Performance

Chapter 9

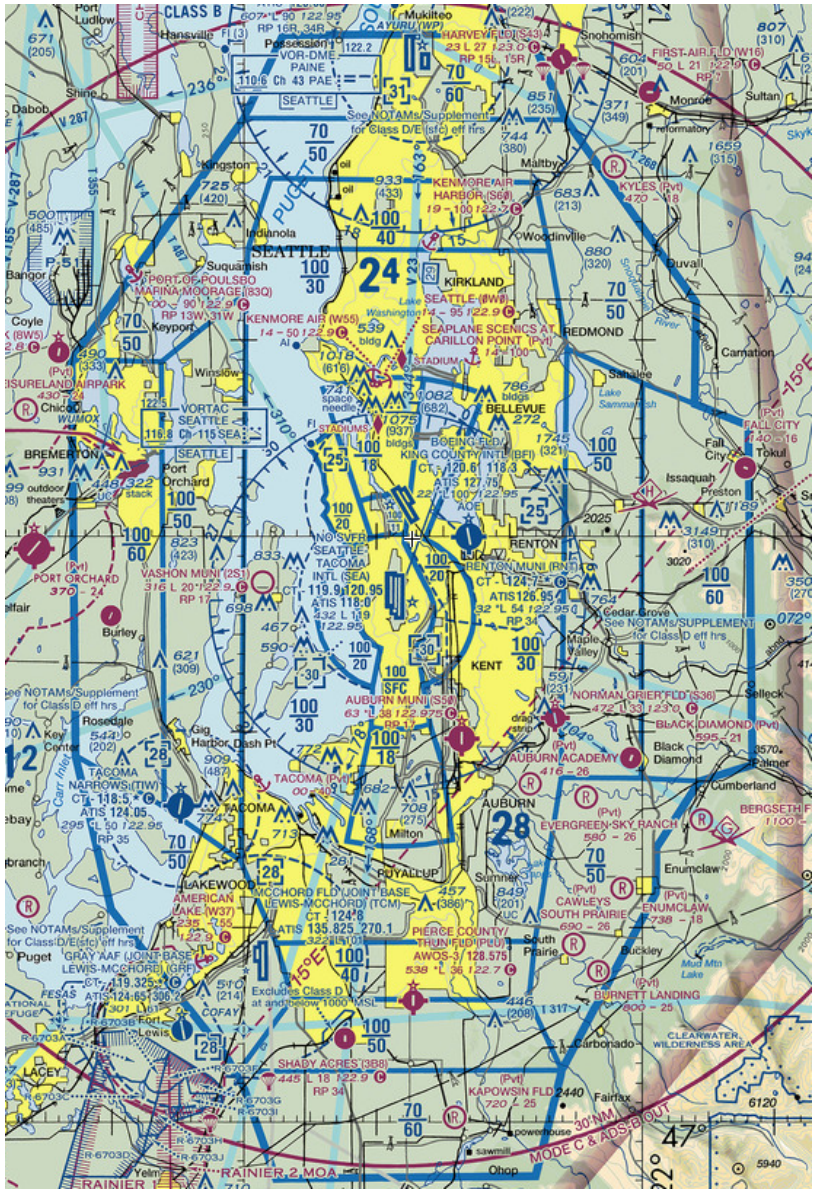
Questions

Plan a flight from Bremerton, WA (KPWT) to Bellingham, WA (KBLI) in a typical Cessna 172S-G1000. Winds are calm at both airports, so you can use whatever runway you want. Winds aloft are

FT	3000	6000	9000	12000	18000
SEA	2413	2624+12	2435+09	2134+06	2745-06

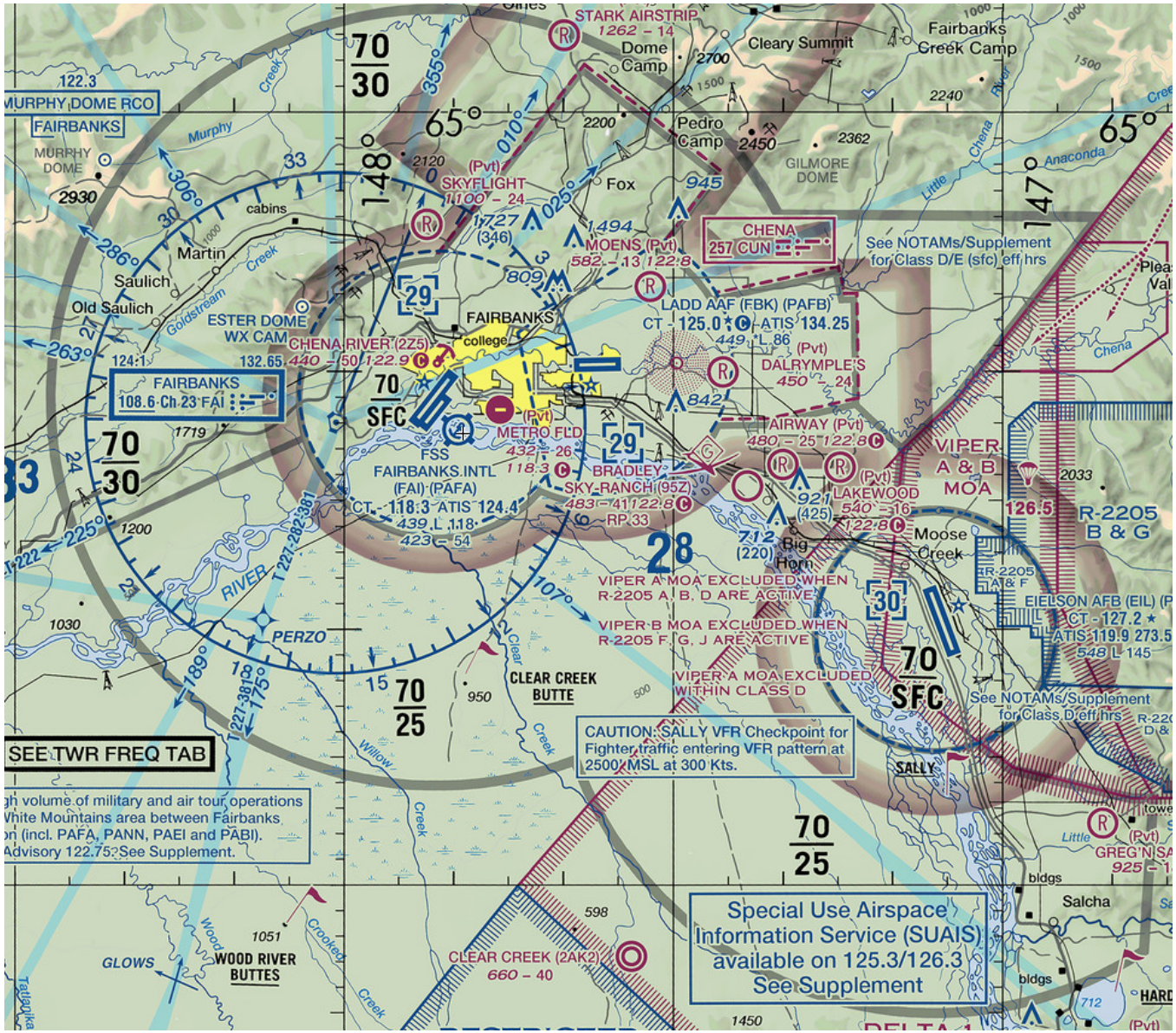
1. What altitude did you select?
2. What is your time, distance, and fuel used to get to that altitude?
3. What is your true airspeed at that altitude?
4. What are the winds aloft at that altitude?
5. What magnetic heading will you hold?
6. What is your ground speed?
7. How far from KBLI will you start your descent?
8. How long will it take you to get to the top-of-descent (TOD) and how much fuel did you use?

