

Part 107 Remote Pilot, Instructor Resource Kit

11

The National Airspace System

A 50-minute lesson, Volume One, Chapter 11, Remote Pilot ACS Area II



Sample lesson, instructor edition



Learning objectives

By the end of this lesson, you can

1

Name each airspace class and its vertical limits.

2

Identify each class on a sectional chart excerpt.

3

State when Part 107 requires ATC authorization, and how to get it.

4

Recognize special use airspace and TFRs, and the rules that apply.

Lesson plan, 50 minutes

How the hour runs

Minutes	Segment	Slides	Mode
0–5	Objectives and warm-up scenario	1–4	Discussion
5–20	The airspace classes and the sectional	5–9	Lecture
20–27	§107.41 authorization and LAANC	10–11	Lecture
27–35	Special use airspace, TFRs, NOTAMs	12–13	Lecture
35–43	Guided chart practice	14	Pairs
43–46	Check for understanding	15	Quiz
46–50	Wrap-up and assignment	16	Discussion

Warm-up, 2 minutes with a partner

A realtor hires you to photograph a house two miles from a towered airport. Can you launch?

Decide with your partner: yes, no, or “it depends.” If it depends, on what?

11.1 The big split

Six classes, two families

Controlled

A, B, C, D, E

Air traffic control provides services here. Some of it requires your authorization before a Part 107 flight.

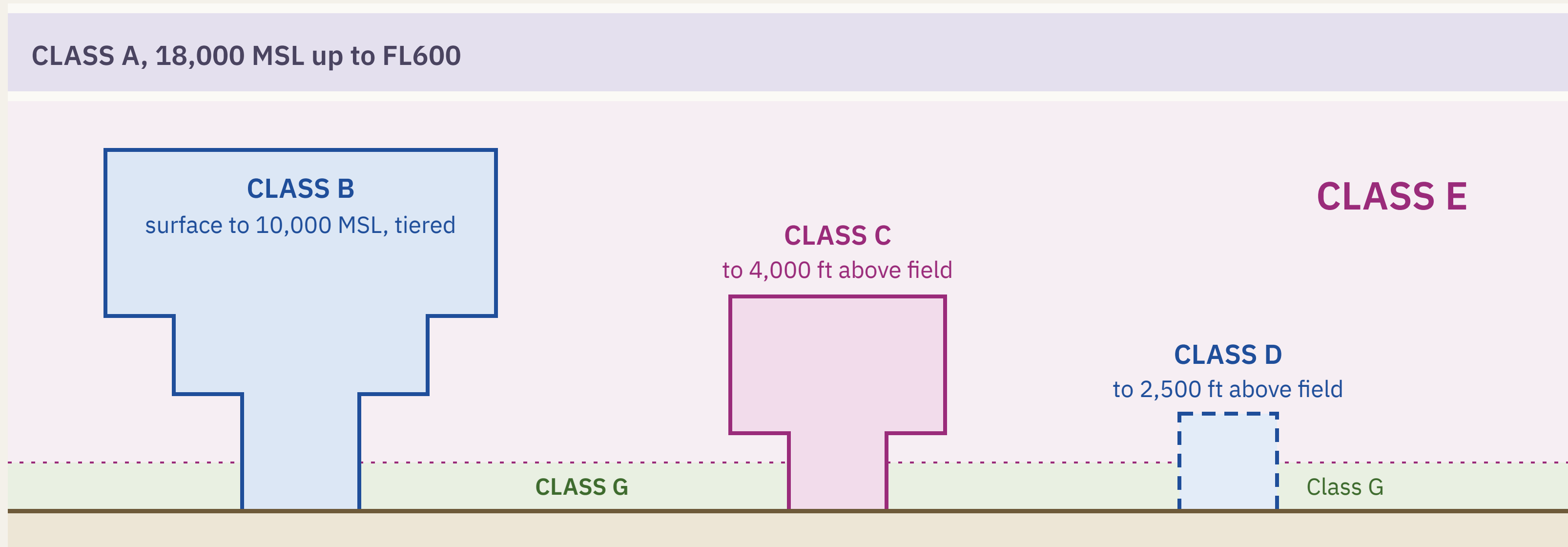
Uncontrolled

G

No authorization needed. All other Part 107 rules still apply.

