

# **Airspace**

## **Lesson 2: Airspace Entry Requirements and Services**

## **Objective**

Identify airspace on a sectional chart and determine the requirements for entering that given airspace.

## **Motivation**

Different classes of airspace have different entry requirements and provide different level of services to aircraft. We need to know the entry requirements for each class before flying into them.

# Overview

- Communication requirements, Transponder/ADS-B requirements, ATC services for:
  - Class A
  - Class B
  - Class C
  - Class D
  - Class E
  - Class G



## Class A Entry Requirements

- Flights above 18,000' MSL to FL600
- IFR rated and IFR equipped
- Requires an IFR flight plan and IFR clearance
- Equipment
  - Mode C transponder and ADS-B Out
- ATC services
  - Separation services for IFR traffic



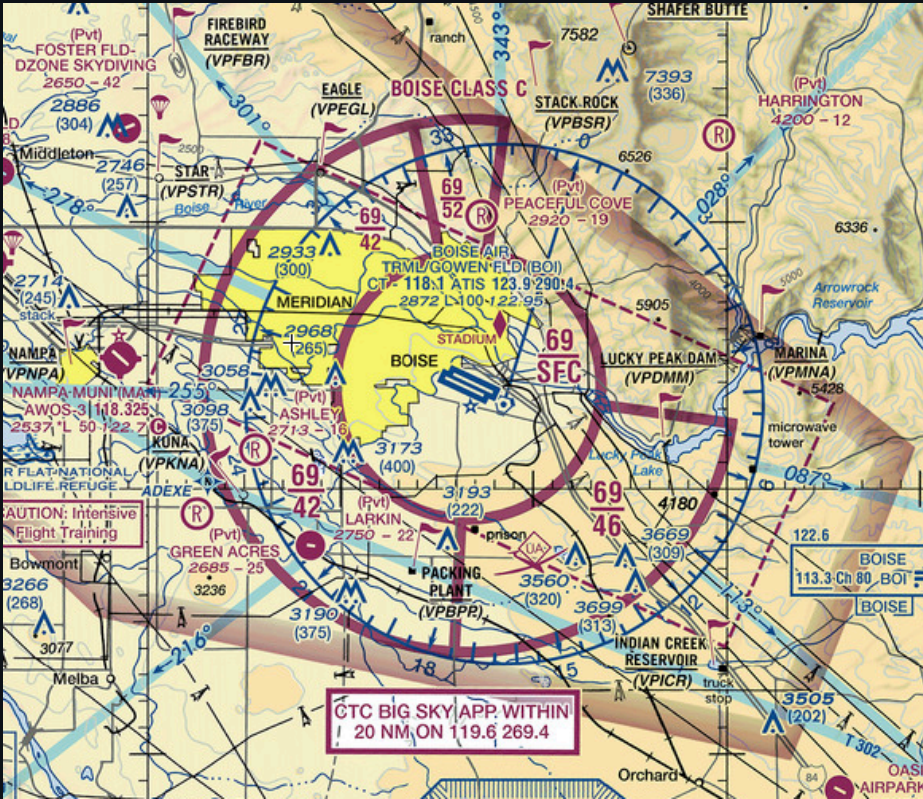
# Class B Entry Requirements



- Need 2-way radio communication with controlling facility
- VFR traffic need explicit clearance:
  - "N549SR cleared into the Class B, maintain 3000"
- Mode-C Transponder + ADS-B Out
  - Within and above Class B lateral bounds
  - Within 30nm (Mode C Veil)
- ATC services
  - Separation from other traffic
  - Sequencing into primary airport



