

RNAV - STANDARD INSTRUMENT APPROACH PROCEDURE TITLE 14 CFR PART 97.33				Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.											
TERMINAL ROUTES										MISSED APPROACH					
FROM		TO		COURSE AND DISTANCE				ALTITUDE		LPV: DA LNAV/VNAV: DA LNAV: RW28R CLIMB TO 3000 DIRECT ZERMO AND TRACK 335.32 TO REBAS AND HOLD. ADDITIONAL FLIGHT DATA: HOLD S, RT, 343.64 INBOUND. CHART FAS OBST: 168 ANT 374225N/1220952W 840 AAO 374259.14N/1220645.06W DISTANCE TO THLD FROM 200 HAT: 0.47 NM. CHART VDP AT 1.20 MILES TO RW28R* *LNAV ONLY. WAAS CHANNEL # 42535 REFERENCE PATH ID: W28B CHART CIRCLING ICON. CHART MANDATORY 5000 AT BBUBB. CHART MANDATORY 5300 AT CYMBL. *LNAV ONLY. LTP HAE: -30.7 M					
BBUBB (IAF)		NAGVY (FB)		230.50 / 4.87				4200							
CYMBL (IAF)		NAGVY (FB)		299.10 / 5.69				4200							
NAGVY (IF)		GROVE (FB)		278.35 / 3.10				3400							
GROVE		URZAF (FB)		278.31 / 2.31				2700							
URZAF		NIXDE (FB)		278.28 / 2.01				2100							
NIXDE		CUVSA (FB)		278.26 / 2.15				1500							
CUVSA (FAF)		JAPSO/2.90 NM TO RW28R (FB)		278.23 / 1.63											
(SEE FORM 8260-10)															
1. PT _____ SIDE OF COURSE _____ OUTBOUND _____ FT WITHIN _____ MILES OF _____ (IAF) 2. PROFILE STARTS AT NAGVY 3. FAC: 278.23 FAF: CUVSA DIST FAF TO MAP: 4.53 THLD: 4.53 4. MIN. ALT: NAGVY 4200, GROVE 3400, URZAF 2700, NIXDE 2100, CUVSA 1500, JAPSO/2.90 NM TO RW28R 980* 5. DIST TO THLD FROM OM: _____ MM: _____ IM: _____ 150 HAT: _____ 100 HAT: _____ GS ANT: _____ 6. MIN GS INCPT: 1500 GS ALT AT: CUVSA 1500 OM: _____ MM: _____ IM: _____ 7. GS ANGLE: 3.00 TCH: 52.8 34:1 IS CLEAR 8. MSA FROM: RW28R 5100										MAG VAR: 14E		EPOCH YEAR: 2015			
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		STANDARD @					
CATEGORY =====>		A		B		C		D		E					
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA
LPV DA	207	2400	200	207	2400	200	207	2400	200	207	2400	200			
LNAV/VNAV DA	387	4000	380	387	4000	380	387	4000	380	387	4000	380			
LNAV MDA	440	2400	433	440	2400	433	440	4000	433	440	4000	433			
CIRCLING	560	1	551	560	1	551	660	1 3/4	651	1400	3	1391			
NOTES: CHART NOTE: DME/DME RNP-0.3 NA. @ CAT D 1400-3 CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW 1C (34F) OR ABOVE 54C (130F).															
CITY AND STATE OAKLAND, CA		ELEVATION: 9 TDZE: 7 AIRPORT NAME: METROPOLITAN OAKLAND INTL		FACILITY IDENTIFIER: RNAV		PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) Y RWY 28R, AMDT 3, 12/10/2015						SUP:			
												AMDT: 2B			
												DATED 07/24/2014			



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INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.33**

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TERMINAL ROUTES, (CONT.):

FROM	TO	COURSE AND DISTANCE	ALTITUDE
JAPSO/2.90 NM TO RW28R	RW28R (MAP) (FO)	278.23 / 2.90	
RW28R (MAP)	207 MSL	278.23	
207 MSL	ZERMO (FB)		
ZERMO	REBAS (FO)	335.32 / 10.44	3000

QUALITY
16
CHECKED

CITY AND STATE

OAKLAND, CA

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**RNAV STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICE - FAR PART 97.33**

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FAS DATA BLOCK INFORMATION**DATA FIELD****DATA**

OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KOAK
RUNWAY	RW28R
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	Y
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W28B
LTP/FTP LATITUDE	374329.3245N
LTP/FTP LONGITUDE	1221216.9325W
LTP/FTP ELLIPSOIDAL HEIGHT	-00307
FPAP LATITUDE	374402.9875N
FPAP LONGITUDE	1221400.9405W
THRESHOLD CROSSING HEIGHT (TCH)	00052.8
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1088
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	35.0

CRC REMAINDER

F40D4C6C

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+00018
FPAP ORTHOMETRIC HEIGHT	+00018

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07/24/2014

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION
RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE
FLIGHT STANDARDS SERVICES - TITLE 14 CFR PART 97.33

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ARINC SUMMARY - KOAK

ROUTES

TRANSITION	WPT SEQ	WPT NAME	LEG TYPE	FB/FO	RNP	MAG CRS	REC NAV	ANGLE	TURN DIR	CENTER FIX	TURN RADIUS	ALTITUDE DESCRIPTION & VALUE	SPEED LIMIT DESCRIPTION & VALUE	WPT DESCRIPTION CODE
BBUBB	010	BBUBB	IF	FB								AT 05000		E A
BBUBB	020	NAGVY	TF	FB	1.0	230.5						AA 04200		EE B
CYMBL	010	CYMBL	IF	FB								AT 05300		E A
CYMBL	020	NAGVY	TF	FB	1.0	299.1						AA 04200		EE B
	010	NAGVY	IF	FB								AA 04200		E I
	011	GROVE	TF	FB	0.5	278.4						AA 03400		E
	012	URZAF	TF	FB	0.5	278.3						AA 02700		E
	013	NIXDE	TF	FB	0.5	278.3						AA 02100		E
	020	CUVSA	TF	FB	0.5	278.3				RW28R		AA 01500		E F
	021	JAPSO	TF	FB	0.3	278.2		3.00				AA 00980 GS 00982		E S
	030	RW28R	TF	FO	0.3	278.2		3.00				AT 00059		GY M
	040		CA	FB		278.2						AA 00207		M
	050	ZERMO	DF	FB										E
	060	REBAS	TF	FO	1.0	335.3						AA 03000		EY
	070	REBAS	HM	FO		343.6			R			AA 03000		EE

POINTS

POINT NAME	LATITUDE	LONGITUDE
BBUBB	N374014.58	W1215018.49
CUVSA	N374146.56	W1220700.07
CYMBL	N373415.17	W1215037.07
GROVE	N373919.17	W1215927.32
JAPSO	N374223.51	W1220853.90
NAGVY	N373808.42	W1215550.68
NIXDE	N374057.58	W1220429.39
REBAS	N375626.46	W1222301.20
URZAF	N374011.82	W1220208.82
ZERMO	N374610.04	W1222034.44

RUNWAYS

RUNWAY	THRESHOLD LATITUDE	THRESHOLD LONGITUDE	THRESHOLD ELEVATION	PROCEDURE TCH
RW28R	N374329.32	W1221216.93	00006	52.8

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