

MISSION DATA CARD								
OPORD		Callsign		Mission		Date/Time		
432/2021		Panther 7		Training		060000DEC21		
Task	Training PreBriefed HARM Low and Close					Freq		
AO	North War/ SA-15/SA-6/SA-11					261.35		
Departure				Recovery				
FYTTR THREE				HI-TACAN Y RWY 21L				
#	Callsign		Pilot		IFF	TCN	LSR	NET
-1	Panther 7-1		Prinz		1251	31Y	1571	
-2	Panther 7-2		Jemi		1252	94Y	1572	

LOADOUT			
A/A	2xA9X, A120C	GUN	100% HEI-T
A/G	4xA88C	CHF	90
POD	TGP	FLR	30
TKS	FPU-8A	FUEL	100%

TOLD					
	Takeoff	Target	Joker	Bingo	Land
FUEL	13047			2500	

AIRBASES								
	Name	TCN	ATIS	GND	TWR	RWY	Elev	ILS
Dep	Nellis AFB	12X	270.1	275.8	327.0	21L	1850	109.1
Arr	Nellis AFB	12X	270.1	275.8	327.0	21L	1850	109.1
Div	Creech AFB	87X	290.45	275.8	360.6			

FLIGHTPLAN				
#	Name	Navaid/Coords/DME	ALT	TOT
1	FYTTR	LSV 269/33 (N36 21.440 W115 41.470)	20000	
2	JAYSN	N36 34.425 W116 02.444	30000	
3	FLUSH	LSV 287/73 (N36 50.800 W116 20.270)	30000	
4	GARTH	LSV 302/90 (N37 17.960 W116 21.260)	6000	
5	Belted Peak	TQQ 100/36 (N37 34 W116 04.500)	6000	
6	Groom Lake	INS 339/42 (N37 16.500 W115 48)	4500	
7	BIGHORN	LSV 347/97 (N37 52 W115 02)	30000	
8	ELKXX	LSV 001/100 (N37 52 W114 30)	30000	
9	MOOSE	LSV 016/94 (N37 36.770 W114 04.420)	30000	
10	TIMBR	LSV 011/33 (N36 45 W114 44.580)	25000	
11	ARCOE	LSV 357/30 (N36 44.260 W114 55.020)	20000	
12	TROUTT	LSV 323/63 (N37 17 W115 07.050)	0	

COMMS	
Radio	Usage
1	(3), (4), (16)
2	261.35
3	42
4	45

NOTES

--- FAH 020+/- 10 (15-10 nm) --- WP 1-2-3-(6)
Target SA-15 109 #1
Target SA-6 108 #2
SA-11 107 #1

EWR 1L13 S 101
EWR 55G6 S 102
SAM SA-10 S-300PS SR 5N66M CS 103
SAM SA-10 S-300PS SR 64H6E BB 104
SAM SA-10 S-300PS TR 30N6 10 110
SAM SA-11 Buk SR 9S18M1 SD 107
SAM SA-11 Buk LN 9A310M1 11 115
SAM SA-6 Kub STR 1S91 6 108
SAM SA-15 Tor 9A331 15 119