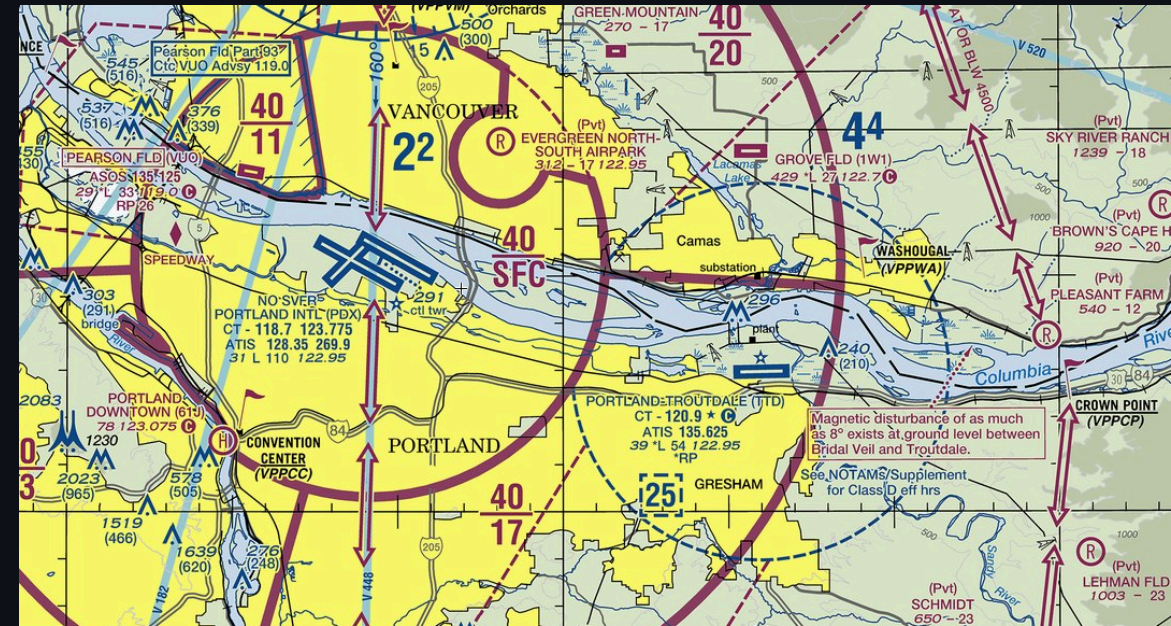
# Class C Entry Requirements



- Need 2-way radio communication with controlling facility
- Need acknowledgement of your callsign
  - "N549SR, Portland Tower." - sufficient
  - "Aircraft calling, standby" - not sufficient
- Mode-C Transponder + ADS-B Out
  - Needed within and above the Class C bounds
- ATC services
  - Sequencing to the primary airport
  - Separation of VFR/IFR traffic

# Satellite Airports

- Some Class D airports have Class C airspace above them
- Arriving from within Class C airspace
  - Class C will hand you off to the Class D tower
- Departing from the Class D airport:
  - May issue you a squawk code before departure
  - Class D will hand you off to a Class C frequency



