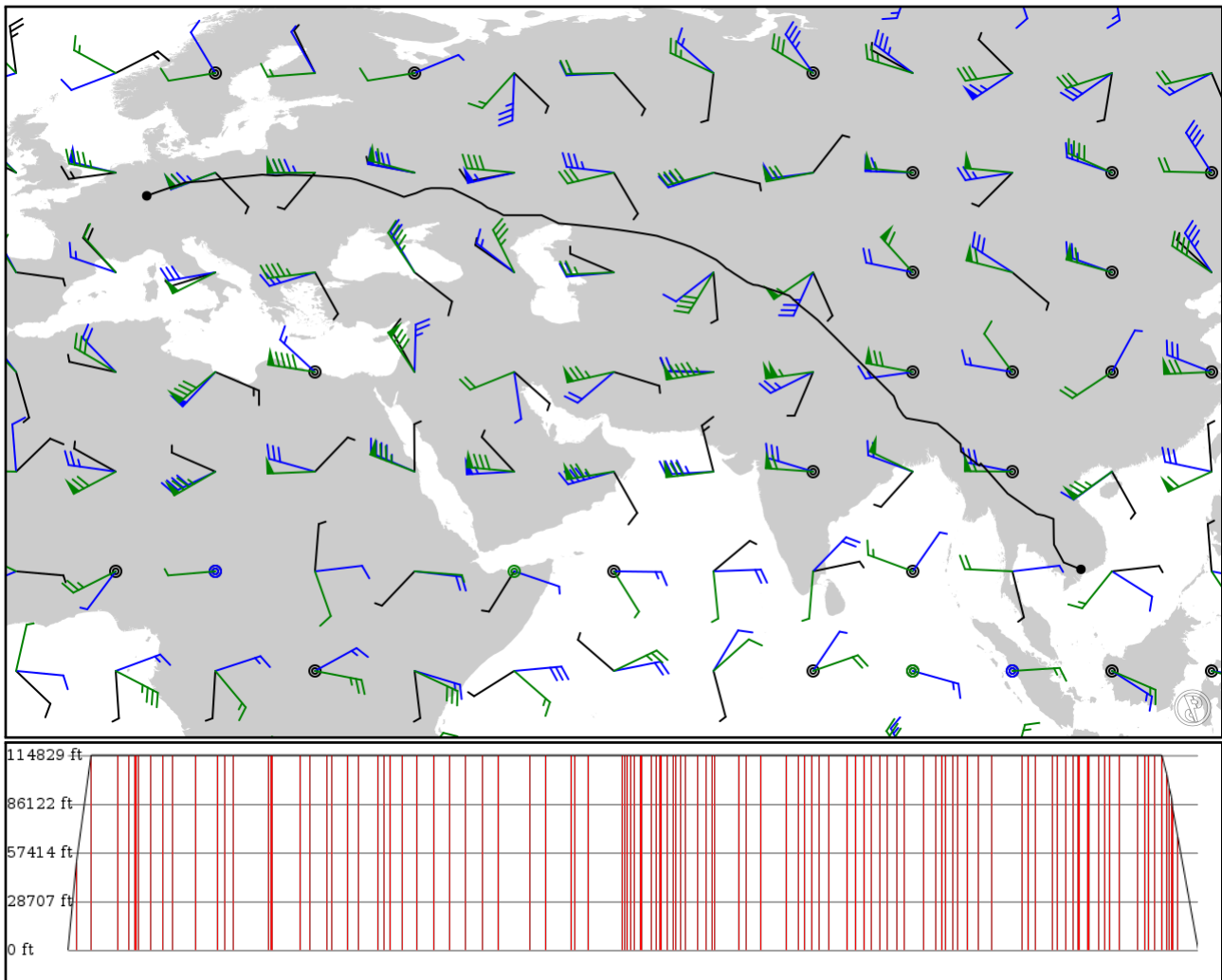


2024/06/03 0822Z

VVTS POPET **R468** PNH PNH **W1** SRE **R345** ROT **W5** KKN **W16** CMP CMP **W16** CMA **R207** MDY **FR2** MIA MIA **W10** KL  
 2400N09400E **KKU W53** GGT **Q18** OPIMO BBD 2700N08800E NONIM 2900N08700E 3000N08600E 3100N08500E  
 3200N08400E 3300N08300E 3400N08200E 3600N08000E 3700N07900E SCH **A364** KHG OU **G134** SA **A126** SMK SMK  
**R482** GENDI **A352** KZO KZO **A356** ATR 4800N05000E 4800N04900E 4800N04800E 4800N04700E 4800N04600E SL  
**R130** WGD **R120** BUTRI **G826** RASAP **A279** KUBOK **L4** SUTOR **L32** GOMAD **P851** WAR **T174** TADUV **T173** TAMEB EDDF

