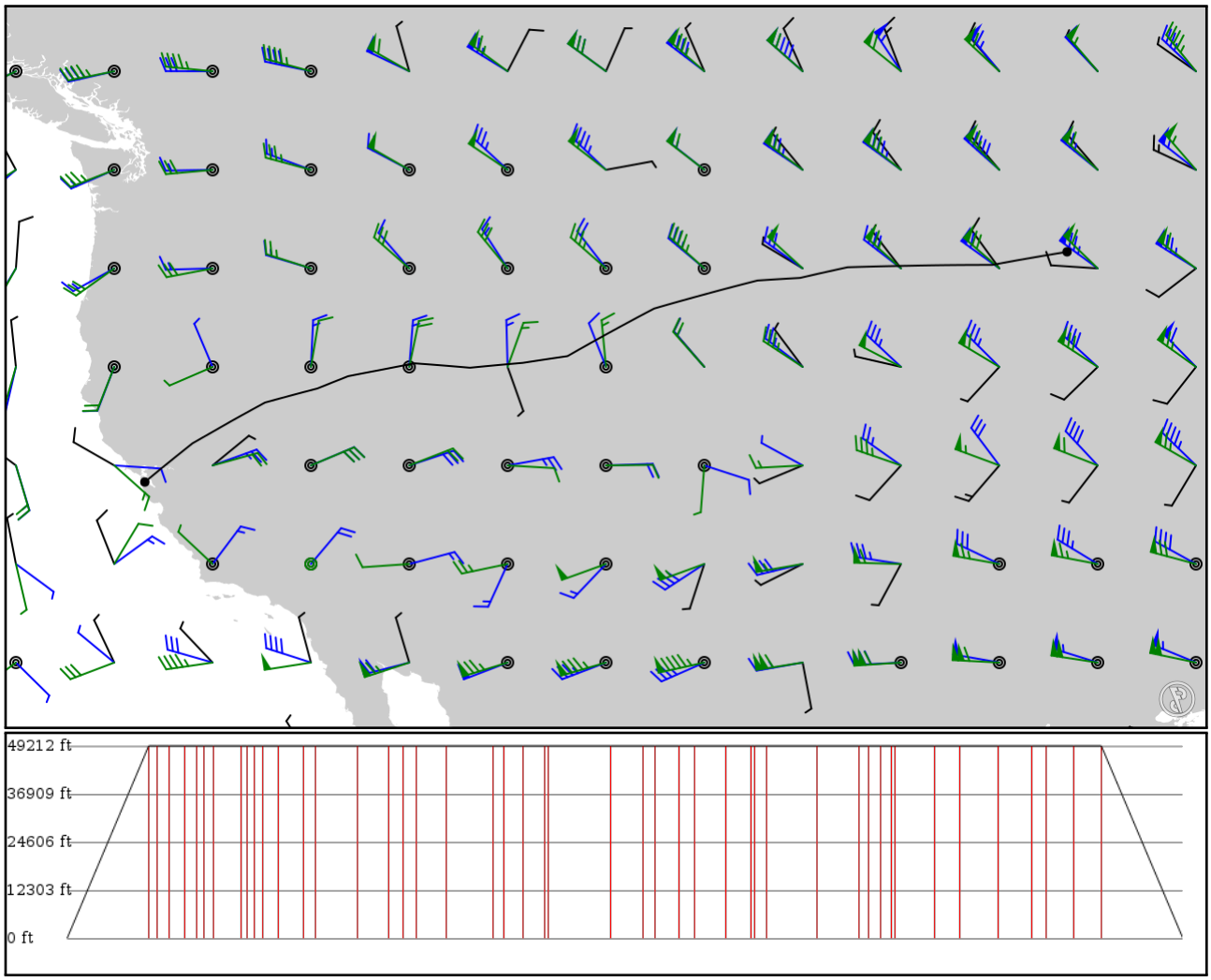
KMSP – KSFO

Minneapolis-St Paul International Airport — San Francisco International

2024/03/19 1344Z

KMSP JUNES **V26** DDY **V235** OCS **V142** FBR **V6** BAM **T331** LLC **V6** COLOM KSFO

1411.41 nm / 2613.94 km



Notes

Basic altitude profile:
- Ascent Rate: 600ft/min
- Ascent Speed: 145kts
- Cruise Altitude: 15000ft
- Cruise Speed: 170kts
- Descent Rate: 1000ft/min
- Descent Speed: 140kts

Options:
- Use NATs: yes
- Use PACOTS: yes
- Use low airways: yes
- Use high airways: no

