

KOAK

Metro Oakland Intl

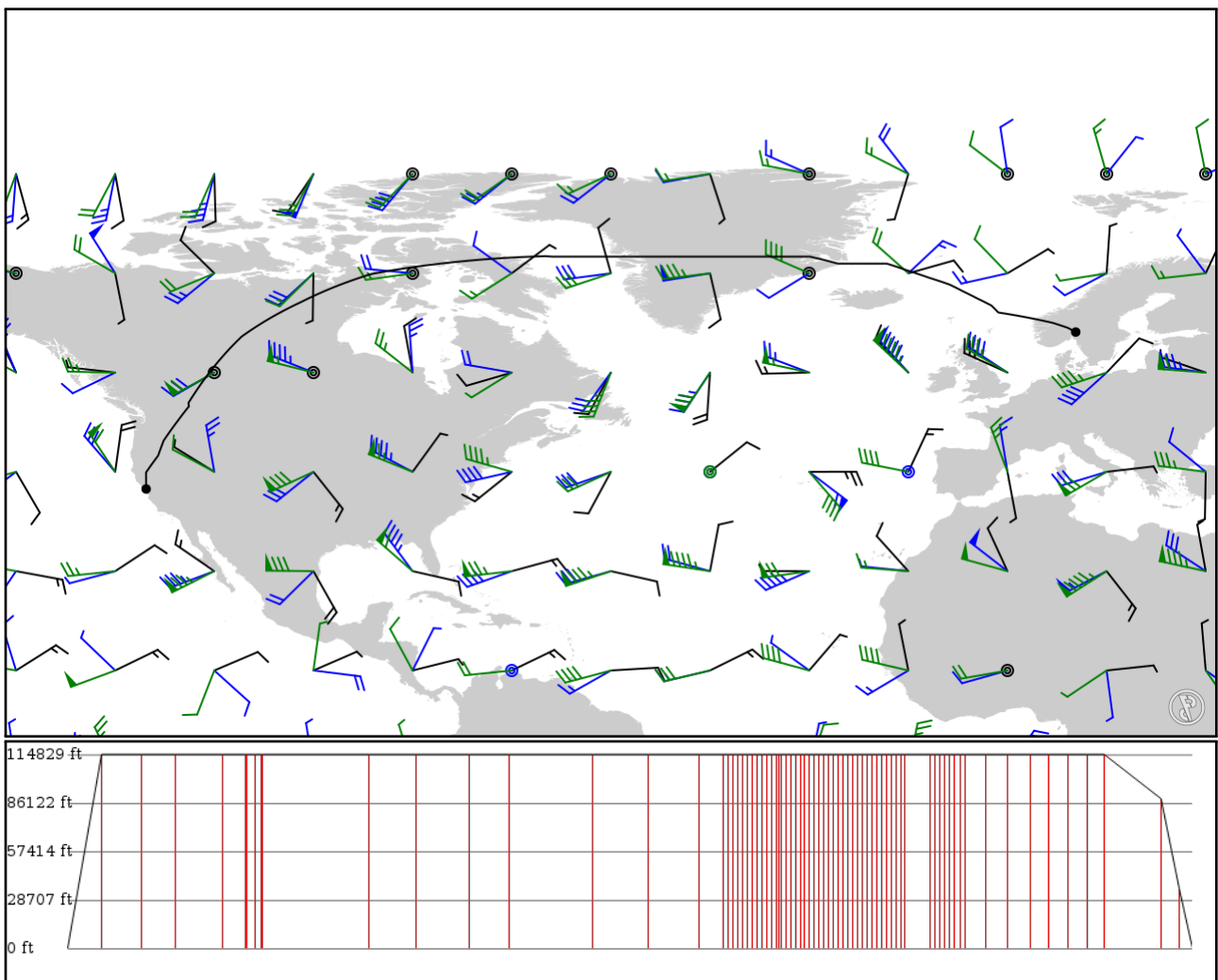
ENGM

Oslo Gardermoen

2024/05/18 0714Z

KOAK OAK J1 RBL J3 GEG J517 YXC WOFFI CHITE DATNO Q915 IKLIX LAT1 100A LAT50 090N NCAN NADMA
7100N0-6400W 7100N0-6300W 7100N0-6200W 7100N0-6100W 7100N0-6000W 7100N0-5900W 7100N0-5800W
7100N0-5700W 7100N0-5600W 7100N0-5500W 7100N0-5400W KELUX 7100N0-5300W 7100N0-5200W 7100N0-5100W
7100N0-5000W 7100N0-4900W 7100N0-4800W 7100N0-4700W 7100N0-4600W 7100N0-4500W 7100N0-4400W
7100N0-4300W 7100N0-4200W 7100N0-4100W 7100N0-4000W 7100N0-3900W 7100N0-3800W 7100N0-3700W
7100N0-3600W 7100N0-3500W 7100N0-3400W 7100N0-3300W 7100N0-3200W 7100N0-3100W 7100N0-3000W
7100N0-2900W 7100N0-2800W 7100N0-2700W 7000N0-2300W 7000N0-2200W 7000N0-2100W 7000N0-2000W
7000N0-1900W 7000N0-1800W 7000N0-1700W 7000N0-1600W 6900N0-1300W 6800N0-1000W 6700N0-700W
6600N0-500W 6500N0-300W 6400N0-100W ISVIG Z268 EVTOG ENGM