5490.87 nm / 10169.10 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
VVTS	-	10.81870	0 ft	-	Tan Son Nhat Intl
APT	-	106.65200	0 m		
POPET	-	11.10000	15,900 ft	44	-
FIX	-	105.95000	4,846 m		
PNH	R468	11.54400	35,000 ft	70	PHNOM PENH
VOR	AWY-HI	104.84400	10,668 m		
PNH	-	11.54670	35,000 ft	0	PHNOM PENH VOR-DME
DME	-	104.84200	10,668 m		
SRE	W1	13.41500	35,000 ft	127	SIEM REAP VOR-DME
DME	AWY-HI	103.82200	10,668 m		
BIDEM	R345	14.36500	35,000 ft	57	-
FIX	AWY-HI	103.79700	10,668 m		
PEKBA	R345	14.80210	35,000 ft	26	-
FIX	AWY-HI	103.79200	10,668 m		
PASAT	R345	14.95740	35,000 ft	9	-
FIX	AWY-HI	103.79100	10,668 m		
GRASO	R345	15.15470	35,000 ft	11	-
FIX	AWY-HI	103.78700	10,668 m		
ROT	R345	16.11680	35,000 ft	57	ROI ET
VOR	AWY-HI	103.77200	10,668 m		
KKN	W5	16.47080	35,000 ft	60	KHON KAEN
VOR	AWY-HI	102.78800	10,668 m		
CMP	W16	16.63500	35,000 ft	47	CHUM PHAE
VOR	AWY-HI	101.98800	10,668 m		
CMP	-	16.63650	35,000 ft	0	CHUM PHAE VOR-DME
DME	-	101.98500	10,668 m		
UTTAR	W16	17.71800	35,000 ft	109	-
FIX	AWY-HI	100.45200	10,668 m		
CMA	W16	18.76610	35,000 ft	105	CHIANG MAI
VOR	AWY-HI	98.96120	10,668 m		
MACHI	R207	19.21850	35,000 ft	35	-
FIX	AWY-HI	98.56290	10,668 m		
SISUK	R207	19.80110	35,000 ft	45	-
FIX	AWY-HI	98.04520	10,668 m		
MDY	R207	21.93430	35,000 ft	167	MANDALAY
VOR	AWY-HI	96.12980	10,668 m		
MIA	FR2	21.71160	35,000 ft	15	MANDALAY
VOR	AWY-HI	95.97920	10,668 m		
MIA	-	21.71090	35,000 ft	0	MANDALAY VOR-DME
DME	-	95.97470	10,668 m		
KL	W10	23.18870	35,000 ft	138	KALAY
NDB	AWY-HI	94.05850	10,668 m		
2400N09400E	-	24.00000	35,000 ft	48	-
LATLON	-	94.00000	10,668 m		
KKU	-	24.91360	35,000 ft	78	SILCHAR
VOR	-	92.97770	10,668 m		
VENUM	W53	25.20140	35,000 ft	25	-
FIX	AWY-HI	92.64470	10,668 m		
GGT	W53	26.10190	35,000 ft	78	GUWAHATI VOR-DME
DME	AWY-HI	91.58570	10,668 m		
DUKUM	Q18	26.27560	35,000 ft	50	-
FIX	AWY-HI	90.66360	10,668 m		
OPIMO	Q18	26.58280	35,000 ft	95	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-HI	88.93060	10,668 m		
BBD	-	26.68760	35,000 ft	33	BAGDOGRA VOR-DME
DME	-	88.32600	10,668 m		
2700N08800E	-	27.00000	35,000 ft	25	-
LATLON	-	88.00000	10,668 m		
NONIM	-	27.83330	35,000 ft	58	-
FIX	-	87.43330	10,668 m		
2900N08700E	-	29.00000	35,000 ft	73	-
LATLON	-	87.00000	10,668 m		
3000N08600E	-	30.00000	35,000 ft	79	-
LATLON	-	86.00000	10,668 m		
3100N08500E	-	31.00000	35,000 ft	79	-
LATLON	-	85.00000	10,668 m		
3200N08400E	-	32.00000	35,000 ft	78	-
LATLON	-	84.00000	10,668 m		
3300N08300E	-	33.00000	35,000 ft	78	-
LATLON	-	83.00000	10,668 m		
3400N08200E	-	34.00000	35,000 ft	78	-
LATLON	-	82.00000	10,668 m		
3600N08000E	-	36.00000	35,000 ft	155	-
LATLON	-	80.00000	10,668 m		
