Part 107

Commercial Drone Pilot Study Guide

Complete Exam Prep with 185 Practice Questions & 6 Visual Diagrams

2026 EDITION

CommercialDroneGuide.com

Pass the FAA Part 107 Knowledge Test on Your First Try

How to Use This Guide

You're holding the study guide we wish existed when we first sat down to prep for the Part 107. It's not a 400-page textbook, and it's not a list of memorized questions. It's the stuff that actually matters — explained like a fellow pilot is sitting across the table from you.

The 2–3 Week Study Plan

If you're starting from zero aviation knowledge, give yourself two to three weeks:

- **Week 1:** Sections 1–2 (Regulations and Airspace). These are the foundation. Airspace is where most people struggle, so don't rush it.
- **Week 2:** Sections 3–5 (Weather, Loading & Performance, Operations). Weather decoding looks intimidating but follows a predictable pattern once you learn the format.
- **Final 2–3 Days:** Section 6 (Exam Strategy & Practice). Take the full practice exam under timed conditions. Review anything you missed.

If you already have some aviation background, you can probably compress this to a week.

Icons & Callouts

- ✈ **Exam Tip** — Especially likely to show up on test day.
- ⚠ **Common Mistake** — Where people consistently get tripped up.

Diagrams

This guide includes six visual reference diagrams placed inline the first time each concept is introduced. When you see a reference to a diagram later in the guide, flip back to the page where it first appears.

The Testing Supplement

The FAA publishes the **Airman Knowledge Testing Supplement** (FAA-CT-8080-2H). You'll have access to this during the actual exam — it contains sectional chart excerpts, figures, and legends referenced by test questions. Download it free from faa.gov and keep it open alongside this guide. Don't walk into the exam seeing it for the first time.

About the Part 107 Exam

The Basics

The Part 107 knowledge test — officially the "Unmanned Aircraft General (UAG)" exam — is a 60-question, multiple-choice test. You get two hours, which works out to about two minutes per question. Most people finish in 60–90 minutes.

You need a **70% to pass** (can miss up to 18 questions).

What It Covers

1. **Regulations** (~15–20%) — Part 107 rules, certification, waivers, Remote ID
2. **Airspace & Requirements** (~25–30%) — Airspace classifications, sectional charts, NOTAMs, airport operations
3. **Weather** (~15–20%) — METARs, TAFs, weather theory, effects on performance
4. **Loading & Performance** (~5–10%) — Weight, balance, density altitude, battery factors
5. **Operations** (~20–25%) — Crew roles, decision making, emergency procedures, human factors

Airspace and weather together account for roughly half the exam.

What to Expect at the Testing Center

- Bring a valid, government-issued photo ID and your FAA Tracking Number (FTN) from iacra.faa.gov.
- The center provides a computer, scratch paper, and the testing supplement.
- You'll see your score immediately. If you pass, you get an Airman Knowledge Test Report (AKTR). If not, the report lists ACS codes for areas to review, and you can retake after 14 calendar days.

After You Pass

Complete your application through IACRA, pass the TSA background check, and receive your temporary certificate (usually within a few weeks). Permanent card arrives by mail.

Section 1: Regulations

This section covers the regulatory framework for commercial drone operations. It's heavily tested, but most of it is straightforward once you read through it.

1.1 The Big Picture: What Part 107 Is

Title 14 of the Code of Federal Regulations (14 CFR), Part 107, is the FAA's ruleset governing small unmanned aircraft systems (sUAS) for non-recreational purposes. If you're flying commercially — for pay, for business, or in furtherance of a business — Part 107 is your operating authority.

Key definitions:

- **Small Unmanned Aircraft** — Weighing less than 55 pounds at takeoff (including payload, batteries, everything).
- **Small Unmanned Aircraft System (sUAS)** — The aircraft plus all associated elements: controller, software, communication links.
- **Remote Pilot in Command (Remote PIC)** — The Part 107 certificate holder directly responsible for safe operation.
- **Person Manipulating the Controls** — Can be someone other than the Remote PIC, but the PIC is always responsible.
- **Visual Observer (VO)** — An optional crew member who watches the aircraft and scans for hazards.

> ✈ **Exam Tip:** The FAA loves testing the distinction between Remote PIC and the person manipulating controls. The Remote PIC is *always* responsible, even if someone else is physically flying.

1.2 Operating Rules

Flight Limitations:

- **Maximum altitude:** 400 feet AGL. Exception: within 400 feet horizontally of a structure, you can fly up to 400 feet above that structure.
- **Maximum groundspeed:** 100 mph (87 knots).
- **Minimum visibility:** 3 statute miles from the control station.
- **Minimum cloud clearance:** 500 feet below clouds, 2,000 feet horizontally.
- **Visual line of sight (VLOS):** Remote PIC or person manipulating controls must see the aircraft at all times with unaided vision (corrective lenses OK; binoculars or FPV goggles alone don't count).

General Operating Rules:

- Yield right of way to all manned aircraft. Always.
- No careless or reckless operations.
- No operations from a moving vehicle unless over a sparsely populated area.
- One pilot, one drone (unless you get a waiver).
- 8-hour bottle-to-throttle rule, 0.04% BAC limit.

Night Operations:

You can fly at night without a waiver, provided your sUAS has anti-collision lighting visible for at least 3 statute miles and you've completed training covering night operations (the current Part 107 test satisfies this).

⚠ **Common Mistake:** Some study materials still reference the old rule requiring a waiver for night flight. That's outdated since the 2021 rule update.

✈ **Exam Tip:** The 400-foot altitude rule and structure exception is almost guaranteed on your exam. "Within 400 feet of a structure" means horizontally — you stay within a 400-foot radius and can't exceed 400 feet above the structure itself.

1.3 Remote Pilot Certification

Anyone acting as Remote PIC needs a Remote Pilot Certificate with an sUAS rating. The person manipulating controls does *not* need a certificate if they're under the direct supervision of a certificated PIC.

Eligibility: Be at least 16, read/speak/write English, be physically and mentally fit, pass the knowledge test.

Already hold a Part 61 pilot certificate? You can complete an online training course through FAASTeam at faasafety.gov instead of taking the full knowledge test.

Staying current: Complete recurrent training or testing every 24 calendar months. Most people do the free online course at faasafety.gov.

✈ **Exam Tip:** "24 calendar months" means the end of the 24th month. Passed on March 15, 2026 → recurrent due by March 31, 2028.

1.4 Alcohol, Drugs & Disqualifying Conditions

- **8-hour rule:** No acting as PIC or crew within 8 hours of consuming alcohol.
- **BAC limit:** 0.04% (half the driving limit).
- **Drugs:** No operating under any substance that impairs faculties.
- **Refusal to test:** FAA can suspend or revoke your certificate.
- **Convictions:** Report drug/alcohol-related motor vehicle convictions to the FAA within 60 days.

⚠ **Common Mistake:** The BAC limit is 0.04%, not 0.08%.

1.5 Waivers

The FAA can waive certain Part 107 rules through the DroneZone portal if you demonstrate safe operation.

Waivable: VLOS, one-pilot-one-drone, max altitude, max speed, ops from moving vehicle, ops over people (some cases), certain airspace restrictions.

Not waivable: Registration requirements, Remote PIC certification, drug/alcohol rules, reckless operation prohibition, yielding right of way to manned aircraft.

✈ **Exam Tip:** Anything tied to safety fundamentals (certification, sobriety, right of way) is not waivable.

1.6 Operations Over People

Four categories created by the 2021 rule update:

- **Category 1:** sUAS ≤ 0.55 lbs (250g) at takeoff. No exposed rotating parts that could lacerate skin. No additional approval needed.
- **Category 2:** Must not cause injury above FAA severity thresholds. Requires manufacturer's Declaration of Compliance

(DOC).

- **Category 3:** Same injury requirements as Cat 2, but more restrictions on *where* you fly. Can operate over people in structures/vehicles or those participating in the operation. Must be transitioning, not sustained flight over people.
- **Category 4:** Heavier drones with FAA airworthiness certificate. Very narrow category.

> ⚠ **Common Mistake:** Category 1 weight is 0.55 lbs (250g) — not 55 lbs. Don't confuse the sUAS weight ceiling with the Cat 1 limit.

1.7 Remote Identification (Remote ID)

As of March 16, 2024, all Part 107 drones must comply with Remote ID — think of it as a digital license plate.

Three compliance methods:

1. **Standard Remote ID** — Built into the drone. Broadcasts ID, location, altitude, velocity, control station location, time mark.
2. **Remote ID Broadcast Module** — Add-on device for older drones without built-in RID.
3. **FRIA (FAA-Recognized Identification Area)** — A defined area where drones without RID can operate.

Broadcasts on Bluetooth/Wi-Fi. Law enforcement, FAA, and anyone with a compatible receiver can pick them up.

> ✈ **Exam Tip:** Expect a few Remote ID questions. Focus on the three compliance methods and what information is broadcast.

1.8 Accident & Incident Reporting

Part 107.9 — Report to FAA within 10 calendar days if: - Serious injury to any person or loss of consciousness - Damage to property (other than your drone) exceeding $500

NTSB Part 830: If your operation causes death or serious injury, notify the NTSB immediately (in addition to the FAA).

NASA ASRS: Voluntary, confidential safety reporting. File within 10 days for limited enforcement protection. Not a "get-out-of-jail-free card," but valuable.

> ✈ **Exam Tip:** Remember both 10-day windows (FAA reporting and ASRS filing). Damage to your own drone doesn't trigger reporting.

