caution. Being in a hurry, not making sure everything is secured, and forgetting to brief the passenger can trigger one event that leads to another. Exercising caution in the open flight deck is an important step for WSC pilots.

If flying a WSC aircraft in turbulence, the pilot must have both hands on the bar to maintain control of the aircraft. Therefore, changing radio frequencies, measuring courses on the map, or operating any of the flight deck controls becomes difficult and secondary to maintaining control of the aircraft. This is different from flying an airplane or a powered parachute, which requires less physical effort to maintain control of the aircraft and at least one hand is available to tend to flight deck duties. It must be noted that the