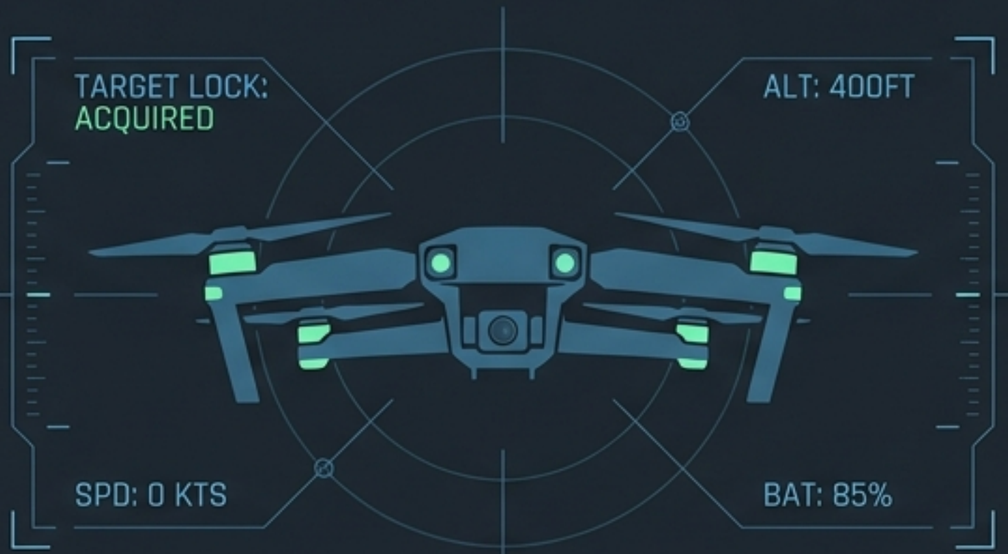
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MODULE 12: CAPSTONE MISSION LIFECYCLE & DEFENSE

End-to-End Commercial Execution and the 85% Standard.

100.00% ▶

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THE ULTIMATE TEST: THE 85% STANDARD

THE CAPSTONE IS AN INDEPENDENT, UNFAMILIAR COMMERCIAL MISSION.

TO CLEAR THIS FINAL GATE AND EARN THE COMMERCIAL OPERATOR CREDENTIAL, A PILOT MUST ACHIEVE A MINIMUM OVERALL SCORE OF 85% ACROSS ALL MISSION PHASES.



AIRSPACE CLEARANCE
[ATC LINK: ACTIVE] [ZONE: CLASS B]

PRACTICAL FLIGHT
[SYS: OPTIMAL] [BATT: 92%]

KNOWLEDGE MASTERY
[REGS: CFR 107] [METAR: CHECKED]

ZERO TOLERANCE: A SINGLE CRITICAL SAFETY FAILURE RESULTS IN IMMEDIATE MISSION TERMINATION AND EVALUATION FAILURE.

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PARADIGM SHIFT: PRACTICE VS. DEFENSE

STANDARD PRACTICE FLIGHT

- Instructor corrects operational errors in real-time.
- Simulated LAANC and airspace coordination.
- Graded primarily on physical stick-skills and maneuvers.
- Forgiving environment for minor checklist deviations.

CAPSTONE MISSION DEFENSE

- Independent execution; instructor acts only as a safety stop.
- Auditable, real-world LAANC and Remote ID documentation required.
- Graded on total mission compliance and client deliverables.
- Zero-tolerance for safety, CRM, or regulatory failures.

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T095:50:42 T09:83:8S WARNING AMBER MINT GREEN

THE COMMERCIAL MISSION LIFECYCLE



1. INTAKE (PLAN)

Client Request, Scope, Deliverables, Resource Assignment.

2. INTELLIGENCE (MITIGATE)

Airspace, Weather, Hazards, Risk Matrix, Authorizations.

3. EXECUTION (FLY)

Crew Briefing, Flight Protocol, Telemetry, Emergency Response.

4. EXTRACTION (DELIVER)

Flight Logs, Data Assembly, Client Handoff, Oral Defense.

TACTICAL AZURE WARNING AMBER MINT GREEN

[Synthesizing the 18-point commercial mission file into actionable operational phases]

AVIATION MISSION COMMAND TERMINAL | DRONE OPS V.3.1 | SECURE FLIGHT LINK ESTABLISHED

AM

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PHASE 1: TRANSLATING THE CLIENT SOW

Hey, can you fly my construction site tomorrow?



