

KSEA

Seattle-Tacoma Intl

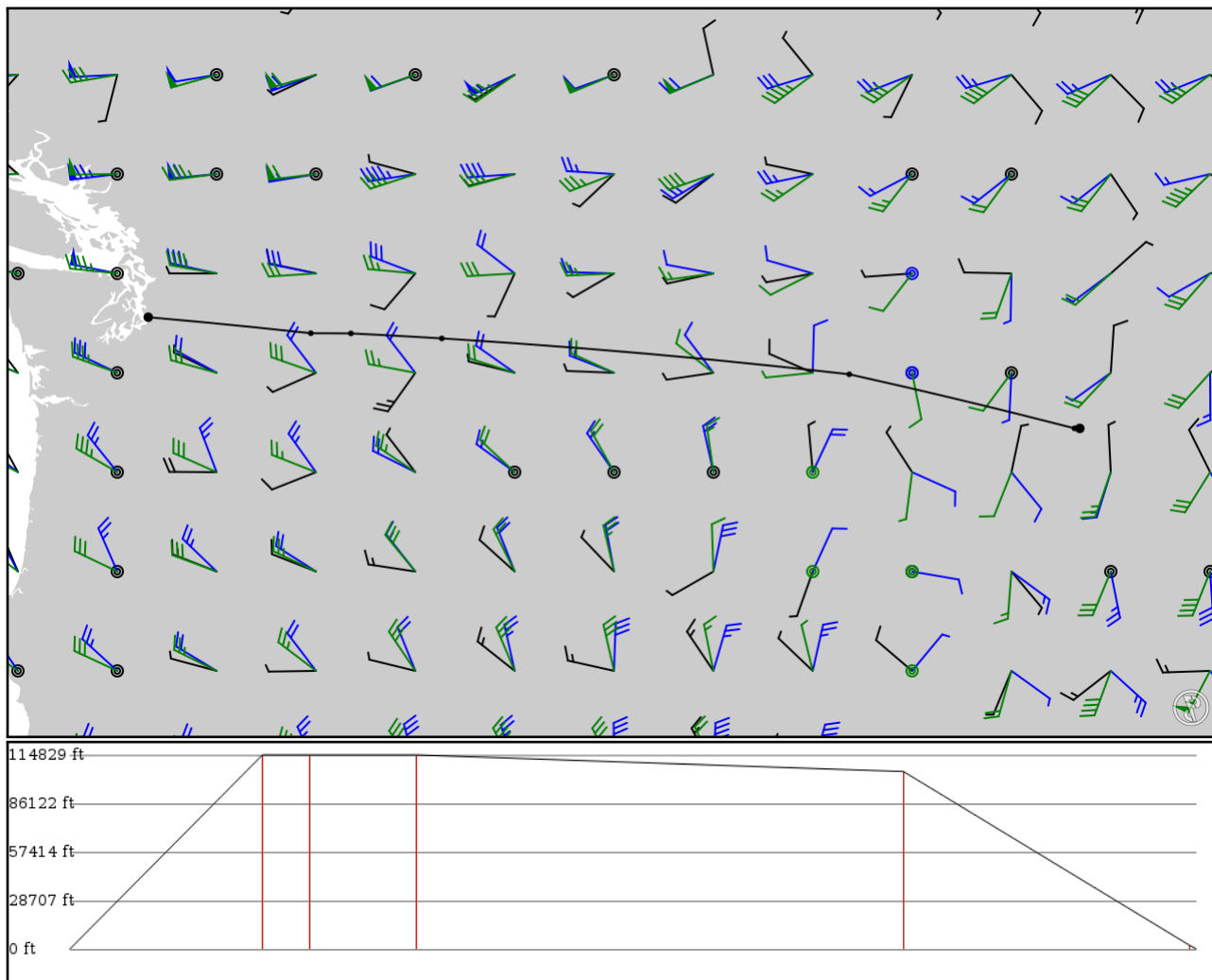
KBIL

Billings Logan Intl

2024/05/04 0357Z

KSEA QUINT **V357** MWH **J34** HLN **J136** BIL KBIL

576.86 nm / 1068.34 km



Notes

Basic altitude profile:

