

| MISSION DATA CARD |            |          |         |          |      |             |        |     |
|-------------------|------------|----------|---------|----------|------|-------------|--------|-----|
| OPORD             |            | Callsign |         | Mission  |      | Date/Time   |        |     |
| 1860/2023         |            | Cougar 1 |         | Training |      | 202000APR23 |        |     |
| Task              |            |          |         |          |      |             | Freq   |     |
| AO                |            |          |         |          |      |             | 261.25 |     |
| Departure         |            |          |         | Recovery |      |             |        |     |
| FYTTR LOW         |            |          |         | STRYK    |      |             |        |     |
| #                 | Callsign   |          | Pilot   |          | IFF  | TCN         | LSR    | NET |
| -1                | Cougar 1-1 |          | Striver |          | 1111 | 21Y         | 1561   |     |
| -2                | Cougar 1-2 |          | Uta     |          | 1112 | 84Y         | 1562   |     |
| -3                | Cougar 1-3 |          | Lempo   |          | 1113 | 84X         | 1563   |     |

| LOADOUT |  |  |      |
|---------|--|--|------|
| A/A     |  |  | GUN  |
| A/G     |  |  | CHF  |
| POD     |  |  | FLR  |
| TKS     |  |  | FUEL |

| TOLD |         |        |       |       |      |
|------|---------|--------|-------|-------|------|
|      | Takeoff | Target | Joker | Bingo | Land |
| FUEL | 16200   |        |       |       |      |

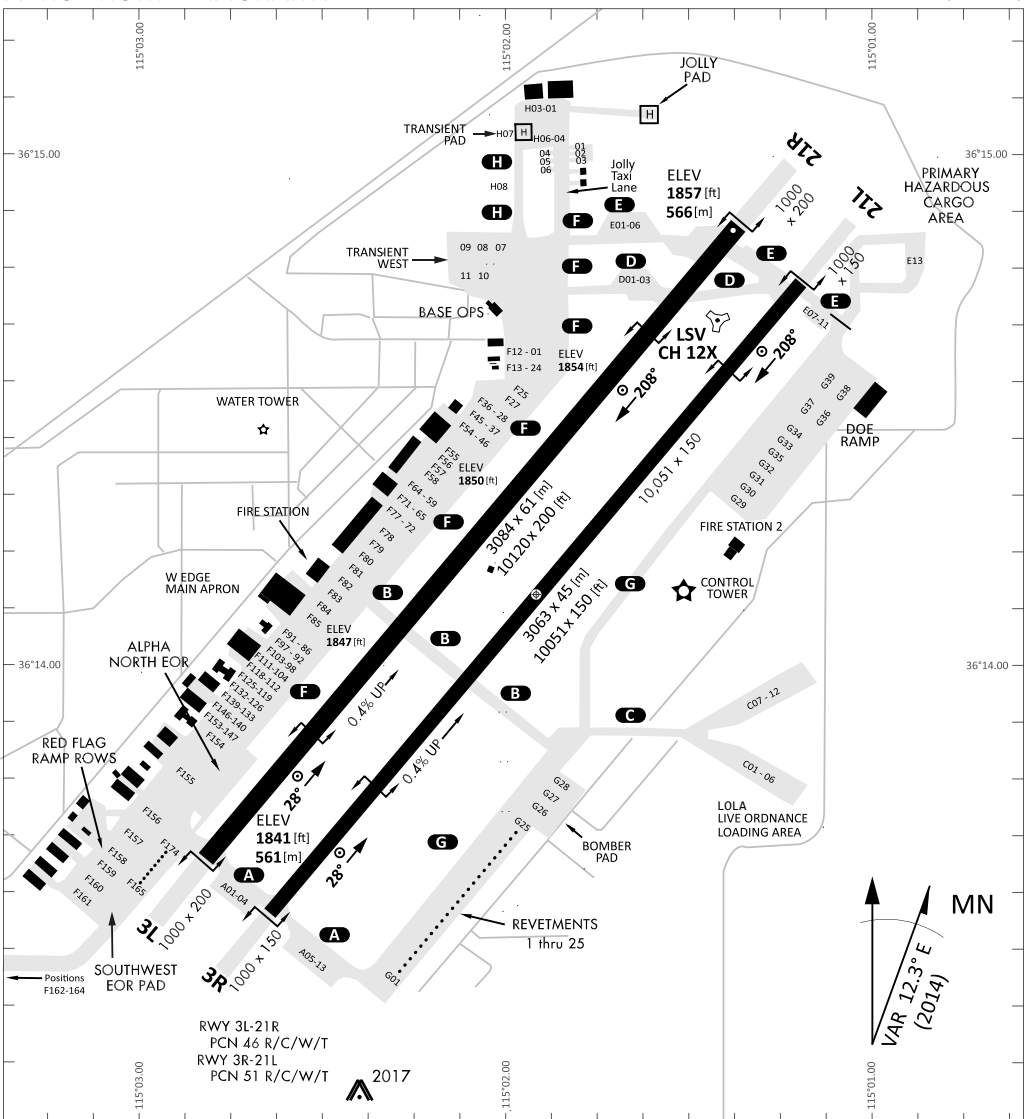
| AIRBASES |            |     |       |       |       |     |      |       |
|----------|------------|-----|-------|-------|-------|-----|------|-------|
|          | Name       | TCN | ATIS  | GND   | TWR   | RWY | Elev | ILS   |
| Dep      | Nellis AFB | 12X | 270.1 | 275.8 | 327.0 | 21L | 1850 | 109.1 |
| Arr      | Nellis AFB | 12X | 270.1 | 275.8 | 327.0 | 21L | 1850 | 109.1 |