11.2 The classes in profile

Where each class sits



Classes B, C and D at a glance

Class	Where you find it	Typical vertical limits	On the sectional
B	The busiest airports	Surface to 10,000 ft MSL, tiered	Solid blue lines
C	Busy towered airports with radar approach control	Core: surface to 4,000 ft above the airport. Shelf starts about 1,200 ft AGL	Solid magenta lines
D	Airports with an operating control tower	Surface to about 2,500 ft above the airport	Dashed blue line

All three need prior ATC authorization for a Part 107 flight. More on slide 10.

11.4 Where drones usually fly

Class E floors decide what's Class G

Floor at

Surface

Around some airports.
Needs authorization.

Floor at

700 ft AGL

Near airports with
instrument approaches.

Floor at

1,200 ft AGL

Across most of the
country.

Floor at

14,500 MSL

Where nothing lower is
designated.

Below the floor is **Class G**. With a 700 or 1,200 ft floor, a 400 ft Part 107 flight is in Class G and needs no authorization.

11.5 Reading the chart

How the sectional draws each class

-  **Class B**, solid blue
-  **Class C**, solid magenta
-  **Class D**, dashed blue
-  **Class E to surface**, dashed magenta
-  **Class E at 700 AGL**, faded magenta
-  **Class E at 1,200 AGL**, faded blue

The numbers are MSL

70 / 25

Ceiling over floor, in hundreds of feet MSL: 7,000 down to 2,500.

[30]

Class D ceiling: up to and including 3,000 ft MSL.

11.6 The rule, 14 CFR 107.41

You need prior ATC authorization in four places

B

Class B

C

Class C

D

Class D

E

Surface area of Class E
designated for an
airport

Everywhere else, including Class E above a 700 or 1,200 ft floor and all Class G, needs no ATC authorization.

11.7 Getting authorization

Two routes to a yes

Usually minutes

LAANC

- Through an FAA-approved app
- Near real-time approval
- Up to the altitude on the UAS Facility Map grid

Plan weeks ahead

FAA DroneZone

- Where LAANC isn't available
- Above the facility map altitude, up to 400 ft AGL
- Reviewed manually by the FAA

Not the same as a waiver. Authorization is about airspace. A waiver (§107.205) lets you deviate from certain operating rules.

Areas with their own rules

Type	Chart label	What it means for a Part 107 flight
Prohibited	P-56	No flight without the controlling agency's permission (§107.45)
Restricted	R-####	No flight without the controlling agency's permission (§107.45)
Warning	W-###	Offshore hazards beyond U.S. territorial waters. Use caution
MOA	name + MOA	Military training. Legal to fly; check if active, stay alert
Alert	A-###	Heavy pilot training or unusual activity. Use caution

11.9 Temporary restrictions

TFRs change daily. Check before every flight.

Common TFRs

- Wildfires and disaster areas
- VIP and presidential movement
- Space launches and recoveries
- Stadiums during major events

