

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.
Distances are in nautical miles (NM). Graphic depictions attached.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
BANND (RNAV)	TWO	BANND.BANND2	ONE	10/15/2015	24MAY2018

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
MRLET	MRLET.BANND2	MRLET	MRLET						
			POYSN	178.91	51.55	FL200			
			OAKES	194.75	27.80	16000	9400		BETWEEN FL240 AND FL320
			GRUDG	244.10	24.66	11000	5300		AT FL200
RPARK	RPARK.BANND2	RPARK	BANND	243.68	09.93	7000	1500		AT/BELOW FL180
			MOLLA	245.74	46.50	FL200			
			OAKES	245.02	30.92	16000	11400		BETWEEN FL240 AND FL320
			GRUDG	244.10	24.66	11000	5300		AT FL200
RUSME	RUSME.BANND2	RUSME	BANND	243.68	09.93	7000	1500		AT/BELOW FL180
			OAKES	266.63	136.79	FL200			BETWEEN FL240 AND FL320
			GRUDG	244.10	24.66	11000	5300		AT FL200
			BANND	243.68	09.93	7000	1500		AT/BELOW FL180

ARRIVAL ROUTE DESCRIPTION:

LANDING RWY 12: FROM BANND ON TRACK 277.38/16.54 TO CROSS SULRR AT OR BELOW 13000, THEN ON TRACK 263.76/16.78 TO CROSS KEENR AT 8000, THEN ON TRACK 261.83/10.66 TO CROSS LOHGN AT 6000 AND AT 230 KIAS, THEN ON TRACK 260.76/4.00 TO CROSS WHYEE AT OR ABOVE 5000, THEN ON TRACK 260.79/5.00 TO CROSS HIRMO AT 4000, THEN ON TRACK 260.79. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

FIXES AND/OR HOLDING PATTERNS:

CHART: INSLO, TATOO

COMMUNICATIONS:

OAK D-ATIS, OAK ARTCC, NORCAL APP CON, OAK ATCT, OAK GND.

AIRPORTS SERVED:

METROPOLITAN OAKLAND INTL, OAKLAND, CA (KOAK)

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LOST COMMUNICATIONS PROCEDURE:

REMARKS:

- 1) Applying 8260.3D, 15-2-1.b.(1). to KEENR-LOHGN Mt Diablo spot elevation. As a minimum 2000 feet of terrain/vegetation clearance is required. Crossing LOHGN AT 6000 resulting ROC is 2051.
- 2) RUSME-OAKES MOCA 16500. (INFO ONLY, NOT CHARTED)
- 3) COMPLETE EVALUATION ACCOMPLISHED. THIS ABBREVIATED AMENDMENT QUALIFIES AS A PERIODIC REVIEW.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
REFERENCE MAGNETIC VARIATION = KOAK 14E/2015
CHART AT HIRMO TERMINUS: KOAK LDG RWY 12; CHART: KSJC, KSFO

FLIGHT INSPECTED BY:

Processed IAW Aircraft Operations Group (AJW-33) Memo,
December 22, 2017, Subject: Flight Inspection Review Not Required

Name

AJW-33

Organization

08/13/2015

Date

Digitally signed by

DONALD H LANIER

Mar 06, 2018

Signature

DEVELOPED BY:

DEBORAH PRICE, MGR

Name

DOMESTIC AIRSPACE & PROCEDURES,
OAKLAND ARTCC

Organization

Date

Digitally signed by

DONALD H LANIER

Mar 06, 2018

Signature

APPROVED BY:

SHAWN KOZICA, MGR

Name

WSC, OSG

Organization

Date

Digitally signed by

DONALD H LANIER

Mar 06, 2018

Signature

CHANGES:

1. CHANGED ALTITUDE AT GRUDG FROM FL200BFL230 TO AT FL200 AND REMOVED THE SPEED RESTRICTION.
2. LOWERED ALTITUDE AT BANND FROM AT/BELOW FL190 TO AT/BELOW FL180 AND ADDED SPEED RESTRICTION AT 270 KIAS.
3. LOWERED ALTITUDE AT SULRR FROM AT/BELOW 15000 TO AT/BELOW 13000 AND REMOVED THE SPEED RESTRICTION.
4. RAISED ALTITUDE RESTRICTION AT KEENR FROM AT 7000 TO AT 8000.
5. CHANGED ALTITUDE RESTRICTION AT LOHGN FROM AT/ABOVE 6000 TO AT 6000 AND REMOVED THE SPEED RESTRICTION.
6. REMOVED MONOH WPT (TRANSITION) FROM THE PROCEDURE.
7. MOVED BEGINNING OF OLD MONOH TRANSITION 0.10NM SOUTH TO RPARK AND RENAMED THE TRANSITION RPARK. (LEG MEA FL200)
8. RECONFIGURED ALL ENROUTE TRANSITIONS TO END AT THE COMMON POINT BANND VS ACTUAL START OF OLD COMMON ROUTE OAKES.
9. REMOVED NOTE PERTAINING TO NON RNP-AR AIRCRAFT.
10. REMOVED TIE-IN TO INSTRUMENT APPROACH BY ADDING FM TRACK AFTER HIRMO, AND CHANGING HIRMO TO A FLY BY.
11. ADDED TERMINUS INFORMATION AT HIRMO.

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REASONS:

1. OPERATIONAL REQUIREMENTS.
2. CHANGED FOR FLYABILITY.
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4. CHANGED FOR FLYABILITY.
5. TO SEPARATE FROM OTHER AIR TRAFFIC.
6. ATC REQUEST TO RENAME THE TRANSITION. (COMMEMORATIVE FIX NAME CHANGE).
7. COMMEMORATIVE NAME CHANGE.
8. TO RETAIN THE CURRENT PROCEDURE CODING.
9. PROCEDURE DOES NOT TIE TO THE RNP-AR APPROACH
10. ADDS FLEXIBILITY.
11. NEW CRITERIA REQUIREMENT.

FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)

Arrival Name BANND (RNAV)		Number TWO		STAR Computer Code BANND.BANND2		Superseded Number ONE		Dated 10/15/2015	Effective Date 24MAY2018
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
MRLET	390737.20N / 1194931.20W	Y		IF					MRLET.BANND2
POYSN	381718.33N / 1200409.08W	Y	FB	TF	192.91	51.55			
OAKES	375252.93N / 1202102.50W	Y	FB	TF	208.75	27.80	FL240BFL320	AT 280K	
GRUDG	374743.55N / 1205128.85W	Y	FB	TF	258.10	24.66	AT FL200		
BANND	374535.69N / 1210342.58W	Y	FB	TF	257.68	09.93	AT/BELOW FL180	AT 270K	
En Route Transition									
RPARK	380724.91N / 1184449.79W	Y		IF					RPARK.BANND2
MOLLA	375852.98N / 1194242.06W	Y	FB	TF	259.74	46.50			
OAKES	375252.93N / 1202102.50W	Y	FB	TF	259.02	30.92	FL240BFL320	AT 280K	
GRUDG	374743.55N / 1205128.85W	Y	FB	TF	258.10	24.66	AT FL200		
BANND	374535.69N / 1210342.58W	Y	FB	TF	257.68	09.93	AT/BELOW FL180	AT 270K	
En Route Transition									
RUSME	372939.00N / 1173112.00W	Y		IF					RUSME.BANND2
OAKES	375252.93N / 1202102.50W	Y	FB	TF	280.63	136.79	FL240BFL320	AT 280K	
GRUDG	374743.55N / 1205128.85W	Y	FB	TF	258.10	24.66	AT FL200		
BANND	374535.69N / 1210342.58W	Y	FB	TF	257.68	09.93	AT/BELOW FL180	AT 270K	
Runway Transition									
BANND	374535.69N / 1210342.58W	Y		IF			AT/BELOW FL180	AT 270K	
SULRR	375136.32N / 1212309.33W	Y	FB	TF	291.38	16.54	AT/BELOW 13000		
KEENR	375350.51N / 1214409.87W	Y	FB	TF	277.76	16.78	AT 8000		
LOHGN	375454.79N / 1215733.96W	Y	FB	TF	275.83	10.66	AT 6000	AT 230K	
WHYEE	375514.63N / 1220236.22W	Y	FB	TF	274.76	04.00	AT/ABOVE 5000		
HIRMO	375539.54N / 1220854.06W	Y	FO	TF	274.79	05.00	AT 4000		
KOAK:RWY 12				FM	274.79				RECOMMENDED NAVAID: EHF VORTAC