

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



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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.

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

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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 *.....	 TWR

* 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 1dg 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 THREE 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).

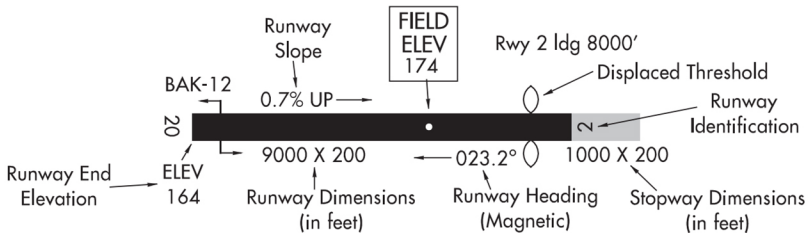
Approach light symbols are shown in the Flight Information Handbook.

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 ± 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

19021

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
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LAS VEGAS, NV**HENDERSON EXECUTIVE (HND)**

TAKEOFF MINIMUMS AND (OBSTACLE)
DEPARTURE PROCEDURES

ORIG 05132 (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 proceed-
ing 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 center
line, 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





INSTRUMENT APPROACH PROCEDURE CHARTS

LAS VEGAS, NV (CON'T)

MCCARRAN INTL (LAS) (CON'T)

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)

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) (CON'T)

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 62' AGL/1881' 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, Rwys 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.





19021

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.



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	KIFP		16	656			124.0				119.825
							250.1				
							38.5				
			34	673							
Lincoln County	1L1		17	4816				122.800			
			35	4816							
Mc Carran	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		135.1	118.125	125.500
						275.8	327.1		385.4	291.725	
							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

9L

166.0°

Beacon Public Phone

AIRPORT

36°52.0'N

VAR 12.9° E

5615 X 60



36°51.5'N

ELEV 3123

348.0°

34

116°47.5'W

116°47.0'W

AIRPORT DIAGRAM

BEATTY, NEVADA

Beatty (KBTY)

476 VFG JAN 2019

476 VFG JAN 2019

AIRPORT DIAGRAM

ATIS
 NA
 BOULDER CITY CTAF
 122.8
 GND CON
 NA
 CLNC DEL
 NA



3701
35°37'N

60
ELEV
2152

086.9°

115°52'W



FIELD
ELEV
2205

152.9°



3530

476 VFG JAN 2019

476 VFG JAN 2019

ELEV
2123

332.9°

33

4800 X 70

D

3850 X 70

B

B

X

X

X

X

X

CONTROL
TOWER

PASSENGER
TERMINAL

ELEV
2136

266.9°

27

FIRE
DEPT

115°51'W

AIRPORT DIAGRAM

TACAN INS	APCH CRS	Rwy ldg TDZE	9002
Chan 87X	065°	Arpt Elev	3127

476 vFG

INDIAN SPRINGS AF AUX (KINS)



* MISSED APPROACH: Straight ahead to INS TACAN, intercept INS R-114 outbound, cross 17 DME or at or above 9300, then direct LSV TACAN.

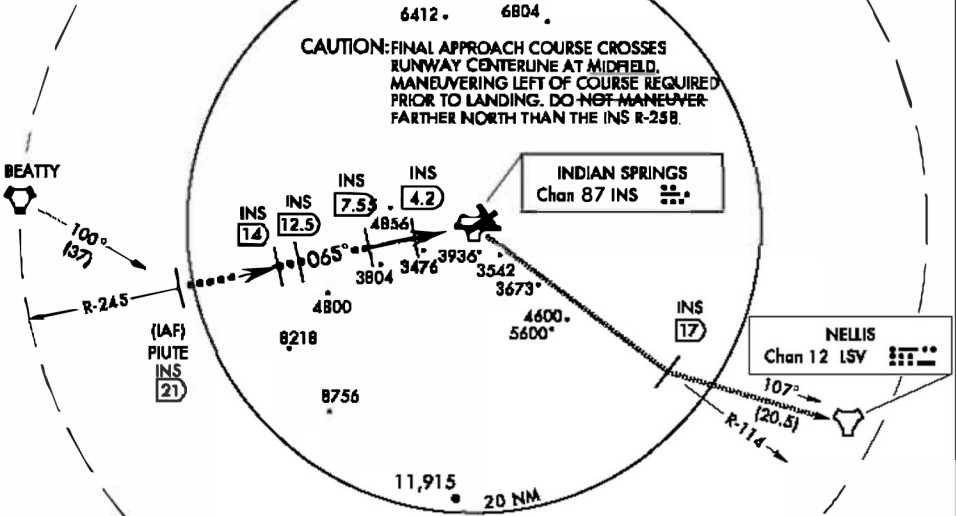
NELLIS CON
N/A

INDIAN SPRINGS TOWER *
118.4 360.7 38.65

GND CON
118.3 275.8

NOT FOR CIVIL USE

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-258.

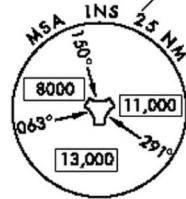


*CAUTION: Missed Approach Climb Rate to 9500

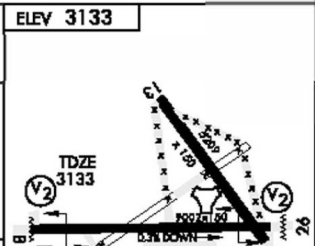
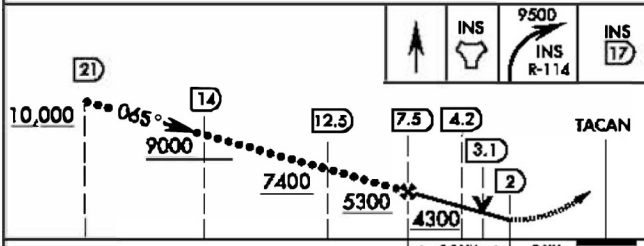
Knots	60	120	180	240	300
V/v(fom)	364	728	1092	1456	1820

Contro ling Obstacles 5600

HIGH ALTITUDE FACILITIES



EMERG SAFE ALT 100 NM 14,000



CAI EGORY	A	B	C	D	E
S-8	3760-1½	627 (700-1½)	3760-1¾ 627(700 1¾)	3760-2 627(700-2)	3760-2¼ 627(700-2¼)
CIRCLING	NOT AUTHORIZED				

065° 6.3 NM from FAF
MURL Rwy 8 26 (C)

476 vFG JAN 2019

476 vFG JAN 2019

TACAN INS Chan 87x	APCH CRS 294°	Rwy ldg 9002 TDZE 3127 Arpl 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.

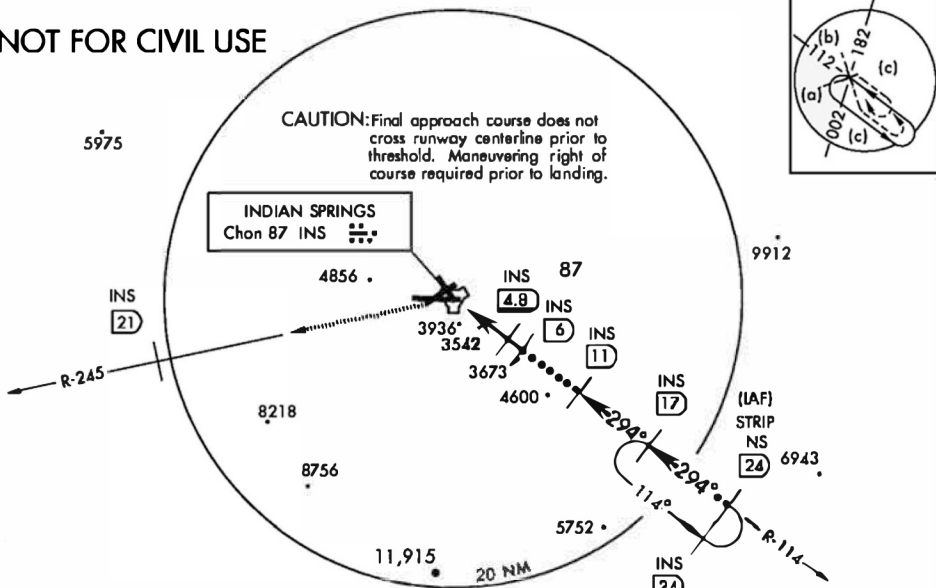
NELLIS CON
N/A

INDIAN SPRINGS TOWER *
118.4 360.7 38.65

GND CON
118.3 275.8

NOT FOR CIVIL USE

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

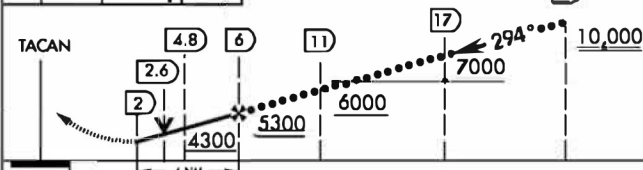
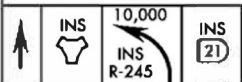


* CAUTION: Missed Approach Climb Rate to 10,000

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

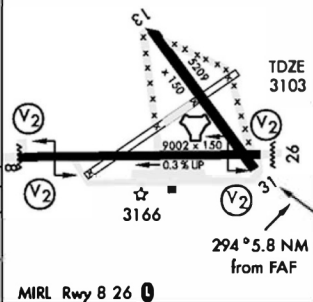
Controlling Obstacle 3936

EMERG SAFE ALT 100 NM 14,000



CATEGORY	A	B	C	D	E
S-26	3800-2¼	697 (700 2¼)		3800-2¼ 697(700-2¼)	3800-2½ 697(700-2½)
CIRCLING	NOT AUTHORIZED				

ELEV 3133



MIRL Rwy 8 26

476 VFG JAN 2019

476 VFG JAN 2019

AIRPORT DIAGRAM

476 VFG

CREECH AFB (KINS)
INDIAN SPRINGS, NEVADA

ATIS
 122.5
 CREECH TOWER
 118.4 360.7 38.65
 GND CON
 118.3 275.8
 CLNC DEL

115°42'W

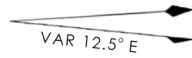
FIELD
 ELEV
 3127

80

972 X 150

HOT CARGO PAD

BAK-12



WEST EOR

115°41'W

476 VFG JAN 2019

CONTROL TOWER
 BASE OPS

RPA LOLA WEST

RPA LOLA EAST

LOLA / HUNG ORDNANCE

RUNWAY
 31/13
 MQ/RQ-1
 ONLY

9002 X 150

258.5°

860 X 100

313.8°

4064 X 100

199 X 100

ELEV 3127

BAK-12

ELEV 3127

115°40'W

EAST EOR

1030 X 150

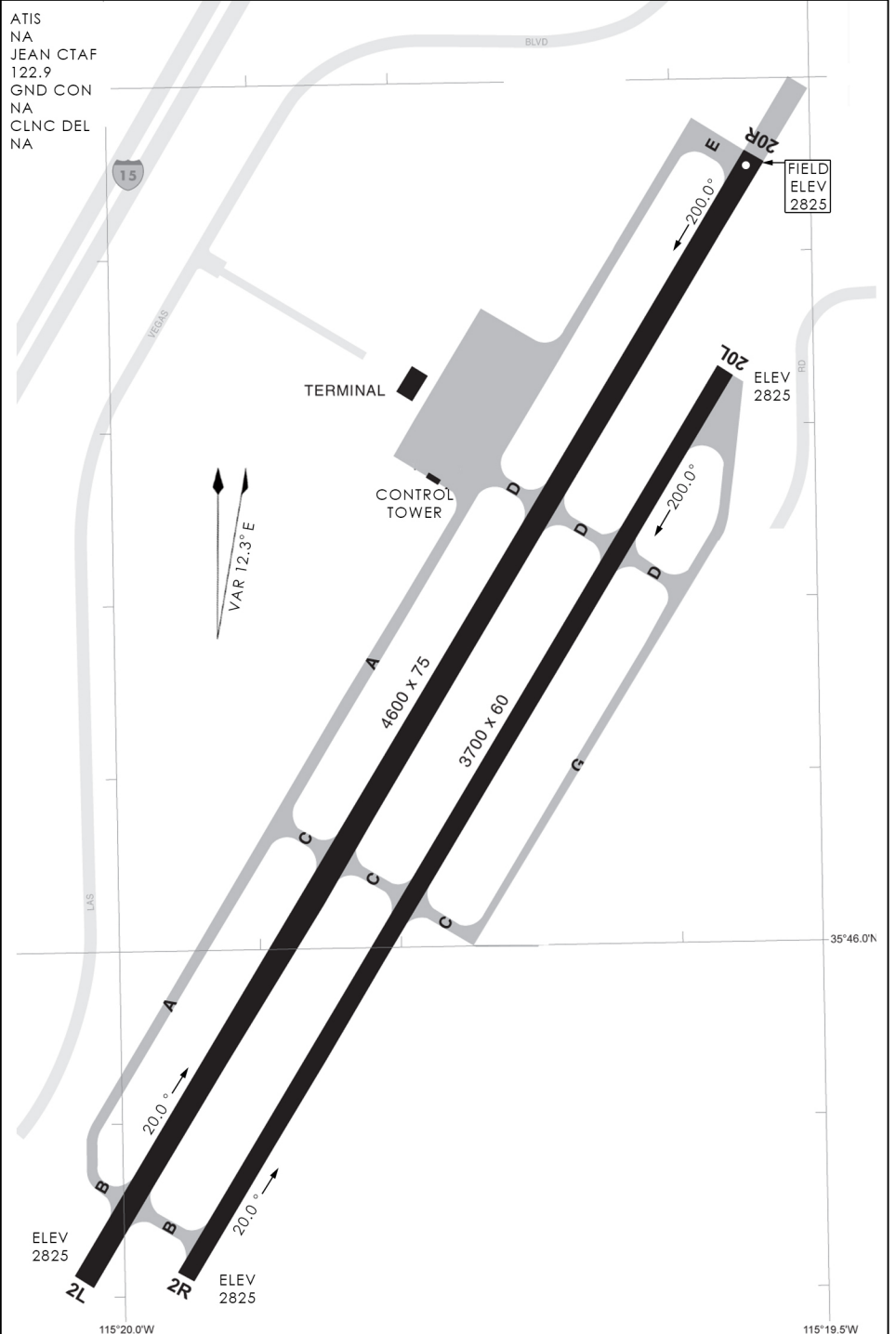
26

476 VFG JAN 2019

AIRPORT DIAGRAM

INDIAN SPRINGS, NEVADA
CREECH AFB (KINS)

ATIS
 NA
 JEAN CTAF
 122.9
 GND CON
 NA
 CLNC DEL
 NA



476 VFG JAN 2019

476 VFG JAN 2019

LAS VEGAS, NEVADA

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

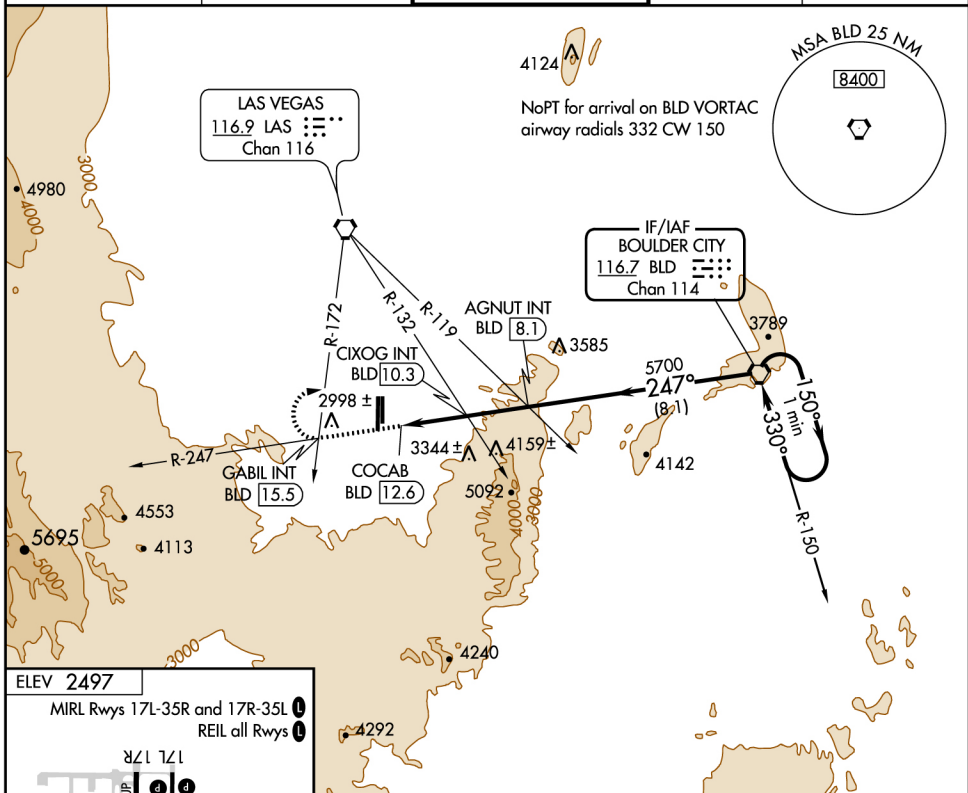
476 vFG

VOR-C
HENDERSON EXECUTIVE (HND)

⚠ Circling to Rwy 35L NA at night.
⚠ If local altimeter setting not received, use McCarran Intl altimeter setting and increase all MDAs 60 feet.

