Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 11/30/2011	Task #: 2011113023750301001	Request #: 20111130237503
Procedure: RNAV (GPS) RWY 9 AMDT 2		Airport ID: KRAL	Airport: RIVERSIDE MUNI		Reimbursable #:
City: RIVERSIDE	ST: CA	GPS #:		Estimated Chart Date: 09/20/2012	FICO #:
Fac ID:	Fac. Type: Proc-S	Specialist: MIKE MELSSEN			

Procedure Review

P2

	Rec'd	Rel'd	Full Name	Comments
Lead:	12/05/2011	06/14/2012	JEFF RAWDON	LPV
QA:	06/14/2012	06/22/2012	STEVEN SZUKALA	
Liaison:	06/22/2012		K. Spurlin	P2; PKG 2 of 4

Procedure Comments: **Remark Type:** INFORMATION

RIVERSIDE, CA; RIVERSIDE MUNI (KRAL); RNAV (GPS) RWY 9, AMDT 2; ENROUTE-NO; FC BY 8/7/12; PUB 9/20/12

ATTACHED FORMS: 8260-3; 8260-9; 8260-10.
8260-2 (6): EXPAM INT, REV 1; HOMELAND VOR, REV 13; JASER INT, REV 5; OVUCU, REV 1, CANCELLATION; PIRRO INT, REV 8; POMONA VORTAC, REV 17; PRADO INT, REV 19; JIKUB, REV 1 (INFO ONLY).
CLEAR FDC NOTAM 1/6710.
CONTACT: ADOLFO URRUTIA/LONNIE EVERHART-AVN-130 LEADS, 405.954.2079/405.954.4576.

WAAS CH 81921 W09A	APP CRS 089°	Rwy ldg 5401 THRE 760 Apt Elev 819

RNAV (GPS) RWY 9
RIVERSIDE MUNI (RAL)

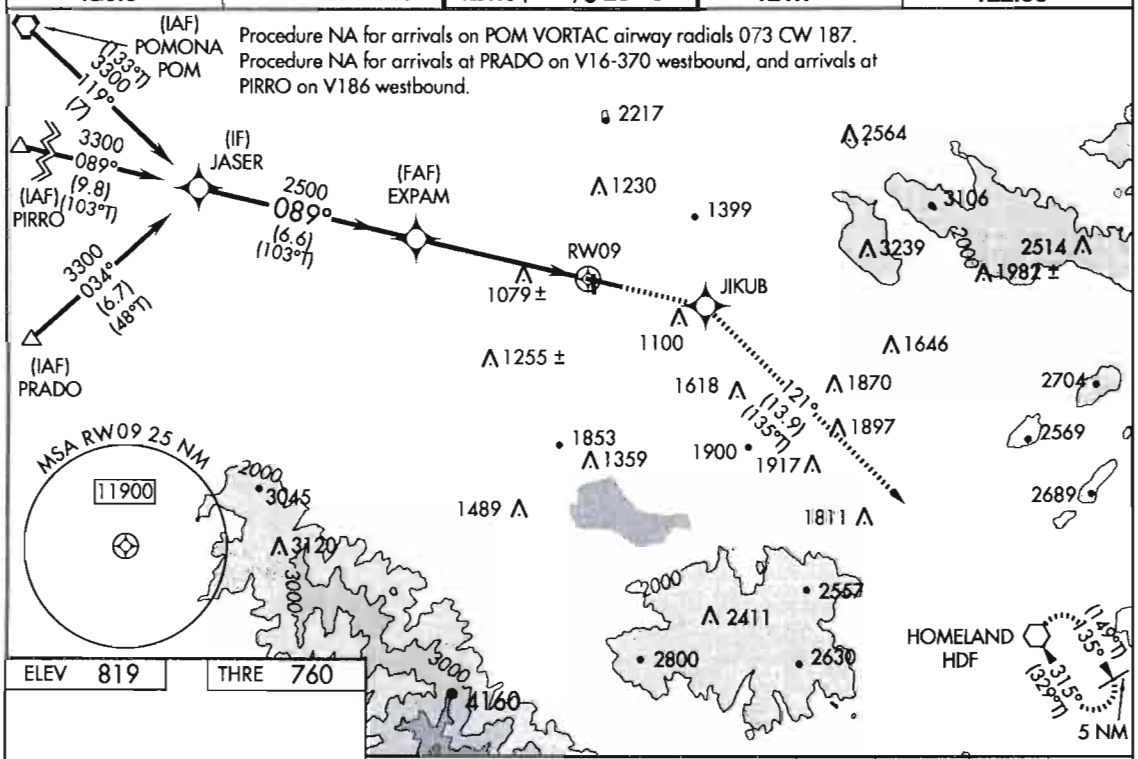
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Chino altimeter setting and increase all DA 46 feet and all MDA 60 feet and increase LPV all Cats and Circling Cats C and D visibility ¼ mile and LNAV/VNAV all Cats and LNAV Cats C and D visibility ⅛ mile. Circling to Rwy 16 NA at night. For inoperative MALSR, increase LPV all Cats visibility to 1⅛ mile and LNAV/VNAV all Cats visibility to 2½ mile. When using Chino altimeter setting; for inoperative MALSR, increase LPV all Cats visibility to 1¼ mile. VDP and Baro-VNAV NA with Chino altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). When VGSI inop, circling to Rwy 34 NA at night. Circling NA for Cat D north of Rwy 9-27.

MALSR

MISSED APPROACH: Climb to 6000 direct JIKUB and on track 121° to HDF VOR and hold, continue climb-in-hold 6000.

ATIS	SOCAL APP CON	RIVERSIDE TOWER *	GND CON	UNICOM
128.8	135.4 377.125	121.0 (CTAF) 257.8	121.7	122.95

Procedure NA for arrivals on POM VORTAC airway radials 073 CW 187.
Procedure NA for arrivals at PRADO on V16-370 westbound, and arrivals at PIRRO on V186 westbound.



ELEV 819 THRE 760

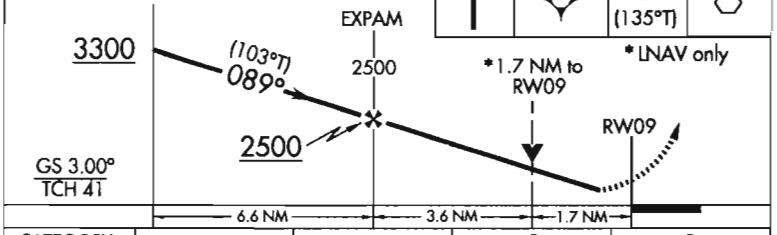
(103°T) 089° to RW09

EXPAM: 3358.436'/ 11733.367'
HOMELAND: 3346.580'/ 11711.119'
JASER: 3359.908'/ 11741.051'
PRADO: 3355.390'/ 11747.028'
JIKUB: 3356.418'/ 11722.903
PIRRO: 3402.127'/ 11752.580
POMONA: 3404.703'/ 11747.224
PRADO: 3355.390'/ 11747.028
RWY09: 3357.233'/ 11727.118