| OTHER FLIGHTS |          |              |        |                        |       |       |
|---------------|----------|--------------|--------|------------------------|-------|-------|
| Callsign      | Mission  | Airframe     | Freq   | TCN                    | Grpld | Laser |
| Raptor 1      | Training | 4x F-16C     | 134.0  | 21/84                  |       | 156X  |
|               | AO       | Range 61     | Task   | Bomb Training - Pop Up |       |       |
| Rattler 2     | Training | 4x AH-64D    | 133.5  | 21/84                  |       | 125X  |
|               | AO       | LATNC        | Task   | Formations             |       |       |
| Vanguard 1    | Training | 1x AV-8B N/A | 264.55 | 21/84                  |       | 168X  |
|               | AO       | Range 64A    | Task   | Bombing Training       |       |       |
| T-Rex 2       | Training | 4x A-10C     | 132.25 | 27/90                  | 25    | 165X  |
|               | AO       | Creech AFB   | Task   | Emergency Procedures   |       |       |
| Panther 3     | Training | 4x F/A-18C   | 261.35 | 31/94                  |       | 157X  |
|               | AO       | Range 75-43  | Task   | Training AGM65F        |       |       |
| Monster 2     | Training | 4x A-10C     | 132.15 | 27/90                  | 21    | 164X  |
|               | AO       | R62          | Task   |                        |       |       |

| 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  |    |
| T          | H    | U   | M   | B  | S  | C   | R  | E  | W  |    |
| KTC 1400 C |      |     |     |    |    |     |    |    |    |    |
|            | 0    | 1   | 2   | 3  | 4  | 5   | 6  | 7  | 8  | 9  |
| A          | FHVO | NBG | ECY | DU | IL | WXR | KJ | TS | QA | PM |
| B          | DTOR | VSN | KUW | MB | GA | LIF | EC | HQ | PJ | YX |
| C          | AFKP | QID | GCU | TO | LJ | BYS | XN | VH | WM | ER |
| D          | OWJB | IFG | DTA | PQ | EK | SYV | NU | CH | MR | XL |
| E          | GAFS | VHW | CKE | XJ | DO | IYT | MR | NB | PQ | UL |
| F          | GUIB | MVK | WFH | LT | SX | RYC | QO | JE | AP | DN |
| G          | HAWU | QDK | BCV | EF | RL | SMO | IY | JN | PX | TG |
| H          | VEHP | YFD | RTU | LB | JA | OGQ | CI | XS | NM | WK |
| I          | FPUA | KTW | QNE | YH | BV | CMD | LO | RG | XJ | SI |
| J          | KWAX | VCI | SRU | GH | YM | LDF | QN | TJ | OE | PB |
| K          | NHXI | VPO | DYE | SJ | WK | FGL | QU | BC | AM | RT |
| L          | HBWV | TLR | GYO | JU | AE | SPD | QX | CN | IK | MF |
| M          | IRTL | VCN | BUP | EA | DM | QYO | FS | JG | HW | KX |
| N          | RFSE | AJT | VQP | KH | OW | UBN | IX | GL | DY | CM |
| O          | PTWO | AUV | SBC | DE | RY | KQG | IJ | FH | XL | NM |
| P          | IWUO | PMD | TJC | NY | AL | HEF | XV | RS | QB | GK |
| Q          | GHPA | VEO | FNT | IM | WK | UYB | SL | CQ | DX | RJ |
| R          | GFIX | QCA | SDU | KM | YT | RNL | BP | VE | WO | JH |
| S          | YUGH | KRQ | OBS | JC | PW | TNF | IL | XM | VE | AD |
| T          | IAUX | QKC | YTD | SG | HR | OEM | LW | PJ | VB | NF |
| U          | HNTD | PJC | XUY | BV | MO | GIL | QK | FA | RE | WS |
| V          | KUJP | QCT | HIY | MW | BG | ELN | AX | DO | RV | SF |
| W          | YFBD | HCR | OQS | MV | IU | NEA | XJ | LK | PT | WG |
| X          | UCPY | IEA | DTV | OB | RH | JLX | WN | QS | KM | FG |
| Y          | PBXO | WTS | DAU | LF | GI | RVQ | JE | HY | KM | CN |