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

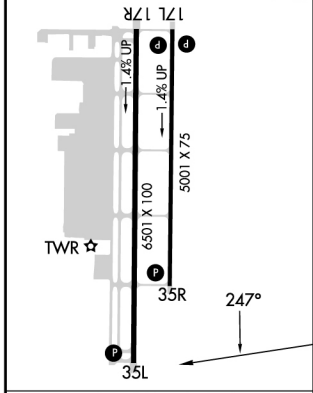
ATIS 120.775	LAS VEGAS APP CON 118.4 307.25	HENDERSON TOWER * 125.2 250.2 38.85	GND CON NA	UNICOM NA
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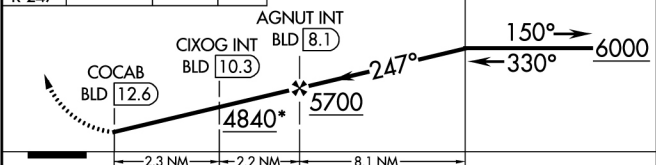
476 vFG JAN 2019

476 vFG JAN 2019

ELEV 2497
MIRL Rwys 17L-35R and 17R-35L
REIL all Rwys



7000 ↑ BLD R-247	GABIL INT BLD 15.5	BLD *4960 when using McCarran Intl altimeter setting.	BLD VORTAC	One Minute Holding Pattern
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CATEGORY	A	B	C	D
CIRCLING	4840-1¼ 2343 (2400-1¼)	4840-1½ 2343 (2400-1½)	4840-3 2343 (2400-3)	NA
CIXOG FIX MINIMUMS (DUAL VOR RECEIVERS OR DME REQUIRED)				
CIRCLING	3620-1¼ 1123 (1200-1¼)	3620-1½ 1123 (1200-1½)	3620-3 1123 (1200-3)	NA

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

LAS VEGAS, NEVADA

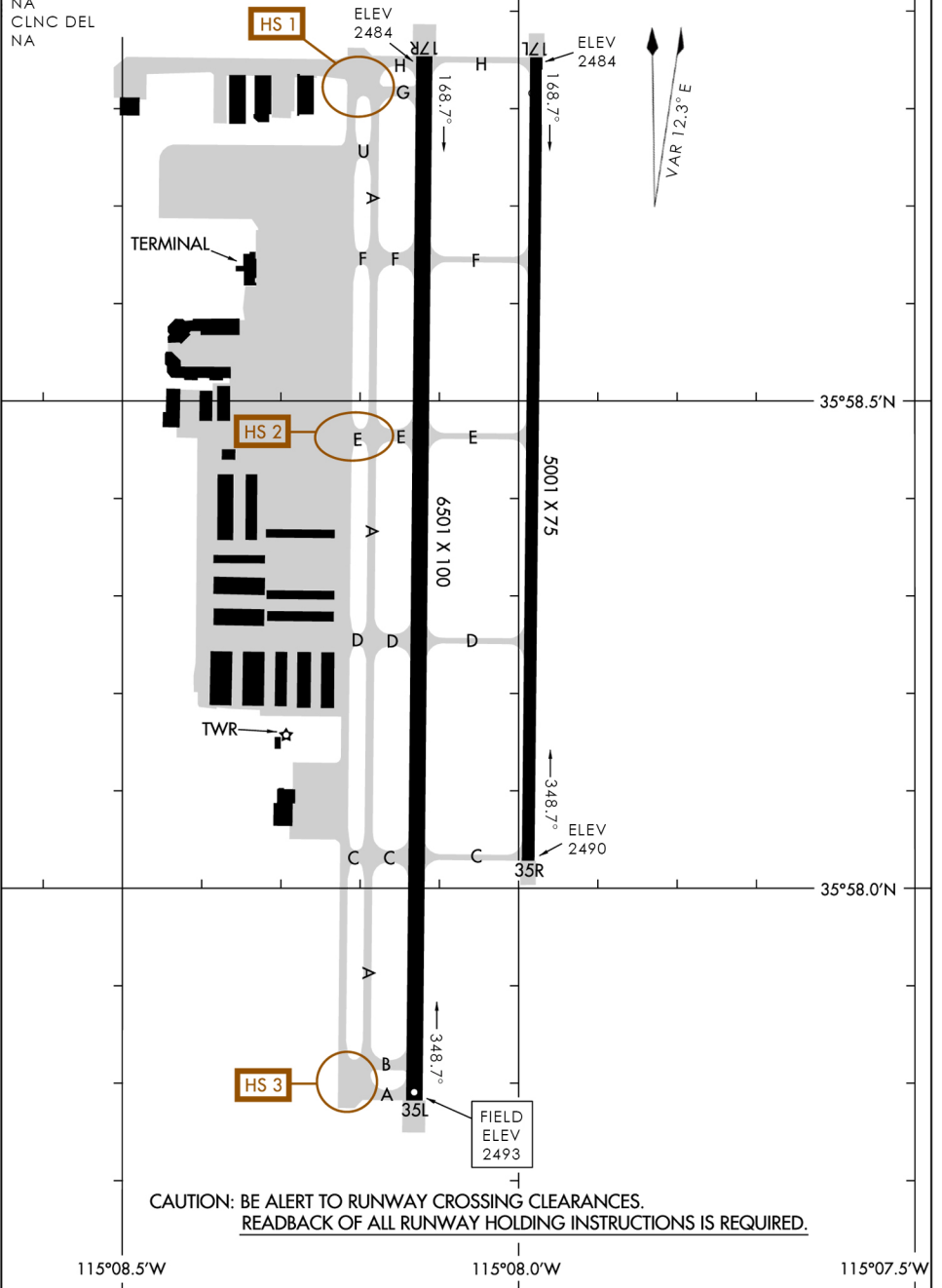
35°58'N-115°08'W

HENDERSON EXECUTIVE (HND)
VOR-C

AIRPORT DIAGRAM

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

35°59.0'N



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6176 vFG JAN 2019

AIRPORT DIAGRAM

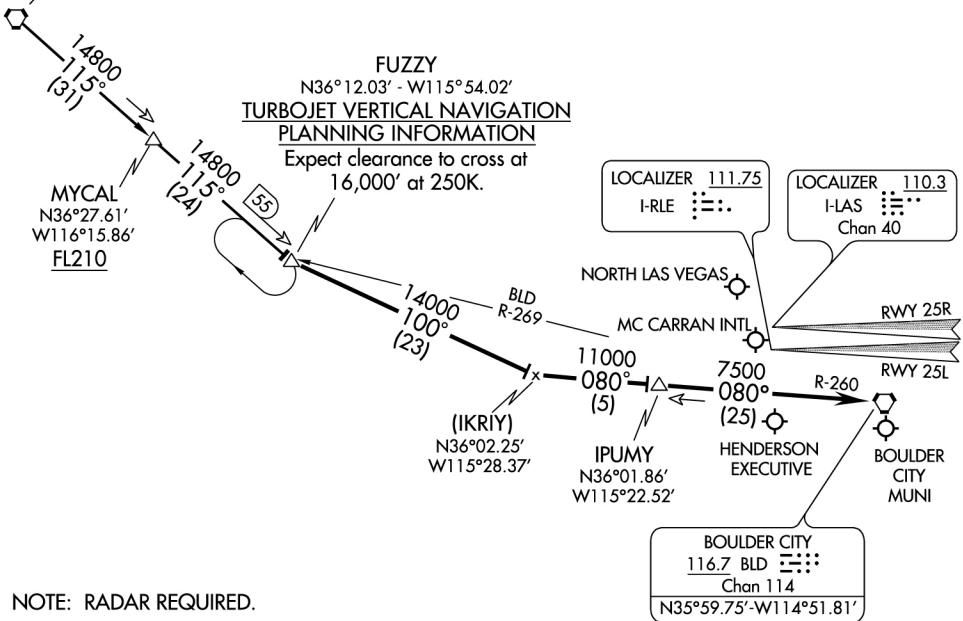
FUZZY SEVEN ARRIVAL

476 vFG

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 $\equiv \dots$
 Chan 94
 N36°48.04' - W116°44.86'
 L-9, H-4



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476 vFG JAN 2019

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

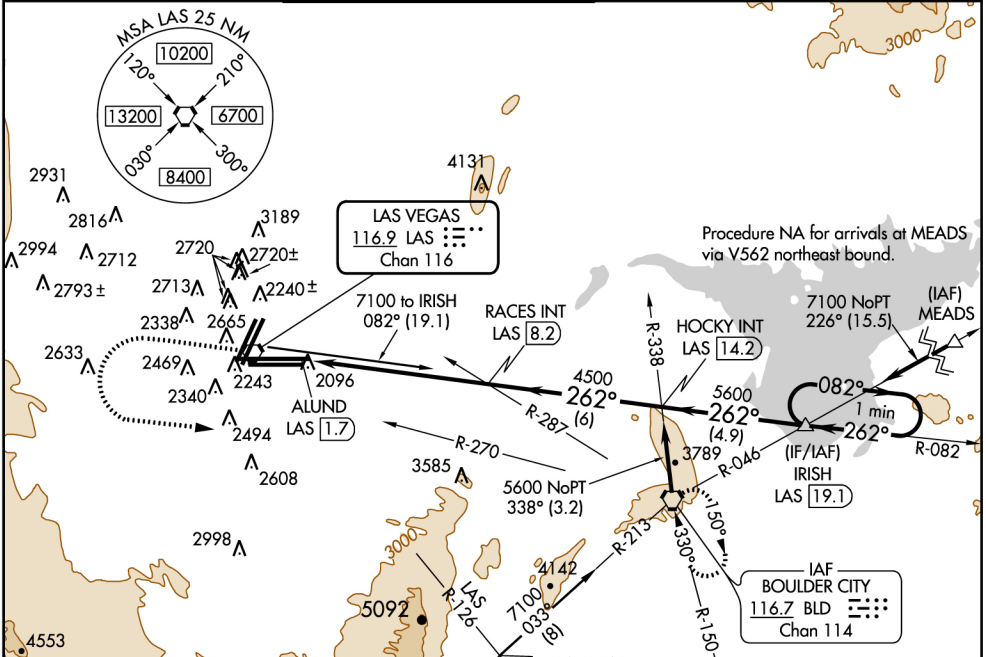
VORTAC LAS 116.9 Chan 116	APP CRS 262°	Rwy 25L Idg TDZE Apt Elev	10525 2073 2178	Rwy 25R Idg TDZE Apt Elev	12757 2073 2178
---	------------------------	---------------------------------	--	---------------------------------	--

VOR RWY 25L/R

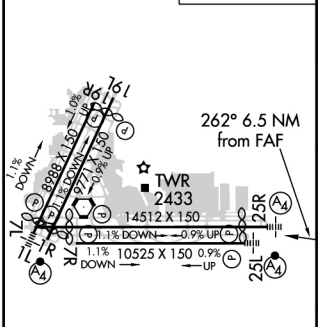
MC CARRAN INTL (LAS)

<p>Inoperative table does not apply to MALS Rwy 25R. Inoperative table does not apply to MALS F Rwy 25L. Cat. C.</p>	<p>MALS Rwy 25L</p>	<p>MALS Rwy 25R</p>	<p>MISSED APPROACH: Climb to 4000 then climbing left turn to 6000 via heading 070° and BLD R-270 to BLD VORTAC and hold.</p>
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ATIS 125.5	LAS VEGAS APP CON N/A	LAS VEGAS TOWER 112.0 257.9 38.75	GND CON N/A	CLNC DEL N/A	CPDLC
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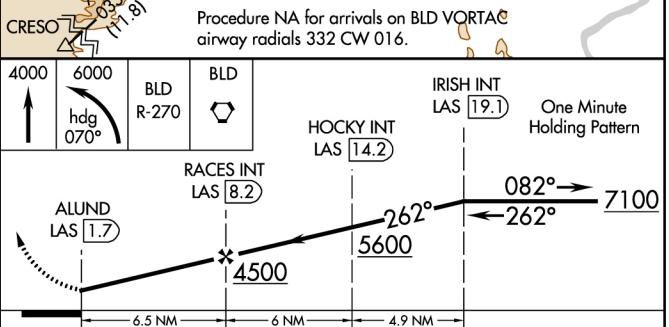
ELEV	2178	D	TDZE 25L 2073	TDZE 25R 2073
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REIL Rwy 1R, 7R, 19L and 19R
MIRL Rwy 1R-19L
HIRL Rwy 1L-19R, 7L-25R and 7R-25L

FAF to MAP 6.5 NM

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



CATEGORY	A	B	C	D
S-25R	2720-1	653 (600-1)	2720-1 ³ / ₄ 653 (600-1 ³ / ₄)	2720-2 653 (600-2)
S-25L	2720- ³ / ₄	651 (600- ³ / ₄)	2720-1 ³ / ₄ 651 (600-1 ³ / ₄)	2720-2 651 (600-2)
CIRCLING	3080-1 ¹ / ₄	899 (900-1 ¹ / ₄)	3280-3	1099 (1100-3)

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LOC/DME I-RLE 111.75 Chan 54 (Y)	APP CRS 255°	Rwy Idg 25L 10525 TDZE 2073 Apt Elev 2178	Rwy Idg 25R 12757 TDZE 2073 Apt Elev 2178
--	------------------------	--	--

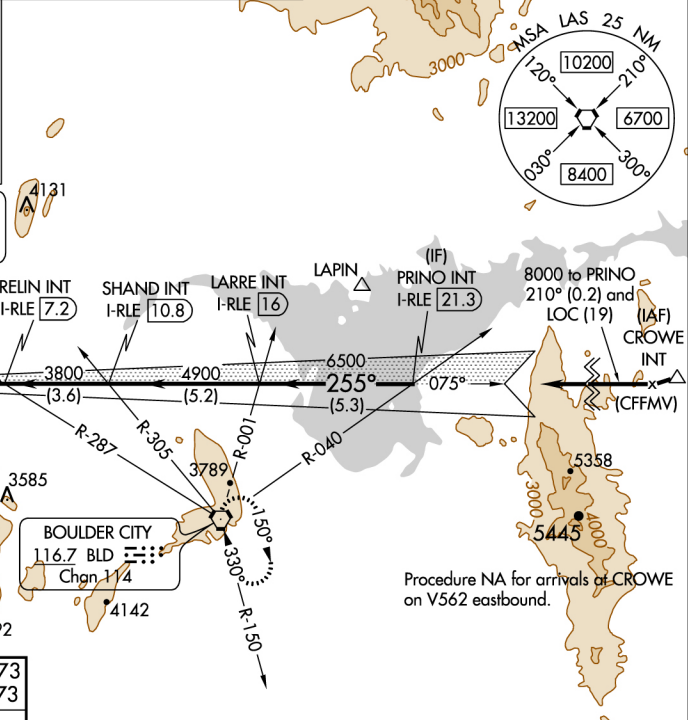
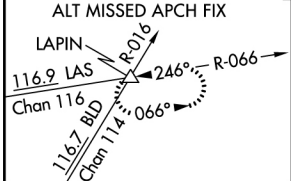
ILS or LOC RWY 25L

MC CARRAN INTL (LAS)

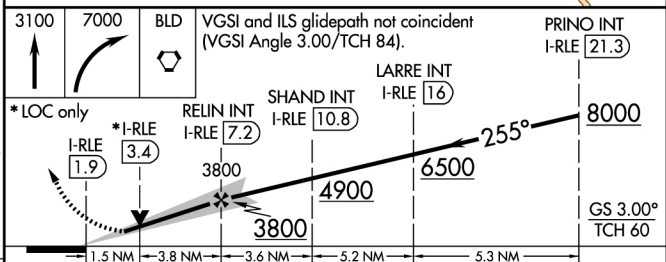
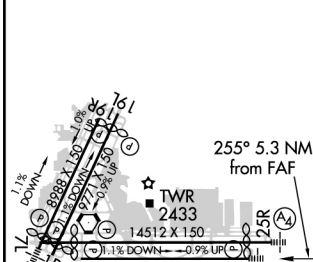
⚠ For inop MALSF, increase S-ILS all Cats visibility 1/8 mile and S-LOC Cat D and E 1/4 mile. Inop table does not apply to Sidestep 25R.

MALSF Rwy 25L **MALS Rwy 25R**
MISSED APPROACH: Climb to 3100 then climbing right turn to 7000 direct BLD VORTAC and hold, continue climb-in-hold to 7000.

ATIS 125.5	LAS VEGAS APP CON N/A	LAS VEGAS TOWER 112.0 257.9 38.75	GND CON N/A	CLNC DEL N/A	CPDLC
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ELEV 2178	D TDZE 25L 2073 TDZE 25R 2073
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CATEGORY	A	B	C	D	E
S-ILS 25L	2350-3/4 281 (200-3/4)				
S-LOC 25L	2600-3/4	531 (500-3/4)	2600-1/4 531 (500-1/4)		
SIDESTEP 25R	2600-1	533 (500-1)	2600-1 1/2 533 (500-1 1/2)	2600-2 533 (500-1)	
C CIRCLING	3080-1 1/4	899 (900-1 1/4)	3100-2 3/4 919 (1000-2 3/4)	3540-3 1359 (1400-3)	

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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.
 Pole 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.