CLIENT WORK ORDER SCHEMATIC

> DEFINE SCOPE & DELIVERABLES

Real estate media, construction inspection, or infrastructure photogrammetry.

> DATA HANDLING PROTOCOL

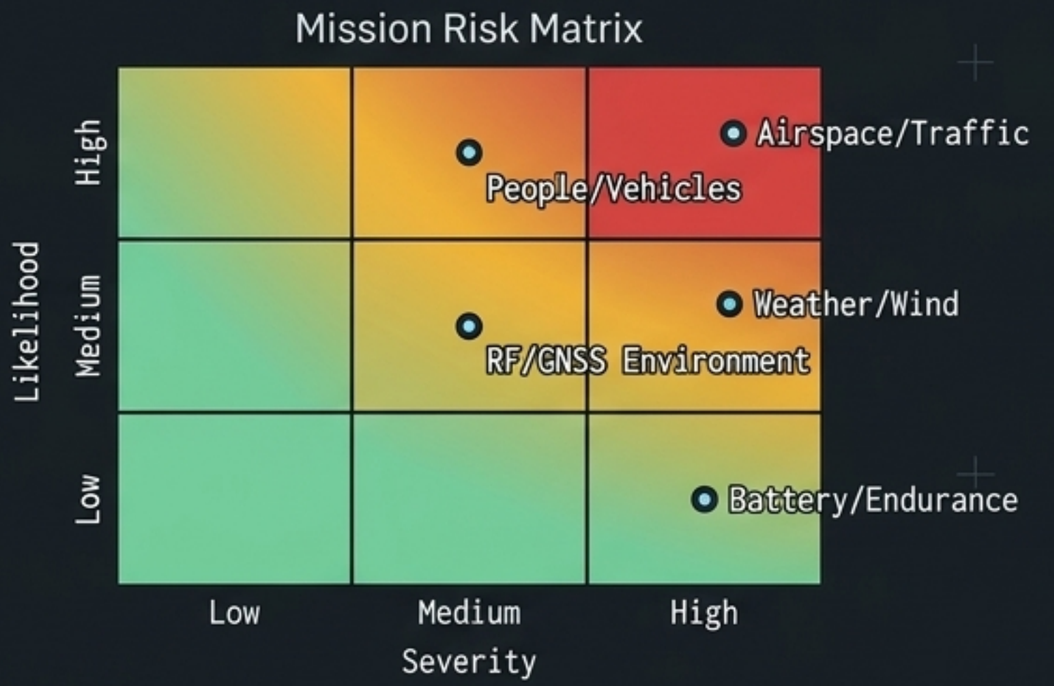
Client privacy, storage, and secure transfer requirements.

> RESOURCE ALLOCATION

Identifying the precise aircraft, payload, and crew (PIC, VO) required to execute the specific mission.

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Phase 2: Site Hazard Mitigation



GO: Routine/uncontrolled, parameters within conservative limits.

MODIFY: Implement specific mitigations (e.g., visual observers, modified flight path).

DELAY: Temporary weather or traffic hazard; hold until clear.

NO-GO: Unresolved authorization, uncontrolled public exposure, or critical aircraft defect.

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Phase 2: The Compliance Shield



[ ] **REMOTE ID VERIFICATION:**
CONFIRMING BROADCAST MODULE OR BUILT-IN COMPLIANCE ACTIVE.

[ ] **DRONEZONE FLEET INTEGRITY:**
VALIDATING CURRENT FAA REGISTRATION FOR THE SPECIFIC TAIL NUMBER.

[ ] **LAANC AUTHORIZATION:**
SECURING REAL-TIME AIRSPACE CLEARANCE FOR CONTROLLED ZONES.