- Ascent Rate: 2500ft/min
- Ascent Speed: 250kts
- Cruise Altitude: 35000ft
- Cruise Speed: 420kts
- Descent Rate: 1500ft/min
- Descent Speed: 250kts

Options:

- Use NATs: yes
- Use PACOTS: yes
- Use low airways: yes
- Use high airways: yes

Route

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
KSEA APT	-	47.45020 -122.31200	0 ft 0 m	-	Seattle-Tacoma Intl
QUINT FIX	-	47.21400 -119.90900	35,000 ft 10,668 m	98	-
MWH VOR	V357 AWY-LO	47.21090 -119.31700	35,000 ft 10,668 m	24	MOSES LAKE
ODESS FIX	J34 AWY-HI	47.13690 -117.97400	35,000 ft 10,668 m	55	-
HLN VOR	J34 AWY-HI	46.60680 -111.95300	32,000 ft 9,754 m	249	HELENA
BIL VOR	J136 AWY-HI	45.80860 -108.62500	700 ft 213 m	146	BILLINGS
KBIL APT	-	45.80770 -108.54600	0 ft 0 m	3	Billings Logan Intl

KSEA

Region: UNITED STATES
Timezone: AMERICA/LOS_ANGELES
Runways: 3

Elevation: 432 ft / 132 m
Location: 47.450200 -122.312000
Magnetic Var: 14.777 E

METAR

KSEA 040253Z 26012KT 10SM OVC090 13/06 A2973 RMK A02 SLP075 T01330056 56010

TAF

KSEA 040257Z 0403/0506 26010KT P6SM OVC090 FM040800 36003KT P6SM OVC050 FM041500 35007KT P6SM -SHRA OVC035 FM042000

Frequencies

REC - 118.00 MHz - SEATTLE ATIS
GND - 121.70 MHz - SEATTLE GROUND
TWR - 120.95 MHz - SEATTLE TOWER
DEP - 120.10 MHz - SEATTLE DEPARTURE
CLD - 128.00 MHz - SEATTLE CLEARANCE
TWR - 119.90 MHz - SEATTLE TOWER
APP - 133.65 MHz - SEATTLE APPROACH

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
16L	151 ft	11,904 ft	180.35	CONCRETE	0 ft	400 ft
	46 m	3,628 m	165.57		0 m	122 m
34R	151 ft	11,904 ft	0.35	CONCRETE	0 ft	400 ft
	46 m	3,628 m	345.57		0 m	122 m
16C	151 ft	9,428 ft	180.34	CONCRETE	0 ft	400 ft
	46 m	2,874 m	165.57		0 m	122 m
34C	151 ft	9,428 ft	0.34	CONCRETE	0 ft	397 ft
	46 m	2,874 m	345.57		0 m	121 m
16R	151 ft	8,502 ft	180.34	CONCRETE	0 ft	200 ft
	46 m	2,591 m	165.56		0 m	61 m
34L	151 ft	8,502 ft	0.34	CONCRETE	0 ft	197 ft
	46 m	2,591 m	345.56		0 m	60 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
16C	DME	ISZI	111.70 MHz	18 nm	-	-	470 ft
				33 km	-		470 m
16L	DME	ISNQ	110.30 MHz	18 nm	-	-	369 ft
				33 km	-		369 m
16R	DME	ICJL	110.75 MHz	18 nm	-	-	410 ft
				33 km	-		410 m
34C	DME	ITUC	111.70 MHz	18 nm	-	-	470 ft
				33 km	-		470 m
34L	DME	IBEJ	110.75 MHz	18 nm	-	-	410 ft
				33 km	-		410 m
34R	DME	ISEA	110.30 MHz	18 nm	-	-	469 ft
				33 km	-		469 m
16C	LOC-ILS	ISZI	111.70 MHz	18 nm	180.34	-	355 ft
				33 km	165.56		355 m
16L	LOC-ILS	ISNQ	110.30 MHz	18 nm	180.34	-	338 ft
				33 km	165.57		338 m
16R	LOC-ILS	ICJL	110.75 MHz	18 nm	180.34	-	410 ft
				33 km	165.56		410 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
34C	LOC-ILS	ITUC	111.70 MHz	18 nm	0.34	-	422 ft
				33 km	345.56		422 m
34L	LOC-ILS	IBEJ	110.75 MHz	18 nm	0.34	-	433 ft
				33 km	345.56		433 m
34R	LOC-ILS	ISEA	110.30 MHz	18 nm	0.34	-	428 ft
				33 km	345.57		428 m
16C	GS	ISZI	111.70 MHz	10 nm	180.67	3.00	418 ft
				19 km	165.90		418 m
16L	GS	ISNQ	110.30 MHz	10 nm	180.69	3.00	425 ft
				19 km	165.91		425 m
16R	GS	ICJL	110.75 MHz	10 nm	180.67	3.00	410 ft
				19 km	165.90		410 m
34C	GS	ITUC	111.70 MHz	10 nm	0.67	3.00	367 ft
				19 km	345.90		367 m
34L	GS	IBEJ	110.75 MHz	10 nm	0.67	3.00	360 ft
				19 km	345.90		360 m
34R	GS	ISEA	110.30 MHz	10 nm	0.69	2.75	355 ft
				19 km	345.91		355 m