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ATIS
132.4
CLNC DEL
NA
CPDLC
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:
7000**

DOVE CREEK
114.6 DVC
Chan 93
N37°48.53'-W108°55.88'
L-9, H-3

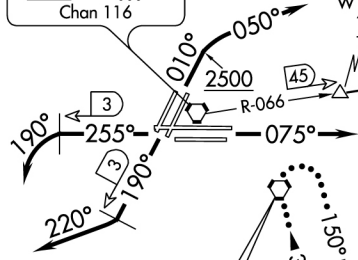
BRYCE CANYON
112.8 BCE
Chan 75
N37°41.35'-W112°18.23'

LAS VEGAS
116.9 LAS
Chan 116

TRALR
N36°11.62'
W114°14.68'

FL260

FL270
053°
(131)



NICLE
N36°18.73'
W113°13.48'
FL240

PAGE
117.6 PGA
Chan 123
N36°55.86'-W111°26.85'

NOTE: RADAR and DME required.

(NOTES CONTINUED ON FOLLOWING PAGE)

BOULDER CITY
116.Z BLD
Chan 114
N35°59.75'-W114°51.81'

TAKEOFF MINIMUMS

Rwys 7L/R: Standard.

Rwys 1L/R: Standard with minimum obstacle climb of 328' per NM to 5000, ATC climb of 400' per NM to 5200.

Rwys 25L/R: Standard with minimum obstacle climb of 324' per NM to 7100, ATC climb of 360' per NM to 7000.

Rwys 19L/R: Standard with minimum climb of 360' per NM to 7000.

NOTE: Chart not to scale.

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°, thence

TAKEOFF 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

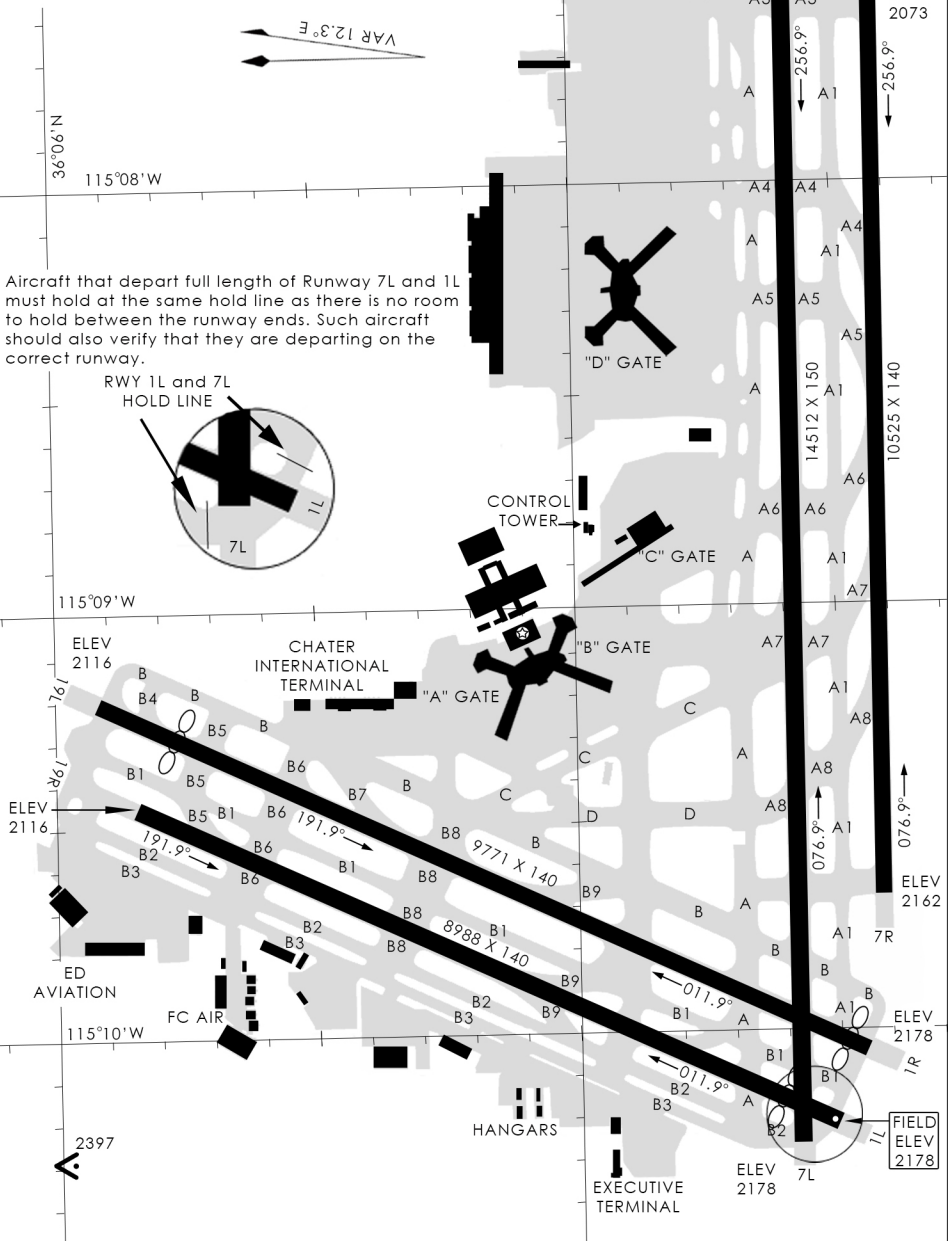
.... via RADAR vector to transition or assigned route, maintain 7000, expect clearance to filed altitude two minutes after departure.

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.

AIRPORT DIAGRAM

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



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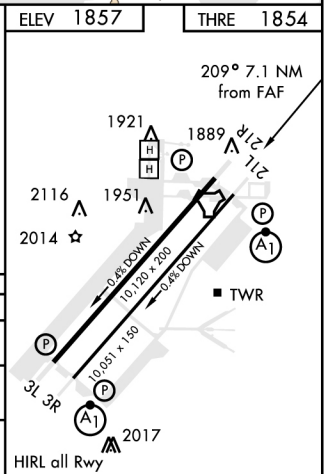
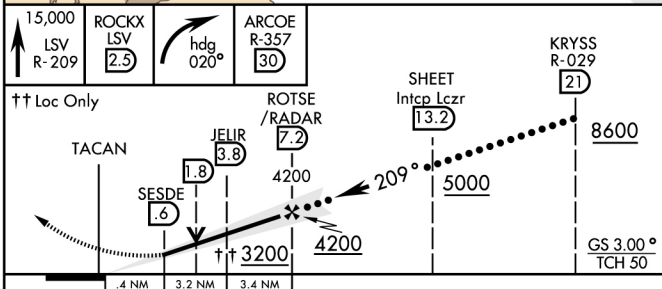
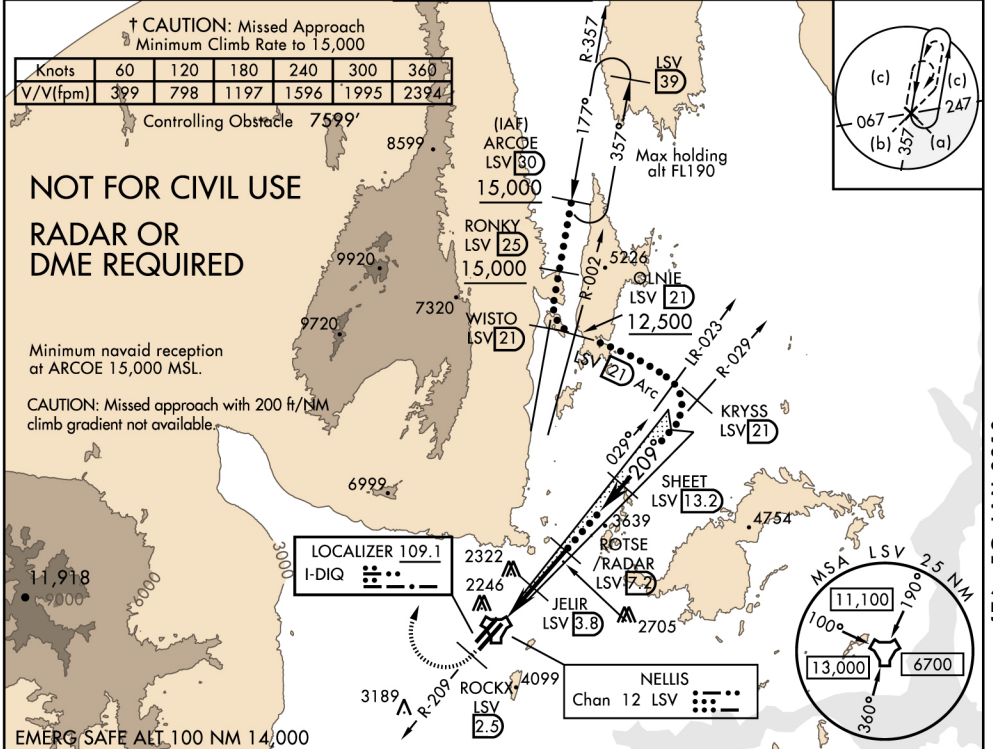
AIRPORT DIAGRAM

HI-ILS or LOC/DME Z RWY 21L

LOC I-DIQ 109.1	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arprt Elev 1857	476 vFG	NELLIS AFB (KLSV)
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<p>⚠ * When ALS inop, increase CAT CDE RVR to 40, vis to 3/4 mile. ** When ALS inop, increase CAT CDE vis to 1 1/2 miles. *** Circling not authorized E of Rwy 3R-21L.</p>	<p>ALSF-1 (A1)</p>	<p>† 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.</p>
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ATIS 125.5	NELLIS APP CON 118.125 291.725	NELLIS TOWER 132.65 327.1 38.8	GND CON 121.8 275.8	CLNC DEL NA
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CATEGORY	C	D	E
S-ILS 21L*	2065/24	200 (200-1/2)	
S-LOC 21L**	2440-1 1/4	575 (600-1 1/4)	
CIRCLING ***	2680-2 1/2	2860-3	3120-3
	811 (900-2 1/2)	991 (1000-3)	1251 (1300-3)

HI-ILS or LOC/DME Z RWY 21L

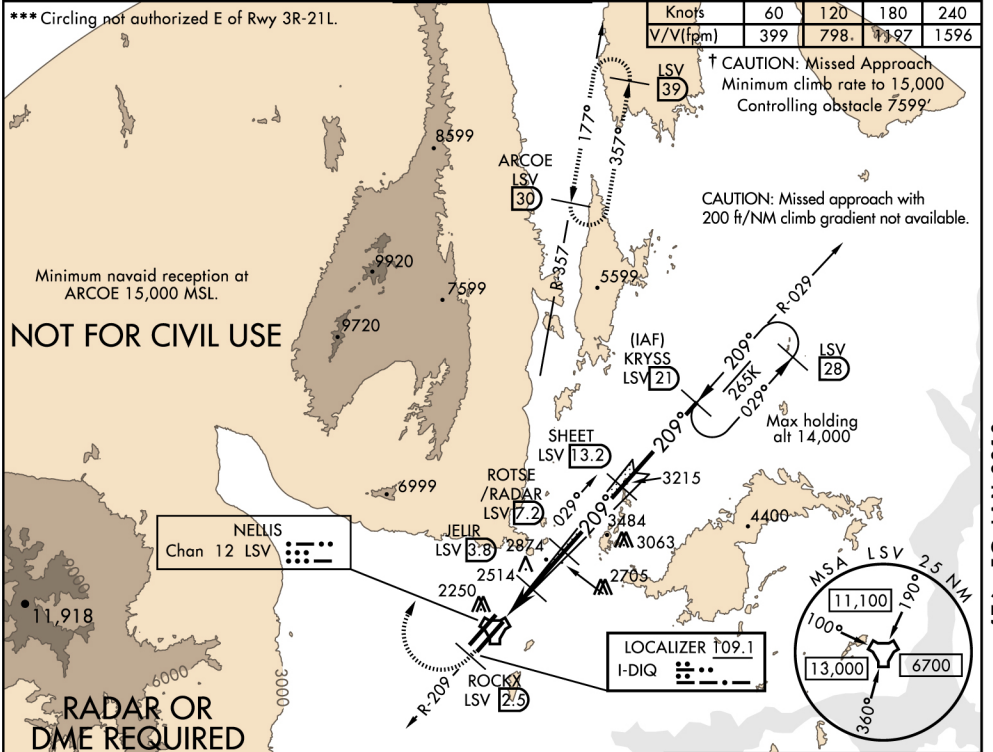
ILS or LOC/DME X RWY 21L

LOC I-DIQ 109.1	APCH CRS 209°	Rwy ldg THRE Arpt Elev 10,051 1854 1857	476 vFG	NELLIS AFB (KLSV)
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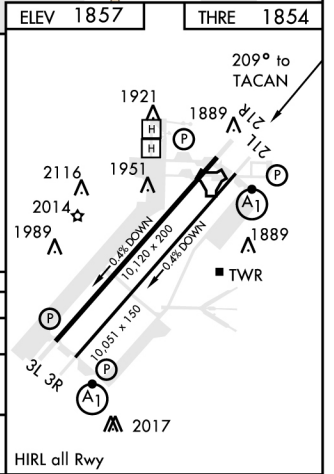
* When ALS inop, increase all CAT RVR to 40, vis to ¼ mile.
 ** When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1½ miles.

ALS-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 125.5	NELLIS APP CON 118.125 291.725	NELLIS TOWER 132.65 327.1 38.8	GND CON 121.8 275.8	CLNC DEL NA
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15,000 LSV R-209	ROCKX LSV 2.5	ARC OE R-357 30	↑↑ Loc Only	SHEET Intcp Lczzr 13.2	KRYSS 21
hdg 020°			ROTSE /RADAR 7.2		
TACAN	SESDE 0.6	JELIR 3.8	4200	5000	8900
		↑↑ 3200			GS 3.00° TCH 50
.4	3.2 NM	3.4 NM			
CATEGORY	A	B	C	D	E
S-ILS 21L *	2065/24		200	(200-½)	
S-LOC 21L **	2440/24 575 (600-½)		2440-1¼ 575 (600-1¼)		
CIRCLING ***	2480-1	2680-1¼	2680-2½	2860-3	3120-3
	611 (700-1)	811 (900-1¼)	811 (900-2½)	991 (1000-3)	1251 (1300-3)



ILS or LOC/DME X RWY 21L

476 vFG JAN 2019

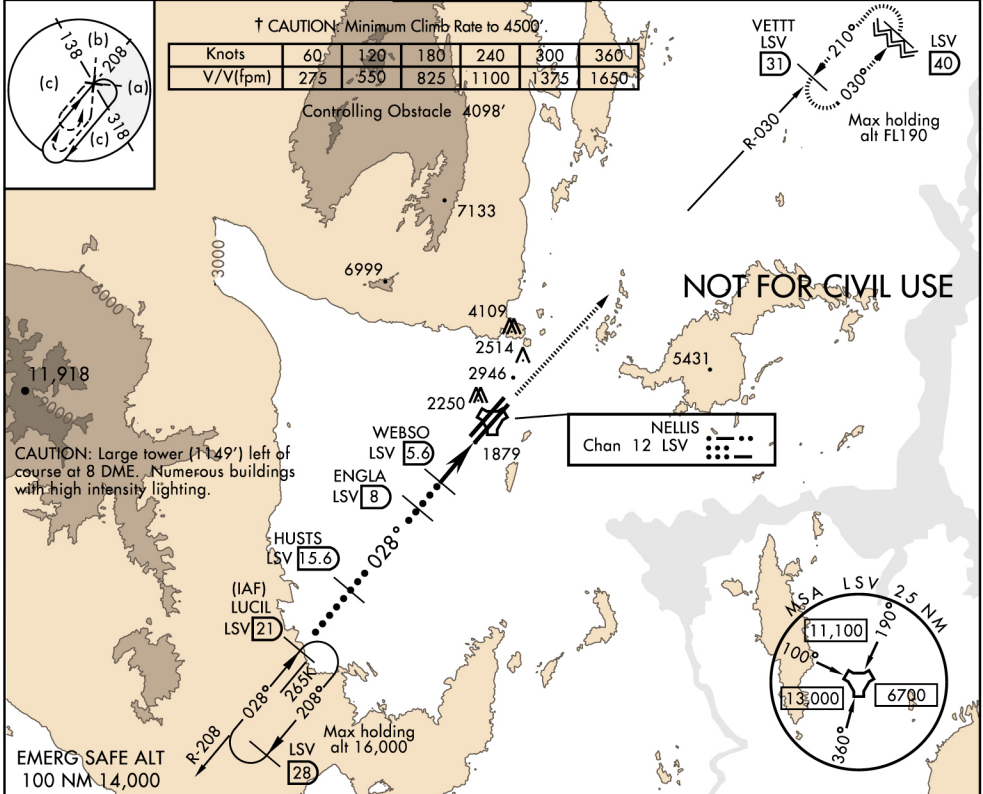
476 vFG JAN 2019

HI-TACAN RWY 3R

TACAN LSV Chan 12	APCH CRS 028°	Rwy ldg 10,051 THRE 1841 Arpt Elev 1857	476 VFG	NELLIS AFB (KLSV)
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* 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 	† MISSED APPROACH: Climb to 9000 on LSV TACAN R-030 to VETT and hold, continue climb in hold to 9000.
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ATIS 125.5	NELLIS APP CON 118.125 291.725	NELLIS TOWER 132.65 327.1 38.8	GND CON 121.8 275.8	CLNC DEL NA
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476 VFG JAN 2019

