

DCS WORLD
FLIGHT INFORMATION PUBLICATION

NV/AZ

NEVADA/ARIZONA

INSTRUMENT APPROACH PROCEDURES
STANDARD INSTRUMENT DEPARTURES
AIRPORT DIAGRAMS

EFFECTIVE 0901Z 1 DEC 2010
 TO 0901Z 30 NOV 2011
TCN EFFECTIVE 0901Z 21 JAN 2019



Published By
476TH vFIGHTER GROUP
www.476vfightergroup.com

WARNING



Not suited for real operations

Made for Digital Combat Simulator with mission dates 1 DEC 2010 - 30 NOV 2011
Tower frequencies have 0.1 added to the DCS World frequencies.

VERSION 2.3

EFF. DATE 19021

GENERAL INFORMATION & ABBREVIATIONS

- * Indicates control tower or ATIS operates non-continuously, or non-standard Pilot Controlled Lighting.
- x Indicates frequency is unmonitored and available on request through the controlling agency. Distances in nautical miles (except visibility which may be statute miles or meters and Runway Visual Range which may be in hundreds of feet or meters).
- Runway dimensions in feet. Elevations in feet mean sea level (MSL). Ceilings in feet above airport elevation.
- Radials/bearings/headings/courses are magnetic.
- Coordinates are compatible with DCS World.

ADF.....	Automatic Direction Finder	MALSR.....	Medium Intensity Approach Light System with RAIL
ALS.....	Approach Light System	MAP.....	Missed Approach Point
APP CON.....	Approach Control	MDA.....	Minimum Descent Altitude
ARR.....	Arrival	MIRL.....	Medium Intensity Runway Lights
ASR/PAR.....	Published Radar Minimums at this Airport	MLS.....	Microwave Landing System
ATIS.....	Automatic Terminal Information Service	NA.....	Not Authorized
BC.....	Back Course	NDB.....	Non-directional Radio Beacon
C.....	Circling	NoPT.....	No Procedure Turn Required (Procedure Turn shall not be executed without ATC clearance)
CAT.....	Category	NVG.....	Night Vision Goggles
Chan.....	Channel	ODALS.....	Omnidirectional Approach Light System
CLNC DEL.....	Clearance Delivery	ODP.....	Obstacle Departure Procedure
CNF.....	Computer Navigation Fix	PAPI.....	Precision Approach Path Indicator
CTAF.....	Common Traffic Advisory Frequency	RA.....	Radio Altimeter setting height
DEP CON.....	Departure Control	Radar Required.....	Radar vectoring required for this approach
DH.....	Decision Height	RAIL.....	Runway Alignment Indicator Lights
DME.....	Distance Measuring Equipment	RBn.....	Radio Beacon
DR.....	Dead Reckoning	RCLs.....	Runway Centerline Light System
ELEV.....	Elevation	REIL.....	Runway End Identifier Lights
FAF.....	Final Approach Fix	RNAV.....	Area Navigation
FL.....	Flight Level	RPI.....	Runway Point of Intercept(ion)
FM.....	Fan Marker	RRRL.....	Runway Remaining Lights
GP.....	Glide Path	Runway Touchdown.....	First 3000' of runway Zone
GS.....	Glide Slope	RVR.....	Runway Visual Range
HAA.....	Height Above Airport	Rwy.....	Runway
HAL.....	Height Above Landing	S.....	Straight-in
HAT.....	Height Above Touchdown	SALS.....	Short Approach Light System
HATH.....	Height Above Threshold	SDF.....	Simplified Directional Facility
HIRL.....	High Intensity Runway Lights	SSALR.....	Simplified Short Approach Light System with RAIL
IAF.....	Initial Approach Fix	TA.....	Transition Altitude
ICAO.....	International Civil Aviation Organization	TACAN.....	TACAN
Intcp.....	Intercept	TCH.....	Threshold Crossing Height (height in feet Above Ground Level)
INT, INTXN.....	Intersection	TDZ.....	Touchdown Zone
KIAS.....	Knots Indicated Airspeed	TDZE.....	Touchdown Zone Elevation
LDA.....	Landing Distance Available, Localizer Type Directional Aid	TDZL.....	Touchdown Zone Lights
Ldg.....	Landing	THRE.....	Threshold Elevation
LDIN.....	Lead in Light System	TLV.....	Transition Level
LIRL.....	Low Intensity Runway Lights	VDP.....	Visual Descent Point
LLZ/LOC.....	Localizer	WPT.....	Waypoint (RNAV)
LR.....	Lead Radial Provides at least 2 NM (Copter 1NM) of lead to assist in turning onto the intermediate/final course		
M.....	Meters		
MALS.....	Medium Intensity Approach Light System		

TABLE OF CONTENTS

INDEX OF SUPPLEMENTARY ENCLOSURES

ABBREVIATIONS	PAGE I	IFR TAKE-OFF MINIMUMS AND DEPARTURE PROCEDURES	PAGE IV
TABLE OF CONTENTS	PAGE II	AIRFIELD QUICK REFERENCE LIST	PAGE V
LEGENDS			PAGE VII
AIRPORT DIAGRAM/SKETCH LEGEND	PAGE III		

INDEX OF INSTRUMENT PROCEDURE CHARTS

NAME	PAGE	NAME	PAGE
BEATTY, NV		MECURY, NV	
BEATTY (KBTY)		PAHUTE MESA (L23)	
AIRPORT DIAGRAM.....	3	AIRPORT DIAGRAM.....	32
BOULDER CITY, NV		MESQUITE, NV	
BOULDER CITY MUNICIPLE		MESQUITE AIRPORT (67L)	
AIRPORT (KBVU)		AIRPORT DIAGRAM.....	33
AIRPORT DIAGRAM.....	4	MINA, NV	
INDIAN SPRINGS, NV		MINA AIRPORT (3QL)	
CREECH AFB (KINS)		AIRPORT DIAGRAM.....	34
HI-TACAN RWY 08.....	5	OVERTON, NV	
HI-TACAN RWY 26.....	6	ECHO BAY AIRPORT (OL9)	
AIRPORT DIAGRAM.....	7	AIRPORT DIAGRAM.....	35
JEAN, NV		PANACA, NV	
JEA AIRPORT (OL7)		LINCOLN COUNTRY (1L1)	
AIRPORT DIAGRAM.....	8	AIRPORT DIAGRAM.....	36
LAS VEGAS, NV		Rachel, NV	
HENDERSON EXECUTIVE		Groom Lake AB (KXTA)	
AIRPORT (KHND)		Airport Diagram.....	37
VOR C	9	TONOPAH, NV	
AIRPORT DIAGRAM.....	10	TONOPAH AIRPORT (KTPH)	
McCARRAN INTERNATIONAL		VGA OR GPS-A.....	38
AIRPORT (KLAS)		AIRPORT DIAGRAM.....	39
FUZZY SEVEN ARRIVAL.....	11	TONOPAH TEST RANGE (KTNX)	
VOR RWY 25L/R.....	12	ILS OR LOC/DME RWY 14.....	40
ILS OR LOC RWY 25R.....	13	ILS OR LOC/DME RWY 32.....	41
LAS VEGAS FOUR DEPARTURE.....	14	VOR/DME OR TACAN RWY 14.....	42
AIRPORT DIAGRAM.....	16	VOR/DME OR TACAN RWY 12.....	43
NELLIS AFB (KLSV)		VOR/DME Z RWY 14.....	44
HI-ILS OR LOC/DME Z RWY 21L.....	17	VOR/DME Z RWY 23.....	45
ILS OR LOC/DME X RWY 21L.....	18	AIRPORT DIAGRAM.....	46
HI-TACAN RWY 3R.....	19	BULLHEAD CITY, AZ	
HI-TACAN Y RWY 21L.....	20	LAUGHLIN/BULLHEAD	
HI-TACAN Z RWY 21L.....	21	INTERNATIONAL AIRPORT (KIFP)	
TACAN X RWY 21L.....	22	AIRPORT DIAGRAM.....	47
DREAM FOUR DEPARTURE.....	23		
FYTTR THREE DEPARTURE.....	24		
MORMAN MESA FOUR DEPARTURE....	25		
AIRPORT DIAGRAM.....	31		
NORTH LAS VEGAS			
AIRPORT (KVGT)			
ILS OR LOC RWY 12L.....	27		
BOULDER CITY ONE DEPARTURE.....	28		
NORTHTOWN FOUR DEPARTURE.....	29		
RIGHTTURN TWO DEPARTURE.....	30		
AIRPORT DIAGRAM.....	31		

LEGEND

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface	Overruns, Taxiways, Parking Areas
Closed Runway	Closed Taxiway

REFERENCE FEATURES

Buildings.....	
Tanks.....	
Obstruction.....	
Airport Beacon.....	
Runway Radar Deflectors.....	
Control Tower *.....	

* When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and identified as TWR.

Runway length depicted shall be the physical length of the runway (end-to-end, including displaced thresholds, if any) but excluding areas designated as overruns or stopways. Where a displaced threshold is shown and/or part of the runway is otherwise not available for landing, an annotation will be added to indicate the landing length of the runway; e.g., Rwy 13 ldg 5000'.

Runway Weight Bearing Capacity is shown as a codified expression. Refer to the appropriate Supplement/Directory for applicable codes.

Negative Symbols used to identify Copter Procedures
landing point.....

Runway Threshold Elevation THRE 123
Runway TDZ Elevation TDZE123
Runway Slope 0.8% UP
(shown when runway slope equals or exceeds 0.3%)
(Runway Slope measured to midpoint on runways 8000 feet or longer).

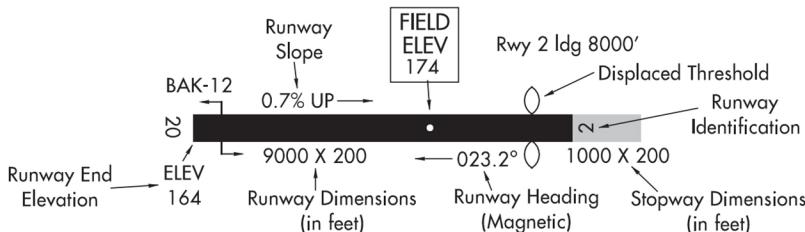
Approach light symbols are shown in the Flight Information Handbook.

Airport Diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram.

Coordinate values are shown in 1 or 1/2 minute increments. They are further broken down into 6 second ticks, within each 1 minute increment.

Position accuracy within \pm 600 feet unless otherwise noted on the chart.



SCOPE

Airport Diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer based Navigation Systems (i.e., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. Requisition for the creation of airport diagrams must meet the above criteria and will be approved by the 476th vFighter Group Command Staff.



TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR takeoff minimums other than standard, are listed below. Takeoff Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or the applicable military volume, as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not specifically assigned a departure procedure (i.e., ODP, SID, or radar vector) as part of an IFR clearance, an ODP may be required to be flown for obstacle clearance, even though not specifically stated in the IFR clearance. When doing so in this manner, ATC should be informed when the ODP being used contains a specified route to be flown, restrictions before turning, and/or altitude restrictions.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard takeoff rules and establishes takeoff minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) takeoff minima are published below. For military takeoff minima, refer to appropriate service directives.

NAME	TAKEOFF MINIMUMS	NAME	TAKEOFF MINIMUMS
LAS VEGAS, NV		MCCARRAN INTL (LAS)	
HENDERSON EXECUTIVE (HND) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES ORIG 05132 (FAA)	TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 6 10210 (FAA) TAKEOFF MINIMUMS: Rwy 17L/R , Cat A/B std. with a min. climb of 491' per NM to 6000, or 2100-3 for climb in visual conditions, Cat C/D NA. Rwy 35L/R , Cat A/B std. with a min. climb of 12' per NM to 4700, or 2100-3 for climb in visual conditions, Cat C/D NA. DEPARTURE PROCEDURE: Rwy 17L/R , climbing right turn via LAS R-157 to LAS VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. Rwy 35L/R , climbing right turn via BLD R-257 to BLD VORTAC before proceeding on course, or for climb in visual conditions: Cross Henderson Executive Airport eastbound at or above 4500, then via BLD R-249 to BLD VORTAC. NOTE: Rwy 17L , tree 5610' from DER, 82' left of centerline, 100' AGL/2739' MSL. Tree 1.9 miles from DER, 1495' left of centerline, 100' AGL/2859' MSL. Rwy 17R , tree 4041' from DER, 859' left of centerline, 100' AGL/2739' MSL	MCCARRAN INTL (LAS) TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES AMDT 6 10210 (FAA) TAKEOFF MINIMUMS: Rwys 19L/R , std. w/ min. climb of 210' per NM to 2600. Rwy 25R, 300-2 or standard with a minimum climb of 230' per NM to 2600. DEPARTURE PROCEDURE: Rwys 1L/R , climbing right turn direct BLD VORTAC before proceeding on course. Rwys 7L/R , climb heading 075° to 3700, then climbing right turn direct BLD VORTAC before proceeding on course. Rwys 25 L/R , climb heading 255° to 2800, then climbing right turn direct BLD VORTAC before proceeding on course. Rwys 19 L/R , climbing left turn via heading 120° and BLD R-257 direct BLD VORTAC before proceeding on course. NOTE: Rwy 1L , building 1508' from DER, 463' left of centerline, 71' AGL/2146' MSL. Pole 453' from DER, 283' left of centerline, 38' AGL/2118' MSL. Sign 1042' from DER, 694' left of centerline, 35' AGL/2124' MSL. Rwy 1R , sign 1331' from DER, 448' right of centerline, 60' AGL/2120' MSL. Vents 604' from DER, 539' right of centerline, up to 17' AGL/2095' MSL.	

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES





TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



INSTRUMENT APPROACH PROCEDURE CHARTS

LAS VEGAS, NV (CONT)

MCCARRAN INTL (LAS) (CONT)

NOTE: **Rwy 7L**, Trees 761' from DER, left and right of center line, up to 42' AGL/2074' MSL. Pole 747' from DER, 442' right of centerline, 25' AGL/2057' MSL. **Rwy 7R**, tower 1457' from DER, 847' right of centerline, 65' AGL/2096' MSL. Rwy 19L, multiple buildings, trees and poles 1394' from DER, 251' right of centerline, up to 96' AGL/2284' MSL. Sign 2181' from DER, 1062' right of centerline, 36' AGL/2236' MSL. **Rwy 19R**, trees 1563' from DER, 329' left of center line, up to 55' AGL/ 2236' MSL. Multiple buildings, signs and poles 197' from DER, 59' right of centerline, up to 75' AGL/2291' MSL. **Rwy 25L**, multiple poles, sign and buildings 1003' from DER, 145' left of centerline, up to 97' AGL/2291' MSL. Tree 2837' from DER, 1008' left of centerline, 72' AGL/2230' MSL. Railroad 2564' from DER, 773' left of centerline, 66' AGL/2223' MSL. **Rwy 25R**, multiple poles and trees 533' from DER, 1' left of centerline, up to 271' AGL/2457' MSL. Building 1822' from DER, 652' left of centerline, 59' AGL/2238' MSL. Roads 669' from DER, 17' right of centerline, up to 29' AGL/2208' MSL.

NELLIS AFB (KLSV) (CONT)

LAS VEGAS, NV TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

ORIG 12320

Rwy 3L/R, 10,200-3* SR-SS

Rwy 21L/R, 10,200-3* SR-SS

Diverse departure not authorized.

MILITARY: Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 300' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vector climb gradient, A/C must depart VFR.

* **CIVIL:** Use published DP, if unable to comply with DP climb gradient file appropriate DP for intended destination and notify clearance delivery and request RADAR Vectors (Climb Gradient of 330' per NM until 12,000 for RADAR Vectors). If unable to comply with RADAR Vectors climb gradient, A/C may use published weather minimums or depart VFR.
TAKE-OFF OBSTACLES: RWY 3L: Terrain 0' AGL/1869' MSL, 0' from DER, 303' left of centerline. Terrain 0' AGL/ 1870' MSL, 0' from DER, 500' left of centerline. Road 15' AGL/1914' MSL, 1322' from DER, 801' left of centerline.
RWY 3R: C-5 on taxiway 65' AGL/1934' MSL, 1346' from DER, 821' right of centerline. Road 15' AGL/1994' MSL, 3930' from DER, 1403' right of centerline.

NELLIS AFB (KLSV) (CONT)

TAKE-OFF OBSTACLES: RWY 21L: Trees 90' AGL/1929' MSL, 4596' from DER, 1595' right of centerline. Trees 90' AGL/ 1929' MSL, 4942' from DER, 540' right of centerline. Trees 60' AGL/1879' MSL, 931' from DER, 725' left of centerline. Trees 52' AGL/1881' MSL, 2069' from DER, 693' left of centerline. Trees 42' AGL/ 1863' MSL, 1642' from DER, 744' left of centerline. Trees 45' AGL/1861' MSL, 1377' from DER, 737' left of centerline. Trees 35' AGL/1855' MSL, 1011' from DER, 662' left of centerline. Trees 47' AGL/ 1868' MSL, 1846' from DER, 844' left of centerline. Trees 38' AGL/1858' MSL, 826' from DER, 760' left of centerline. Trees 60' AGL/1879' MSL, 948' from DER, 627' left of centerline. Trees 60' AGL/ 1879' MSL, 2722' from DER, 342' left of centerline.

RWY 21R: Terrain 0' AGL/1834' MSL, 23' from DER, 471' right of centerline. Trees 90' AGL/1929' MSL, 4596' from DER, 596' right of centerline. Building 45' AGL/1884' MSL, 2276' from DER, 1036' right of centerline. Road 15' AGL/1854' MSL, 1406' from DER, 465' right of centerline. Terrain 0' AGL/1835' MSL, 0' from DER, 500' right of centerline. Building 38' AGL/1868' MSL, 2160' from DER, 1077' right of centerline. Tower 100' AGL/1938' MSL, 1462' from DER, 1135' right of centerline. Tower 100' AGL/1939' MSL, 1157' from DER, 1135' right of centerline.

NORTH LAS VEGAS (VGT)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 3 08045 (FAA)

DEPARTURE PROCEDURE: Use BOULDER CITY DEPARTURE.

TONOPAH, NV

TONOPAH (TPH)

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

AMDT 1 88350 (FAA)

TAKEOFF MINIMUMS: **Rwys 11, 29, NA. Rwy 15,** 33, 2600-2 or std. with a min. climb of 260' per NM to 8000.

DEPARTURE PROCEDURE: **Rwy 15**, turn left. **Rwy 33**, turn right. Climb direct TPH VORTAC. Continue climb in holding pattern (NE, right turns, 246° inbound) to depart TPH VORTAC at or above 8000. Climb on course to MEA or assigned altitude.



TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES





19021

TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



INSTRUMENT APPROACH PROCEDURE CHARTS

TONOPAH TEST RANGE (KTNX)

TONOPAH , NV

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 12096

DEPARTURE PROCEDURE: **Rwy 14:** 1000-3 with minimum climb of 320 ft/NM to 10,700 or 2700-3 for Climb in Visual Conditions. Climb on a heading between 325° CW to 155° from DER or Climb in Visual Conditions to cross KZ - KTNX airport at or above 8100 MSL before proceeding on course. **Rwy 32:** 1000-3 with minimum climb of 260 ft/NM to 5900 or 2700-3 for Climb in Visual Conditions. Climb on a heading between 295° CW to 005° from DER or Climb in Visual Conditions to cross KZKTNX airport at or above 8100 MSL before proceeding on course.

TAKEOFF OBSTACLES: **Rwy 14,** Terrain, 5582' MSL, 1204' from DER, 823' right of centerline. Terrain, 5565' MSL, 63' from DER, 517' right of centerline. Terrain, 5564' MSL, 46' from DER, 480' right of centerline. Terrain, 5561' MSL, 0' from DER, 353' right of centerline. Terrain, 5558' MSL, 62' from DER, 200' right of centerline. Terrain, 5561' MSL, 14' from DER, 292' right of centerline. Terrain, 5561' MSL, 0' from DER, 287' right of centerline. Terrain, 5559' MSL, 0' from DER, 222' right of centerline. Surveyed terrain, 5560' MSL, 215' from DER, 427' right of centerline. **Rwy 32,** Terrain, 5476' MSL, 0' from DER, 500' left of centerline. Terrain, 5476' MSL, 19' from DER, 465' left of centerline. Terrain, 5476' MSL, 110' from DER, 529' left of centerline.

BULLHEAD CITY, AZ

LAUGHLIN/BULLHEAD INTL (IFP)

TAKEOFF MINIMUMS AND (OBSTACLE)

DEPARTURE PROCEDURES

AMDT 1 09183 (FAA)

TAKEOFF MINIMUMS: **Rwy 16,** std. w/ a min. climb of 370' per NM to 1800, or 1700-3 for climb in visual conditions. **Rwy 34,** std. w/ a min. climb of 495' per NM to 5500, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 16,** climb via heading 164° and EED VORTAC R-334 to EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **Rwy 34,** climb via heading 344° to 1600, then climbing right turn direct EED VORTAC, or for climb in visual conditions: cross Laughlin/Bullhead Intl airport at or above 2300, then continue climbing via heading 155° and EED VORTAC R-335 to EED VORTAC. **All Aircraft** climb in EED VORTAC holding pattern (East, right turn, 257° inbound) to cross EED VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 16,** multiple bushes beginning 3600' from DER, left of centerline, up to 12' AGL/1029' MSL. **Rwy 34,** multiple poles beginning 2211' from DER, right of centerline, up to 105' AGL/821' MSL.



TAKEOFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES



AIRPORT QUICK REFERENCE LIST

Airfield	ICAO	TACAN	RWY	Elev	ILS	GND	TOWER	CTAF	DPT	APP	ATIS
Beatty	KBTY			16	3173			122.900			
					3123						
Boulder City	KBVU			9	2152			122.800			
				15	2205						
				27	2136						
				33	2123						
Creech	KINS		87X	8	3127		118.3	118.4			122.500
						275.8	360.7				
							38.65				
				13	3127						
				26	3127						
				31	3127						
Echo Bay	OL9			6	1549			122.800			
				24	1503						
Groom Lake	KXTA		18X	14L	4459		118.1				123.500
						250.15					
						38.7					
				32R	4495	109.300					
Henderson Executive	KHND			17L	2484		125.2				120.775
						250.2					
						38.85					
				17R	2484						
				35L	2493						
				35R	2490						
Jean	OL7			02L	2825			122.900			
				02R	2825						
				20L	2825						
				20R	2825						
Laughlin	KIIP			16	656		124.0				119.825
						250.1					
						38.5					
				34	673						
Lincoln County	1L1			17	4816			122.800			
				35	4816						
Mc Carren	KLAS		116X	01L	2178		112.0				124.500
				01R	2178		257.9				
				07L	2162		38.75				
				07R	2162						
				19L	2116						
				19R	2116						
				25L	2073	111.800					
				25R	2060	110.300					
Mesquite	67L			1	1857			122.800			
				19	1857						
Mina	3Q0			13	4560			122.900			
				31	4560						
Nellis	KLSV		12X	03L	1841		121.8	132.65			118.125
						275.8	327.1				125.500
						38.8					
				03R	1841						
				21L	1854	109.100					
				21R	1857						
North Las Vegas	KVGT			7	2228		125.8				118.050
						360.85					
						38.55					
				12L	2228	110.700					
				12R	2228						
				25	2228						
				30L	2228						
				30R	2228						
Pahute Mesa	L23			18	5059			122.900			
				36	5056						
Tonopah	KTPH			11	5390			123.000			
				15	5390						
				29	5390						
				33	5390						
Tonopah Test Range	KTNX		77X	14	5535	108.300	127.25	124.85			113.000
							275.8	258.05			
							38.6				
				32	5535	111.700					

19021

AIRPORT DIAGRAM

476 vFG

BEATTY (KBTY)
BEATTY, NEVADA

ATIS
NA
BEATTY CTAF
122.9
GND CON
NA
CLNC DEL
NA

FIELD
ELEV
3173

91

168.0°

Beacon
Public
Phone

AIRPORT

36°52.0'N

VAR 12.9° E

5615 X 60

ELEV
3123

34

348.0°



36°51.5'N

116°47.0'W

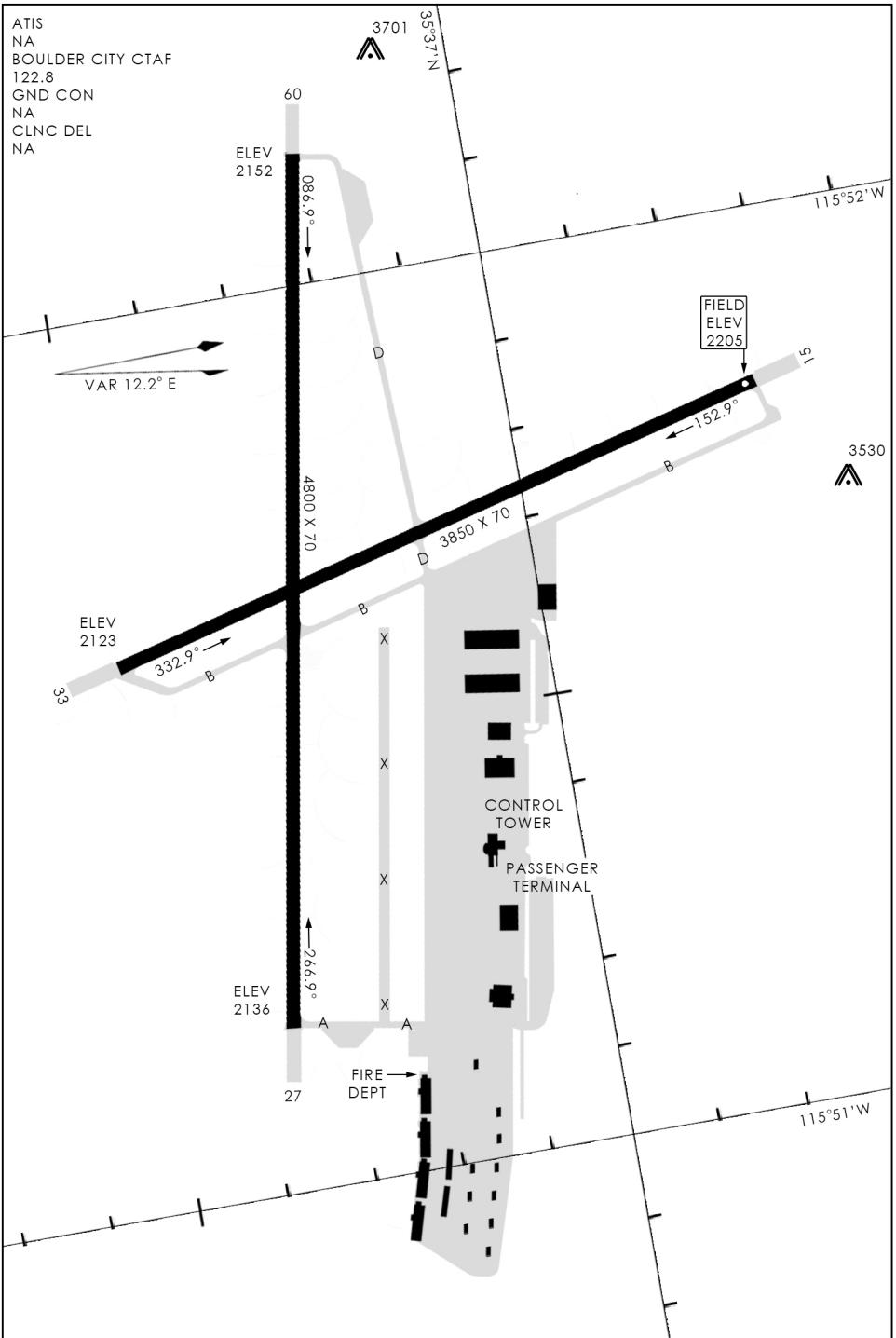
116°47.5'W

AIRPORT DIAGRAM

BEATTY, NEVADA
Beatty (KBTY)

19021
AIRPORT DIAGRAM

BOULDER CITY MUNICIPAL AIRPORT(KBVU)
476 vFG
BOULDER CITY, NEVADA



AIRPORT DIAGRAM

BOULDER CITY, NEVADA
BOULDER CITY MUNICIPAL AIRPORT(KBVU)

INDIAN SPRINGS, NEVADA

HI-TACAN RWY 8

TACAN INS Chan 87x	APCH CRS 065°	Rwy ldg 9002 TDZE 3127 Aptl Elev 3127
-----------------------	------------------	---

476 VFG

INDIAN SPRINGS AF AUX (KINS)



* MISSED APPROACH: Straight ahead to INS TACAN, intercept INS R-114 outbound, cross 17 DME at or above 9500, then direct LSY TACAN.

NELLIS CON
N/A

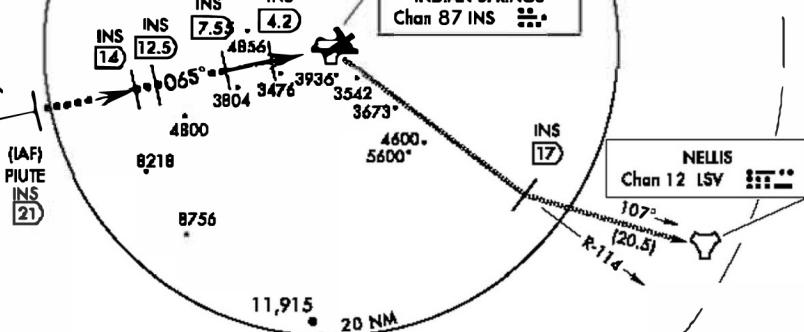
INDIAN SPRINGS TOWER *118.4 360.7 38.65

GND CON
118.3 275.8

NOT FOR CIVIL USE

6412 . 6804 .
CAUTION: FINAL APPROACH COURSE CROSSES RUNWAY CENTERLINE AT MIDFIELD.
MANEUVERING LEFT OF COURSE REQUIRED PRIOR TO LANDING. DO NOT MANEUVER FARTHER NORTH THAN THE INS R-25B.

BEATTY

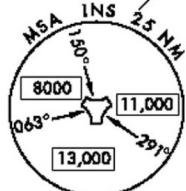


*CAUTION: Missed Approach Climb Rate to 9500

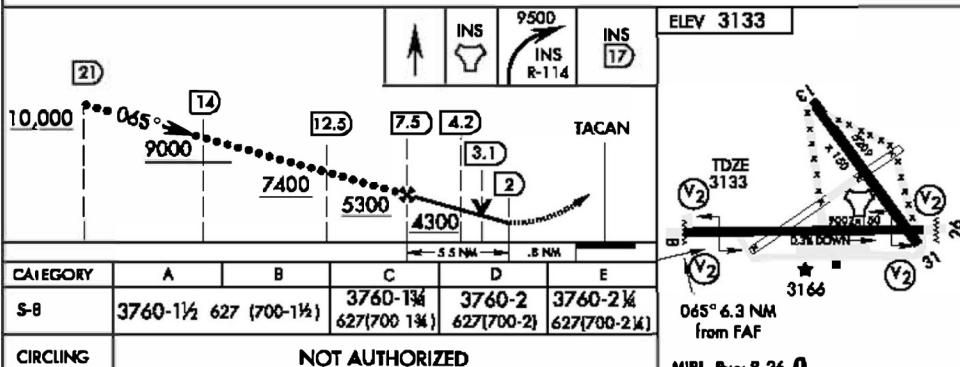
Knots	60	120	180	240	300
V/V (ft/min)	364	728	1092	1456	1820

Controlling Obstacle 5600

HIGH ALTITUDE FACILITIES



EMERG SAFE ALT 100 NM 14,000



INDIAN SPRINGS, NEVADA

36°35'N-115°40'W

INDIAN SPRINGS AF AUX (KINS)

19021

HI-TACAN RWY 8

INDIAN SPRINGS, NEVADA

HI-TACAN RWY 26

TACAN INS
Chan 87xAPCH CRS
294°Rwy Idg 9002
TDZE 3127
Arpt Elev 3127

476 vFG

INDIAN SPRINGS AF AUX (KINS)



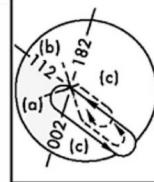
* MISSED APPROACH: Direct INS then outbound INS R-245 to 21 DME climbing to 10,000.

NELLIS CON
N/AINDIAN SPRINGS TOWER ★
118.4 360.7 38.65GND CON
118.3 275.8

NOT FOR CIVIL USE

5975

CAUTION: Final approach course does not cross runway centerline prior to threshold. Maneuvering right of course required prior to landing.

INDIAN SPRINGS
Chan 87 INS

4856 .

INS 87

4.8

INS

6

INS

11

INS

17

9912

INS

21

INS

3936' 3542

3673

4600

INS

24

(IAF)
STRIP
NS

24

6943

8218

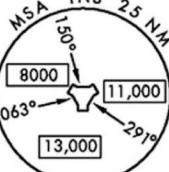
8756

11,915

5752

•

20 NM

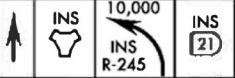


* CAUTION: Missed Approach Climb Rate to 10,000

Knots	60	120	180	240	300	360
V/V(fpm)	450	900	1350	1800	2250	2700

Controlling Obstacle 3936

EMERG SAFE ALT 100 NM 14,000



TACAN

4.8

6

11

2.6

2

4300

5300

6000

7000

10,000

24

CATEGORY

A

B

C

D

E

S-26

3800-2 1/4

697

(700 2 1/4)

3800-2 1/2

697(700-2 1/2)

CIRLING

NOT AUTHORIZED

ELEV 3133

TDZE 3103

9002 x 150

0.3% UP

V2

V2

V2

3166

V2

MIRL Rwy 8 26

294° 5.8 NM

from FAF

INDIAN SPRINGS, NEVADA

36° 35'N-115° 40'W

INDIAN SPRINGS AF AUX (KINS)

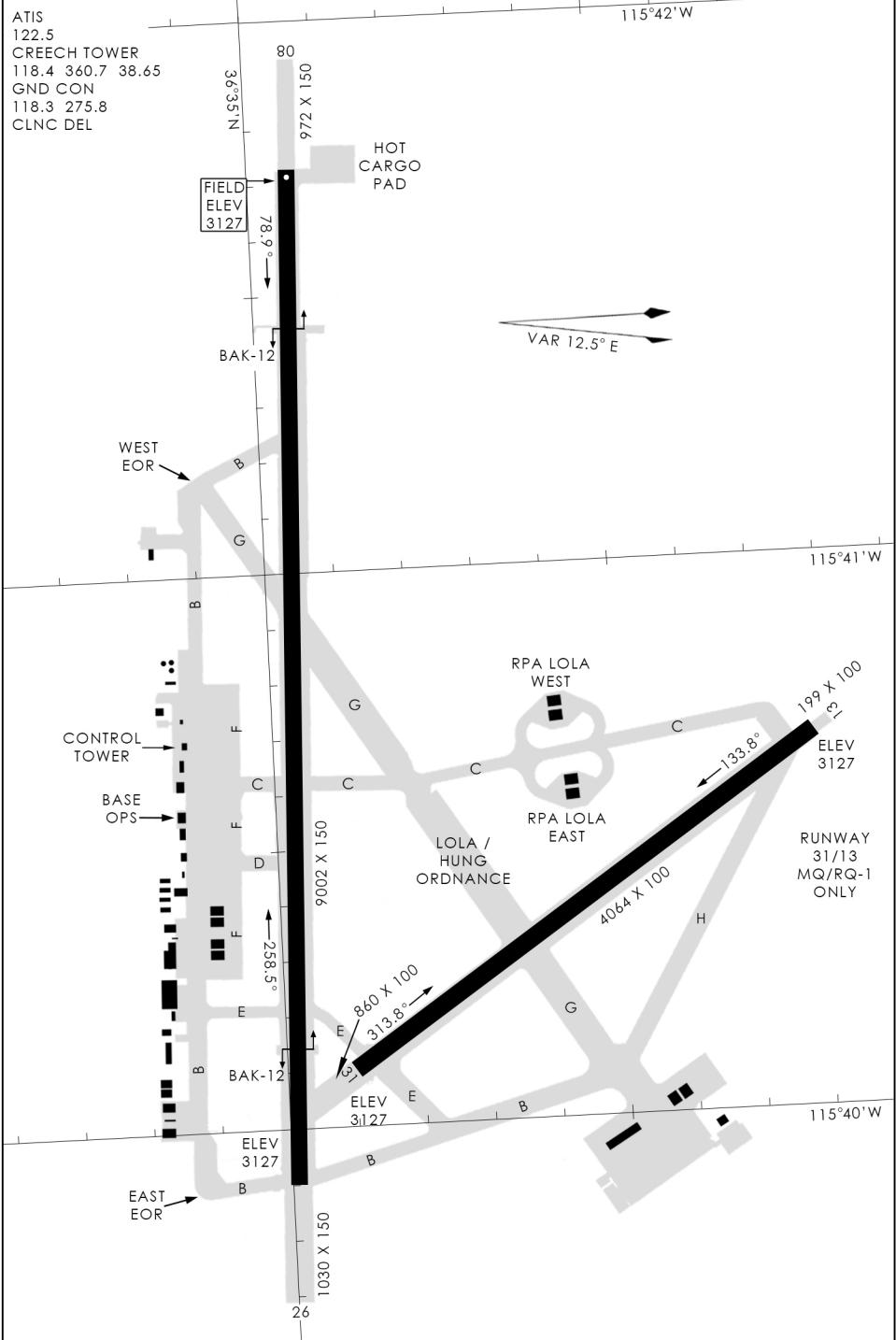
HI-TACAN RWY 26

19021

19021

AIRPORT DIAGRAM

476 vFG

CREECH AFB (KINS)
INDIAN SPRINGS, NEVADA

AIRPORT DIAGRAM

INDIAN SPRINGS, NEVADA
CREECH AFB (KINS)

19021

AIRPORT DIAGRAM

476 vFG

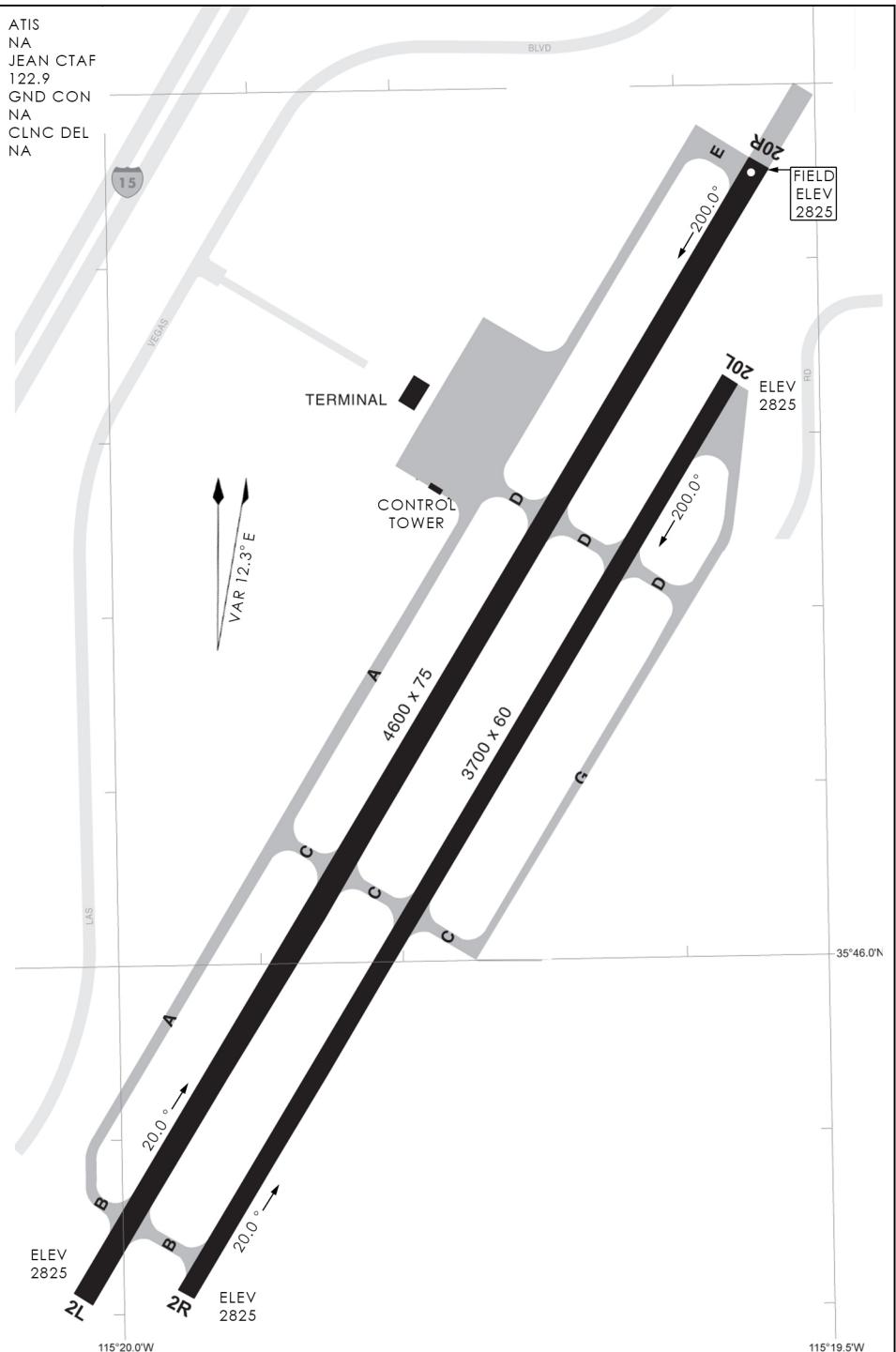
JEAN AIRPORT (OL7)

JEAN, NEVADA

ATIS
NA
JEAN CTAF
122.9
GND CON
NA
CLNC DEL
NA

476 vFG JAN 2019

476 vFG JAN 2019



AIRPORT DIAGRAM

JEAN, NEVADA
JEAN AIRPORT (OL7)

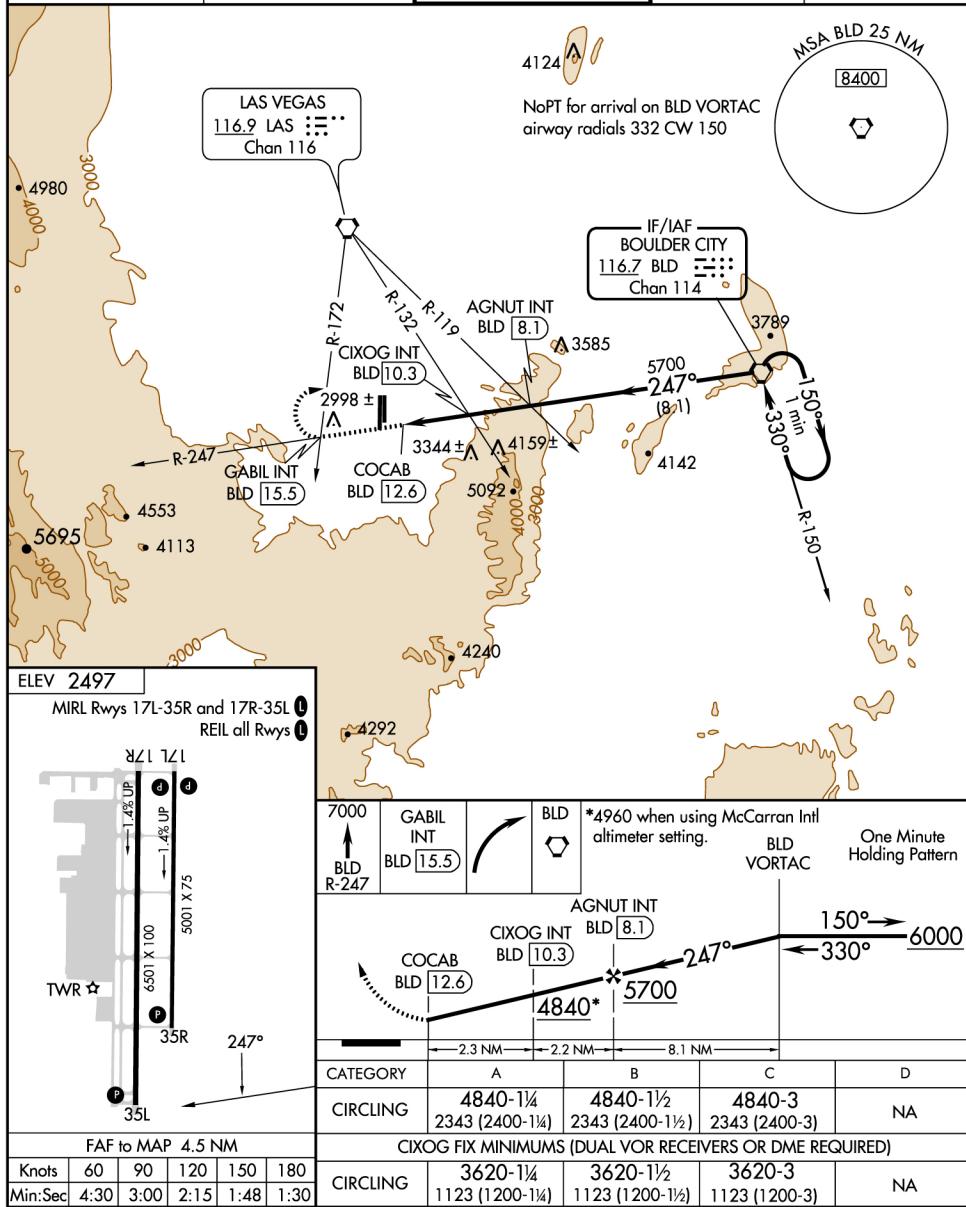
LAS VEGAS, NEVADA

VORTAC BLD 116.7 Chan 114	APP CRS 247°	Rwy Idg TDZE Apt Elev N/A N/A 2493
--	------------------------	--

476 vFG

VOR-C
HENDERSON EXECUTIVE (HND)
T Circling to Rwy 35L NA at night.**A** If local altimeter setting not received, use McCarran Int'l altimeter setting and increase all MDAs 60 feet.

