

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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
THRNE (RNAV)	THREE	THRNE.THRNE3	TWO	10/12/2017	29MAR2018

TRANSITION ROUTES:

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Mag Course	Distance	MEA	MOCA	MAA	Crossing Altitudes / Fixes
PHRED	PHRED.THRNE3	PHRED	PHRED						
			FOILD	264.85	53.07	17000	5900		
			QUTIP	264.99	11.85	17000	4600		AT/BELOW FL290
			VLLMA	265.11	09.67	17000	6200		
			DROGO	264.69	10.93	17000	7600		AT/ABOVE FL240
			DEWWW	264.96	15.23	17000	7700		AT/ABOVE FL210
			DNERY	263.32	11.87	13000	7700		AT/BELOW FL200
			ARRYA	264.57	08.41	13000	5500		AT 16000
			YATZE	268.78	06.71	13000	12300		BETWEEN 14000 AND 15000
			IRONN	268.80	15.54	13000	12300		AT 13000
			THRNE	274.04	06.94	8000	7100		AT/BELOW 11000

ARRIVAL ROUTE DESCRIPTION:

LANDING KBUR: FROM THRNE ON TRACK 274.10/18.05 TO CROSS BFOON AT 10000, THEN ON TRACK 274.05/2.78 TO CROSS CRCUS AT 10000, THEN ON TRACK 268.59/25.60 TO CROSS NNEDD AT 8000, THEN ON TRACK 253.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KSMO: FROM THRNE ON TRACK 274.10/18.05 TO CROSS BFOON AT 10000, THEN ON TRACK 274.05/2.78 TO CROSS CRCUS AT 10000, THEN ON TRACK 265.58/17.34 TO CROSS SMEGL AT OR ABOVE 7000, THEN ON TRACK 265.34/8.33 TO CROSS JOFRY AT 6000, THEN ON TRACK 265.34. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING KVNY: FROM THRNE ON TRACK 274.10/18.05 TO CROSS BFOON AT 10000, THEN ON TRACK 274.05/2.78 TO CROSS CRCUS AT 10000, THEN ON TRACK 268.59/25.60 TO CROSS NNEDD AT 8000, THEN ON TRACK 272.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: DME/DME/IRU OR GPS REQUIRED

NOTE: TURBOJET AND TURBOPROP AIRCRAFT ONLY

NOTE: EXPECT LOCAL AREA ALTIMETER SETTING REACHING FL200.

FIXES AND/OR HOLDING PATTERNS:

CHART: LITNG AS STANDALONE

CHART HOLDING AT LITNG: HOLD E, LT, 264.04 INBOUND, 10 NM LEGS.

COMMUNICATIONS:

SOCAL APP CON

BOB HOPE ATIS, ATCT

SANTA MONICA ATIS, ATCT

VAN NUYS ATIS, ATCT



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THRNE (RNAV)	THREE	THRNE.THRNE3	TWO	10/12/2017	29MAR2018

AIRPORTS SERVED:

BOB HOPE, BURBANK, CA (KBUR)
SANTA MONICA MUNI, SANTA MONICA, CA (KSMO)
VAN NUYS, VAN NUYS, CA (KVNY)

LOST COMMUNICATIONS PROCEDURE:REMARKS:ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0)
REFERENCE MAGNETIC VARIATION = KBUR 12E/2020
DO NOT CHART MOCAS.

FLIGHT INSPECTED BY:

DONALD MCGOUGH
Name

Digitally signed by

ROBERT G HAMILTON

Dec 01, 2017

FICO
Organization

11/14/17
Date

Signature

DEVELOPED BY:

Robert E. Henry, FAA-Lead
Jose Gonzalez, NATCA Co-Lead
Name

Digitally signed by

CASIMIR L TABAKA

Oct 16, 2017

Southern California Metroplex
Organization

08/11/2017
Date

Signature

APPROVED BY:

S.L. Shrimpton
Name

Digitally signed by

CASIMIR L TABAKA

Oct 16, 2017

Acting Manager, OSG WSC, AJV-W2
Organization

Date

Signature

CHANGES:

1. ADDED BFOON WAYPOINT BETWEEN THRNE AND CRCUS WITH RESTRICTION AT 10000.
2. CHANGED RESTRICTION AT THRNE FROM BETWEEN 10000 AND 11000 TO AT/BELOW 11000.

