

WSSS

Singapore Changi

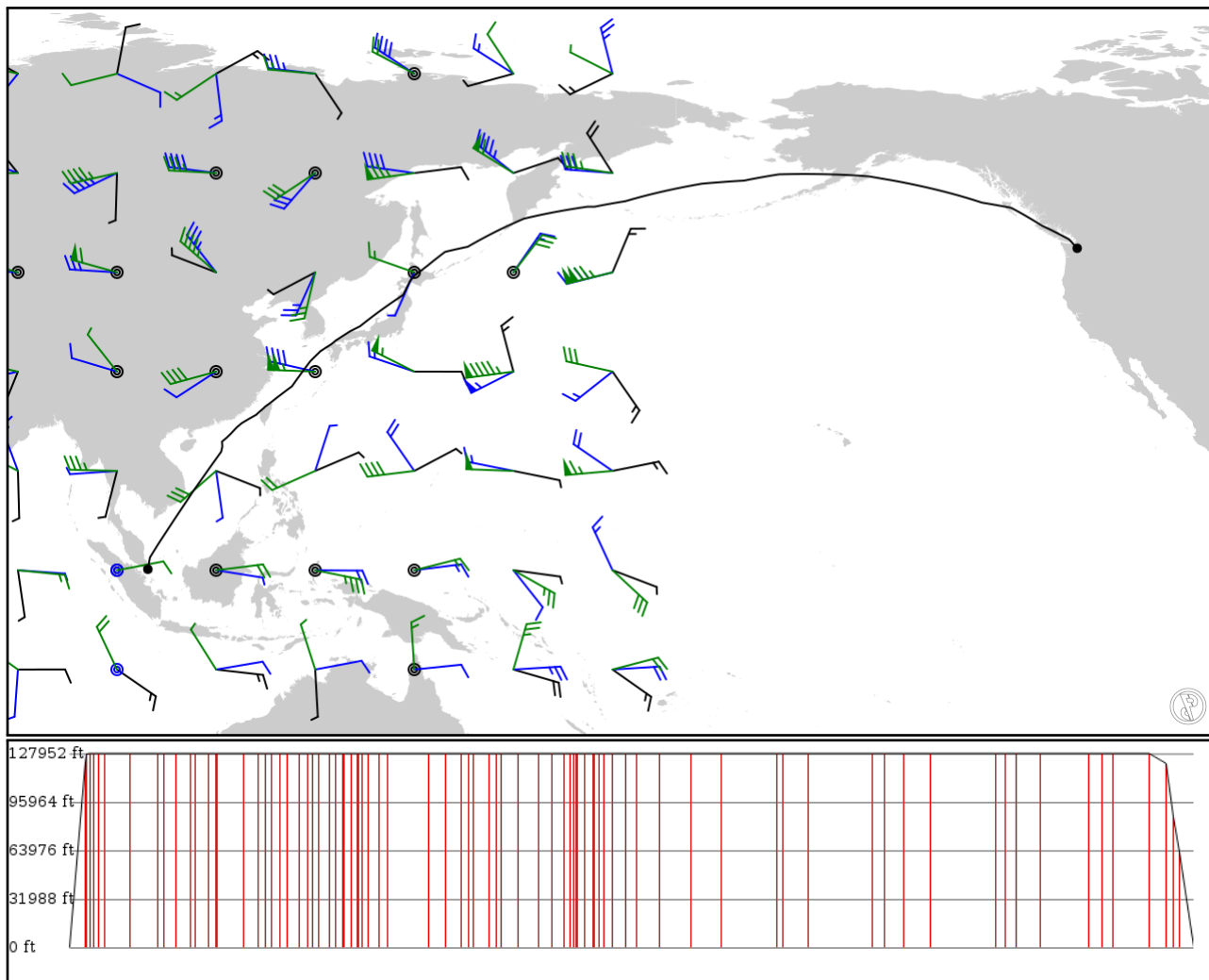
KSEA

Seattle Tacoma Intl

2024/05/23 2211Z

WSSS RAXIM M771 DULOP Q1 CARSO V551 SUKER RAMUS GRUPA CONGA V2 ELATO A1 MKG MKG A1 HLG HLG A1
IGMON Z40 ESBIS OTR30 FUE V28 DGC Y14 SAMON Z17 MRE V13 CHE Y116 AWE V8 LUBEK Y116 MVE G583 LATAK
G103 NETRI B932 RIMLI G816 LUMES NYMPH G469 SPY R591 CHUUK R341 ODK J123 CJAYY B757 KATCH TR18
YZP J523 YZT J502 YYJ KSEA

