Teaching SFAR 93

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When to Teach SFAR 93

- Student Pilots
- Flight Reviews
- Area Checkouts

Student Pilots

- Based at an airport within the special rules area
- Soloing to an airport within the special rules area
- Cross country flights to and through the special rules area

Student Pilots (cont.)

- Include SFAR 93 in pre-solo written test questions
- Use endorsements to control students
- Carefully review pre-flight planning for solo cross-country flights

Flight Reviews

- Review of FAR 91 general operating rules required
- Pilots should know the rules that apply to their operations
- Pilots should know their limitations and where to get the answers if their operations change

Area Checkouts

- Tailor training to the operations planned
- In any situation, an overview is essential to establish limits of the knowledge “envelope”

What Pilots Need to Know

- Lateral and vertical limits of the special rules airspace
- Operating altitudes
- Reporting points
- Routes
- Communications procedures
- Equipment requirements

Sources of Information

- Terminal chart (NOT Sectional chart)
- Anchorage Terminal Area Pilot Bulletin
- Alaska Supplement

Lateral Limits

- Not in most GPS databases
- Textual description (SFAR 93.55)
- Diagram in Pilot Bulletin
- Terminal chart

The Anchorage, Alaska, Terminal Area is subdivided as follows:

(a) International segment. That area from the surface to and including 4,100 feet MSL, within a 5.2-mile radius of the Anchorage International ATCT; excluding that airspace east of the 350° bearing from the Anchorage International ATCT and north of the 090° bearing from the Anchorage International ATCT and east of a line bearing 180° and 360° from the intersection of the new Seward Highway and International Airport Road and the airspace extending upward from the surface to but not including 600 feet MSL, south of latitude 61° 08' 28"N.

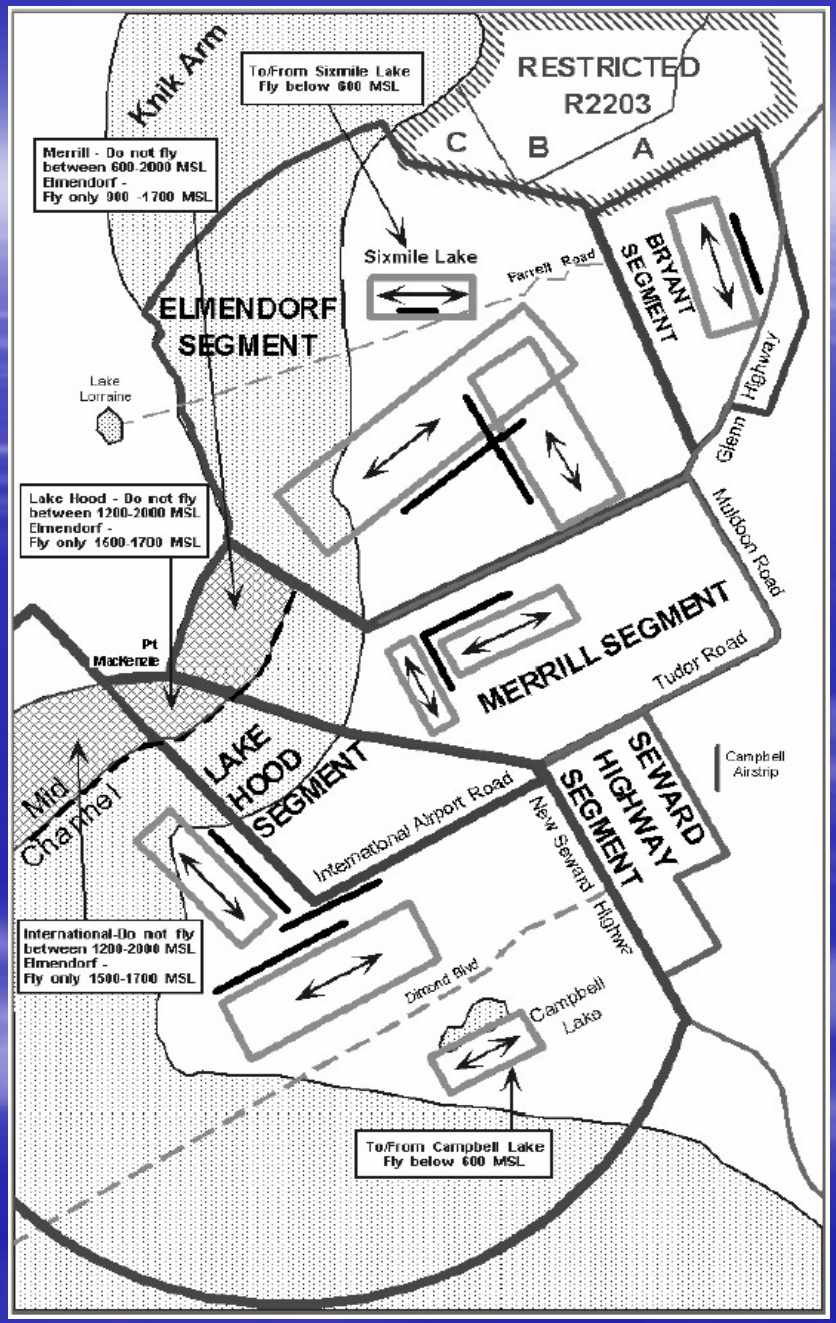
(b) Merrill segment. That area from the surface to and including 2,500 feet MSL, within a line beginning at Point Noname; thence direct to the mouth of Ship Creek; thence direct to the intersection of the Glenn Highway and Muldoon Road; thence south along Muldoon Road to Tudor Road; thence west along Tudor Road to the new Seward Highway; thence direct to West Anchorage High School; thence direct to Point MacKenzie; thence via the north bank of Knik Arm to the point of beginning.