4600.25 nm / 8519.67 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
KOAK	-	37.72500	0 ft	-	Metro Oakland Intl
APT	-	-122.22000	0 m		
OAK	-	37.72590	0 ft	0	OAKLAND
VOR	-	-122.22400	0 m		
RBL	J1	40.09890	35,000 ft	142	RED BLUFF
VOR	AWY-HI	-122.23600	10,668 m		
LKV	J3	42.49280	35,000 ft	163	LAKEVIEW
VOR	AWY-HI	-120.50700	10,668 m		
IMB	J3	44.64840	35,000 ft	133	KIMBERLY
VOR	AWY-HI	-119.71200	10,668 m		
GEG	J3	47.56490	35,000 ft	195	SPOKANE
VOR	AWY-HI	-117.62700	10,668 m		
EDGES	J517	48.96480	35,000 ft	94	-
FIX	AWY-HI	-116.55900	10,668 m		
BZXIV	J517	49.00000	35,000 ft	2	-
FIX	AWY-HI	-116.53100	10,668 m		
YXC	J517	49.55430	35,000 ft	37	CRANBROOK
VOR	AWY-HI	-116.08800	10,668 m		
WOFFI	-	49.97020	35,000 ft	25	-
FIX	-	-116.14400	10,668 m		
CHITE	-	50.04670	35,000 ft	4	-
FIX	-	-116.15200	10,668 m		
DATNO	-	50.06560	35,000 ft	1	-
FIX	-	-116.14400	10,668 m		
SAVEL	Q915	56.66640	35,000 ft	432	-
FIX	AWY-HI	-111.28700	10,668 m		
IKLIX	Q915	59.55500	35,000 ft	194	-
FIX	AWY-HI	-108.51800	10,668 m		
TADOM	LAT1	62.44910	35,000 ft	218	-
FIX	AWY-HI	-103.98700	10,668 m		
100A	LAT1	64.50000	35,000 ft	163	-
FIX	AWY-HI	-100.00000	10,668 m		
090N	LAT50	68.50000	35,000 ft	338	-
FIX	AWY-HI	-90.00000	10,668 m		
080N	NCAN	70.00000	35,000 ft	230	-
FIX	AWY-HI	-80.00000	10,668 m		
070N	NCAN	70.85770	35,000 ft	207	-
FIX	AWY-HI	-70.00000	10,668 m		
NADMA	NCAN	71.06720	35,000 ft	100	-
FIX	AWY-HI	-64.92630	10,668 m		
7100N0-6400W	-	71.00000	35,000 ft	18	-
LATLON	-	-64.00000	10,668 m		
7100N0-6300W	-	71.00000	35,000 ft	19	-
LATLON	-	-63.00000	10,668 m		
7100N0-6200W	-	71.00000	35,000 ft	19	-
LATLON	-	-62.00000	10,668 m		
7100N0-6100W	-	71.00000	35,000 ft	19	-
LATLON	-	-61.00000	10,668 m		
7100N0-6000W	-	71.00000	35,000 ft	19	-
LATLON	-	-60.00000	10,668 m		
7100N0-5900W	-	71.00000	35,000 ft	19	-
LATLON	-	-59.00000	10,668 m		
7100N0-5800W	-	71.00000	35,000 ft	19	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