Class B Airspace

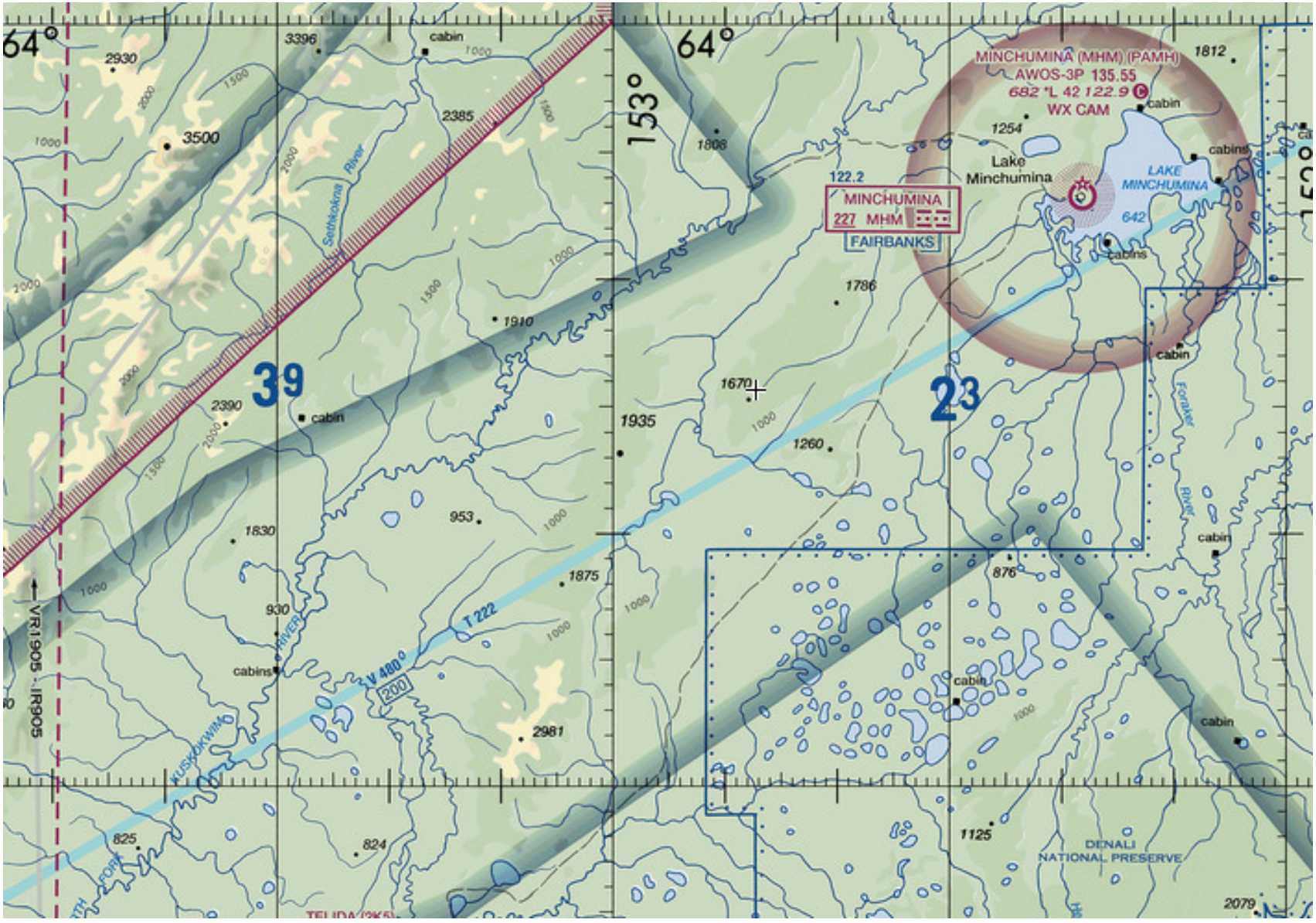


Class C Airspace

Class D Airspace & TRSA

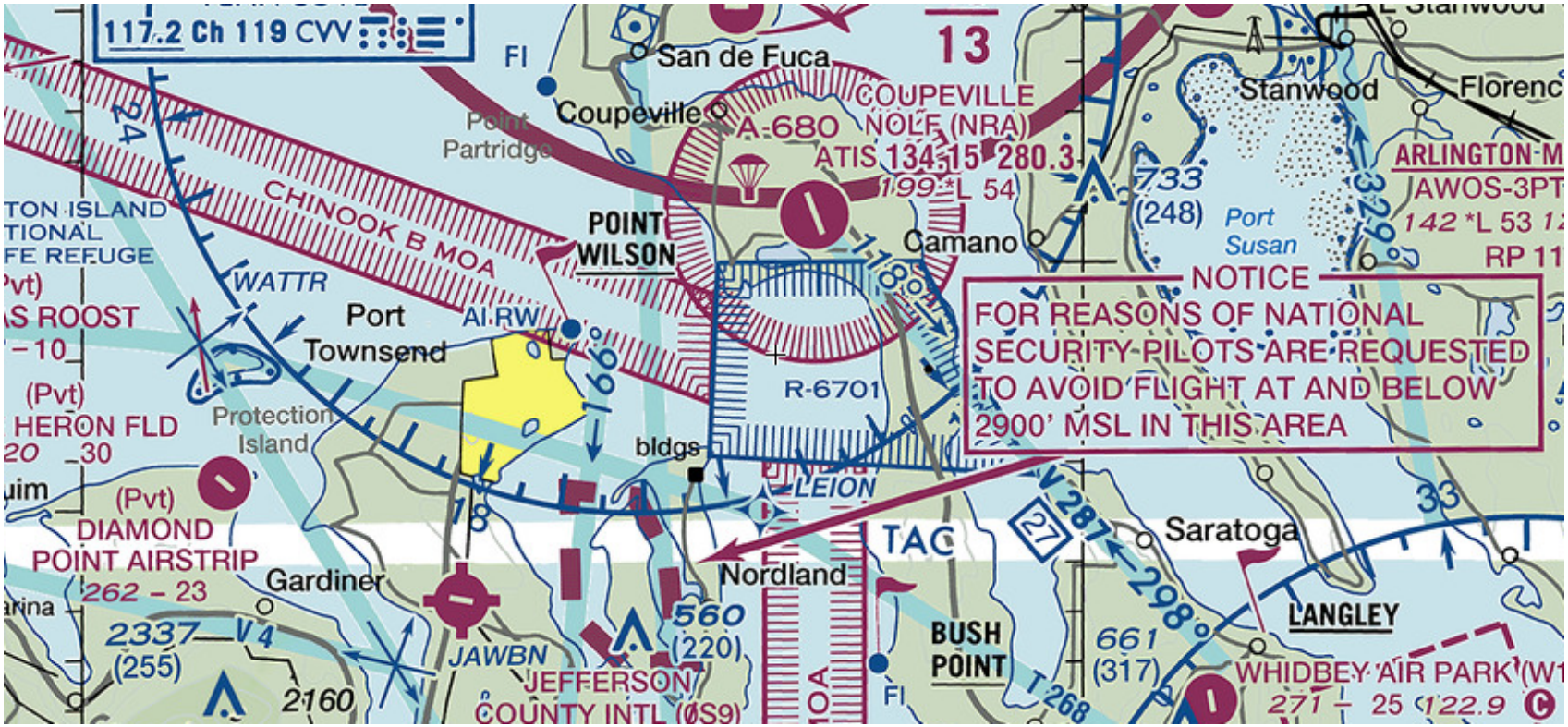


Class E & G Airspace

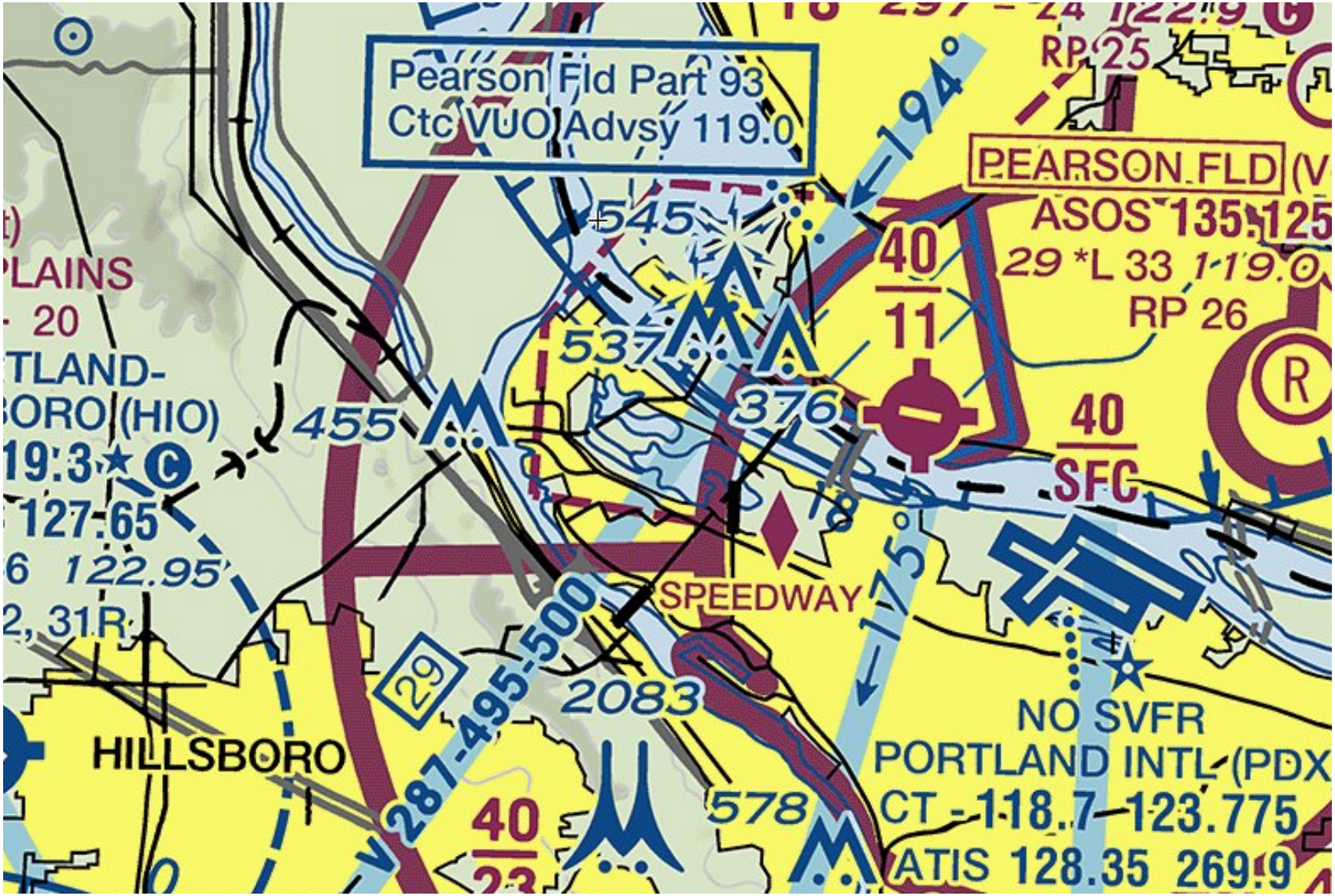


Prohibited Area

Restricted, Alert, and MOA



Part 93