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
JUNES FIX	– –	44.46880 -95.59380	15,000 ft 4,572 m	104	–
GHENT FIX	V26 AWY-LO	44.46890 -95.83180	15,000 ft 4,572 m	10	–
CARIT FIX	V26 AWY-LO	44.46800 -96.20320	15,000 ft 4,572 m	15	–
ASTOE FIX	V26 AWY-LO	44.46540 -96.63800	15,000 ft 4,572 m	18	–
OBITT FIX	V26 AWY-LO	44.46200 -96.99940	15,000 ft 4,572 m	15	–
GOLDS FIX	V26 AWY-LO	44.45940 -97.21830	15,000 ft 4,572 m	9	–
ZOTBY FIX	V26 AWY-LO	44.45560 -97.49060	15,000 ft 4,572 m	11	–
HON VOR	V26 AWY-LO	44.44010 -98.31110	15,000 ft 4,572 m	35	HURON
OPOJE FIX	V26 AWY-LO	44.43690 -98.49710	15,000 ft 4,572 m	7	–
DAKPE FIX	V26 AWY-LO	44.43290 -98.70640	15,000 ft 4,572 m	8	–
VAYLA FIX	V26 AWY-LO	44.42770 -98.95410	15,000 ft 4,572 m	10	–
CHANS FIX	V26 AWY-LO	44.41640 -99.41950	15,000 ft 4,572 m	19	–
PIR VOR	V26 AWY-LO	44.39450 -100.16300	15,000 ft 4,572 m	31	PIERRE
CABKU FIX	V26 AWY-LO	44.32670 -100.47400	15,000 ft 4,572 m	13	–
PHP VOR	V26 AWY-LO	44.05820 -101.66400	15,000 ft 4,572 m	53	PHILIP
CRETO FIX	V26 AWY-LO	44.00450 -102.57500	15,000 ft 4,572 m	39	–
RAP VOR	V26 AWY-LO	43.97600 -103.01200	15,000 ft 4,572 m	18	RAPID CITY
RULER FIX	V26 AWY-LO	43.88330 -103.37600	15,000 ft 4,572 m	16	–
WILDA FIX	V26 AWY-LO	43.67580 -104.17000	15,000 ft 4,572 m	36	–
SALON FIX	V26 AWY-LO	43.32670 -105.44900	15,000 ft 4,572 m	59	–
AFYAB FIX	V26 AWY-LO	43.24520 -105.73800	15,000 ft 4,572 m	13	–
DDY VOR	V26 AWY-LO	43.09090 -106.27700	15,000 ft 4,572 m	25	MUDDY MOUNTAIN (CASPER)
GIPEC FIX	V235 AWY-LO	42.82820 -106.77500	15,000 ft 4,572 m	26	–
OILLY FIX	V235 AWY-LO	42.78740 -106.85100	15,000 ft 4,572 m	4	–
BORGG FIX	V235 AWY-LO	42.00290 -108.28700	15,000 ft 4,572 m	79	–
OCS	V235	41.59020	15,000 ft	40	ROCK SPRINGS

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
VOR	AWY-LO	-109.01500 4,572 m			
PUDVY FIX	V142 AWY-LO	41.54270 -109.34200	15,000 ft 4,572 m	14	-
WEGEM FIX	V142 AWY-LO	41.44560 -109.99000	15,000 ft 4,572 m	29	-
FBR VOR	V142 AWY-LO	41.37840 -110.42400	15,000 ft 4,572 m	19	FORT BRIDGER
PACKY FIX	V6 AWY-LO	41.30180 -111.28900	15,000 ft 4,572 m	39	-
EVIEW FIX	V6 AWY-LO	41.23470 -111.99100	15,000 ft 4,572 m	31	-
OGD VOR	V6 AWY-LO	41.22410 -112.09800	15,000 ft 4,572 m	4	OGDEN
MOINT FIX	V6 AWY-LO	41.25260 -112.42900	15,000 ft 4,572 m	15	-
LCU VOR	V6 AWY-LO	41.36300 -113.84100	15,000 ft 4,572 m	64	LUCIN
LWL VOR	V6 AWY-LO	41.14480 -114.97800	15,000 ft 4,572 m	52	WELLS
VODOU FIX	V6 AWY-LO	41.09530 -115.23800	15,000 ft 4,572 m	12	-
ARAYI FIX	V6 AWY-LO	41.03240 -115.56500	15,000 ft 4,572 m	15	-
DOBYS FIX	V6 AWY-LO	40.97180 -115.87400	15,000 ft 4,572 m	14	-
DEGHU FIX	V6 AWY-LO	40.95680 -115.95000	15,000 ft 4,572 m	3	-
BAM VOR	V6 AWY-LO	40.56910 -116.92200	15,000 ft 4,572 m	49	BATTLE MOUNTAIN
CUTVA FIX	T331 AWY-LO	40.39090 -117.60000	15,000 ft 4,572 m	32	-
LLC VOR	T331 AWY-LO	40.12530 -118.57800	15,000 ft 4,572 m	47	LOVELOCK
WADDS FIX	V6 AWY-LO	39.71650 -119.32400	15,000 ft 4,572 m	42	-
FMG VOR	V6 AWY-LO	39.53130 -119.65600	15,000 ft 4,572 m	18	MUSTANG (RENO)
SWR VOR	V6 AWY-LO	39.18030 -120.27000	15,000 ft 4,572 m	35	SQUAW VALLEY(SOUTH LAKE TAHOE)
COLOM FIX	V6 AWY-LO	38.83900 -120.87000	15,000 ft 4,572 m	34	-
KSFO APT	- -	37.61850 -122.37500	0 ft 0 m	102	San Francisco International