CP 9S80M1 Sborka DE 109
SAM SA-8 Osa 9A33 8 117
SAM SA-13 Strela-10M3 9A35M3 13 118
SAM SA-19 Tunguska 2S6 19 120
AAA ZSU-23-4 Shilka A 121
SAM SR P-19 S 122
SAM SA-3 S-125 TR SNR 3 123
Rapier FSA Blindfire Tracker RP 124
Rapier FSA Launcher RT 125
SAM SA-2 TR SNR-75 Fan Song 2 126
HQ7 Self-Propelled LN 7 127
HQ7 Self-Propelled STR HQ 128
SAM Roland ADS RO 201
SAM Patriot STR AN/MPQ-53 P 202
SAM Hawk SR AN/MPQ-50 HK 203
SAM Hawk TR AN/MPQ-46 HK 204
SAM Roland SR RO 205
SAM Hawk CWAR AN/MPQ-55 HK 206
AAA Gepard A 207
AAA Vulcan M163 A 208
CV 1143.5 Admiral Kuznetsov SW 301
CV 1143.5 Admiral Kuznetsov(2017) SW 320
CG 1164 Moskva T2 303
FFL 1124.4 Grisha HP 306
FF 1135M Rezkly TP 309
FSG 1241.1MP Molniya PS 312
CGN 1144.2 Piotr Velikiy HN 313
Ticonderoga class AE 315
FFG 11540 Neustrashimy TP 319
Oliver Hazzard Perry class 49 401
CVN-70 Carl Vinson SS 402
CVN-71 Theodore Roosevelt SS 403
CVN-72 Abraham Lincoln SS 404
CVN-73 George Washington SS 405
CVN-74 John C. Stennis SS 406
LHA-1 Tarawa 40 407
Type 071 Amphibious Transport Dock PS 408
Type 052B Destroyer MR 409
Type 052C Destroyer HN 410
Type 054A Frigate MR 411

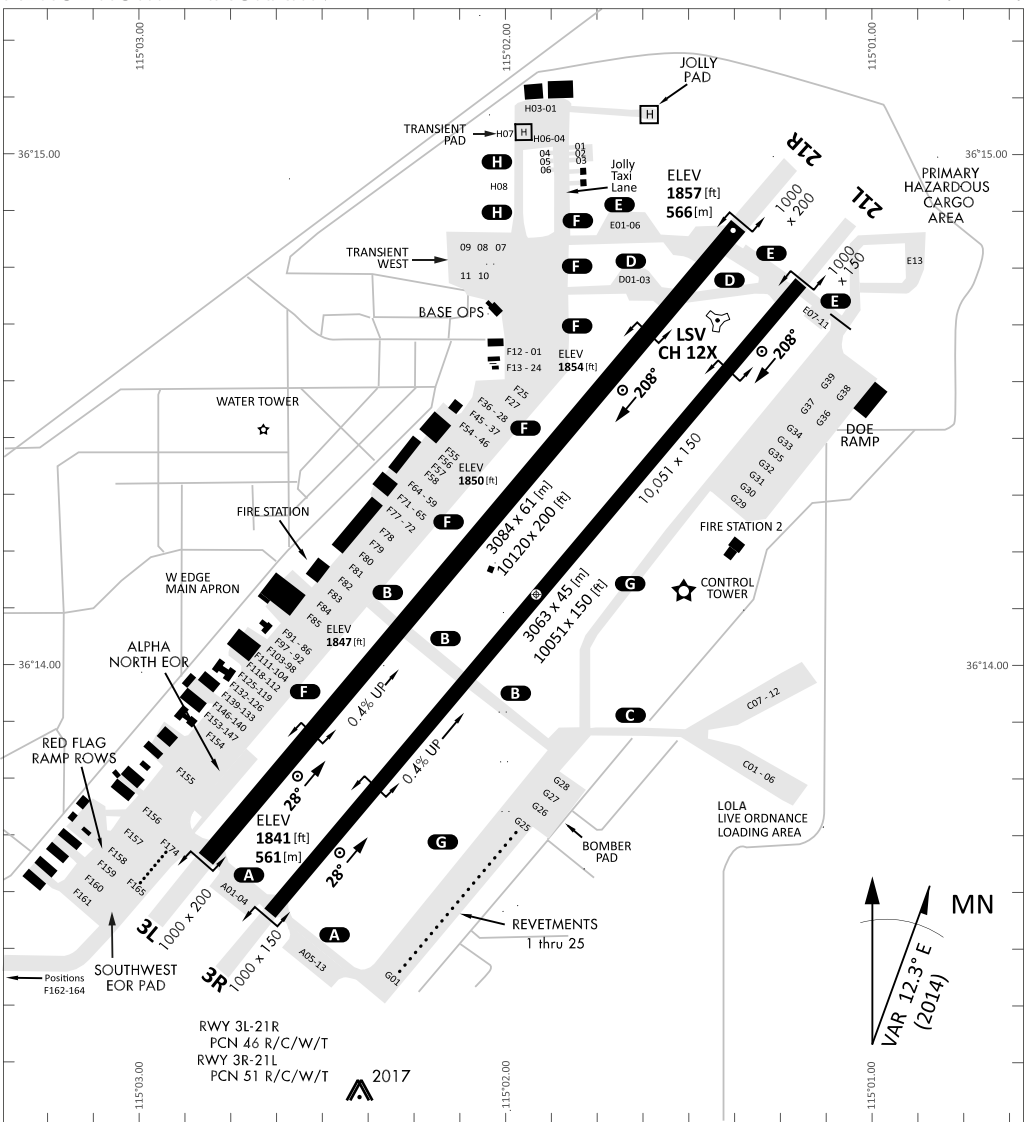
SUPPORT					
Tanker					
Callsign		TCN	Freq	ALT	TAS
ARCO 1		113Y	319.8	FL250	450
	Pos	AR-625: MVA 168/77 (N3717 W11802)			
SHELL 2		115Y	360.8	FL250	430
	Pos	AR-635: MLF 260/127 (N3831 W11542)			

