

WSSS

Singapore Changi Intl. Airport

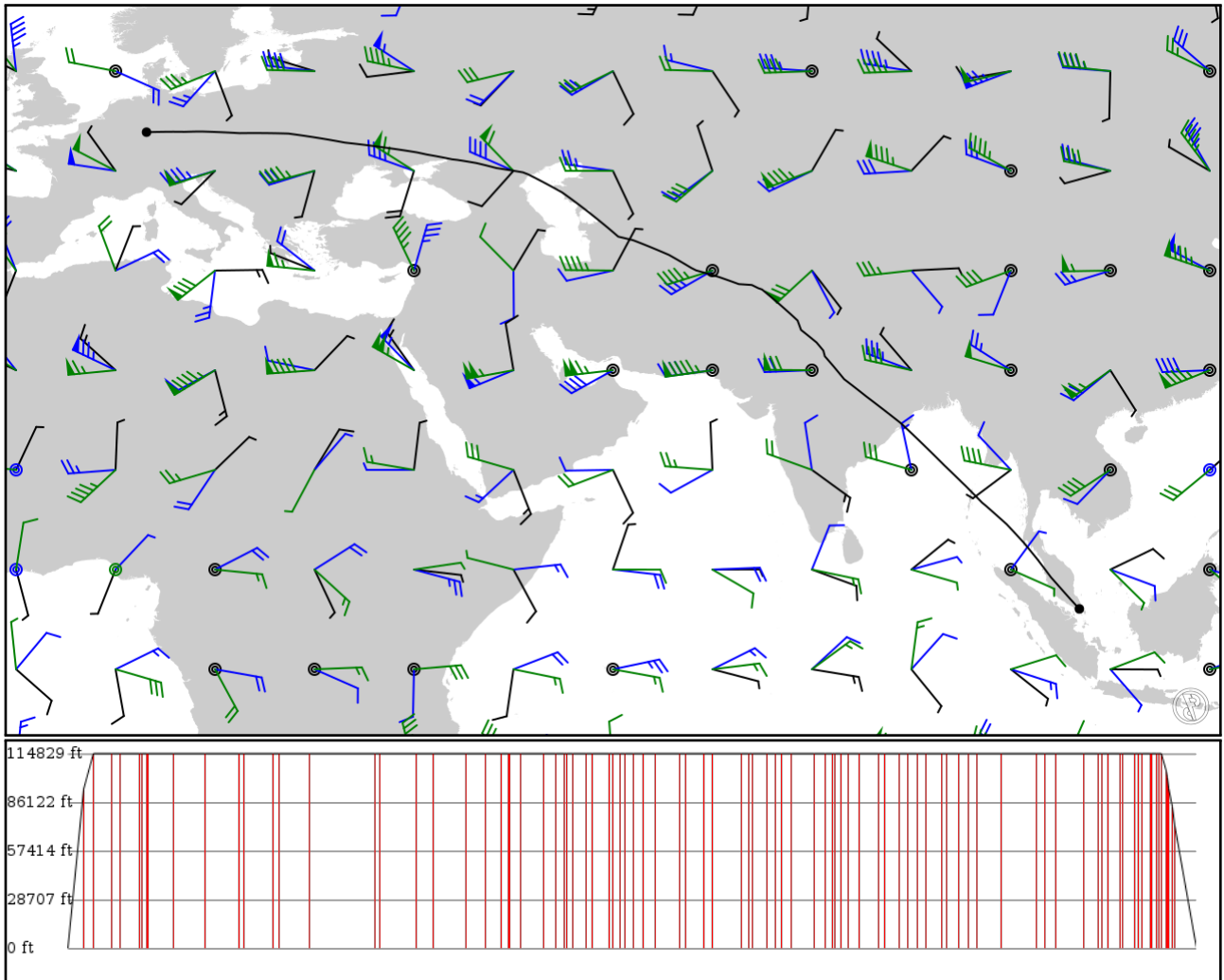
EDDF

Frankfurt am Main

2024/05/12 1024Z

WSSS DAMAL R325 VIH W531 VPL B579 PUT L759 AGG L760 DPN W31E ELKUX A466 SAMAR LA J161 PS KOTAL
A455 RAMSO A453 MURAD M696 LEMOD N644 KEKAL A87 AMATA G246 KS B946 ROSNI B493 PW A87 BULIG UL984
NM B493 KOROP UL984 ADOKI L984 SKAVI UL984 PADKA L984 SOPAV UL984 OKL L984 LONLI EDDF