Section 1 Key Numbers

Rule	Value
Max sUAS weight	55 lbs
Max altitude AGL	400 ft
Max groundspeed	100 mph (87 knots)
Min visibility	3 statute miles
Min below clouds	500 ft
Min horizontal from clouds	2,000 ft
Anti-collision light visibility	3 statute miles
Bottle-to-throttle	8 hours
BAC limit	0.04%
Min age	16 years
Recurrency	24 calendar months
Cat 1 max weight	0.55 lbs (250g)
FAA report deadline	10 calendar days
Property damage threshold	$500 (other property)
DUI report deadline	60 days
Failed test retake wait	14 calendar days

Section 1 Quiz

1. Who is directly responsible for the safe conduct of a Part 107 flight? A) The visual observer B) The person manipulating controls C) The remote pilot in command D) The drone manufacturer

2. Under standard Part 107 rules, a drone may fly at 500 feet AGL if: A) The drone weighs less than 55 lbs B) It’s within 400 ft of a structure and doesn’t exceed 400 ft above it C) Never — 400 ft is absolute D) The pilot has ATC authorization

3. Minimum visibility required under Part 107: A) 1 SM B) 2 SM C) 3 SM D) 5 SM

4. Which condition requires an FAA report under Part 107.9? A) Your drone crashes with no other impact B) $200 damage to a client’s tree C) $750 damage to a parked car D) A flyaway recovered undamaged

5. Recurrent training must be completed every: A) 12 months B) 24 calendar months C) 36 months D) 5 years

6. Which is NOT a valid Remote ID compliance method? A) Built-in Standard RID B) Broadcast module C) FRIA D) Filing a flight plan through LAANC

7. Night flight under Part 107 requires: A) A waiver B) Anti-collision lighting visible for 3 SM and updated training C) Class G airspace only D) A private pilot certificate

8. Category 1 operations over people max weight: A) 55 lbs B) 25 lbs C) 0.55 lbs (250g) D) 4.4 lbs

9. Which rule CANNOT be waived? A) VLOS B) Max altitude C) Yielding right of way to manned aircraft D) Moving vehicle ops

10. DUI convictions must be reported to the FAA within: A) 10 days B) 30 days C) 60 days D) 90 days

Quiz Answers: 1-C · 2-B · 3-C · 4-C · 5-B · 6-D · 7-B · 8-C · 9-C · 10-C

Section 1 Test

1. A remote pilot passed the knowledge test on June 10, 2026. By what date must they complete recurrent training? A) June 10, 2028 B) June 30, 2028 C) December 31, 2028 D) June 10, 2027

2. A person manipulating the flight controls under Part 107 must: A) Hold a Remote Pilot Certificate B) Be under the direct supervision of a certificated Remote PIC C) Be at least 18 years old D) File a NOTAM before each flight

3. The BAC limit for acting as Remote PIC is: A) 0.00% B) 0.02% C) 0.04% D) 0.08%

4. A drone weighing 48 lbs carries a 9-lb payload. Under Part 107: A) Legal B) Illegal — exceeds 55-lb maximum C) Legal with a waiver D) Legal only in Class G

5. Standard Remote ID broadcasts all of the following EXCEPT: A) Drone location and altitude B) Control station location C) The pilot's name and certificate number D) A unique identifier

6. An anti-authority attitude is best described as: A) "It won't happen to me" B) "The rules don't apply to me" C) "I can handle it" D) "Do something quickly"

7. Your drone clips a power line, causing $400 in damage. Must you report to the FAA? A) Yes — any damage is reportable B) No — below the $500 threshold C) Yes — utility damage is always reportable D) Only if someone was injured

8. Under Part 107, a drone may operate from a moving vehicle: A) Never B) Only over a sparsely populated area C) Only with ATC authorization D) Anytime if the driver isn't the PIC

9. The NASA ASRS report must be filed within how many days? A) 5 B) 10 C) 14 D) 30

10. A Visual Observer: A) Must hold a Remote Pilot Certificate B) Must be in direct communication with the PIC C) May manipulate the controls D) Is required for all Part 107 flights

11. Yielding right of way to manned aircraft: A) Can be waived B) Applies only in controlled airspace C) Is not waivable D) Is optional for drones under 5 lbs

12. A Part 61 pilot with a current flight review can get Part 107 by: A) Full UAG knowledge test B) FAASTeam online course C) Practical flight test D) Medical certificate

13. An sUAS with a Remote ID broadcast module must broadcast: A) Same info as Standard RID B) Only serial number C) Only location D) Takeoff location instead of control station location

14. Minimum age for Remote Pilot Certificate: A) 14 B) 16 C) 18 D) 21

15. A bystander loses consciousness after being struck by a drone. The PIC must: A) Report to FAA within 10 days B) Report to both FAA (10 days) and NTSB (immediately) C) File NASA ASRS only D) No report unless injury is permanent

Test Answers: 1-B · 2-B · 3-C · 4-B · 5-C · 6-B · 7-B · 8-B · 9-B · 10-B · 11-C · 12-B · 13-D · 14-B · 15-B

Section 2: Airspace & Requirements

This is the most-tested topic on the exam. Spend extra time here.

Before you start: Open the **Airman Knowledge Testing Supplement** to Legend 1 and Figures 20–26.

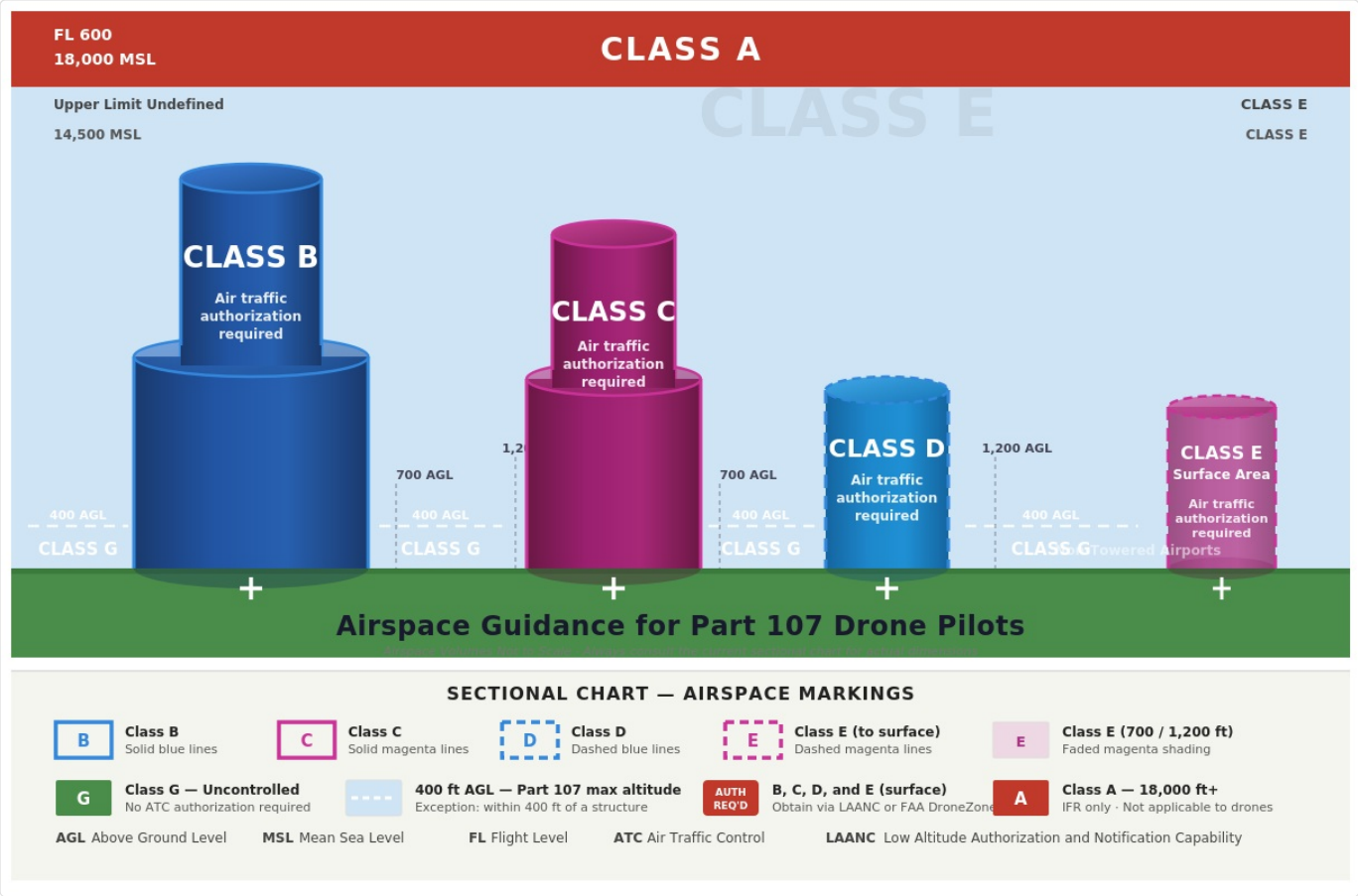
2.1 The National Airspace System

The FAA divides all U.S. airspace into controlled (Classes A, B, C, D, and some E) and uncontrolled (Class G). The critical question before every flight: *Am I in controlled or uncontrolled airspace?* Controlled airspace extending to the surface requires authorization.

Classes go **A–B–C–D–E–G** (no Class F in the U.S.).

2.2 Airspace Classification: See It on the Chart

The diagram below shows all airspace classes in profile view — how they stack vertically, where drones operate, and which require authorization. Refer back to this diagram throughout this section.



U.S. Airspace Classification — Profile View

This diagram shows the key relationships: Class B is the largest “wedding cake” around major airports; Class C is smaller around mid-size airports; Class D is a single cylinder around towered airports; and Class E Surface Area (dashed magenta) appears around non-towered airports with instrument approaches. Class G fills the gaps between all of them at low altitude. The dashed white line at 400 ft AGL represents your Part 107 maximum altitude. Notice how the cylinder outlines match the

actual sectional chart line styles — solid blue for B, solid magenta for C, dashed blue for D, dashed magenta for E surface.

Class A — 18,000 ft MSL and above. IFR only. Irrelevant to drones, but know it exists.

Class B — Major Airports, Solid Blue Lines

↗ **Open Figure 20.** Find the thick **solid blue lines** around Norfolk International. The fraction numbers (40/SFC, 40/20, 40/12) indicate ceiling/floor in hundreds of feet MSL. This is the "upside-down wedding cake."

You **must** have ATC authorization (LAANC or DroneZone) to operate inside Class B.

> ✈ **Exam Tip:** "40/20" = ceiling 4,000 MSL, floor 2,000 MSL — not 40 and 20 feet.

Class C — Mid-Size Airports, Solid Magenta Lines

↗ **On Figure 23,** find **"SAVANNAH CLASS C"** with solid magenta circles. Inner core: surface to ~4,000 ft within ~5 NM. Outer shelf: ~1,200 ft to ~4,000 ft between 5–10 NM.

Under the outer shelf (below its floor), you're in Class G — no auth needed.