OTHER FLIGHTS						
Callsign	Mission	Airframe	Freq	TCN	GrpId	Laser
Panther 5	Training	2x F/A-18C	261.35	31/94		157X
AO	North War/ SA-10	Task	Training Close	PreBriefed	HARM	Low and

RADIO CHANNELS		
#	Freq	Name
1		Flight/Squadron specific
2	289.4	Nellis Clearance Delivery
3	275.8	Nellis Ground
4	327.0	Nellis Tower
5	385.4	Nellis Approach/Departure West
6	273.55	Nellis Approach/Departure East
7	317.525	Nellis Control -- Sally
8	254.4	Nellis Control-- Lee
9	305.6	SOF Bullseye
10	343.725	EMERGENCY SINGLE FRQ
11	270.1	Nellis ATIS
12	360.625	Creech AFB Tower
13	250.1	HAVE QUICK 13
14	251.1	HAVE QUICK 14
15	252.1	HAVE QUICK 15
16	377.8	Blackjack
17	265.0	KC-135 AR-641A
18	360.8	KC-135MPRS AR-635
19	319.8	KC-135MPRS AR-625
20	300.05	KC-135 AR-231V

RAMROD										
0	1	2	3	4	5	6	7	8	9	
H	O	S	P	I	T	A	B	L	E	
KTC 1400 C										
	0	1	2	3	4	5	6	7	8	9
A	QRKD	YFH	ILV	OE	WG	JCU	SM	PN	XB	TA
B	SOXB	IVJ	RMP	AH	DL	CEN	TF	WG	KU	YQ
C	VBQA	DTN	XMF	WE	YK	GPC	RH	JO	SL	UI
D	MODK	RNU	VPG	QB	LC	HTY	JS	XW	FA	IE
E	QJRG	FXU	DTC	IN	WB	VMS	LP	YH	KA	OE
F	TDAE	FLC	VMS	PJ	BO	RHK	NW	IY	UX	QG
G	OGJF	SLC	AQW	RE	PH	TUV	KB	MI	DN	YX
H	BQNW	IPS	XTY	JU	DO	HLK	CV	AG	RF	EM
I	UXNG	RFS	OYV	IW	HJ	MKE	LP	BD	CA	QT
J	TULS	NPH	FJX	MY	GW	ORB	CD	QV	IK	AE
K	AKHQ	OWT	FSJ	EX	LD	NCV	RG	BY	MI	PU
L	YFLQ	KAV	STM	DH	UX	PNI	BJ	CE	WG	RO
M	GWFY	PRI	JES	HB	TD	NMA	LK	UV	QC	OX
N	BKQJ	VDN	PHU	CR	XW	AEO	IS	GT	LY	FM
O	ULYB	XOM	KAQ	NH	DE	GTJ	RI	PW	SF	CV
P	THUA	WBL	MCY	ND	XR	ISQ	KE	VO	FP	JG
Q	MUAW	YSR	PDF	GB	CO	XLJ	KI	QV	TN	EH
R	GCBT	XNU	WSP	QR	ME	FYK	IL	JO	HA	VD
S	UTOY	EWP	XMI	HV	AF	JKD	BL	CS	NG	RQ
T	CMHB	PVQ	FKN	OW	SR	AJL	DT	EY	GX	IU
