

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.
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
GRNPA (RNAV)	TWO	GRNPA.GRNPA2	ONE	10/30/2003	17 AUG 2017

TRANSITION ROUTES:

Transition Name	Transition Computer Code	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	MAA	Crossing Altitude/Fixes
BRYCE CANYON	BCE.GRNPA2	BCE VORTAC	KSINO	221.55	108.41	14800			
			LUXOR	229.64	22.00	10100			AT 12000
			GRNPA	181.04	7.97	6100			AT 11000
DOVE CREEK	DVC.GRNPA2	DVC VORTAC	BETHL	241.81	176.78	FL250			
			HOLDM	255.09	53.32	14800			
			KSINO	229.96	29.85	14800			
			LUXOR	229.64	22.00	10100			AT 12000
			GRNPA	181.04	7.97	6100			AT 11000
MILFORD	MLF.GRNPA2	MLF VORTAC	KSINO	194.90	118.57	14800			
			LUXOR	229.64	22.00	10100			AT 12000
			GRNPA	181.04	7.97	6100			AT 11000
BETHL	BETHL.GRNPA2	BETHL	HOLDM	255.09	53.32	14800			
			KSINO	229.96	29.85	14800			
			LUXOR	229.64	22.00	10100			AT 12000



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Arrival Name	Number	STAR Computer Code	Superseded Number	Dated	Effective Date
GRNPA (RNAV)	TWO	GRNPA.GRNPA2	ONE	10/30/2003	17 AUG 2017
	GRNPA	181.04	7.97	6100	AT 11000

ARRIVAL ROUTE DESCRIPTION:

FROM GRNPA ON TRACK 215.61/8.21 TO DUBLX, THENCE AS DEPICTED TO LEMNZ (MEA 6100 FROM GRNPA TO LEMNZ).

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.
NOTE: RNAV 1.
NOTE: DME/DME/IRU OR GPS REQUIRED.
NOTE: ALL RUNWAYS: EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.
CROSS LUXOR AT 12000 AND 250 KIAS; CROSS GRNPA AT 11000; CROSS DUBLX AT 9000; CROSS FRAWG AT 8000 AND 210 KIAS.
FOR: /E, /F, /G AND /R (RNP 2.0) EQUIPPED AIRCRAFT ONLY.

FIXES AND/OR HOLDING PATTERNS:

CHART HOLDING AT KSINO: NE, RT, 229.96 INBOUND, 10 NM LEGS.
CHART HOLDING AT LUXOR: NE, LT, 229.64 INBOUND, 6 NM LEGS.
CHART HOLDING AT BLD VORTAC: SE, RT, 330.00 INBOUND, 6 NM LEGS.
CHART TRROP.

COMMUNICATIONS:

D-ATIS, LAS APPROACH CONTROL, LAS TWR, GRD.

AIRPORTS SERVED:

AIRPORT NAME	CITY	STATE
MC CARRAN INTL	LAS VEGAS	NV

LOST COMMUNICATIONS PREFERENCES:

AFTER LEMNZ TURN LEFT DIRECT BLD VORTAC AND HOLD, MAINTAIN 8000.

REMARKS:

WIAVER SUBMITTED TO ATP-500 REGARDING FAA ORDER 7110.65 AND 170 KTS AT CHIPS.
THIS IS A DIRECT TRANSCRIPTION OF THE PREVIOUS FORM EXCEPT WHAT IS DESCRIBED IN CHANGES AND REASONS.
AMENDMENT DOES NOT SATISFY PERIODIC REVIEW REQUIREMENTS.

ADDITIONAL FLIGHT DATA:

DME/DME ASSESSMENT: SAT (RNP 2.0).
REFERENCE MAGNETIC VARIATION: KLAS 11E/2020.