> ⚠ **Common Mistake:** Being "near" a Class C airport doesn't automatically mean you need authorization. Read the chart to find where the floor is.

Class D — Towered Airports, Dashed Blue Lines

Dashed blue lines. Typically surface to ~2,500 ft AGL, ~4 NM radius. When the tower closes (part-time), airspace often reverts to Class E or G. Look for "See NOTAMs/Directory for Class D eff hrs."

Class E — The Tricky One

- **Surface-level (dashed magenta lines):** Around non-towered airports with instrument approaches. Authorization required.
- **Starting at 700 ft AGL (faded magenta shading):** Below 700 ft you're in Class G.
- **Starting at 1,200 ft AGL:** General controlled airspace above most of the U.S.

> ⚠ **Common Mistake: Solid magenta = Class C. Dashed magenta = surface-level Class E. Faded magenta shading = Class E at 700 ft.**

Class G — Uncontrolled. No specific marking. No ATC authorization required. Follow all other Part 107 rules.

2.3 The Decision Tree

1. Check the sectional chart or flight planning app.
2. Identify airspace boundaries at your location.
3. Does controlled airspace extend to the surface? → Get authorization.
4. Class B, C, D, or surface E? → LAANC or DroneZone.
5. Class G? → You're good. Follow all Part 107 rules.

2.4 Special Use Airspace

↗ **On Figure 23,** find R-3005 areas (Restricted) and Bulldog MOAs. ↗ **On Figure 20,** find W-50A/B/C (Warning Areas) east of Virginia Beach.

Type	Can You Fly?
Prohibited (P)	Never
Restricted (R)	Only when inactive (check NOTAMs)
Warning (W)	Not prohibited, but extremely inadvisable
MOA	Not prohibited, but use extreme caution
Alert	Not prohibited, but use caution
CFA	Yes (activities suspend when aircraft detected; not charted)

> ✈ **Exam Tip:** Prohibited = always off-limits. Restricted = off-limits when active. MOA = not prohibited.

2.5 Other Airspace Considerations

TFRs: Temporary no-fly zones. Check tfr.faa.gov before every flight. Stadium TFRs: 3 NM radius, surface to 18,000 ft, 1 hour before to 1 hour after.

MTRs: Military training routes. 📍 **On Figure 23,** find VR97-1059. - 4-digit number → segments at or below 1,500 ft AGL (dangerous for drones) - 3-digit number → segments above 1,500 ft AGL

2.6 LAANC & DroneZone

LAANC: Near-instant authorization at 700+ airports. Request through apps like Aloft, DJI Fly, DroneUp. Up to 90 days in advance. You may not get your requested altitude — UAS Facility Maps set grid ceilings.

DroneZone: Manual authorization for non-LAANC airports. Submit at least 60 days ahead.

2.7 Reading Sectional Charts

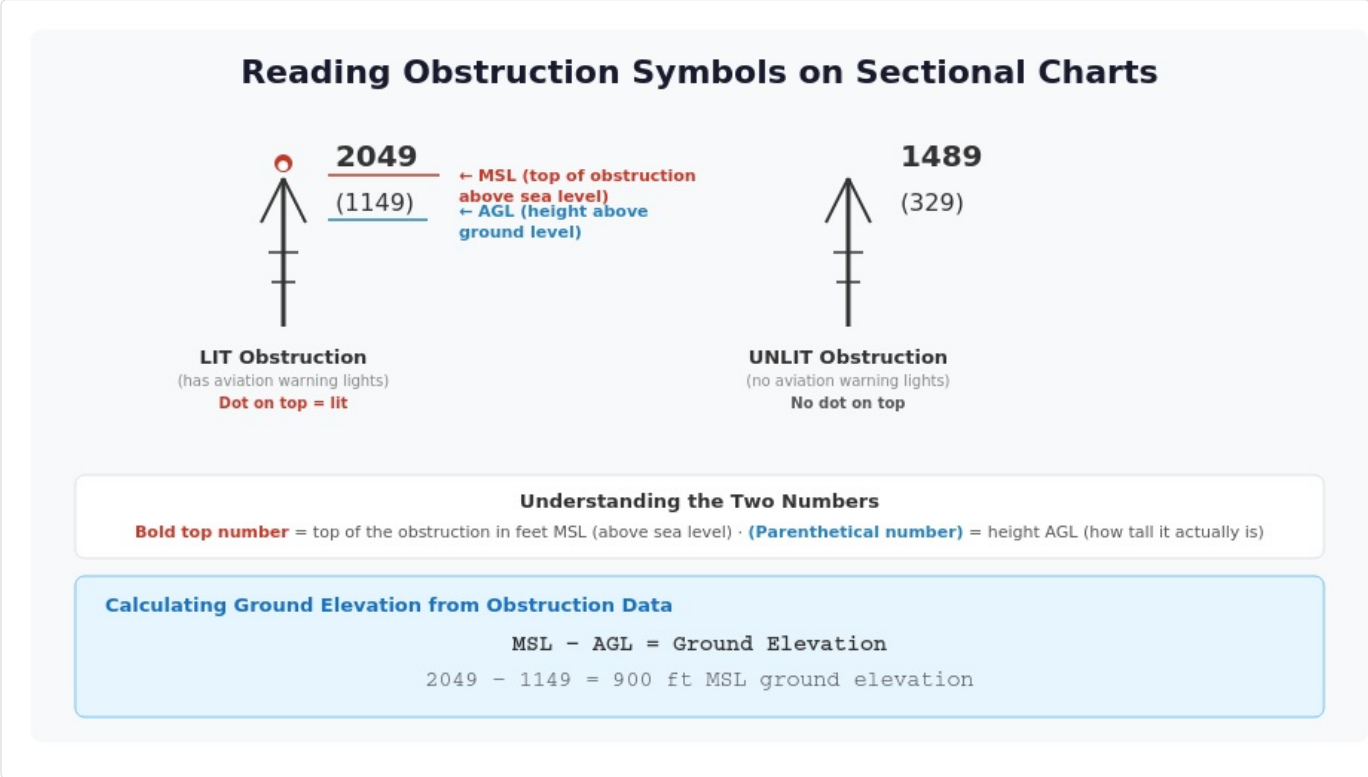
📍 **Open Legend 1 from the testing supplement.**

Airports: Blue = towered. Magenta = non-towered. “CT” + frequency = control tower. “C” + frequency = CTAF.

Airspace boundary colors: Solid blue (B), solid magenta (C), dashed blue (D), dashed magenta (E surface), faded magenta shading (E at 700 ft).

Obstructions:

The diagram below shows how to read obstruction symbols on sectional charts. The bold top number is MSL altitude; the parenthetical number is AGL height. A dot on top means the structure has aviation warning lights.



Reading Obstruction Symbols

Use this diagram as a reference whenever an exam question asks about obstruction heights. The key formula: MSL − AGL = ground elevation. For example, an obstruction at 2,049 MSL that is 1,149 ft AGL means the ground at its base is 900 ft MSL.

Terrain: Contour lines (closer = steeper). MEF = max elevation figure per quadrangle (hundreds of feet MSL).

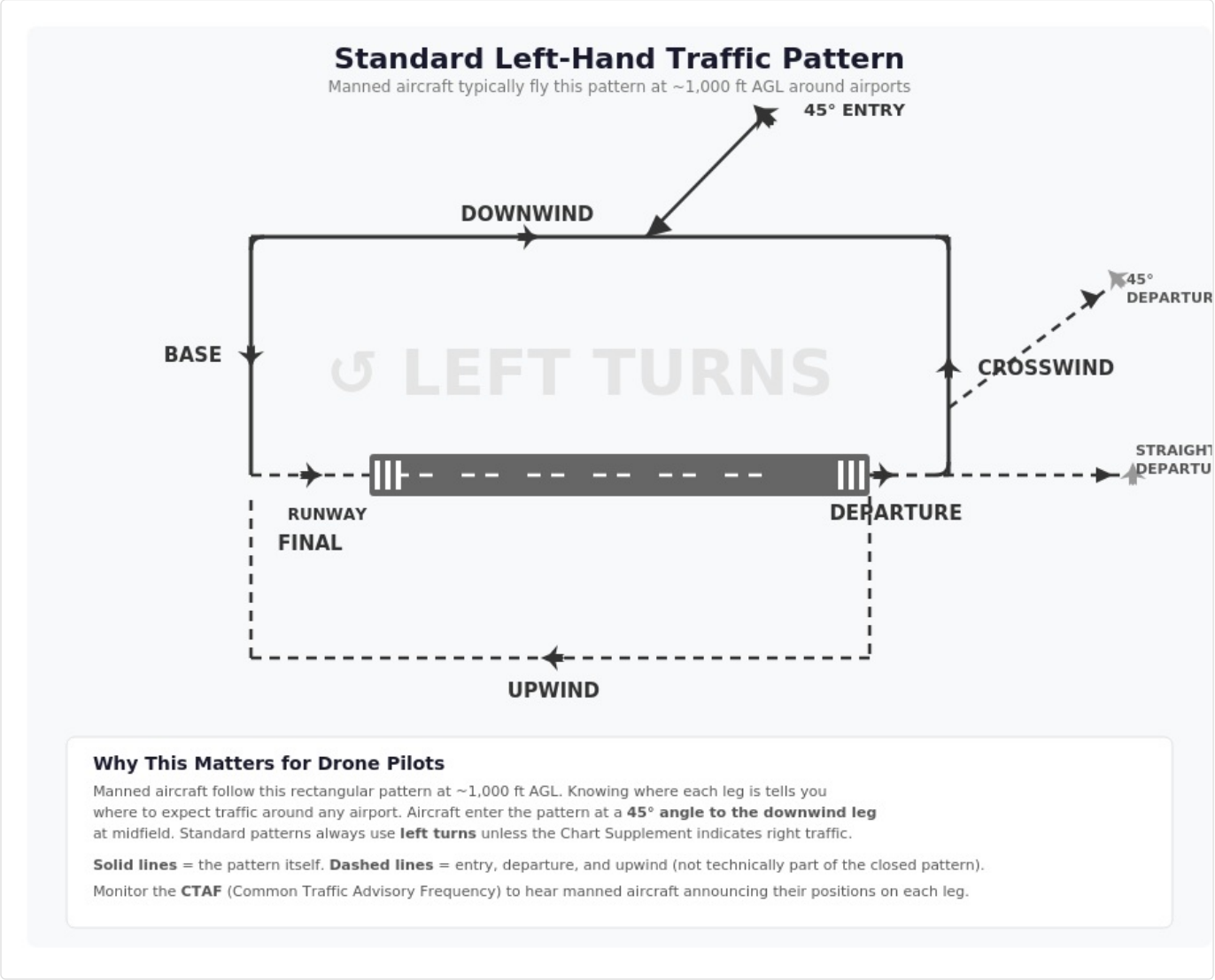
> ⚠ **Common Mistake:** Airspace on charts is in MSL. Part 107's limit is AGL. To convert: ground elevation + flight height AGL = MSL.