MISSIED APPROACH: Climb to 7000 on BLD VORTAC R-247 to GABIL INT/BLD 15.5 DME and right turn direct BLD VORTAC and hold.

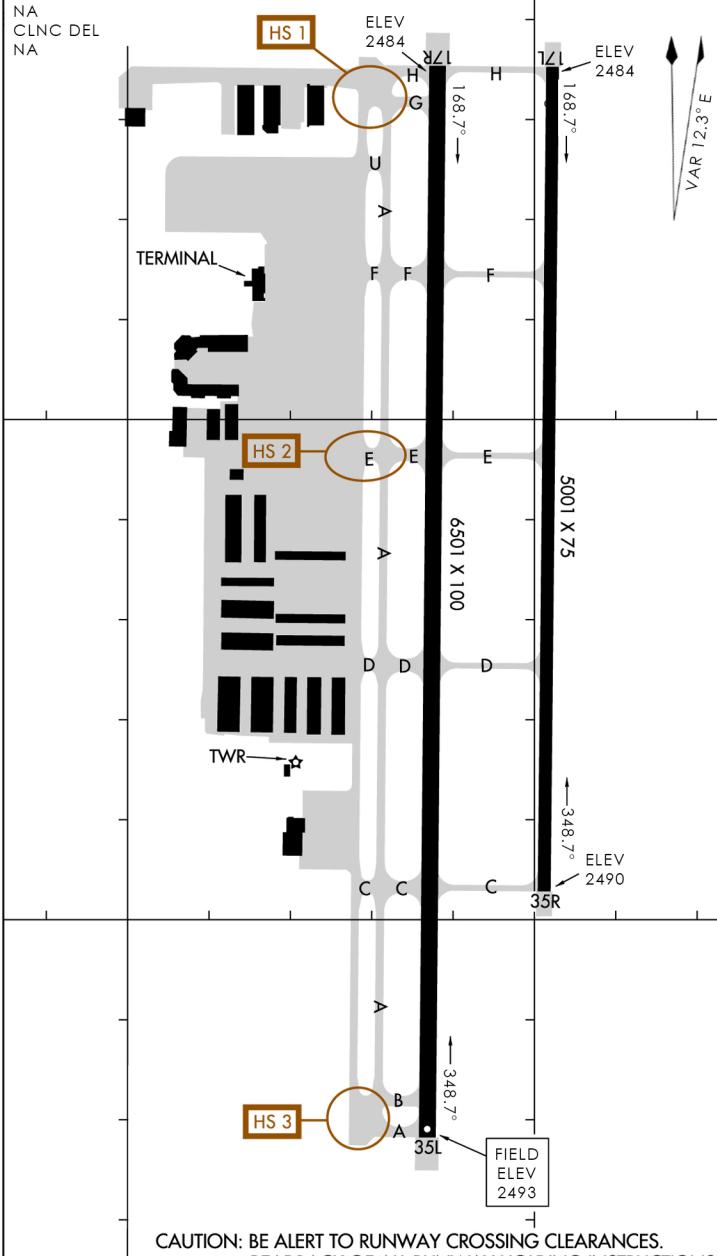
ATIS
120.775LAS VEGAS APP CON
118.4 307.25HENDERSON TOWER*
125.2 250.2 38.85GND CON
NAUNICOM
NA

19021

AIRPORT DIAGRAM

HENDERSON EXECUTIVE AIRPORT (KHND)
476 vFG
LAS VEGAS, NEVADA

ATIS
120.775
HENDERSON TOWER
125.2 250.2 38.85
GND CON
NA
CLNC DEL
NA



115°08.5'W

115°08.0'W

115°07.5'W

AIRPORT DIAGRAM

LAS VEGAS, NEVADA
HENDERSON EXECUTIVE AIRPORT (KHND)

FUZZY SEVEN ARRIVAL

LAS VEGAS, NEVADA

LAS VEGAS APP CON

112.2 257.9 38.75

LAS VEGAS TOWER

112.2 257.9 38.75 (RWY 1L/L19R, 1R/19L)

112.2 257.9 38.75 (RWY 7L/L25R, 7R/27L)

NORTH LAS VEGAS TOWER*

125.7 360.75 38.45

LAS VEGAS ATIS

132.4

NORTH LAS VEGAS ATIS

118.05

BEATTY
114.7 BTY E:::
Chan 94

N36°48.04' - W116°44.86'
L-9, H-4

14800
(31)

14800
(24)

14000
(23)

11000
(5)

7500
(25)

116.7 BLD E:::
Chan 114

N35°59.75' - W114°51.81'

FUZZY

N36°12.03' - W115°54.02'

TURBOJET VERTICAL NAVIGATION

PLANNING INFORMATION

Expect clearance to cross at
16,000' at 250K.

LOCALIZER 111.75

I-RLE E:::

LOCALIZER 110.3

I-LAS E:::
Chan 40

NORTH LAS VEGAS

MC CARRAN INTL

RWY 25R

RWY 25L

BLD R-269

IPUMY

N36°01.86'

W115°22.52'

HENDERSON

EXECUTIVE

BOULDER CITY

116.7 BLD E:::

Chan 114

BOULDER CITY MUNI

NOTE: RADAR REQUIRED.

NOTE: DME REQUIRED.

NOTE: Chart not to scale.

BEATTY TRANSITION (BTY.FUZZY7): From over BTY VORTAC via BTY R-115 to FUZZY INT. Thence . . .

. . . From over FUZZY via heading 100° to intercept BLD R-260 to BLD VORTAC.

LANDING MC CARRAN INTL RWYS 1L/R, 7L/R, and 19L/R: Expect vectors for visual approach prior to BLD VORTAC.

LANDING MC CARRAN INTL RWYS 25L/R: Expect ILS approach.

LANDING NORTH LAS VEGAS, HENDERSON EXECUTIVE, and BOULDER CITY MUNI : After IPUMY, expect radar vectors to airport.

FUZZY SEVEN ARRIVAL

LAS VEGAS, NEVADA

LAS VEGAS, NEVADA

476 vFG

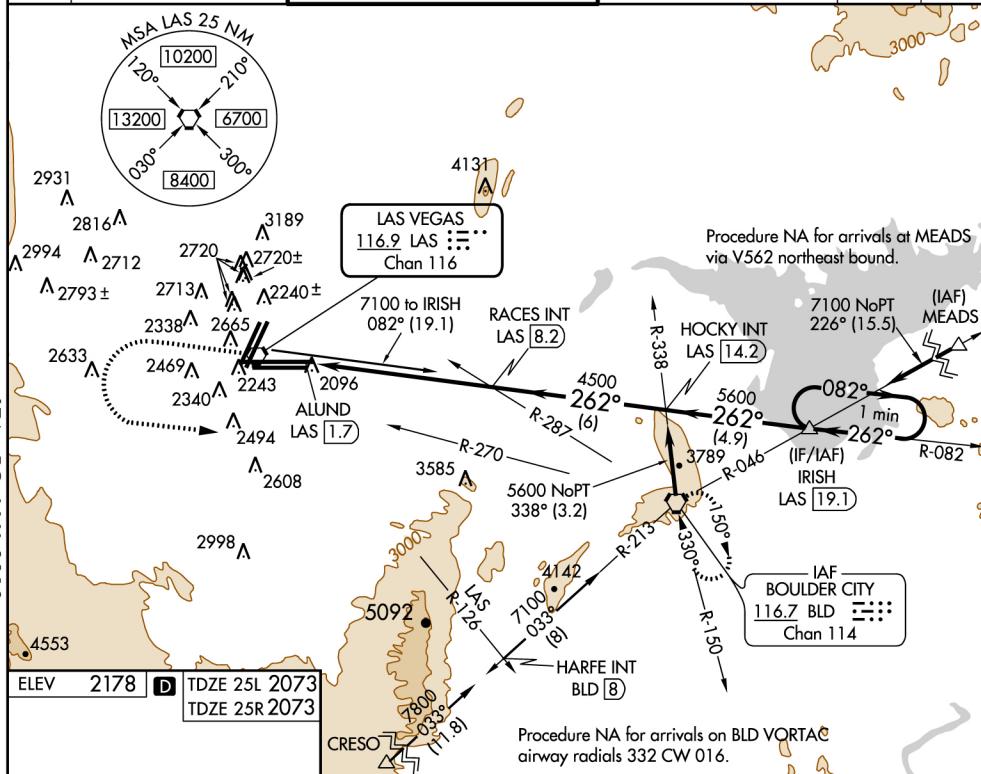
19021

VORTAC LAS 116.9 Chan 116	APP CRS 262°	Rwy 25L Idg 10525 TDZE Apt Elev 2073 2178	Rwy 25R Idg 12757 TDZE Apt Elev 2073 2178
--	------------------------	---	---

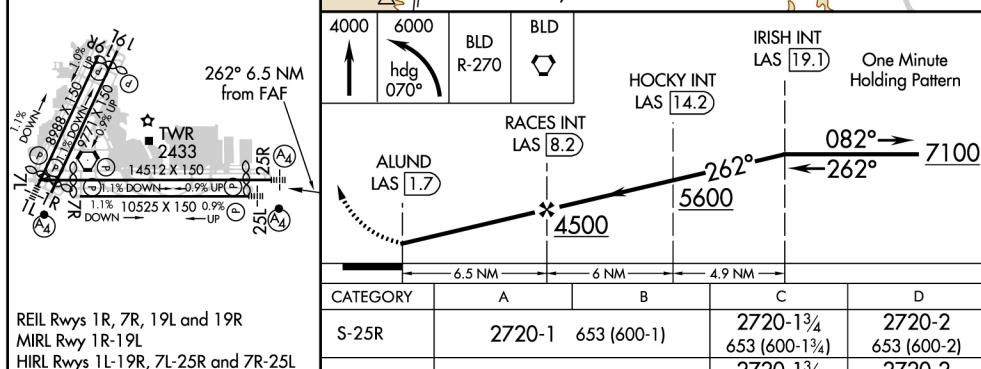
VOR RWY 25L/R
MC CARRAN INTL (LAS)

▼ Inoperative table does not apply to MALS Rwy 25R. ▲ Inoperative table does not apply to MALS F Rwy 25L Cat. C.	MALSF Rwy 25L A4	MALS Rwy 25R A4	MISSIED APPROACH: Climb to 4000 then climbing left turn to 6000 via heading 070° and BLD R-270 to BLD VORTAC and hold.
---	----------------------------	---------------------------	--

ATIS 125.5	LAS VEGAS APP CON N/A	LAS VEGAS TOWER 112.0 257.9 38.75	GND CON N/A	CINCE DEL N/A	CPDLC
----------------------	--------------------------	---	----------------	------------------	-------



ELEV 2178 D TDZE 25L 2073
TDZE 25R 2073



REIL Rwy 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwy 1L-19R, 7L-25R and 7R-25L

FAF to MAP 6.5 NM

Knots 60 90 120 150 180
Min:Sec 6:30 4:20 3:15 2:36 2:10

LAS VEGAS, NEVADA

36°05'N-115°09'W

12

MC CARRAN INTL (LAS)
VOR RWY 25L/R

TAKEOFF OBSTACLE NOTES

- RWY 1L: Multiple buildings 3954' from DER, 1 NM left of centerline, up to 283' AGL/2409' MSL.
 Pole 450' from DER, 283' left of centerline, 38' AGL/2118' MSL.
 Obstacle light on wind sock 248' from DER, 224' right of centerline, 50' AGL/2104' MSL.
 Pole 1029' from DER, 715' left of centerline, 85' AGL/2124' MSL.
 Tree 1536' from DER, 502' left of centerline, 100' AGL/2132' MSL.
- RWY 1R: Sign 1331' from DER, 448' right of centerline, 60' AGL/2120' MSL
 Building 599' from DER, 541' right of centerline, 70' AGL/2096' MSL
 Multiple buildings 4878' from DER, 1.2 NM left of centerline, up to 283' AGL/2409' MSL.
- RWY 25R: Light pole 3115' from DER, 1033' right of centerline, 109' AGL/2301' MSL.
 Light on pole 1.5 NM from DER, 2836' left of centerline, 124' AGL/2457' MSL.
 Road 1.7 NM from DER, 2965' left of centerline, 139' AGL/2469' MSL.
 Light on pole 1100' from DER, 508' left of centerline, 47' AGL/2226' MSL.
 Building 1822' from DER, 652' left of centerline, 46' AGL/2238' MSL.
 Building 2202' from DER, 596' left of centerline, 44' AGL/2246' MSL.
 Rod on building 534' from DER, 369' left of centerline, 33' AGL/2202' MSL.
 Road 678' from DER, 16' right of centerline, 35' AGL/2201' MSL.
 Light on localizer antenna 533' from DER, 32' AGL/2195' MSL.
- RWY 25L: Pole 2860' from DER, 813' left of centerline, 57' AGL/2236' MSL.
 Sign 3672' from DER, 1302' left of centerline, 57' AGL/2256' MSL.
 Antenna on building 1002' from DER, 251' left of centerline, 34' AGL/2183' MSL.
 Pole 3677' from DER, 146' left of centerline, 67' AGL/2249' MSL.
- RWY 7L: Tree 1257' from DER, 789' left of centerline, 85' AGL/2077' MSL.
 Light pole 747' from DER, 441' right of centerline, 62' AGL/2057' MSL.
 Tree 1007' from DER, 557' right of centerline, 70' AGL/2062' MSL.
- RWY 7R: Light on wind sock 102' from DER, 300' right of centerline, 30' AGL/2051' MSL.
- RWY 19L: Pole 1394' from DER, 533' right of centerline, 36' AGL/2236' MSL.
 Sign 2181' from DER, 1062' right of centerline, 50' AGL/2256' MSL.
 Rod on building 2921' from DER, 581' right of centerline, 50' AGL/2262' MSL.
 Pole 2633' from DER, 319' right of centerline, 40' AGL/2246' MSL.
- RWY 19R: Pole 1135' from DER, 619' right of centerline, 65' AGL/2249' MSL.
 Pole 756' from DER, 618' right of centerline, 50' AGL/2231' MSL.
 Sign 2182' from DER, 126' right of centerline, 50' AGL/2256' MSL.
 Pole 1396' from DER, 403' left of centerline, 55' AGL/2236' MSL.
 Rod on building 197' from DER, 441' right of centerline, 30' AGL/2202' MSL.
 Rod on building 2922' from DER, 356' left of centerline, 50' AGL/2262' MSL.

LAS VEGAS FOUR DEPARTURE

476 vFG

MC CARRAN INTL (LAS)
LAS VEGAS, NEVADAATIS
132.4
CLNC DEL
NACPDLC
GND CON
NA 8 E OR 1R/19L
NA 3 W OF 1R/19L
LAS VEGAS DEP CON
119.9 (Rwy 19R/L, 25R/L)
N/A (Rwy 1R/LM 7R/L)MILFORD
112.1 MLF
Chan 58

N38°21.62'-W113°00.79'

TOP ALTITUDE:
7000DOVE CREEK
114.6 DVC
Chan 93

N37°48.53'-W108°55.88'

L-9, H-3

BRYCE CANYON
112.8 BCE
Chan 75

N37°41.35'-W112°18.23'

LAS VEGAS
116.9 LAS
Chan 116TRALR
N36°11.62'
W114°14.68'

10000

FL240

066°

(50)

FL240

95°

FL240

054°

(94)

FL240

053°

(131)

R-234

R-233

R-230

R-227

R-226

R-225

R-224

R-223

R-222

R-221

R-220

R-219

R-218

R-217

R-216

R-215

R-214

R-213

R-212

R-211

R-210

R-209

R-208

R-207

R-206

R-205

R-204

R-203

R-202

R-201

R-200

R-199

R-198

R-197

R-196

R-195

R-194

R-193

R-192

R-191

R-190

R-189

R-188

R-187

R-186

R-185

R-184

R-183

R-182

R-181

R-180

R-179

R-178

R-177

R-176

R-175

R-174

R-173

R-172

R-171

R-170

R-169

R-168

R-167

R-166

R-165

R-164

R-163

R-162

R-161

R-160

R-159

R-158

R-157

R-156

R-155

R-154

R-153

R-152

R-151

R-150

R-149

R-148

R-147

R-146

R-145

R-144

R-143

R-142

R-141

R-140

R-139

R-138

R-137

R-136

R-135

R-134

R-133

R-132

R-131

R-130

R-129

R-128

R-127

R-126

R-125

R-124

R-123

R-122

R-121

R-120

R-119

R-118

R-117

R-116

R-115

R-114

R-113

R-112

R-111

R-110

R-109

R-108

R-107

R-106

R-105

R-104

R-103

R-102

R-101

R-100

R-99

R-98

R-97

R-96

R-95

R-94

R-93

R-92

R-91

R-90

R-89

R-88

R-87

R-86

R-85

R-84

R-83

R-82

R-81

R-80

R-79

R-78

R-77

R-76

R-75

R-74

R-73

R-72

R-71

R-70

R-69

R-68

R-67

R-66

R-65

R-64

R-63

R-62

R-61

R-60

R-59

R-58

R-57

R-56

R-55

R-54

R-53

R-52

R-51

R-50

R-49

R-48

R-47

R-46

R-45

R-44

R-43

R-42

R-41

R-40

R-39

R-38

R-37

R-36

R-35

R-34

R-33

R-32

R-31

R-30

R-29

R-28

R-27

R-26

R-25

R-24

R-23

R-22

R-21

R-20

R-19

R-18

R-17

R-16

R-15

R-14

R-13

R-12

R-11

R-10

R-9

R-8

R-7

R-6

R-5

R-4

R-3

R-2

R-1

R-0

R-180

R-170

R-160

R-150

R-140

R-130

R-120

R-110

R-100

R-90

R-80

R-70

R-60

R-50

R-40

R-30

R-20

R-10

R-0

R-180

R-170

R-160

R-150

NOTE: RADAR and DME required.
(NOTES CONTINUED ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 1L/R: Climb via heading 010° to 2500, then climbing right turn via

heading 050°, thence

TAKEOFF RUNWAYS 7L/R: Climb via heading 075°, thenceTAKEOFF RUNWAYS 19L/R: Climb via heading 190° until LAS VORTAC 3 DME, then right

turn via heading 220°, thence

TAKEOFF RUNWAYS 25L/R: Climb via heading 255° until LAS VORTAC 3 DME, then left

turn via heading 190°, thence

.... via RADAR vector to transition or assigned route, maintain 7000, expect clearance to

filed altitude two minutes after departure.

LOST COMMUNICATIONS: If no contact with ATC upon reaching 7000, proceed direct BLD

VORTAC then climb in BLD VORTAC holding pattern to appropriate MEA for route of flight.

