

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
RAZRR (RNAV)	FIVE	STUBL.RAZRR5	FOUR	07/21/2016	14JULY2022

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
FAANG	FAANG.RAZRR5	FAANG	FAANG						
			STUBL	269.20	66.82	16000	15500		BETWEEN FL240 AND FL270
KNGRY	KNGRY.RAZRR5	KNGRY	KNGRY						
			GYLET	231.57	76.36	FL240	15800		
			STUBL	240.50	47.26	16000	14300		BETWEEN FL240 AND FL270
MDOWS	MDOWS.RAZRR5	MDOWS	MDOWS						
			STSHH	181.38	103.51	FL200	13700		
			STUBL	181.04	54.50	16000	12500		BETWEEN FL240 AND FL270
RUSME	RUSME.RAZRR5	RUSME	RUSME						
			CANDA	251.46	60.71	FL210	16000		
			STUBL	247.47	56.51	16000	16000		BETWEEN FL240 AND FL270

ARRIVAL ROUTE DESCRIPTION:

FROM STUBL ON TRACK 249.52/21.02 TO CROSS RAZRR BETWEEN FL200 AND FL220, THEN ON TRACK 249.17/18.06 TO CROSS OUCHH BETWEEN 16000 AND FL190, THEN ON TRACK 249.17/18.03 TO CROSS NIKKT BETWEEN 10000 AND 14000.

EAST TRANSITION LANDING RWY 12L/R: FROM NIKKT ON TRACK 239.69/12.14 TO CROSS GOTEE BETWEEN 10000 AND 12000 AND AT 280 KIAS, THEN ON TRACK 239.96/7.43 TO SHIKK, THEN ON TRACK 281.44/11.74 TO CROSS TRCOT AT OR ABOVE 9000 AND AT 240 KIAS, THEN ON TRACK 281.24/6.36 TO CROSS GGUGL BETWEEN 7000 AND 8000, THEN ON TRACK 318.31/4.47 TO CROSS GAARY AT OR ABOVE 5800, THEN ON TRACK 318.28/2.80 TO CROSS EDMND AT OR ABOVE 5600, THEN ON TRACK 318.26/4.30 TO CROSS JESEN AT OR ABOVE 4100, THEN ON TRACK 305.51/2.30 TO CROSS HITIR AT 4000, THEN ON TRACK 305.51. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

WEST TRANSITION LANDING RWY 30L/R: FROM NIKKT ON TRACK 265.23/13.29 TO CROSS SEKKO BETWEEN 8000 AND 10000 AND AT 250 KIAS, THEN ON TRACK 264.99/11.12 TO CROSS SCOPR BETWEEN 5000 AND 7000, THEN ON TRACK 264.85/4.00 TO CROSS KLIDE AT OR ABOVE 4000 AND AT 230 KIAS. EXPECT ASSIGNED INSTRUMENT APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE.

PBN REQUIREMENT NOTES

RNAV 1 - DME/DME/IRU OR GPS

EQUIPMENT REQUIREMENT NOTES

RADAR REQUIRED

PROCEDURAL DATA NOTES:

NOTE: EXPECT TO RECEIVE TRANSITION (EAST/WEST) AND "DESCEND VIA" CLEARANCE FROM OAKLAND CENTER. NORTHERN CALIFORNIA TRACON WILL ASSIGN LANDING RUNWAY.

NOTE: WEST TRANSITION INDICATES RWYS 30L/R.

NOTE: EAST TRANSITION INDICATES RWYS 12L/R.

NOTE: EXPECT WEST TRANSITION UNLESS OTHERWISE ADVISED.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT RAZRR: HOLD E, LT, 249.52 INBOUND, 10 NM LEGS.

CHART HOLDING AT SCOPR: HOLD E, LT, 264.99 INBOUND, 8 NM LEGS.

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Arrival Name RAZRR (RNAV)	Number FIVE	STAR Computer Code STUBL.RAZRR5	Superseded Number FOUR	Dated 07/21/2016	Effective Date 14JULY2022
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COMMUNICATIONS:

CHART: ZOA.
CHART: NORCAL APP CON.
CHART: TWR.
CHART: GND CON.