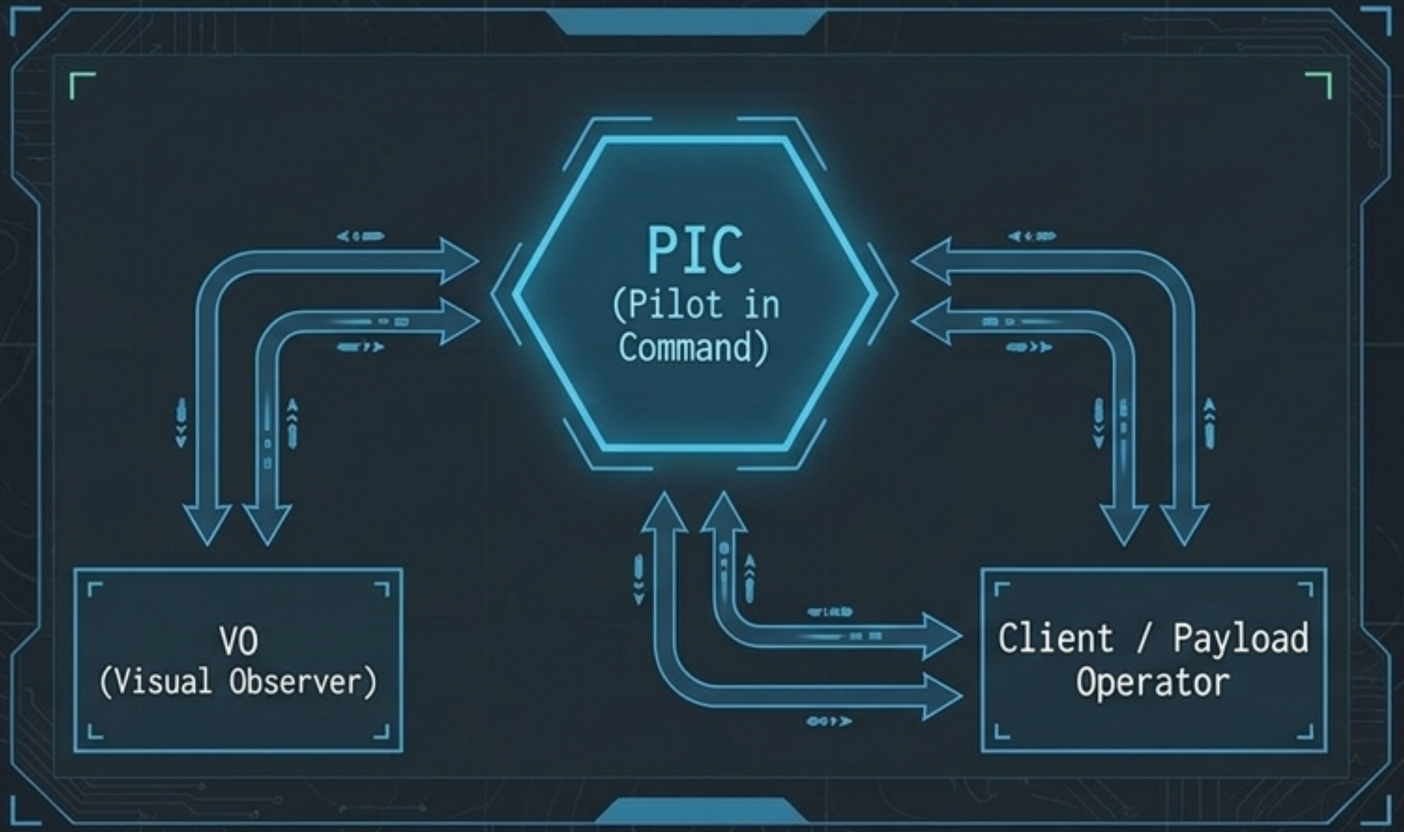
[ ] **OPERATIONAL WAIVERS:**
VERIFYING SAFETY-CASE APPROVALS FOR NIGHT OR OVER-PEOPLE OPERATIONS IF APPLICABLE.

TACTICAL AZURE WARNING AMBER MINT GREEN

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Phase 3: Flight Execution & Zero-Tolerance

Flawless stick-skills cannot compensate for poor aeronautical decision-making.