2.8 NOTAMs

Check before every flight. TFRs are published as FDC NOTAMs. Sources: notams.aim.faa.gov, 1800wxbrief.com, LAANC apps.

2.9 Airport Operations

The diagram below shows the standard left-hand traffic pattern used by manned aircraft at airports. Understanding where each leg is tells you where to expect traffic. Aircraft enter at a 45° angle to the downwind leg at midfield. Standard patterns always use left turns unless otherwise noted.



Standard Airport Traffic Pattern

Monitor the **CTAF** at non-towered airports to hear manned aircraft announcing their positions on each leg of this pattern. “Cessna 123 turning left base runway 27” tells you exactly where that aircraft is in relation to the runway.

2.10 Night Operations

Anti-collision lighting visible for 3 statute miles. Scout sites during daylight. Allow 30 minutes for dark adaptation. Dim screens.

Section 2 Quick Reference

Class	Chart Marking	Surface?	Auth?
A	N/A	No (18,000+)	N/A
B	Solid blue	Yes	Yes
C	Solid magenta	Yes (core)	Yes
D	Dashed blue	Yes	Yes
E (sfc)	Dashed magenta	Yes	Yes
E (700/1200)	Faded magenta	No	Usually no
G	None	Yes	No

Section 2 Quiz

1. Solid magenta lines on a sectional chart indicate: A) Class B B) Class C C) Class D D) Surface Class E

2. (Refer to Figure 20.) What airspace surrounds Norfolk International? A) Class C B) Class B C) Class D D) Class G

3. A 4-digit MTR number means: A) Segments at or below 1,500 ft AGL B) Segments above 1,500 ft AGL C) IFR only D) Restricted to helicopters

4. An obstruction shows 2049 bold / (1149) in parentheses. The AGL height is: A) 2,049 ft B) 1,149 ft C) 900 ft D) 204.9 ft

5. A Prohibited Area: A) Is off-limits only when active B) Is always off-limits C) Allows VFR traffic D) Can be entered with a waiver

6. The fastest way to get Class D airspace authorization: A) Call the tower B) LAANC C) File a flight plan D) Email the FSDO

7. A dashed magenta line on a sectional chart indicates: A) Class C B) MOA boundary C) Class E to the surface D) TFR boundary

8. You're at 300 ft AGL under a Class C outer shelf with a floor of 1,200 ft. What airspace are you in? A) Class C B) Class B C) Class G D) Class E

9. (Refer to Figure 23.) "BULLDOG B MOA" is a: A) Class B airspace B) Military Operations Area C) Prohibited Area D) Restricted Area

10. LAANC requests can be submitted up to: A) 7 days B) 30 days C) 60 days D) 90 days in advance

Quiz Answers: 1-B · 2-B · 3-A · 4-B · 5-B · 6-B · 7-C · 8-C · 9-B · 10-D

Section 2 Test

1. (Refer to Figure 20.) Warning Areas W-50A/B/C are located: A) Over Norfolk B) Over the Atlantic east of Virginia Beach C) Near Albemarle Sound D) Over the Chesapeake Bay

2. When a Class D tower closes, the airspace typically: A) Becomes Class B B) Reverts to Class E or G C) Remains Class D D) Becomes a TFR

3. (Refer to Figure 20.) Restricted areas R-5301 and R-5302B near Albemarle Sound: A) All flight permanently banned B) Flight prohibited when active C) Only military may enter D) Warning areas over water

4. Faded magenta shading on a sectional chart indicates: A) Class C B) A MOA C) Class E beginning at 700 ft AGL D) A TFR

5. You need to fly above a LAANC ceiling of 100 ft but under 400 ft. You should: A) Fly at 100 ft max B) Submit a further coordination request C) Contact the tower D) Apply for an altitude waiver

6. A blue airport symbol indicates: A) Non-towered B) Towered C) Private D) Military

7. (Refer to Figure 23.) Savannah/Hilton Head International is: A) Class B B) Class D C) Class C D) Class E

8. Stadium TFRs typically extend: A) 1 NM, 3,000 ft B) 3 NM, 18,000 ft C) 5 NM, 10,000 ft D) 10 NM, 5,000 ft

9. TFRs are published as: A) D NOTAMs B) FDC NOTAMs C) Pointer NOTAMs D) Military NOTAMs

10. (Refer to Figure 23.) Bulldog C MOA excludes 1,500 ft and below. Drone at 350 ft is: A) Inside the MOA B) Below the MOA floor C) Needs a waiver D) Must contact ATC

11. At a non-towered airport, monitor which frequency? A) ATIS B) CTAF C) 121.5 MHz D) Center

12. Standard traffic patterns use: A) Right turns B) Left turns C) Alternating turns D) Straight-in only

13. Class A begins at: A) The surface B) 1,200 ft AGL C) 14,500 ft MSL D) 18,000 ft MSL

14. DroneZone manual requests should be submitted at least: A) 7 days B) 30 days C) 60 days D) 90 days before

15. At 200 ft AGL under faded magenta shading (Class E at 700 ft), you’re in: A) Class E B) Class C C) Class G D) Class D

Test Answers: 1-B · 2-B · 3-B · 4-C · 5-B · 6-B · 7-C · 8-B · 9-B · 10-B · 11-B · 12-B · 13-D · 14-C · 15-C

Section 3: Weather

Weather is the second most-tested topic. METAR and TAF decoding follows a rigid format — once you learn the pattern, you can decode any report.

Before you start: Open Figure 12 (METARs) and Figure 15 (TAFs) in the testing supplement.

3.1 Sources of Weather Information

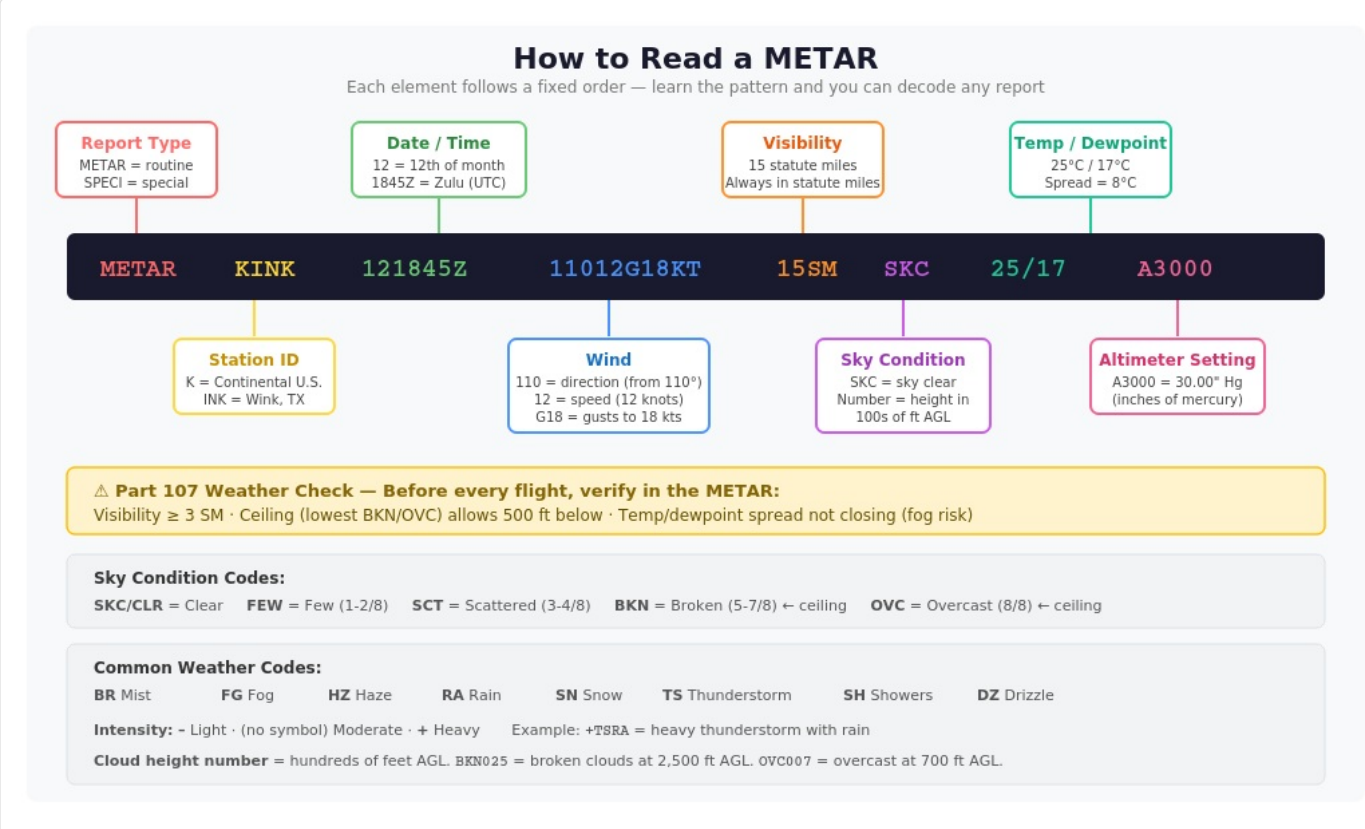
Aviation sources (what the exam tests): Aviation Weather Center (aviationweather.gov), 1800wxbrief.com, ASOS/AWOS automated stations.

Practical sources: ForeFlight, Windy, UAV Forecast, LAANC apps.

> ✈ **Exam Tip:** Correct exam answers reference aviation-specific sources — METARs, TAFs, 1800wxbrief — not the Weather Channel.

3.2 METARs — How to Decode Them

The diagram below breaks down every element of a METAR with color coding. Each element always appears in the same order — learn the pattern and you can decode any report.