AIRPORTS SERVED:

NORMAN Y MINETA SAN JOSE INTL, SAN JOSE, CA (KSJC)

LOST COMMUNICATIONS PROCEDURE:REMARKS:

MEAS BASED ON MINIMUM DME/DME ASSESSMENT.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
REFERENCE MAGNETIC VARIATION = KSJC 13E/2020.
CHART AT HITIR TERMINUS: KSJC LDG RWY 12L/R.
CHART AT KLIDE TERMINUS: KSJC LDG RWY 30L/R.

FLIGHT INSPECTED BY:

GARY J VEER
Name

FPO
Organization

11/02/2021
Date

Digitally signed by

DONALD H LANIER

Mar 16, 2022

Signature

Digitally signed by

NICHOLAS JACKSON

Mar 15, 2022

Signature

DEVELOPED BY:

NICHOLAS K. JACKSON
Name

AJV-A431
Organization

09/29/2021
Date

APPROVED BY:

LONNIE EVERHART
Name

AJV-A430
Organization

Date

Digitally signed by

DONALD H LANIER

Mar 16, 2022 Signature

CHANGES:

1. REMOVED ZORSA FROM RWY 12L/R TRANSITION.
2. CHANGED HITIR FROM FLYBY TO FLYOVER WAYPOINT WITH 306 TRACK FM LEG.
3. CHANGED ALTITUDE CROSSING RESTRICTION FROM AT OR ABOVE 8000 TO 8000B10000 AT SEKKO.
4. CHANGED ALTITUDE CROSSING RESTRICTION FROM AT OR ABOVE 5000 TO 5000B7000 AT SCOPR.
5. CHANGED ALTITUDE CROSSING RESTRICTION FROM FL240BFL280 TO FL240BFL270 AT STUBL.
6. ADDED RUNWAY TERMINUS DATA TO ADDITIONAL FLIGHT DATA.

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7. REMOVED MEAs FROM COMMON ROUTE AND RUNWAY TRANSITIONS.
8. RAISED MEA FROM RUSME TO CANDA FROM FL200 TO FL210.
9. REMOVED DO NOT CHART MOCAS.
10. ADDED DO NOT CHART MOCAS ABOVE FL180.
11. UPDATED MOCA DATA IN TRANSITION ROUTES.
12. CHANGED RWY 30L/R ARRIVAL ROUTE DESCRIPTION TO: EXPECT ASSIGNED INSTRUMENT APPROACH OR RADAR VECTORS TO FINAL APPROACH COURSE.

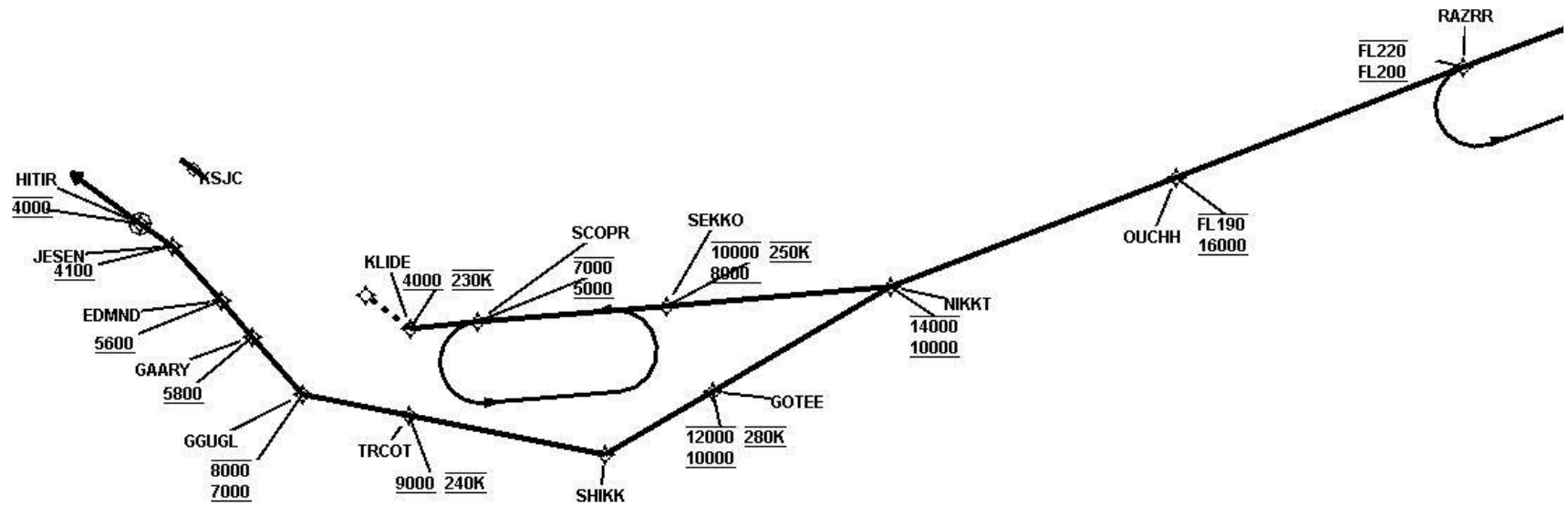
REASONS:

- 1-2. ATC REQUEST.
- 3-5. ATC/INDUSTRY REQUEST TO FACILITATE DESCENT TO IAF.
- 6-7. CONFORM TO CRITERIA.
8. CONFORM TO NEW DME/DME ASSESSMENT ANALYSIS.
- 9-10. IAW AFS MEMO DATED 7-1-21.
11. NEW TERRAIN ANALYSIS.
12. PER AIS REQUEST AND COORDINATION WITH NCT ATC.

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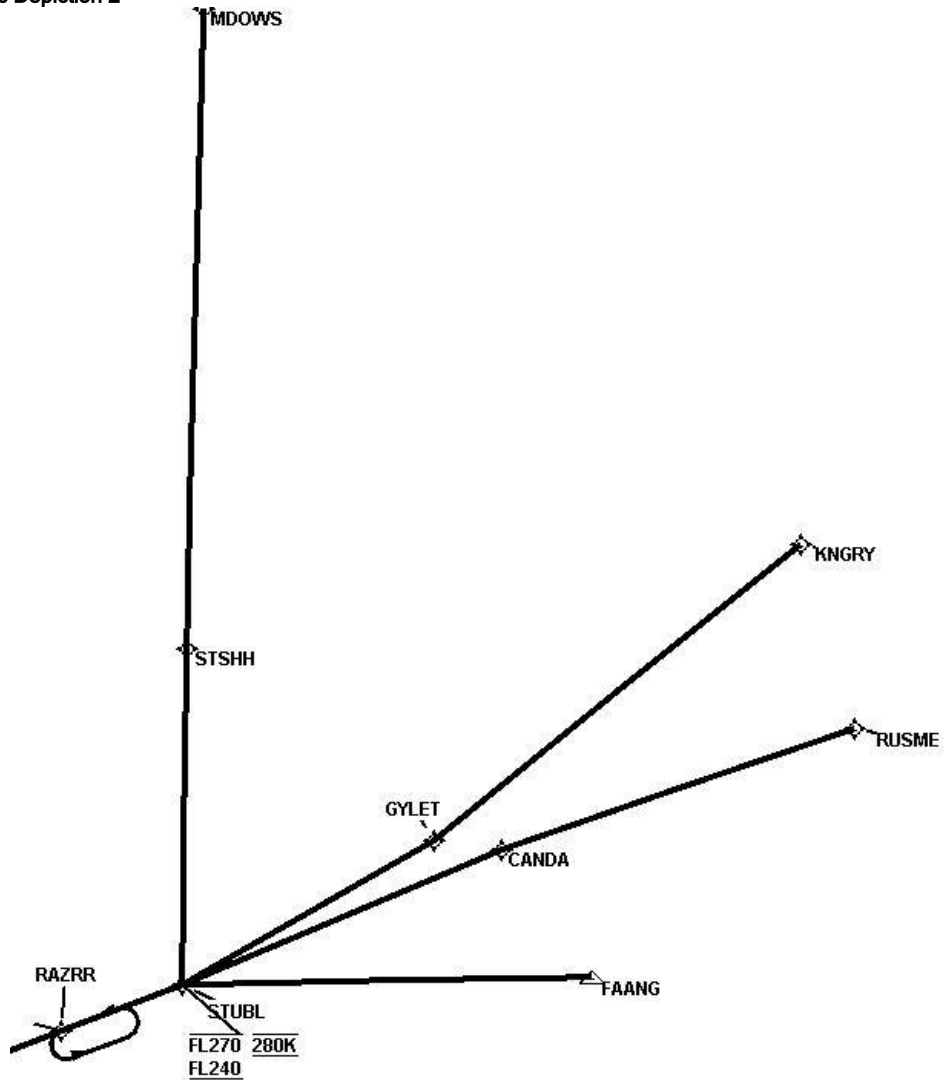
Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
RAZRR (RNAV)	FIVE	STUBL.RAZRR5	FOUR	07/21/2016	14JULY2022
Graphic Depiction 1					



