KMSP - KSEA

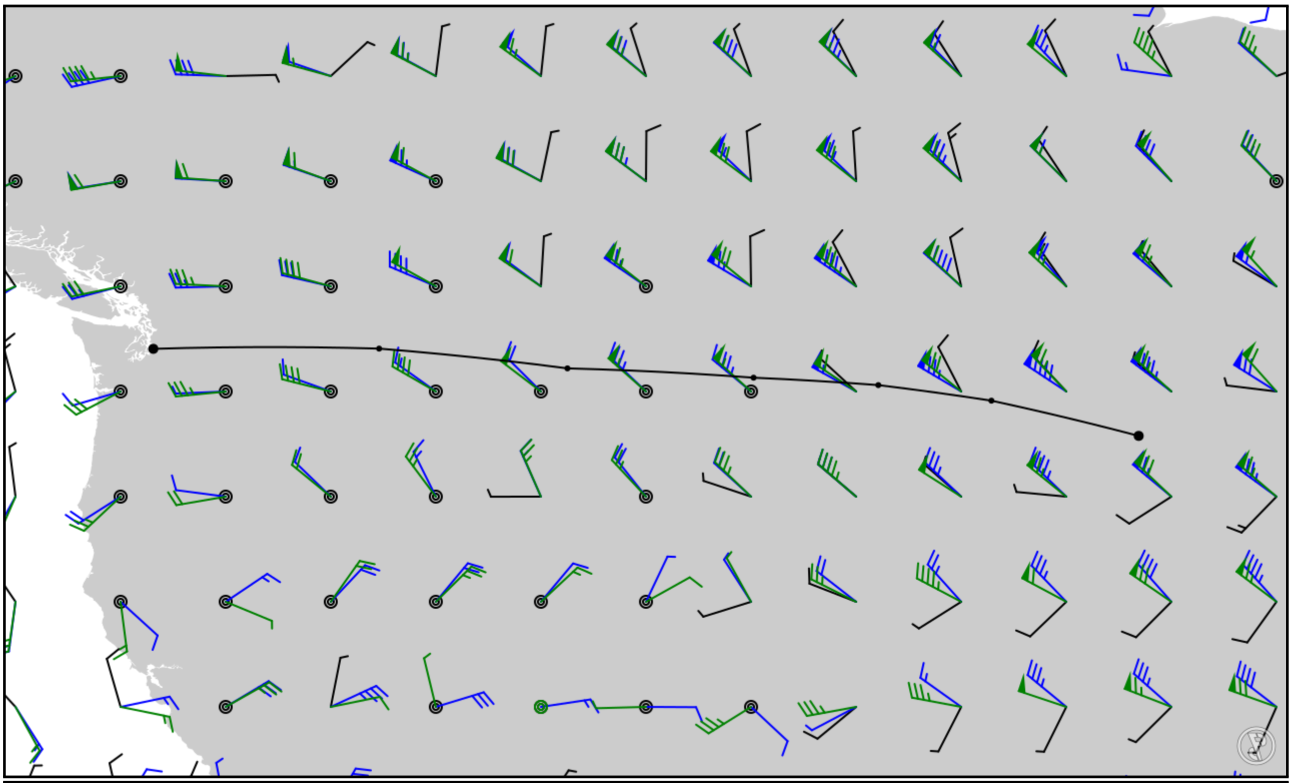
Minneapolis-St Paul International Airport

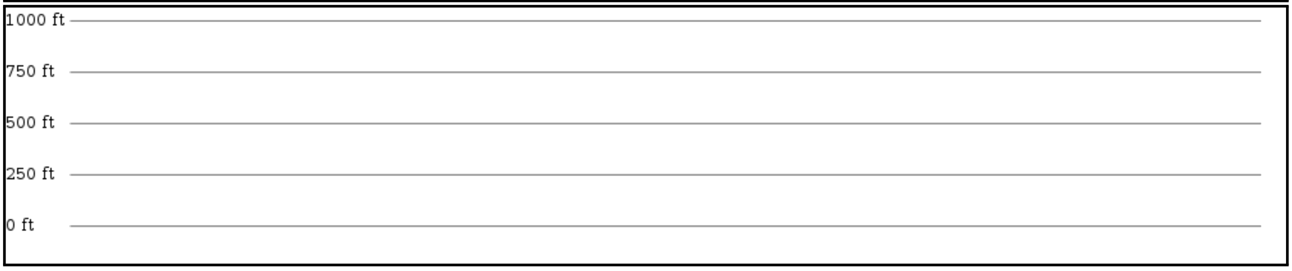
Seattle-Tacoma Intl

2024/03/19 1126Z

KMSP SMERF **Q146** ZERZO MLP KSEA

1215.09 nm / 2250.34 km





Notes

Requested: KMSP SMERF7 SMERF Q146 ZERZO MLP GLASR1 KSEA
Unmatched points: SMERF7 GLASR1