476 VFG JAN 2019

	LUCIL (21)	HUSTS (15.6)	ENGLA (8)	WEBSO (5.6)	TACAN	VETT (31)	ELEV 1857	THRE 1841
	10,000	6300	3900	3200		9000 LSV	HIRL all Rwy	1921
	3.04°	028°	028°	028°	028°	R-030		1889
								1951
								2014
								2017
CATEGORY	C	D	E					
S-3R*	2760-2	934	(900-2)					
CIRCLING***	2760-2¾ 891 (900-2¾)	2860-3 991 (1000-3)	3120-3 1251 (1300-3)					
BELOW MINIMA REQUIRES MISSED APPROACH CLIMB GRADIENT								
† S-3R**	2320/50	494	(500-1)					
† CIRCLING***	2680-2½ 811 (900-2½)	2860-3 991 (1000-3)	3120-3 1251 (1300-3)					

HI-TACAN RWY 3R

LAS VEGAS, NEVADA

HI-TACAN Y RWY 21L

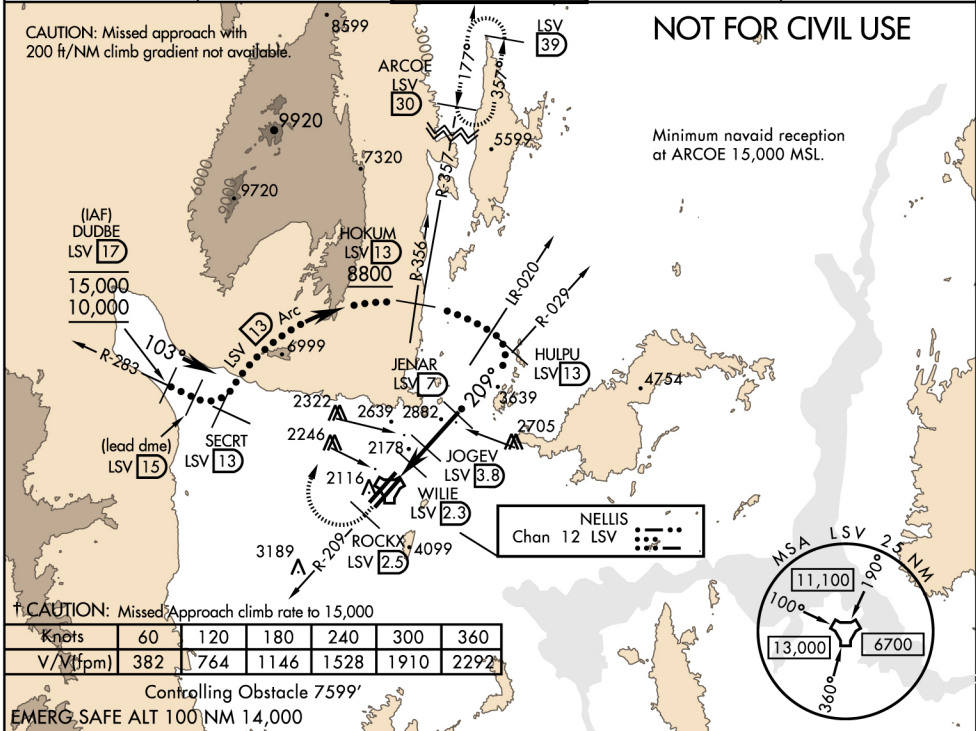
TACAN LSV Chan 12	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arpt Elev 1857
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476 VFG

NELLIS AFB (KLSV)

<p>▼ * When ALS inop, increase CAT CDE vis to 1 1/4 miles. ** Circling not authorized E of Rwy 3R-21L.</p>	<p>ALSF-1 </p> <p>† 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.</p>
--	--

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



† CAUTION: Missed Approach climb rate to 15,000

Knots	60	120	180	240	300	360
V/V(ftpm)	382	764	1146	1528	1910	2292

Controlling Obstacle 759'

EMERG. SAFE ALT 100 NM 14,000

<p>VGSI and descent angle not coincident. (VGSI Angle 3.00/TCH 54.4)</p>	<p>15,000 ROCKX LSV R-209 2.5</p>	<p>ARCOE R-357 30</p>	<p>ELEV 1857</p>	<p>THRE 1854</p>
--	---	---------------------------	------------------	------------------

CATEGORY	C	D	E
S-21L *	2480-1 1/8	615 (700-1 1/8)	
CIRCLING **	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)

HI-TACAN Y RWY 21L

LAS VEGAS, NEVADA

HI-TACAN Z RWY 21L

TACAN LSV
Chan 12

APCH CRS
209°

Rwy ldg 10,051
THRE 1854
Arpt Elev 1857

476 vFG

NELLIS AFB (KLSV)

▼* When ALS inop, increase CAT CDE vis to 1¼ 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

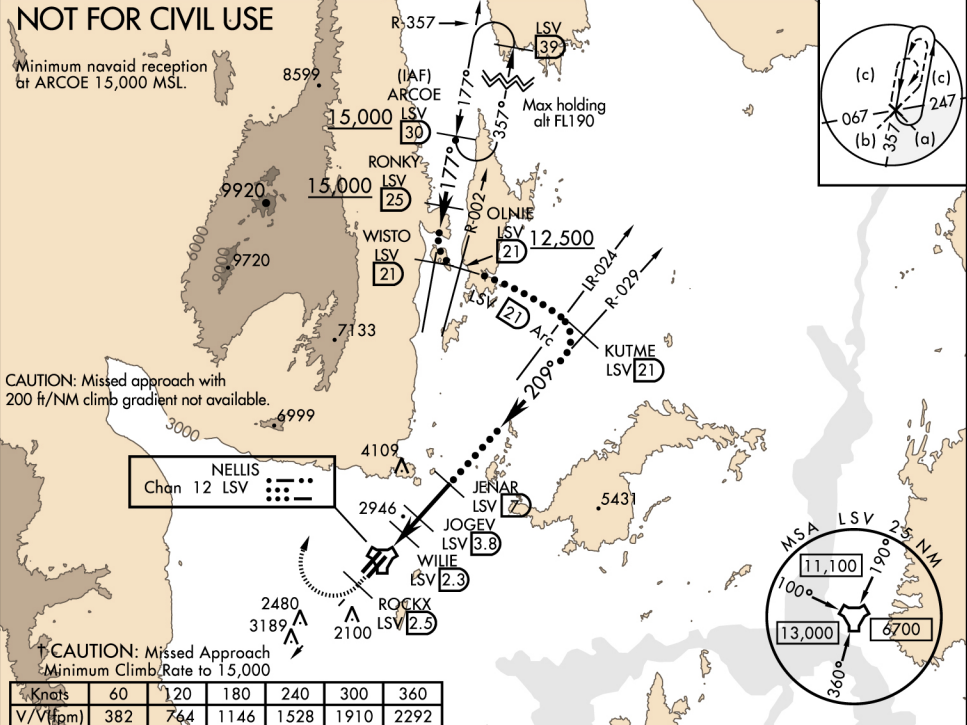
NELLIS TOWER
132.65 327.1 38.8

GND CON
121.8 275.8

CLNC DEL
NA

NOT FOR CIVIL USE

Minimum navaid reception
bt ARCOE 15,000 MSL.



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

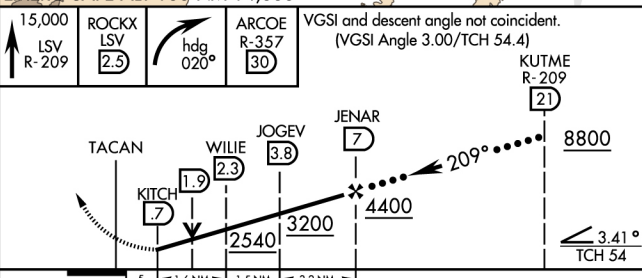
NELLIS
Chan 12 LSV

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

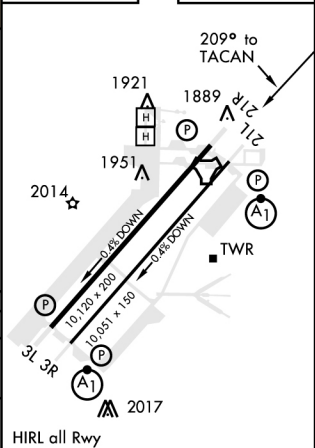
Knots	60	120	180	240	300	360
V/ftpm	382	764	1146	1528	1910	2292

Controlling Obstacle 7599'

EMERG SAFE ALT 100 NM 14,000



ELEV 1857 THRE 1854



476 vFG JAN 2019

476 vFG JAN 2019

LAS VEGAS, NEVADA

36°14'N-115°02'W

NELLIS AFB (KLSV)

HI-TACAN Z RWY 21L

LAS VEGAS, NEVADA

TACAN X RWY 21L

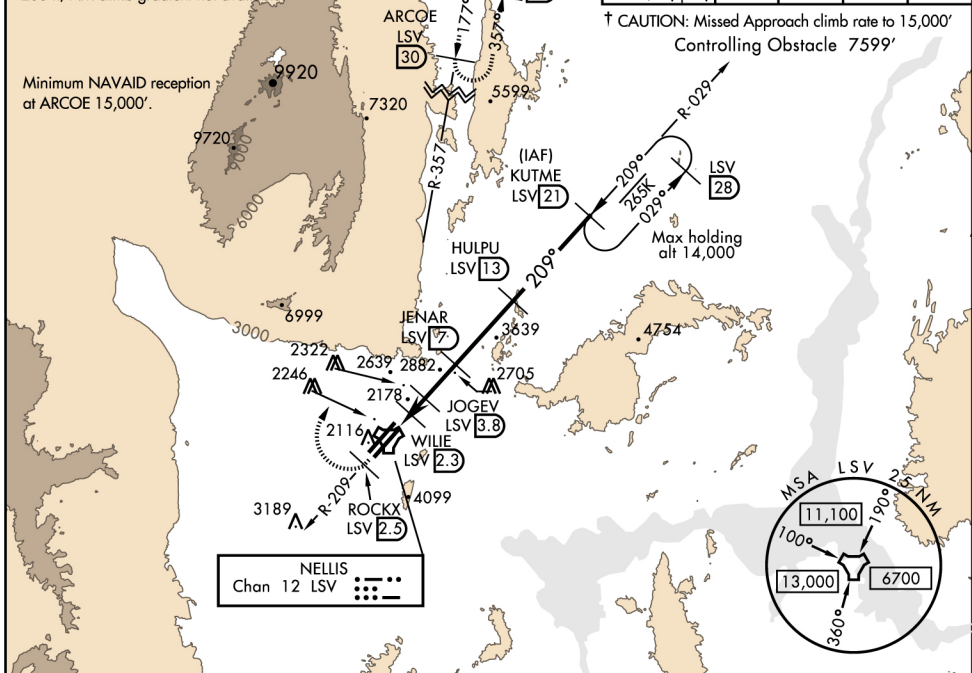
TACAN LSV Chan 12	APCH CRS 209°	Rwy ldg 10,051 THRE 1854 Arpt Elev 1857	476 vFG	NELLIS AFB (KLSV)
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▼ * When ALS inop, increase CAT AB RVR to 55, vis to 1 mile, CAT CDE vis to 1¼ miles.
 ** Circling not authorized E of Rwy 3R-21L.

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 125.5	NELLIS APP CON 118.125 291.725	NELLIS TOWER 132.65 327.1 38.8	GND CON 121.8 275.8	CLNC DEL NA
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CAUTION: Missed approach with 200 ft/NM climb gradient not available.	Knots	60	120	180	240
	V/V(fpm)	382	764	1146	1528

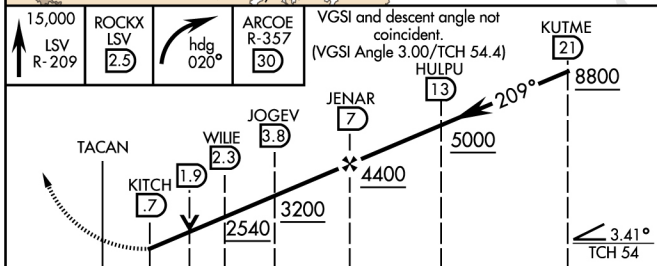


476 vFG JAN 2019

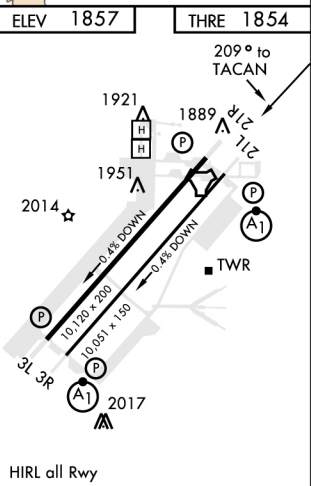
476 vFG JAN 2019

NOT FOR CIVIL USE

EMERG SAFE ALT 100 NM 14,000



CATEGORY	A	B	C	D	E
S-21L *	2480/24	615 (700-½)	2480-1¾	615 (700-1¾)	
CIRCLING **	2480-1 611 (700-1)	2680-1¼ 811 (900-1¼)	2680-2½ 811 (900-2½)	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)

LAS VEGAS, NEVADA

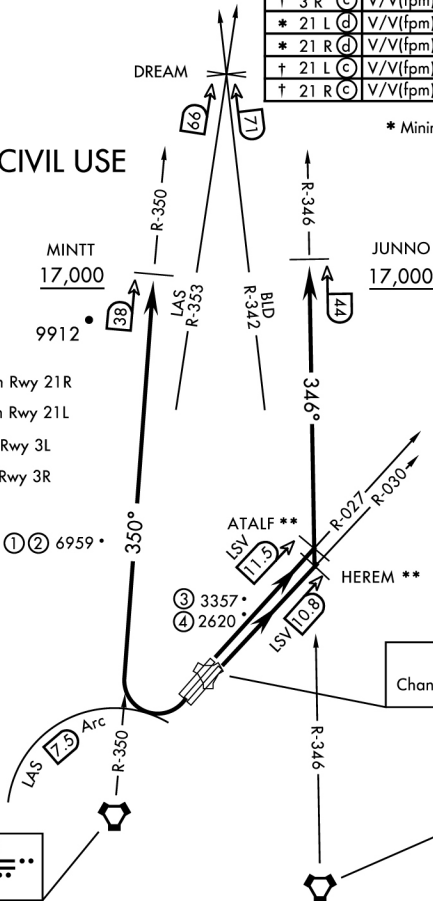
ATIS 270.1
 CLNC DEL
 NA
 GND CON
 121.8 275.8
 NELLIS TOWER
 132.65 327.1 38.8
 NELLIS DEP CON
 135.1 385.4

476 vFG

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	1992	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

* Minimum † ATC Climb Rate (a) to 3600
 (b) to 3100
 (c) to 17,000
 (d) to 8500

NOT FOR CIVIL USE



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

** Lead DME:
 ATALF - LSV 9.5
 HEREM - LSV 8.8

- 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

① ② 6959 •

③ 3357 •

④ 2620 •

LAS VEGAS
 116.9 LAS
 Chan 116

BOULDER CITY
 116.7 BLD
 Chan 114

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.

DREAM FOUR DEPARTURE (DREAM4 • DREAM)

LAS VEGAS, NEVADA
 NELLIS AFB (KLSV)

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 (a)	V/V(fpm)	400	800	1200	1600	2000	2400
3R (a)	V/V(fpm)	395	790	1185	1580	1975	2370
21L/R (b)	V/V(fpm)	390	780	1170	1560	1950	2340

Minimum Climb Rate

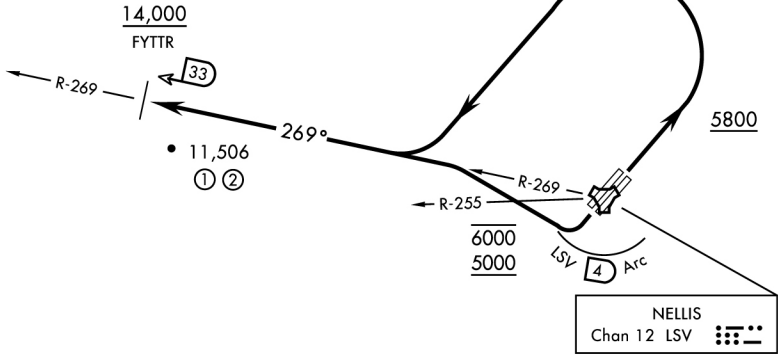
(a) to 9600

(b) 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.