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GRNPA (RNAV)	TWO	GRNPA.GRNPA2	ONE	10/30/2003	17 AUG 2017

FLIGHT INSPECTED BY:

FLIGHT INSPECTION NOT REQUIRED, MANAGER ROBERT STUCKERT

ORGANIZATION:

AJW-331

DATE:

Flight Inspected Signature:

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2017

DEVELOPED BY:

JAMES ROGERS

Digitally signed by
JAMES ROGERS
May 25, 2017

AJV-5421

4/27/2017

Developed By Signature:

APPROVED BY:

JULIE MORGAN

AJV-5420

12/5/2016

Approved By Signature:

Digitally signed by
ROBERT G HAMILTON
Jun 07, 2017

CHANGES:

1. TRANSITION ROUTES: UPDATED ALL COURSES TO REFLECT UPDATED MAGVAR.
2. ARRIVAL ROUTE DESCRIPTION: CHANGED TRACK FROM GRNPA TO DUBLX FROM 211.61 TO 215.61.
3. FIXES AND/OR HOLDING PATTERNS: CHANGED HOLDING INBOUND COURSE AT KSINO FROM 225.96 TO 229.96; CHANGED HOLDING INBOUND COURSE AT LUXOR FROM 225.64 TO 229.64; LUXOR HOLDING: ADDED CORRECTION OF 6 DME TO CHART.

REASONS:

- 1-3. MAGVAR CHANGED FROM 15E EPOCH YEAR 1980 TO 11E EPOCH YEAR 2020.



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GRNPA (RNAV)	TWO	GRNPA.GRNPA2	ONE	10/30/2003	17 AUG 2017

Title:



FEDERAL AVIATION ADMINISTRATION

FLIGHT STANDARDS SERVICE

STAR (DATA RECORD)

Arrival Name	Number		STAR Computer Code		Superseded Number	Dated	Effective Date
GRNPA (RNAV)	TWO		GRNPA.GRNPA2		ONE	10/30/2003	17 AUG 2017

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
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En Route Transition

BCE VORTAC	374121.13N / 1121814.00W	Y		IF					BCE.GRNPA2
KSINO	363432.12N / 1140504.59W	Y	FB	TF	232.55	108.41			
LUXOR	362341.62N / 1142849.54W	Y	FB	TF	240.64	22.00	AT 12000	AT 250K	
GRNPA	361553.00N / 1143053.00W	Y	FB	TF	192.04	7.97	AT 11000		

En Route Transition

DVC VORTAC	374831.46N / 1085552.59W	Y		IF					DVC.GRNPA2
BETHL	365303.90N / 1122625.55W	Y	FB	TF	252.81	176.78			
HOLDM	364907.10N / 1133240.59W	Y	FB	TF	266.09	53.32			
KSINO	363432.12N / 1140504.59W	Y	FB	TF	240.96	29.85			
LUXOR	362341.62N / 1142849.54W	Y	FB	TF	240.64	22.00	AT 12000	AT 250K	
GRNPA	361553.00N / 1143053.00W	Y	FB	TF	192.04	7.97	AT 11000		

En Route Transition

MLF VORTAC	382137.28N / 1130047.64W	Y		IF					MLF.GRNPA2
KSINO	363432.12N / 1140504.59W	Y	FB	TF	205.90	118.57			



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FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
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LUXOR	362341.62N / 1142849.54W	Y	FB	TF	240.64	22.00	AT 12000	AT 250K	
GRNPA	361553.00N / 1143053.00W	Y	FB	TF	192.04	7.97	AT 11000		

En Route Transition

BETHL	365303.90N / 1122625.55W	Y		IF					BETHL.GRNPA2
HOLDM	364907.10N / 1133240.59W	Y	FB	TF	266.09	53.32			
KSINO	363432.12N / 1140504.59W	Y	FB	TF	240.96	29.85			
LUXOR	362341.62N / 1142849.54W	Y	FB	TF	240.64	22.00	AT 12000	AT 250K	
GRNPA	361553.00N / 1143053.00W	Y	FB	TF	192.04	7.97	AT 11000		

Common Route

GRNPA	361553.00N / 1143053.00W	Y		IF			AT 11000		GRNPA.GRNPA2
DUBLX	361014.00N / 1143815.00W	Y	FB	TF	226.61	8.21	AT 9000		
FRAWG	360843.00N / 1144604.00W	Y	FB	TF	256.58	6.51	AT 8000	AT 210K	
TRROP	360757.00N / 1145727.00W	Y	FB	TF	265.31	9.25			
LEMNZ	360814.25N / 1150757.07W	Y	FB	TF	271.98	8.51			