U	IFGB	PNU	OQA	TH	LV	SKJ	RE	MW	YX	CD
V	IKEY	CAW	LGH	BO	MX	FVQ	PR	DS	UJ	TN
W	SFOB	IWK	YEJ	VR	DA	HQN	CT	LG	XP	UM
X	TQCK	DOS	IXY	UG	JN	WFH	AL	EB	PR	VM
Y	XHEJ	LNQ	AYO	TR	IM	UDF	VK	CW	BG	SP

NAVAIDS				
Id	Name	Channel	Position	Elevation
BCE	Bryce Canyon	75	N3741.35 W11218.23	9040
BIH	Bishop	33	N3722.62 W11821.99	4114
BLD	Boulder	114	N3559.75 W11451.82	3650
BTY	Beatty	94	N3648.54 W11644.86	2925
CDC	Cedar City	120	N3747.24 W11304.90	5463
DAG	Daggett	79	N3457.75 W11634.69	1760
EED	Needles	99	N3445.96 W11428.43	650
GFS	Goffs	91	N3507.87 W11510.59	4019
GRL	Groom Lake	18	N3713.91 W11548.16	4475
HEC	Hector	74	N3447.83 W11627.78	1854
ILC	Wilson Creek	110	N3815.02 W11423.65	9318
INS	Creech AFB	87	N3635.20 W11540.12	3101
LAS	McCarran Intl	116	N3604.78 W11509.59	2142
LSV	Nellis	12	N3614.68 W11501.50	1864
MLF	Milford	58	N3821.62 W11300.79	4977
MMM	Mormon Mesa	90	N3646.16 W11416.65	2120
MVA	Mina	98	N3833.92 W11801.97	7860
OAL	Coale Dale	124	N3800.20 W11746.23	4800
PGS	Peach Springs	57	N3537.48 W11332.67	4754
TPH	Tonopah Muni	119	N3801.84 W11702.01	5330
TQQ	Silverbow	77	N3748.00 W11647.00	5500
UTI	St George	23	N3705.29 W11335.53	2871



PAR	RWY	CAT	MINIMA	ARP	ELEV	Scale
	21L	A B D E	2057 - 0.8 200 (200-0.8/1.6) GS 3°	36° 14.060° N	1857 [ft]	0 300 600 900 1200 1500 [m]
	3R	A B D E	2057 - 0.8 200 (200-0.8/1.6) GS 3°	115° 01.058° W	566 [m]	0 1000 2000 3000 4000 5000 [ft]
SRA	RWY	CAT	MINIMA	ARP	ELEV	Scale
	21R	A C D E	2257 - 1.2 350 (350-1.2/1.6)	36° 14.060° N	1857 [ft]	0 300 600 900 1200 1500 [m]
	3L	A C D E	2257 - 1.2 350 (350-1.2/1.6)	115° 01.058° W	566 [m]	0 1000 2000 3000 4000 5000 [ft]