7127.43 nm / 13200.00 km



Notes

Basic altitude profile:

- Ascent Rate: 2500ft/min
- Ascent Speed: 250kts
- Cruise Altitude: 39000ft
- Cruise Speed: 420kts
- Descent Rate: 1500ft/min
- Descent Speed: 250kts

Options:

- Use NATs: yes

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

Route

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
WSSS	-	1.35561	0 ft	-	Singapore Changi
APT	-	103.98800	0 m	-	
RAXIM	-	3.05500	37,000 ft	103	-
FIX	-	104.28700	11,278 m	-	-
OTLON	M771	3.13111	38,900 ft	5	-
FIX	AWY-HI	104.33500	11,857 m	-	-
VISAT	M771	3.43889	39,000 ft	21	-
FIX	AWY-HI	104.52600	11,887 m	-	-
DUBSA	M771	3.81694	39,000 ft	26	-
FIX	AWY-HI	104.76100	11,887 m	-	-
DAMOG	M771	4.20694	39,000 ft	27	-
FIX	AWY-HI	105.00400	11,887 m	-	-
DOLOX	M771	4.81139	39,000 ft	42	-
FIX	AWY-HI	105.38000	11,887 m	-	-
DUDIS	M771	7.00000	39,000 ft	156	-
FIX	AWY-HI	106.80900	11,887 m	-	-
DAGAG	M771	9.46333	39,000 ft	176	-
FIX	AWY-HI	108.44200	11,887 m	-	-
SUDUN	M771	9.99278	39,000 ft	38	-
FIX	AWY-HI	108.79600	11,887 m	-	-
DAMVO	M771	11.10830	39,000 ft	80	-
FIX	AWY-HI	109.54500	11,887 m	-	-
DOXAR	M771	12.36670	39,000 ft	90	-
FIX	AWY-HI	110.37800	11,887 m	-	-
NITOM	M771	12.74190	39,000 ft	27	-
FIX	AWY-HI	110.64000	11,887 m	-	-
DAMEL	M771	13.97830	39,000 ft	89	-
FIX	AWY-HI	111.51000	11,887 m	-	-
34BC	M771	14.56670	39,000 ft	42	-
FIX	AWY-HI	111.92500	11,887 m	-	-
DONDA	M771	14.70330	39,000 ft	9	-
FIX	AWY-HI	112.02200	11,887 m	-	-
DOSUT	M771	17.03330	39,000 ft	169	-
FIX	AWY-HI	113.68000	11,887 m	-	-
DULOP	M771	18.23670	39,000 ft	87	-
FIX	AWY-HI	114.54300	11,887 m	-	-
CARSO	Q1	19.00000	39,000 ft	46	-
FIX	AWY-HI	114.71000	11,887 m	-	-
SUKER	V551	19.67600	39,000 ft	40	-
FIX	AWY-HI	114.65300	11,887 m	-	-
RAMUS	-	20.26090	39,000 ft	52	-
FIX	-	115.35200	11,887 m	-	-
GRUPA	-	20.84560	39,000 ft	48	-
FIX	-	115.95000	11,887 m	-	-
CONGA	-	21.73400	39,000 ft	70	-
FIX	-	116.78500	11,887 m	-	-
ELATO	V2	22.33330	39,000 ft	53	-
FIX	AWY-HI	117.50000	11,887 m	-	-
ANPOG	A1	22.60420	39,000 ft	29	-
FIX	AWY-HI	117.95400	11,887 m	-	-
KADLO	A1	22.95510	39,000 ft	38	-
FIX	AWY-HI	118.54200	11,887 m	-	-
MKG	A1	23.56170	39,000 ft	70	MAGONG TACAN