Pearson Fld Part 93
Ctc VUO Advsy 119.0
194°
RP 25
PEARSON FLD (V
ASOS 135.125
29 *L 33 119.0
RP 26
545
537
455
376
40
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SFC
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2083
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HILLSBORO
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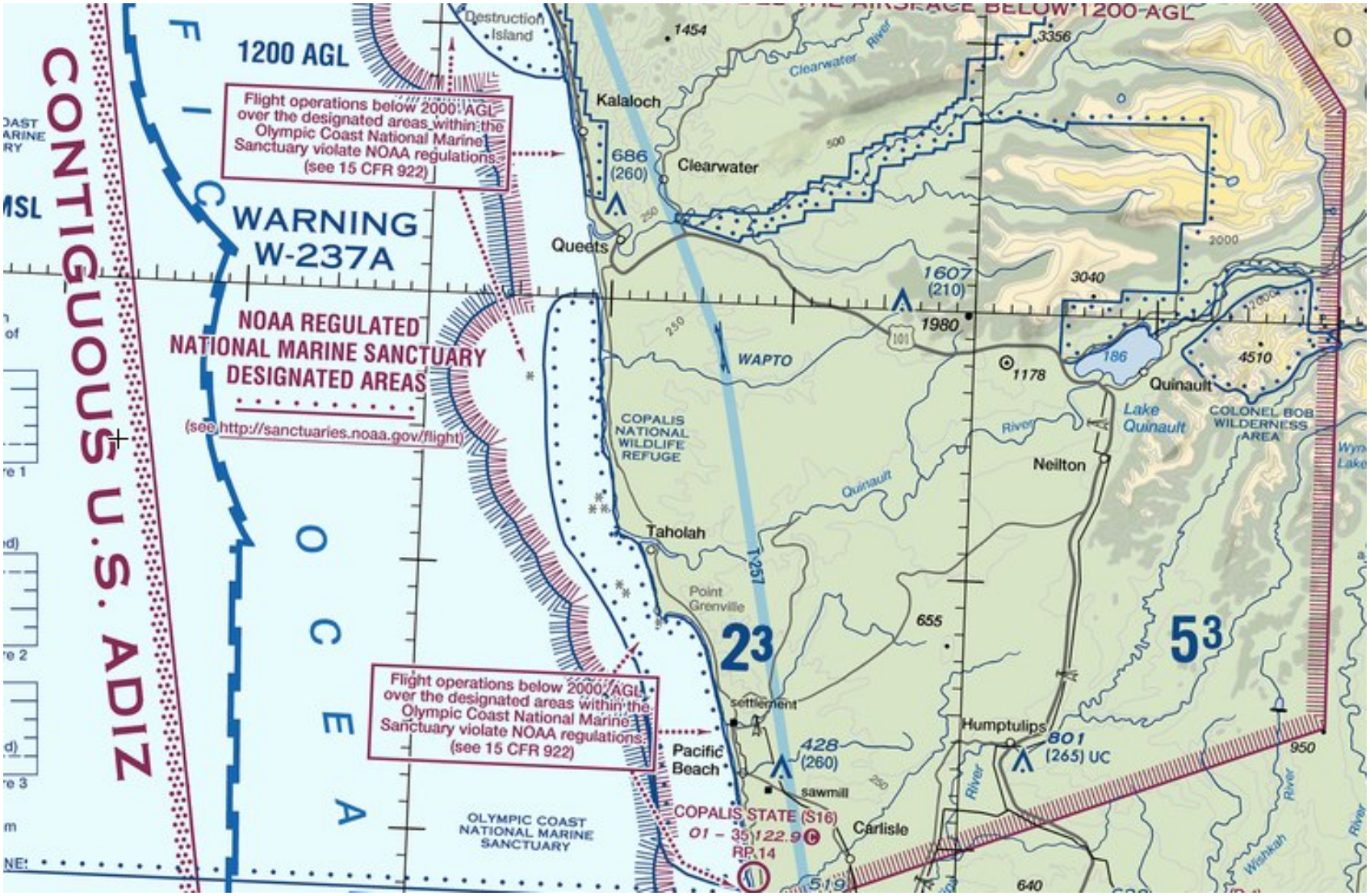
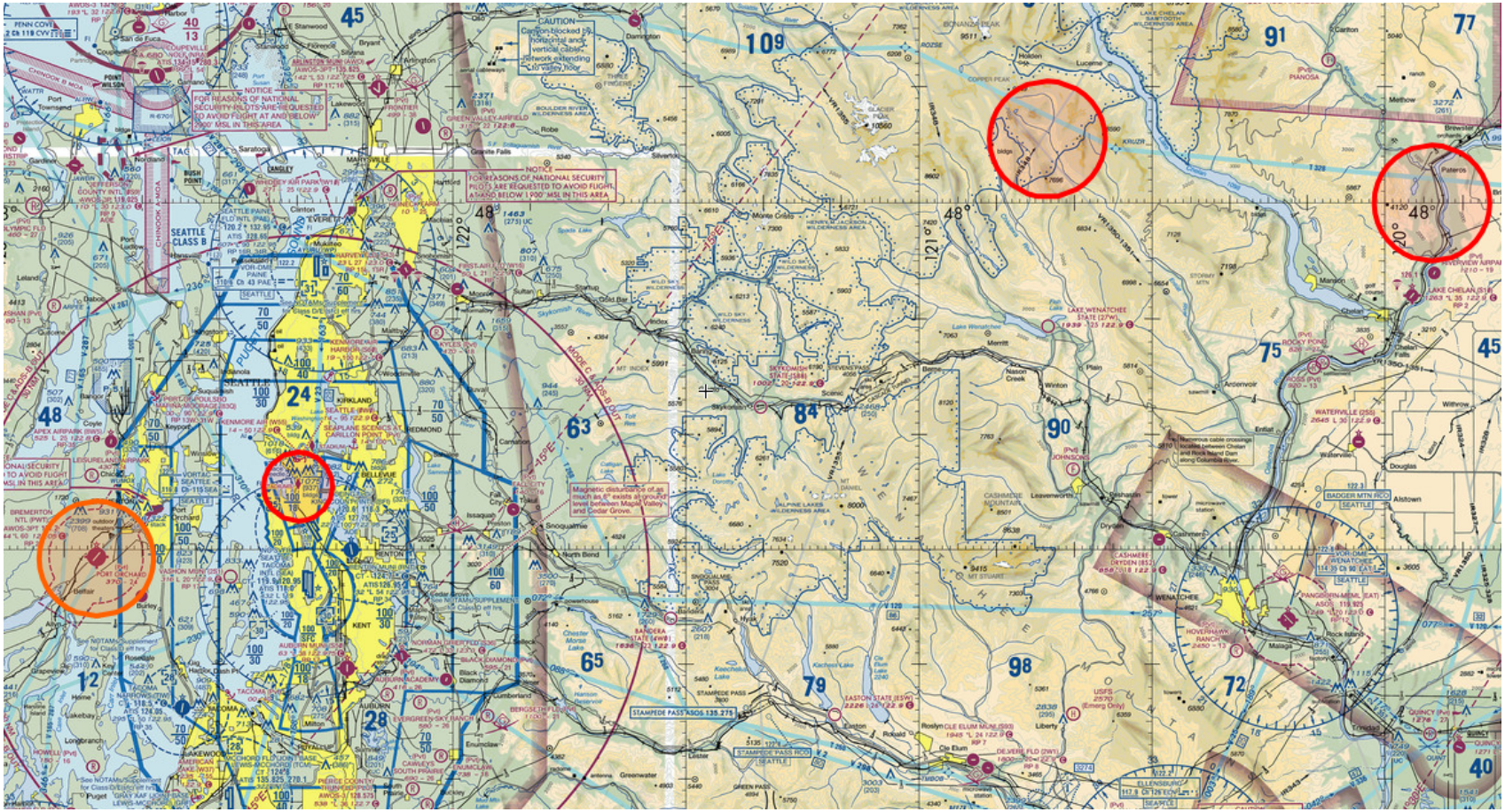
23
NO SVFR
PORTLAND INTL (PDX
CT 118.7 123.775
ATIS 128.35 269.9
PLAINS
20
TLAND-
ORO (HIO)
19.3
127.65
6 122.95
2, 31R