5626.35 nm / 10420.00 km



Notes

Basic altitude profile:

- Ascent Rate: 2600ft/min
- Ascent Speed: 280kts
- Cruise Altitude: 380ft
- Cruise Speed: 480kts
- Descent Rate: 1500ft/min
- Descent Speed: 280kts

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
WSSS APT	-	1.35192 103.99560	0 ft 0 m	-	Singapore Changi Intl. Airport
DAMAL FIX	-	2.33194 103.08667	28,600 ft 8,717 m	80	-
LATUK FIX	R325 AWY-LO	2.92111 102.56278	35,000 ft 10,668 m	47	-
ANSOM FIX	R325 AWY-LO	4.07333 101.53861	35,000 ft 10,668 m	92	-
VIH VOR	R325 AWY-LO	4.57303 101.09361	35,000 ft 10,668 m	40	IPOH VOR-DME
VILAT FIX	W531 AWY-LO	5.89111 100.09917	35,000 ft 10,668 m	99	-
ANDOK FIX	W531 AWY-LO	6.02222 100.00000	35,000 ft 10,668 m	9	-
VPL VOR	W531 AWY-LO	6.35542 99.74739	35,000 ft 10,668 m	25	LANGKAWI VOR-DME
DALAN FIX	B579 AWY-LO	6.46889 99.65556	35,000 ft 10,668 m	8	-
PUT VOR	B579 AWY-LO	8.11523 98.30630	35,000 ft 10,668 m	127	PHUKET VOR-DME
TAVUN FIX	L759 AWY-LO	10.00000 96.55333	35,000 ft 10,668 m	153	-
MIPAK FIX	L759 AWY-LO	11.89194 94.41667	35,000 ft 10,668 m	169	-
LADER FIX	L759 AWY-LO	12.20000 94.04167	35,000 ft 10,668 m	28	-
NISUN FIX	L759 AWY-LO	13.93478 92.33033	35,000 ft 10,668 m	144	-
LIBDI FIX	L759 AWY-LO	14.25142 91.99703	35,000 ft 10,668 m	27	-
MABUR FIX	L759 AWY-LO	16.01667 90.16833	35,000 ft 10,668 m	149	-
LEMEX FIX	L759 AWY-LO	19.90925 86.15600	35,000 ft 10,668 m	327	-
BBS VOR	L759 AWY-LO	20.24478 85.81131	35,000 ft 10,668 m	28	BHUBANESHWAR VOR-DME
OTABA FIX	L759 AWY-LO	22.18403 83.32300	35,000 ft 10,668 m	181	-
IBUDA FIX	L759 AWY-LO	23.06728 82.16481	35,000 ft 10,668 m	83	-
KKJ VOR	L759 AWY-LO	24.81487 79.91868	35,000 ft 10,668 m	161	KHAJURAHO VOR-DME
NOBOM FIX	L759 AWY-LO	26.15028 78.81519	35,000 ft 10,668 m	100	-
AGG VOR	L759 AWY-LO	27.15075 77.94753	35,000 ft 10,668 m	76	AGRA VOR-DME
GURTI FIX	L760 AWY-LO	27.72931 77.79450	35,000 ft 10,668 m	35	-
ITBAN FIX	L760 AWY-LO	27.82872 77.71321	35,000 ft 10,668 m	7	-
DPN VOR	L760 AWY-LO	28.56672 77.09486	35,000 ft 10,668 m	55	DELHI VOR-DME
ELKUX	W31E	29.84158	35,000 ft	112	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-LO	75.51145	10,668 m		
ASARI	A466	30.80425	35,000 ft	60	-
FIX	AWY-LO	75.15871	10,668 m		
SAMAR	A466	31.34667	35,000 ft	44	-
FIX	AWY-LO	74.56583	10,668 m		
LA	-	31.49972	35,000 ft	12	LAHORE VOR-DME
VOR	-	74.40002	10,668 m		
SARPO	J161	31.81333	35,000 ft	26	-
FIX	AWY-LO	74.04778	10,668 m		
CADIZ	J161	32.63667	35,000 ft	68	-
FIX	AWY-LO	73.11611	10,668 m		
BALKA	J161	32.98833	35,000 ft	29	-
FIX	AWY-LO	72.69611	10,668 m		
PS	J161	33.97537	35,000 ft	83	PESHAWAR VOR-DME
VOR	AWY-LO	71.51716	10,668 m		
KOTAL	-	34.09972	35,000 ft	19	-
FIX	-	71.14944	10,668 m		
RAMSO	A455	34.43000	35,000 ft	38	-
FIX	AWY-LO	70.47500	10,668 m		
MIXEL	A453	34.45529	35,000 ft	19	-
FIX	AWY-LO	70.08185	10,668 m		
MURAD	A453	34.51667	35,000 ft	46	-
FIX	AWY-LO	69.15000	10,668 m		
VUSAR	M696	34.83950	35,000 ft	48	-
FIX	AWY-LO	68.25777	10,668 m		
SERGO	M696	35.24028	35,000 ft	60	-
FIX	AWY-LO	67.12167	10,668 m		
RESOT	M696	35.92500	35,000 ft	121	-
FIX	AWY-LO	64.77000	10,668 m		
LEMOD	M696	36.16667	35,000 ft	27	-
FIX	AWY-LO	64.29167	10,668 m		
KENAL	N644	37.05667	35,000 ft	90	-
FIX	AWY-LO	62.77833	10,668 m		
MEKOL	N644	37.50000	35,000 ft	45	-
FIX	AWY-LO	62.00000	10,668 m		
ABDAN	N644	38.59500	35,000 ft	140	-
FIX	AWY-LO	59.36667	10,668 m		
BODBA	N644	38.88667	35,000 ft	38	-
FIX	AWY-LO	58.62833	10,668 m		