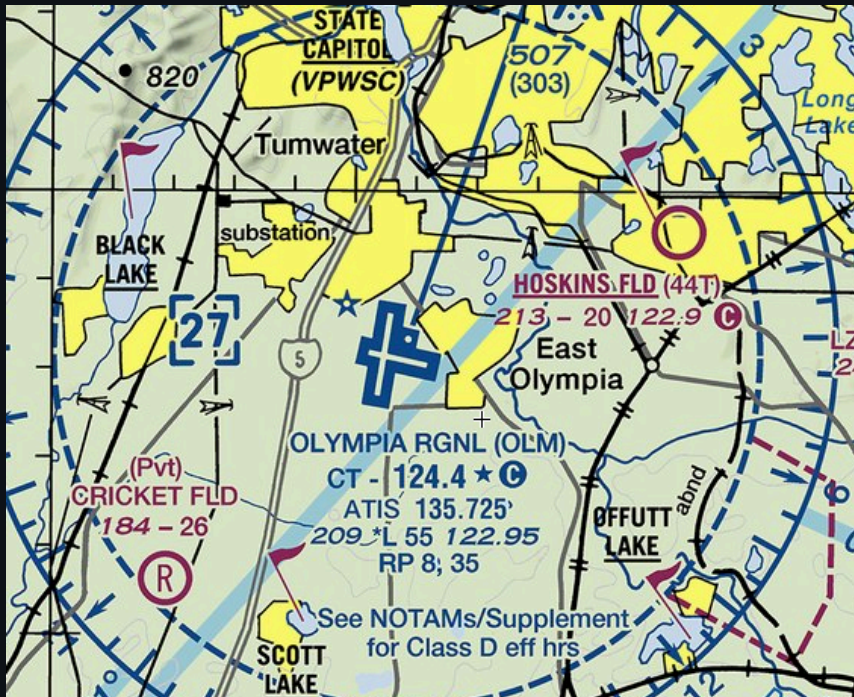


# Class D Entry Requirements



- Need 2-way radio communication with controlling facility
- Need acknowledgement of your callsign
- No transponder/ADS-B requirements
- ATC services
  - Sequencing to the primary airport
  - No separation services
  - Traffic advisories

# Class D: Part-time Towers



- Some Class D control towers are part-time
- Look for star on sectional next to frequency
- Refer to Chart Supplement for hours
- Airspace will revert to Class E or G when tower is closed

**AIRPORT REMARKS:** Attended 1600–0100Z†. Airport field conditions unmonitored 0100–1500Z†. Twy lgts on Twy A, Twy B, Twy L and Twy W.

**AIRPORT MANAGER:** 360-528-8074

**WEATHER DATA SOURCES:** ASOS (360) 754-0781 SAWRS.

**COMMUNICATIONS:** CTAF 124.4 ATIS 135.725 UNICOM 122.95

® SEATTLE APP/DEP CON 121.1

TOWER 124.4 (1600–0400Z†) GND CON 121.6

**CLEARANCE DELIVERY PHONE:** For CD when ATCT is clsd ctc Seattle Apch at 206-214-4723.

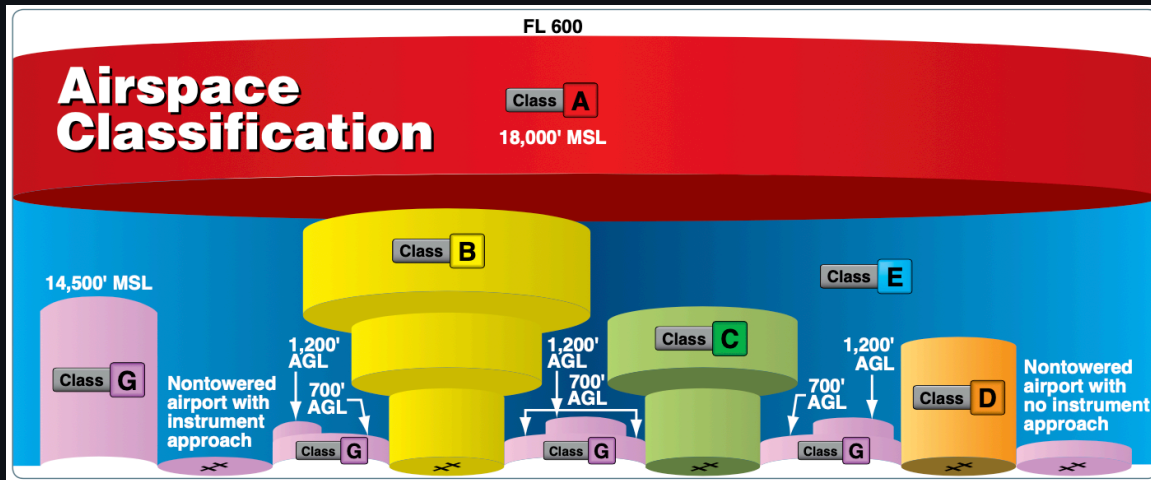
**AIRSPACE:** CLASS D svc 1600–0400Z†; other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OLM.