3700N07900E	-	37.00000	35,000 ft	77	-
LATLON	-	79.00000	10,668 m		
SCH	-	38.42830	35,000 ft	119	SHACHE VOR-DME
DME	-	77.24000	10,668 m		
ANKIV	A364	38.70830	35,000 ft	22	-
FIX	AWY-HI	76.93330	10,668 m		
KHG	A364	39.54670	35,000 ft	65	KASHI
VOR	AWY-HI	76.02330	10,668 m		
OU	-	40.63680	35,000 ft	164	OSH
NDB	-	72.74200	10,668 m		
OGODA	G134	40.65500	35,000 ft	7	-
FIX	AWY-HI	72.58000	10,668 m		
AN	G134	40.69350	35,000 ft	15	ANDIZHAN
NDB	AWY-HI	72.24740	10,668 m		
DIKRI	G134	40.83330	35,000 ft	16	-
FIX	AWY-HI	71.93170	10,668 m		
SA	G134	40.96840	35,000 ft	16	NAMANGAN
NDB	AWY-HI	71.62130	10,668 m		
ABDOK	A126	41.28830	35,000 ft	29	-
FIX	AWY-HI	71.13830	10,668 m		
RODKI	A126	41.39670	35,000 ft	9	-
FIX	AWY-HI	70.98170	10,668 m		
TULGA	A126	41.89640	35,000 ft	46	-
FIX	AWY-HI	70.20110	10,668 m		
ADESA	A126	42.16110	35,000 ft	23	-
FIX	AWY-HI	69.81500	10,668 m		
SMK	A126	42.35860	35,000 ft	18	SHYMKENT VOR-DME
DME	AWY-HI	69.50470	10,668 m		
SMK	-	42.37230	35,000 ft	2	SHYMKENT
VOR	-	69.44180	10,668 m		
RUSEK	R482	42.76360	35,000 ft	29	-
FIX	AWY-HI	69.02110	10,668 m		
VAGRI	R482	43.17940	35,000 ft	33	-
FIX	AWY-HI	68.51500	10,668 m		
GENDI	R482	43.30000	35,000 ft	9	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-HI	68.36670	10,668 m		
KUDUG	A352	43.53780	35,000 ft	24	-
FIX	AWY-HI	67.91580	10,668 m		
GIMRI	A352	43.75830	35,000 ft	22	-
FIX	AWY-HI	67.49190	10,668 m		
GITIM	A352	44.29780	35,000 ft	56	-
FIX	AWY-HI	66.42780	10,668 m		
KZO	A352	44.70670	35,000 ft	43	KYZYLORDA VOR-DME
DME	AWY-HI	65.60000	10,668 m		
KZO	-	44.69580	35,000 ft	1	KYZYLORDA
VOR	-	65.56360	10,668 m		
BUDET	A356	44.91860	35,000 ft	28	-
FIX	AWY-HI	64.97330	10,668 m		
AGMUR	A356	45.01560	35,000 ft	13	-
FIX	AWY-HI	64.68500	10,668 m		
NKZ	A356	45.83110	35,000 ft	118	NOVOKAZALINSK
VOR	AWY-HI	62.12750	10,668 m		
SANUR	A356	45.95470	35,000 ft	30	-
FIX	AWY-HI	61.41280	10,668 m		
ABDUN	A356	46.22690	35,000 ft	72	-
FIX	AWY-HI	59.72110	10,668 m		
TISRA	A356	46.64750	35,000 ft	128	-
FIX	AWY-HI	56.68330	10,668 m		
PEMOL	A356	46.81140	35,000 ft	58	-
FIX	AWY-HI	55.28890	10,668 m		
RIKRI	A356	46.88860	35,000 ft	29	-
FIX	AWY-HI	54.57310	10,668 m		
LEPSI	A356	46.96390	35,000 ft	30	-
FIX	AWY-HI	53.83060	10,668 m		
GOGDI	A356	47.05560	35,000 ft	40	-
FIX	AWY-HI	52.84860	10,668 m		
ATR	A356	47.14390	35,000 ft	43	ATYRAU
VOR	AWY-HI	51.80150	10,668 m		
4800N05000E	-	48.00000	35,000 ft	89	-
LATLON	-	50.00000	10,668 m		
4800N04900E	-	48.00000	35,000 ft	40	-
LATLON	-	49.00000	10,668 m		
4800N04800E	-	48.00000	35,000 ft	40	-
LATLON	-	48.00000	10,668 m		
4800N04700E	-	48.00000	35,000 ft	40	-
LATLON	-	47.00000	10,668 m		
4800N04600E	-	48.00000	35,000 ft	40	-