TABIP	N644	39.00000	35,000 ft	15	-
FIX	AWY-LO	58.33333	10,668 m		
KEKAL	N644	39.36833	35,000 ft	74	-
FIX	AWY-LO	56.80833	10,668 m		
NONIK	A87	39.86500	35,000 ft	40	-
FIX	AWY-LO	56.23167	10,668 m		
IDRIS	A87	40.26833	35,000 ft	32	-
FIX	AWY-LO	55.75000	10,668 m		
Begli	A87	40.87500	35,000 ft	49	-
FIX	AWY-LO	55.01500	10,668 m		
TIROM	A87	42.24278	35,000 ft	112	-
FIX	AWY-LO	53.28889	10,668 m		
INRED	A87	42.87611	35,000 ft	53	-
FIX	AWY-LO	52.45167	10,668 m		
BALIG	A87	43.32889	35,000 ft	38	-
FIX	AWY-LO	51.83833	10,668 m		
ETUNA	A87	43.47917	35,000 ft	12	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-LO	51.63111	10,668 m		
AKT	A87	43.85861	35,000 ft	32	AKTAU VOR-DME
VOR	AWY-LO	51.10194	10,668 m		
AMANU	A87	44.18972	35,000 ft	32	-
FIX	AWY-LO	50.51056	10,668 m		
AZABI	A87	44.74000	35,000 ft	54	-
FIX	AWY-LO	49.50000	10,668 m		
YO	A87	45.71667	35,000 ft	99	BIRYUCHA KOSA NDB
NDB	AWY-LO	47.60000	10,668 m		
UP	A87	45.92722	35,000 ft	25	ZENZELI NDB
NDB	AWY-LO	47.06028	10,668 m		
PESOT	A87	46.22500	35,000 ft	76	-
FIX	AWY-LO	45.26667	10,668 m		
LISMU	A87	46.37333	35,000 ft	39	-
FIX	AWY-LO	44.33167	10,668 m		
SUKUL	A87	46.64667	35,000 ft	46	-
FIX	AWY-LO	43.27167	10,668 m		
AMATA	A87	46.88333	35,000 ft	43	-
FIX	AWY-LO	42.28333	10,668 m		
KS	G246	47.20000	35,000 ft	81	KRASNY NDB
NDB	AWY-LO	40.35000	10,668 m		
ROSNI	B946	47.25833	35,000 ft	21	-
FIX	AWY-LO	39.82000	10,668 m		
FASAD	B493	47.55500	35,000 ft	63	-
FIX	AWY-LO	38.31333	10,668 m		
PW	B493	47.74816	35,000 ft	45	PAVLIVKA NDB
NDB	AWY-LO	37.22339	10,668 m		
BULIG	A87	47.96648	35,000 ft	42	-
FIX	AWY-LO	36.21504	10,668 m		
TABOP	UL984	48.41811	35,000 ft	122	-
FIX	AWY-HI	33.22999	10,668 m		
NM	UL984	48.96639	35,000 ft	176	NEMYRIV NDB
NDB	AWY-HI	28.84826	10,668 m		
KOROP	B493	49.14971	35,000 ft	41	-
FIX	AWY-LO	27.84324	10,668 m		
NALAD	UL984	49.38803	35,000 ft	56	-
FIX	AWY-HI	26.44989	10,668 m		
DIBED	UL984	49.88833	35,000 ft	135	-
FIX	AWY-HI	23.05833	10,668 m		
LUXAR	UL984	49.93000	35,000 ft	72	-
FIX	AWY-HI	21.17528	10,668 m		
ADOKI	UL984	49.93583	35,000 ft	20	-
FIX	AWY-HI	20.64583	10,668 m		
SKAVI	L984	49.94028	35,000 ft	28	-
FIX	AWY-LO	19.90000	10,668 m		
PADKA	UL984	49.93388	35,000 ft	62	-
FIX	AWY-HI	18.28327	10,668 m		
SOPAV	L984	49.93092	35,000 ft	8	-
FIX	AWY-LO	18.05238	10,668 m		
VAMBO	UL984	50.01708	35,000 ft	62	-
FIX	AWY-HI	16.43003	10,668 m		
DOBIL	UL984	50.03869	35,000 ft	19	-
FIX	AWY-HI	15.93739	10,668 m		
PEMUR	UL984	50.05467	35,000 ft	15	-
FIX	AWY-HI	15.53824	10,668 m		
LETNA	UL984	50.09203	35,000 ft	43	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-HI	14.42218	10,668 m		
OKL	UL984	50.09648	35,000 ft	6	PRAHA VOR-DME
VOR	AWY-HI	14.26281	10,668 m		
RAK	L984	50.09706	35,000 ft	22	RAKOVNIK NDB
NDB	AWY-LO	13.69072	10,668 m		
BALTU	L984	50.08946	35,000 ft	14	-
FIX	AWY-LO	13.32652	10,668 m		
DONAD	L984	50.08081	35,000 ft	12	-
FIX	AWY-LO	13.00000	10,668 m		
OKG	L984	50.06515	31,900 ft	22	CHEB VOR-DME
VOR	AWY-LO	12.40574	9,723 m		
OKG06	L984	50.06763	30,700 ft	5	-
FIX	AWY-LO	12.26397	9,357 m		
ABERU	L984	50.06936	28,800 ft	9	-
FIX	AWY-LO	12.02787	8,778 m		
KULOK	L984	50.07278	25,500 ft	15	-
FIX	AWY-LO	11.63056	7,772 m		
LONLI	L984	50.07472	22,100 ft	15	-
FIX	AWY-LO	11.22639	6,736 m		
EDDF	-	50.03260	0 ft	103	Frankfurt am Main
APT	-	8.54064	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 121000Z 12006KT 090V160 9999 VCSH FEW017CB FEW018TCU SCT050 BKN300 30/25 Q1008 NOSIG