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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
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Graphic Depiction 2					



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)

Arrival Name RAZRR (RNAV)		Number FIVE		STAR Computer Code STUBL.RAZRR5		Superseded Number FOUR		Dated 07/21/2016	Effective Date 14JULY2022
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
FAANG	365959.81N / 1183502.72W	Y		IF					FAANG.RAZRR5
STUBL	371339.90N / 1195649.16W	Y	FB	TF	282.20	66.82	FL240BFL270	AT 280K	
En Route Transition									
KNGRY	380041.60N / 1173328.28W	Y		IF					KNGRY.RAZRR5
GYLET	372720.00N / 1190005.00W	Y	FB	TF	244.57	76.36			
STUBL	371339.90N / 1195649.16W	Y	FB	TF	253.50	47.26	FL240BFL270	AT 280K	
En Route Transition									
MDOWS	394703.41N / 1190741.96W	Y		IF					MDOWS.RAZRR5
STSHH	380636.88N / 1194016.09W	Y	FB	TF	194.38	103.51			
STUBL	371339.90N / 1195649.16W	Y	FB	TF	194.04	54.50	FL240BFL270	AT 280K	
En Route Transition									
RUSME	372939.00N / 1173112.00W	Y		IF					RUSME.RAZRR5
CANDA	372322.53N / 1184701.91W	Y	FB	TF	264.46	60.71			
STUBL	371339.90N / 1195649.16W	Y	FB	TF	260.47	56.51	FL240BFL270	AT 280K	
Common Route									
STUBL	371339.90N / 1195649.16W	Y		IF			FL240BFL270	AT 280K	STUBL.RAZRR5
RAZRR	371052.68N / 1202253.99W	Y	FB	TF	262.52	21.02	FL200BFL220		
OUCHH	370822.66N / 1204516.83W	Y	FB	TF	262.17	18.06	16000BFL190		
NIKKT	370553.11N / 1210736.15W	Y	FB	TF	262.17	18.03	10000B14000		
Runway Transition									
NIKKT	370553.11N / 1210736.15W	Y		IF			10000B14000		
GOTEE	370215.11N / 1212205.05W	Y	FB	TF	252.69	12.14	10000B12000	AT 280K	
SHIKK	370003.89N / 1213057.39W	Y	FB	TF	252.96	07.43			
TRCOT	370455.06N / 1214419.08W	Y	FB	TF	294.44	11.74	AT/ABOVE 9000	AT 240K	

QUALITY
45
CHECKED

QUALITY
45
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STAR (DATA RECORD)

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
GGUGL	370731.68N / 1215134.20W	Y	FB	TF	294.24	06.36	7000B8000		
GAARY	371127.41N / 1215415.50W	Y	FB	TF	331.31	04.47	AT/ABOVE 5800		
EDMND	371354.91N / 1215556.59W	Y	FB	TF	331.28	02.80	AT/ABOVE 5600		
JESEN	371741.39N / 1215832.05W	Y	FB	TF	331.26	04.30	AT/ABOVE 4100		
HITIR	371924.84N / 1220026.61W	Y	FO	TF	318.51	02.30	AT 4000		
KSJC:RWY 12L,RWY 12R				FM	318.51				
Runway Transition									
NIKKT	370553.11N / 1210736.15W	Y		IF			10000B14000		
SEKKO	370746.31N / 1212403.01W	Y	FB	TF	278.23	13.29	8000B10000	AT 250K	
SCOPR	370918.30N / 1213749.32W	Y	FB	TF	277.99	11.12	5000B7000		
KLIDE	370951.03N / 1214246.98W	Y	FB	TF	277.85	04.00	AT/ABOVE 4000	AT 230K	
KSJC:RWY 30L,RWY 30R									