LATLON	-	46.00000	10,668 m		
SL	-	48.40220	35,000 ft	37	SOLODNIKI
NDB	-	45.29580	10,668 m		
WGD	R130	48.78080	35,000 ft	44	VOLGOGRAD
VOR	AWY-HI	44.34350	10,668 m		
ST	R120	49.25890	35,000 ft	38	SIROTINSKAYA
NDB	AWY-HI	43.67940	10,668 m		
INBAL	R120	50.19170	35,000 ft	90	-
FIX	AWY-HI	41.84330	10,668 m		
BUTRI	R120	50.78330	35,000 ft	59	-
FIX	AWY-HI	40.59830	10,668 m		
EREPI	G826	50.82560	35,000 ft	31	-
FIX	AWY-HI	39.78060	10,668 m		
KELUB	G826	50.84310	35,000 ft	14	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-HI	39.39830	10,668 m		
GIKEK	G826	50.84670	35,000 ft	36	-
FIX	AWY-HI	38.42690	10,668 m		
RASAP	G826	50.73140	35,000 ft	25	-
FIX	AWY-HI	37.77670	10,668 m		
KUBOK	A279	50.31670	35,000 ft	43	-
FIX	AWY-HI	36.82830	10,668 m		
SUTOR	L4	49.91720	35,000 ft	54	-
FIX	AWY-HI	35.54530	10,668 m		
TALOB	L32	50.50580	35,000 ft	67	-
FIX	AWY-HI	34.04140	10,668 m		
KIBER	L32	51.71640	35,000 ft	147	-
FIX	AWY-HI	30.63170	10,668 m		
GOMAD	L32	51.86640	35,000 ft	26	-
FIX	AWY-HI	29.96500	10,668 m		
MAGEP	P851	51.94640	35,000 ft	34	-
FIX	AWY-HI	29.04970	10,668 m		
KUNIN	P851	52.10810	35,000 ft	81	-
FIX	AWY-HI	26.85640	10,668 m		
PNK	P851	52.15360	35,000 ft	26	PINSK
VOR	AWY-HI	26.13000	10,668 m		
DIVIM	P851	52.18970	35,000 ft	39	-
FIX	AWY-HI	25.04810	10,668 m		
RAVOK	P851	52.21310	35,000 ft	35	-
FIX	AWY-HI	24.09310	10,668 m		
VALOL	P851	52.22470	35,000 ft	23	-
FIX	AWY-HI	23.46640	10,668 m		
ABERO	P851	52.22780	35,000 ft	9	-
FIX	AWY-HI	23.20890	10,668 m		
GERVI	P851	52.15530	35,000 ft	37	-
FIX	AWY-HI	22.20080	10,668 m		
NEPOX	P851	52.15920	35,000 ft	7	-
FIX	AWY-HI	21.99920	10,668 m		
WAR	P851	52.25930	35,000 ft	49	ZABOROWEK
VOR	AWY-HI	20.65720	10,668 m		
LOLSI	T174	52.17750	35,000 ft	29	-
FIX	AWY-HI	19.87140	10,668 m		
DIBLO	T174	52.12970	35,000 ft	19	-
FIX	AWY-HI	19.34420	10,668 m		
INDIG	T174	51.99670	35,000 ft	50	-
FIX	AWY-HI	18.00000	10,668 m		
LATAG	T174	51.72170	35,000 ft	85	-
FIX	AWY-HI	15.74670	10,668 m		
KORUP	T174	51.58310	35,000 ft	38	-
FIX	AWY-HI	14.73810	10,668 m		
ETNUS	T174	51.55220	35,000 ft	18	-
FIX	AWY-HI	14.24470	10,668 m		
OGSEN	T174	51.49970	35,000 ft	29	-
FIX	AWY-HI	13.47170	10,668 m		
TADUV	T174	51.42990	35,000 ft	34	-
FIX	AWY-HI	12.54820	10,668 m		
NOTGO	T173	51.21060	31,600 ft	26	-
FIX	AWY-HI	11.94670	9,632 m		
NAMUB	T173	51.12370	29,200 ft	11	-
FIX	AWY-HI	11.67870	8,900 m		
RELKO	T173	51.05980	27,400 ft	8	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
FIX	AWY-HI	11.48380	8,352 m		
WEMAR	T173	50.98310	25,300 ft	9	-
FIX	AWY-HI	11.25190	7,711 m		
TAMEB	T173	50.80780	20,500 ft	22	-
FIX	AWY-HI	10.73000	6,248 m		
EDDF	-	50.03260	0 ft	95	Frankfurt
APT	-	8.54067	0 m		