TAF

TAF AMD WSSS 120800Z 1208/1312 20008KT 9999 FEW015 SCT020 TEMPO 1306/1309 3000 TSRA FEW012CB BKN015

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

EDDF

Region: GERMANY - CIVIL
Timezone: EUROPE/BERLIN
Runways: 4

Elevation: 362 ft / 110 m
Location: 50.032600 8.540670
Magnetic Var: 3.174 E

METAR

EDDF 120950Z AUTO 09006KT 030V130 CAVOK 23/12 Q1017 NOSIG

TAF

TAF EDDF 120500Z 1206/1312 02007KT CAVOK BECMG 1208/1211 10008KT BECMG 1220/1223 04005KT BECMG 1307/1310 14007KT

Frequencies

REC - 118.02 MHz - ATIS ARRIVAL
GND - 121.80 MHz - GROUND
GND - 121.70 MHz - APRON RAMP/TAXI
GND - 121.85 MHz - APRON RAMP/TAXI
TWR - 118.77 MHz - TOWER
TWR - 124.85 MHz - TOWER
TWR - 136.50 MHz - TOWER
APP - 127.27 MHz - FRANKFURT DIRECT
APP - 125.35 MHz - LANGEN RADAR
APP - 120.80 MHz - LANGEN RADAR
APP - 136.12 MHz - LANGEN RADAR