DOVE CREEK TRANSITION (LAS4.DVC): From over TRALR INT on LAS R-066 to NICLE INT,

then on PGA R-234 to PGA VOR/DME, then on PGA R-053 and DVC R-233 to

DVC VORTAC.

19021

AIRPORT DIAGRAM

476 vFG

LAS VEGAS/McCARRAN INTL (KLAS)

LAS VEGAS, NEVADA

ATIS

132.4

LAS VEGAS TOWER

112.0 257.9 38.75 (FWY 01L/19R, 01R/19L)

112.0 257.9 38.75 (FWY 07L/25R, 07R/25L)

GND CON

NA

CLNC DEL

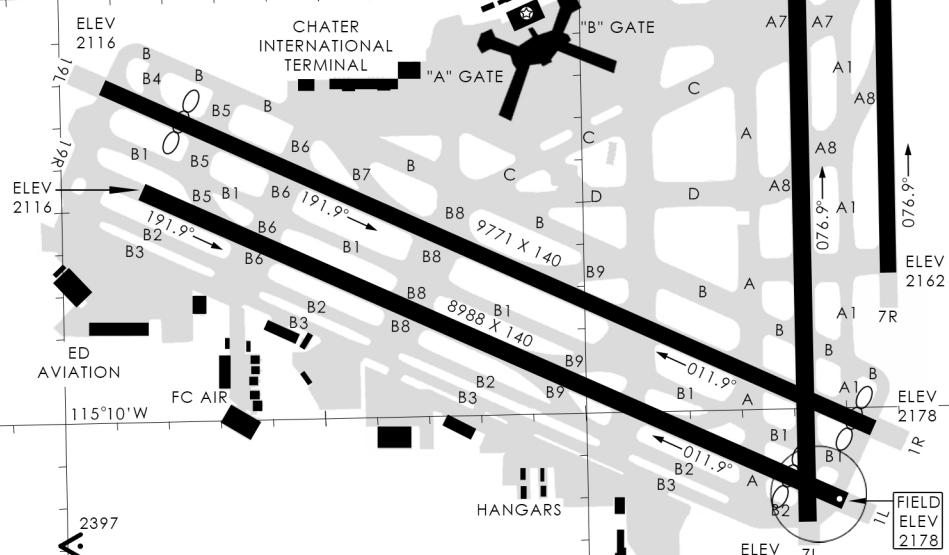
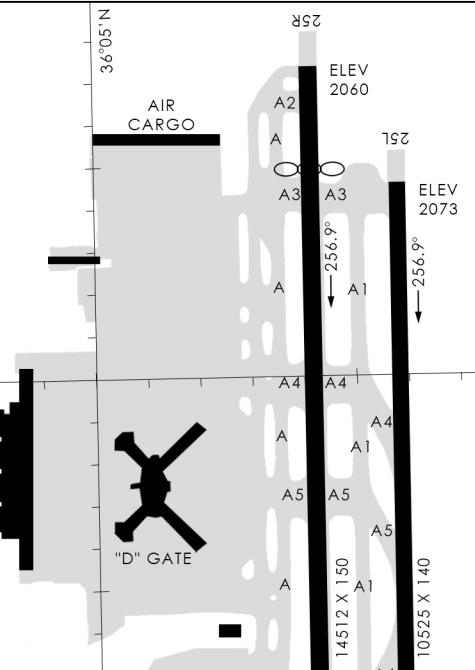
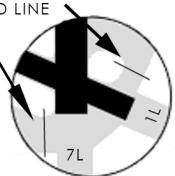
NA

N
36°06' N

115°08' W

VAR 12.3° E

Aircraft that depart full length of Runway 7L and 1L must hold at the same hold line as there is no room to hold between the runway ends. Such aircraft should also verify that they are departing on the correct runway.

RWY 1L and 7L
HOLD LINE

2397

AIRPORT DIAGRAM

LAS VEGAS, NEVADA

LAS VEGAS/McCARRAN INTL (KLAS)

LAS VEGAS, NEVADA

HI-ILS or LOC/DME Z RWY 21L

LOC I-DIQ 109.1	APCH CRS 209°	Rwy Idg 10,051 THRE 1854 Arpt Elev 1857
476 vFG		

476 vFG

NELLIS AFB (KLSV)

† * When ALS inop, increase CAT CDE RVR to 40, vis to $\frac{3}{4}$ mile.
 ** When ALS inop, increase CAT CDE vis to 1½ miles.
 *** Circling not authorized E of Rwy 3R-21L.

ALSF-1

(A1)

† MISSED APPROACH: Climb to 15,000, intercept LSV TACAN R-209 to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV R-357 to ARCOE and hold, continue climb-in-hold to 15,000.

ATIS
125.5NELLIS APP CON
118.125 291.725NELLIS TOWER
132.65 327.1 38.8GND CON
121.8 275.8CLNC DEL
NA

† CAUTION: Missed Approach
Minimum Climb Rate to 15,000

Knots	60	120	180	240	300	360
V/V(fpm)	399	798	1197	1596	1995	2394

Controlling Obstacle 7599'

8599 .

15,000 .

(IAE) ARCOE LSV [30]

15,000 .

RONKY LSV [25]

15,000 .

WISTO LSV [21]

12,500 .

LSV [21] Arc

IR-023

R-029

KRYSS LSV [21]

SHEET LSV [13.2]

ROTSE RADAR LSV [7.2]

JELIR LSV [3.8]

2705 .

3189 A R-209

4099 ROCKX LSV [2.5]

NELLIS Chan 12 LSV

EMERG SAFE ALT 100 NM 14,000

LOCALIZER 109.1

I-DIQ

15,000 .

ROCKX LSV [2.5]

hdg 020°

ARCOE R-357 [30]

15,000 .

†† Loc Only

TACAN

ROTSE RADAR [7.2]

4200 .

Intcp Lzcr [13.2]

8600 .

GS 3.00°

TCH 50

.4 NM 3.2 NM 3.4 NM

CATEGORY C D E

S-ILS 21L*

2065/24 200 (200-½)

S-LOC 21L**

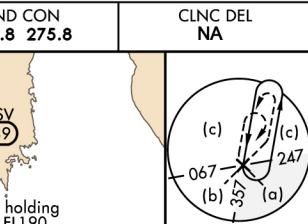
2440-1¼ 575 (600-1¼)

CIRLING ***

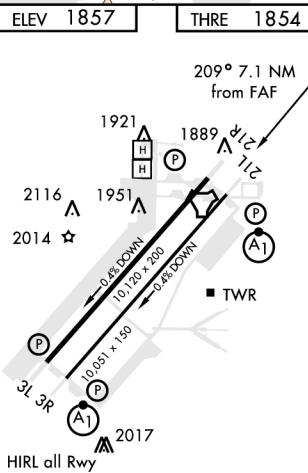
2680-2½ 811 (900-2½)

2860-3 991 (1000-3)

3120-3 1251 (1300-3)



NOT FOR CIVIL USE

RADAR OR
DME REQUIREDMinimum navaid reception
at ARCOE 15,000 MSL.CAUTION: Missed approach with 200 ft/NM
climb gradient not available.

LAS VEGAS, NEVADA

LOC I-DIQ 109.1	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arpt Elev 1857
--------------------	------------------	---

476 vFG

ILS or LOC/DME X RWY 21L

NELLIS AFB (KLSV)

- * When ALS inop, increase all CAT RVR to 40, vis to $\frac{3}{4}$ mile.
 ** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile,
 CAT CDE vis to 1 $\frac{1}{2}$ miles.

ALSF-1

(A1)

MISSED APPROACH: Climb to 15,000, intercept LSV TACAN R-209 to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV R-357 to ARCOE and hold, continue climb in hold to 15,000.

ATIS
125.5NELLIS APP CON
118.125 291.725NELLIS TOWER
132.65 327.1 38.8GND CON
121.8 275.8CLNC DEL
NA

*** Circling not authorized E of Rwy 3R-21L.

Minimum navaid reception at
ARCOE 15,000 MSL.

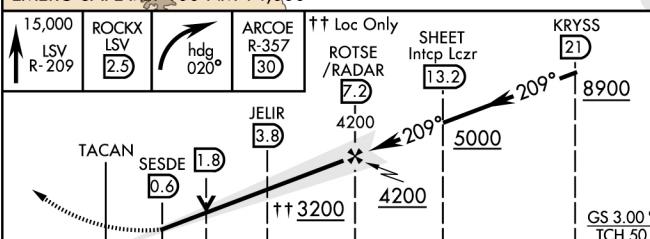
NOT FOR CIVIL USE

476 vFG JAN 2019

476 vFG JAN 2019

RADAR OR
DME REQUIRED

EMERG SAFE ALT 100 NM 14,000



CATEGORY	A	B	C	D	E
S-ILS 21L *	2065/24	200	(200-1/2)		
S-LOC 21L **	2440/24 575 (600-1/2)	2440-1 1/4 575 (600-1 1/4)			
CIRLING ***	2480-1 611 (700-1)	2680-1 1/4 811 (900-1 1/4)	2680-2 1/2 811 (900-2 1/2)	2860-3 991 (1000-3)	3120-3 1251 (1300-3)

LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

ILS or LOC/DME X RWY 21L

LAS VEGAS, NEVADA

HI-TACAN RWY 3R

TACAN LSV
Chan 12 APCH CRS
028° Rwy Idg **10,051**
THRE **1841**
Arpt Elev **1857**

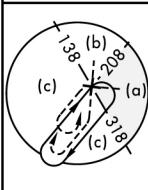
476 vFG

NELLIS AFB (KLSV)

V * When ALS inop, increase CAT CDE vis to 2½ miles.
** When ALS inop, increase CAT CDE vis to 1¾ miles.
*** Circling not authorized E of Rwy 3R-21L.

ALSF-1
(A1)

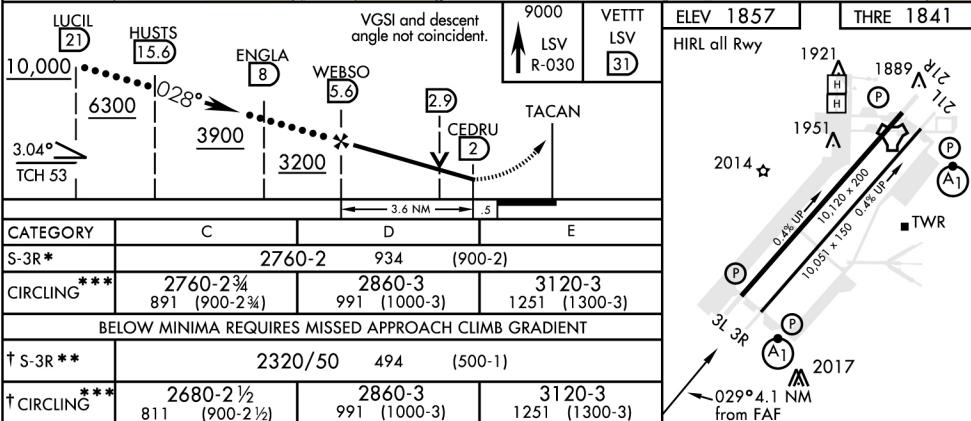
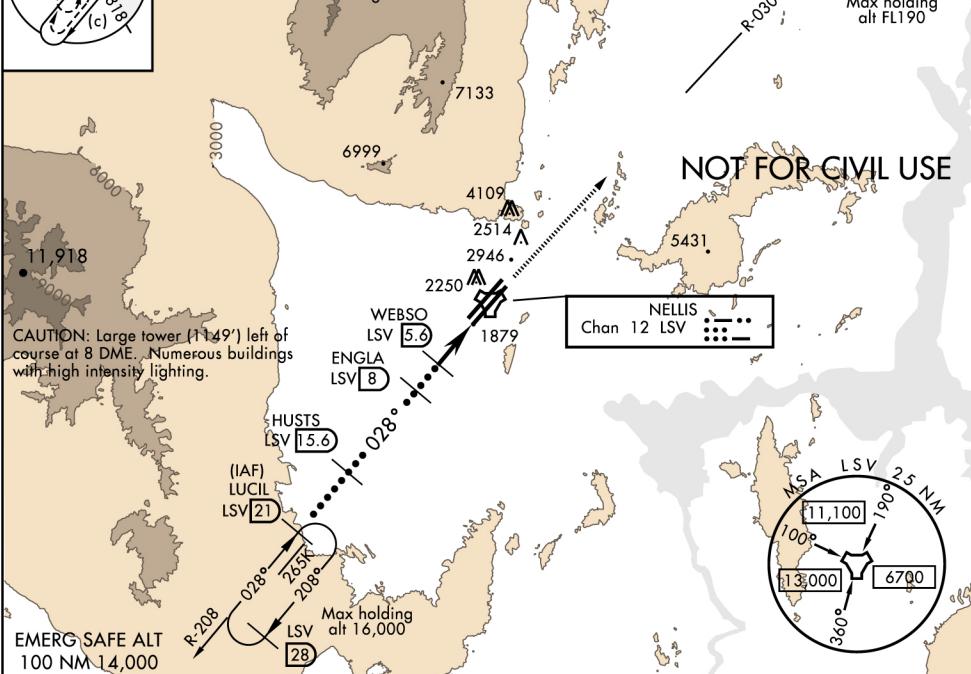
† MISSED APPROACH: Climb to 9000 on
LSV TACAN R-030 to VETTT and hold,
continue climb in hold to 9000.

ATIS
125.5NELLIS APP CON
118.125 291.725NELLIS TOWER
132.65 327.1 38.8GND CON
121.8 275.8CLNC DEL
NA

† CAUTION: Minimum Climb Rate to 4500'.

Knots	60	120	180	240	300	360
V/V(fpm)	275	550	825	1100	1375	1650

Controlling Obstacle 4098'



LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

HI-TACAN RWY 3R

LAS VEGAS, NEVADA

TACAN LSV Chan 12	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arpt Elev 1857
----------------------	------------------	---

476 vFG

HI-TACAN Y RWY 21L

NELLIS AFB (KLSV)

V * When ALS inop, increase CAT CDE vis to 1 1/4 miles.
 ** Circling not authorized E of Rwy 3R-21L.

ALSF-1



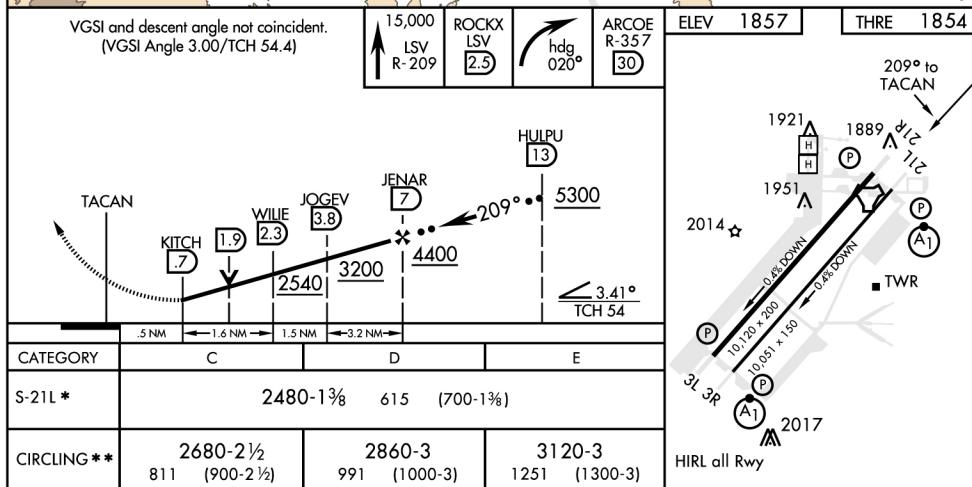
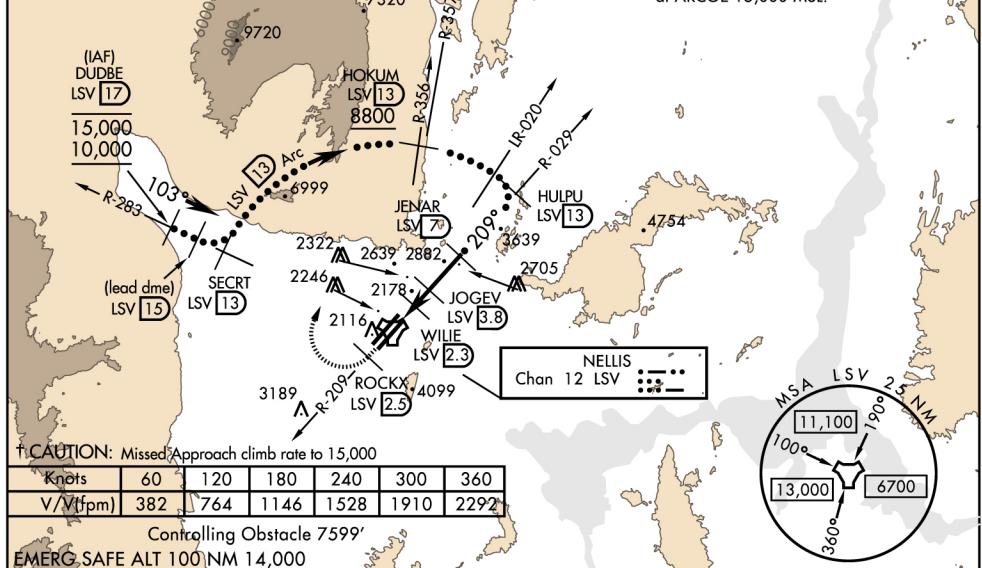
† MISSED APPROACH: Climb to 15,000, intercept LSV TACAN R-209 to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV R-357 to ARCOE and hold, continue climb in hold to 15,000.

ATIS
125.5NELLIS APP CON
118.125 291.725NELLIS TOWER
132.65 327.1 38.8GND CON
121.8 275.8CLNC DEL
NA

CAUTION: Missed approach with
200 ft/NM climb gradient not available.

NOT FOR CIVIL USE

Minimum navaid reception
at ARCOE 15,000 MSL.



LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

HI-TACAN Y RWY 21L

LAS VEGAS, NEVADA

TACAN LSV Chan 12	APCH CRS 209°	Rwy Idg 10,051 THRE 1854 Aptl Elev 1857
----------------------	------------------	---

476 vFG

HI-TACAN Z RWY 21L

NELLIS AFB (KLSV)

V* When ALS inop, increase CAT CDE vis to 1 1/4 miles.
** Circling not authorized E of Rwy 3R-21L.

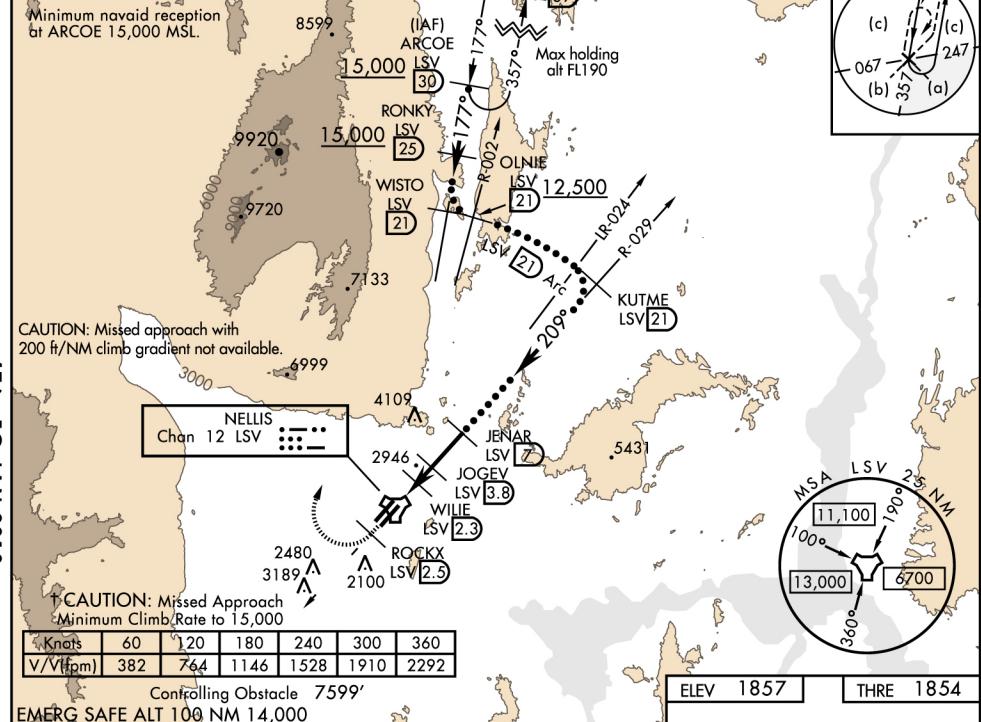
ALSF-1



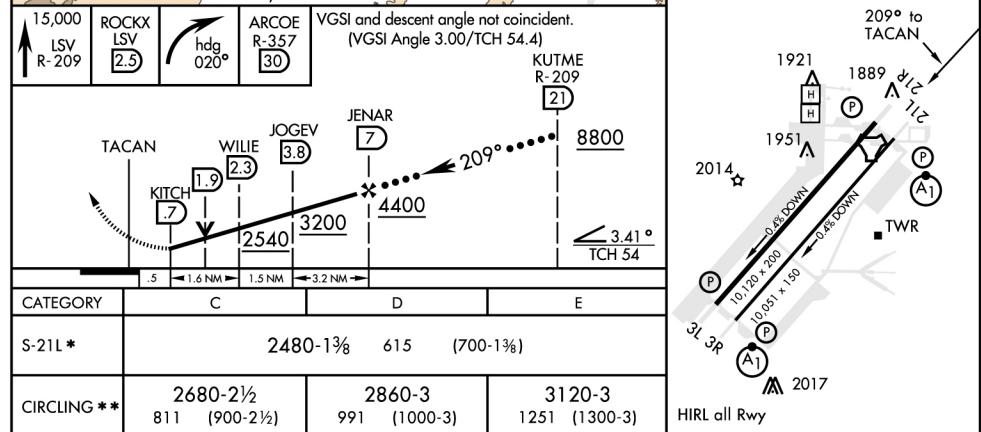
† MISSED APPROACH: Climb to 15,000, intercept LSV TACAN R-209 to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV R-357 to ARCOE and hold, continue climb-in-hold to 15,000.