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 191253Z 28008KT 10SM BKN230 02/M07 A2970 RMK AO2 SLP064 T00221067

TAF

KMSP 191130Z 1912/2018 30011KT P6SM BKN200 FM191400 31013G22KT P6SM BKN120 FM191700 31017G28KT P6SM SCT050 FM2004

Frequencies

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

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

KSFO

Region: UNITED STATES
Timezone: AMERICA/LOS_ANGELES
Runways: 4

Elevation: 13 ft / 4 m
Location: 37.618500 -122.375000
Magnetic Var: 12.857 E

METAR

KSFO 191256Z 26007KT 10SM FEW005 BKN009 11/09 A3010 RMK AO2 SLP192 T01110089

TAF

KSFO 191122Z 1912/2018 25006KT 6SM BR SCT006 OVC009 FM192000 28016KT P6SM BKN250 FM200700 27008KT P6SM BKN250 FM2

Frequencies

REC - 113.70 MHz - D-ATIS
REC - 118.85 MHz - D-ATIS
CLD - 118.20 MHz -
SAN FRANCISCO CLEARANCE DELIVERY
TWR - 120.50 MHz - SAN FRANCISCO TOWER
APP - 128.32 MHz - NORCAL APPROACH
APP - 133.95 MHz - NORCAL APPROACH
DEP - 135.10 MHz - NORCAL DEPARTURE

REC - 115.80 MHz - D-ATIS
COM - 122.95 MHz - UNICOM
GND - 121.80 MHz - SAN FRANCISCO GROUND
APP - 134.50 MHz - NORCAL APPROACH
APP - 128.57 MHz - NORCAL APPROACH
DEP - 120.90 MHz - NORCAL DEPARTURE

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
10L	200 ft 61 m	11,859 ft 3,615 m	117.90 105.04	ASPHALT	0 ft 0 m	876 ft 267 m
28R	200 ft 61 m	11,859 ft 3,615 m	297.92 285.06	ASPHALT	302 ft 92 m	318 ft 97 m
10R	200 ft 61 m	11,371 ft 3,466 m	117.90 105.04	ASPHALT	0 ft 0 m	748 ft 228 m
28L	200 ft 61 m	11,371 ft 3,466 m	297.92 285.06	ASPHALT	305 ft 93 m	322 ft 98 m
01R	200 ft 61 m	8,665 ft 2,641 m	27.71 14.85	ASPHALT	564 ft 172 m	404 ft 123 m
19L	200 ft 61 m	8,665 ft 2,641 m	207.72 194.86	ASPHALT	0 ft 0 m	443 ft 135 m
01L	200 ft 61 m	7,664 ft 2,336 m	27.71 14.85	ASPHALT	643 ft 196 m	469 ft 143 m
19R	200 ft 61 m	7,664 ft 2,336 m	207.72 194.86	ASPHALT	0 ft 0 m	446 ft 136 m

Approach Navaids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
19L	DME	ISIA	108.90 MHz	18 nm 33 km	- -	-	24 ft 24 m
28L	DME	ISFO	109.55 MHz	18 nm 33 km	- -	-	22 ft 22 m
28R	DME	IGWQ	111.70 MHz	18 nm 33 km	- -	-	17 ft 17 m
28R	DME	IFNP	110.75 MHz	18 nm 33 km	- -	-	13 ft 13 m
19L	LOC-ILS	ISIA	108.90 MHz	18 nm 33 km	207.72 194.86	-	13 ft 13 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
28L	LOC-ILS	ISFO	109.55 MHz	18 nm 33 km	297.91 285.05	-	13 ft 13 m
28R	LOC-ILS	IGWQ	111.70 MHz	18 nm 33 km	297.91 285.05	-	13 ft 13 m
19L	GS	ISIA	108.90 MHz	10 nm 19 km	207.72 194.86	3.00	13 ft 13 m
28L	GS	ISFO	109.55 MHz	10 nm 19 km	297.91 285.05	2.85	13 ft 13 m
28R	GS	IGWQ	111.70 MHz	10 nm 19 km	297.91 285.05	3.00	13 ft 13 m