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476 vFG JAN 2019

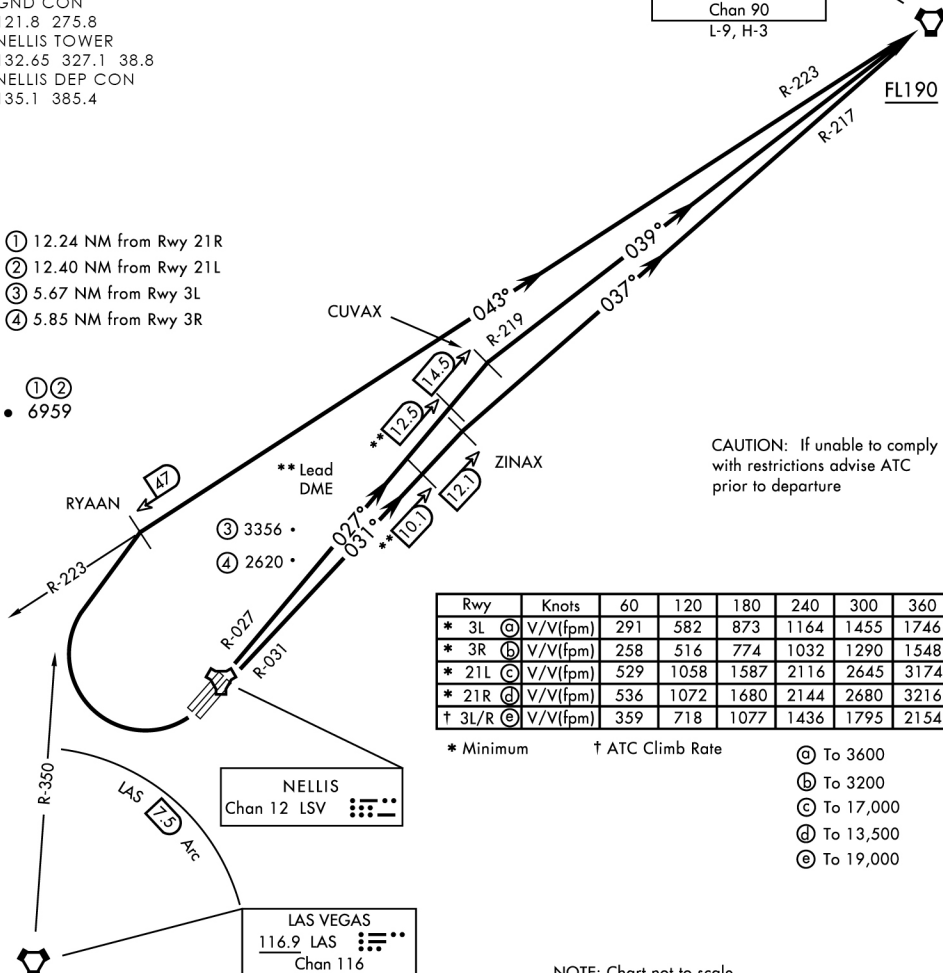
ATIS 270.1
 CLNC DEL
 NA
 GND CON
 121.8 275.8
 NELLIS TOWER
 132.65 327.1 38.8
 NELLIS DEP CON
 135.1 385.4

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

- ① ②
- 6959



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

Rwy	Knots	60	120	180	240	300	360
* 3L (a)	V/V(fpm)	291	582	873	1164	1455	1746
* 3R (b)	V/V(fpm)	258	516	774	1032	1290	1548
* 21L (c)	V/V(fpm)	529	1058	1587	2116	2645	3174
* 21R (d)	V/V(fpm)	536	1072	1680	2144	2680	3216
† 3L/R (e)	V/V(fpm)	359	718	1077	1436	1795	2154

* Minimum † ATC Climb Rate

- (a) To 3600
- (b) To 3200
- (c) To 17,000
- (d) To 13,500
- (e) To 19,000

NOTE: Chart not to scale

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 3L: Fly runway heading to intercept LSV TACAN R-027 then direct CUVAX, 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.

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476 vFG JAN 2019

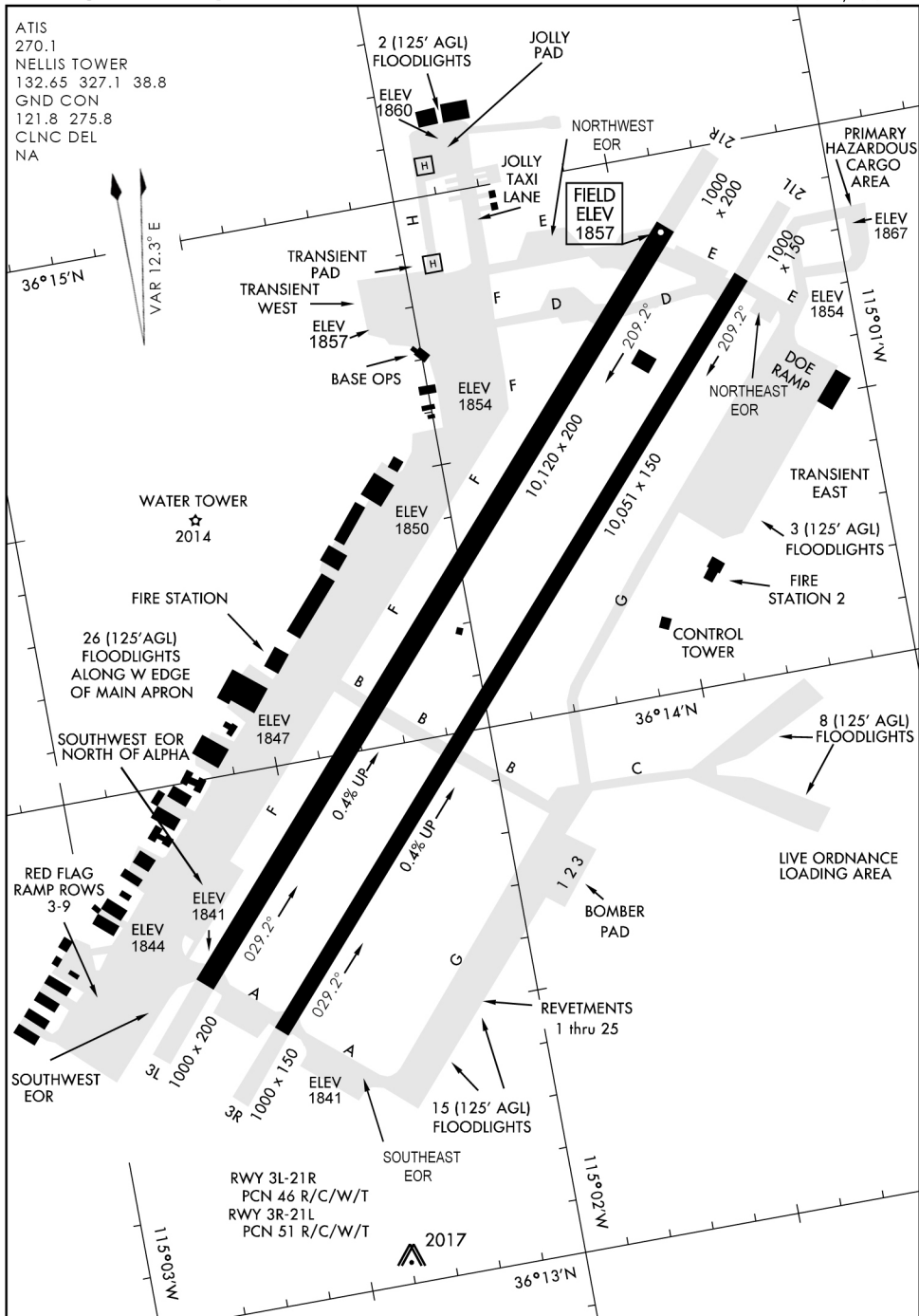
AIRPORT DIAGRAM

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

476 vFG

476 vFG JAN 2019

476 vFG JAN 2019



AIRPORT DIAGRAM

LAS VEGAS, NEVADA

LOC/DME I-HWG 110.7 Chan NA	APP CRS 120°	Rwy Idg TDZE Apt Elev	4203 2189 2228
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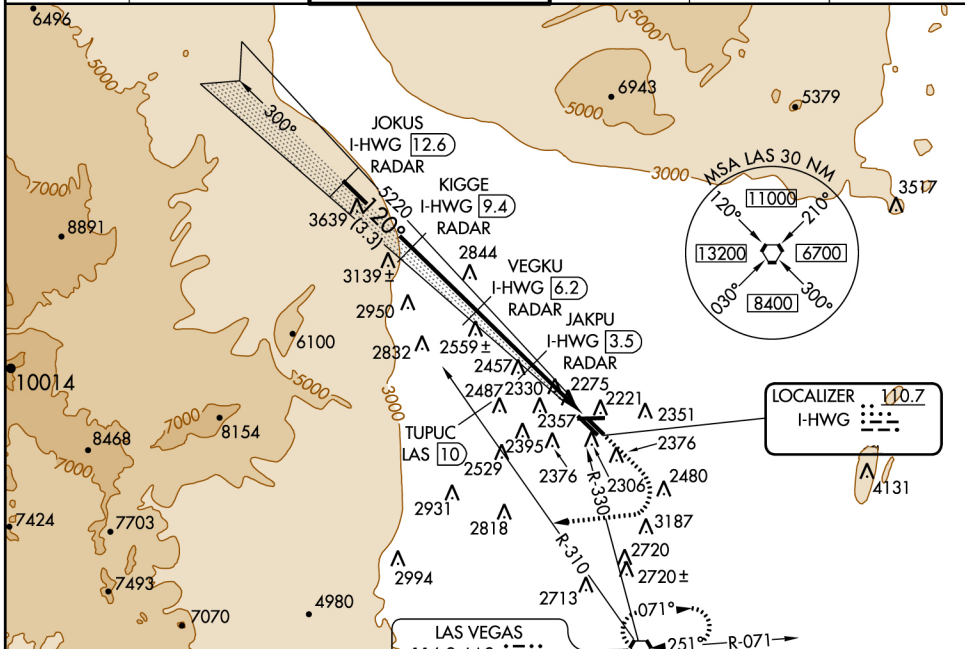
ILS or LOC RWY 12L

NORTH LAS VEGAS (VGT)

⚠ When local altimeter setting not received, use McCarran Intl altimeter setting and increase DA to 2478, and visibility Cats A/B 1/4 mile; increase all MDA 40 feet. DME and RADAR required.

MISSED 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.

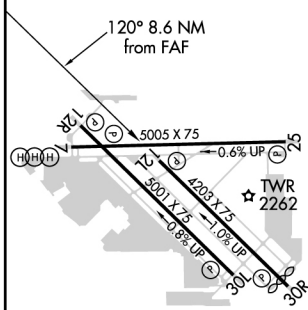
ATIS 118.05	LAS VEGAS APP CON 119.4 360.85	NORTH LAS VEGAS TOWER* 125.8 360.85 38.55	GND CON 121.7	CLNC DEL NA	UNICOM NA
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476 VFG JAN 2019

476 VFG JAN 2019

ELEV 2205	TDZE 2189
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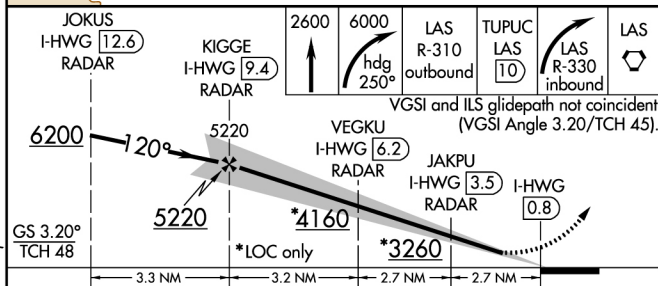
REIL all Rwys
MIRL all Rwy

FAF to MAP 8.6 NM					
Knots	60	90	120	150	180
Min:Sec	8:36	5:44	4:18	3:26	2:52

LAS VEGAS, NEVADA

Orig-C

DME and RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 12L	2456-1	267 (300-1)		NA
S-LOC 12L	2580-1	391 (400-1)		NA
CIRCLING	2680-1	475 (500-1)		NA

36°13'N-115°12'W

NORTH LAS VEGAS (VGT)

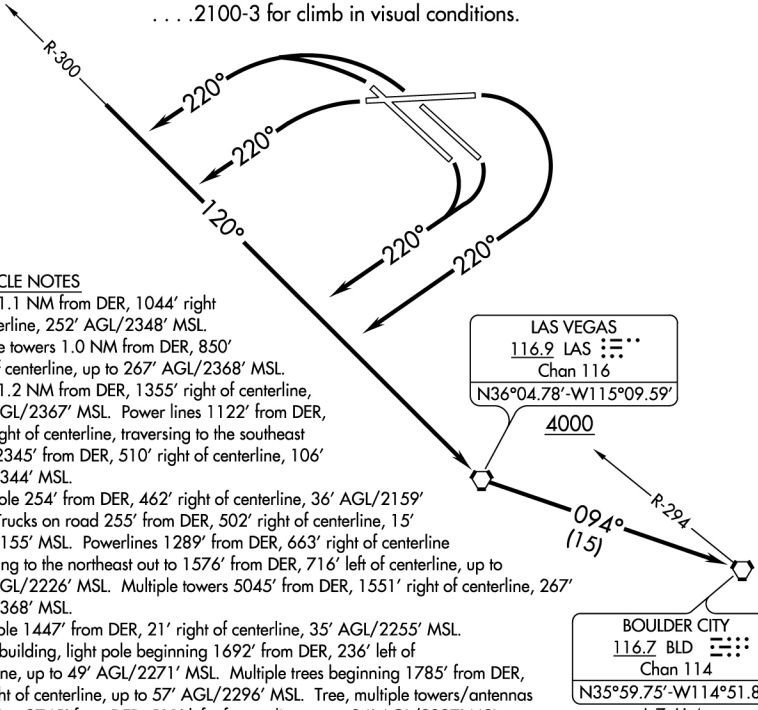
ILS or LOC RWY 12L

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.



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, 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.
- Rwy 25: Light pole 1447' from DER, 21' right of centerline, 35' AGL/2255' MSL.
- Rwy 30L: Signs, building, light pole beginning 1692' from DER, 236' left of centerline, up to 49' AGL/2271' MSL. Multiple trees beginning 1785' from DER, 78' right of centerline, up to 57' AGL/2296' MSL. Tree, multiple towers/antennas beginning 2745' from DER, 511' left of centerline, up to 84' AGL/2397' MSL.
- Rwy 30R: Antenna tower 4639' from DER, 1736' left of centerline, 84' AGL/2327' MSL. Anemometer 552' from DER, 570' left of centerline, 34' AGL/2216' MSL. Vent on building 1632' from DER, 566' right of centerline, 58' AGL/2240' MSL. Antenna on hangar 2012' from DER, 195' right of centerline, 61' AGL/2247' MSL.

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.

476 VFG JAN 2019

476 VFG JAN 2019

NORTHTOWN FOUR DEPARTURE

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

RUZCO
N36°14.54'
W115°17.12'
5000

**TOP ALTITUDE:
ASSIGNED BY ATC**

TAKEOFF MINIMUMS

- Rwy 25: Standard with minimum climb of 425' per NM to 5000.
- Rwy 30L: Standard with minimum climb of 415' per NM to 5000.
- Rwy 30R: Standard with minimum climb of 390' per NM to 5000.

TAKEOFF OBSTACLE NOTES

- Rwy 25: Light pole 1447' from DER, 21' right of centerline, up to 35' AGL/2255' MSL.
- Rwy 30L: Signs, buildings and light poles beginning 1692' from DER, 236' left of centerline, up to 49' AGL/2271' MSL.
Multiple trees beginning 1785' from DER, 78' right of centerline, up to 57' AGL/2296' MSL.
Trees, multiple towers/antennas beginning 2745' from DER, 511' left of centerline, up to 84' AGL/2397' MSL.
- Rwy 30R: Antenna tower 4639' from DER, 1736' left of centerline, up to 84' AGL/2327' MSL.
Anemometer 552' from DER, 570' left of centerline, 34' AGL/2216' MSL.
Vent on building 1632' from DER, 566' right of centerline, 58' AGL/2240' MSL.
Antenna on hanger 1012' from DER, 195' right of centerline, 61' AGL/2247' MSL.

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.

476 VFG JAN 2019

476 VFG JAN 2019

(RTRN2.LAS) 19021

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

RUZCO
N36°14.54'
W115°17.12'
5000
3700

**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.

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 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.