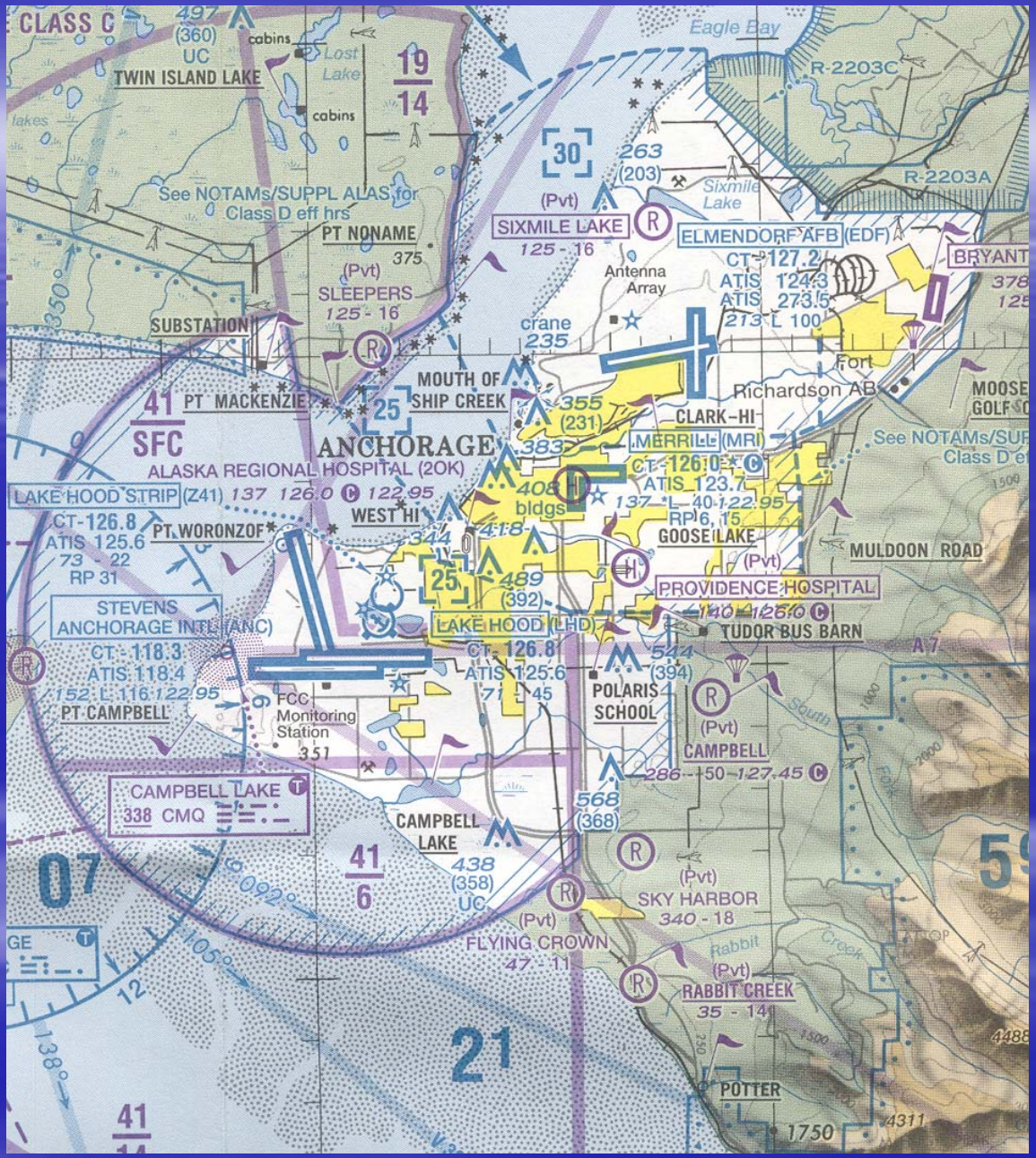
(c) Lake Hood segment. That area from the surface to and including 2,500 feet MSL, within a line beginning at Point MacKenzie; thence direct to West Anchorage High School; thence direct to the intersection of Tudor Road and the new Seward Highway; thence south along the new Seward Highway to the 090° bearing from the Anchorage International ATCT; thence west direct to the Anchorage International ATCT; thence north along the 350° bearing from the Anchorage International ATCT to the north bank of Knik arm; thence via the north bank of Knik Arm to the point of beginning.