REC - 118.72 MHz - ATIS DEPARTURE
GND - 121.65 MHz - APRON RAMP/TAXI
GND - 121.95 MHz - APRON RAMP/TAXI
GND - 121.75 MHz - APRON RAMP/TAXI
TWR - 119.90 MHz - TOWER
TWR - 127.32 MHz - TOWER
CLD - 121.90 MHz - CLEARANCE DELIVERY
APP - 118.50 MHz - FRANKFURT DIRECT
APP - 126.55 MHz - LANGEN RADAR
APP - 120.15 MHz - LANGEN RADAR
APP - 119.02 MHz - LANGEN RADAR

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
07L	148 ft	9,194 ft	69.56	CONCRETE	0 ft	0 ft
	45 m	2,802 m	66.39		0 m	0 m
25R	148 ft	9,194 ft	249.59	CONCRETE	0 ft	0 ft
	45 m	2,802 m	246.42		0 m	0 m
07C	197 ft	13,134 ft	69.57	ASPHALT	0 ft	203 ft
	60 m	4,003 m	66.40		0 m	62 m
25C	197 ft	13,134 ft	249.61	ASPHALT	0 ft	935 ft
	60 m	4,003 m	246.44		0 m	285 m
07R	148 ft	13,134 ft	69.59	ASPHALT	0 ft	213 ft
	45 m	4,003 m	66.41		0 m	65 m
25L	148 ft	13,134 ft	249.63	ASPHALT	0 ft	1,775 ft
	45 m	4,003 m	246.45		0 m	541 m
18	148 ft	13,083 ft	179.64	ASPHALT	0 ft	0 ft
	45 m	3,988 m	176.46		0 m	0 m
36	148 ft	13,083 ft	359.64	ASPHALT	0 ft	121 ft
	45 m	3,988 m	356.46		0 m	37 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
07L	DME	IFNE	111.75 MHz	18 nm	-	-	357 ft
				33 km	-		357 m
25C	DME	IFCW	111.55 MHz	18 nm	-	-	364 ft
				33 km	-		364 m
25R	DME	IFNW	111.35 MHz	18 nm	-	-	357 ft
				33 km	-		357 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
07C	LOC-ILS	IFCE	110.55 MHz	18 nm	69.59	-	362 ft
				33 km	66.42		362 m
07L	LOC-ILS	IFNE	111.75 MHz	18 nm	69.58	-	362 ft
				33 km	66.41		362 m
07R	LOC-ILS	IFSE	110.95 MHz	18 nm	69.61	-	362 ft
				33 km	66.44		362 m
25C	LOC-ILS	IFCW	111.55 MHz	18 nm	249.59	-	362 ft
				33 km	246.42		362 m
25L	LOC-ILS	IFSW	111.15 MHz	18 nm	249.61	-	362 ft
				33 km	246.44		362 m
25R	LOC-ILS	IFNW	111.35 MHz	18 nm	249.58	-	362 ft
				33 km	246.41		362 m
07C	GS	IFCE	110.55 MHz	10 nm	69.59	3.00	362 ft
				19 km	66.42		362 m
07L	GS	IFNE	111.75 MHz	10 nm	69.58	3.00	362 ft
				19 km	66.41		362 m
07R	GS	IFSE	110.95 MHz	10 nm	69.61	3.00	362 ft
				19 km	66.44		362 m
25C	GS	IFCW	111.55 MHz	10 nm	249.59	3.00	362 ft
				19 km	246.42		362 m
25L	GS	IFSW	111.15 MHz	10 nm	249.61	3.00	362 ft
				19 km	246.44		362 m
25R	GS	IFNW	111.35 MHz	10 nm	249.58	3.00	362 ft
				19 km	246.41		362 m