

SPECIAL EMPHASIS AREAS

Positive aircraft control

Procedures for positive exchange of flight controls

- During the flight, there must always be a clear understanding between the pilots of who has control of the aircraft.
- Prior to flight, a briefing should be conducted that includes the procedure for the exchange of flight controls: “You have the controls”, “I have the controls”, “You have the controls”

Stall/spin awareness

Special use airspace and other airspace areas

Collision avoidance procedures

- Scanning Technique. To be most effective, the pilot should shift glances and refocus at intervals.
- Head Movement. Pilots should be reminded that it is necessary to move the head to search around the physical obstructions, such as door and window posts.
- Peripheral Vision. Each time a scan is stopped and the eyes are refocused, the peripheral vision takes on more importance because it is through this element that movement is detected.
- Accurate position reporting and collision avoidance.
- Traffic awareness, “See and Avoid” concept.

Wake turbulence and low level wind shear avoidance procedures

Runway incursion avoidance and good cockpit discipline during taxi operations, hot spots, NOTAMS

Land and hold short operations (LAHSO)

Crew resource management/single-pilot resource management (CRM/SRM) to include:

- Aeronautical decision making (ADM)
- Risk management
- Task management
- Situational awareness
- CFIT awareness
- Automation management

Checklist usage

TFR’s and SUA

Aviation Security

Icing:

- Recognition of wing contamination to icing;
- Adverse effects of wing contamination in icing conditions during takeoff, cruise, and landing phases of flight;
- Icing procedures of information published by the manufacturer, within the AFM, that is specific to the type of aircraft

Applicant must give crew briefing before each takeoff/ departure and approach/ landing

SINGLE PILOT RESOURCE MANAGEMENT AREAS

Aeronautical Decision-Making: to determine that the applicant exhibits sound aeronautical decision-making during the planning and execution of the planned flight.

- Use a sound decision-making process, such as the DECIDE model, 3P model, or similar process when making critical decisions that will have an effect on the outcome of the flight. The applicant should be able to explain the factors and alternative courses of action that were considered while making the decision.
- Recognize and explain any hazardous attitudes that may have influenced any decision.
- Decide and execute an appropriate course of action to properly handle any situation that arises that may cause a change in the original flight plan in such a way that leads to a safe and successful conclusion of the flight.
- Explain how the elements of risk management, CFIT awareness, overall situational awareness, use of automation, and task management influenced the decisions made and the resulting course of action.

Risk Management: to determine that the applicant can utilize risk management tools and models to assess the potential risk associated with the planned flight during preflight planning and while in flight.

- Explain the four fundamental risk elements associated with the flight being conducted in the given scenario and how each one was assessed.
- Use a tool, such as the PAVE checklist, to help assess the four risk elements.
- Use a personal checklist, such as the I'M SAFE checklist, to determine personal risks.
- Use weather reports and forecasts to determine weather risks associated with the flight.
- Explain how to recognize risks and how to mitigate those risks throughout the flight.
- Use the 5P model to assess the risks associated with each of the five factors.

Task Management: to determine that the applicant can prioritize the various tasks associated with the planning and execution of the flight.

- Explain how to prioritize tasks in such a way to minimize distractions from flying the aircraft.
- Complete all tasks in a timely manner considering the phase of flight without causing a distraction from flying.
- Execute all checklists and procedures in a manner that does not increase workload at critical times.

Situational Awareness: to determine that the applicant can maintain situational awareness during all phases of the flight.

- Explain the concept of situational awareness and associated factors.
- Explain the dangers associated with becoming fixated on a particular problem to the exclusion of other aspects of the flight.
- State the current situation at any time during the flight in such a way that displays an accurate assessment of the current and future status of the flight, including weather, terrain, traffic, ATC situation, fuel status, and aircraft status.
- Explain taxi operation planning procedures, such as recording taxi instructions, reading back taxi clearances, and reviewing taxi routes on the airport diagram.
- Explain procedures for steering, maneuvering, maintaining taxi, runway position, and situational awareness.
- Explain procedures for holding the pilot's workload to a minimum during taxi operations which should increase the pilot's awareness during taxiing.

- ATC communications and pilot operations before takeoff, before landing, and after landing at controlled and uncontrolled airports.
- Uses the navigation displays, traffic displays, terrain displays, weather displays, and other features of the aircraft to maintain a complete and accurate awareness of the current situation and any reasonably anticipated changes that may occur.

Controlled Flight into Terrain Awareness: to determine that the applicant can accurately assess risks associated with terrain and obstacles, maintain accurate awareness of terrain and obstacles, and can use appropriate techniques and procedures to avoid controlled flight into terrain or obstacles by using all resources available.

- Use current charts and procedures during the planning of the flight to ensure the intended flightpath avoids terrain and obstacles.
- Be aware of potential terrain and obstacle hazards along the intended route.
- Explain the terrain display, TAWS, and/or GPWS as installed in the aircraft.
- Use the terrain display, TAWS, and/or GPWS of the navigation displays as appropriate to maintain awareness and to avoid terrain and obstacles.
- Plan departures and arrivals to avoid terrain and obstacles.
- Alter flight as necessary to avoid terrain.
- Plan any course diversion, for whatever reason, in such a way to ensure proper terrain and obstruction clearance to the new destination.
- Explain and understand aircraft performance limitations associated with CFIT accidents.

Automation Management: to determine that the applicant can effectively use the automation features of the aircraft, including autopilot and flight management systems, in such a way to manage workload and can remain aware of the current and anticipated modes and status of the automation.

- Explain how to recognize the current mode of operation of the autopilot/FMS.
- Explain how to recognize anticipated and unanticipated mode or status changes of the autopilot/FMS.
- State at any time during the flight the current mode or status and what the next anticipated mode or status will be.
- Use the autopilot/FMS to reduce workload as appropriate for the phase of flight, during emergency or abnormal operations.
- Recognize unanticipated mode changes in a timely manner and promptly return the automation to the correct mode.