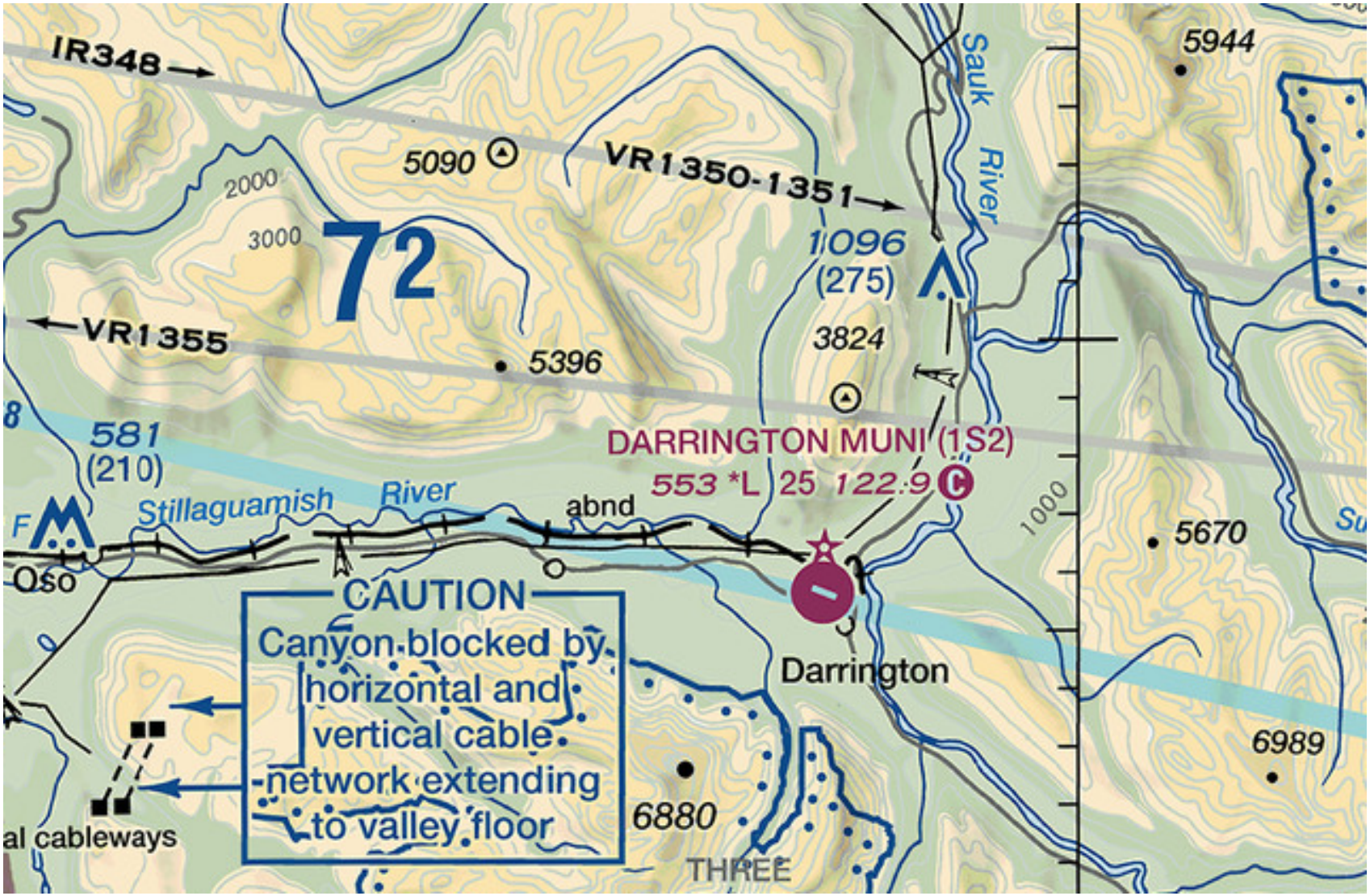
Warning, ADIZ, & Wildlife



Temporary Flight Restrictions



Military Training Route



2) While flying from Cedar Rapids to Farifield, you cross Interstate 80 at 1015, and the highway west of Wellman at 1022. What is your estimated time of arrival at Fairfield if your ground spewed remains constant?

A 1028

B 1035

C 1040

3) Your airplane uses 8.6 gallons of fuel per hour. You plan a 250 nautical mile flight at an average ground speed of 115 knots. What is the minimum fuel required for the trip (allow a 30-minute reserve)?

A 18.7 gallons.

B 23.0 gallons.

C 15.6 gallons.

4) Your ground speed between Cedar Rapids and Fairfield (52nm) is 111 knots. At an average fuel consumption rate of 7.2 gallons per hour, how much fuel will you use en route?