RWY	TORA	TODA	ASDA	LDA	PSN THR	ALS
21L	10051 [ft] 3063 [m]	11051 [ft] 3368 [m]	11051 [ft] 3368 [m]	10051 [ft] 3063 [m]	36°14.043°N 115°01.018°W	⊕
3R	10120 [ft] 3084 [m]	11120 [ft] 3398 [m]	11120 [ft] 3398 [m]	10120 [ft] 3084 [m]	36°13.029°N 115°02.038°W	

ATIS	NELLIS GROUND	NELLIS TOWER	NELLIS CONTROL	TACAN	ILS RWY 21L	NELLIS EAST	NELLIS WEST
270.100 MHz	275.800 121.800	327.000 132.55	317.525	LSV 12X	109.10 Mhz	384.400	385.000

FYTTR THREE DEPARTURE

NELLIS AFB (KLSV)
IFR CHART | VALID 2014 LAS VEGAS, NEVADA

ATIS
270.100
NELLIS GROUND
275.800
NELLIS TOWER
327.000
NELLIS CONTROL
317.525
NELLIS DEP/APP EAST
384.400
BLACKJACK
377.800



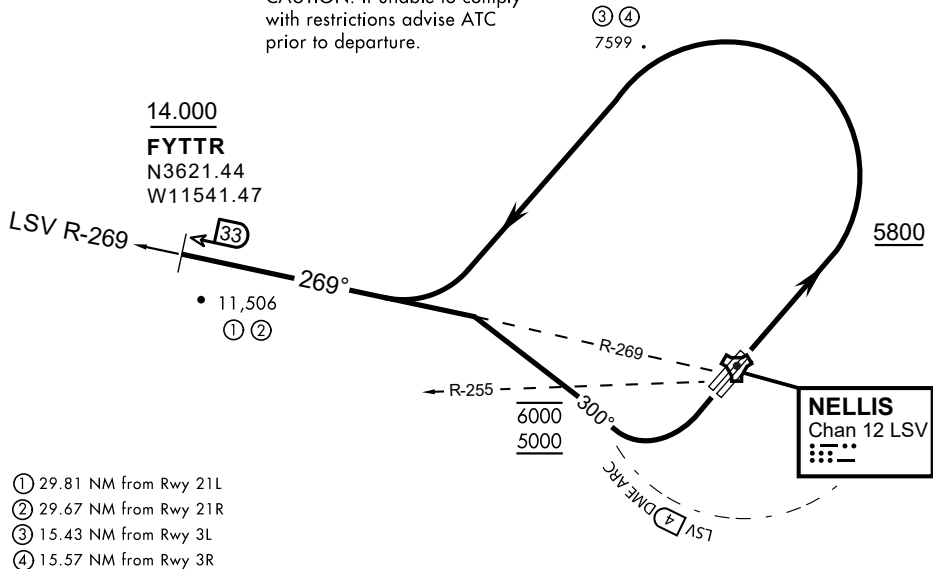
Rwy	Knots	60	120	180	240	300	360
3L ①	V/V(fpm)	394	788	1182	1576	1970	2364
3R ②	V/V(fpm)	392	784	1176	1568	1960	2352
21L ③	V/V(fpm)	388	776	1164	1552	1940	2328
21R ④	V/V(fpm)	390	780	1170	1560	1950	2340

Minimum Climb Rate

① to 9300

③ to 13 500

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



- 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

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 3L/R

- Fly runway heading until reaching 5,800'.
- Then climbing left turn to intercept LSV TACAN R-269 outbound.
- Cross FYTTR at or above 14,000' or as assigned, then via assigned route.