REIL Rwy 27
MIRL Rwys 9-27 and 16-34

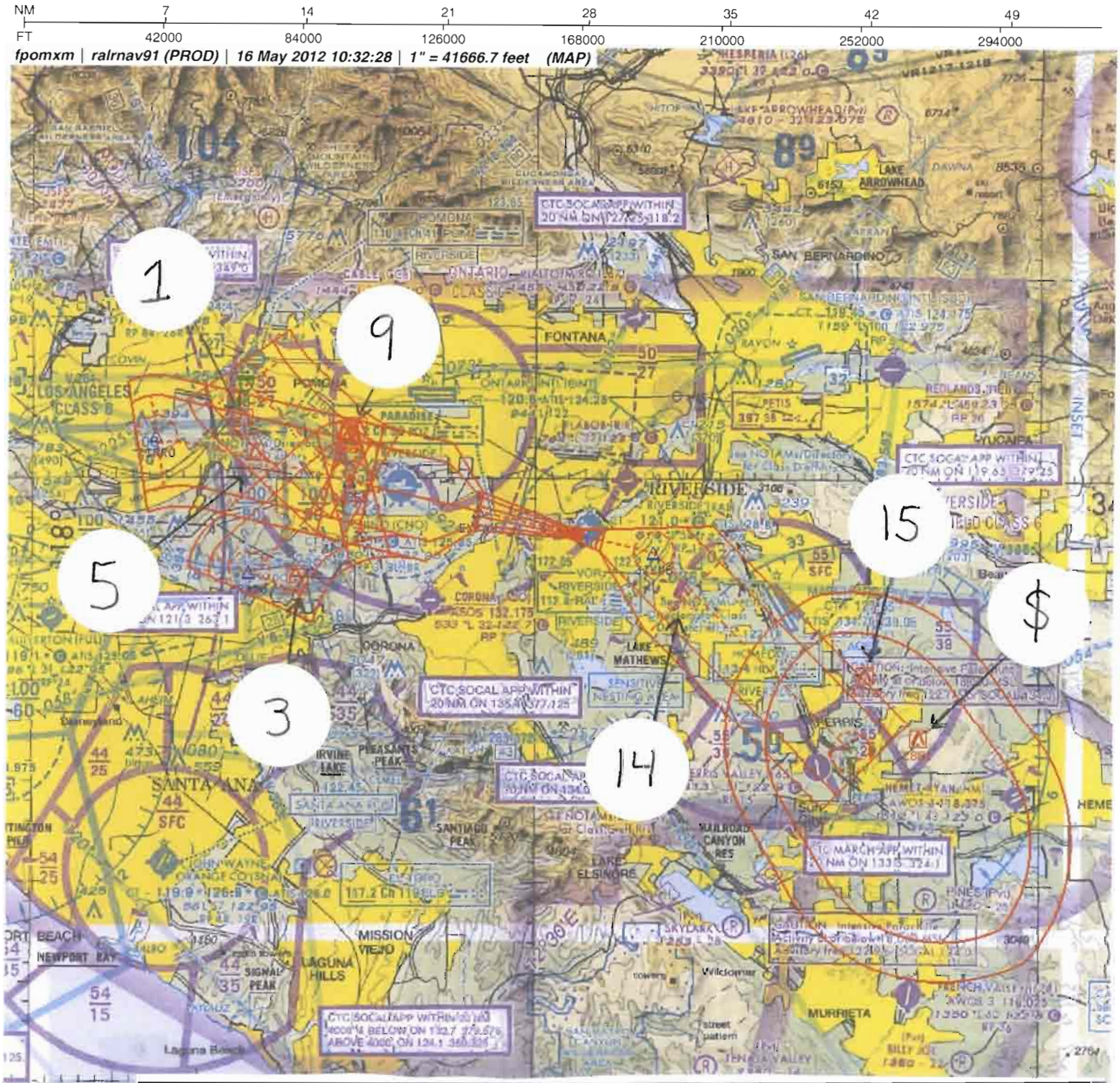
Procedure Turn NA

6000	JIKUB	tr 121° (135°T)	HDF

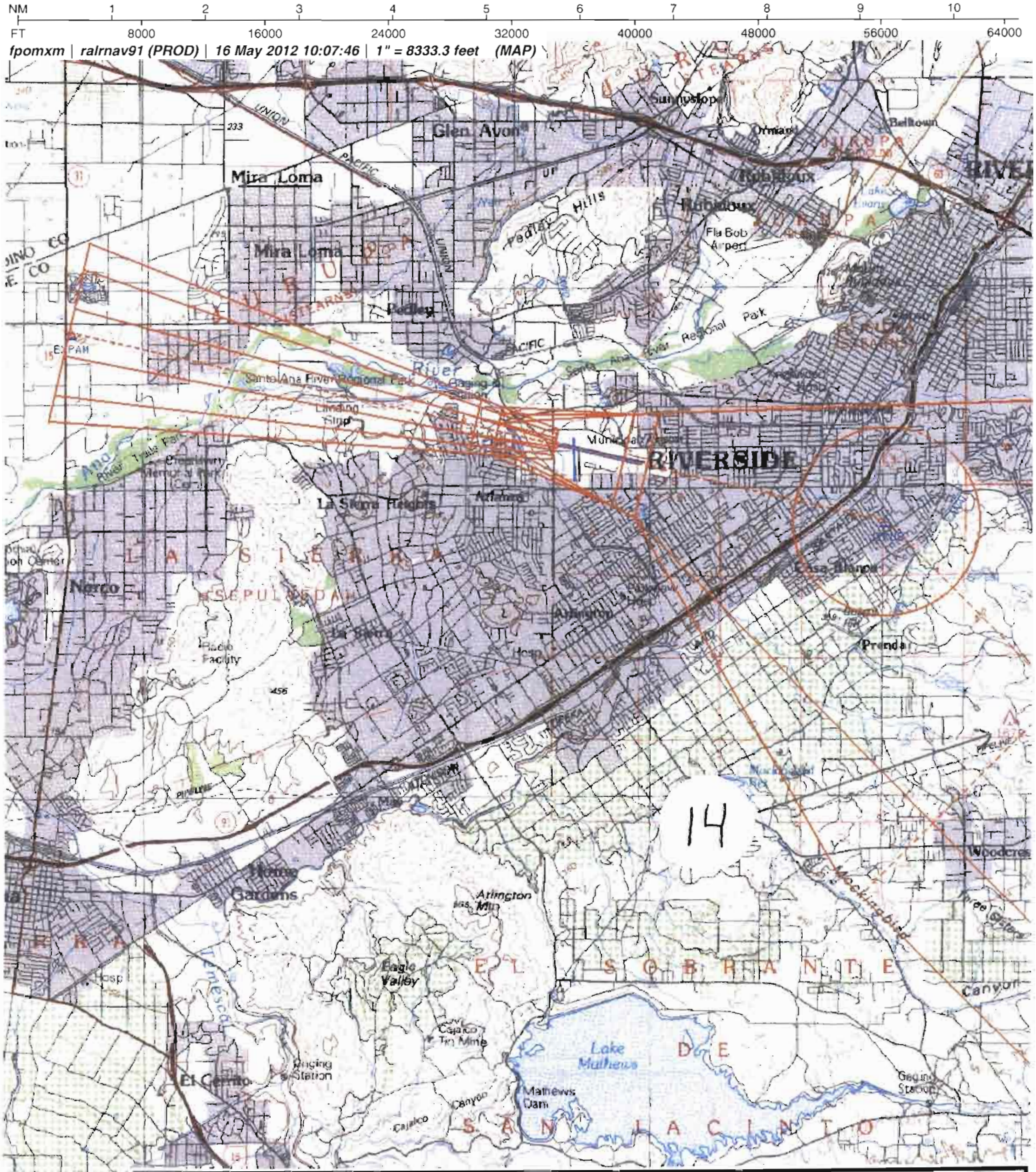


* LNAV only

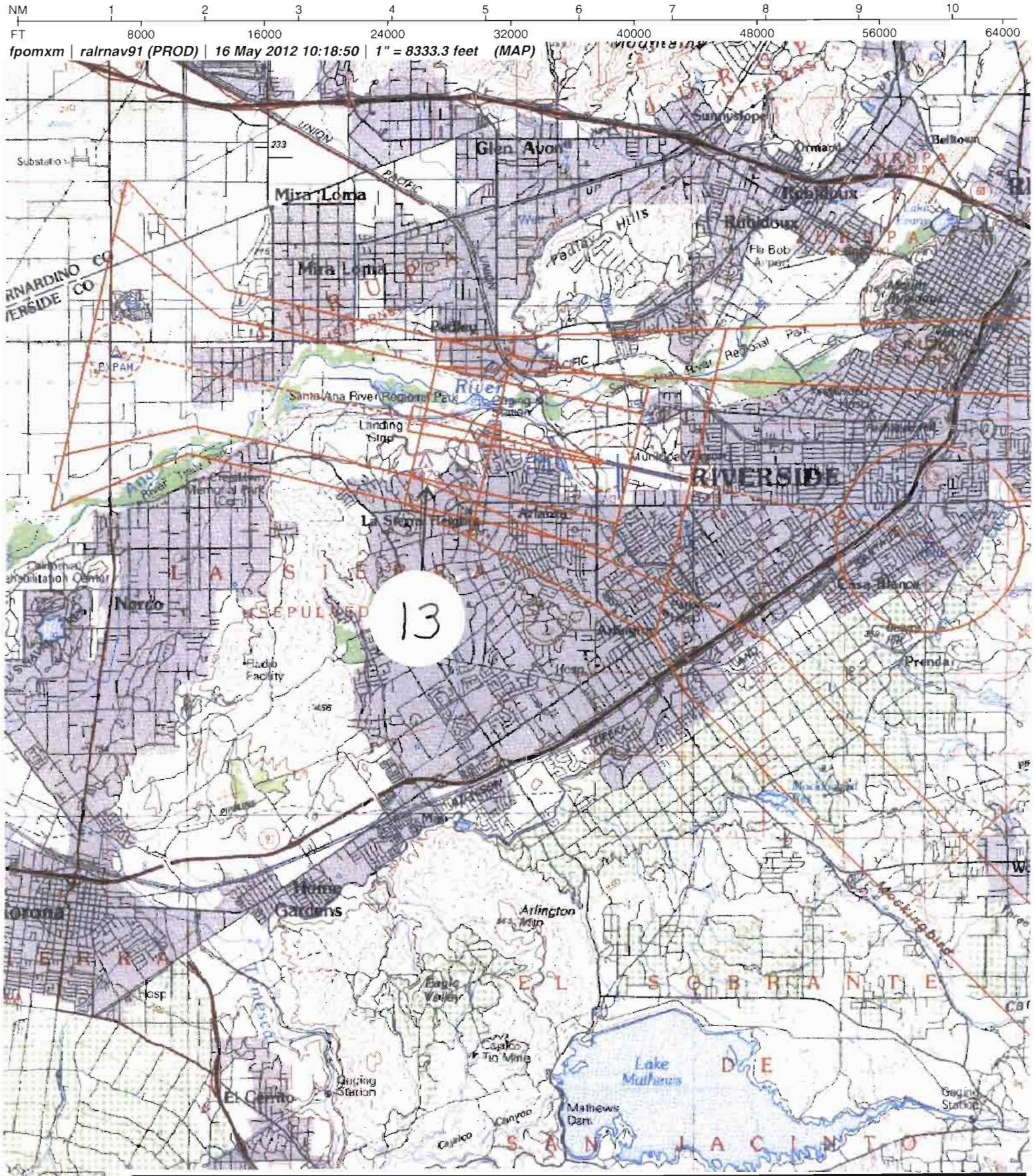
CATEGORY	A	B	C	D
LPV DA	1092-5/8 332 (400-¾)			
LNAV/VNAV DA	1426-1⅞ 666 (700-1⅞)			
LNAV MDA	1340-1/2 580 (600-¾)		1340-1¼ 580 (600-1¼)	
CIRCLING	1340-1 521 (600-1)		1620-2¼ 801 (900-2¼)	1620-2½ 801 (900-2½)



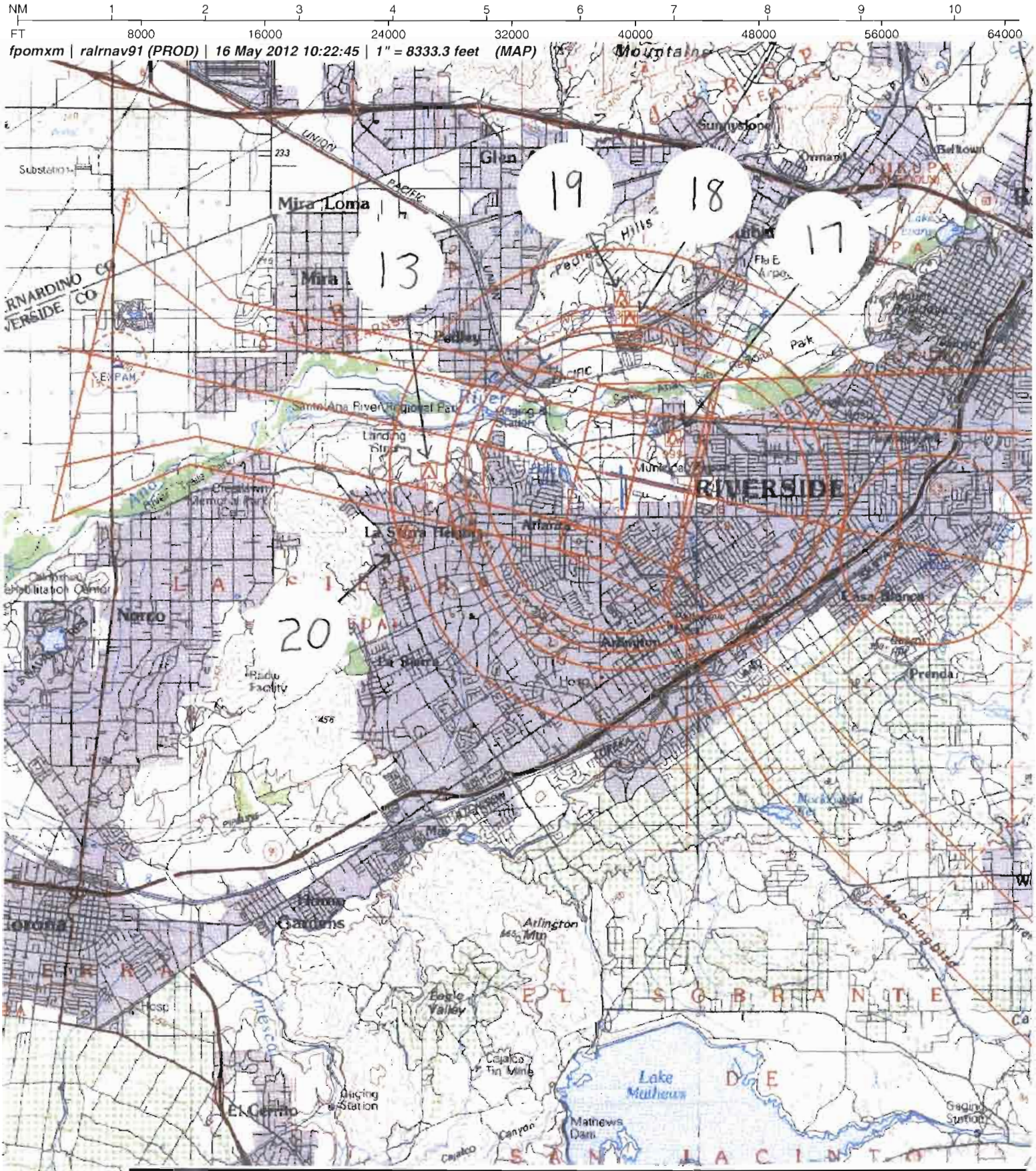
Apt ID	KRAL	FM 9	RWY 9		
Apt name	RIVERSIDE MUNI	No.	Segment	Obstruction	Elev MSL
City	RIVERSIDE	1	INITIAL: POM VORTAC	AAO	1569
State	CA	3	INITIAL: PRADO	AAO	1962
Proc ID	RNAV (GPS) RWY 9	5	INITIAL: PIRRO	TOWER	1631
Number	AMDT 2	9	INTERMEDIATE	AAO	1070
Scale	1:500,000		LPV FINAL	ASC	
		14	40:1 MISSED	AAO	1879
		15	LEVEL SURFACE	TOWER	2718
		$	HOLDING	AAO	2861



Apt ID	KRAL	FM 9	LPV FINAL		
Apt name	RIVERSIDE MUNI	No.	Segment	Obstruction	Elev MSL
City	RIVERSIDE		LPV FINAL	ASC	
State	CA	14	MISSED	AAO	1879
Proc ID	RNAV (GPS) RWY 9				
Number	AMDT 2				
Scale	1:100,000				