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
DME	AWY-HI	119.62800	11,887 m		
MKG	-	23.59540	39,000 ft	2	MAGONG (PENGHU ISLAND)
VOR	-	119.63700	11,887 m		
SWORD	A1	24.00250	39,000 ft	35	-
FIX	AWY-HI	120.09400	11,887 m		
HLG	A1	24.55980	39,000 ft	48	HOULONG
VOR	AWY-HI	120.72700	11,887 m		
HLG	-	24.64000	39,000 ft	5	HOULONG VOR-DME
DME	-	120.78300	11,887 m		
APU	A1	25.17690	39,000 ft	51	ANBU (TAIPEI)
VOR	AWY-HI	121.52200	11,887 m		
ANNNA	A1	25.57180	39,000 ft	36	-
FIX	AWY-HI	122.02200	11,887 m		
DRAKE	A1	25.61560	39,000 ft	4	-
FIX	AWY-HI	122.07800	11,887 m		
AISAR	A1	25.94750	39,000 ft	30	-
FIX	AWY-HI	122.49300	11,887 m		
OSTAR	A1	26.33170	39,000 ft	35	-
FIX	AWY-HI	123.00000	11,887 m		
BULAN	A1	27.09170	39,000 ft	70	-
FIX	AWY-HI	124.00000	11,887 m		
IGMON	A1	27.62210	39,000 ft	49	-
FIX	AWY-HI	124.72100	11,887 m		
ESBIS	Z40	31.25350	39,000 ft	258	-
FIX	AWY-HI	127.38100	11,887 m		
FUE	OTR30	32.66860	39,000 ft	112	FUKUE
VOR	AWY-HI	128.82700	11,887 m		
DGC	V28	33.67620	39,000 ft	99	FUKUOKA
VOR	AWY-HI	130.39000	11,887 m		
STOUT	Y14	34.19070	39,000 ft	43	-
FIX	AWY-HI	131.01600	11,887 m		
HALNA	Y14	34.53380	39,000 ft	33	-
FIX	AWY-HI	131.53600	11,887 m		
MIHOU	Y14	35.53110	39,000 ft	97	-
FIX	AWY-HI	133.09400	11,887 m		
DRIPS	Y14	35.90890	39,000 ft	42	-
FIX	AWY-HI	133.83600	11,887 m		
SAMON	Y14	36.24290	39,000 ft	38	-
FIX	AWY-HI	134.50300	11,887 m		
CELCA	Z17	37.48850	39,000 ft	107	-
FIX	AWY-HI	136.10100	11,887 m		
NOMAS	Z17	38.91380	39,000 ft	125	-
FIX	AWY-HI	138.03800	11,887 m		
GEPPA	Z17	39.89290	39,000 ft	87	-
FIX	AWY-HI	139.44000	11,887 m		
MRE	Z17	40.73880	39,000 ft	77	AOMORI
VOR	AWY-HI	140.70500	11,887 m		
OHMAR	V13	41.30940	39,000 ft	36	-
FIX	AWY-HI	140.98800	11,887 m		
TIKYU	V13	41.68400	39,000 ft	23	-
FIX	AWY-HI	141.17300	11,887 m		
MAMBE	V13	41.86340	39,000 ft	11	-
FIX	AWY-HI	141.26000	11,887 m		
SIRAO	V13	41.96610	39,000 ft	6	-
FIX	AWY-HI	141.31600	11,887 m		
CHE	V13	42.69990	39,000 ft	47	CHITOSE