LATLON	-	-58.00000	10,668 m		
7100N0-5700W	-	71.00000	35,000 ft	19	-
LATLON	-	-57.00000	10,668 m		
7100N0-5600W	-	71.00000	35,000 ft	19	-
LATLON	-	-56.00000	10,668 m		
7100N0-5500W	-	71.00000	35,000 ft	19	-
LATLON	-	-55.00000	10,668 m		
7100N0-5400W	-	71.00000	35,000 ft	19	-
LATLON	-	-54.00000	10,668 m		
KELUX	-	71.00000	35,000 ft	12	-
FIX	-	-53.33640	10,668 m		
7100N0-5300W	-	71.00000	35,000 ft	6	-
LATLON	-	-53.00000	10,668 m		
7100N0-5200W	-	71.00000	35,000 ft	19	-
LATLON	-	-52.00000	10,668 m		
7100N0-5100W	-	71.00000	35,000 ft	19	-
LATLON	-	-51.00000	10,668 m		
7100N0-5000W	-	71.00000	35,000 ft	19	-
LATLON	-	-50.00000	10,668 m		
7100N0-4900W	-	71.00000	35,000 ft	19	-
LATLON	-	-49.00000	10,668 m		
7100N0-4800W	-	71.00000	35,000 ft	19	-
LATLON	-	-48.00000	10,668 m		
7100N0-4700W	-	71.00000	35,000 ft	19	-
LATLON	-	-47.00000	10,668 m		
7100N0-4600W	-	71.00000	35,000 ft	19	-
LATLON	-	-46.00000	10,668 m		
7100N0-4500W	-	71.00000	35,000 ft	19	-
LATLON	-	-45.00000	10,668 m		
7100N0-4400W	-	71.00000	35,000 ft	19	-
LATLON	-	-44.00000	10,668 m		
7100N0-4300W	-	71.00000	35,000 ft	19	-
LATLON	-	-43.00000	10,668 m		
7100N0-4200W	-	71.00000	35,000 ft	19	-
LATLON	-	-42.00000	10,668 m		
7100N0-4100W	-	71.00000	35,000 ft	19	-
LATLON	-	-41.00000	10,668 m		
7100N0-4000W	-	71.00000	35,000 ft	19	-
LATLON	-	-40.00000	10,668 m		
7100N0-3900W	-	71.00000	35,000 ft	19	-
LATLON	-	-39.00000	10,668 m		
7100N0-3800W	-	71.00000	35,000 ft	19	-
LATLON	-	-38.00000	10,668 m		
7100N0-3700W	-	71.00000	35,000 ft	19	-
LATLON	-	-37.00000	10,668 m		
7100N0-3600W	-	71.00000	35,000 ft	19	-
LATLON	-	-36.00000	10,668 m		
7100N0-3500W	-	71.00000	35,000 ft	19	-
LATLON	-	-35.00000	10,668 m		
7100N0-3400W	-	71.00000	35,000 ft	19	-
LATLON	-	-34.00000	10,668 m		
7100N0-3300W	-	71.00000	35,000 ft	19	-
LATLON	-	-33.00000	10,668 m		
7100N0-3200W	-	71.00000	35,000 ft	19	-
LATLON	-	-32.00000	10,668 m		
7100N0-3100W	-	71.00000	35,000 ft	19	-