ATIS
125.5NELLIS APP CON
118.125 291.725NELLIS TOWER
132.65 327.1 38.8GND CON
121.8 275.8CLNC DEL
NA

NOT FOR CIVIL USE

Minimum navaid reception
at ARCOE 15,000 MSL.

EMERG SAFE ALT 100 NM 14,000



LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

HI-TACAN Z RWY 21L

LAS VEGAS, NEVADA

TACAN LSV Chan 12	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arpt Elev 1857
----------------------	------------------	---

476 vFG

TACAN X RWY 21L

NELLIS AFB (KLSV)

▼* When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1 1/4 miles.
** Circling not authorized E of Rwy 3R-21L.

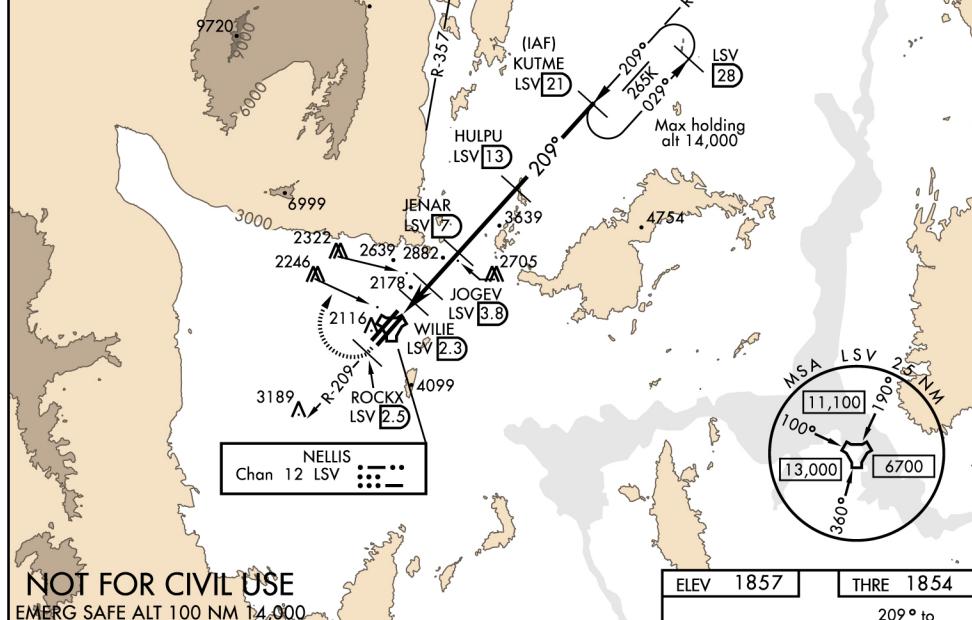


† MISSED APPROACH: Climb to 15,000, intercept LSV TACAN R-209 to 2.5 DME (ROCKX), then climbing right turn heading 020° to join LSV R-357 to ARCOE and hold, continue climb-in hold to 15,000.

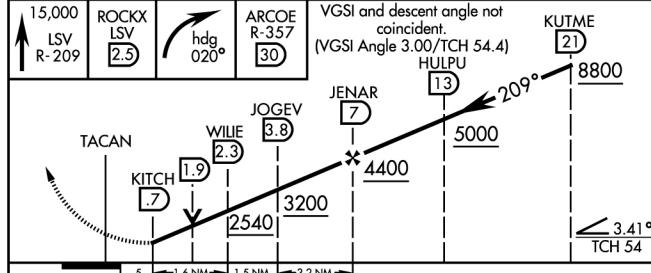
ATIS 125.5	NELLIS APP CON 118.125 291.725	NELLIS TOWER 132.65 327.1 38.8	GND CON 121.8 275.8	CINC DEL NA
---------------	-----------------------------------	-----------------------------------	------------------------	----------------

CAUTION: Missed approach with 200 ft/NM climb gradient not available.

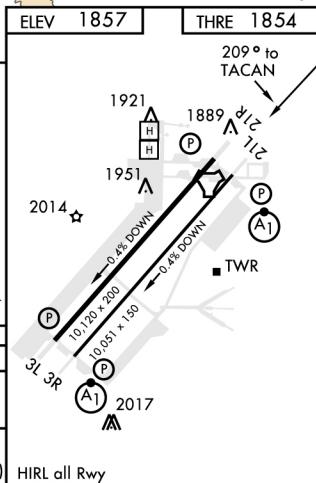
Minimum NAVAID reception at ARCOE 15,000'.



NOT FOR CIVIL USE
EMERG SAFE ALT 100 NM 14,000



CATEGORY	A	B	C	D	E
S-21L *	2480/24 615 (700-1/2)		2480-1 3/8	615 (700-1 3/8)	
CIRCLING **	2480-1 611 (700-1)	2680-1 1/4 811 (900-1 1/4)	2680-2 1/2 811 (900-2 1/2)	2860-3 991 (1000-3)	3120-3 1251(1300-3)



LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

TACAN X RWY 21L

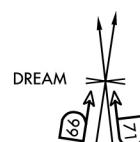
DREAM FOUR DEPARTURE (DREAM4 • DREAM)

ATIS 270.1
CLNC DEL
NA
GND CON
121.8 275.8
NELLIS TOWER
132.65 327.1 38.8
NELLIS DEP CON
135.1 385.4

476 vFG

Rwy	Knots	60	120	180	240	300	360
* 3 L (a) V/V(fpm)	269	538	807	1076	1345	1614	
* 3 R (b) V/V(fpm)	245	490	735	980	1225	1470	
† 3 L (c) V/V(fpm)	498	996	1494	1922	2490	2988	
† 3 R (c) V/V(fpm)	496	992	1488	1984	2480	2976	
* 21 L (d) V/V(fpm)	389	778	1167	1556	1945	2334	
* 21 R (d) V/V(fpm)	395	790	1185	1580	1975	2370	
† 21 L (c) V/V(fpm)	453	906	1359	1812	2265	2718	
† 21 R (c) V/V(fpm)	457	914	1371	1828	2285	2742	

NOT FOR CIVIL USE



* Minimum Climb Rate

- (a) to 3600
- (b) to 3100
- (c) to 17,000
- (d) to 8500

- ① 12.24 NM from Rwy 21R
- ② 12.40 NM from Rwy 21L
- ③ 5.67 NM from Rwy 3L
- ④ 5.85 NM from Rwy 3R

JUNNO
17,000MINTT
17,000

9912 • (38)

LAS
R-353

R-346

R-342

346°

JUNNO
17,000

CAUTION: If unable to comply with restrictions advise ATC prior to departure.

ATALF **

LSV 11.5

R-027

HEREM **

R-030

** Lead DME:

ATALF - LSV 9.5
HEREM - LSV 8.8NELLIS
Chan 12 LSVBOULDER CITY
116.7 BLD

Chan 114

①② 6959 •

350°

Arc

R-350

LAS VEGAS
116.9 LAS

Chan 116

:::..

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L: Fly runway heading to intercept the LSV TACAN R-027 then direct ATALF, intercept the BLD VORTAC R-346 then direct JUNNO, cross JUNNO at or above 17,000, then via assigned route.

TAKE-OFF RWY 3R: Fly runway heading to intercept the LSV TACAN R-030 then direct HEREM, intercept the BLD VORTAC R-346 then direct JUNNO, cross JUNNO at or above 17,000, then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept LAS VORTAC R-350 outbound. Remain North of LAS 7.5 DME turning Northbound. Intercept LAS R-350 between 5000 and 6000, do not proceed West of LAS R-350. Cross MINTT at above 17,000, then via assigned route

NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions.

FYTR THREE DEPARTURE (FYTR3 • FYTR)

476 vFG

NELLIS AFB (KLSV)

LAS VEGAS, NEVADA

ATIS 270.1

CLNC DEL

NA

GND CON

121.8 275.8

NELLIS TOWER

132.65 327.1 38.8

NELLIS DEP CON

135.1 385.4

Rwy	Knots	60	120	180	240	300	360
3L (①)	V/V(fpm)	400	800	1200	1600	2000	2400
3R (②)	V/V(fpm)	395	790	1185	1580	1975	2370
21L/R (③)	V/V(fpm)	390	780	1170	1560	1950	2340

Minimum Climb Rate

① to 9600

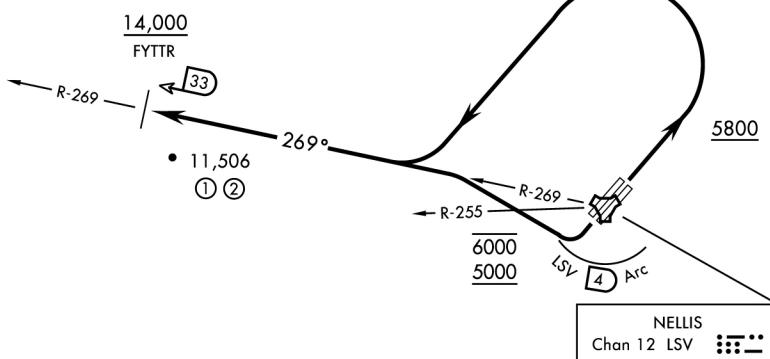
③ to 13,500

- ① 29.81 NM from Rwy 21L
- ② 29.67 NM from Rwy 21R
- ③ 15.43 NM from Rwy 3L
- ④ 15.57 NM from Rwy 3R

CAUTION: If unable to comply with restrictions advise ATC prior to departure.

③ ④

7599 .



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L/R: Fly runway heading until reaching 5800, then climbing left turn to intercept LSV TACAN R-269 outbound. Cross FYTR at or above 14,000 or as assigned, then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept LSV TACAN R-269 outbound, remain within LSV 4 DME until joining LSV R-269, cross LSV R-255 between 5000 and 6000. Cross FYTR at or above 14,000 or as assigned, then via assigned route.

NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions.

FYTR THREE DEPARTURE (FYTR3 • FYTR)

LAS VEGAS, NEVADA
NELLIS AFB (KLSV)

19021

MORMON MESA FOUR DEPARTURE (MMMF4 • MMM)

NELLIS AFB (KLSV)
LAS VEGAS, NEVADA

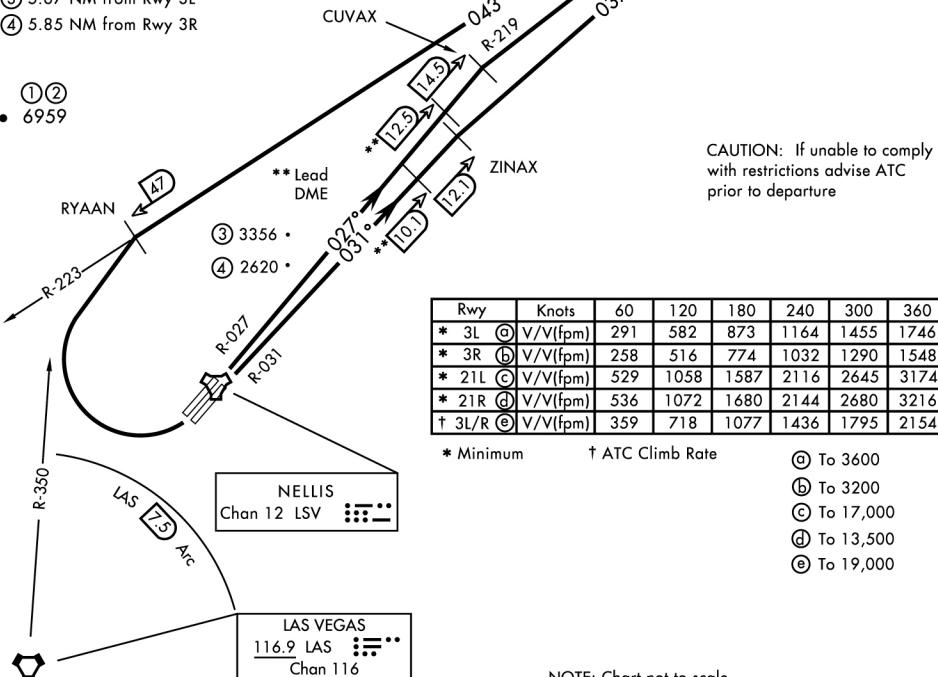
ATIS 270.1
CLNC DEL
NA
GND CON
121.8 275.8
NELLIS TOWER
132.65 327.1 38.8
NELLIS DEP CON
135.1 385.4

476 vFG

MORMON MESA
114.3 MMM Chan 90
L-9, H-3

- ① 12.24 NM from Rwy 21R
- ② 12.40 NM from Rwy 21L
- ③ 5.67 NM from Rwy 3L
- ④ 5.85 NM from Rwy 3R

- ①②
• 6959



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L: Fly runway heading to intercept LSV TACAN R-027 then direct CUVAZ, intercept the MMM VORTAC R-219 then direct MMM climbing to FL190 or as assigned, then via assigned route.

TAKE-OFF RWY 3R: Fly runway heading to intercept LSV TACAN R-031 then direct ZINAX, intercept the MMM VORTAC R-217 then direct MMM climbing to FL190 or as assigned, then via assigned route.

TAKE-OFF RWY 21L/R: Turn right to intercept MMM VORTAC R-223 prior to MMM 47 DME, remain North of the LAS VORTAC 7.5 DME, remain East of LAS R-350, intercept MMM R-223 then direct MMM, cross MMM at or above FL190 then via assigned route.

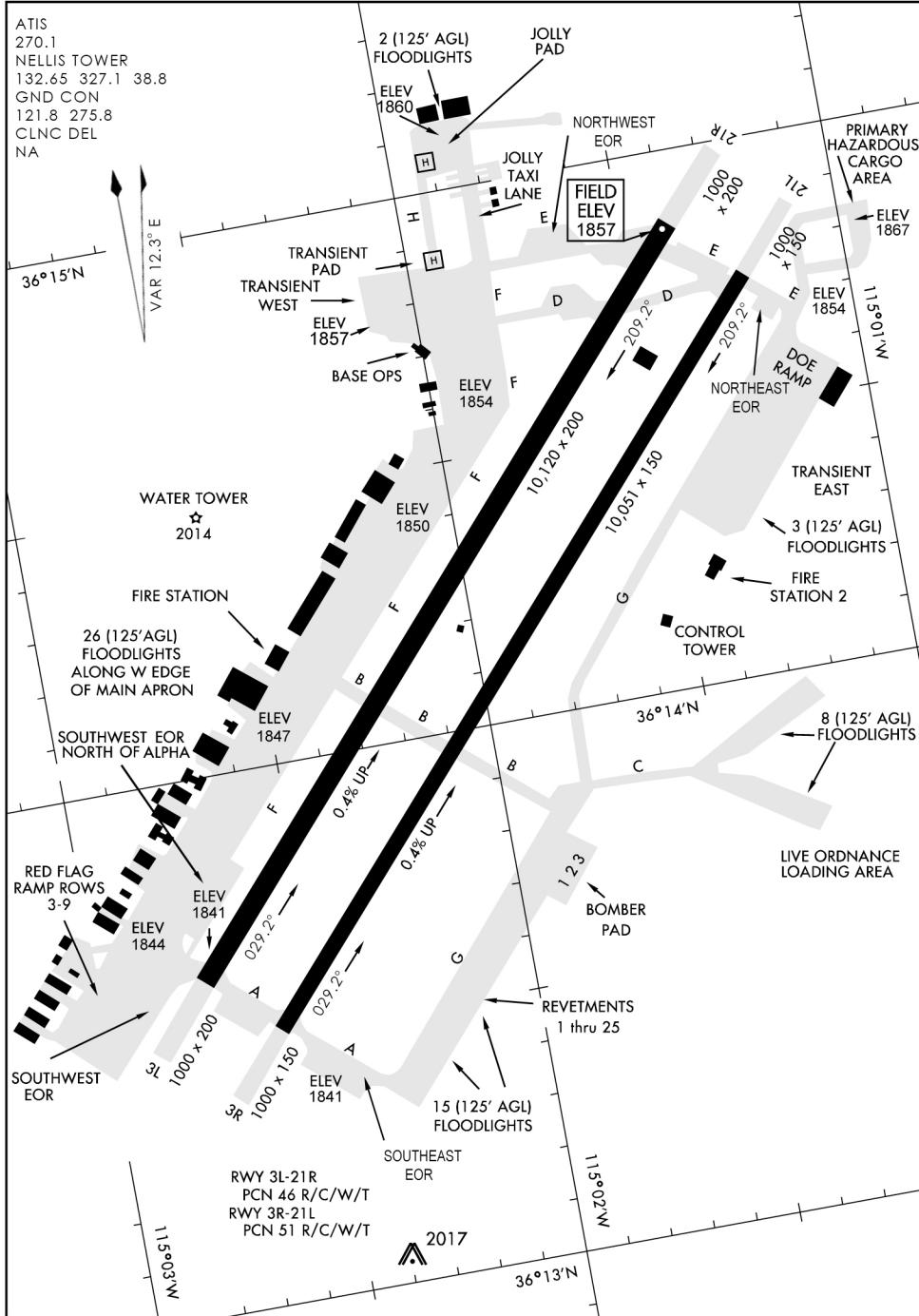
NOISE ABATEMENT PROCEDURES: Fly IAW Nellis Noise Abatement instructions.

MORMON MESA FOUR DEPARTURE (MMMF4 • MMM)

LAS VEGAS, NEVADA
NELLIS AFB (KLSV)

AIRPORT DIAGRAM

476 vFG



AIRPORT DIAGRAM

LAS VEGAS, NEVADA
NELLIS AFB (KLSV)

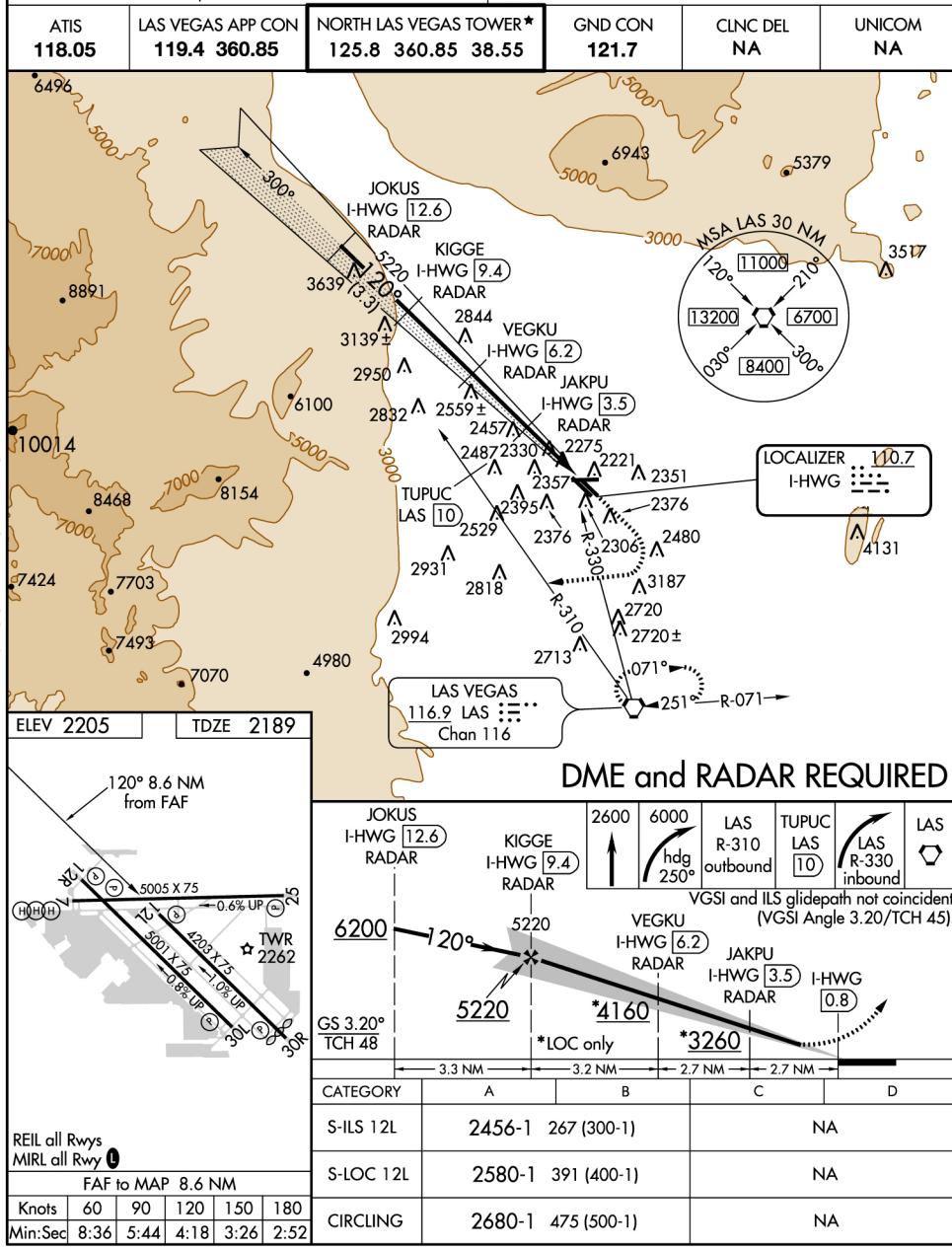
LAS VEGAS, NEVADA

LOC/DME I-HWG 110.7 Chan NA	APP CRS 120°	Rwy Idg 4203 TDZE 2189 Apt Elev 2228
-----------------------------------	-----------------	---

ILS or LOC RWY 12L NORTH LAS VEGAS (VGT)

T When local altimeter setting not received, use McCarran Intl altimeter setting and increase DA to 2478, and visibility
A Cuts A/B $\frac{1}{4}$ mile; increase all MDA 40 feet.
 DME and RADAR required.

