6 Minutes for Safety Topic: Situational Awareness

Situational Awareness (SA) Definition:

“A continuous Perception of self and aircraft in relation to the dynamic environment of flight, threats (risks) and mission; and the ability to Forecast and then execute tasks based on that perception”

Level of SA can be determined by experience, attitude, skill, and knowledge. Loss of SA is the single largest contributing factor in aircraft accidents.

Causes of Loss of SA:
- Familiar Perception / Complacency
- Channelized Attention (#1 Cause of SA Loss)
- Task Saturation
- Task Mis-Prioritization
- Target Fixation
- Old Habit Patterns
- New Situations
- Distractions
  - Internal
  - External

Contributing Factors to Loss of SA:
- Unanticipated Complexity / Intensity of Tasks
- Addition of New / Unusual Events
- In-Flight Emergencies
- Group Dynamics
- Missed or Mis-Interpreted Communications

SA Loss Recognition:
- Feeling of Being “Behind the Airplane”
- Poor Performance on Basic Maneuvers
- Missed Tasks / Checks
- Switch Errors
- Erratic Aircraft Control
- Missed Radio Calls
- Task Mis-Prioritization
- Task Overload / Underload
- Uncertainty / Confusion
- Departures From SOP
– (Intentional / Unintentional)
  • Airspeed
  • Altitude

Recovering from Loss of SA:
• Climb to Cope (Get away from the ground)
• Re-Prioritize Tasks
  – Terrain Clearance Tasks (TCT)
  – Mission Critical Tasks (MCT)
  – Non-Critical Tasks (NCT)
• Talk to Other Flight Members / Agencies
  – Help Build SA and / or Communicate Concerns
• KNOCK-IT-OFF, Abort, Go Around, Regroup, Re-Brief (If Necessary), Try Again
• Decide Whether to Continue Mission or Terminate
• Prevent a Potentially Bad Decision / Situation from Escalating