Apt ID	KRAL	FM 9	LNAV/VNAV FINAL		
Apt name	RIVERSIDE MUNI	No.	Segment	Obstruction	Elev MSL
City	RIVERSIDE	13	LNAV/VNAV FINAL	TREE	1079
State	CA				
Proc ID	RNAV (GPS) RWY 9				
Number	AMDT 2				
Scale	1:100,000				



Apt ID	KRAL	FM 9	LFINAL		
Apt name	RIVERSIDE MUNI	No.	Segment	Obstruction	Elev MSL
City	RIVERSIDE	13	LFINAL	TREE	1079
State	CA	17	CIRC CAT A	TREE	999
Proc ID	RNAV (GPS) RWY 9	18	CIRC CAT B	TREE	1039
Number	AMDT 2	19	CIRC CAT C	TREE	1319
Scale	1:100,000	20	CIRC CAT D	TREE	1159

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

FROM	TO	COURSE AND DISTANCE	ALTITUDE
POM VORTAC (IAF)	JASER (FB)	118.99 / 7.02	3300
PRADO (IAF)	JASER (FB)	033.77 / 6.71	3300
PIRRO (IAF)	JASER (FB)	088.96 / 9.84	3300
JASER (IF)	EXPAM (FB)	088.91 / 6.56	2500
EXPAM (FAF)	RW09 (MAP) (FO)	088.98 / 5.33	
RW09 (MAP)	1092 MSL	088.98	
1092 MSL	JIKUB (FB)		
JIKUB	HDF VOR (FO)	120.97 / 13.88	6000

MISSED APPROACH

LPV: DA
LNAV/VNAV: DA
LNAV: RW09

CLIMB TO 6000 DIRECT JIKUB AND ON TRACK 120.97 TO HDF VOR AND HOLD, CONTINUE CLIMB-IN-HOLD TO 6000.