How to Read a METAR

> 🖈 **Now open Figure 12.** Let's decode the first report using the same structure shown in the diagram:

`METAR KINK 121845Z 11012G18KT 15SM SKC 25/17 A3000`

Element	Meaning
METAR	Routine observation (SPECI = special)
KINK	Station: Wink, TX
121845Z	12th day, 1845 Zulu
11012G18KT	Wind from 110° at 12 kts, gusting 18
15SM	15 statute miles visibility
SKC	Sky clear
25/17	Temp 25°C / Dewpoint 17°C
A3000	Altimeter 30.00” Hg

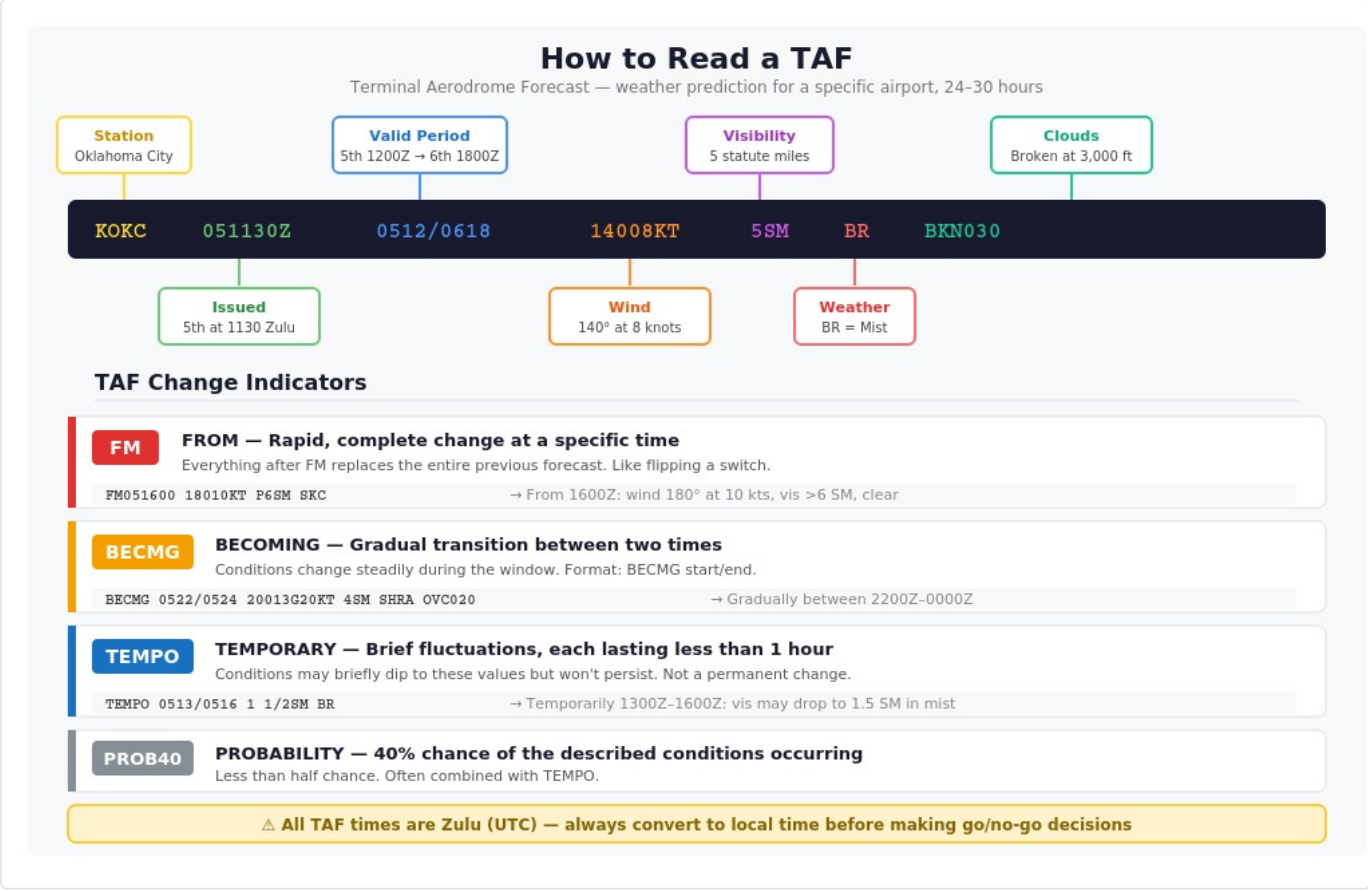
Sky condition codes: SKC/CLR (clear), FEW (1-2/8), SCT (3-4/8), BKN (5-7/8), OVC (8/8). The **ceiling** is the lowest BKN or OVC layer.

Weather codes: BR (mist), FG (fog), HZ (haze), RA (rain), SN (snow), TS (thunderstorm), SH (showers). Intensity: – light, (none) moderate, + heavy.

> ⚠ **Common Mistake:** Visibility is in **statute miles**. Cloud heights are in **hundreds of feet AGL**. OVC007 = overcast at 700 ft AGL.

3.3 TAFs — How to Decode Them

The diagram below shows the structure of a TAF header line and the four change indicators you’ll see on the exam.



↗ **Open Figure 15.** The KOKC forecast:

`KOKC 051130Z 0512/0618 14008KT 5SM BR BKN030`

Valid from 5th at 1200Z to 6th at 1800Z. Wind 140° at 8 kts, 5 SM visibility in mist, broken at 3,000 ft.

Change indicators (shown in detail on the diagram above):

Keyword	Meaning
FM	Rapid change at specific time. Replaces everything prior.
BECMG	Gradual change between two times.
TEMPO	Temporary fluctuations, each <1 hour.
PROB40	40% probability of described conditions.

⚠ **Common Mistake:** TAF times are Zulu (UTC), not local time.

3.4 Weather Theory

- **High pressure** → clockwise winds (Northern Hemisphere), clear/stable weather.
- **Low pressure** → counterclockwise winds, clouds/precipitation/instability.
- **Cold front** → sharp weather changes, thunderstorms, rapid clearing after passage.
- **Warm front** → gradual cloud buildup, steady precipitation, fog.
- **Stable air** → smooth, layered clouds, poor visibility, steady precip.
- **Unstable air** → turbulent, puffy clouds, good visibility, gusty/showery.

✈ **Exam Tip:** “Clockwise around a high, counterclockwise around a low” is a favorite question.

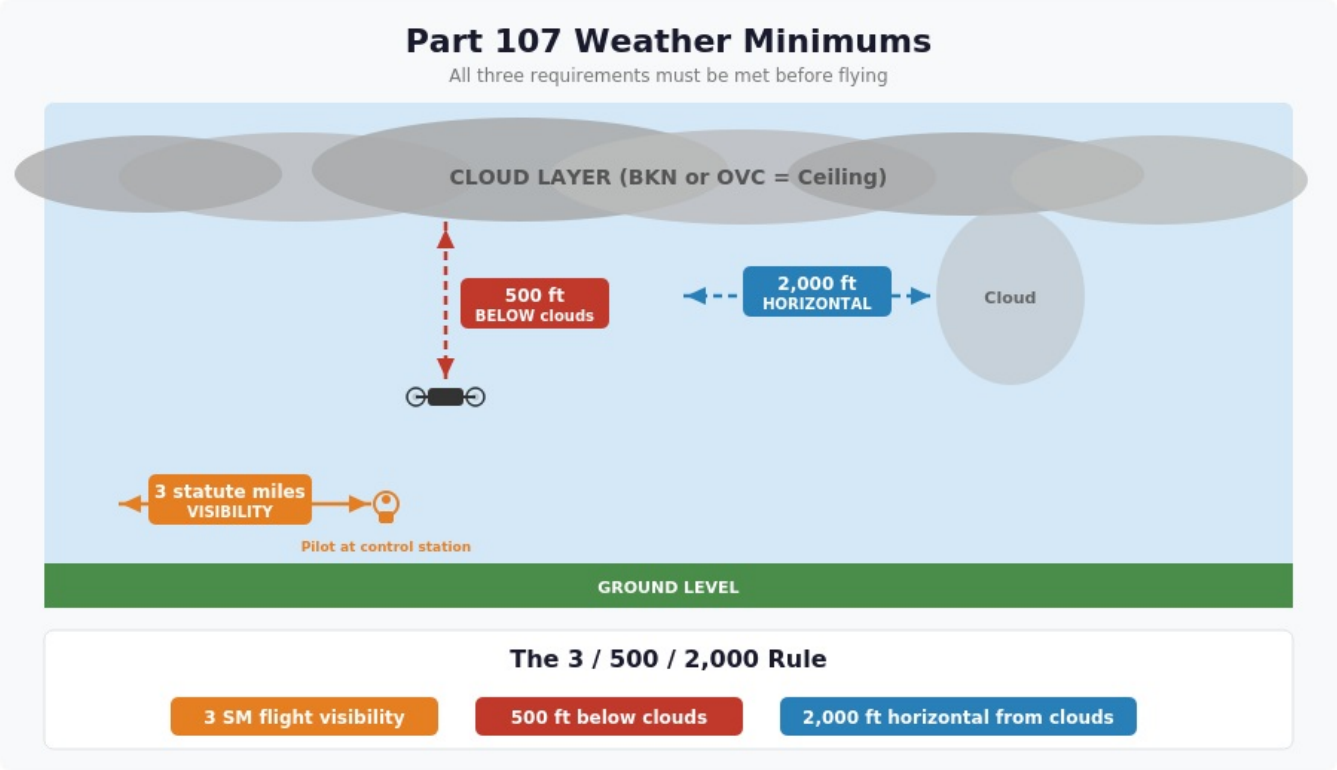
3.5 Wind and Turbulence

- **Convective:** Uneven surface heating. Worst on hot afternoons (10 AM – 4 PM).
- **Mechanical:** Wind flowing over obstacles (buildings, trees, terrain).
- **Wind shear:** Sudden change in speed/direction. Dangerous near thunderstorms.

Wind at altitude is almost always stronger than at ground level.

3.6 Weather Minimums

The diagram below shows the three Part 107 weather requirements in profile view — visibility, vertical cloud clearance, and horizontal cloud clearance. Memorize these numbers: 3 / 500 / 2,000.