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
VOR	AWY-HI	141.68600	11,887 m		
ASIBE	Y116	43.45110	39,000 ft	52	-
FIX	AWY-HI	142.28400	11,887 m		
AWE	Y116	43.66730	39,000 ft	15	ASAHIKAWA
VOR	AWY-HI	142.45700	11,887 m		
LUBEK	V8	44.01910	39,000 ft	30	-
FIX	AWY-HI	142.97300	11,887 m		
MVE	Y116	44.30530	39,000 ft	25	MONBETSU
VOR	AWY-HI	143.39500	11,887 m		
BISIV	G583	44.99200	39,000 ft	56	-
FIX	AWY-HI	144.28300	11,887 m		
IKADA	G583	46.00580	39,000 ft	80	-
FIX	AWY-HI	145.54400	11,887 m		
LATAK	G583	46.93330	39,000 ft	74	-
FIX	AWY-HI	146.75800	11,887 m		
NETRI	G103	47.65500	39,000 ft	139	-
FIX	AWY-HI	150.00100	11,887 m		
OTLER	B932	49.80310	39,000 ft	203	-
FIX	AWY-HI	153.97900	11,887 m		
RIMLI	B932	51.70500	39,000 ft	194	-
FIX	AWY-HI	158.11500	11,887 m		
LUMES	G816	53.41170	39,000 ft	347	-
FIX	AWY-HI	167.21600	11,887 m		
NYMPH	-	53.40880	39,000 ft	36	-
FIX	-	168.24000	11,887 m		
ONEIL	G469	54.20240	39,000 ft	164	-
FIX	AWY-HI	172.68100	11,887 m		
PINTT	G469	56.71730	39,000 ft	403	-
FIX	AWY-HI	-176.30700	11,887 m		
CREMR	G469	56.91420	39,000 ft	81	-
FIX	AWY-HI	-173.86900	11,887 m		
SPY	G469	57.15700	39,000 ft	119	SAINT PAUL ISLAND
NDB	AWY-HI	-170.23300	11,887 m		
CHUUK	R591	58.05750	39,000 ft	170	-
FIX	AWY-HI	-165.21500	11,887 m		
ODK	R341	57.77500	39,000 ft	410	KODIAK
VOR	AWY-HI	-152.34000	11,887 m		
CJAYY	J123	57.46410	39,000 ft	61	-
FIX	AWY-HI	-150.53100	11,887 m		
GRIZZ	B757	57.11490	39,000 ft	69	-
FIX	AWY-HI	-148.50200	11,887 m		
HMPTN	B757	56.19440	39,000 ft	158	-
FIX	AWY-HI	-144.00200	11,887 m		
KATCH	B757	54.00000	39,000 ft	304	-
FIX	AWY-HI	-136.00000	11,887 m		
KALTS	TR18	53.62170	39,000 ft	81	-
FIX	AWY-HI	-133.80500	11,887 m		
YZP	TR18	53.25220	39,000 ft	74	SANDSPIT
VOR	AWY-HI	-131.80700	11,887 m		
YZT	J523	50.68410	39,000 ft	225	PORT HARDY
VOR	AWY-HI	-127.36500	11,887 m		
ROYST	J502	49.59140	37,000 ft	108	-
FIX	AWY-HI	-125.12600	11,278 m		
ARRUE	J502	49.07310	26,300 ft	49	-
FIX	AWY-HI	-124.13000	8,016 m		
YYJ	J502	48.72710	19,200 ft	32	VICTORIA

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
VOR	AWY-HI	-123.48400	5,852 m		
KSEA	-	47.45020	0 ft	89	Seattle Tacoma Intl
APT	-	-122.31200	0 m		