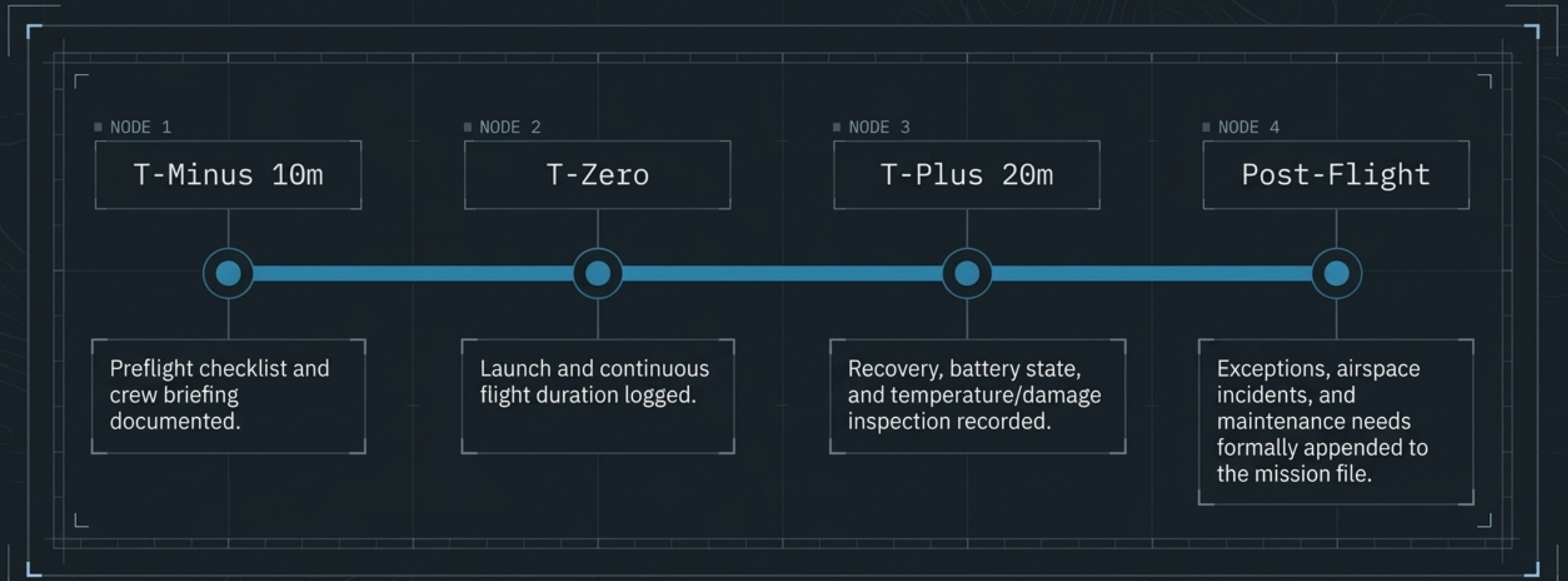


CRITICAL FAILURES (INSTANT MISSION ABORT)

- Creates or accepts an avoidable collision hazard.
- Fails to yield right-of-way to manned aircraft.
- Continues flight after loss of safe control or abort condition.
- Bypasses a required preflight safety item.
- Careless or reckless operational discipline.

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Phase 3: The Auditable Reality (Logs)



Phase 4: Data Package Assembly



FOLDER CONTENTS:

- **COMPLIANCE DATA:** Compliance data: Flight logs, LAANC approvals, risk matrices.
- **RAW MEDIA/DATA:** The actual client deliverables (photos, photogrammetry data).
- **THE AAR (After-Action Review):** Post-mission notes capturing exceptions, near-misses, and operational improvements.

The professional handoff. Transferring data per mission policy and closing out the professional UAS mission file.

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THE TRIBUNAL: THE ORAL DEFENSE



> JUSTIFY YOUR LAANC ALTITUDE LIMIT DECISION.