1. PT ____ SIDE OF COURSE ____ OUTBOUND ____ FT WITHIN ____ MILES OF ____ (IAF)
2. PROFILE STARTS AT JASER
3. FAC: 088.98 FAF: EXPAM DIST FAF TO MAP: 5.33 THLD: 5.33
4. MIN. ALT: JASER 3300, EXPAM 2500
5. DIST TO THLD FROM OM: ____ MM: ____ IM: ____ 150 HAT: ____ 100 HAT: ____ GS ANT: ____
6. MIN GS INCPT: 2500 GS ALT AT: EXPAM 2500 OM: ____ MM: ____ IM: ____
7. GS ANGLE: 3.00 TCH: 40.9 34:1 IS CLEAR
8. MSA FROM: RW09 11900

ADDITIONAL FLIGHT DATA:
HOLD SE, RT, 315.37 INBOUND.
CHART FAS OBST: 1079 TREE 335711N/1172923W
DISTANCE TO THLD FROM 332 HATH: 0.91 NM.
CHART VDP AT 1.69 MILES TO RW09*
*LNAV ONLY.
WAAS CHANNEL # 81921
REFERENCE PATH ID: W09A
LTP HAE: 198.4 M

MAG VAR: 14E EPOCH YEAR: 2000

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	1092	5/8	332	1092	5/8	332	1092	5/8	332	1092	5/8	332			
LNAV/VNAV DA	1426	1 7/8	666	1426	1 7/8	666	1426	1 7/8	666	1426	1 7/8	666			
LNAV MDA	1340	1/2	580	1340	1/2	580	1340	1 1/4	580	1340	1 1/4	580			
CIRCLING	1340	1	521	1340	1	521	1620	2 1/4	801	1620	2 1/2	801			

NOTES:
CHART NOTE: DME/DME RNP-0.3 NA.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS ON POM VORTAC AIRWAY RADIALS 073 CW 187.
CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PRADO ON V16-370 WESTBOUND, AND ARRIVALS AT PIRRO ON V186 WESTBOUND.
(SEE FORM 8260-10)

@ CAT C 900-2 1/4, CAT D 900-2 1/2
@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 819 THRE: 760	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP:
RIVERSIDE, CA	AIRPORT NAME: RIVERSIDE MUNI	RNAV	RNAV (GPS) RWY 9, AMDT 2	AMDT: 1
				DATED 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[ ] YES [X] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[ ]	[ ]	[X]	[ ]	[X]	[X]	[X] **ZLA, ONT APCH, RAL ATCT, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME: **ADOLFO URRUTIA (MIKE MELSSEN)**	FIFO **AJV-354**	DATE: **02/01/2012**
APPROVED BY		
NAME: **DEZ SILAGYI** **MANAGER**	FIFO **AJV-354**	DATE:

CHANGES:

1. LOWERED LPV DA/HATH FROM 1120/360 TO 1092/332.
2. LOWERED LNAV/VNAV DA/HATH FROM 1473/713 TO 1426/666.
3. LOWERED LNAV MDA/HAT FROM 1760/1000 TO 1340/580.
4. VDP RELOCATED FROM 3 NM TO RWY 09 TO 1.7 NM TO RWY 09.
5. CHART NOTE CHANGED FOR BACKUP ALTIMETER SETTING ADJUSTMENT FOR LNAV/VNAV FROM "INCREASE VISIBILITY 1/4 MILE" TO "INCREASE VISIBILITY 1/8 MILE".
6. CHART NOTE CHANGED FOR INOP MALSR TO INCREASE LPV TO 1 1/8 SM VICE 1 1/4 SM.
7. CHANGED PFAF FROM OVUCU TO EXPAM.

REASONS:

1, 2, 3. NEW OBSTACLE EVALUATION.
4. LNAV MDA LOWERED FROM 1760 FT TO 1340 FT.
5. LNAV/VNAV MINIMUMS LOWERED FROM 1473/713 TO 1426/666.
6. LOWERED LPV DA/HATH FROM 1120/362 TO 1092/332.
7. RECONCILES THE PROCEDURE WITH KRAL ILS OR LOC RWY 9 FOR COINCIDENTAL PFAFS.

PDF EDITS:
1. ADDED "FAF" AFTER EXPAM.
2. DELETED NA FOR PT.
3. CHANGED HOMELAND TO HDF.

NOTES, (CONT.):
CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CHINO ALTIMETER SETTING AND INCREASE ALL DA 46 FEET AND ALL MDA 60 FEET AND INCREASE LPV ALL CATS AND CIRCLING CATS C AND D VISIBILITY 1/4 MILE AND LNAV/VNAV ALL CATS AND LNAV CATS C AND D VISIBILITY 1/8 MILE.
CHART NOTE: CIRCLING RWY 16 NA AT NIGHT.
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE LPV ALL CATS VISIBILITY TO 1 1/8 MILE AND LNAV/VNAV ALL CATS VISIBILITY TO 2 1/2 MILE.
CHART NOTE: WHEN USING CHINO ALTIMETER SETTING; FOR INOPERATIVE MALSR, INCREASE LPV ALL CATS VISIBILITY TO 1 1/4 MILE.
CHART NOTE: VDP AND BARO-VNAV NA WITH CHINO ALTIMETER SETTING.
CHART NOTE: FOR UNCOMPENSATED BARO-VNAV SYSTEMS, LNAV/VNAV NA BELOW -16C (4F) OR ABOVE 54C (130F).

CHART NOTE: WHEN VGSI INOP, CIRCLING TO RWY 34 NA AT NIGHT.
CHART NOTE: CIRCLING NA FOR CAT D N OF RWY 9-27.

QUALITY CHECKED

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
☐	☐	☐	☐	☐	☐	☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

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FAS DATA BLOCK INFORMATION

DATA FIELD	DATA
OPERATION TYPE	0
SBAS SERVICE PROVIDER IDENTIFIER	0
AIRPORT IDENTIFIER	KRAL
RUNWAY	RW09
APPROACH PERFORMANCE DESIGNATOR	0
ROUTE INDICATOR	
REFERENCE PATH DATA SELECTOR	0
REFERENCE PATH IDENTIFIER (APPROACH ID)	W09A
LTP/FTP LATITUDE	335713.9945N
LTP/FTP LONGITUDE	1172707.0890W
LTP/FTP ELLIPSOIDAL HEIGHT	+01984
FPAP LATITUDE	335653.8400N
FPAP LONGITUDE	1172522.7500W
THRESHOLD CROSSING HEIGHT (TCH)	00040.9
TCH UNITS SELECTOR (METERS OR FEET USED)	F
GLIDEPATH ANGLE (GPA)	03.00
COURSE WIDTH AT THRESHOLD	106.75
LENGTH OFFSET	1104
HORIZONTAL ALERT LIMIT (HAL)	40.0
VERTICAL ALERT LIMIT (VAL)	50.0
CRC REMAINDER	DCB1303D

ADDITIONAL PATH POINT RECORD INFORMATION

ICAO CODE	K2
LTP ORTHOMETRIC HEIGHT	+02318
FPAP ORTHOMETRIC HEIGHT	+02318

QUALITY CHECKED

CITY AND STATE	ELEVATION: 819 THRE: 760	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
RIVERSIDE, CA	AIRPORT NAME: RIVERSIDE MUNI	RNAV	RNAV (GPS) RWY 9, AMDT 2	AMDT: 1
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
☐	☐	☐	☐	☐	☐	☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

REASONS:

QUALITY CONTROL

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR PART 97.33**

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ARINC PACKET - 424-18 - RNAV (GPS)

```
                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        HDF   K2011340V L  N33463478W117110716                      E0140     1     NARHOMELAND
        SUSAD        POM   K2011040VTLW N34044219W117471346    N34044219W117471346E0150012661     NARPOMONA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
WP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAEAENRT   EXPAM K20    C     N33582617W117332200                      E0123     NAR           EXPAM
        SUSAEAENRT   JASER K20    C     N33595446W117410304                      E0124     NAR           JASER
        SUSAEAENRT   JIKUB K20    W     N33562509W117225416                      E0123     NAR           JIKUB
        SUSAEAENRT   PIRRO K20    C   L N34020761W117523480                      E0124     NAR           PIRRO
        SUSAEAENRT   PRADO K20    C   L N33552341W117470170                      E0124     NAR           PRADO

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KRALK2ARAL     0     054YHN33570680W117264240E014000819         1800018000C    MNAR    RIVERSIDE MUNI

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KRALK2FR09   APIRRO 010PIRROK2EA0E  A    IF                                          18000                A JS
        SUSAP KRALK2FR09   APIRRO 020JASERK2EA0EE B 010TF                    08900098    + 03300                        A JS
        SUSAP KRALK2FR09   APOM   010POM  K2D 0V  A    IF                                          18000                A JS
        SUSAP KRALK2FR09   APOM   020JASERK2EA0EE B 010TF                    11900070    + 03300                        A JS
        SUSAP KRALK2FR09   APRADO 010PRADOK2EA0E  A    IF                                          18000                A JS
        SUSAP KRALK2FR09   APRADO 020JASERK2EA0EE B 010TF                    03380067    + 03300                        A JS
        SUSAP KRALK2FR09   R      010JASERK2EA0E  I    IF                                 + 03300  18000                A JS
        SUSAP KRALK2FR09   R      020EXPAMK2EA1E  F 051TF                    08890066    + 02500                RW09  K2PGA JS
        SUSAP KRALK2FR09   R      020EXPAMK2EA2WALPV       ALNAV/VNAV ALNAV                                                JS
        SUSAP KRALK2FR09   R      030RW09 K2PG0GY M 031TF                    08900053      00801            -300          A JS
        SUSAP KRALK2FR09   R      040         0  M     CA                    0890        + 01092                        A JS
        SUSAP KRALK2FR09   R      050JIKUBK2EA0E       DF                                                               A JS
        SUSAP KRALK2FR09   R      060HDF  K2D 0VY   010TF                    1210        + 06000                        A JS
        SUSAP KRALK2FR09   R      070HDF  K2D 0VE  R   HM                    31540050    + 06000                        A JS

                 1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KRALK2GRW09    0054010890 N33571399W117270709+1100    +01984007600000041100I

                 1         2         3         4         5         6         7         8         9         0         1         2         3
```

CITY AND STATE	ELEVATION: 819 THRE: 760	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
RIVERSIDE, CA	AIRPORT NAME: **RIVERSIDE MUNI**	**RNAV**	**RNAV (GPS) RWY 9, AMDT 2**	AMDT: **1**
				DATED: **05/05/2011**

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

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```
PP      123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KRALK2PR09   RW09 001 0000W09A0N3357139945W11727070890+019840300N3356538400W117252275001067511040004 09F400500DCB1303D
        SUSAP KRALK2PR09   RW09 002E      +02318+02318LPV       81921