TAKEOFF RWY 21L/21R

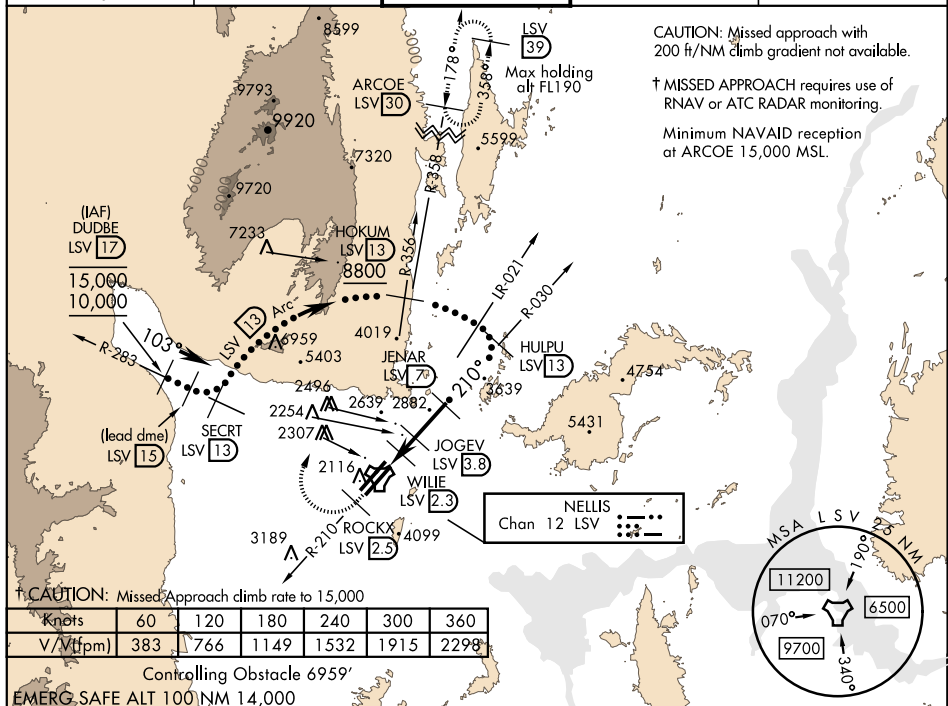
- Turn right to intercept LSV TACAN R-269 outbound.
- Remain within LSV 4 DME until joining LSV R-269
- Cross R-255 between 5,000' and 6,000'.
- Cross FYTTR at or above 14,000' or as assigned, then via assigned route.

NOISE ABATEMENT PROCEDURES:

Fly according to Nellis Noise Abatement instructions as published

HI-TACAN Y RWY 21L

ATIS 270.1	NELLIS APP CON 124.95 273.55	NELLIS TOWER 132.55 327.0	GND CON 121.8 275.8	CLNC DEL 120.9 289.4
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VGSI and descent angles not coincident (VGSI angle 3.00/TCH 54).

15,000 LSV R-210

ROCKX LSV 2.5

hdg 020°

ARCOE R-358 30

ELEV 1869

TDZE 21L 1865

TDZE 21R 1869

TACAN

KITCH 7

WILLE 1.8 2.3

JOGEV 3.8

JENAR 7

HULPU 13

5300

210° to TACAN

4400

2540

3200

†† JENAR to MAP

†† 3.41° TCH 54

CATEGORY	C	D	E
S-21L *	2460-1 ¼	595 (600-1 ¼)	
SIDESTEP 21R	2460-1	591 (600-1)	
CIRCLING **	2620-2 ¼ 751 (800-2 ¼)	2840-3 971 (1000-3)	3040-3 1171 (1200-3)

Diagram details: The approach path starts at TACAN, passes through KITCH (7 NM from TACAN), WILLE (1.8 NM from KITCH), JOGEV (2.3 NM from WILLE), JENAR (3.8 NM from JOGEV), and HULPU (13 NM from JENAR). Altitudes are 5300 at HULPU, 4400 at JENAR, 2540 at JOGEV, and 3200 at WILLE. Descent angles are 3.41° TCH 54 and 210° to TACAN. A diagram on the right shows the approach path with a 6.6% DOWN slope, a 10.1% DOWN slope, and a 0.6% DOWN slope. It also shows the TWR 1978 and the 2022 runway extension.