Route

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
KMSP APT	- -	44.88190 -93.22200	0 ft 0 m	-	Minneapolis-St Paul International Airport
SMERF FIX	- -	45.92110 -97.56900	0 ft 0 m	193	-
TIMMR FIX	Q146 AWY-HI	46.38040 -100.90800	0 ft 0 m	141	-
KIXCO FIX	Q146 AWY-HI	46.59880 -104.59100	0 ft 0 m	152	-
ZERZO FIX	Q146 AWY-HI	46.87390 -110.08600	0 ft 0 m	226	-
MLP VOR	- -	47.45690 -115.64600	0 ft 0 m	229	MULLAN PASS
KSEA APT	- -	47.45020 -122.31200	0 ft 0 m	270	Seattle-Tacoma Intl

KMSP

Region: UNITED STATES
Timezone: AMERICA/CHICAGO
Runways: 4
Elevation: 841 ft / 256 m
Location: 44.881900 -93.222000
Magnetic Var: 0.266 W

METAR

KMSP 191053Z 30010KT 10SM SCT250 02/M09 A2965 RMK AO2 SLP049 T00221094

TAF

KMSP 190900Z 1909/2012 26012G20KT P6SM FEW250 FM191100 30015G24KT P6SM SCT150 FM191700 31019G29KT P6SM BKN050 FM1

Frequencies

DEP - 132.97 MHz - MINNEAPOLIS DEPARTURE
DEP - 124.70 MHz - MINNEAPOLIS DEPARTURE
APP - 119.30 MHz - MINNEAPOLIS APPROACH
TWR - 126.70 MHz - MINNEAPOLIS TOWER
TWR - 123.67 MHz - MINNEAPOLIS TOWER
GND - 127.92 MHz - MINNEAPOLIS GROUND
GND - 121.80 MHz - MINNEAPOLIS GROUND
REC - 135.35 MHz - MINNEAPOLIS D-ATIS
CLD - 133.20 MHz - MINNEAPOLIS CLEARANCE DELIVERY
DEP - 125.75 MHz - MINNEAPOLIS DEPARTURE
APP - 126.95 MHz - MINNEAPOLIS APPROACH
APP - 118.72 MHz - MINNEAPOLIS APPROACH
TWR - 123.95 MHz - MINNEAPOLIS TOWER
GND - 133.57 MHz - MINNEAPOLIS GROUND
GND - 121.90 MHz - MINNEAPOLIS GROUND
REC - 120.80 MHz - MINNEAPOLIS D-ATIS
COM - 122.95 MHz - MINNEAPOLIS UNICOM

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
17	150 ft 46 m	8,008 ft 2,441 m	169.56 169.82	CONCRETE	0 ft 0 m	397 ft 121 m
35	150 ft 46 m	8,008 ft 2,441 m	349.56 349.83	CONCRETE	0 ft 0 m	394 ft 120 m
12L	150 ft 46 m	8,190 ft 2,496 m	121.42 121.68	CONCRETE	0 ft 0 m	397 ft 121 m
30R	150 ft 46 m	8,190 ft 2,496 m	301.44 301.70	CONCRETE	203 ft 62 m	394 ft 120 m
12R	200 ft 61 m	9,985 ft 3,043 m	121.42 121.69	CONCRETE	0 ft 0 m	1,194 ft 364 m
30L	200 ft 61 m	9,985 ft 3,043 m	301.44 301.71	CONCRETE	0 ft 0 m	781 ft 238 m
04	150 ft 46 m	11,118 ft 3,389 m	44.90 45.17	CONCRETE	1,660 ft 506 m	0 ft 0 m
22	150 ft 46 m	11,118 ft 3,389 m	224.92 225.19	CONCRETE	0 ft 0 m	410 ft 125 m