The rules

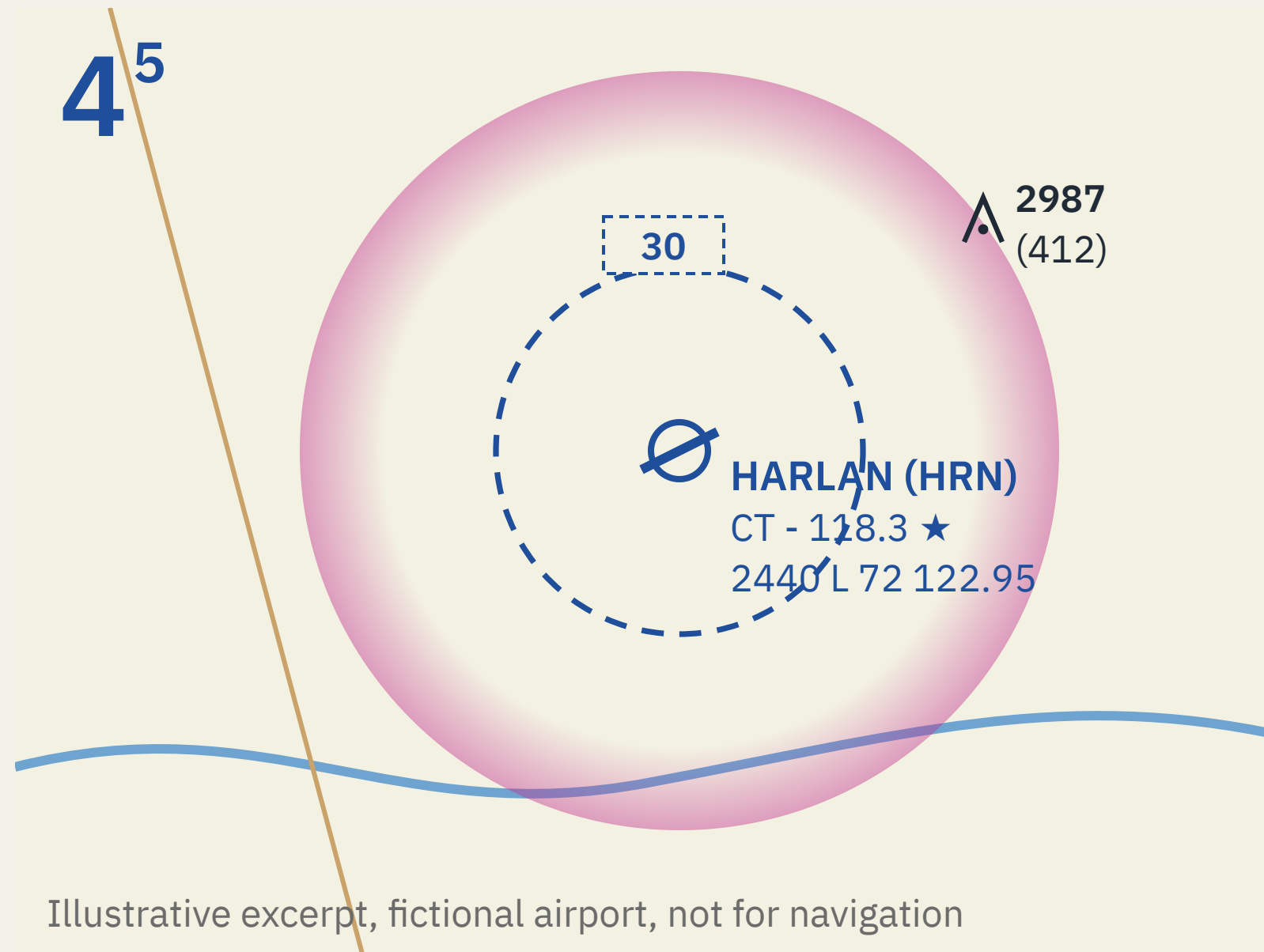
- §107.47: obey restrictions issued by NOTAM
- §107.49: check airspace and flight restrictions before flight

Where to check

- FAA TFR list
- NOTAM search
- B4UFLY and LAANC apps

Guided practice, pairs, 8 minutes

Read this chart excerpt with your partner



1. What is the Class D ceiling, in feet above the airport?

2. You'll fly at 200 ft AGL just inside the dashed ring. Authorization needed?

3. Outside the ring, inside the faded band, at 350 ft AGL. What class, and authorization?

Check for understanding, 3 minutes

Three questions, on your own

1. Which airspace class runs from 18,000 ft MSL up to FL600?

A. Class B B. Class A C. Class E

2. A part-time Class D reverts to a Class E surface area at night. You fly there at night. Authorization?

A. Required B. Not required, the tower is closed C. Not required under 400 ft

3. You want to fly inside restricted area R-2501 near your job. What do you need?

A. LAANC approval B. Permission from the using or controlling agency C. Nothing below 400 ft

Wrap-up and assignment

Three things to take with you

B, C, D, E

Authorization for B, C, D and surface-area E. Nowhere else.

MSL – ground

Chart numbers are MSL. Subtract elevation to compare with 400 ft AGL.

Check TFRs

Before every flight, even with authorization in hand.

Before next class

Read Volume One, Chapters 11 and 12. Work Volume Two, Plates A1–A6. In the Exam Engine, run 25 Airspace questions in “Mark each answer as I go” mode.