(d) Elmendorf segment. That area from the surface to and including 3,000 feet MSL, within a line beginning at Point Noname; thence via the north bank of Knik Arm to the intersection of the 4.7-mile radius of Elmendorf AFB; thence clockwise along the 4.7-mile radius of Elmendorf AFB to longitude 149° 46' 44"W.; thence south along longitude 149° 46' 44"W. to latitude 61° 19' 10"N.; thence to latitude 61° 17' 58"N., longitude 149° 44' 08"W.; thence to latitude 61° 17' 30"N., longitude 149° 43' 08"W.; thence south along longitude 149° 43' 08"W. to the Glenn Highway; thence south and west along the Glenn Highway to Muldoon Road; thence direct to the mouth of Ship Creek; thence direct to the point of beginning.

(e) Bryant segment. That area from the surface to and including 2,000 feet MSL, within a line beginning at latitude 61° 17' 13"N., longitude 149° 43' 35"W.; thence west along latitude 61° 17' 13"N., to longitude 149° 43' 08"W.; thence south along longitude 149° 43' 08"W., to the Glenn Highway; thence north and east along the Glenn Highway to Ski Bowl Road; thence southeast along the Ski Bowl Road to a point one-half mile south of the Glenn Highway; thence north and east one-half mile south of and parallel to the Glenn Highway to its intersection with a line one-half mile east of and parallel to the Bryant Airport Runway 16/34 extended centerline; thence northeast along a line one-half mile east of and parallel to Bryant Airport runway 16/34 extended centerline to the point of beginning.