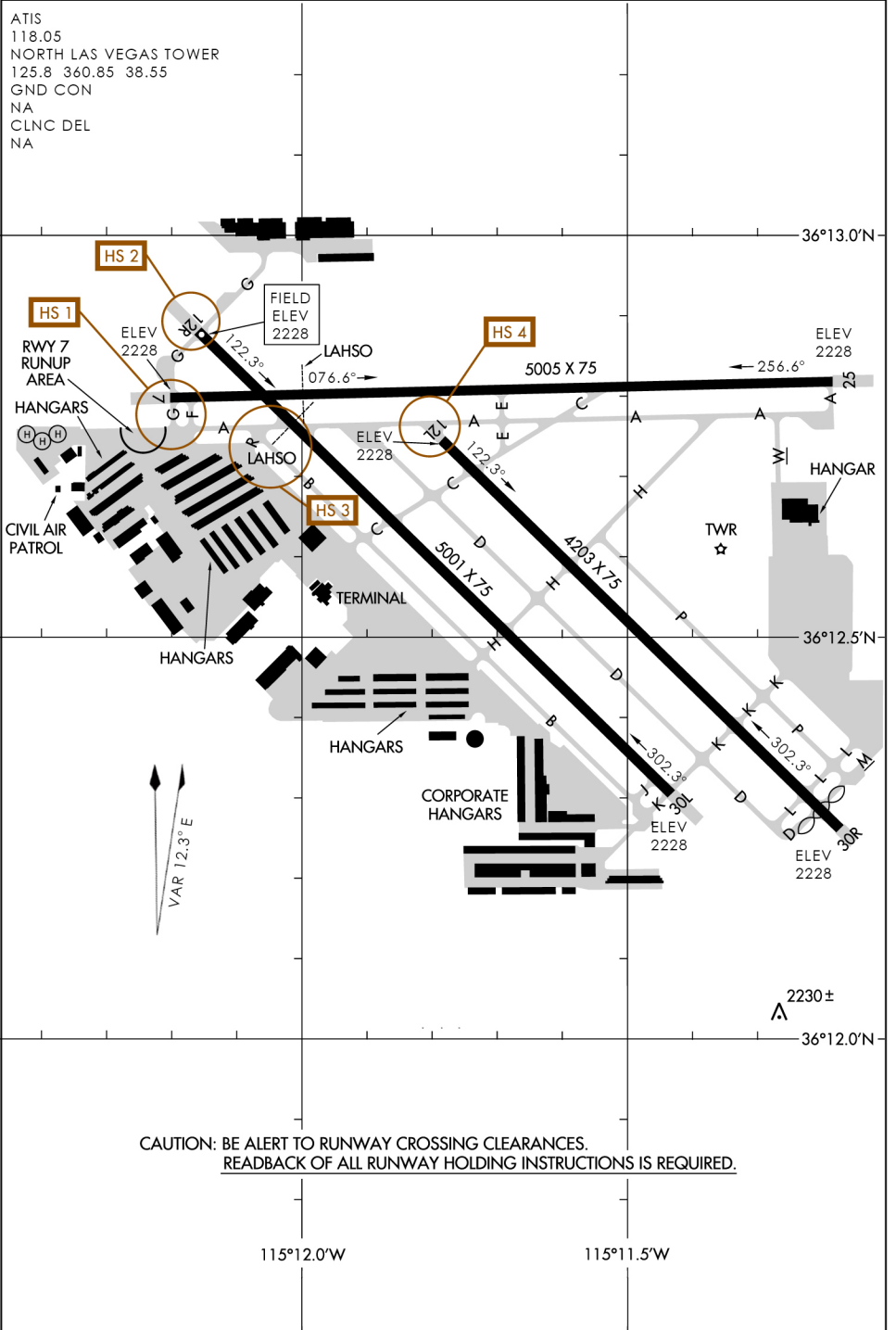
RIGHTTURN TWO DEPARTURE
(RTRN2.LAS) 19021

LAS VEGAS, NEVADA
NORTH LAS VEGAS (VGT)

476 VFG JAN 2019

476 VFG JAN 2019

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



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

476 vFG JAN 2019

476 vFG JAN 2019

19021

AIRPORT DIAGRAM

476 VFG

PAHUTA MESA AIRSTRIP (L23)

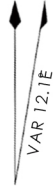
MERCURY, NEVADA

ATIS
 NA
 PAHUTA MESA CTAF
 122.9
 GND CON
 NA
 CLNC DEL

1161.81 W

ELEV 5056

181.9°



5800 X 100

476 VFG JAN 2019

476 VFG JAN 2019

37°06'N

FIELD
 ELEV
 5059

01.9°

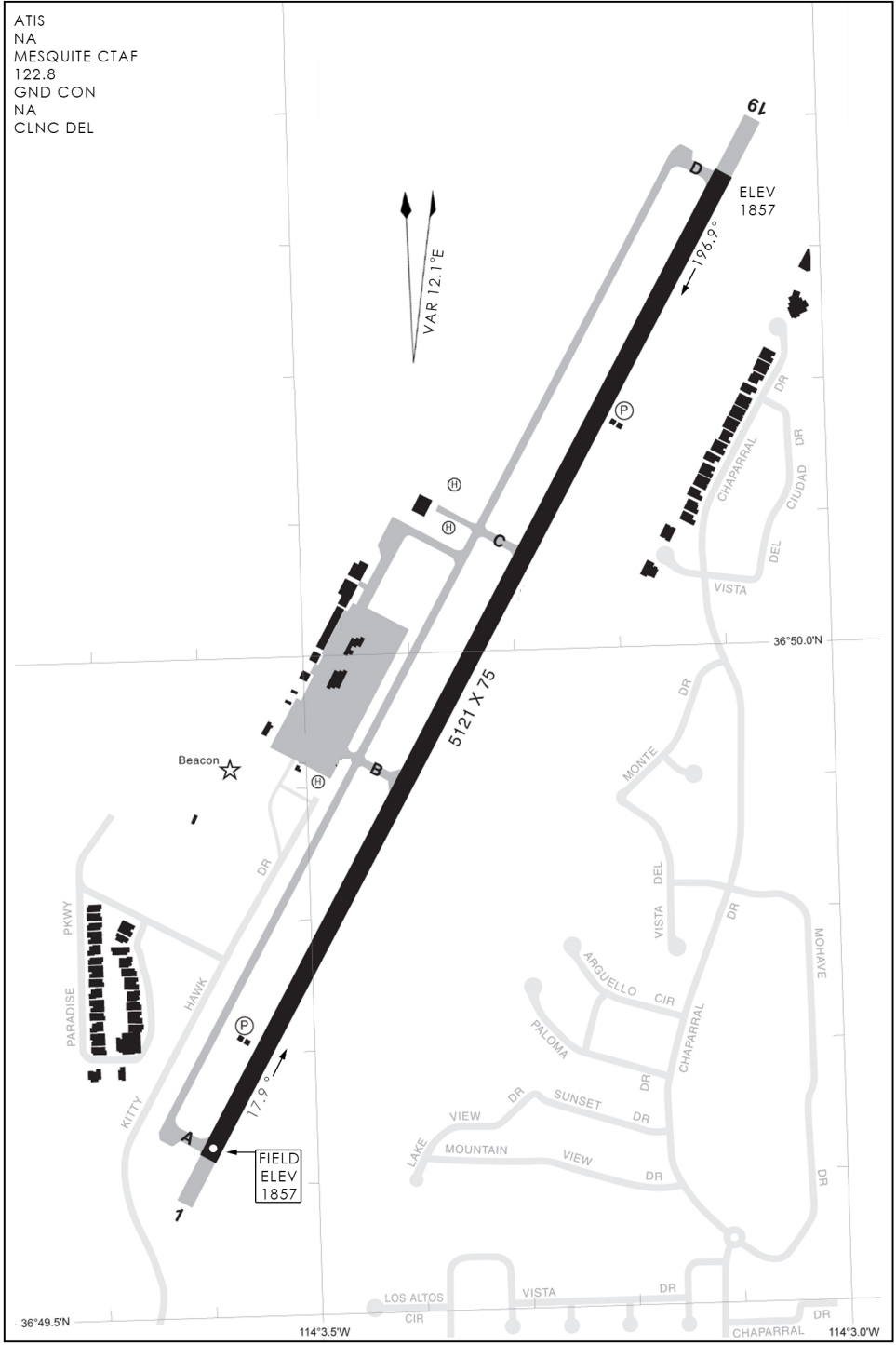
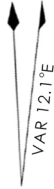
AIRPORT DIAGRAM

MERCURY, NEVADA

PAHUTA MESA AIRSTRIP (L23)

AIRPORT DIAGRAM

ATIS
 NA
 MESQUITE CTAF
 122.8
 GND CON
 NA
 CLNC DEL

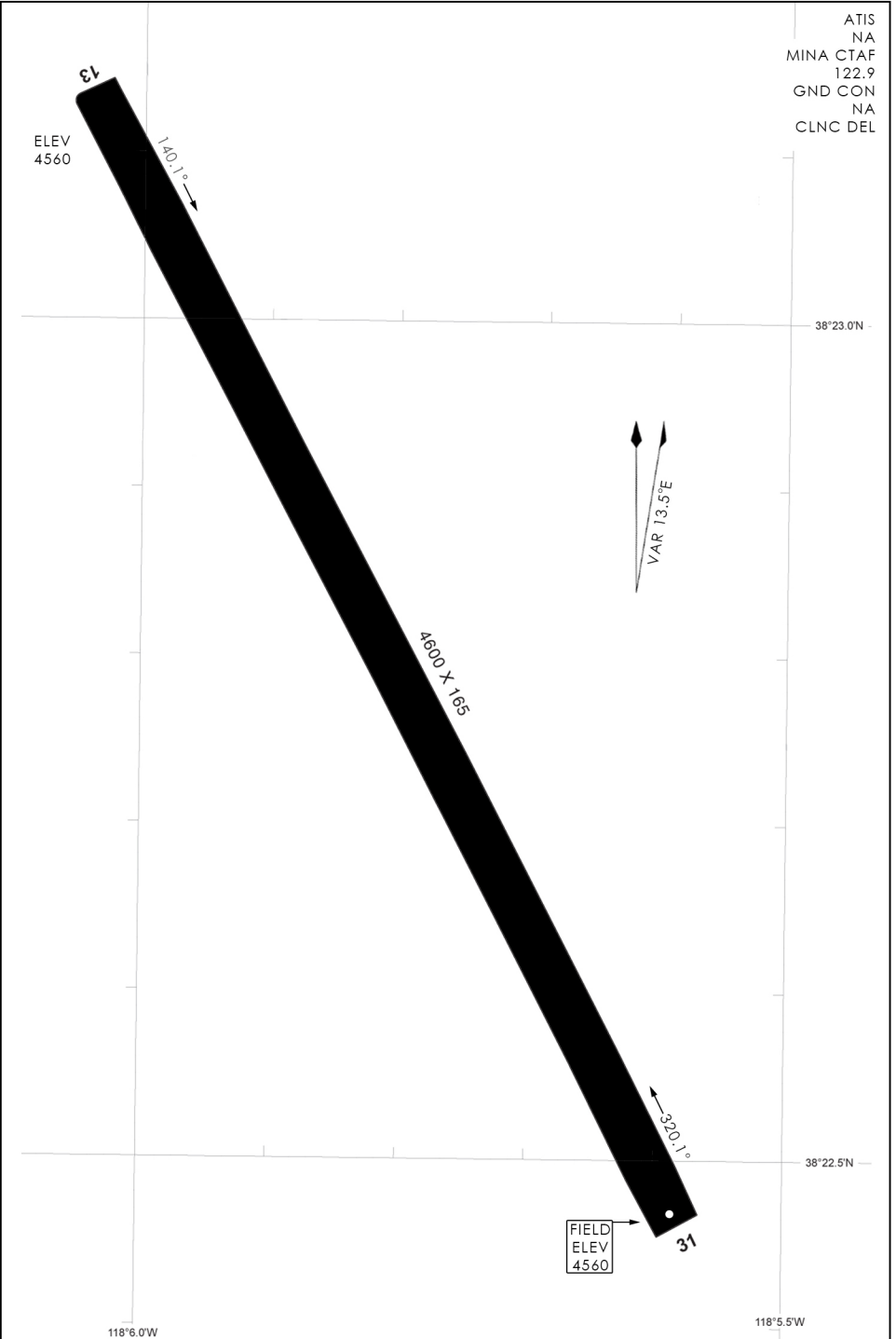


476 VFG JAN 2019

476 VFG JAN 2019

AIRPORT DIAGRAM

ATIS
 NA
 MINA CTAF
 122.9
 GND CON
 NA
 CLNC DEL



476 VFG JAN 2019

476 VFG JAN 2019

19021

AIRPORT DIAGRAM

476 VFG

ECHO BAY AIRPORT (0L9)

OVERTON, NEVADA

ATIS
 NA
 ECHO BAY CTAF
 122.8
 GND CON
 NA
 CLNC DEL

24
 ELEV
 1502

245.9°

114°27.5'W

VAR 12.2° E

AIRSTRIIP

RD

3400 X 50



476 VFG JAN 2019

476 VFG JAN 2019

FIELD
 ELEV
 1550

6

66.9°

114°28.0'W

36°18.5'N

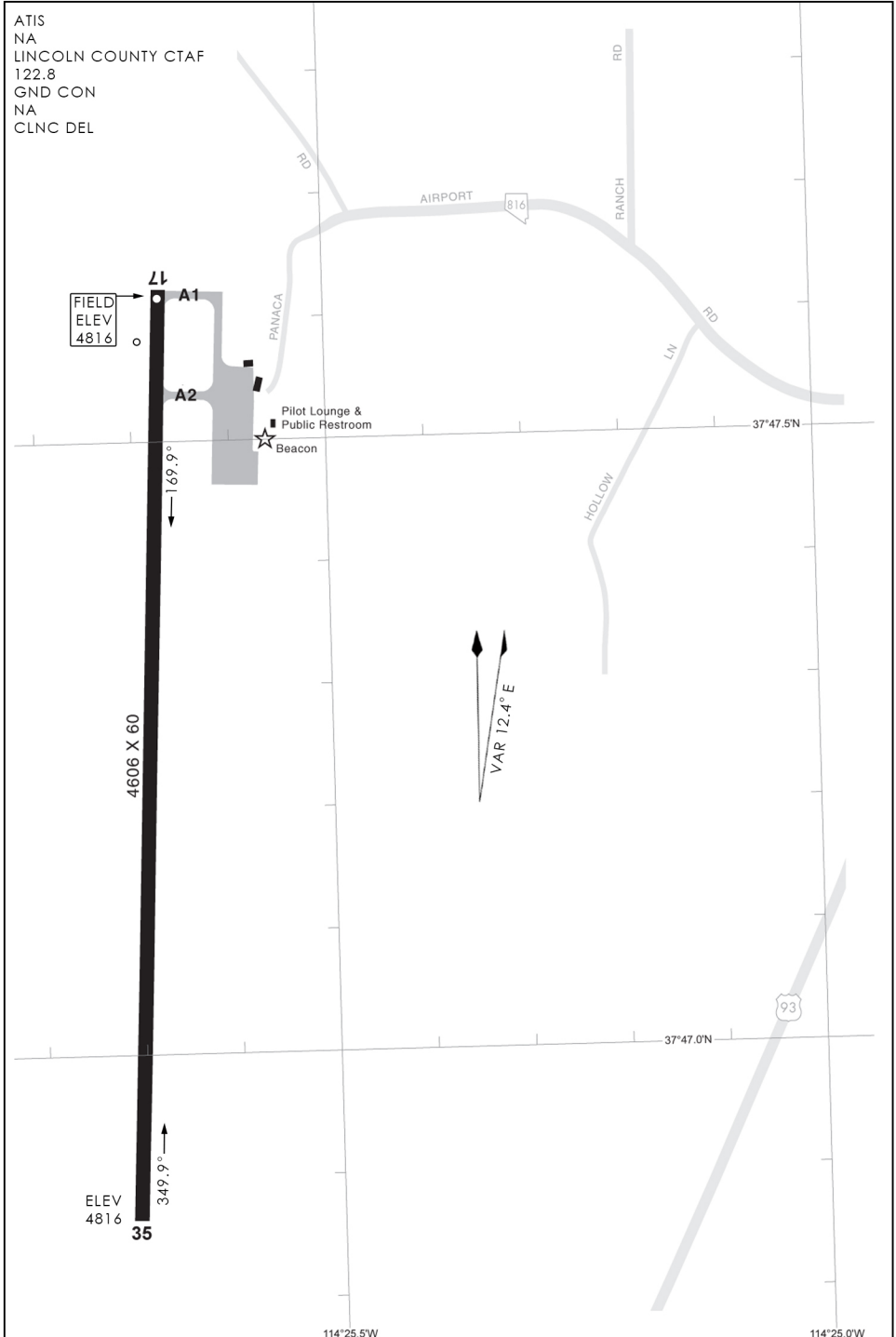
AIRPORT DIAGRAM

OVERTON, NEVADA

ECHO BAY AIRPORT (0L9)

AIRPORT DIAGRAM

ATIS
 NA
 LINCOLN COUNTY CTAF
 122.8
 GND CON
 NA
 CLNC DEL



476 VFG JAN 2019

476 VFG JAN 2019

AIRPORT DIAGRAM

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

115°50' W

115°49' W

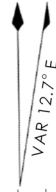
115°48' W

37°16' N

37°15' N

37°14' N

37°13' N



7P1

ELEV
4459

NORTH
EOR
BAK-2

CONTROL
TOWER

11,007 X 150

32A,9°

BAK-12

FIELD ELEV 4495

SOUTH
EOR

32R

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476 VFG JAN 2019

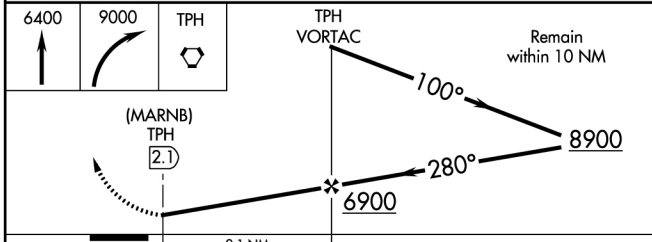
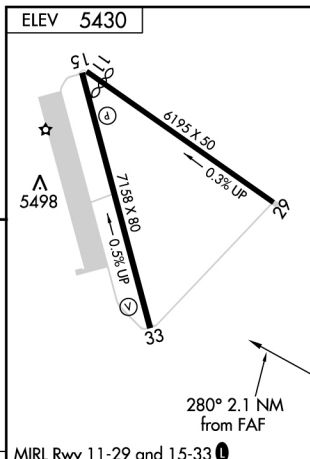
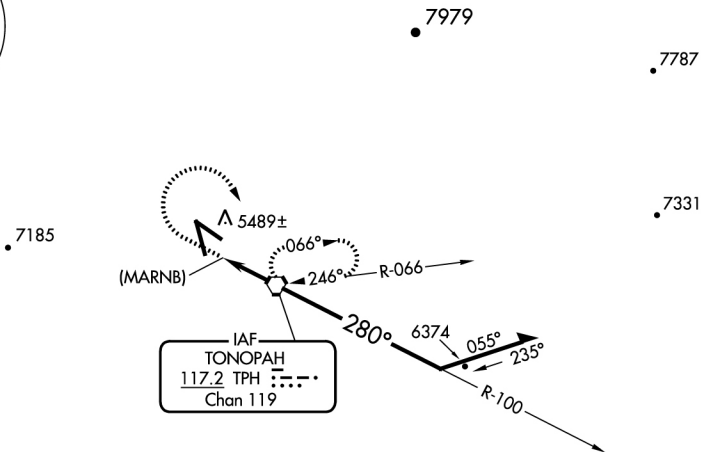
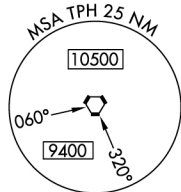
TONOPAHA, NEVADA

VORTAC TPH 117.2 Chan 119	APP CRS 280°	Rwy Idg TDZE Apt Elev	N/A N/A 5390
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VOR or GPS-A TONOPAHA (TPH)

MISSED APPROACH: Climb to 6400 then climbing right turn to 9000 direct TPH VORTAC and hold.