WSSS

Region: SINGAPORE

Timezone: ASIA/SINGAPORE

Runways: 2

Elevation: 20 ft / 6 m

Location: 1.355510 103.988000

Magnetic Var: 0.198 E

METAR

WSSS 232200Z 32004KT 260V360 8000 FEW018 FEW020CB BKN150 27/25 Q1007 NOSIG

TAF

TAF WSSS 231700Z 2318/2500 14008KT 9999 FEW015 SCT020

Frequencies

DEP - 123.70 MHz - SINGAPORE RADAR	DEP - 127.30 MHz - SINGAPORE RADAR
DEP - 133.80 MHz - SINGAPORE RADAR	DEP - 133.25 MHz - SINGAPORE RADAR
DEP - 135.80 MHz - SINGAPORE RADAR	DEP - 134.20 MHz - SINGAPORE RADAR
DEP - 133.35 MHz - SINGAPORE RADAR	DEP - 134.40 MHz - SINGAPORE RADAR
DEP - 128.10 MHz - SINGAPORE RADAR	DEP - 255.40 MHz - SINGAPORE RADAR
DEP - 124.05 MHz - SINGAPORE RADAR	APP - 120.30 MHz - SINGAPORE APPROACH
APP - 124.60 MHz - SINGAPORE APPROACH	APP - 119.30 MHz - SINGAPORE ARRIVAL
TWR - 118.60 MHz - SINGAPORE TOWER	TWR - 118.25 MHz - SINGAPORE TOWER
GND - 124.30 MHz - SINGAPORE GROUND	GND - 121.72 MHz - SINGAPORE GROUND
GND - 121.85 MHz - SINGAPORE GROUND	GND - 121.00 MHz - SINGAPORE GROUND EMERGENCY
GND - 122.55 MHz - SINGAPORE GROUND	CLD - 121.65 MHz - SINGAPORE DELIVERY
CLD - 119.60 MHz - SINGAPORE DELIVERY	REC - 128.60 MHz -
REC - 128.02 MHz -	CHANGI AIRPORT INFORMATION (D-ATIS)
CHANGI AIRPORT ARRIVAL INFORMATION	

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
02L	197 ft	13,187 ft	22.88	ASPHALT	0 ft	0 ft
	60 m	4,020 m	22.68		0 m	0 m
20R	197 ft	13,187 ft	202.88	ASPHALT	2,428 ft	390 ft
	60 m	4,020 m	202.68		740 m	119 m
02C	197 ft	13,187 ft	22.88	ASPHALT	0 ft	0 ft
	60 m	4,020 m	22.68		0 m	0 m
20C	197 ft	13,187 ft	202.88	ASPHALT	0 ft	0 ft
	60 m	4,020 m	202.68		0 m	0 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
02C	DME	ICE	108.30 MHz	18 nm	-	-	15 ft
				33 km	-		15 m
02L	DME	ICW	110.90 MHz	18 nm	-	-	20 ft
				33 km	-		20 m
20C	DME	ICC	109.70 MHz	18 nm	-	-	15 ft
				33 km	-		15 m
20R	DME	ICH	108.90 MHz	18 nm	-	-	22 ft
				33 km	-		22 m
02C	LOC-ILS	ICE	108.30 MHz	18 nm	22.88	-	20 ft
				33 km	22.68		20 m
02L	LOC-ILS	ICW	110.90 MHz	18 nm	22.88	-	20 ft

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
				33 km	22.68		20 m
20C	LOC-ILS	ICC	109.70 MHz	18 nm	202.88	-	20 ft
				33 km	202.68		20 m
20R	LOC-ILS	ICH	108.90 MHz	18 nm	202.88	-	20 ft
				33 km	202.68		20 m
02C	GS	ICE	108.30 MHz	10 nm	22.88	3.00	20 ft
				19 km	22.68		20 m
02L	GS	ICW	110.90 MHz	10 nm	22.88	3.00	20 ft
				19 km	22.68		20 m
20C	GS	ICC	109.70 MHz	10 nm	202.88	3.00	20 ft
				19 km	202.68		20 m
20R	GS	ICH	108.90 MHz	10 nm	202.88	3.00	20 ft
				19 km	202.68		20 m

KSEA

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

Elevation: 432 ft / 132 m
Location: 47.450200 -122.312000
Magnetic Var: 14.769 E

METAR

KSEA 232153Z 26009KT 10SM BKN035 16/06 A3013 RMK AO2 SLP208 T01560061

TAF

KSEA 232131Z 2322/2424 25012KT P6SM BKN035 FM232300 25007KT P6SM SCT035 BKN100 FM240800 20006KT P6SM BKN100 FM241

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	165.58		0 m	122 m
34R	151 ft	11,904 ft	0.35	CONCRETE	0 ft	400 ft
	46 m	3,628 m	345.58		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	165.57		0 m	61 m
34L	151 ft	8,502 ft	0.34	CONCRETE	0 ft	197 ft
	46 m	2,591 m	345.57		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	IB EJ	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	165.57		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	165.57		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	345.57		422 m
34L	LOC-ILS	IBEJ	110.75 MHz	18 nm	0.34	-	433 ft
				33 km	345.57		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	165.92		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	345.92		355 m