Part 107 Weather Minimums

Requirement	Minimum
Flight visibility	3 statute miles
Below clouds	500 ft
Horizontal from clouds	2,000 ft

If ceiling is BKN012 (broken at 1,200 ft), max operating altitude = 700 ft (1,200 – 500).

> ✈ **Exam Tip:** The 3/500/2,000 numbers are tested constantly.

3.7 Density Altitude

↗ Open Figure 8 (Density Altitude Chart).

Higher density altitude = thinner air = less lift, shorter flight time, reduced payload capacity.

Three factors that increase density altitude: **high temperature, high altitude (low pressure), high humidity.**

3.8 Thunderstorms, Microbursts & Hazardous Weather

Three ingredients: moisture, instability, lifting force. Stay at least 20 miles away. If you can hear thunder or see lightning, pack up.

Microbursts produce surface winds shifting 180° at 45+ knots within seconds. Can occur without visible precipitation.

3.9 Fog & Temperature/Dewpoint Spread

When temp/dewpoint spread is ≤5°F (≤2.8°C) and decreasing → expect fog.

Radiation fog: Clear, calm nights. Burns off after sunrise. **Advection fog:** Warm moist air over cool surface. Can persist for days.

↗ **Look at KJFK in Figure 12:** Temp 20°C, dewpoint 18°C (spread 2°C). Visibility 1/2 SM in fog. Well below Part 107 minimums.

Section 3 Quiz

1. (Refer to Figure 12.) KINK wind conditions: A) 110° at 12 kts B) 120° at 18 kts C) 110° at 12 kts gusting 18 D) Variable at 12 kts

2. (Refer to Figure 12.) KLAX visibility: A) 6 NM B) 6 SM C) 7 SM D) Unlimited

3. (Refer to Figure 12.) KMDW ceiling: A) 700 ft MSL B) 7,000 ft AGL C) 700 ft AGL D) 70 ft AGL

4. Under Part 107, minimum distance below clouds: A) 200 ft B) 500 ft C) 1,000 ft D) 2,000 ft

5. Temp/dewpoint spread of 3°F and decreasing indicates: A) Clear skies B) Fog or low visibility C) Thunderstorms D) Increasing wind

6. Surface winds flow clockwise around: A) Low pressure B) High pressure C) Both D) Neither

7. (Refer to Figure 15.) KOKC from 1600Z on the 5th: A) 5 SM in mist B) >6 SM, clear C) 4 SM in showers D) 1.5 SM in mist

8. “TEMPO” in a TAF means: A) Permanent change B) Temporary fluctuations <1 hour C) Temperature change D) Gradual transition

9. High density altitude is caused by: A) Low temp, low humidity, high pressure B) High temp, high humidity, low pressure C) Low temp, high humidity D) High pressure only

10. (Refer to Figure 12.) Could you fly under Part 107 based on KMDW SPECI (1 1/2 SM visibility)? A) Yes B) No — below 3 SM minimum C) Yes, below 200 ft D) No — because it’s SPECI

Quiz Answers: 1-C · 2-B · 3-C · 4-B · 5-B · 6-B · 7-B · 8-B · 9-B · 10-B

Section 3 Test

1. (Refer to Figure 12.) In the KINK METAR, what is the temperature/dewpoint spread? A) 25°C B) 17°C C) 8°C D) 42°C

2. (Refer to Figure 12.) “FG” in the KJFK SPECI means: A) Light rain B) Fog C) Freezing drizzle D) Haze

3. (Refer to Figure 15.) “BECMG 0522/0524” means conditions will: A) Change immediately at 2200Z B) Gradually transition between 2200Z and 0000Z C) Temporarily fluctuate D) Have 40% probability

4. Which cloud designations constitute a “ceiling”? A) FEW and SCT B) SCT only C) BKN and OVC D) All layers

5. If the ceiling is BKN at 900 ft AGL, max Part 107 altitude is: A) 900 ft B) 500 ft C) 400 ft D) 400 ft (lower of 400 ft max and 900 – 500 = 400)

6. (Refer to Figure 8.) At pressure altitude 1,000 ft and 35°C, approximate density altitude: A) 1,000 ft B) 2,500 ft C) 4,000 ft D) 5,500 ft

7. A cold front typically produces: A) Gradual clouds and steady rain B) Thunderstorms, turbulence, rapid clearing C) Extended fog D) Calm conditions

8. Stable air produces: A) Cumulus clouds and turbulence B) Layered clouds, poor visibility, smooth conditions C) Thunderstorms D) Clear skies only

9. Radiation fog forms on: A) Windy afternoons B) Coastlines during day C) Clear, calm nights D) During fronts

10. “P6SM” in a TAF means: A) Patchy 6 SM B) Greater than 6 SM C) Probability of 6 SM D) Partial 6 SM

11. METAR visibility is in: A) Nautical miles B) Statute miles C) Kilometers D) Feet

12. A localized column of sinking air producing extreme surface winds is a: A) Tornado B) Microburst C) Wind shear D) Dust devil

13. Thunderstorm ingredients: A) High pressure, cold, mountains B) Moisture, instability, lifting force C) Fog, wind, cold D) Low vis, warm front, humidity

14. Cloud heights in METARs are in: A) Feet MSL B) Hundreds of feet AGL C) Meters AGL D) Hundreds of feet MSL

15. Reduced hover performance on a hot day at 5,000 ft is most likely caused by: A) GPS interference B) High density altitude C) Increased air pressure D) Magnetic interference

Test Answers: 1-C · 2-B · 3-B · 4-C · 5-D · 6-C · 7-B · 8-B · 9-C · 10-B · 11-B · 12-B · 13-B · 14-B · 15-B

End of Sections 1–3 -e

Section 4: Loading & Performance

The shortest section, but don’t skip it. A few exam questions will cover weight, balance, and performance factors.

> ↗ **Have Figure 8 (Density Altitude Chart) from the testing supplement ready.**

4.1 Weight & Balance Basics

Part 107 applies to sUAS under **55 pounds at takeoff** — aircraft plus batteries, cameras, sensors, payloads, everything.

- **Too heavy:** Motors work harder, battery drains faster, flight time decreases, sluggish handling.
- **Unbalanced:** Off-center payload shifts center of gravity (CG), forcing certain motors to work harder. Wastes battery, increases wear, can lead to instability.

4.2 Center of Gravity (CG)

The CG is the balance point. Most multirotors are designed with CG at the frame’s geometric center. When CG shifts from an unbalanced payload, the flight controller compensates by running some motors harder — uneven power draw, reduced flight time, and in extreme cases, loss of control.

Rule: Always mount payloads centered and secured. Test hover stability before flying a full mission with asymmetric loads.

4.3 Effects of Payload on Performance

Adding weight causes: reduced flight time, reduced max altitude, reduced maneuverability, increased stall risk in wind or aggressive maneuvers.

> ✈ **Exam Tip:** When a scenario adds payload, performance always degrades — shorter time, slower climb, lower ceiling.

4.4 Density Altitude & Performance

> ↗ **Open Figure 8.**

Three factors that increase density altitude: **high temperature, high elevation, high humidity.**

All three reduce air density → less lift → worse performance. On a 110°F day in Phoenix (1,100 ft elevation), density altitude can exceed 5,000 ft. A drone that performs well at sea level in cool weather may struggle significantly.

Practical takeaway: Hot days at elevation → plan shorter flights, reduce payload, monitor battery more conservatively.

4.5 Battery Performance Factors

- **Cold temperatures:** Lithium batteries lose 20–30% capacity at freezing temps. Warm batteries before cold-weather flights.
- **Age/cycle count:** Batteries degrade over time. 200+ cycles won’t match a new battery.
- **High discharge rate:** Heavy payloads + aggressive flying = faster drain.
- **Heat:** Don’t charge a hot battery immediately after flight.

Section 4 Key Concepts

Factor	Effect
Added weight	Less flight time, climb rate, maneuverability
CG shift	Uneven motor load, reduced efficiency
High density altitude	Reduced lift, shorter flights
Cold battery	Reduced capacity and voltage
Battery age	Reduced capacity

Density altitude increases with: High temp + High altitude + High humidity **Density altitude decreases with:** Low temp + Low altitude + Low humidity

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Section 4 Quiz

1. Max takeoff weight for sUAS under Part 107: A) 25 lbs B) 44 lbs C) 55 lbs D) 10 lbs

2. Adding a 3-lb sensor to a drone that normally carries 1 lb will: A) Have no effect B) Reduce flight time and climb rate C) Improve stability D) Increase max altitude

3. Highest density altitude conditions: A) Low temp, low humidity, high pressure B) High temp, high humidity, low pressure C) High temp, low humidity, high pressure D) Low temp, high humidity, high pressure

4. (Refer to Figure 8.) Density altitude at 2,000 ft pressure altitude and 35°C: A) 2,000 ft B) 3,500 ft C) 5,000 ft D) 6,500 ft

5. Cold weather reduces drone flight time primarily because: A) Air is denser B) Battery capacity decreases C) GPS accuracy drops D) Motors run faster

6. An off-center payload will most likely cause: A) Improved GPS B) Uneven motor load and reduced efficiency C) No effect under 55 lbs D) Increased speed

7. The 55-lb weight limit includes: A) Aircraft only B) Aircraft plus batteries only C) Aircraft plus everything attached at takeoff D) Aircraft minus the battery

8. Density altitude is best described as: A) The altitude shown on GPS B) The altitude the air “feels like” based on temp and pressure C) The height of the densest cloud layer D) Altitude above the nearest airport

9. On a hot summer day at high elevation, a pilot should: A) Fly longer missions B) Plan shorter flights and reduce payload C) Increase altitude for cooler air D) Use older batteries

10. Which factor does NOT increase density altitude? A) High humidity B) High temperature C) High atmospheric pressure D) High elevation

Quiz Answers: 1-C · 2-B · 3-B · 4-C · 5-B · 6-B · 7-C · 8-B · 9-B · 10-C

Section 4 Test

1. A drone weighs 12 lbs empty. With a 2-lb battery, 3-lb camera, and 1-lb prop guards, takeoff weight is: A) 12 lbs B) 15 lbs C) 18 lbs D) 17 lbs

2. At density altitudes above 5,000 ft, expect: A) Improved motor efficiency B) Longer flight times C) Reduced hover performance D) No change