                  1         2         3         4         5         6         7         8         9         0         1         2         3
MSA     123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------
        SUSAP KRALK2SRW09 K2PG                0   18018011925                                                                        M
```

CITY AND STATE	ELEVATION: 819 THRE: 760	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
RIVERSIDE, CA	AIRPORT NAME: RIVERSIDE MUNI	RNAV	RNAV (GPS) RWY 9, AMDT 2	AMDT: 1
				DATED: 05/05/2011

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

RNAV (GPS) STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - **FAR 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.

ARINC SUMMARY - 424-18 - RNAV (GPS)

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	PIRRO	PIRRO	010	IAF	IF		FB					
	PIRRO	JASER	020		TF		FB	1.0	089.0(103.0T)	009.8	AA 03300	
	POM	POM	010	IAF	IF		FB					
	POM	JASER	020		TF		FB	1.0	119.0(133.0T)	007.0	AA 03300	
	PRADO	PRADO	010	IAF	IF		FB					
	PRADO	JASER	020		TF		FB	1.0	033.8(047.8T)	006.7	AA 03300	
		JASER	010	FACF	IF		FB				AA 03300	
		EXPAM	020	FAF	TF		FB	0.5	088.9(102.9T)	006.6	AA 02500	
		RW09	030	MAP	TF		FO	0.3	089.0(103.0T)	005.3	AT 00801	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		089.0(103.0T)		AA 01092	
	JIKUB	050		DF		FB					
	HDF	060		TF		FO	1.0	121.0(135.0T)		AA 06000	
	HDF	070		HM	R	FO		315.4(329.4T)	005.0	AA 06000	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	HDF	N334634.78	W1171107.16	N3346.580	W11711.119
	POM	N340442.19	W1174713.46	N3404.703	W11747.224
	EXPAM	N335826.17	W1173322.00	N3358.436	W11733.367
	JASER	N335954.46	W1174103.04	N3359.908	W11741.051
	JIKUB	N335625.09	W1172254.16	N3356.418	W11722.903
	PIRRO	N340207.61	W1175234.80	N3402.127	W11752.580
	PRADO	N335523.41	W1174701.70	N3355.390	W11747.028
	RW09	N335713.99	W1172707.09	N3357.233	W11727.118

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW09	00760	41

QUALITY 9 CHECKED

CITY AND STATE	ELEVATION: 819 THRE: 760	FACILITY IDENTIFIER:	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:	SUP:
RIVERSIDE, CA	AIRPORT NAME: **RIVERSIDE MUNI**	**RNAV**	**RNAV (GPS) RWY 9, AMDT 2**	AMDT: **1**
				DATED: **05/05/2011**

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	NFPG	DATE:
APPROVED BY		
NAME:	NFPG	DATE:

CHANGES:

REASONS:

QUALITY CHECKED 9

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
INITIAL	POM VORTAC	JASER	1. AAO	340236.00N/1174718.00W	1569 (4E)	1000	AT731	3300
			2. TERRAIN	340236.00N/1174718.00W	1369 (1400)		AS1500	2900
INITIAL	PRADO	JASER	3. AAO	335451.00N/1174415.00W	1962 (4E)	1000		3000
			4. TERRAIN	335451.00N/1174415.00W	1762 (1800)		AS1500	3300
INITIAL	PIRRO	JASER	5. AAO	340054.00N/1174639.00W	1631 (4E)	1000	AT669	3300
			6. TERRAIN	340054.00N/1174639.00W	1431 (1400)		AS1500	2900
INTERMEDIATE	JASER	EXPAM	7. AAO	340157.00N/1174124.00W	1067 (4E)	500	AC98 AT835	2500
			8. TERRAIN	340148.00N/1174030.00W	844 (800)		AS1500	2300
INTERMEDIATE	JASER	EXPAM	9. AAO	340215.00N/1174030.00W	1070 (4E)	500	AC98 AT832	2500
			10. TERRAIN	340145.00N/1173951.00W	847 (800)		AS1500	2300
INTERMEDIATE	JASER	EXPAM	11. AAO	340154.00N/1174103.00W	1060 (4E)	500	AC98 AT842	2500
			12. TERRAIN	340154.00N/1174106.00W	860 (900)		AS1500	2400
FINAL: LPV	EXPAM	RW09				ASC	MA132	1092/332
FINAL: LNAV/VNAV	EXPAM	RW09	13. TREE	335710.90N/1172922.66W	1079 (2C)	23.44:1	AC20	1426/666
2. PROCEDURE TURN	NA							
3. MISSED APPROACH MAP:	DA / DA / RW09	HDF VOR	14. AAO	335415.30N/1172118.31W	1879 (2C)	ASC		6000
			15. AAO	334957.00N/1171018.00W	2718 (4E)	1000	SA-429	3300
ELEV:	869/1265/1240		16. TERRAIN	334839.00N/1171527.00W	1972 (2000)		AS1500	3500
4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.						
CATEGORY A	1.3 NM	REQUIRED 350 / ACTUAL 521	17. TREE	335730.97N/1172614.99W	999 (2C)	300	SI	1340
CATEGORY B	1.5 NM	REQUIRED 450 / ACTUAL 521	18. TREE	335848.00N/1172648.00W	1039 (2C)	300		1340
CATEGORY C	1.7 NM	REQUIRED 450 / ACTUAL 801	19. TREE	335900.00N/1172654.00W	1319 (2C)	300		1620
CATEGORY D	2.3 NM	REQUIRED 550 / ACTUAL 801	20. AAO	335631.35N/1172940.04W	1159 (2C)	300	XP161	1620
CATEGORY E	4.5 NM	REQUIRED 550 / ACTUAL						

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: RW09

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	AA0	055/ 28.9	10886 (4E)	11900					

CITY AND STATE	ELEVATION: 819 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
RIVERSIDE, CA	RIVERSIDE MUNI	RNAV	RNAV (GPS) RWY 9, AMDT 2	AWP

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SOCAL APP CON RAL TOWER		N W S	OTHER: ASOS	SOURCE: KRAL / KCNO
	X	F A A		DISTANCE: 0 / 9.65
SATISFACTORY ON:		A / C		HOURS REMOTE OPERATION: BACKUP
X V H F X U H F H F	LOCATION: KRAL/KRAL			ADJUSTMENT: 0 / 46

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN:	CAT 1
		CAT 3

5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
	X	MALSR 09 (PCL)
		HIRL
	X	MIRL 16 (PCL), 27 (PCL), 34 (PCL), 09 (PCL)
	X	REIL 27
		TDZ
		C/LINE
	X	OTHER (SPECIFY) PAPI-2L 34 PAPI-4L 27, 09

6. RUNWAY MARKINGS	BASIC	BSC-G 16, 34
	ALL WEATHER	PIR-F 09
	INSTRUMENT	NPI-F 27
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	

8. GLIDE PATH	GP ANGLE: 3.00	ELEV RWY THRESHOLD: 760.4
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 40.9

9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: ADOLFO URRUTIA (MIKE MELSSEN)	DATE: 02/01/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-354

PART C - REMARKS:

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BOTH KRAL AND KCNO ASOS ARE ON SERVICE-A

VGSI DATA: 3.00/41

RASS PRESSURE PATTERNS SAME
KRAL 818.9, KCNO 650.0
RA = 45.9.
SEE ATTACHED AIRSPACE LETTER.

100' VEGETATION UTILIZED PER PREVIOUS PROCEDURE

TAA NOT DEVELOPED PER FPO

TERPS, VOLUME 1 "VISUAL PORTION OF FINAL" PENETRATIONS:

20:1
RWY 16
803 TREE (KRAL0037) 335721.00N-1172652.76W (26.43)
809 LT POLE (KRAL0040) 335723.11N-1172652.72W (21.77)
808 TREE (KRAL0041) 335723.76N-1172657.68W (16.96)

RWY 34
780 LT POLE (KRAL0047) 335644.65N-1172657.05W (10.81)
778 OL ON LT POLE (KRAL0048) 335644369N-1172651.90W (8.46)
819 TREE (KRAL0051) 335634.84N-1172656.99W (.26)

FPO NOTIFIED OF VISUAL PENETRATIONS.

CIRCLING TO RWY 16 NA AT NIGHT DUE TO 20:1 PENETRATIONS.

CIRCLING NA FOR CAT D NORTH OF RWY 9-27 NOTE RETAINED PER PREVIOUS PROCEDURE.

LPV SLOPE: 34:1

LNAV/VNAV:
SLOPE: 23.44:1

AVERAGE COLD TEMPERATURE BASED ON -30 DEGREE ISA DEVIATION. HISTORICAL DATA NOT AVAILABLE.

MA OBSTACLE #16 LOCATED 5221 FT INTO SECONDARY.

OBSTACLE KRAL0013 HAS BEEN LOWERED 5' FROM 788' MSL TO 783' MSL PER FPT. EMAIL DATED 4/19/2012.
OBSTACLE KRAL0014 HAS BEEN REMOVED AND SHOULD BE TAKEN OUT OF THE DATABASE PER FPT. EMAIL DATED 4/19/2012.

XP: CAT D INCREASED TO MATCH CAT C MINIMA.

QUALITY CHECKED

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FINAL: LNAV	EXPAM	RW09	13. TREE	335710.90N/1172922.66W	1079 (2C)	250		1340

3. MISSED APPROACH									
	MAP:								
	ELEV:								

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT.								
CATEGORY A	1.3 NM	REQUIRED	350	ACTUAL						
CATEGORY B	1.5 NM		450							
CATEGORY C	1.7 NM		450							
CATEGORY D	2.3 NM		550							
CATEGORY E	4.5 NM		550							

5. MINIMUM SAFE ALTITUDES PRIMARY NAVAID:

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A

CITY AND STATE		FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
RIVERSIDE, CA	ELEVATION: 819 AIRPORT NAME: RIVERSIDE MUNI	RNAV	RNAV (GPS) RWY 9, AMDT 2	AWP

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
SATISFACTORY ON:		N W S	OTHER:	SOURCE:
				DISTANCE:
		F A A		HOURS REMOTE OPERATION:
		A / C		
V H F / U H F / H F	LOCATION:			ADJUSTMENT:

4. MONITOR STATUS	PRIMARY NAVAID:	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	

5. APPROACH & RUNWAY LIGHTING		**ALS**
		(S) SALS
		MALS
		HIRL
		MIRL
		REIL
		TDZ
		C/LINE
		OTHER (SPECIFY)

6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:

9. FINAL APPROACH COURSE AIMING		RUNWAY THRESHOLD	FT. FROM THRESHOLD
		ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS:

PART D - PREPARED BY:	DATE:
TITLE:	OFFICE:

PART C - REMARKS:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: EXPAM **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 335826.17N/1173322.00W **TYPE:** WP, RADAR, INT

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	RIVERSIDE	I-RAL	LOC		269.04	283.04		6.40	38916	2500	5300
2	PARADISE	PDZ	VORTAC	H	323.63	338.63		3.58		2500	5000

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W	I-RAL	LOC	269.04	089.04	R	1		2800	4000	4	4

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	335112.04N/1172833.74W	1719	2C

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 9	1, 2	1	KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) RWY 9			KRAL	RIVERSIDE	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX MAKE-UP.
UPDATED CONTROLLING OBSTACLE.
UPDATED HOLDING PATTERN DATA.
UPDATED FIX USE.
ADDED RNAV (GPS) RWY 9 TO FIX USE.

DEVELOPED BY: **DATE:** 01/18/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: LAX
ARTCC: ZOA
ATC FACILITY: SOCAL APP CON
OTHER: RAL ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: HOMELAND VOR **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 334634.78N/1171107.16W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	HOMELAND	HDF	VOR	L							17500

FIX RESTRICTIONS:
MCA V372 11200 NORTHEAST BOUND

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SE	HDF	VOR	135.37	315.37	R	1-1 1/2		5000	17500	5	16
2	N	HDF	VOR	353.00	173.00	R	1		5000	14000	5	10
3	SE		WP	135.37	315.37	R		5	6000	14000	6	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	334651.00N/1170706.00W	2861	4E
1	310	AAO	333751.00N/1165042.00W	4731	4E
2	200	AAO	335400.00N/1170903.00W	2871	2C
3	200	AAO	334651.00N/1170706.00W	2861	4A
3	310	AAO	333830.00N/1165112.00W	4269	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

PROCEDURES REQUIRING CLIMB-IN-HOLD:

PAT	PROCEDURE TITLE	AIRPORT IDENT	CITY	STATE
1	HI-VOR RWY 32	KRIV	RIVERSIDE	CA (US)
1	ILS Y OR LOC RWY 32	KRIV	RIVERSIDE	CA (US)
1	ILS Y RWY 32 (CAT II)	KRIV	RIVERSIDE	CA (US)
1	IFR TAKE-OFF	KF70	MURRIETA/TEMECULA	CA (US)
1	VOR RWY 32	KRIV	RIVERSIDE	CA (US)
1	IFR TAKE-OFF	KHMT	HEMET	CA (US)
1	ILS OR LOC RWY 9	KRAL	RIVERSIDE	CA (US)
3	RNAV (GPS) RWY 9	KRAL	RIVERSIDE	CA (US)

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 310 KTS CONTROLLING OBSTACLE IS LOCATED 7603 FT. WITHIN SECONDARY; PRIMARY EQUIVALENT ELEVATION 3919 FT.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	IFR TAKE-OFF	1	1	KHMT	HEMET	CA (US)
DP	IFR TAKE-OFF		1	KF70	MURRIETA/TEMECULA	CA (US)
DP	PRADO			KONT	ONTARIO	CA (US)
DP	CATHEDRAL			KPSP	PALM SPRINGS	CA (US)
DP	SKYES			KRIV	RIVERSIDE	CA (US)
EN ROUTE	V283-372					(US)
EN ROUTE	V283-587					(US)
EN ROUTE	V372					(US)
IAP	ILS OR LOC RWY 26R		1	KCNO	CHINO	CA (US)
IAP	RNAV (GPS) RWY 26R			KCNO	CHINO	CA (US)
IAP	ILS OR LOC RWY 26L			KONT	ONTARIO	CA (US)
IAP	ILS OR LOC RWY 26R			KONT	ONTARIO	CA (US)
IAP	ILS OR LOC RWY 8L		1	KONT	ONTARIO	CA (US)
IAP	ILS RWY 26L (CAT II)			KONT	ONTARIO	CA (US)
IAP	ILS RWY 26L (CAT III)			KONT	ONTARIO	CA (US)
IAP	GPS-A			KREI	REDLANDS	CA (US)
IAP	NDB OR GPS-A			KL67	RIALTO	CA (US)
IAP	ILS OR LOC RWY 9		1	KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) RWY 9		3	KRAL	RIVERSIDE	CA (US)
IAP	VOR-A			KRAL	RIVERSIDE	CA (US)
IAP	VOR-B			KRAL	RIVERSIDE	CA (US)
IAP	HI-VOR RWY 32		1	KRIV	RIVERSIDE	CA (US)
IAP	ILS Y OR LOC RWY 32		1	KRIV	RIVERSIDE	CA (US)
IAP	ILS Y RWY 32 (CAT II)		1	KRIV	RIVERSIDE	CA (US)
IAP	VOR RWY 32		1	KRIV	RIVERSIDE	CA (US)
IAP	ILS OR LOC Z RWY 6			KSBD	SAN BERNARDINO	CA (US)
IAP	LOC Y RWY 6		2	KSBD	SAN BERNARDINO	CA (US)
STAR	KAYOH			KLGB	LONG BEACH	CA (US)
STAR	BASET			KLAX	LOS ANGELES	CA (US)
STAR	REDEYE			KLAX	LOS ANGELES	CA (US)

STAR	SEAVU	KLAX	LOS ANGELES	CA (US)
STAR	SETER	KONT	ONTARIO	CA (US)
STAR	ZIGGY	KONT	ONTARIO	CA (US)
STAR	HITOP	KRIV	RIVERSIDE	CA (US)
STAR	MARCH	KRIV	RIVERSIDE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 13 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
CORRECTED PAT 1,2,3 CONTROLLING OBSTACLES.
CHANGED PAT 3 310 KTS PRECIPITOUS TERRAIN ADJ FROM 88 TO 102.
UPDATED FIX USE.

DEVELOPED BY: **DATE:** 01/19/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZOA
ATC FACILITY: SOCAL APP CON
OTHER: MARCH ARB GCA/ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: JASER **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 335954.46N/1174103.04W **TYPE:** WP, INT

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	RIVERSIDE	I-RAL	LOC		269.05	283.05		12.96		3000	5300
2	POMONA	POM	VORTAC	L	117.99	132.99		7.02		3000	17500
3	SEAL BEACH	SLI	VORTAC	L	040.05	055.05		22.55		3000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	W		WP	271.60	091.60	R		4	3800	6000	5	6

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	335548.00N/1174439.00W	1880	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERN.

REMARKS:
POMONA (FAC 2) AND RIVERSIDE (FAC 1) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	ILS OR LOC RWY 9	1, 2, 3		KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) RWY 9			KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) - A		1	KRIR	RIVERSIDE/RUBIDOUX	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX USE.
UPDATED CONTROLLING OBSTRUCTION COORDINATES AND ELEVATION.

DEVELOPED BY: **DATE:** 01/18/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL APP CON
OTHER: RAL ATCT

QUALITY CHECKED 9

RADIO FIX AND HOLDING DATA RECORD

NAME: OVUCU **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 335826.17N/1173322.00W **TYPE:** WP

CANCELLED

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** CANCEL

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
8250.54A L-V RNP PFAF FORMULA APPLIED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 9			KRAL	RIVERSIDE	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/05/2011

REASON FOR REVISION:
REMOVED KRAL R09 AS FAC 1.
UPDATED FIX USE.
FIX MOVED 465.73 FEET WEST, COORDINATES UPDATED.

DEVELOPED BY: **DATE:** **OFFICE:** **NAME:**

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL
OTHER: RAL ATCT

QUALITY CHECKED 9

RADIO FIX AND HOLDING DATA RECORD

NAME: PIRRO **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 340207.61N/1175234.80W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	VAN NUYS	VNY	VOR/DME	L	095.00	110.00	32.65	32.65		3500	17500
2	POMONA	POM	VORTAC	L	225.00	240.00	5.14	5.14		3500	17500
3	RIVERSIDE	I-RAL	LOC		269.12	283.12		22.80		3500	5300

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
I-RAL	LOC	R-269	23	3500	10000

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
VAN NUYS (FAC 1) AND POMONA (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V186	1, 2				(US)
EN ROUTE	V210	1, 2				(US)
IAP	ILS OR LOC RWY 9	3		KRAL	RIVERSIDE	CA (US)
IAP	RNAV(GPS) RWY 9			KRAL	RIVERSIDE	CA (US)

REQUIRED CHARTING: IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED FIX USE.
UPDATED TRUE BEARING FOR FIX 3.

DEVELOPED BY: **DATE:** 01/18/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL APP CON
OTHER: KRAL ATCT

QUALITY CHECKED 9

RADIO FIX AND HOLDING DATA RECORD