KBIL

Region: UNITED STATES
Timezone: AMERICA/DENVER
Runways: 3

Elevation: 3,662 ft / 1,116 m
Location: 45.807700 -108.546000
Magnetic Var: 9.958 E

METAR

KBIL 040253Z 22004KT 10SM SCT085 07/M04 A3010 RMK AO2 SLP210 SHRASN DSNT W-NW T00671039 53002

TAF

TAF KBIL 032320Z 0400/0424 34010KT P6SM BKN060 FM040200 VRB06KT P6SM FEW200 FM041400 10011KT P6SM SCT100

Frequencies

COM - 122.95 MHz - BILLINGS UNICOM	REC - 126.30 MHz - ATIS
GND - 121.90 MHz - BILLINGS GROUND	TWR - 127.20 MHz - BILLINGS TOWER (1)
TWR - 257.80 MHz - BILLINGS TOWER (2)	DEP - 119.20 MHz - BILLINGS DEPARTURE (EAST)
APP - 119.20 MHz - BILLINGS APPROACH (EAST)	APP - 120.50 MHz - BILLINGS APPROACH (WEST)
DEP - 120.50 MHz - BILLINGS DEPARTURE (WEST)	

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
10L	150 ft	10,493 ft	111.77	ASPHALT	0 ft	200 ft
	46 m	3,198 m	101.82		0 m	61 m
28R	150 ft	10,493 ft	291.80	ASPHALT	0 ft	200 ft
	46 m	3,198 m	281.84		0 m	61 m
07	75 ft	5,488 ft	83.97	ASPHALT	0 ft	0 ft
	23 m	1,673 m	74.01		0 m	0 m
25	75 ft	5,488 ft	263.99	ASPHALT	0 ft	0 ft
	23 m	1,673 m	254.03		0 m	0 m
10R	75 ft	3,793 ft	111.70	ASPHALT	0 ft	0 ft
	23 m	1,156 m	101.74		0 m	0 m
28L	75 ft	3,793 ft	291.71	ASPHALT	0 ft	0 ft
	23 m	1,156 m	281.75		0 m	0 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
28R	DME	IBMO	111.50 MHz	18 nm	-	-	3,649 ft
				33 km	-		3,649 m
10L	LOC-ILS	IBIL	110.30 MHz	18 nm	111.80	-	3,492 ft
				33 km	101.84		3,492 m
28R	LOC-ILS	IBMO	111.50 MHz	18 nm	291.77	-	3,584 ft
				33 km	281.81		3,584 m
10L	GS	IBIL	110.30 MHz	10 nm	112.57	3.00	3,571 ft
				19 km	102.61		3,571 m
28R	GS	IBMO	111.50 MHz	10 nm	292.57	3.00	3,488 ft
				19 km	282.61		3,488 m