MISSSED APPROACH: Climb to 2600, then climbing right turn heading 250° to 6000, intercept LAS R-310 outbound to TUPUC/LAS 10 DME then turn right via LAS R-330 inbound to LAS VORTAC and hold.



LAS VEGAS, NEVADA

Orig-C

36°13'N-115°12'W

NORTH LAS VEGAS (VGT) ILS or LOC RWY 12L

BOULDER CITY ONE DEPARTURE (OBSTACLE)

SL-6970 (FAA)

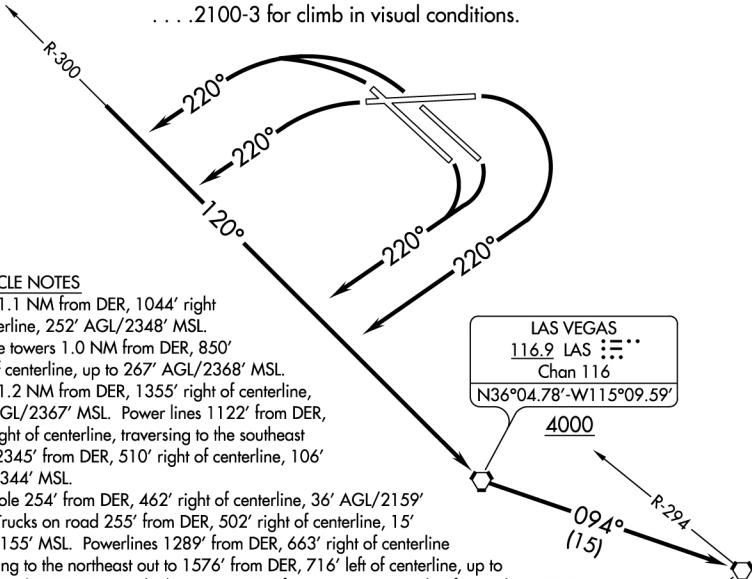
LAS VEGAS, NEVADA

ATIS
118.05
GND CON
NA
NORTH LAS VEGAS TOWER
125.8 360.85 38.55
NELLIS DEP CON
NA

TAKEOFF MINIMUMS

Rwy 7: Standard with minimum climb of 339' per NM to 3600 or....
 Rwy 12L: Standard with minimum climb of 393' per NM to 3600 or....
 Rwy 12R: Standard with minimum climb of 373' per NM to 3600 or....
 Rwy 25: Standard with minimum climb of 257' per NM to 4500 or....
 Rwy 30R: Standard with minimum climb of 354' per NM to 4700 or....
 Rwy 30L: Standard with minimum climb of 367' per NM to 4700 or....

....2100-3 for climb in visual conditions.



LAS VEGAS
116.9 LAS :••
Chan 116
N36°04.78'-W115°09.59'

4000

R-294

094°

(15)

BOULDER CITY
116.7 BLD :••
Chan 114
N35°59.75'-W114°51.81'

L-7, H-4

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 7, 12 L/R: Turn right.

TAKEOFF RUNWAYS 25, 30L/R: Turn left.

All aircraft climb to 6000 via heading 220° and LAS-300 to LAS VORTAC, cross LAS VORTAC at or above 4000. Continue climb via LAS VORTAC R-094 to BLD VORTAC.

RUNWAYS 7, 12L/R, 25, 30L/R: For climb in visual conditions: cross North Las Vegas Airport at or above 4200 then via BLD VORTAC R-294 to BLD VORTAC.

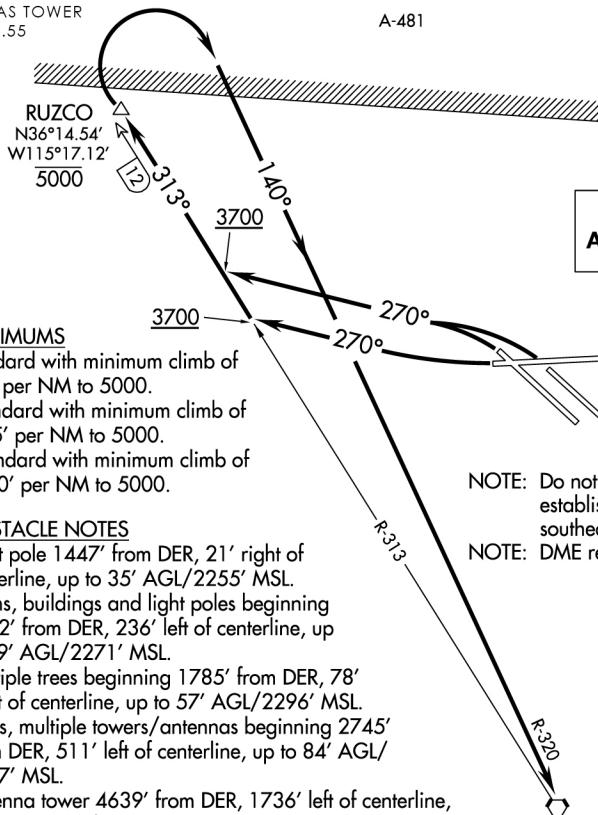
NORTHTOWN FOUR DEPARTURE

NORTH LAS VEGAS (VGT)
LAS VEGAS, NEVADA

ATIS
118.05
GND CON
NA
NORTH LAS VEGAS TOWER
125.8 360.85 38.55
NELLIS DEP CON
NA

WARNING: Rapidly rising terrain west and north of procedure airport.

A-481

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: Do not exceed 240K until established on LAS R-320 southeast bound.

NOTE: DME required.

LAS VEGAS
116.9 LAS
Chan 116
N36°04.78' W115°09.59'
L-7, H-4
7000

NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAY 25: Climbing right turn heading 270° to intercept LAS R-313 at or above 3700, thence . . .**TAKEOFF RUNWAYS 30L/R:** Climbing left turn heading 270° and right turn to intercept LAS R-313 at or above 3700, thence . . .

. . . on LAS R-313 outbound to cross RUZCO/LAS 12 DME at or below 5000, then climbing right turn to intercept LAS R-320 to LAS VORTAC. Cross LAS VORTAC at or above 7000.

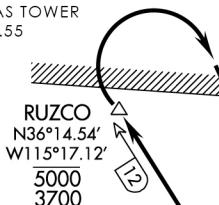
RIGHTTURN TWO DEPARTURE

NORTH LAS VEGAS (VGT)
LAS VEGAS, NEVADA

ATIS
118.05
GND CON
NA
NORTH LAS VEGAS TOWER
125.8 360.85 38.55
NELLIS DEP CON
NA

WARNING: Rapidly rising terrain west and north of procedure.

A-481

TOP ALTITUDE:
ASSIGNED BY ATC

NOTE: Do not exceed 240K until established on LAS R-320 southeast bound.

NOTE: DME required.

TAKEOFF MINIMUMS

Rwy 7: Standard with minimum climb of 295' per NM to 3600.

Rwy 12L: Standard with minimum climb of 397' per NM to 3600.

Rwy 12R: Standard with a minimum climb of 379' per NM to 3600.

TAKEOFF OBSTACLE NOTES

Rwy 7: Tower 1.1 NM from DER, 1044' right of centerline, 252' AGL/2348' MSL.

Rwy 12R: Multiple towers 1.0 NM from DER, 850' right of centerline, up to 267' AGL/2368' MSL.

Tower 1.2 NM from DER, 1355' right of centerline, 270' AGL/2367' MSL.

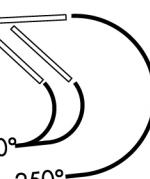
Power lines 1122' from DER, 764' right of centerline, traversing to the southeast out to 2345' from DER, 510' right of centerline, up to 106' AGL/2344' MSL.

Rwy 12L: Light pole 254' from DER, 462' right of centerline, 36' AGL/2159' MSL.

Trucks on road 255' from DER, 502' right of centerline, 15' AGL/2155' MSL.

Powerlines 1289' from DER, 663' right of centerline, traversing to the northeast out to 1576' from DER, 716' left of centerline, up to 129' AGL/2226' MSL.

Multiple towers 5045' from DER, 1551' right of centerline, 267' AGL/2368' MSL.



NOTE: Chart not to scale.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF RUNWAYS 7 and 12L/R: Climbing right turn on heading 250° and right turn to intercept LAS R-313 northwest bound to cross RUZCO at or above 3700, at or below 5000, then climbing right turn to intercept LAS R-320 southeast bound to LAS VORTAC. Cross LAS VORTAC at or above 7000.

RIGHTTURN TWO DEPARTURE
(RTTRN2.LAS) 19021

LAS VEGAS, NEVADA
NORTH LAS VEGAS (VGT)

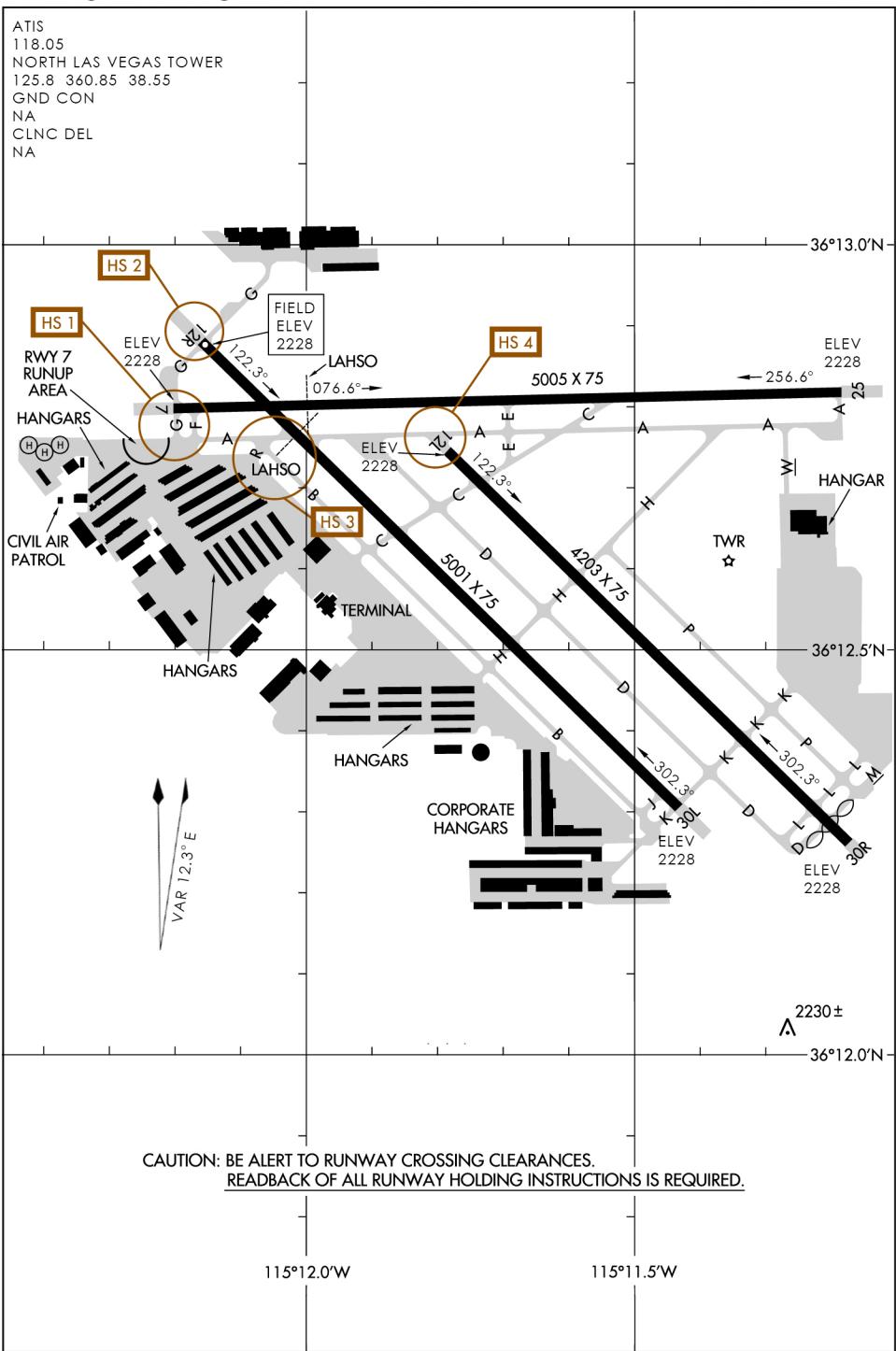
19021

AIRPORT DIAGRAM

476 vFG

NORTH LAS VEGAS (KVG) LAS VEGAS, NEVADA

ATIS
118.05
NORTH LAS VEGAS TOWER
125.8 360.85 38.55
GND CON
NA
CLNC DEL
NA



AIRPORT DIAGRAM

LAS VEGAS, NEVADA
NORTH LAS VEGAS (KVG)

19021

AIRPORT DIAGRAM

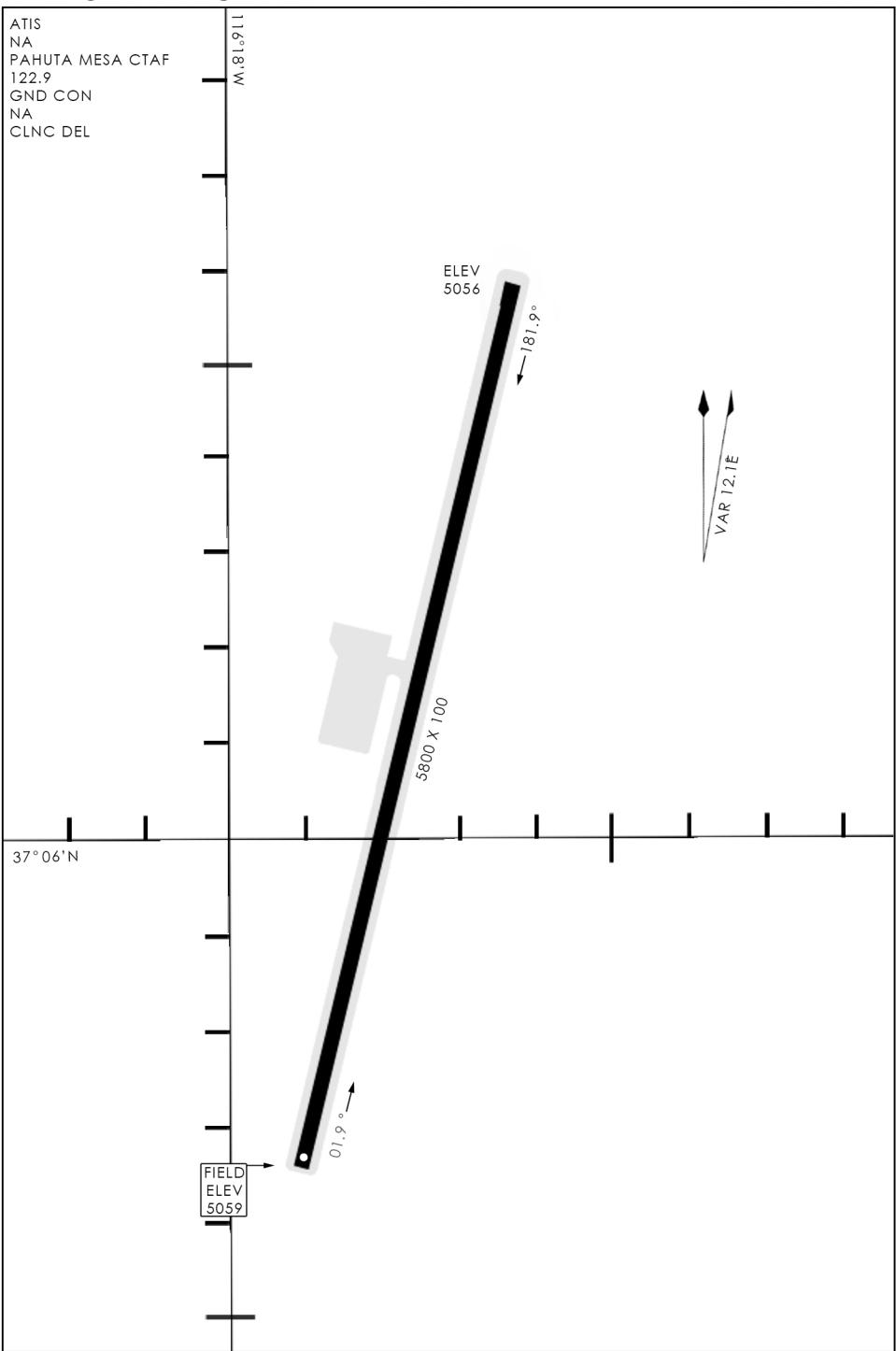
476 vFG

PAHUTA MESA AIRSTRIP (L23)

MERCURY, NEVADA

ATIS
NA
PAHUTA MESA CTAF
122.9
GND CON
NA
CLNC DEL

476 vFG JAN 2019



AIRPORT DIAGRAM

MERCURY, NEVADA
PAHUTA MESA AIRSTRIP (L23)

476 vFG JAN 2019

19021

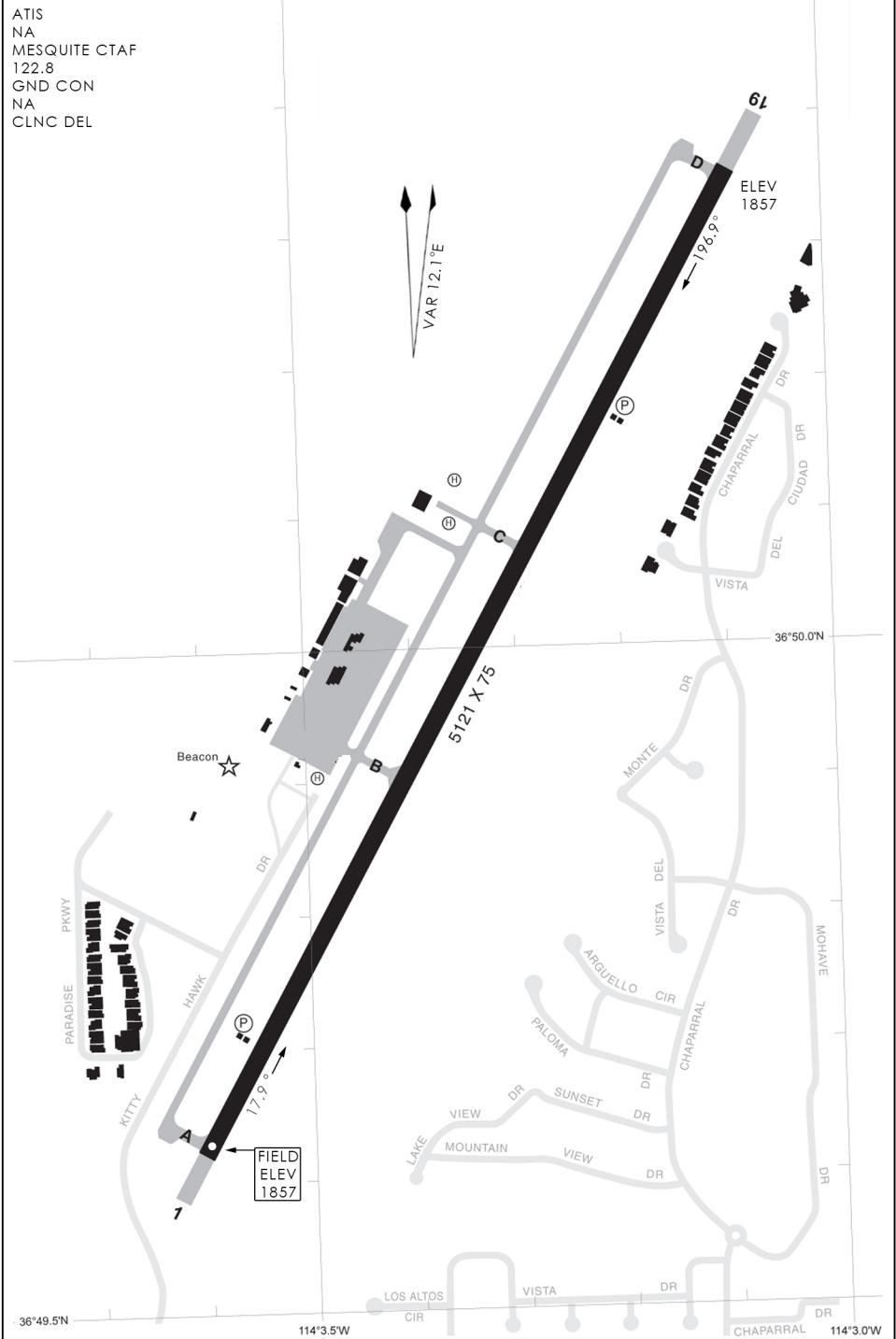
AIRPORT DIAGRAM

476 vFG

MESQUITE AIRPORT (67L)

MESQUITE, NEVADA

ATIS
NA
MESQUITE CTAF
122.8
GND CON
NA
CLNC DEL



AIRPORT DIAGRAM

MESQUITE, NEVADA

MESQUITE AIRPORT (67L)