CTAF 123.0	NELLIS APP CON	UNICOM NA
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CATEGORY	A	B	C	D	FAF to MAP 2.1 NM					
CIRCLING	6100-1 670 (700-1)		6100-2 670 (700-2)	6100-2½ 670 (700-2½)	Knots	60	90	120	150	180
					Min:Sec	2:06	1:24	1:03	0:50	0:42

TONOPAHA, NEVADA

38°04'N - 117°05'W

TONOPAHA (TPH) VOR or GPS-A

476 VFG JAN 2019

476 VFG JAN 2019

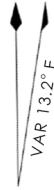
AIRPORT DIAGRAM

476 VFG

TONOPAH (KTPH)

TONOPAH, NEVADA

ATIS
 NA
 TONOPAH CTAF
 123.0
 GND CON
 NA
 CLNC DEL
 NA



FIELD
 ELEV
 5390

ELEV
5430

38°04'N

▲
 5498

7158 X 80

6195 X 50

292.2°

ELEV
5390

38°03'N

ELEV
5390

332.2°

RWY 11-29
 S-30, D-66, 2S-84, 2D-77
 RWY 15-33
 S-30

117°06'W

117°05'W

476 VFG JAN 2019

476 VFG JAN 2019

AIRPORT DIAGRAM

TONOPAH, NEVADA

TONOPAH (KTPH)

TONOPAH, NEVADA

ILS or LOC/DME RWY 14

LOC I-RVP 108.3	APCH CRS 141°	Rwy ldg THRE 5473 Arprt Elev 5535
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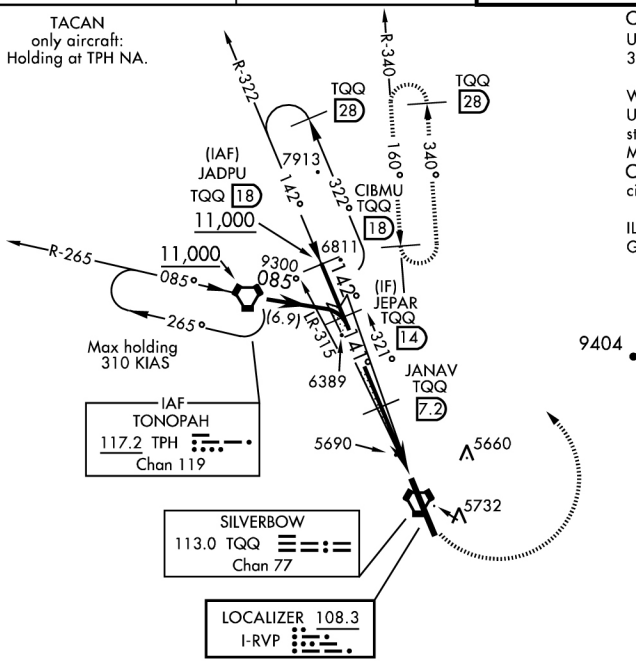
TONOPAH TEST RANGE (KTNX)

▼ *When ALS inop, increase CAT ABCDE vis to ¾ mile.
 **When ALS inop, increase CAT AB vis to 1 mile, CAT CDE to 1½ miles.
 *** Circling not authorized West of Rwy 14/32.

ALSF-1 MISSED APPROACH: Turn left climbing to 11,000 via TQQ R-340 to CIBMU 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
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TACAN
only aircraft:
Holding at TPH NA.



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.

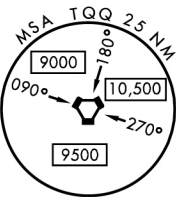
CAUTION: When Rwy 32 VGSI inop, circling to Rwy 32 NA at night.

ILS Rwy 14; ILS procedure NA for Height Group 4 aircraft due to low TCH.

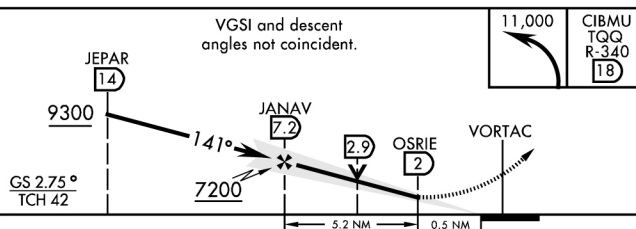
IAF
TONOPAH
117.2 TPH Chan 119

SILVERBOW
113.0 TQQ Chan 77

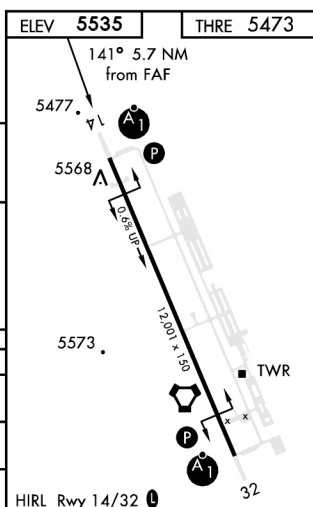
LOCALIZER 108.3
I-RVP



EMERG SAFE ALT 100 NM 16,600



CATEGORY	A	B	C	D	E
S-ILS 14 *	5673 - ½		200	(200-½)	
S-LOC 14 **	5960 - ½ 487 (500-½)		5960-1	487	(500-1)
CIRCLING ***	6040-1 490 (500-1)		6040-1½ 490 (500-1½)	6100-2 550 (600-2)	



TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

ILS or LOC/DME RWY 14

476 VFG JAN 2019

476 VFG JAN 2019

TONOPAH, NEVADA

ILS or LOC/DME RWY 32

TONOPAH TEST RANGE (KTNX)

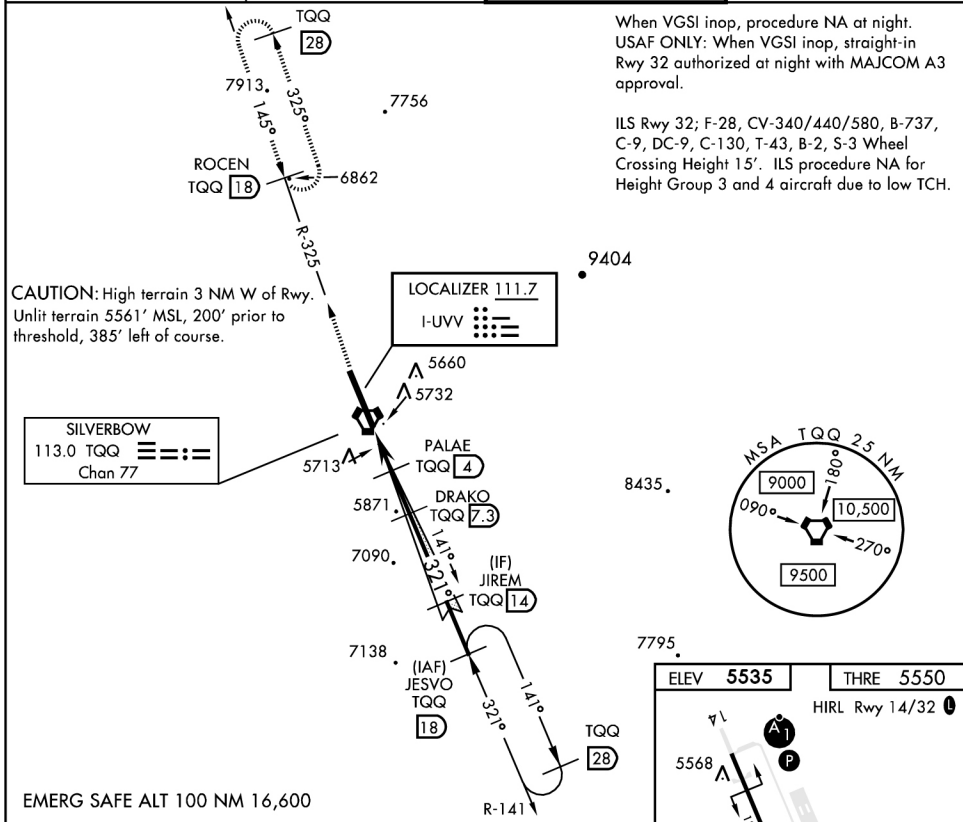
LOC I-UVV 111.7	APCH CRS 321°	Rwy ldg THRE Arprt Elev 12,001 5550 5535
---------------------------	-------------------------	--

▼ * When ALS inop, increase CAT CDE vis to 1¼ miles.
** Circling NA West of Rwy 14/32

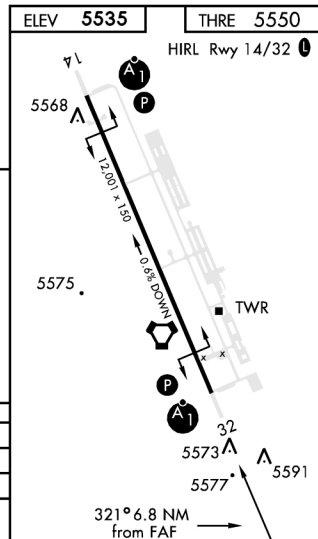
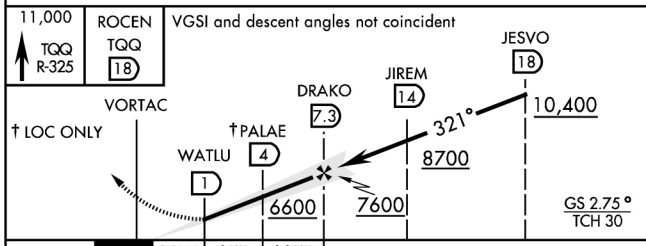


MISSED APPROACH: Climb to 11,000 via TQQ VORTAC R-325 to ROCEN and hold, continue climb in hold to 11,000.

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



When VGSi inop, procedure NA at night.
USAF ONLY: When VGSi inop, straight-in Rwy 32 authorized at night with MAJCOM A3 approval.
ILS Rwy 32; F-28, CV-340/440/580, B-737, C-9, DC-9, C-130, T-43, B-2, S-3 Wheel Crossing Height 15'. ILS procedure NA for Height Group 3 and 4 aircraft due to low TCH.



CATEGORY	A	B	C	D	E
S-ILS 32		5800-1	250	(300-1)	
S-LOC 32 *		5980-1	430	(500-1)	
ⓐ CIRCLING **	6040-1 490 (500-1)	6040-1 ½ 490 (500-½)	6100-2 550 (600-2)		

TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

ILS or LOC/DME RWY 32

476 VFG JAN 2019

476 VFG JAN 2019

TONOPAH, NEVADA

VOR/DME or TACAN RWY 14

TONOPAH TEST RANGE (KTNX)

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

▼ * When ALS inop, increase CAT AB vis to 1 mile, CAT CDE vis to 1 3/8 miles.
** Circling not authorized West of Rwy 32.



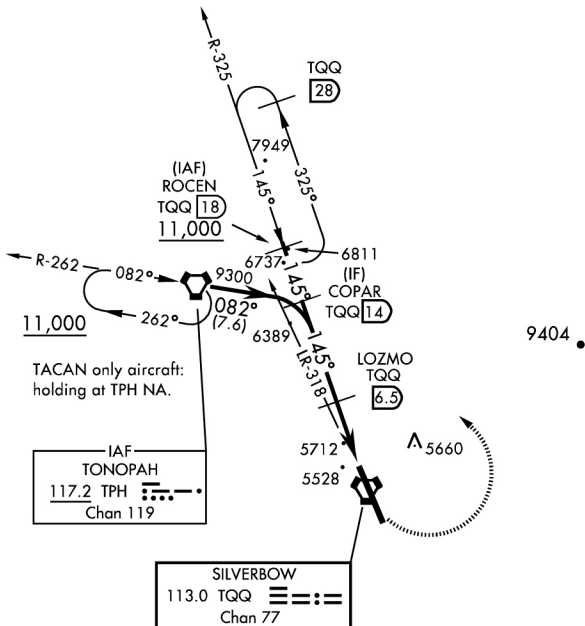
MISSED APPROACH: Turn left climbing to 11,000 via TQQ R-325 to ROCEN and hold, continue climb-in-hold to 11,000.

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

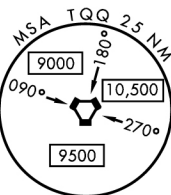
CAUTION: When Rwy 32 VGSI inop, circling to Rwy 32 NA at night.



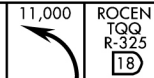
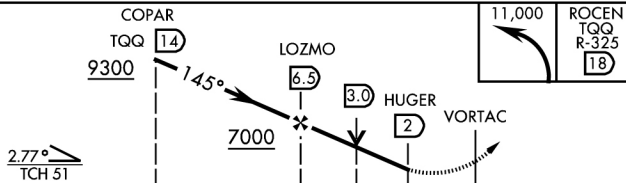
TACAN only aircraft:
holding at TPH NA.

IAF
TONOPAH
117.2 TPH
Chan 119

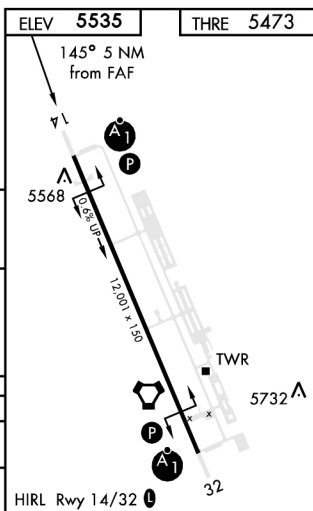
SILVERBOW
113.0 TQQ
Chan 77



EMERG SAFE ALT 100 NM 16,600



CATEGORY	A	B	C	D	E
S-14 *	5980-1/2 507 (500-1/2)		5980-1	507	(500-1)
Ⓞ CIRCLING **	6040-1 490 (500-1)		6040-1/2 490 (500-1/2)	6100-2 550 (600-2)	



TONOPAH, NEVADA

37°47'N - 116°47'W

TONOPAH TEST RANGE (KTNX)

VOR/DME or TACAN RWY 14

476 VFG JAN 2019

476 VFG JAN 2019

TONOPAH, NEVADA

VOR/DME or TACAN RWY 32

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

AL-3188 [USAF]

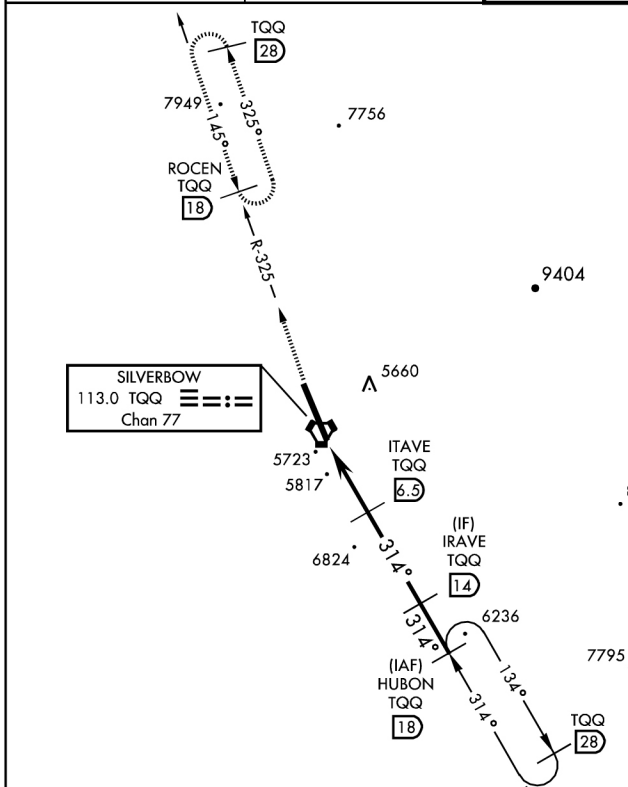
TONOPAH TEST RANGE (KTNX)

▼ * When ALS inop, increase CAT CDE vis to 1½ miles.
** Circling NA W of Rwy 14/32



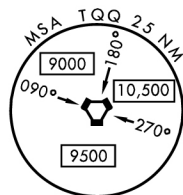
MISSED APPROACH: Climb to 11,000 via TQQ VORTAC R-325 to ROCEN and hold, continue climb in hold to 11,000.