(VH) (H) VORTACW 113.4 OLM Chan 81 N46°58.30' W122°54.1

TACAN AZIMUTH unusable:

# Class E Entry Requirements



- No entry requirements for VFR
- No separation services for VFR traffic
- Can receive ATC services (IFR, VFR flight following)
- Mode-C Transponder + ADS-B Out
  - Required above 10,000' MSL

## Class G Entry Requirements

- Uncontrolled airspace, no entry requirements
- No ATC services provided
- No radio, transponder, or ADS-B required



# Summary

- Class A: ADS-B/Transponder, IFR flight plan + clearance
- Class B: ADS-B/Transponder within 30nm, "Cleared in the bravo", separation/sequencing
- Class C:
  - ADS-B/Transponder within + above
  - Acknowledgement by call sign
  - Separation/sequencing
- Class D: Acknowledgement by call sign, sequencing only
- Class E: ADS-B/Transponder above 10,000 ft., no entry requirements
- Class G: No entry requirements



## Knowledge Check

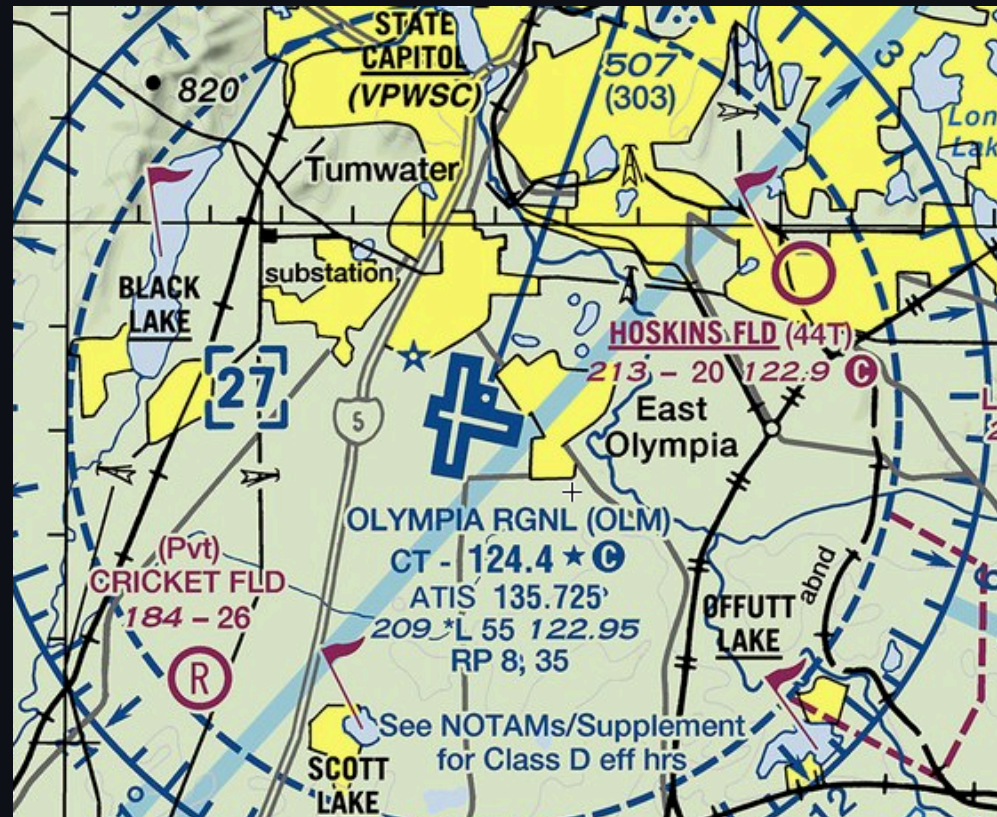
You are looking to transition KPDX's airspace at 3000' MSL. You call Portland Tower and ask for a northbound transition.

They reply "N12382, standby." Are you cleared to enter the airspace?

What if they reply "Aircraft calling, standby?"

# Knowledge Check

- What's the meaning of the \*L on a airport block?
- What about the star symbol next to 124.4?



# Knowledge Check

You are flying an airplane with no transponder or ADS-B equipment. You plan to make a flight to the Eugene airport for some repairs.

Are you able to land there? Do you need to make any prior arrangements?