3. Why avoid charging a battery immediately after flight? A) Reduces charge speed B) Heat accelerates degradation C) Voids warranty D) Firmware errors

4. A drone rated for 28 min at sea level/70°F flown at 6,000 ft in 95°F heat: A) About the same time B) Significantly reduced C) Slightly increased D) Exactly 28 min

5. CG shift affects flight by: A) Changing GPS accuracy B) Forcing uneven motor output C) Improving wind resistance D) Reducing radio range

6. (Refer to Figure 8.) At standard temp and sea level pressure altitude, density altitude equals: A) 0 ft B) 1,000 ft C) Field elevation D) Cannot determine

7. Humidity increases density altitude because: A) Droplets add weight B) Water vapor is lighter than dry air C) Humidity blocks GPS D) Moisture damages props

8. A battery with 300 cycles compared to a new one will likely provide: A) Same capacity B) Greater capacity C) Reduced capacity D) More consistent voltage

9. Most significant cold-weather drone concern: A) Prop icing B) Reduced battery capacity C) GPS drift D) Wind chill on pilot

10. A drone with 2-lb max payload at sea level — at 8,000 ft density altitude: A) Same capacity B) Reduced payload capacity C) Increased capacity D) No correlation

11. (Refer to Figure 8.) At sea level pressure altitude and 43°C (110°F), approximate density altitude: A) 1,000 ft B) 2,500 ft C) 3,500 ft D) 5,000 ft

12. A properly balanced quadcopter should: A) Tilt slightly forward B) Hover level without significant drift C) Always need correction D) Pull to one side

13. Heavier drones have shorter flight times primarily because: A) Smaller batteries B) Motors draw more current C) GPS uses more power D) Firmware limits

14. Lowest density altitude scenario: A) Sea level, 40°F, 30.10” Hg B) 5,000 ft, 90°F, 29.80” Hg C) 3,000 ft, 70°F, 29.92” Hg D) 1,000 ft, 100°F, 29.85” Hg

15. Winter operations at 25°F — best practice: A) Use batteries from the car B) Warm batteries before flight C) Fly longer since cold air is denser D) Disable low-battery warnings

Test Answers: 1-C · 2-C · 3-B · 4-B · 5-B · 6-A · 7-B · 8-C · 9-B · 10-B · 11-C · 12-B · 13-B · 14-A · 15-B

Section 5: Operations

This section covers how to conduct a safe flight — crew roles, decision-making, emergencies, and human factors.

5.1 Crew Resource Management

Remote PIC: Certificate holder, final authority, always responsible. Must be able to take control immediately.

Person Manipulating Controls: Does not need a certificate. Must be under direct PIC supervision.

Visual Observer (VO): Optional. Watches drone and scans for hazards. Must communicate with PIC. Cannot fly the drone. Does not need a certificate.

Key rule: At all times, someone with control capability must have the drone in VLOS.

> ✈ **Exam Tip:** Who's responsible? Always the Remote PIC.

5.2 Aeronautical Decision Making (ADM)

PAVE Checklist: Pilot (fit to fly?) · **A**ircraft (airworthy?) · **E**nvironment (weather, airspace, obstacles?) · **V** (external pressures — client deadlines, ego, "get-there-itis"?)

Five Hazardous Attitudes:

Attitude	Characteristic	Antidote
Anti-authority	"Rules don't apply to me"	"Follow the rules"
Impulsivity	"Do something quickly!"	"Think first"
Invulnerability	"It won't happen to me"	"It could happen to me"
Macho	"I can handle it — watch"	"Taking chances is foolish"
Resignation	"What's the point?"	"I can make a difference"

> ✈ **Exam Tip:** Expect a scenario-based question asking you to identify the hazardous attitude.

5.3 IMSAFE Checklist

Illness · **M**edication · **S**tress · **A**lcohol · **F**atigue · **E**motion

Fatigue is the most insidious — you often don't realize how degraded your performance is. No regulatory duty-hour limits for drone pilots.

5.4 Radio Communications

Not required under Part 107 unless your authorization specifies it. But monitoring the CTAF at non-towered airports lets you hear manned traffic. Emergency frequency: 121.5 MHz. (See the Traffic Pattern Diagram in Section 2.9 for how manned aircraft use the pattern and announce positions.)

5.5 Emergency Procedures

- **Loss of GPS (ATTI mode):** Maintains altitude, drifts with wind. Manual control required.
- **Loss of control link:** Failsafe activates (RTH or land in place). Know your drone's failsafe settings.
- **Flyaway:** Note last direction/altitude, begin search, report if beyond VLOS.
- **Motor failure:** Most quads can't fly on 3 motors. Focus on where it'll come down.
- **Low battery:** Land immediately. Don't push it.

Priorities: 1) Control the aircraft. 2) Avoid people/property. 3) Communicate with crew. 4) Document.

5.6 Physiological Factors

- **Vision:** VLOS requires unaided vision. Peripheral vision detects motion best. Night: use off-center viewing. Dark adaptation takes ~30 minutes.
- **Spatial disorientation:** Can occur when flying at distance in featureless terrain.
- **Hypoxia:** Above ~10,000 ft. Not realistic for Part 107, but know it exists.

5.7 Preflight Inspection & Site Survey

Site survey: Obstacles, hazards, airspace, emergency landing options, wildlife.

Preflight: Structure, propellers, batteries (charge + condition), payload secured, firmware, control link, compass calibration, GPS lock.

> ✈ **Exam Tip:** Who ensures the sUAS is safe to fly? The Remote PIC.

5.8 Maintenance & Recordkeeping

No formal FAA maintenance schedule for sUAS, but the PIC must ensure airworthiness. Best practices: logbook per drone, follow manufacturer schedules, track battery cycles, replace props regularly, document repairs.

Section 5 Quiz

1. The person manipulating controls under Part 107 must: A) Hold a certificate B) Be under direct PIC supervision C) Be at least 18 D) Also be the VO

2. Skipping preflight to meet a deadline is which hazardous attitude? A) Anti-authority B) Macho C) Impulsivity D) Resignation

3. A VO's role is to: A) Maintain VLOS and scan for hazards B) Serve as backup pilot C) Obtain LAANC auth D) File reports

4. In ATTI mode (GPS lost), the drone will: A) Return to home B) Hold altitude but drift with wind C) Land immediately D) Hover in place

5. "A" in IMSAFE stands for: A) Altitude B) Attitude C) Alcohol D) Aircraft

6. Who has final authority for a Part 107 operation? A) VO B) Person manipulating controls C) Remote PIC D) Client

7. "It won't happen to me" is which hazardous attitude? A) Macho B) Anti-authority C) Invulnerability D) Resignation

8. Dark adaptation takes approximately: A) 5 minutes B) 10 minutes C) 30 minutes D) 60 minutes

9. Who ensures the sUAS is safe for flight? A) Manufacturer B) VO C) Remote PIC D) FAA inspector

10. First priority during a drone emergency: A) Call 911 B) File a report C) Maintain control of the aircraft D) Notify the client

Quiz Answers: 1-B · 2-C · 3-A · 4-B · 5-C · 6-C · 7-C · 8-C · 9-C · 10-C

Section 5 Test

1. Client pressures you to fly in marginal weather. This is: A) Good service B) External pressure influencing ADM C) Acceptable with experience D) Standard practice

2. A Visual Observer must be: A) A certificated pilot B) In direct communication with the PIC C) Able to fly the drone D) A paid employee

3. The PAVE checklist's "V" represents: A) Velocity B) Visibility C) External pressures D) Visual line of sight

4. A drone's failsafe is typically set to: A) Continue the mission B) Return to home or land in place C) Fly to nearest airport D) Hover indefinitely

5. Fatigue degrades all of the following EXCEPT: A) Reaction time B) Decision making C) Battery performance D) Situational awareness

6. Best technique for spotting objects at night: A) Staring directly B) Off-center viewing C) Binoculars D) Squinting

7. "Rules are for other people, not experienced operators like me" is: A) Invulnerability B) Anti-authority C) Macho D) Impulsivity

8. During preflight, you notice a nick on a prop blade. You should: A) Fly if minor B) Replace the propeller C) Monitor during hover D) Apply tape

9. At a non-towered airport, manned aircraft self-announce on the: A) ATIS B) CTAF C) Guard frequency D) Center

10. The "3P model" stands for: A) Plan, Prepare, Perform B) Perceive, Process, Perform C) Pilot, Plane, Passengers D) Prevent, Protect, Preserve

11. PIC + uncertificated person on controls, no VO. Legal? A) No — VO required B) Yes — VO is optional C) No — controller must be cert'd D) Class G only

12. Drone drifting, you suspect GPS loss. First action: A) Press RTH B) Take manual control C) Power off controller D) Wait for GPS

13. Emergency frequency: A) 122.8 MHz B) 121.5 MHz C) 118.3 MHz D) 123.0 MHz

14. Resignation attitude is: A) Breaking rules B) Acting without thinking C) Feeling helpless and giving up D) Taking risks to impress

15. A site survey should include all EXCEPT: A) Obstacle identification B) Airspace classification C) Competitor analysis D) Emergency landing options

Test Answers: 1-B · 2-B · 3-C · 4-B · 5-C · 6-B · 7-B · 8-B · 9-B · 10-B · 11-B · 12-B · 13-B · 14-C · 15-C

Section 6: Exam Strategy & Practice

6.1 Exam Weighting

Area	% of Exam	~Questions
Regulations	15–20%	9–12
Airspace & Requirements	25–30%	15–18
Weather	15–20%	9–12
Loading & Performance	5–10%	3–6
Operations	20–25%	12–15

If time is limited: Prioritize airspace/charts and weather decoding (roughly half the exam).

6.2 Test-Taking Strategies

Before: Skim the testing supplement. Know where Legend 1, Figures 20–26, Figure 12, Figure 15, and Figure 8 are located.

Brain dump immediately: Write key numbers on scratch paper before question 1 — 3 SM / 500 ft / 2,000 ft / 400 ft / 0.04% / 8 hrs / 24 months / 55 lbs / 0.55 lbs / 10 days / $500 / 60 days.

During: Answer easy ones first. Eliminate obviously wrong answers. Go with the spirit of the question. Use the supplement for every figure-based question. Don’t overthink — first instinct is usually right.

Time: 120 minutes for 60 questions (2 min each). Most finish in 60–90 min. Don’t spend more than 3–4 minutes on any single question.