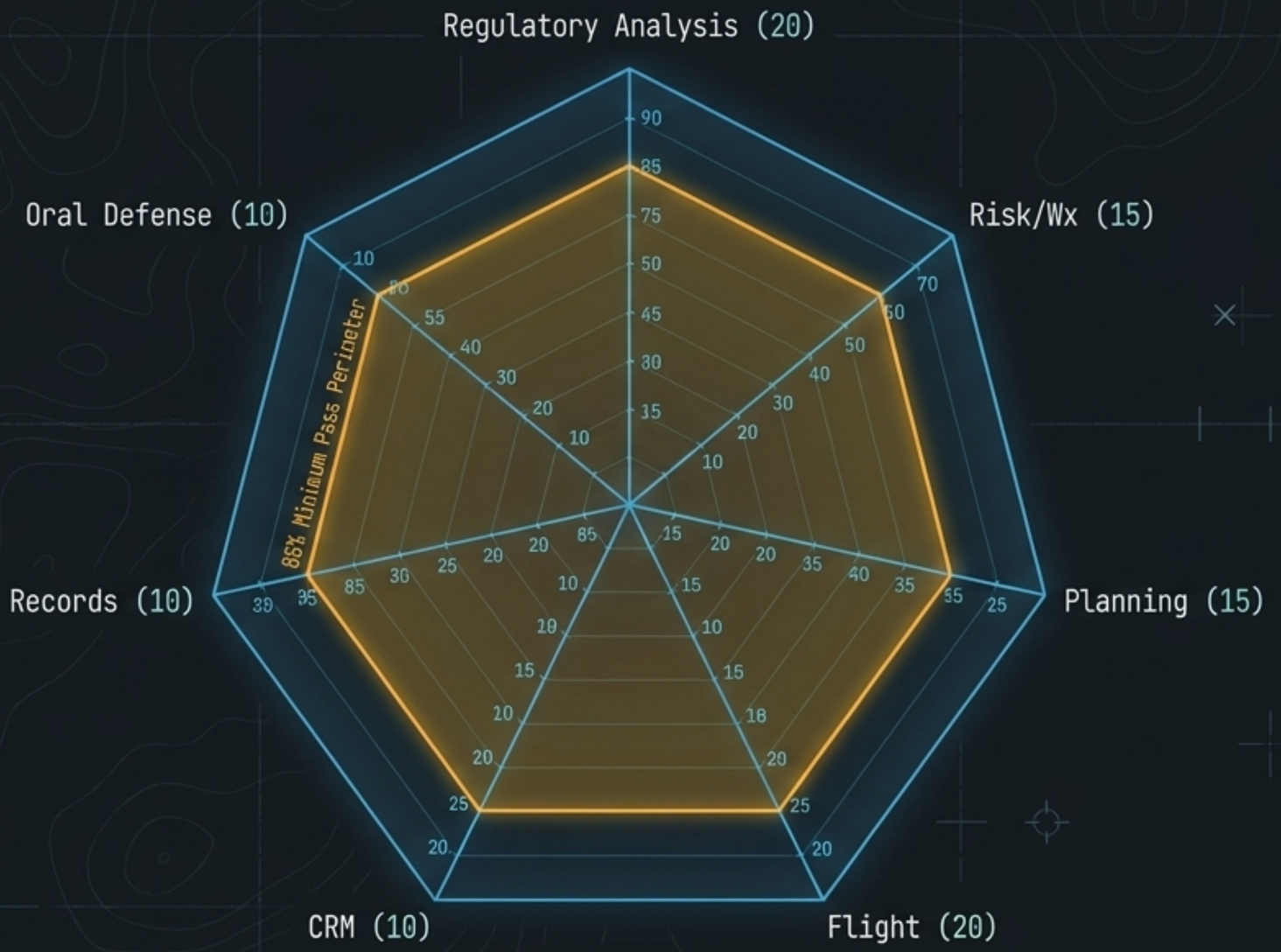
> EXPLAIN YOUR CRM COMMUNICATION DURING THE WIND ANOMALY.

> DEFEND YOUR GO/NO-GO ASSESSMENT BASED ON THE 0800 METAR.

The evaluation demands an oral defense. The pilot must articulate the regulatory, safety, and operational rationale behind every choice in the mission file. Guessing quickly is not mastery.

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THE CAPSTONE RUBRIC



The 100-point distribution forces total mission competence.

Perfect physical flight execution (20/20) cannot mAT save a pilot who fails their regulatory analysis or oral defense.

The shaded perimeter must be breached on all fronts.

TACTICAL AZURE
WARNING AMBER
MINT GREEN

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UNLOCKING THE PLATINUM CREDENTIAL



- SCORE 95%+ ON THE CAPSTONE MISSION.
- POSSESS A VALID FAA PART 107 REMOTE PILOT CERTIFICATE.
- ZERO CRITICAL SAFETY FLAGS THROUGHOUT THE ACADEMY.

Earning Platinum proves the operator is 100% job-ready and remote-fleet qualified for commercial deployment.

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Next Steps: The Compliance Loop



18 Months

Advisory reminder & knowledge refresh.

21 Months

Academy refresher modules assigned.

23 Months

Priority compliance warning.

24 Months

Mandatory FAA ALC-677 recurrency completion.

The transition from student to fully accountable FAA Part 107 Commercial Operator is complete. Maintain your logs, respect the airspace, and prepare for the next mission.

AM TELEMETRY

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