(f) Seward Highway segment. That area from the surface to and including 4,100 feet MSL, within a line beginning at the intersection of a line bearing 180° from the intersection of the new Seward Highway and International Airport Road, and O'Malley Road; thence east along O'Malley Road to its intersection with Lake Otis Park Way, latitude 61° 40' 23"N., long 149° 50' 03"W.; thence northerly along Lake Otis Park Way to its intersection with Abbott Road, latitude 61° 08' 14"N., longitude 149° 50' 03"W.; thence east along Abbott Road to its intersection with Abbott Loop Road, latitude 61° 08' 14"N., longitude 149° 48' 16"W.; thence due north to intersect with Tudor Road, latitude 61° 10' 51"N., longitude 149° 48' 16"W.; thence west along Tudor Road to its intersection with the new Seward Highway, latitude 61° 10' 51"N., longitude 149° 51' 38"W.; thence south along the new Seward Highway to its intersection with a line bearing 180° and 360° from the intersection of the new Seward Highway and International Airport Road; thence south to the point of beginning.



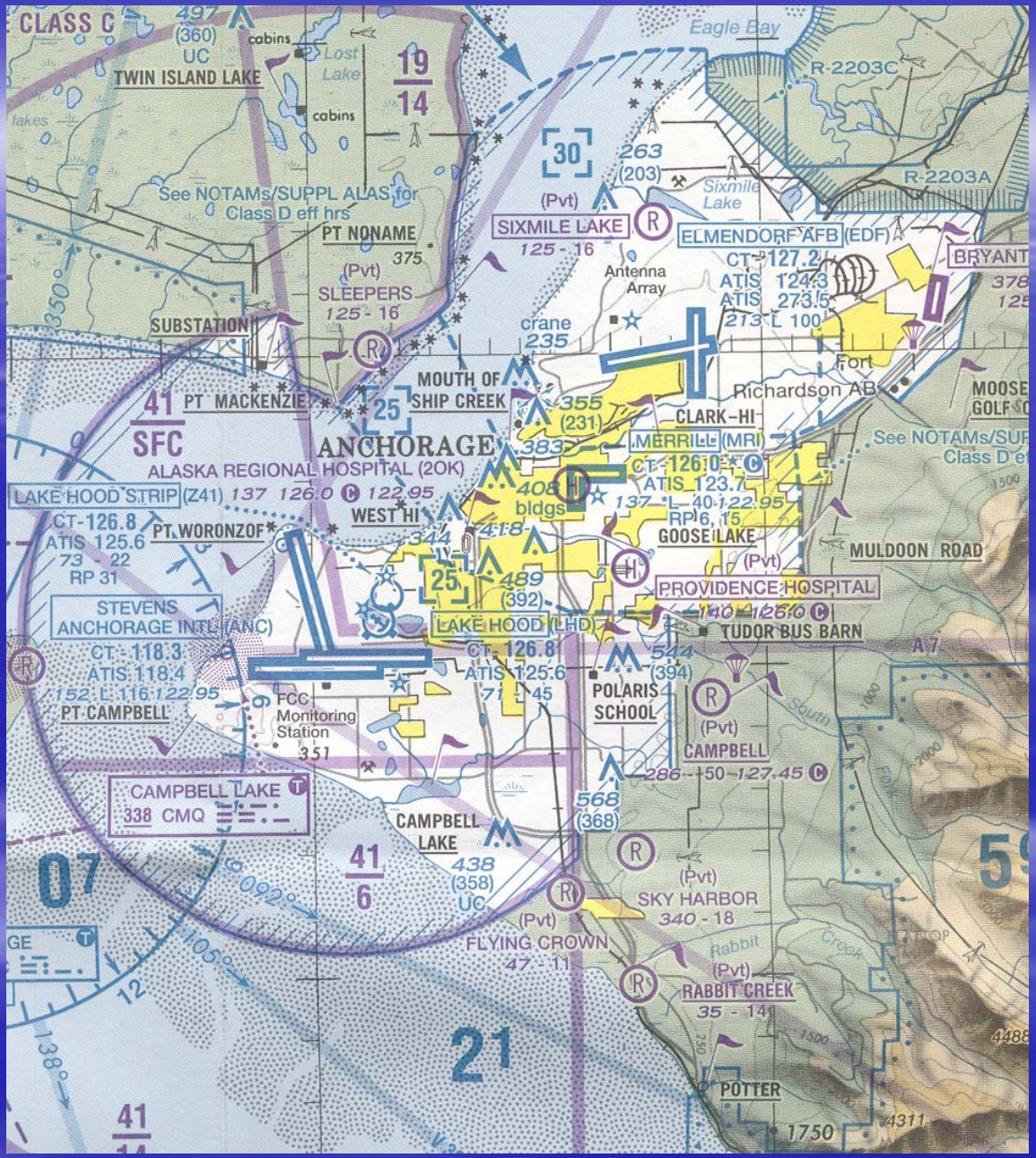


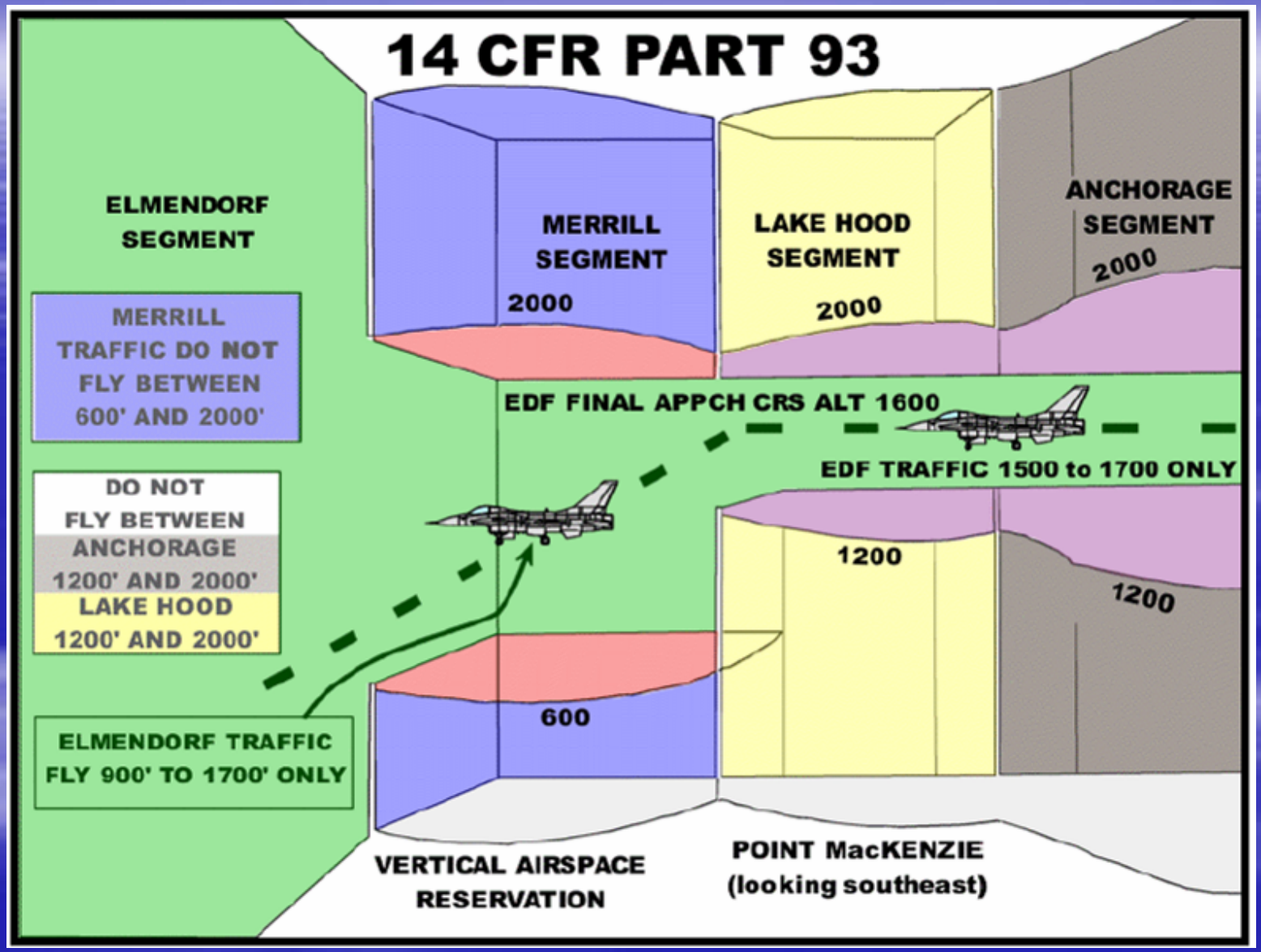
Vertical Limits

- Textual description
