



PIRATE FLYER

sUAS Operations | SMS | Professionalism

HU Captain's Culture

THE SAFETY TRAIL

- Trust** - Safe, Valued, Respect
- Report** - Proactive, Accessible
- Adapt** - Flexible, Innovative
- Inform** - Sharing, Transparent
- Learn** - Safety Intelligence

Name The First American Woman Passenger



Safety Reporting

QR code to share continuous improvement ideas or identify safety hazards.



Focus for sUAS Operations: Airspace, Planning, and Operational Control

Airspace Compliance: Understand controlled vs. uncontrolled airspace, authorization requirements, and coordination with nearby airports.

Pre-Mission Planning: Conduct site surveys, identify obstacles and people hazards, review weather, and establish lost-link and emergency procedures.

See & Avoid: Maintain required visual line of sight and continuously scan for crewed aircraft operating in the vicinity.

Crew Resource Management: Clearly define Remote PIC, visual observer, and payload operator roles; use standard callouts and contingency briefings.

Safety Takeaway: Professional UAS operations require the same risk management discipline as crewed flight programs.



Focus for Air Traffic: Clarity, Accuracy, and Professional Communication

Phraseology Matters: Use standard FAA phraseology to reduce ambiguity—especially during runway operations.

Hearback/Readback: Listen for correct readbacks; correct errors immediately and clearly.

Human Factors: Manage fatigue, workload, and distractions. Use teamwork and briefings to maintain shared situational awareness.

Safety Takeaway: Clear, calm communication prevents small errors from becoming incidents.

ATC Light Signals		
GROUND	SIGNAL	AIR
Cleared for Takeoff	Steady GREEN	Cleared to Land
Cleared to Taxi	Flashing GREEN	Return for Landing
STOP	Steady RED	Give Way Continue Circling
Taxi Clear of Runway	Flashing RED	Airport Unsafe DO NOT LAND
Return to Starting Point on Airport	RED with WHITE MEDIUM	Not Applicable
Exercise EXERCISE CAUTION	RED with WHITE DIM	Exercise EXTREME CAUTION



Pilot Focus: Fundamentals, Situational Awareness, and Decision-Making

Preflight Discipline: Use a consistent checklist flow

Weather & ADM: Reassess weather trends continuously—especially winds, gusts, ceilings, and density altitude.

Runway Safety: Verify runway assignment, hold short instructions, and correct readbacks.

Common Errors to Avoid: Unstabilized approaches, rushed checklists, and task saturation in the pattern.

Safety Takeaway: Slow down. Fly the airplane first. Know how to say Unable!

Management Focus: Safety Culture and Risk Management

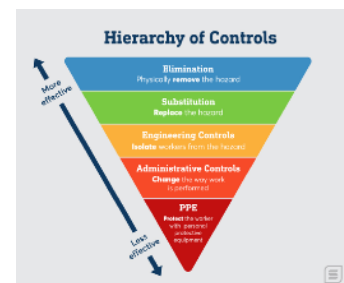
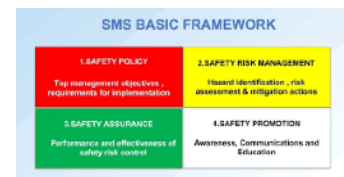
Safety Management Systems (SMS): Promote hazard reporting and continuous improvement.

Operational Risk: Understand how scheduling, maintenance planning, training tempo, and staffing affect safety margins.

Decision Influence: Management decisions shape pilot and controller behavior—model conservative, safety-first choices.

Data Awareness: Use trend data, audits, and feedback to identify risks before accidents occur.

Safety Takeaway: Leadership commitment is the foundation of a strong safety culture.



UNDERSTANDING SITUATIONAL AWARENESS

Situational Awareness isn't just "paying attention." It is a continuous three-step mental process: Perception, Comprehension, and Projection.



Perception

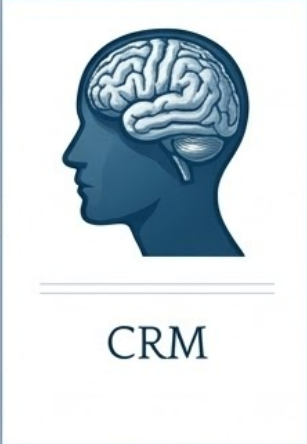
This is the foundation. It involves perceiving the status, attributes, and dynamics of relevant elements in the environment.

You are gathering raw data. You see the warning lights, hear the radio transmissions, and notice the fuel gauge. You are not only monitoring yourself but also others around you.

Comprehension

This goes beyond just seeing the data; it's about processing it to understand the current situation. You are turning "data" into "information."

You don't just see a red light; you understand that the red light means a specific system has failed and how that affects your current flight path. You also take this time to recognize any problems that may have also occurred due to a failed system.



Projection

The ability to imagine the future state of your system based on current variables. If Perception is the "What" and Comprehension is the "So What?", Projection is the "Now What?"

Ask yourself these three questions every 10 minutes:

- Where will we be in 10 minutes if we change nothing?
- What is the biggest change likely to happen in the next phase?
- What is my "Trigger Point" to abort if the projection turns negative?

Pro Tips

Every 2-5 minutes, perform a "Big Picture Scan."

Periodically state your current understanding and your next projected move for yourself and anyone else in the cockpit.

Watch for Ambiguity. If two pieces of information don't match (the GPS says one thing, but the view out the window says another), stop.



"Don't just fly the mission. Be the mission." - Top Gun : Maverick

Image Credit: Croom