19021

AIRPORT DIAGRAM

476 vFG

MINA AIRSTRIP (3Q0)

MINA, NEVADA

ATIS
NA
MINA CTAF
122.9
GND CON
NA
CLNC DEL

38°23.0'N

38°22.5'N

118°6.0'W

118°5.5'W

ELEV
4560

13

140.1°

4600 X 165

330.1°

31

VAR 13.5°E

FIELD
ELEV
4560

118°6.0'W

34

AIRPORT DIAGRAM

MINA, NEVADA

MINA AIRSTRIP (3Q0)

476 vFG JAN 2019

19021

AIRPORT DIAGRAM

476 vFG

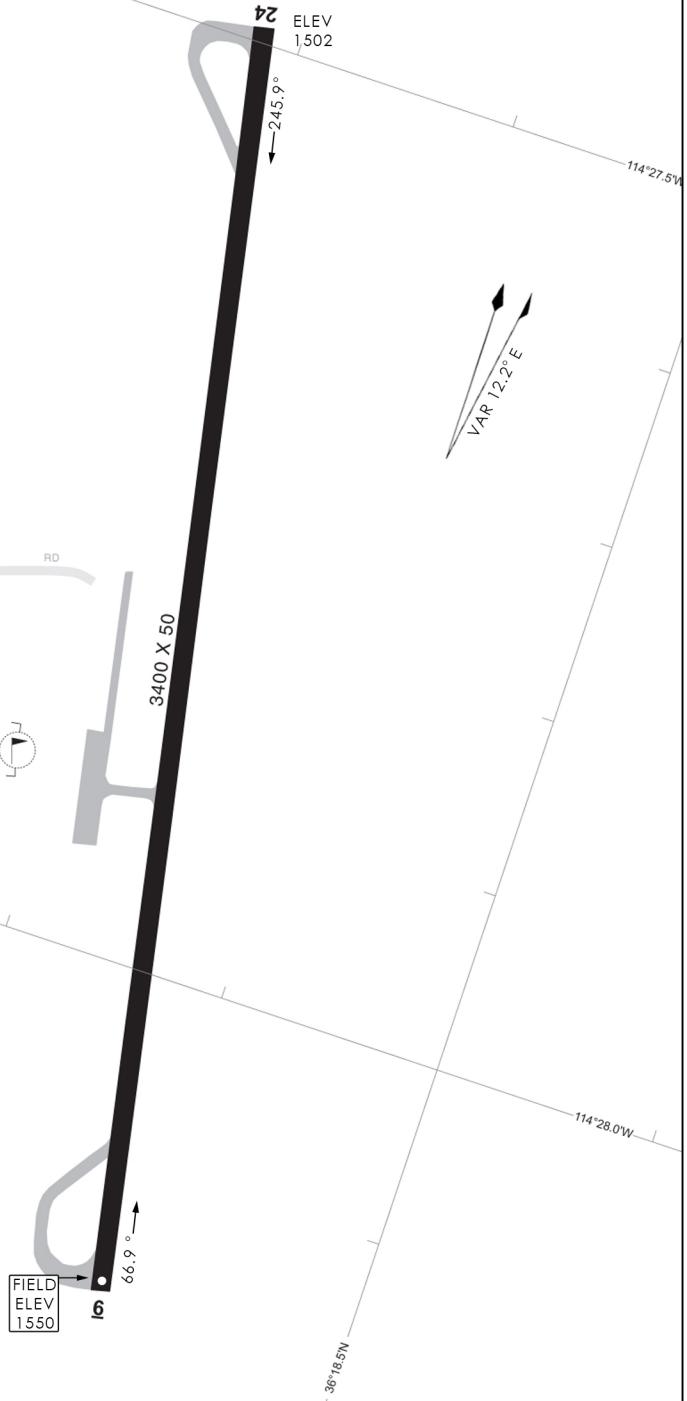
ECHO BAY AIRPORT (OL9)

OVERTON, NEVADA

ATIS
NA
ECHO BAY CTAF
122.8
GND CON
NA
CLNC DEL

476 vFG JAN 2019

476 vFG JAN 2019



AIRPORT DIAGRAM

OVERTON, NEVADA
ECHO BAY AIRPORT (OL9)

19021

AIRPORT DIAGRAM

476 vFG

LINCOLN COUNTY AIRPORT (1L1)

PANACA, NEVADA

ATIS
NA
LINCOLN COUNTY CTAF
122.8
GND CON
NA
CLNC DEL

L1
FIELD ELEV 4816

4606 X 60

ELEV 4816
35

A1

A2

114°25.5'W

349.9°
→

R

PANACA

Pilot Lounge &
Public Restroom
Beacon

476 vFG

LINCOLN COUNTY AIRPORT (1L1)

PANACA, NEVADA

PANACA, NEVADA
LINCOLN COUNTY AIRPORT (1L1)

816

RANCH

RD

LN

HOLLOW

37°47.5'N

37°47.0'N

93

114°25.0'W

VAR 12.4° E

AIRPORT DIAGRAM

19021

AIRPORT DIAGRAM

476 vFG

GROOM LAKE AFB (KXTA)

RACHEL, NEVADA

ATIS
123.5
GROOM LAKE TOWER
118.1 250.15 38.7
GND CON
NA
CLNC DEL
NA

37°16'N

W,15°S,0°W

W,64°S,15°W

W,84°S,15°W

37°15'N

ELEV
4459144°
144°

11.000 X 150

324.9°
BAK-12FIELD
ELEV
4495

37°14'N

CONTROL
TOWER

B

D

C

B

A

C

D

B

A

C

D

B

A

C

D

37°13'N

AIRPORT DIAGRAM

RACHEL, NEVADA
GROOM LAKE AFB (KXTA)

476 vFG JAN 2019

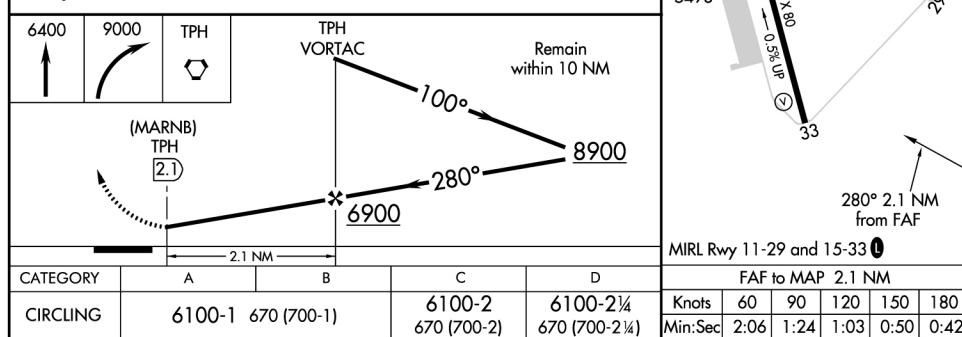
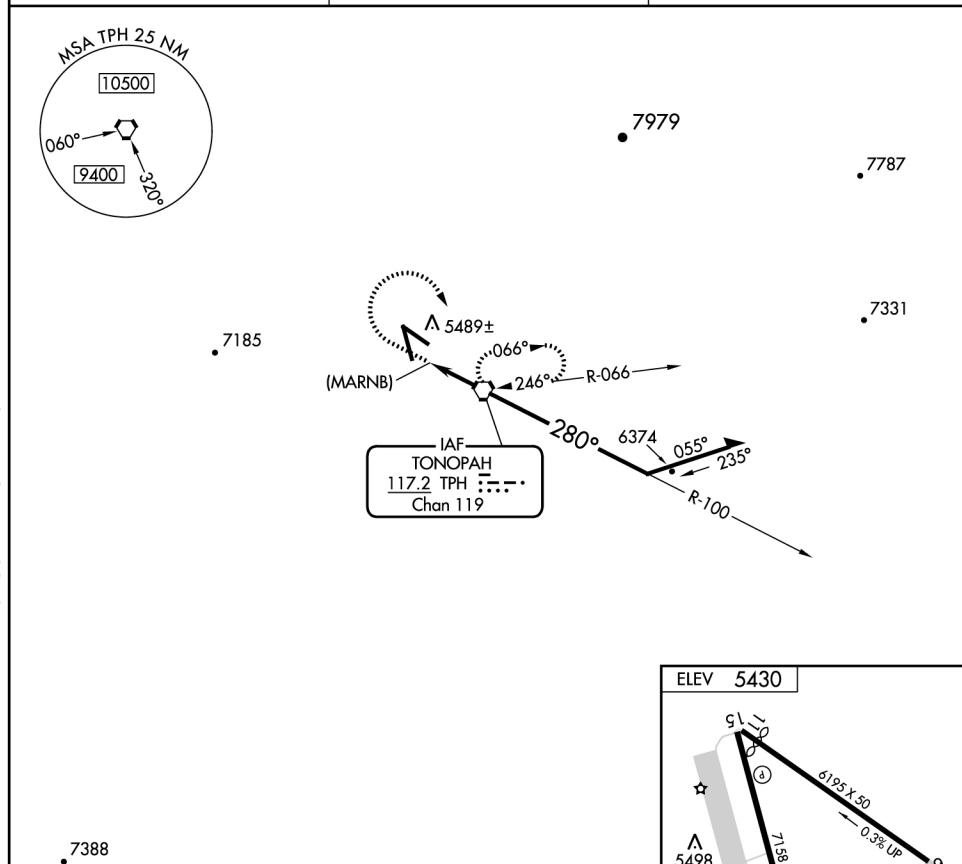
476 vFG JAN 2019

TONOPAH, NEVADA

VORTAC TPH 117.2 Chan 119	APP CRS 280°	Rwy Idg TDZE Apt Elev N/A N/A 5390
--	------------------------	---

VOR or GPS-A TONOPAH (TPH)

T A	MISSIED APPROACH: Climb to 6400 then climbing right turn to 9000 direct TPH VORTAC and hold.	
CTAF 123.0	NELLIS APP CON	UNICOM NA



TONOPAH, NEVADA

TONOPAH (TPH) VOR or GPS-A

38°04'N - 117°05'W

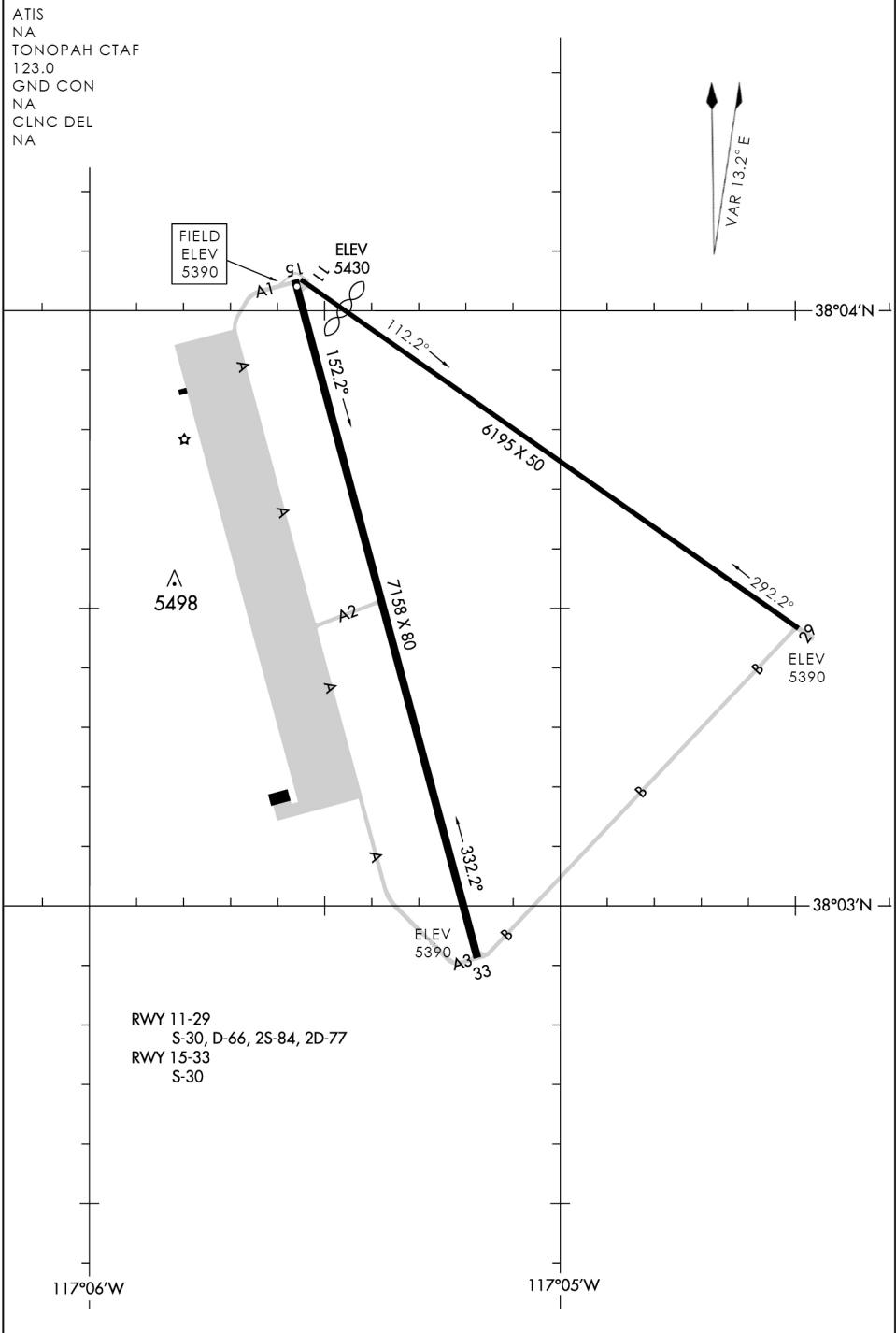
19021

AIRPORT DIAGRAM

476 vFG

TONOPAH (KTPH)
TONOPAH, NEVADA

ATIS
NA
TONOPAH CTA
123.0
GND CON
NA
CLNC DEL
NA



AIRPORT DIAGRAM

TONOPAH, NEVADA
TONOPAH (KTPH)

TONOPAH, NEVADA

LOC I-RVP 108.3	APCH CRS 141°	Rwy Idg 12,001 THRE 5473 Arpt Elev 5535
---------------------------	-------------------------	--

▼ * When ALS inop, increase CAT ABCDE vis to $\frac{3}{4}$ mile.** When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to $1\frac{1}{2}$ miles.

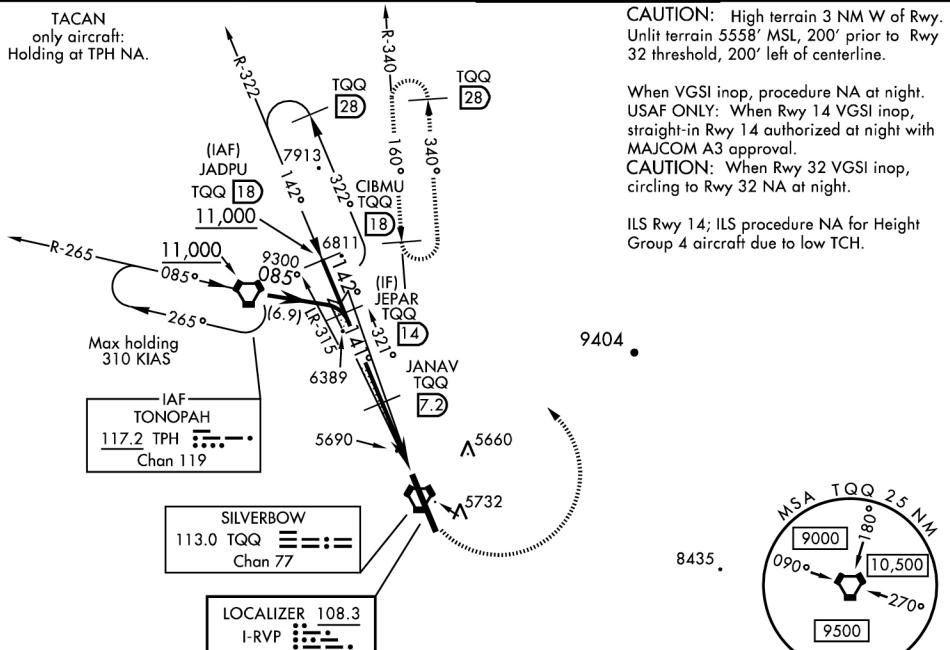
*** Circling not authorized West of Rwy 14/32.

ILS or LOC/DME RWY 14

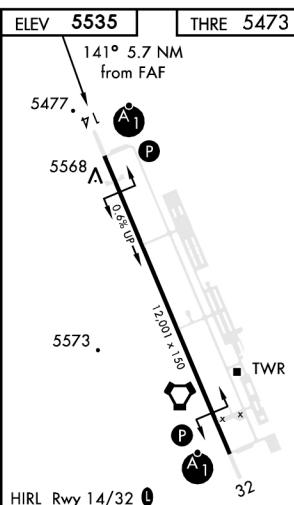
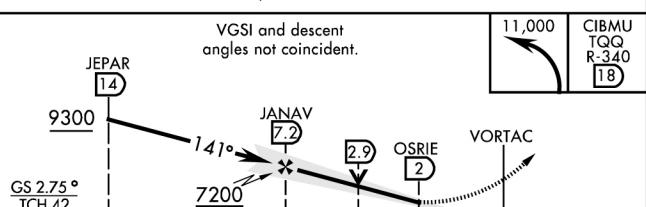
TONOPAH TEST RANGE (KTNX)



MISSIED APPROACH: Turn left climbing to 11,000 via TQQ R-340 to CIBMU and hold, continue climb-in-hold to 11,000.

AWOS
NANELLIS CONTROL
119.35 254.4SILVERBOW TOWER ★
124.85 258.05 38.6GND CON
127.25 275.8TACAN
only aircraft:
Holding at TPH NA.

EMERG SAFE ALT 100 NM 16,600



TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

ILS or LOC/DME RWY 14

TONOPAH, NEVADA

LOC I-UVV 111.7	APCH CRS 321°	Rwy Idg 12,001 THRE 5550 Arpt Elev 5535
--------------------	------------------	---

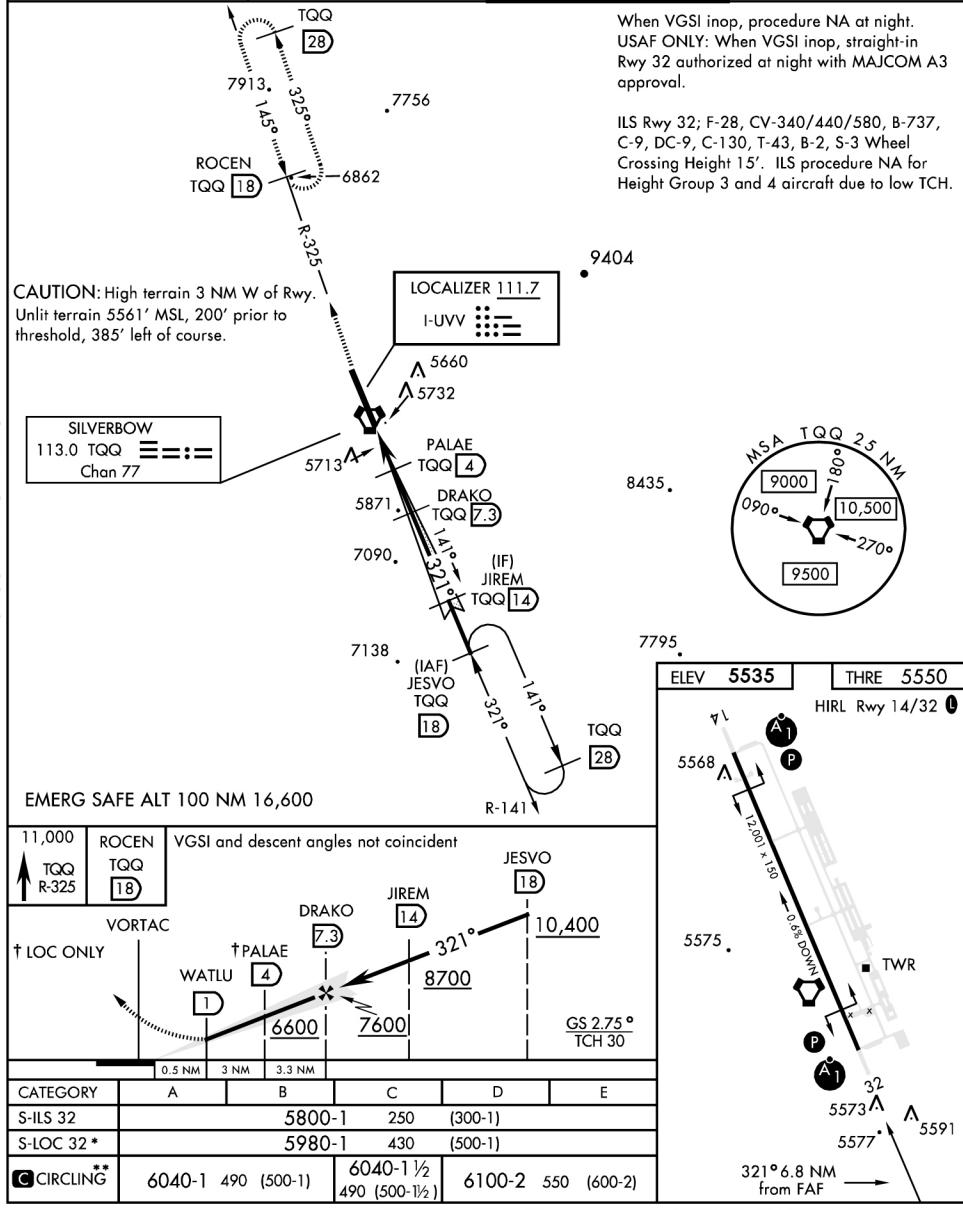
ILS or LOC/DME RWY 32

TONOPAH TEST RANGE (KTNX)

V * When ALS inop, increase CAT CDE vis to 1 1/4 miles.
** Circling NA West of Rwy 14/32



MISSIED APPROACH: Climb to 11,000 via TQQ VORTAC R-325 to ROCEN and hold, continue climb in hold to 11,000.