- The vertical limits of some, but not all, segments are on the terminal chart
- Diagram in Pilot Bulletin

Vertical Limits of Segments

- International – 4,100 feet MSL
- Merrill – 2,500 feet MSL
- Lake Hood – 2,500 feet MSL
- Elmendorf – 3,000 feet MSL
- Bryant – 2,000 feet MSL
- Seward – 4,100 feet MSL





Operating Altitudes

Aircraft Operating at greater than 105 knots

- International – 1,600 ft.
- Lake Hood – 600 ft.
- Merrill – 1,200 ft.
- Elmendorf – 1,200 ft.
- Bryant – 1,000 ft.

Aircraft Operating at less than 105 knots

- International – 900 ft.
- Lake Hood – 600 ft.
- Merrill – 900 ft.
- Elmendorf – 800 ft.
- Bryant – 1,000 ft.

Knik Arm Crossings

- Merrill, International, Lake Hood and Elmendorf have interlocked but separate rules
- Buffer is as little as 300 feet, and ATC will not provide standard wake turbulence separation

Reporting Points

- Some GPS coordinates in Pilot Bulletin
- Terminal chart
- Sectional chart does not depict most reporting points
- “Local knowledge”

GPS COORDINATES FOR VFR REPORTING POINTS

Note: This is a partial list of flagged and un-flagged VFR reporting points most commonly used in the Anchorage area. **Most of these coordinates are approximate and should be used for VFR reference only, not for navigation.**