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

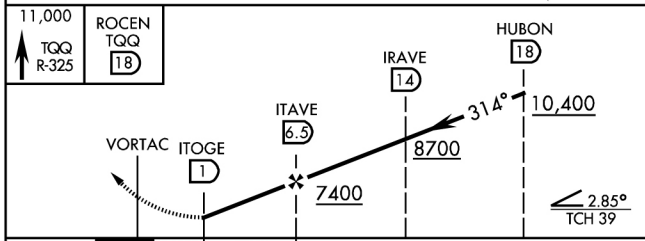


CAUTION: High terrain 3 NM W of Rwy. Unlit terrain 5561' MSL, 200' prior to threshold, 385' left of course.

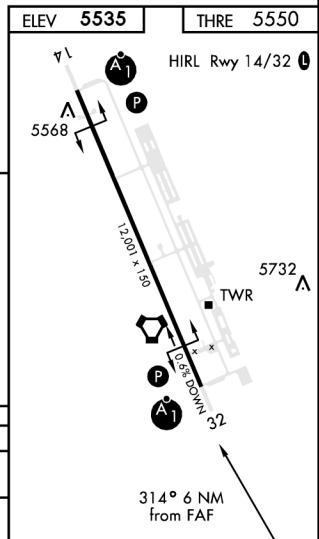
When VGSI inop, procedure NA at night.
USAF ONLY: When VGSI inop, straight-in Rwy 32 authorized at night with MAJCOM A3 approval.



EMERG SAFE ALT 100 NM 16,600



CATEGORY	A	B	C	D	E
S-32 *	6080-1 530 (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

476 VFG JAN 2019

476 VFG JAN 2019

TONOPAH, NEVADA

VOR/DME Z RWY 14

TONOPAH TEST RANGE (KTNX)

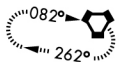
VORTAC TQQ 113.0 Chan 77	APCH CRS 145°	Rwy ldg THRE 5473 Arpt Elev 5535
---------------------------------------	-------------------------	--



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

<p>▼ *Circling not authorized W of Rwy 14/32.</p>		<p>SILVERBOW TOWER ★ 124.85 258.05 38.6</p>	<p>GND CON 127.25 275.8</p>
<p>AWOS NA</p>	<p>NELLIS CONTROL 119.35 254.4</p>		

TONOPAH
117.2 TPH
Chan 119

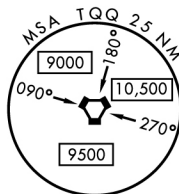
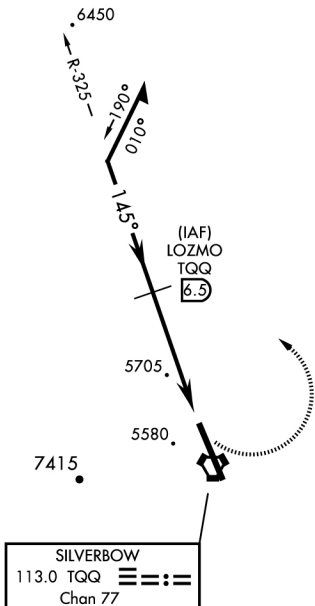


When VGSI inop, procedure NA at night.

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

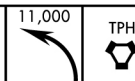
CAUTION: When Rwy 32 VGSI inop, circling to Rwy 32 NA at night.

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

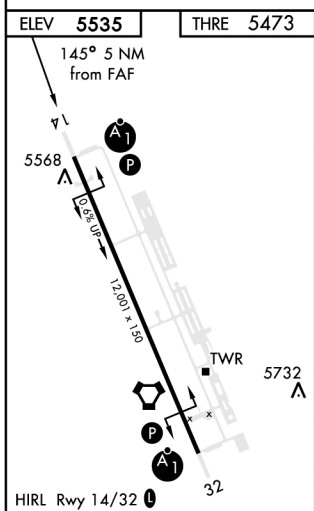


EMERG SAFE ALT 100 NM 16,600 FROM TQQ

VGSI and descent angle not coincident.



Remain within 10 NM.



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

476 VFG JAN 2019

476 VFG JAN 2019

TONOPAH, NEVADA

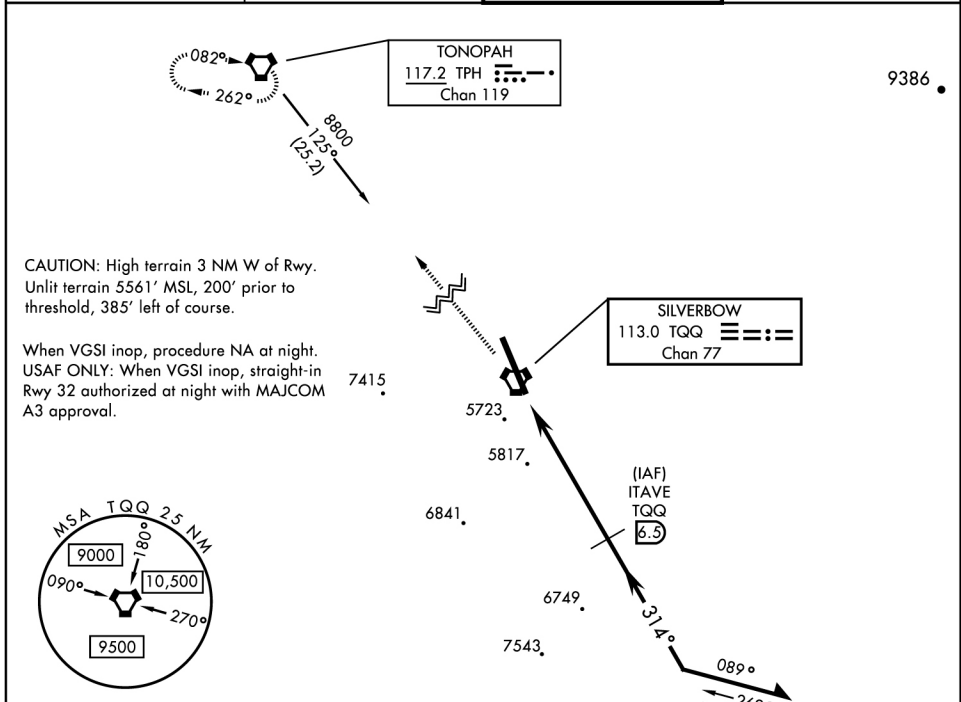
VOR/DME Z RWY 32

TONOPAH TEST RANGE (KTNX)

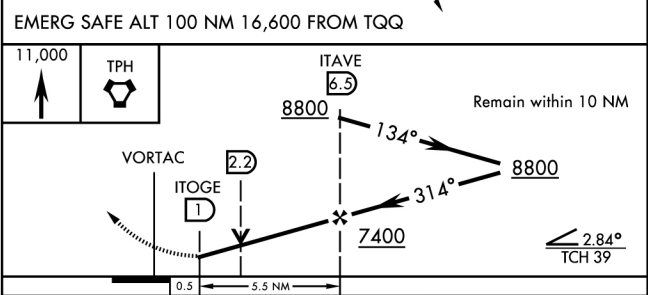
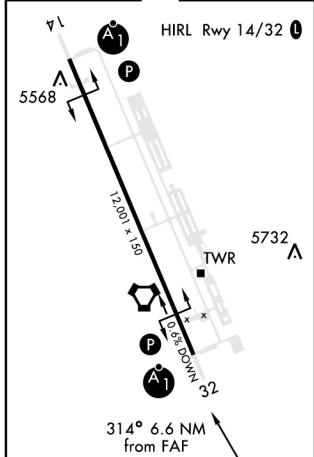
VORTAC TQO 113.0 Chan 77	APCH CRS 314°	Rwy Ldg THRE 12,001 5550 Arpt Elev 5535
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<p>ALSIF-1</p>	<p>MISSED APPROACH: Climb to 11,000 direct to TPH VORTAC and hold. Continue climb in holding to 11,000.</p>
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AWOS NA	NELLIS CONTROL 119.35 254.4	SILVERBOW TOWER ★ 124.85 258.05 38.6	GND CON 127.25 275.8
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ELEV 5535	THRE 5550
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CATEGORY	A	B	C	D	E
S-32	6080/24 530 (600-½)	6080/55 530 (600-1)	6080-1½ 530 (600-1½)	NOT AUTHORIZED	
CIRCLING*	6080-1 530 (600-1)	6080-1½ 530 (600-1½)	NOT AUTHORIZED		

TONOPAH, NEVADA

37° 47' N-116° 47' W

TONOPAH TEST RANGE (KTNX)

VOR/DME Z RWY 32

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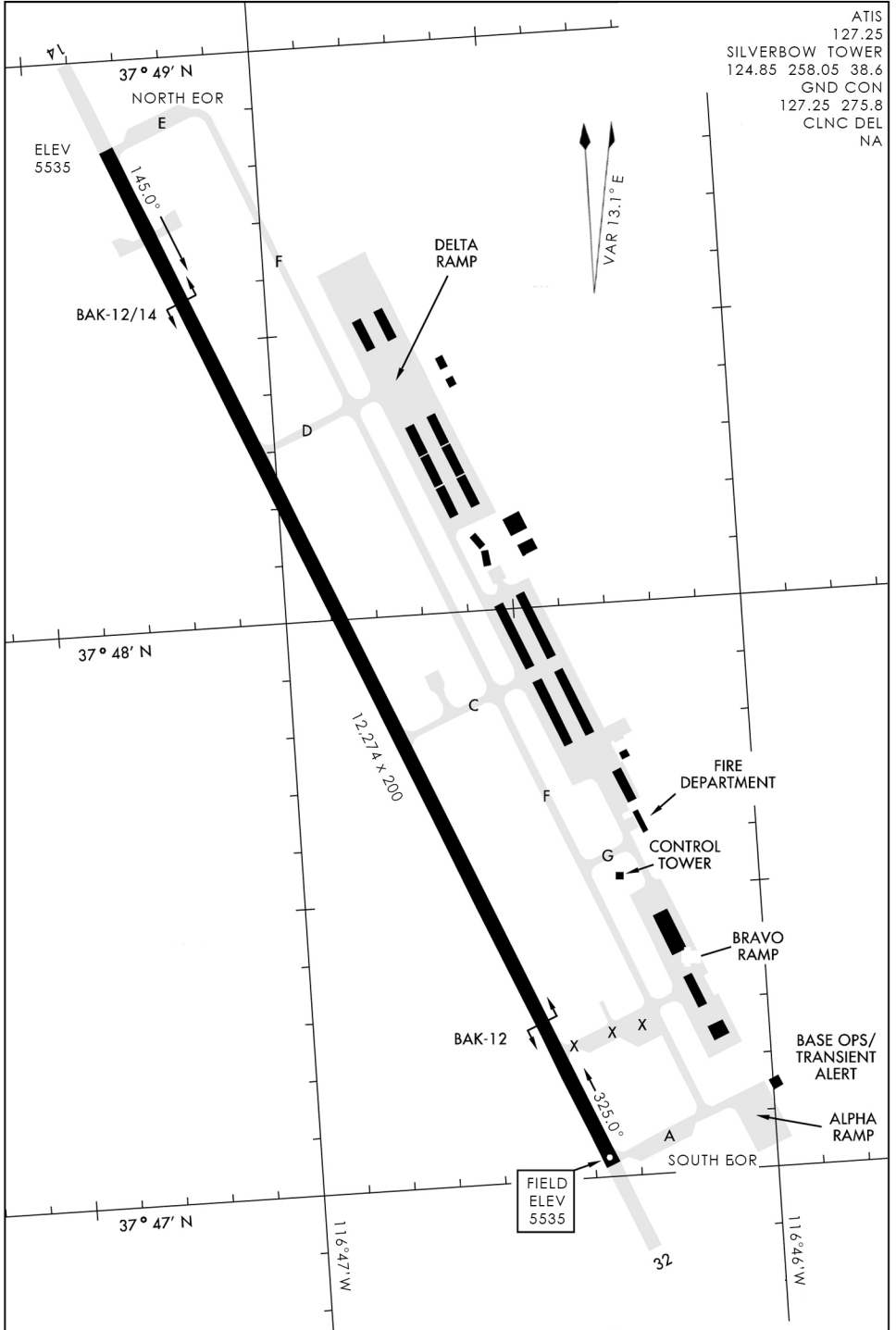
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AIRPORT DIAGRAM

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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
NA	

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AIRPORT DIAGRAM

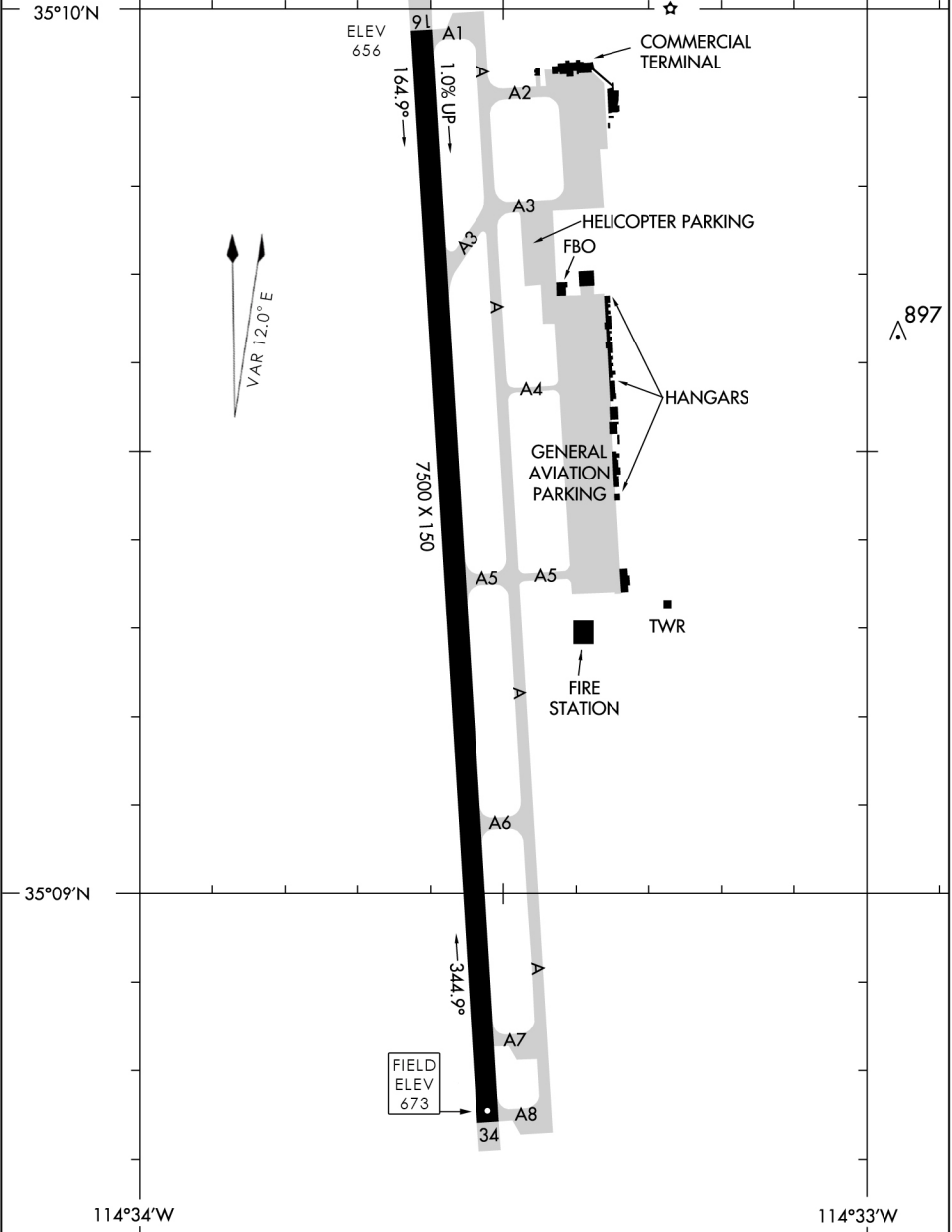
TONOPAH, NEVADA

TONOPAH TEST RANGE (KTNX)

AIRPORT DIAGRAM

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.



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AIRPORT DIAGRAM