Ident Type	Via	Lat Lon	Alt	Dist (nm)	Name
LATLON	-	-31.00000	10,668 m		
7100N0-3000W	-	71.00000	35,000 ft	19	-
LATLON	-	-30.00000	10,668 m		
7100N0-2900W	-	71.00000	35,000 ft	19	-
LATLON	-	-29.00000	10,668 m		
7100N0-2800W	-	71.00000	35,000 ft	19	-
LATLON	-	-28.00000	10,668 m		
7100N0-2700W	-	71.00000	35,000 ft	19	-
LATLON	-	-27.00000	10,668 m		
7000N0-2300W	-	70.00000	35,000 ft	100	-
LATLON	-	-23.00000	10,668 m		
7000N0-2200W	-	70.00000	35,000 ft	20	-
LATLON	-	-22.00000	10,668 m		
7000N0-2100W	-	70.00000	35,000 ft	20	-
LATLON	-	-21.00000	10,668 m		
7000N0-2000W	-	70.00000	35,000 ft	20	-
LATLON	-	-20.00000	10,668 m		
7000N0-1900W	-	70.00000	35,000 ft	20	-
LATLON	-	-19.00000	10,668 m		
7000N0-1800W	-	70.00000	35,000 ft	20	-
LATLON	-	-18.00000	10,668 m		
7000N0-1700W	-	70.00000	35,000 ft	20	-
LATLON	-	-17.00000	10,668 m		
7000N0-1600W	-	70.00000	35,000 ft	20	-
LATLON	-	-16.00000	10,668 m		
6900N0-1300W	-	69.00000	35,000 ft	87	-
LATLON	-	-13.00000	10,668 m		
6800N0-1000W	-	68.00000	35,000 ft	89	-
LATLON	-	-10.00000	10,668 m		
6700N0-700W	-	67.00000	35,000 ft	91	-
LATLON	-	-7.00000	10,668 m		
6600N0-500W	-	66.00000	35,000 ft	76	-
LATLON	-	-5.00000	10,668 m		
6500N0-300W	-	65.00000	35,000 ft	78	-
LATLON	-	-3.00000	10,668 m		
6400N0-100W	-	64.00000	35,000 ft	79	-
LATLON	-	-1.00000	10,668 m		
ISVIG	-	63.00000	35,000 ft	65	-
FIX	-	0.00000	10,668 m		
BATPA	Z268	61.52260	27,000 ft	234	-
FIX	AWY-HI	7.77630	8,230 m		
EVT0G	Z268	60.81680	10,800 ft	75	-
FIX	AWY-HI	9.93653	3,292 m		
ENGM	-	60.19450	0 ft	50	Oslo Gardermoen
APT	-	11.09890	0 m		

KOAK

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

Elevation: 8 ft / 2 m
Location: 37.725000 -122.220000
Magnetic Var: 12.838 E

METAR

KOAK 180653Z 30005KT 10SM SCT011 13/12 A2993 RMK A02 SLP134 T01330122

TAF

KOAK 180530Z 1806/1912 29006KT P6SM BKN012 FM181500 23010KT P6SM SCT012 FM181900 26014KT P6SM SKC TEMPO 1903/1906

Frequencies

REC - 133.77 MHz - OAKLAND ATIS	COM - 122.95 MHz - OAKLAND UNICOM
CLD - 121.10 MHz - OAKLAND CLEARANCE DELIVERY	GND - 121.90 MHz - OAKLAND GROUND NORTH
GND - 121.75 MHz - OAKLAND GROUND SOUTH	TWR - 118.30 MHz - OAKLAND TOWER NORTH
TWR - 127.20 MHz - OAKLAND TOWER SOUTH	TWR - 124.90 MHz - OAKLAND TOWER SOUTH
APP - 125.35 MHz - NORCAL APPROACH	APP - 128.32 MHz - NORCAL APPROACH EAST
APP - 135.10 MHz - NORCAL APPROACH EAST	APP - 133.95 MHz - NORCAL APPROACH WEST
APP - 134.50 MHz - NORCAL APPROACH WEST	DEP - 120.90 MHz - NORCAL DEPARTURE NORTH WEST
DEP - 135.10 MHz - NORCAL DEPARTURE WEST	

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
12	150 ft	10,530 ft	130.11	ASPHALT	0 ft	397 ft
	46 m	3,210 m	117.27		0 m	121 m
30	150 ft	10,530 ft	310.13	ASPHALT	128 ft	397 ft
	46 m	3,210 m	297.29		39 m	121 m
10R	150 ft	6,219 ft	112.25	ASPHALT	0 ft	774 ft
	46 m	1,896 m	99.42		0 m	236 m
28L	150 ft	6,219 ft	292.27	ASPHALT	0 ft	390 ft
	46 m	1,896 m	279.43		0 m	119 m
10L	150 ft	5,463 ft	112.24	ASPHALT	0 ft	390 ft
	46 m	1,665 m	99.40		0 m	119 m
28R	150 ft	5,463 ft	292.25	ASPHALT	0 ft	259 ft
	46 m	1,665 m	279.41		0 m	79 m
15	75 ft	3,379 ft	164.48	ASPHALT	0 ft	0 ft
	23 m	1,030 m	151.64		0 m	0 m
33	75 ft	3,379 ft	344.48	ASPHALT	0 ft	0 ft
	23 m	1,030 m	331.64		0 m	0 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
12	LOC-ILS	IAAZ	111.90 MHz	18 nm	130.11	-	8 ft
				33 km	117.27		8 m
28R	LOC-ILS	IOAK	109.90 MHz	18 nm	292.25	-	8 ft
				33 km	279.41		8 m
30	LOC-ILS	IINB	108.70 MHz	18 nm	310.11	-	8 ft
				33 km	297.27		8 m
12	GS	IAAZ	111.90 MHz	10 nm	130.11	2.75	8 ft
				19 km	117.27		8 m
28R	GS	IOAK	109.90 MHz	10 nm	292.25	3.00	8 ft
				19 km	279.41		8 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
30	GS	IINB	108.70 MHz	10 nm	310.11	3.00	8 ft
				19 km	297.27		8 m