AWOS
NANELLIS CONTROL
119.35 254.4SILVERBOW TOWER ★
124.85 258.05 38.6GND CON
127.25 275.8

TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

ILS or LOC/DME RWY 32

TONOPAH, NEVADA

VORTAC TQQ 113.0 Chan 77	APCH CRS 145°	Rwy ldg 12,001 THRE 5473 Arpt Elev 5535
--------------------------------	------------------	---

VOR/DME or TACAN RWY 14

TONOPAH TEST RANGE (KTNX)

▼ * When ALS inop, increase CAT AB vis to 1 mile,
CAT CDE vis to 1 1/8 miles.
** Circling not authorized West of Rwy 32.



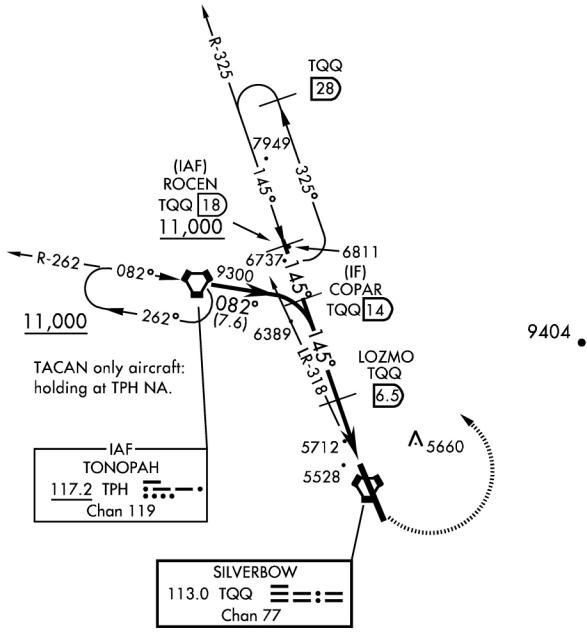
MISSIED APPROACH: Turn left climbing to 11,000
via TQQ R-325 to ROCEN and hold, continue
climb-in-hold to 11,000.

AWOS
NANELLIS CONTROL
119.35 254.4SILVERBOW TOWER ★
124.85 258.05 38.6GND CON
127.25 275.8

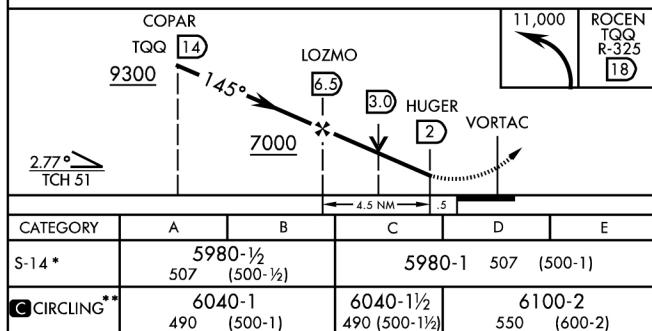
CAUTION: High terrain 3 NM W of Rwy.
Unlit terrain 5558' MSL, 200' prior to Rwy
32 threshold, 200' left of centerline.

When VGSI inop, procedure NA at night.
USAF ONLY: When Rwy 14 VGSI inop,
straight-in Rwy 14 authorized at night with
MAJCOM A3 approval.

CAUTION: When Rwy 32 VGSI inop,
circling to Rwy 32 NA at night.



EMERG SAFE ALT 100 NM 16,600



TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

VOR/DME or TACAN RWY 14

TONOPAH, NEVADA

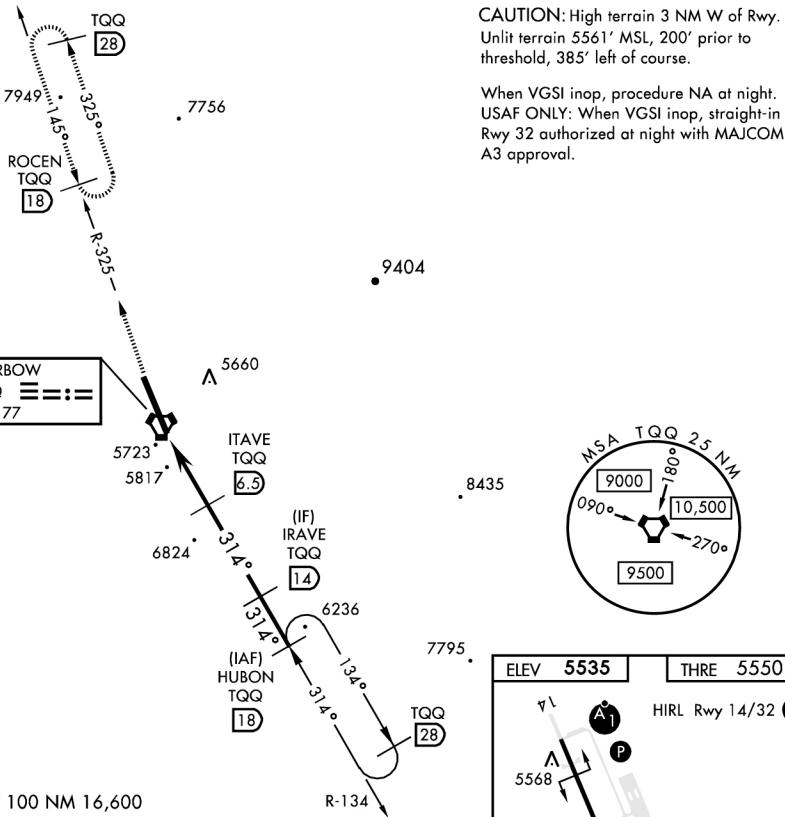
VORTAC TQQ 113.0 Chan 77	APCH CRS 314°	Rwy log 12,001 THRE 5550 Arpt Elev 5535
		AL-3188 [USAF]

VOR/DME or TACAN RWY 32

TONOPAH TEST RANGE (KTNX)

V * When ALS inop, increase CAT CDE vis to 1½ miles. ** Circling NA W of Rwy 14/32	ALSF-1 	MISSIED APPROACH: Climb to 11,000 via TQQ VORTAC R-325 to ROCEN and hold, continue climb in hold to 11,000.
--	------------	---

AWOS NA	NELLIS CONTROL 119.35 254.4	SILVERBOW TOWER ★ 124.85 258.05 38.6	GND CON 127.25 275.8
------------	--------------------------------	---	-------------------------



EMERG SAFE ALT 100 NM 16,600

11,000	ROCEN TQQ (18)	ELEV 5535	THRE 5550
TQQ R-325		A1	HIRL Rwy 14/32
VORTAC ITOGE (1)	ITAVE (6.5)	5568	
0.5 NM - 5.5 NM	IRAVE (14)		
	HUBON (18)	5732	A
	8700	TWR	
	7400		
	10,400		
	2.85° TCH 39		
CATEGORY	A	B	C
S-32 *		6080-1 530 (600-1)	(600-1)
CIRCLING **	6080-1 530 (600-1)	6080-1½ 530 (600-1½)	6100-2 550 (600-2)

TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

VOR/DME or TACAN RWY 32

TONOPAH, NEVADA

VORTAC TQQ 113.0 Chan 77	APCH CRS 145°	Rwy Idg 12,001 THRE 5473 Arpt Elev 5535
--------------------------------	------------------	---

VOR/DME Z RWY 14

TONOPAH TEST RANGE (KTNX)

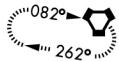
* Circling not authorized W of Rwy 14/32.



MISSED APPROACH: Turn left, climb to 11,000 direct to TPH VORTAC and hold. Continue climb in holding to 11,000.

AWOS NA	NELLIS CONTROL 119.35 254.4	SILVERBOW TOWER ★ 124.85 258.05 38.6	GND CON 127.25 275.8
------------	--------------------------------	---	-------------------------

TONOPAH
117.2 TPH
Chan 119



6450
R325
010°
145°

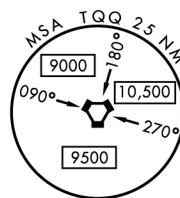
(IAF)
LOZMO
TQQ
6.5

5705

5580

7415

SILVERBOW
113.0 TQQ
Chan 77



When VGSI inop, procedure NA at night.

USAF ONLY: When Rwy 14 VGSI inop, straight-in Rwy 14 authorized at night with MAJCOM A3 approval.

CAUTION: When Rwy 32 VGSI inop, circling to Rwy 32 NA at night.

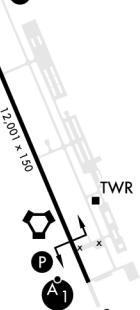
CAUTION: High terrain 3 NM W of Rwy. Unlit terrain 5558' MSL, 200' prior to Rwy 32 threshold, 200' left of centerline.

476 VFG JAN 2019

ELEV 5535	THRE 5473
-----------	-----------

145° 5 NM from FAF

5568 A P



5732 A

EMERG SAFE ALT 100 NM 16,600 FROM TQQ

VGSI and descent angle not coincident.

LOZMO

6.5

11,000

TPH

8800 325°

8800 145°

Remain within 10 NM.

3.33°
TCH 51

7300

VORTAC

HUGER

2

P

CATEGORY	A	B	C	D	E
S-14	5960/24 487 (500-½)		5960/50 487 (500-1)	NOT AUTHORIZED	
C CIRCLING*	6040-1 490 (500-1)		6040-1½ 490 (500-1½)	NOT AUTHORIZED	

TONOPAH, NEVADA

37° 47'N-116° 47'W

TONOPAH TEST RANGE (KTNX)

VOR/DME Z RWY 14

TONOPAH, NEVADA

VORTAC TQQ 113.0 Chan 77	APCH CRS 314°	Rwy Idg 12,001 THRE 5550 Arpt Elev 5535
--------------------------------	------------------	---

VOR/DME Z RWY 32

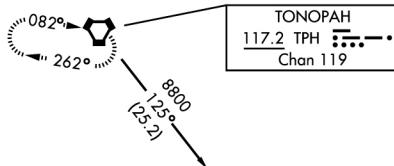
TONOPAH TEST RANGE (KTNX)

▼ * Circling not authorized W of Rwy 14/32



MISSSED APPROACH: Climb to 11,000 direct to TPH VORTAC and hold. Continue climb in holding to 11,000.

AWOS NA	NELLIS CONTROL 119.35 254.4	SILVERBOW TOWER ★ 124.85 258.05 38.6	GND CON 127.25 275.8
------------	--------------------------------	---	-------------------------



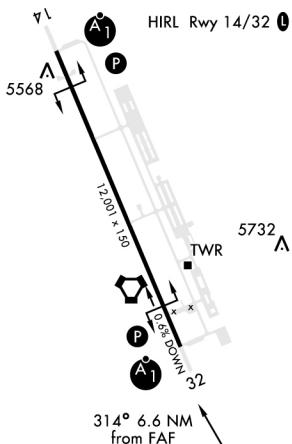
9386

CAUTION: High terrain 3 NM W of Rwy.
Unlit terrain 5561' MSL, 200' prior to
threshold, 385' left of course.

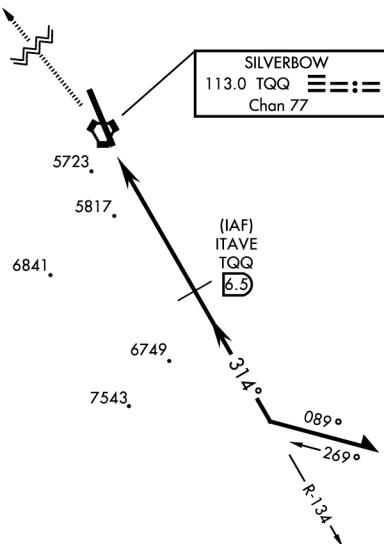
When VGSI inop, procedure NA at night.
USAF ONLY: When VGSI inop, straight-in
Rwy 32 authorized at night with MAJCOM
A3 approval.



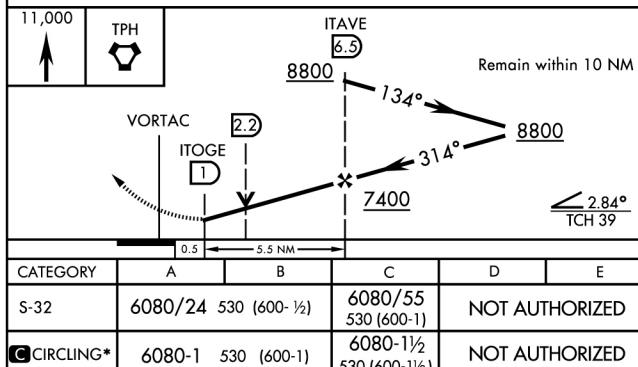
ELEV 5535	THRE 5550
-----------	-----------



7415



EMERG SAFE ALT 100 NM 16,600 FROM TQQ



19021

AIRPORT DIAGRAM

476 vFG

TONOPAH TEST RANGE (KTNX)

TONOPAH, NEVADA

ATIS

127.25

SILVERBOW TOWER

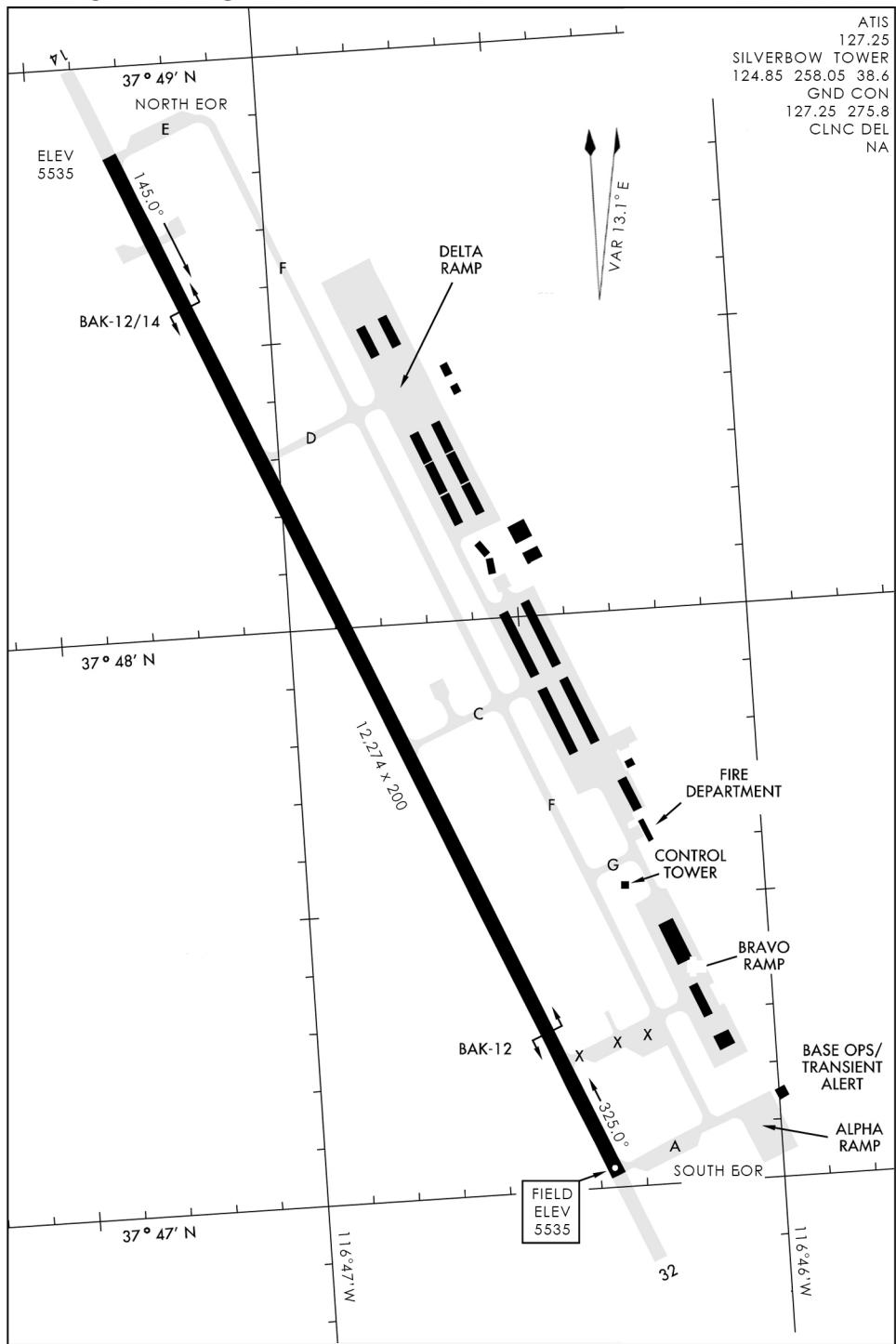
124.85 258.05 38.6

GND CON

127.25 275.8

CLNC DEL

NA



AIRPORT DIAGRAM

TONOPAH, NEVADA

TONOPAH TEST RANGE (KTNX)

19021

AIRPORT DIAGRAM

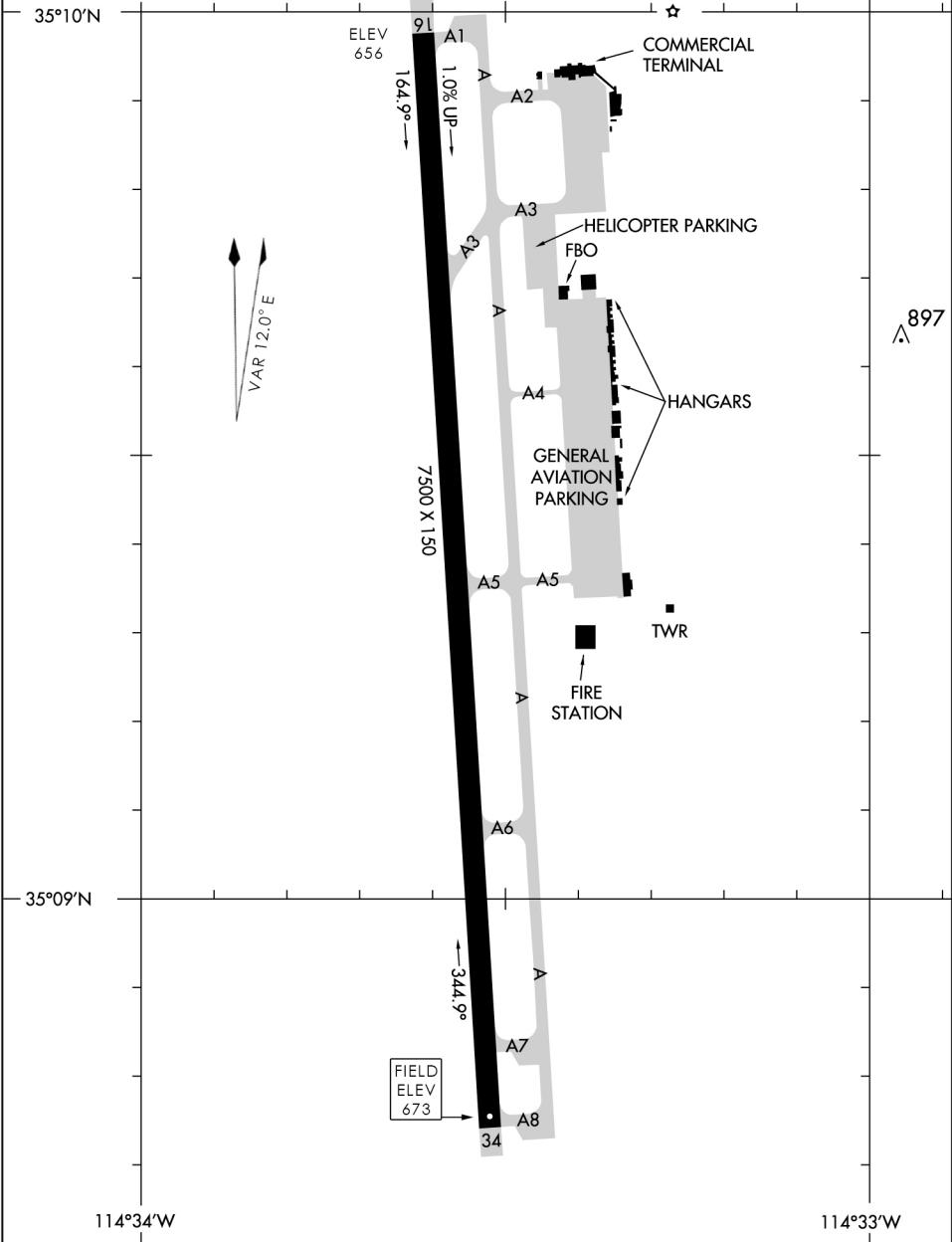
476 vFG

LAUGHLIN/BULLHEAD INTL (KIFP)

BULLHEAD CITY, ARIZONA

ATIS
119.825
LAUGHLIN TOWER
124.0 250.1 38.5
GND CON
NA
CLNC DEL
NA

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.



AIRPORT DIAGRAM

BULLHEAD CITY, ARIZONA
LAUGHLIN/BULLHEAD INTL (KIFP)