HI-TACAN Y RWY 21L



INDIAN SPRINGS, NEVADA

TACAN INS Chan 87	APCH CRS 065 °	Rwy ldg TDZE 3133	9002 3113
		Arpt Elev 3113	

INDIAN SPRINGS AF AUX (KINS)



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

114

NELLIS CON

CREECH AFB TOWER
118.30 660.60

GND CON

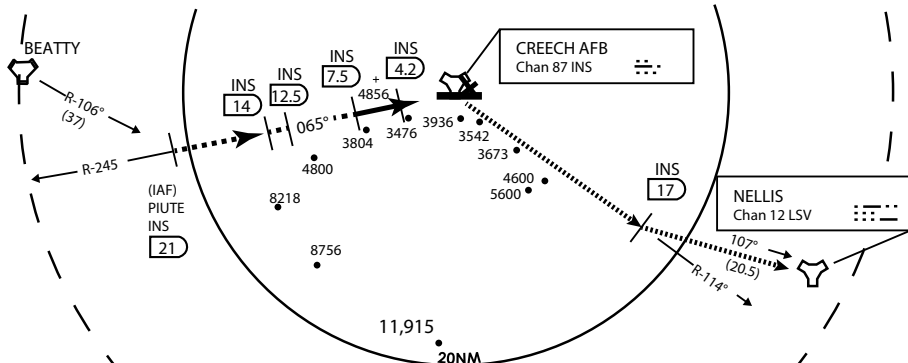
NOT FOR CIVIL USE

FOR USE UNDER BASIC VFR
WEATHER MINIMUMS ONLY

PILOT IS RESPONSIBLE
FOR TERRAIN/OBSTACLE
AVOIDANCE AND
APPROPRIATE VFR CLOUD
CLEARANCE FOR ALL

CAUTION: Descent gradients
are greater than allowed under standard
TERPS criteria and inbound course
does not meet straight-in criteria

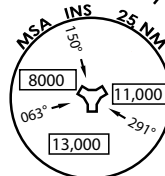
CAUTION: Final approach course crosses
Runway centerline at MIDFIELD. Maneuvering
left of course required prior to landing. Do not
Maneuver farther north than the INS R- 258



* CAUTION: Missed Approach Climb Rate to 4,700

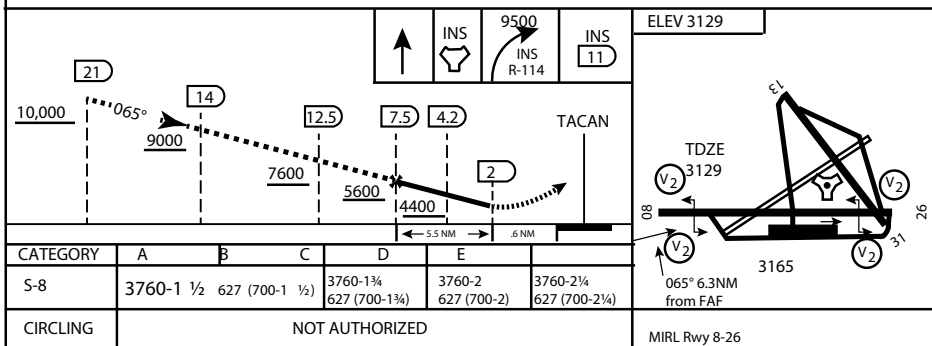
Knots	60	120	180	240	300
V/V (fpm)	230	460	690	920	1150

Controlling Obstacle



HIGH ALTITUDE FACILITIES

EMERG SAFE ALT 100 NM 14,000



CITY OF INDIAN, NEVADA

INDIAN SPRINGS AF AUX (KINS)

(FOR DAY VFR USE ONLY)

Modified by vJaBoG 66 for use with DCS
NOT FOR REAL LIFE NAVIGATION