REASONS:

1. ATC REQUEST - PROVIDE LOCATION AND VERTICAL RESTRICTION FOR WAKE TURBULENCE SEPARATION BETWEEN STAR AND AND KLAX ANJLL STAR AND V442 ENROUTE TRAFFIC.
2. COMPLY WITH DESCENT GRADIENT CRITERIA FROM IRONN TO THRNE.



FEDERAL AVIATION ADMINISTRATION
FLIGHT STANDARDS SERVICE
STAR (DATA RECORD)

Arrival Name THRNE (RNAV)	Number THREE	STAR Computer Code THRNE.THRNE3	Superseded Number TWO	Dated 10/12/2017	Effective Date 29MAR2018
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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
En Route Transition									
PHRED	333844.70N / 1140718.30W	Y		IF					PHRED.THRNE3
FOILD	334448.96N / 1151029.85W	Y	FB	TF	276.85	53.07			
QUTIP	334614.81N / 1152436.17W	Y	FB	TF	276.99	11.85	AT/BELOW FL290		
VLLMA	334726.21N / 1153607.07W	Y	FB	TF	277.11	09.67			
DROGO	334842.05N / 1154908.56W	Y	FB	TF	276.69	10.93	AT/ABOVE FL240		
DEWWW	335031.65N / 1160717.85W	Y	FB	TF	276.96	15.23	AT/ABOVE FL210		
DNERY	335136.94N / 1162129.39W	Y	FB	TF	275.32	11.87	AT/BELOW FL200		
ARRYA	335234.36N / 1163131.42W	Y	FB	TF	276.57	08.41	AT 16000		
YATZE	335349.49N / 1163926.31W	Y	FB	TF	280.78	06.71	14000B15000		
IRONN	335643.16N / 1165747.10W	Y	FB	TF	280.80	15.54	AT 13000		
THRNE	335838.23N / 1170548.56W	Y	FB	TF	286.04	06.94	AT/BELOW 11000		

Common Route									
THRNE	335838.23N / 1170548.56W	Y		IF			AT/BELOW 11000		LANDING KBUR THRNE.THRNE3
BFOON	340337.33N / 1172641.23W	Y	FB	TF	286.10	18.05	AT 10000		
CRCUS	340423.53N / 1172954.38W	Y	FB	TF	286.05	02.78	AT 10000		
NNEDD	340902.59N / 1180013.66W	Y	FO	TF	280.59	25.60	AT 8000		
KBUR				FM	265.00				RECOMMENDED NAVAID: TFD VORTAC

Common Route									
THRNE	335838.23N / 1170548.56W	Y		IF			AT/BELOW 11000		LANDING KSMO THRNE.THRNE3
BFOON	340337.33N / 1172641.23W	Y	FB	TF	286.10	18.05	AT 10000		
CRCUS	340423.53N / 1172954.38W	Y	FB	TF	286.05	02.78	AT 10000		
SMEGL	340639.28N / 1175036.78W	Y	FB	TF	277.58	17.34	AT/ABOVE 7000		
JOFRY	340742.84N / 1180034.19W	Y	FO	TF	277.34	08.33	AT 6000		
KSMO				FM	277.34				RECOMMENDED NAVAID: TFD VORTAC

Common Route									
THRNE	335838.23N / 1170548.56W	Y		IF			AT/BELOW 11000		LANDING KVMY THRNE.THRNE3

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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
BFOON	340337.33N / 1172641.23W	Y	FB	TF	286.10	18.05	AT 10000		
CRCUS	340423.53N / 1172954.38W	Y	FB	TF	286.05	02.78	AT 10000		
NNEDD	340902.59N / 1180013.66W	Y	FO	TF	280.59	25.60	AT 8000		
KVNY				FM	284.00				RECOMMENDED NAVAID: TFD VORTAC