A 3.4

B 2.5

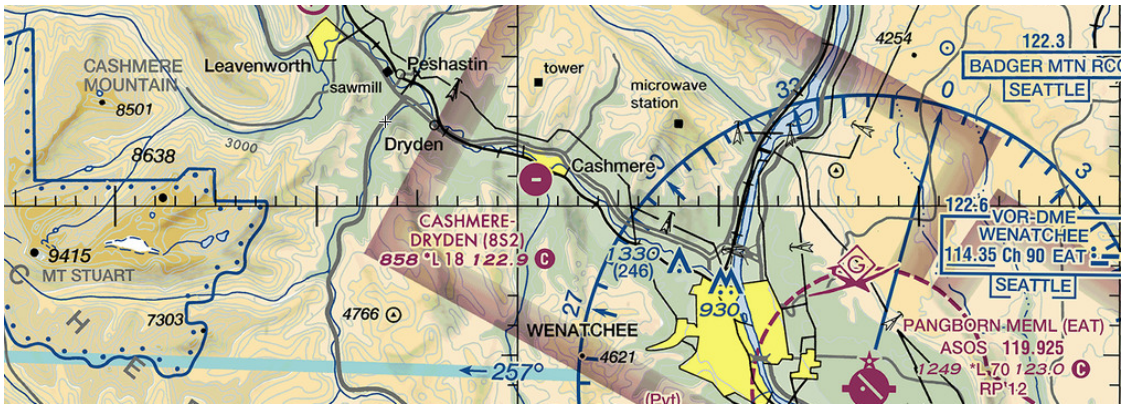
C 4.2

5) Your true course is 270°, your true airspeed is 110 knots, the wind is from 330° at 18 knots, and the magnetic variation is 6°W. What is your ground speed and magnetic heading?

A 119 kts; 278°.

B 100 kts; 264°.

C 100 kts; 284°.



7) What kind of lighting is available at Cashmere-Dryden airport?

A No runway lighting is available.

B Rotating beacon only.

C Pilot-controlled runway lighting (or on request).

CASHMERE–DRYDEN (8S2) 2 SW UTC–8(–7DT) N47°30.89′ W120°29.08′ **SEATTLE**

858 B NOTAM FILE SEA

RWY 07–25: H1800X50 (ASPH) S–8 MIRL 1.4% up W

RWY 07: Trees.

RWY 25: Thld dsplcd 144′. Trees.

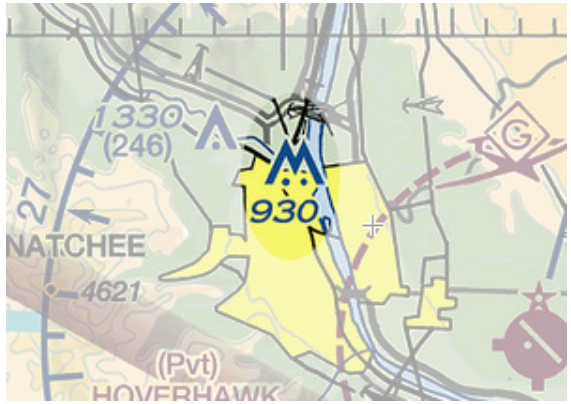
SERVICE: **LGT** ACTIVATE MIRL Rwy 07–25; bcn—121.7.

AIRPORT REMARKS: Unattended. Ground vehicles and pedestrians use twy for hangar access. Exit rwy at twys only. Radio control model activity permitted on W end of arpt.

AIRPORT MANAGER: (509) 782-3321

COMMUNICATIONS: CTAF 122.9

CLEARANCE DELIVERY PHONE: For CD ctc Seattle ARTCC at 253-351-3694.



8) How tall is the antenna for radio station KPQ, 8 miles northwest of the Wenachee airport?

A 560 feet.

B 943 feet.

C 313 feet.

9) Where would you look for information on how to activate pilot-controlled lighting?

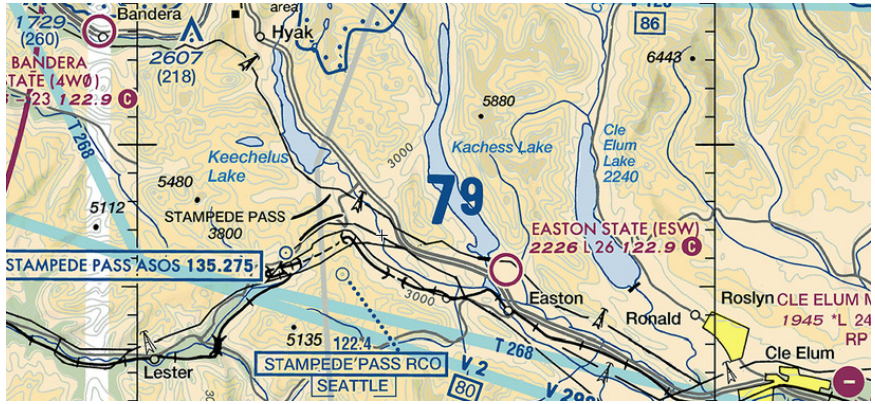
A Sectional chart legend.

B Aeronautical Information Manual.

C Chart Supplement.

Key Mike	Function
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL–Off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL–Off)

Available systems will be indicated in the Service section, e.g., **LGT** ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.



11) You are flying over Lake Kachess in the central Cascade Mountains. What sectional chart feature tells you the minimum safe altitude in that area?

A Terrain with an elevation of $6,680$ feet.

B Maximum elevation number 7^9.

C Contour lines on the mountains.

12) You are approaching an airport with Class C airspace. Which of these statements is true?

A You must have a clearance from ATC before entering the Class C airspace.

B You must be in two-way communication with ATC before entering the Class C airspace.

C Your airplane must be equipped with a transponder, two-way radio, and VOR to enter Class C airspace.

13) Under what conditions, if any, may civil pilots enter a restricted area?

A With the controlling agency's authorization.

B On airways with ATC clearance.

C Under no condition.

14) Under what condition may an aircraft operate from a satellite airport withing Class C airspace?

A The pilot must monitor ATC until clear of the Class C airspace.

B The pilot must contact ATC as soon as practicable after takeoff.

