

Scenario-based Training Toolbox (continued – sheet 7)

Second P - **Process** hazards by using the **CARE** model:

- **CONSEQUENCES** -- Evaluate the consequences (risks) that could arise.
- **ALTERNATIVES** -- Continuously evaluate all available options and alternatives.
- **REALITY** -- Acknowledge and address the reality of situation and avoid wishful thinking.
- **EXTERNAL PRESSURES** -- Be mindful of external pressures, especially tendencies toward get home-it is.

ALTERNATIVES, REALITY, and EXTERNAL PRESSURES Worksheet

An alternative for any hazard is not to fly. This is not described but applicable to all the items below.

PILOT

Experience: An alternative for a pilot who lacks experience is to get more training or fly with an instructor or an experienced pilot. If the mission is a challenging one, such as a long cross-country flight over hazardous terrain, change the mission to a less challenging and less risky one.

Physical and emotional condition: If the pilot is physically or mentally distressed, an instructor or experienced pilot could accompany the pilot. .

AIRCRAFT

Use/Situation: Unknown, borrowed, or unique aircraft could be inspected and test flown by qualified personnel or a different aircraft could be used.

System Failures: System failures usually cannot be predicted, and they immediately become a hazard and do not offer alternatives once they have happened. Fly the aircraft and determine alternatives to deal with the failure. Control the aircraft to a suitable landing area or activate the emergency parachute, if available, if complete loss of control occurs.

Fuel: Low fuel reserves or contamination is a significant hazard leading to engine failure, which can create medium to high risk. Alternatives are to stop for fuel as required, carry reserves if practical, and plan for fuel reserves as an alternative to running low on reserves. Planning sufficient fuel is the best preventative measure.

Performance: High weight, high-density altitude or tailwinds can be calculated and avoided. Weight can be reduced. High density altitude and tailwinds can be mitigated by flying when it is cooler. Tailwinds can be eliminated through go-arounds, taking the other end of the runway, or waiting until the tailwind dies.

Systems: With unfamiliar or critical systems, develop proficiency or fly with a pilot or instructor qualified to operate the system. Use additional systems or plan flight so the system is not as critical.

Airworthiness: Any out-of-date aircraft or aircraft in unknown condition should be inspected by qualified personnel.

ENVIRONMENT

Airport: Different, unfamiliar, or alternate airport risks can be eliminated through additional training, flying with an instructor or another pilot, or choosing an alternate, familiar airport or destination.

Runway: Go-arounds can be used to evaluate runway hazards. Alternate airports can be chosen. Initial flight planning is the best tool to make sure landings have reduced chance of hazards.

Weather: The alternative to flying into bad weather is to turn back or head for better weather. Choosing not to fly in bad weather or landing is another option. Weather usually deteriorates by pressing on and gets better by turning away or back.

Visibility: Bad visibility can be avoided by thorough flight planning, having an extra set of eyes in the aircraft, increasing/decreasing altitude, or flying to a different location.

Terrain: Flying over good or bad terrain can be eliminated or mitigated during the flight planning process by planning for good diversion airports.

Passenger: A passenger who creates distractions should be warned of the hazards of distracting the pilot. The pilot can ask the passenger to help with the mission. The pilot must change the passenger's behavior. A pre-flight briefing requesting the passenger's help is an alternative to explaining the hazards as they arise in flight.

EXTERNAL PRESSURES

Time: Planning alternatives and not committing to deadlines is an alternative to having external pressures to make a deadline. Having communications with those who are expecting you allows you to easily cancel or delay the trip.