Barabara Lake	N60 51.0	W150 14.0
Big Lake	N61 32.0	W149 55.0
Birchwood Airport	N61 25.0	W149 30.5
Boat Hull	N61 14.3	W150 00.0
Eagle River Bridge	N61 18.5	W149 34.0
Bryant AHP	N61 15.8	W149 39.3
Campbell Airstrip	N61 09.5	W149 39.3
Chickaloon Flats	N60 55.0	W150 03.0
Figure 8 Lake	N61 18.6	W150 27.0
Fire Island	N61 09.0	W150 14.0
Flat Horn Lake	N61 28.0	W150 25.5
Flying Crown Airport	N61 06.4	W149 51.8
Goose Bay Airport	N61 23.7	W149 50.7
Horseshoe Lake	N61 21.5	W150 09.0
Moose Point	N60 57.5	W150 41.0
Mouth Big Susitna R.	N61 15.0	W150 35.0
Mouth Little Susitna R.	N61 15.4	W150 17.8
Muldoon Rd. Overpass	N61 13.7	W149 42.3
Pt. Mackenzie	N61 14.3	W149 59.0
Pt. Noname	N61 16.0	W149 55.0
Pt. Possession	N61 02.3	W150 22.5
Polaris School	N61 09.8	W149 50.8
Potter	N61 03.1	W149 47.5
Power Line Bend	N61 18.0	W150 62.0
1nm North	N61 19.0	W150 62.0
Redshirt Lake	N61 37.0	W150 10.0
Substation	N61 14.8	W150 01.8
Twin Island Lake	N61 19.0	W150 00.8

Other VFR reporting points not listed here may be found on the Anchorage Sectional and VFR Terminal Area charts and this publication.