ENGM

Region: NORWAY
Timezone: EUROPE/OSLO
Runways: 2

Elevation: 681 ft / 208 m
Location: 60.194500 11.098900
Magnetic Var: 4.484 E

METAR

ENGM 180650Z 15003KT 120V200 CAVOK 15/04 Q1018 NOSIG

TAF

TAF ENGM 180500Z 1806/1906 36003KT CAVOK BECMG 1808/1810 19010KT BECMG 1819/1821 VRB03KT

Frequencies

REC - 126.12 MHz - GARDERMOEN ARRIVAL INFORMATION
CLD - 121.67 MHz - GARDERMOEN DELIVERY WEST
GND - 121.75 MHz - GARDERMOEN GROUND
GND - 121.90 MHz - GARDERMOEN GROUND EAST
TWR - 120.10 MHz - GARDERMOEN TOWER
APP - 120.45 MHz - OSLO APPROACH

REC - 127.15 MHz - GARDERMOEN DEPARTURE INFORMATION
CLD - 121.92 MHz - GARDERMOEN DELIVERY EAST
GND - 121.60 MHz - GARDERMOEN GROUND WEST
TWR - 118.30 MHz - GARDERMOEN TOWER
APP - 118.47 MHz - OSLO APPROACH

Runways

Ident	Width	Length	Bearing (true) (mag)	Surface	Threshold Offset	Overrun Length
01R	148 ft	9,664 ft	16.01	ASPHALT	0 ft	486 ft
	45 m	2,946 m	11.52		0 m	148 m
19L	148 ft	9,664 ft	196.02	ASPHALT	0 ft	489 ft
	45 m	2,946 m	191.54		0 m	149 m
01L	148 ft	11,797 ft	15.99	ASPHALT	0 ft	423 ft
	45 m	3,596 m	11.51		0 m	129 m
19R	148 ft	11,797 ft	196.01	ASPHALT	0 ft	486 ft
	45 m	3,596 m	191.52		0 m	148 m

Approach Nav aids

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
01L	DME	OBW	110.30 MHz	18 nm	-	-	709 ft
				33 km	-		709 m
01R	DME	ONE	111.95 MHz	18 nm	-	-	723 ft
				33 km	-		723 m
19L	DME	GME	110.55 MHz	18 nm	-	-	729 ft
				33 km	-		729 m
19R	DME	GSW	111.30 MHz	18 nm	-	-	727 ft
				33 km	-		727 m
01L	LOC-ILS	OBW	110.30 MHz	18 nm	16.00	-	681 ft
				33 km	11.52		681 m
01R	LOC-ILS	ONE	111.95 MHz	18 nm	16.04	-	681 ft
				33 km	11.56		681 m
19L	LOC-ILS	GME	110.55 MHz	18 nm	196.04	-	681 ft
				33 km	191.56		681 m
19R	LOC-ILS	GSW	111.30 MHz	18 nm	196.00	-	681 ft
				33 km	191.52		681 m
01L	GS	OBW	110.30 MHz	10 nm	16.00	3.00	681 ft
				19 km	11.52		681 m
01R	GS	ONE	111.95 MHz	10 nm	16.04	3.00	681 ft
				19 km	11.56		681 m

Runway	Type	Ident	Frequency	Range	Bearing (true) (mag)	Slope	Elevation
19L	GS	GME	110.55 MHz	10 nm	196.04	3.00	681 ft
				19 km	191.56		681 m
19R	GS	GSW	111.30 MHz	10 nm	196.00	3.00	681 ft
				19 km	191.52		681 m