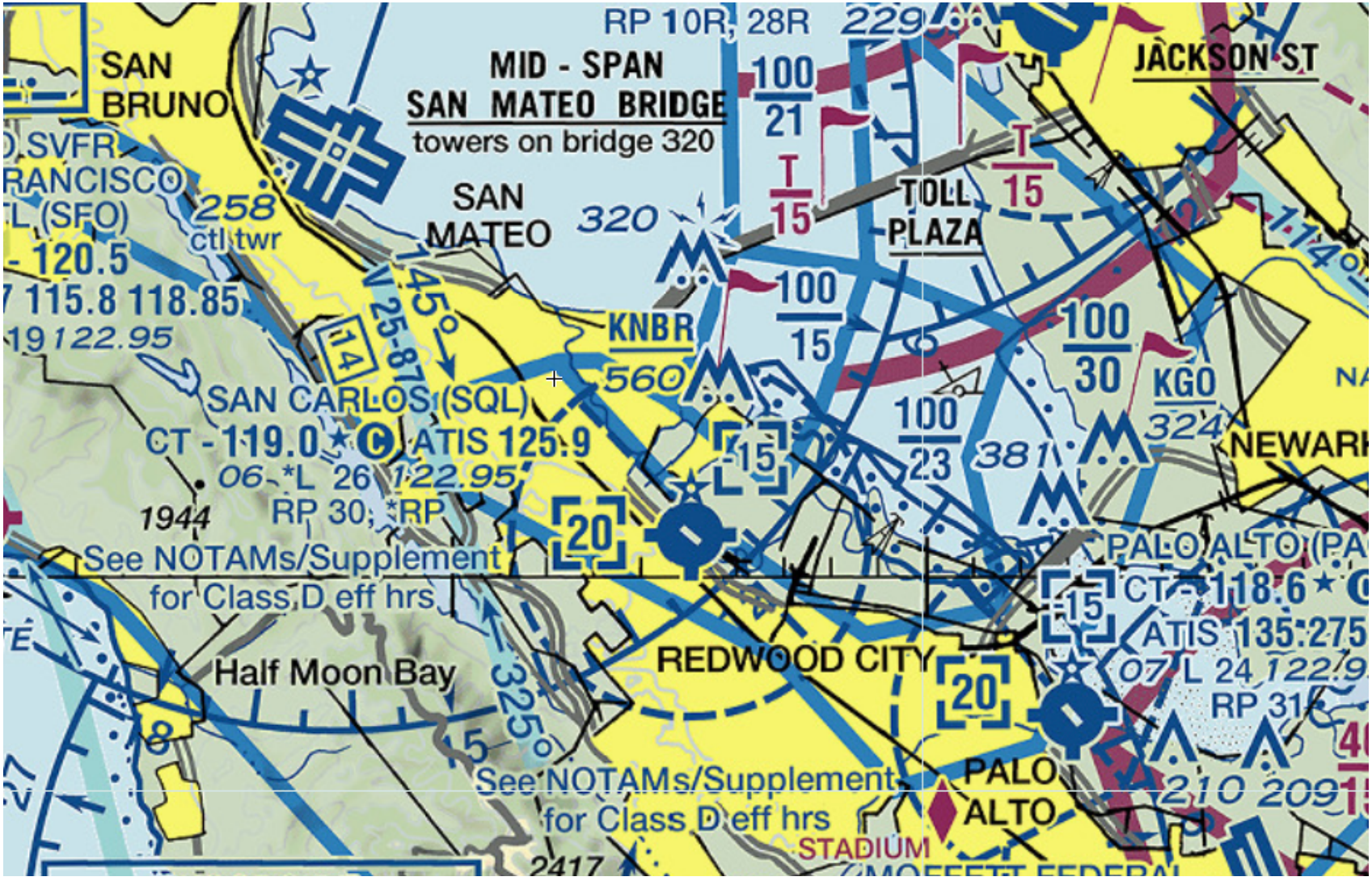
C The pilot must secure prior approval from ATC before takeoff from the satellite airport.

15) What is the upper limit of Class D airspace?

A $18,500$ feet.

B The base of Class A airspace.

C Usually $2,500$ feet.


SAN
BRUNO
SVFR
RANCISCO
L (SFO)
258
ctl twr
120.5
115.8 118.85
19 122.95
MID - SPAN
SAN MATEO BRIDGE
towers on bridge 320
RP 10R, 28R
229
100
21
T
15
SAN
MATEO
320
TOLL
PLAZA
JACKSON ST
145°
V 25-87
14
KNBR
560
100
15
100
30
KGO
324
NEWARK
SAN CARLOS (SQL)
CT - 119.0
ATIS 125.9
06 *L 26 122.95
RP 30, *RP
1944
See NOTAMs/Supplement
for Class D eff hrs
20
100
23
381
PALO ALTO (PA
CT - 118.6
ATIS 135.275
07 L 24 122.9
RP 31
Half Moon Bay
REDWOOD CITY
325°
See NOTAMs/Supplement
for Class D eff hrs
PALO
ALTO
STADIUM
210 209
2417

16) What are the horizontal limits of Class D airspace?

A 5nm from the airport boundary.

B As indicated with blue dashed lines.

C As indicated with magenta dashed lines.

17) Class D airspace is automatically in effect when

A its associated control tower is in operation.

B the weather is below VFR minimums.

C radar service is available.

19) Unless otherwise specified, Federal airways extend from

A 1,200 feet above the surface upward to 14,500 feet MSL and are 16 nm wide.

B 1,200 feet above the surface upward to 18,000 feet MSL and are 8nm wide.