ANCHORAGE AREA AWOS AND ASOS NUMBERS

Anchorage	ASOS	--	248-2033
Birchwood	AWOS	135.55	688-0826
Lake Hood	ASOS	--	245-1618
Merrill Field	ASOS	--	272-0542
Palmer	ASOS	134.75	746-6675
Seward	ASOS	135.2	224-2440
Wasilla	AWOS	135.25	373-3801

Routes

- Departures
- Arrivals
- Overflights/transitions

Communications Procedures

- Frequencies
- Phraseology

Frequencies

- ATIS
- Initial ATC frequency (clearance delivery, ground, approach, or tower)
- Anticipate frequency changes
- Monitoring frequencies

Frequencies (cont.)

- Alaska Supplement
- Terminal chart
- Pilot Bulletin
- Beware of “split” sectors
  - Anchorage Approach (by location and altitude)
  - Merrill Tower

FREQUENCIES

APPROACH CONTROL	
NORTH	119.1
SOUTH	126.4

ANCHORAGE INTERNATIONAL	
ATIS	118.4
CLEARANCE DLVRY	119.4/128.65
GROUND	121.9
TOWER	118.3

ELMENDORF AFB	
ATIS	124.3
CLEARANCE DLVRY	121.8
GROUND	121.8
TOWER	127.2
RFC	134.9

LAKE HOOD	
ATIS/AWOS	125.6
TOWER	126.8

MERRILL	
ATIS	123.7
GROUND	121.7
TOWER	126.0/127.55

KENAI AFSS	
ANCHORAGE	122.2/122.3/122.55* (*FLIGHT PLANS)
HOMER	122.2
KENAI	122.2/122.65
NIKISHKA	122.0
PALMER	122.4
TALKEETNA	122.2

NAVAIDS	
ANC VOR	114.3
BGQ VOR	112.5
ENA VOR	117.6
HOM VOR	114.6
TKA VOR	116.2
ACE NDB	277
CMQ NDB	338
IWW NDB	379
PEE NDB	305
SKW NDB	269

CTAF	
BIG LAKE	122.8
BIRCHWOOD	123.0
CAMPBELL L.	122.9
GIRDWOOD	122.9
GOOSE BAY	122.9
HOPE	122.9
MT.MCKINLEY	122.7
PALMER	123.6
WASILLA	122.8
AIR TO AIR	122.75
KNIK GLACIER	122.7

EMERGENCY ***121.5***

Anchorage Approach Sector Frequencies

- 119.1 (250° to 330° 1,500 feet MSL and below) (331° to 045° 2,500 feet and below)
- 118.6 (250° to 330° above 1,500 feet MSL) (331° to 045° above 2,500 feet MSL)
- 126.4 (046° to 205°)
- 123.8 (206° to 249°)
- 134.9 Elmendorf Final Controller

Phraseology

- Listen
- Think
- Speak concisely - Professionalism
- Pet peeve – “Anchorage Approach, This is Cessna 12345, over”

Equipment Requirements

- Two-way radio
- NORDO procedures
- What about a transponder?

Conclusion

- Knowledge and planning are key to operating in high density airspace
- Pilots must know and respect their limitations
- Ask for clarification or assistance

Where can I get … ?

- A copy of this presentation:

  http://goeringlaw.com/Aviation Resources.html
- Anchorage Terminal Area Pilot Bulletin:

  http://www.alaska.faa.gov/ata/