6.3 Full 60-Question Practice Exam

Set a timer for 120 minutes. Use only the testing supplement. Score honestly.

1. The Remote PIC is responsible for: A) Only physical operation B) Safe operation and regulatory compliance C) Weather forecasting D) Filing flight plans

2. Max sUAS weight at takeoff: A) 25 lbs B) 44 lbs C) 55 lbs D) 10 lbs

3. Max groundspeed: A) 87 kts (100 mph) B) 60 kts C) 120 kts D) No limit

4. Min age for Remote PIC: A) 14 B) 16 C) 18 D) 21

5. Recurrent training interval: A) 12 months B) 24 months C) 36 months D) 60 months

6. (Fig. 20) Norfolk International airspace: A) Class C B) Class B C) Class D D) Class G

7. (Fig. 20) W-50A east of VA Beach: A) Restricted B) Warning area C) Prohibited D) MOA

8. (Fig. 23) Bulldog MOA excludes 1,500 ft and below. Drone at 300 ft: A) In MOA B) Below floor C) Needs waiver D) Needs ATC

9. Solid magenta lines: A) Class B B) Class D C) Class C D) Class E surface

10. Dashed blue lines: A) Class B B) Class C C) Class D D) Prohibited

11. Standard RID broadcasts: A) Only serial B) Location, altitude, velocity, control station, ID C) Pilot name D) Make/model

12. BAC of 0.03%: A) May fly (0.04% limit) B) May not C) Class G only D) Daylight only

13. Cannot be waived: A) VLOS B) Moving vehicle C) Yielding right of way D) Max altitude

14. $800 damage to a car: A) Nothing B) FAA report, 10 days C) NTSB immediately D) Police, 24 hrs

15. Cat 1 max weight: A) 55 lbs B) 4.4 lbs C) 0.55 lbs D) 25 lbs

16. (Fig. 12) KBOI visibility: A) 13 SM B) 30 SM C) 15 SM D) 3 SM

17. (Fig. 12) “BR” means: A) Light rain B) Mist C) Blowing dust D) Drizzle

18. (Fig. 12) KJFK SPECI — legal? A) Yes B) No, 1/2 SM C) SPECI doesn’t apply D) Wind too strong

19. (Fig. 15) FM051600 18010KT P6SM SKC: A) 180°/10 kts, >6 SM, clear B) Forecast May 16 C) Fog at 1600 D) 180°/10, 6 SM, scattered

20. TEMPO means: A) Permanent B) Temporary <1 hr C) Temperature D) Gradual

21. Min visibility: A) 1 SM B) 3 SM C) 5 SM D) 10 SM

22. Min below clouds: A) 200 ft B) 500 ft C) 1,000 ft D) 2,000 ft

23. Horizontal from clouds: A) 500 ft B) 1,000 ft C) 2,000 ft D) 1 SM

24. Clockwise winds around: A) Low B) High C) Both D) Neither

25. Highest density altitude: A) Low temp/humidity B) High temp/humidity/low pressure C) Low temp/high humidity D) High temp/high pressure

26. (Fig. 8) 3,000 ft + 30°C: A) 3,000 ft B) 4,500 ft C) 5,500 ft D) 7,000 ft

27. Cold front: A) Gradual clearing B) Thunderstorms, turbulence C) Extended fog D) Calm

28. Spread 3°F decreasing: A) Clear B) Fog likely C) Thunderstorms D) Wind

29. 300 ft AGL, BKN 900 ft. Compliant? A) Yes, 600 ft below B) No C) Rules don’t apply below 400 D) Need 600 ft below

30. Radiation fog: A) Windy PM B) Coastlines C) Clear calm nights D) Fronts

31. Adding 2-lb payload: A) No change B) Reduced time/climb C) Better stability D) Higher ceiling

32. Off-center payload: A) Better GPS B) Uneven motor load C) No effect D) More speed

33. Fastest Class D auth: A) Call tower B) LAANC C) Flight plan D) Email FSDO

34. LAANC advance: A) 7 days B) 30 days C) 60 days D) 90 days

35. IR1206: A) Above 10,000 B) At/below 1,500 AGL C) IFR only D) Above 1,500

36. Person on controls must: A) Hold cert B) Be under PIC supervision C) Be 18+ D) Be VO

37. Final authority: A) VO B) Control person C) Remote PIC D) Manufacturer

38. “It won’t happen to me”: A) Macho B) Anti-authority C) Invulnerability D) Resignation

39. Flying in marginal weather for client: A) Good service B) External pressure C) Acceptable D) Proper 3P

40. “A” in IMSAFE: A) Altitude B) Attitude C) Alcohol D) Aircraft

41. Night light visibility: A) 1 SM B) 3 SM C) 5 SM D) 10 SM

42. Night technique: A) Stare directly B) Off-center viewing C) Binoculars D) Sensors

43. NOT valid RID compliance: A) Built-in B) Module C) FRIA D) Registration + proof

44. DUI report: A) 10 days B) 30 days C) 60 days D) 90 days

45. (Fig. 23) Savannah airspace: A) Class B B) Class D C) Class C D) Class E

46. Obstruction 2049/(1149). AGL: A) 2,049 B) 1,149 C) 900 D) 204.9

47. Part 107 max alt: A) 400 MSL B) 500 AGL C) 400 AGL + structure exception D) 200 AGL controlled

48. (Fig. 20) R-5301/R-5302B near: A) Norfolk B) VA Beach C) Albemarle Sound D) Bay Bridge

49. 200 ft under faded magenta (E at 700): A) Class E B) Class C C) Class G D) Class D

50. VO must: A) Hold cert B) Communicate with PIC C) Fly drone D) File NOTAMs

51. Yield to: A) Commercial only B) Approaching only C) All manned D) Class B only

52. NASA ASRS: A) Weather B) TFRs C) Confidential safety reporting D) Registration

53. Retake wait: A) 7 days B) 14 days C) 30 days D) 60 days

54. Thunderstorm ingredients: A) High pressure, cold B) Moisture, instability, lift C) Fog, wind D) Low vis, warm front

55. Prohibited prefix: A) R B) W C) P D) A

56. (Fig. 12) KINK spread: A) 25°C B) 17°C C) 8°C D) 42°C

57. Horizontal cloud clearance: A) 500 ft B) 1,000 ft C) 2,000 ft D) 5,000 ft

58. Cert Jan 15, 2026 — recurrent by: A) Jan 15, 2028 B) Jan 31, 2028 C) Jul 15, 2027 D) Jan 15, 2027

59. Accident report: A) 24 hrs B) 48 hrs C) 10 days D) 30 days

60. Traffic awareness near non-towered airport: A) NOTAMs B) Monitor CTAF C) Contact FSDO D) ADS-B

Practice Exam Answer Key

1-B · 2-C · 3-A · 4-B · 5-B · 6-B · 7-B · 8-B · 9-C · 10-C · 11-B · 12-A · 13-C · 14-B · 15-C · 16-B · 17-B · 18-B · 19-A · 20-B · 21-B · 22-B · 23-C · 24-B · 25-B · 26-C · 27-B · 28-B · 29-A · 30-C · 31-B · 32-B · 33-B · 34-D · 35-B · 36-B · 37-C · 38-C · 39-B · 40-C · 41-B · 42-B · 43-D · 44-C · 45-C · 46-B · 47-C · 48-C · 49-C · 50-B · 51-C · 52-C · 53-B · 54-B · 55-C · 56-C · 57-C · 58-B · 59-C · 60-B

Scoring Guide

Score	Assessment
54–60 (90–100%)	Ready. Book your test.
48–53 (80–89%)	Solid. Review missed topics.
42–47 (70–79%)	At the threshold. Focus on weak areas.
Below 42 (<70%)	More study needed. Revisit weak sections.

Back Matter

Quick Reference: Key Numbers

Rule	Value
Max sUAS weight	55 lbs
Max altitude AGL	400 ft
Max groundspeed	100 mph (87 kts)
Min visibility	3 statute miles
Min below clouds	500 ft
Min horizontal from clouds	2,000 ft
Anti-collision light	3 SM visibility
Bottle-to-throttle	8 hours
BAC limit	0.04%
Min age	16 years
Recurrency	24 calendar months
Cat 1 weight	0.55 lbs (250g)
FAA report	10 calendar days
Damage threshold	$500 other property
DUI report	60 days
Failed test retake	14 calendar days
LAANC advance	Up to 90 days
DroneZone lead time	≥60 days
Registration	$5 / 3 years
Knowledge test	~$175

Glossary

ACS — Airman Certification Standards · **AGL** — Above Ground Level · **ASOS/AWOS** — Automated Surface/Weather Observing System · **ATC** — Air Traffic Control · **CTAF** — Common Traffic Advisory Frequency · **DOC** — Declaration of Compliance · **FDC NOTAM** — Flight Data Center NOTAM · **FRIA** — FAA-Recognized Identification Area · **IACRA** — Integrated Airman Certification and Rating Application · **IFR** — Instrument Flight Rules · **LAANC** — Low Altitude Authorization and Notification Capability · **METAR** — Meteorological Aerodrome Report · **MSL** — Mean Sea Level · **MOA** — Military Operations Area · **MTR** — Military Training Route · **NAS** — National Airspace System · **NOTAM** — Notice to Air Missions · **Remote PIC** — Remote Pilot in Command · **RID** — Remote Identification · **sUAS** — Small Unmanned Aircraft System · **TAF** — Terminal Aerodrome Forecast · **TFR** — Temporary Flight Restriction · **UAG** — Unmanned Aircraft General (test designation) · **UAS** — Unmanned Aircraft System · **VFR** — Visual Flight Rules · **VLOS** — Visual Line of Sight · **VO** — Visual Observer · **VOR** — VHF Omnidirectional Range

Next Steps

Passing the Test: 1. Get your FTN at iacra.faa.gov. 2. Find a testing center at faa.psiexams.com (~$175). 3. Bring: government photo ID + FTN.

After You Pass: 1. Complete your application on IACRA. 2. TSA background check (automatic, usually a few weeks). 3. Temporary certificate issued. Permanent card by mail. 4. Set a calendar reminder: recurrent training in 24 months.

Building Your Commercial Operations: - Get insurance ($1–2M general liability is standard for client work). - Develop standard operating procedures. - Build a portfolio to demonstrate capability.