## VVTS

Region: VIETNAM  
Timezone: ASIA/HO\_CHI\_MINH  
Runways: 2

Elevation: 33 ft / 10 m  
Location: 10.818700 106.652000  
Magnetic Var: 0.668 W

## METAR

VVTS 030800Z 31007KT 280V340 9999 SCT025 35/22 Q1007 NOSIG

## TAF

TAF VVTS 030500Z 0306/0412 33006KT 9999 FEW025 SCT050 TEMPO 0306/0312 23011KT TS BKN015 FEW017CB BKN040

## Frequencies

REC - 128.00 MHz - TAN SON NHAT ATIS	TWR - 118.70 MHz - TAN SON NHAT TOWER
TWR - 130.00 MHz - TAN SON NHAT TOWER	GND - 121.60 MHz - TAN SON NHAT GROUND
GND - 121.75 MHz - TAN SON NHAT GROUND	GND - 121.90 MHz - TAN SON NHAT GROUND
GND - 121.97 MHz - TAN SON NHAT GROUND	CLD - 123.60 MHz -
CLD - 121.80 MHz -	TAN SON NHAT CLEARANCE DELIVERY
TAN SON NHAT CLEARANCE DELIVERY	APP - 126.35 MHz - TAN SON NHAT APPROACH
APP - 125.50 MHz - TAN SON NHAT APPROACH	GND - 125.50 MHz -
GND - 124.07 MHz -	TAN SON NHAT TERMINAL CONTROL AREA
TAN SON NHAT TERMINAL CONTROL AREA	APP - 127.72 MHz - TAN SON NHAT ARRIVAL
APP - 126.35 MHz - TAN SON NHAT ARRIVAL	

## Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
07R	148 ft	12,541 ft	68.98	CONCRETE	2,513 ft	853 ft
	45 m	3,822 m	69.64		766 m	260 m
25L	148 ft	12,541 ft	248.98	CONCRETE	0 ft	1,030 ft
	45 m	3,822 m	249.65		0 m	314 m
07L	148 ft	10,009 ft	68.96	CONCRETE	0 ft	1,030 ft
	45 m	3,051 m	69.63		0 m	314 m
25R	148 ft	10,009 ft	248.97	CONCRETE	0 ft	1,033 ft
	45 m	3,051 m	249.64		0 m	315 m

## Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
25L	DME	SGN	108.30 MHz	18 nm	-	-	33 ft
				33 km	-		33 m
25R	DME	HCM	110.50 MHz	18 nm	-	-	33 ft
				33 km	-		33 m
07R	LOC-ILS	ITS	111.70 MHz	18 nm	68.98	-	33 ft
				33 km	69.65		33 m
25L	LOC-ILS	SGN	108.30 MHz	18 nm	248.98	-	33 ft
				33 km	249.65		33 m
25R	LOC-ILS	HCM	110.50 MHz	18 nm	248.97	-	33 ft
				33 km	249.64		33 m
07R	GS	ITS	111.70 MHz	10 nm	68.98	3.00	33 ft
				19 km	69.65		33 m
25L	GS	SGN	108.30 MHz	10 nm	248.98	3.00	33 ft
				19 km	249.65		33 m
25R	GS	HCM	110.50 MHz	10 nm	248.97	3.00	33 ft
				19 km	249.64		33 m



## EDDF

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

Elevation: 362 ft / 110 m  
Location: 50.032600 8.540670  
Magnetic Var: 3.182 E

## METAR

EDDF 030750Z AUTO 01006KT 330V050 9999 OVC030 16/08 Q1019 NOSIG

## TAF

TAF EDDF 030500Z 0306/0412 35008KT 9999 BKN030 BECMG 0312/0314 SCT040 BECMG 0319/0321 VRB03KT BECMG 0408/0410 220

## 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	66.38		0 m	0 m
25R	148 ft	9,194 ft	249.59	CONCRETE	0 ft	0 ft
	45 m	2,802 m	246.41		0 m	0 m
07C	197 ft	13,134 ft	69.57	ASPHALT	0 ft	203 ft
	60 m	4,003 m	66.39		0 m	62 m
25C	197 ft	13,134 ft	249.61	ASPHALT	0 ft	935 ft
	60 m	4,003 m	246.43		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	66.41		362 m
07L	LOC-ILS	IFNE	111.75 MHz	18 nm	69.58	-	362 ft
				33 km	66.40		362 m
07R	LOC-ILS	IFSE	110.95 MHz	18 nm	69.61	-	362 ft
				33 km	66.43		362 m
25C	LOC-ILS	IFCW	111.55 MHz	18 nm	249.59	-	362 ft
				33 km	246.41		362 m
25L	LOC-ILS	IFSW	111.15 MHz	18 nm	249.61	-	362 ft
				33 km	246.43		362 m
25R	LOC-ILS	IFNW	111.35 MHz	18 nm	249.58	-	362 ft
				33 km	246.40		362 m
07C	GS	IFCE	110.55 MHz	10 nm	69.59	3.00	362 ft
				19 km	66.41		362 m
07L	GS	IFNE	111.75 MHz	10 nm	69.58	3.00	362 ft
				19 km	66.40		362 m
07R	GS	IFSE	110.95 MHz	10 nm	69.61	3.00	362 ft
				19 km	66.43		362 m
25C	GS	IFCW	111.55 MHz	10 nm	249.59	3.00	362 ft
				19 km	246.41		362 m
25L	GS	IFSW	111.15 MHz	10 nm	249.61	3.00	362 ft
				19 km	246.43		362 m
25R	GS	IFNW	111.35 MHz	10 nm	249.58	3.00	362 ft
				19 km	246.40		362 m