Approach Navaids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
12L	DME	IPJL	110.70 MHz	18 nm 33 km	- -	-	813 ft 813 m
12R	DME	IHKZ	110.30 MHz	18 nm 33 km	- -	-	841 ft 841 m
17	DME	ITJZ	110.95 MHz	18 nm 33 km	- -	-	822 ft 822 m
30L	DME	IMSP	110.30 MHz	18 nm 33 km	- -	-	841 ft 841 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
30R	DME	IINN	110.70 MHz	18 nm	-	-	813 ft
				33 km	-		813 m
35	DME	IBMA	110.95 MHz	18 nm	-	-	822 ft
				33 km	-		822 m
12L	LOC-ILS	IPJL	110.70 MHz	18 nm	121.43	-	841 ft
				33 km	121.70		841 m
12R	LOC-ILS	IHKZ	110.30 MHz	18 nm	121.44	-	841 ft
				33 km	121.71		841 m
30L	LOC-ILS	IMSP	110.30 MHz	18 nm	301.44	-	841 ft
				33 km	301.71		841 m
30R	LOC-ILS	IINN	110.70 MHz	18 nm	301.43	-	841 ft
				33 km	301.70		841 m
35	LOC-ILS	IBMA	110.95 MHz	18 nm	349.56	-	841 ft
				33 km	349.83		841 m
04	LOC-LOC	IAPL	109.30 MHz	18 nm	44.92	-	841 ft
				33 km	45.19		841 m
17	LOC-LOC	ITJZ	110.95 MHz	18 nm	169.56	-	841 ft
				33 km	169.83		841 m
22	LOC-LOC	ISIJ	110.50 MHz	18 nm	224.92	-	841 ft
				33 km	225.19		841 m
12L	GS	IPJL	110.70 MHz	10 nm	121.43	3.00	841 ft
				19 km	121.70		841 m
12R	GS	IHKZ	110.30 MHz	10 nm	121.44	3.00	841 ft
				19 km	121.71		841 m
30L	GS	IMSP	110.30 MHz	10 nm	301.44	3.00	841 ft
				19 km	301.71		841 m
30R	GS	IINN	110.70 MHz	10 nm	301.43	3.00	841 ft
				19 km	301.70		841 m
35	GS	IBMA	110.95 MHz	10 nm	349.56	3.00	841 ft
				19 km	349.83		841 m

KSEA

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

Elevation: 432 ft / 132 m
Location: 47.450200 -122.312000
Magnetic Var: 14.795 E

METAR

KSEA 191053Z 36003KT 10SM CLR 08/06 A3006 RMK AO2 SLP184 T00780056

TAF

KSEA 190854Z 1909/2012 01006KT P6SM FEW250 FM191200 35003KT 6SM BCFG SCT004 FM191800 30005KT P6SM FEW250 FM192100

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 46 m	11,904 ft 3,628 m	180.35 165.55	CONCRETE	0 ft 0 m	400 ft 122 m
34R	151 ft 46 m	11,904 ft 3,628 m	0.35 345.55	CONCRETE	0 ft 0 m	400 ft 122 m
16C	151 ft 46 m	9,428 ft 2,874 m	180.34 165.55	CONCRETE	0 ft 0 m	400 ft 122 m
34C	151 ft 46 m	9,428 ft 2,874 m	0.34 345.55	CONCRETE	0 ft 0 m	397 ft 121 m
16R	151 ft 46 m	8,502 ft 2,591 m	180.34 165.54	CONCRETE	0 ft 0 m	200 ft 61 m
34L	151 ft 46 m	8,502 ft 2,591 m	0.34 345.54	CONCRETE	0 ft 0 m	197 ft 60 m

Approach Navaids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
16C	DME	ISZI	111.70 MHz	18 nm 33 km	- -	-	470 ft 470 m
16L	DME	ISNQ	110.30 MHz	18 nm 33 km	- -	-	369 ft 369 m
16R	DME	ICJL	110.75 MHz	18 nm 33 km	- -	-	410 ft 410 m
34C	DME	ITUC	111.70 MHz	18 nm 33 km	- -	-	470 ft 470 m
34L	DME	IBEJ	110.75 MHz	18 nm 33 km	- -	-	410 ft 410 m
34R	DME	ISEA	110.30 MHz	18 nm 33 km	- -	-	469 ft 469 m
16C	LOC-ILS	ISZI	111.70 MHz	18 nm 33 km	180.34 165.54	-	355 ft 355 m
16L	LOC-ILS	ISNQ	110.30 MHz	18 nm 33 km	180.34 165.55	-	338 ft 338 m
16R	LOC-ILS	ICJL	110.75 MHz	18 nm 33 km	180.34 165.54	-	410 ft 410 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
34C	LOC-ILS	ITUC	111.70 MHz	18 nm 33 km	0.34 345.54	-	422 ft 422 m
34L	LOC-ILS	IBEJ	110.75 MHz	18 nm 33 km	0.34 345.54	-	433 ft 433 m
34R	LOC-ILS	ISEA	110.30 MHz	18 nm 33 km	0.34 345.55	-	428 ft 428 m
16C	GS	ISZI	111.70 MHz	10 nm 19 km	180.67 165.88	3.00	418 ft 418 m
16L	GS	ISNQ	110.30 MHz	10 nm 19 km	180.69 165.89	3.00	425 ft 425 m
16R	GS	ICJL	110.75 MHz	10 nm 19 km	180.67 165.88	3.00	410 ft 410 m
34C	GS	ITUC	111.70 MHz	10 nm 19 km	0.67 345.88	3.00	367 ft 367 m
34L	GS	IBEJ	110.75 MHz	10 nm 19 km	0.67 345.88	3.00	360 ft 360 m
34R	GS	ISEA	110.30 MHz	10 nm 19 km	0.69 345.89	2.75	355 ft 355 m