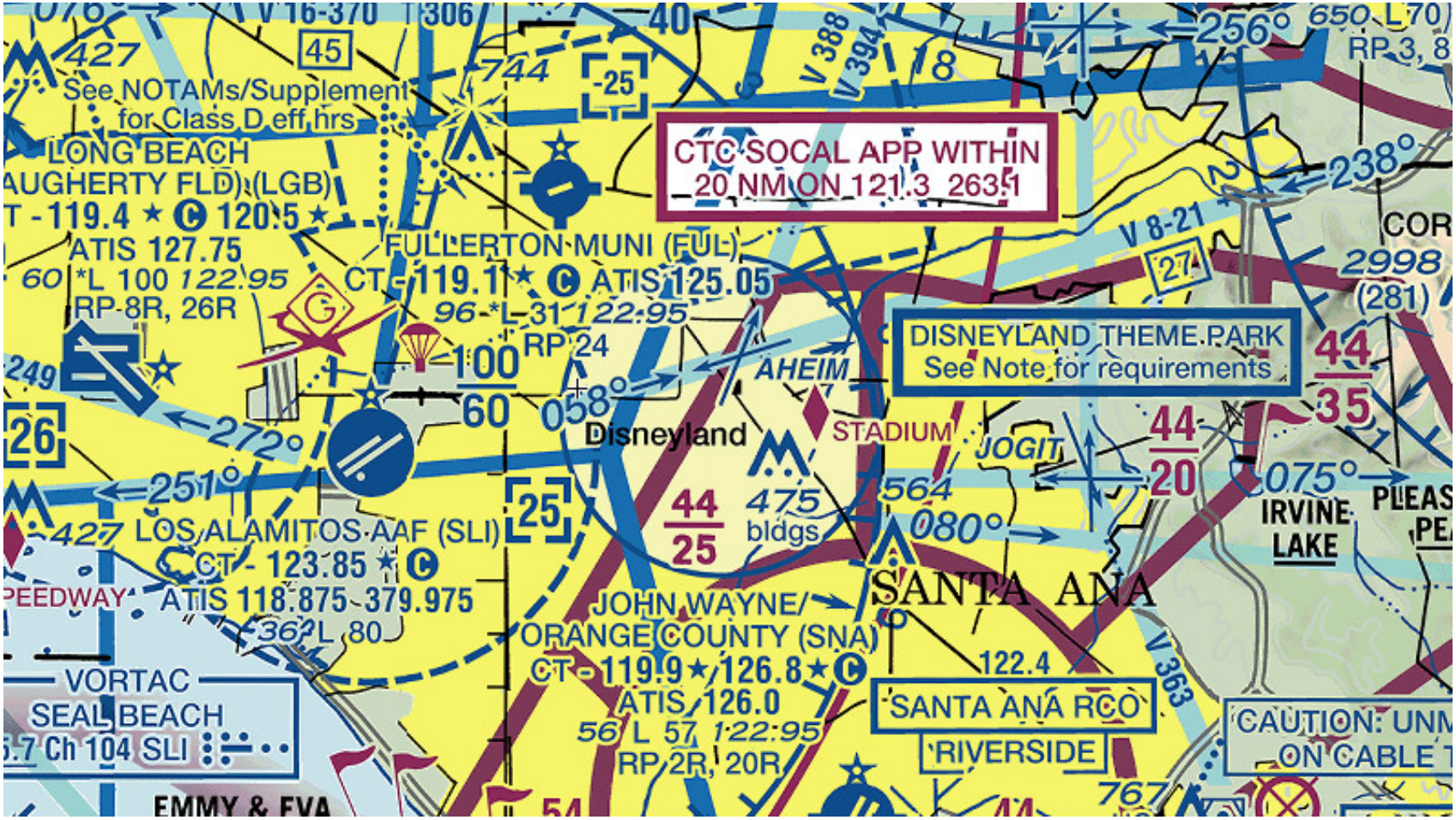
C the surface upward to 18,000 feet MSL and are 4nm wide.

20) What type of airspace is associated with VOR Federal airways?

A Class B, C, D, or E airspace.

B Class E airspace.

C Class D airspace.


See NOTAMs/Supplement for Class D eff hrs
LONG BEACH
AUGHERTY FLD) (LGB)
T -119.4 ★ C 120.5 ★
ATIS 127.75
RP-8R, 26R
CTC SOCAL APP WITHIN 20 NM ON 121.3 263.1
FULLERTON MUNI (FUL)
CT -119.1 ★ C ATIS 125.05
96-*L-31 122:95
RP 24
DISNEYLAND THEME PARK
See Note for requirements
Disneyland
AHEIM
STADIUM
JOGIT
475 bldgs
LOS ALAMITOS AAF (SLI)
CT - 123.85 ★ C
ATIS 118.875-379.975
JOHN WAYNE/ ORANGE COUNTY (SNA)
CT - 119.9 ★ 126.8 ★ C
ATIS 126.0
56 L 57 122:95
RP 2R, 20R
SANTA ANA
SANTA ANA RCO
122.4
RIVERSIDE
IRVINE LAKE
VORTAC
SEAL BEACH
Ch 104 SLI
CAUTION: UNM
ON CABLE
EMMY & EVA

21) Class E airspace in the conterminous United States extends to, but not including

A the base of Class B airspace.

B 3,000 feet MSL.

C 18,000 feet MSL.

22) What is the minimum weather conditions required for airplanes operating under Special VFR in Class B, C, D, or E airspace?

A 1sm flight visibility.

B 1sm flight visibility and 1,000 ft. ceiling.

C 3sm flight visibility and 1,000 ft. ceiling.

24) No person may operate an airplane within Class B, C, D, or E airspace associated with an airport at night under special VFR unless

A the flight can be conducted 500 feet below the clouds.

B the airplane is equipped for instrument flight.

C the flight visibility is at least 3 sm.

26) In which type of airspace is VFR flight prohibited?

A Class B.

B Class D.

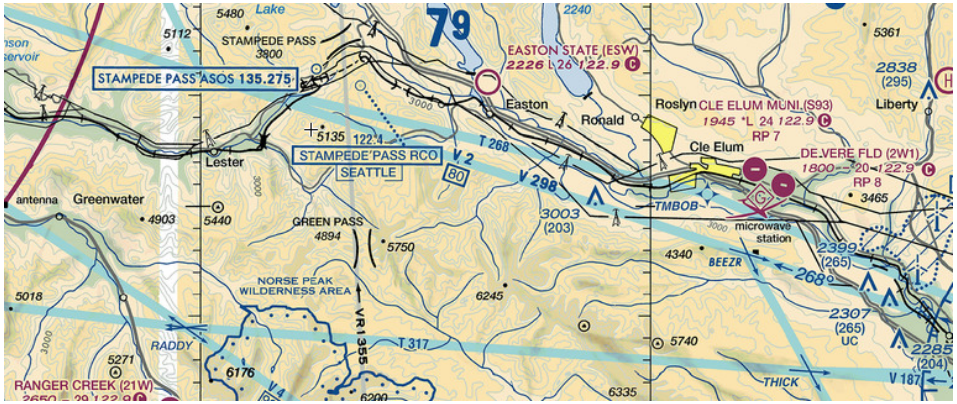
C Class A.

28) What procedure is recommended when climbing or descending VFR on an airway?

A Offset 4 miles or more from the centerline of the airway before changing altitude.

B Advise the nearest FSS of the desired altitude change.

C Execute gentle banks, left and right for continuous visual scanning of the airspace.



32) Just west of Kachess Lake, your course line crosses VR-1355. From this route number, you determine that

A military airplanes will be flying VFR more than 1,500' AGL.

B military airplanes will be flying IFR less than 1,500' AGL.

C military airplanes will be flying VFR less than 1,500' AGL.