NAME: POMONA VORTAC **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 340442.19N/1174713.46W **TYPE:**

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	POMONA	POM	VORTAC	L							17500

FIX RESTRICTIONS:
MCA V210-394 10300 NORTHEAST BOUND
MCA V264 5600 EASTBOUND

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	E	POM	VORTAC	112.00	292.00	L	1-1 1/2		4000	17500	4	16
2	SW	POM	VORTAC	240.00	060.00	R	1		4000	10000	4	9
3	SW	POM	VORTAC	233.00	053.00	R	1		3700	10000	4	9

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	340939.00N/1174754.00W	3449	4E
2	200	AAO	340957.00N/1174500.00W	3639	4E
3	200	AAO	340957.00N/1174439.00W	3665	4E

REASON FOR NONSTANDARD HOLDING:
PAT 1 TERRAIN

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.
PAT 1 CONTROLLING OBSTACLE 1.32NM INTO SECONDARY AREA, PRIMARY EQUIVALENT HEIGHT 2618 MSL.
PAT 2 CONTROLLING OBSTACLE 1.98NM INTO SECONDARY AREA, PRIMARY EQUIVALENT HEIGHT 2645 MSL.
PAT 3 CONTROLLING OBSTACLE 1.97NM INTO SECONDARY AREA, PRIMARY EQUIVALENT HEIGHT 2668 MSL.
MINIMUM TURNING ALTITUDE: AIRCRAFT PROCEEDING AMTRA V264 POM V197 PMD MUST MAINTAIN 11800 OR HIGHER UNTIL ESTABLISHED ON CENTERLINE OF V197 NORTHWEST BOUND.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	ANAHEIM			KFUL	FULLERTON	CA (US)
DP	TAKE-OFF MINIMUMS			KPOC	LA VERNE	CA (US)
DP	ANAHEIM			KLGB	LONG BEACH	CA (US)
DP	LAXX			KLAX	LOS ANGELES	CA (US)
DP	HASSA			KONT	ONTARIO	CA (US)
DP	ONTARIO			KONT	ONTARIO	CA (US)
DP	POMONA			KONT	ONTARIO	CA (US)
DP	ANAHEIM			KSNA	SANTA ANA	CA (US)
DP	IRVINE			KSNA	SANTA ANA	CA (US)
DP	MUSEL			KSNA	SANTA ANA	CA (US)
DP	GLENDALE			KVNY	VAN NUYS	CA (US)
EN ROUTE	V197					(US)
EN ROUTE	V210-394					(US)
EN ROUTE	V264					(US)
EN ROUTE	V363					(US)
EN ROUTE	V394					(US)
IAP	NDB OR GPS-C		1	KEMT	EL MONTE	CA (US)
IAP	VOR OR GPS-A		1	KEMT	EL MONTE	CA (US)
IAP	VOR/DME OR GPS-B			KEMT	EL MONTE	CA (US)
IAP	RNAV (GPS) RWY 24			KFUL	FULLERTON	CA (US)
IAP	ILS RWY 26L			KPOC	LA VERNE	CA (US)
IAP	LOC RWY 26L			KPOC	LA VERNE	CA (US)
IAP	VOR OR GPS-A			KPOC	LA VERNE	CA (US)
IAP	RNAV (GPS) RWY 22L			KSLI	LOS ALAMITOS	CA (US)
IAP	ILS OR LOC RWY 24L			KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 24R			KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 25L			KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 25R			KLAX	LOS ANGELES	CA (US)
IAP	ILS RWY 24R(CAT II)			KLAX	LOS ANGELES	CA (US)
IAP	ILS RWY 24R(CAT III)			KLAX	LOS ANGELES	CA (US)
IAP	ILS RWY 25L(CAT II)			KLAX	LOS ANGELES	CA (US)
IAP	ILS RWY 25L(CAT III)			KLAX	LOS ANGELES	CA (US)
IAP	ILS OR LOC RWY 8L			KONT	ONTARIO	CA (US)
IAP	VOR/DME RWY 8R		2	KONT	ONTARIO	CA (US)
IAP	NDB OR GPS-A		1	KL67	RIALTO	CA (US)

QUALITY CHECKED

IAP	ILS OR LOC RWY 9		KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) RWY 9		KRAL	RIVERSIDE	CA (US)
IAP	ILS OR LOC RWY 19R		KSNA	SANTA ANA	CA (US)
IAP	RNAV (GPS) Y RWY 19R		KSNA	SANTA ANA	CA (US)
IAP	RNAV (RNP) Z RWY 19R		KSNA	SANTA ANA	CA (US)
IAP	RNAV(GPS) RWY 6		KCCB	UPLAND	CA (US)
IAP	VOR-A	3	KCCB	UPLAND	CA (US)
IAP	ILS RWY 16R (ALT MISS)	1	KVNY	VAN NUYS	CA (US)
STAR	KAYOH		KLGB	LONG BEACH	CA (US)
STAR	OLDEE		KLAX	LOS ANGELES	CA (US)
STAR	SEAVU		KLAX	LOS ANGELES	CA (US)
STAR	ZIGGY		KONT	ONTARIO	CA (US)
STAR	MARCH		KRIV	RIVERSIDE	CA (US)

REQUIRED CHARTING: DP, STAR, MILITARY IAP, IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 17 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED PAT 1,2,3 CONTROLLING OBSTACLE PRIMARY EQUIVALENT HEIGHT.

DEVELOPED BY: **DATE:** 01/18/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL TRACON
OTHER: LAX ATCT

RADIO FIX AND HOLDING DATA RECORD

NAME: PRADO **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 335523.41N/1174701.70W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	PARADISE	PDZ	VORTAC	H	256.38	271.38	12.68	12.68		4000	17500
2	POMONA	POM	VORTAC	L	163.99	178.99	9.30	9.30		4000	17500
3	SEAL BEACH	SLI	VORTAC	L	043.18	058.18		15.92		4000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	N	POM	VORTAC	164.00	164.00	R	1		4000	14000	4	10
2	E		WP	076.38	256.38	R		4	4000	14000	5	11

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	AAO	335450.02N/1174417.37W	1962	2C
2	200	AAO	335100.00N/1173915.00W	3235	4E

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS,

REMARKS:
PARADISE (FAC 1) AND POMONA (FAC 2) USED TO ESTABLISH FIX COORDINATES
PAT 2 CONTROLLING OBSTACLE 5165 FEET INTO SECONDARY; PRIMARY EQUIVELANT 2515 FT.
PRECIPITOUS TERRAIN EVAL COMPLETE.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	TAKE-OFF MINIMUMS		1	KPOC	LA VERNE	CA (US)
EN ROUTE	T306					(US)
EN ROUTE	V16-370	1, 2				CA (US)
EN ROUTE	V363	1, 2				CA (US)
IAP	NDB OR GPS-C	2		KEMT	EL MONTE	CA (US)
IAP	VOR OR GPS-A	2		KEMT	EL MONTE	CA (US)
IAP	ILS RWY 26L	1, 2, 3	1	KPOC	LA VERNE	CA (US)
IAP	LOC RWY 26L	1, 2, 3	1	KPOC	LA VERNE	CA (US)
IAP	RNAV (GPS) RWY 26L		2	KPOC	LA VERNE	CA (US)
IAP	VOR OR (GPS) - A	1, 2, 3	1	KPOC	LA VERNE	CA (US)
IAP	VOR OR TACAN RWY 22L	2, 3		KSLI	LOS ALAMITOS	CA (US)
IAP	RNAV (GPS) RWY 27		2	KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) RWY 9			KRAL	RIVERSIDE	CA (US)
IAP	RNAV (GPS) - A			KRIR	RIVERSIDE/RUBIDOUX	CA (US)

REQUIRED CHARTING: DP, MILITARY IAP, IAP, AREA, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 19 **DATE OF REVISION:** 09/20/2012

REASON FOR REVISION:
UPDATED PAT 1 CONTROLLING OBSTACLE.

DEVELOPED BY: **DATE:** 01/20/2012 **OFFICE:** AJV-354 **NAME:** ADOLFO URRUTIA (MIKE MELSSEN)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL, SNA
OTHER: ONTARIO APP CON

QUALITY 9 CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: JIKUB **STATE:** CA **COUNTRY:** US

LATITUDE/LONGITUDE: 335625.09N/1172254.16W **TYPE:** WP

INFO ONLY

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	RNAV (GPS) RWY 9			KRAL	RIVERSIDE	CA (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 1 **DATE OF REVISION:** 05/05/2011

REASON FOR REVISION:
REMOVED KRAL R09 AS FAC 1.
UPDATED FIX USE.
FIX MOVED 3645.77 FEET EAST, COORDINATES UPDATED.

DEVELOPED BY: **DATE:** 11/02/2010 **OFFICE:** AVN-130 **NAME:** ADOLFO URRUTIA (NICHOLAS JACKSON)

APPROVED BY: **DATE:** 02/16/2011 **OFFICE:** AVN-130 **NAME:** DEZ SILAGYI

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: WST
ARTCC: ZLA
ATC FACILITY: SOCAL
OTHER: RAL ATCT

QUALITY CHECKED

TERMINAL AIRSPACE DATA REQUIREMENTS

CITY: RIVERSIDE STATE: CA

AIRPORT NAME: RIVERSIDE MUNI ID: KRAL

PROCEDURE: **RNAV (GPS) RWY 9** AMDT: **AMDT 2**

DOCKET # :
(96-AXX-X/Required/Not Required)

ALL DIST TO 1/100 NM; ELEV TO NEAREST FT; COORD TO 1/100 SEC; DEG TO 1/100 DG.

1. Distance from **THLD** to 1000' point **3.76**
   (Enter THLD, FAF, ARP, FACILITY, as appropriate)
2. Width of **FINAL** segment at 1000' point **1.20**
   (Enter appropriate segment , final, intermediate, etc.)
3. True Course of **FINAL** segment containing 1000' point **102.98**
4. High Terrain in **FINAL** segment containing 1000' point **979**
5. Distance from **THLD** to 1500' point **5.33**
   (If 1500' point in PT maneuvering area or holding pattern note in remarks)
6. Width of **FINAL** segment at 1500' point **2.13**
7. True Course of **FINAL** segment containing 1500' point **102.98**
8. High Terrain in **FINAL** segment containing 1500' point **979**
9. Threshold Coordinates (if straight-in) ... **335713.99N** / **1172707.09W**
10. ARP Coordinates ..... **335706.80N** / **1172642.40W**
11. Runway Approach End and distance furthest from ARP.....RWY **09**
    Distance **0.53** NM
12. FAF Coordinates ..... **335826.17N** / **1173322.00W**
    (Click to Select)

REMARKS: Approach/Drawing attached.