| 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      |



|             | RWY       | CAT                 | MINIMA                                                                   | ARP<br>36° 14.060' N<br>115° 01.058' W | ELEV      | Scale 1:35'500                                                                    |  |                     |  |                          |  |                                                                                     |             |
|-------------|-----------|---------------------|--------------------------------------------------------------------------|----------------------------------------|-----------|-----------------------------------------------------------------------------------|--|---------------------|--|--------------------------|--|-------------------------------------------------------------------------------------|-------------|
| PAR         | 21L<br>3R | A B D E<br>A B D E  | 2057 - 0.8 200 (200-0.8/1.6) GS 3°<br>2057 - 0.8 200 (200-0.8/1.6) GS 3° |                                        | 1857 [ft] | <div><div>030060090012001500 [m]</div><div>010002000300040005000 [ft]</div></div> |  |                     |  |                          |  |                                                                                     |             |
| SRA         | 21R<br>3L | A C D E<br>A C D E  | 2257 - 1.2 350 (350-1.2/1.6)<br>2257 - 1.2 350 (350-1.2/1.6)             |                                        | 566 [m]   |                                                                                   |  |                     |  |                          |  |                                                                                     |             |
|             |           |                     |                                                                          |                                        |           |                                                                                   |  |                     |  |                          |  |                                                                                     |             |
| 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     |

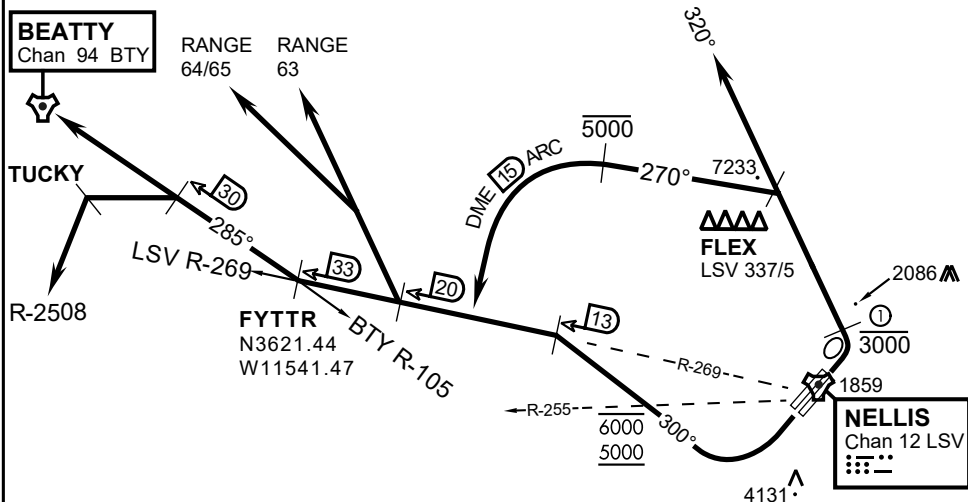
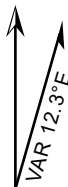
ATIS  
 270.100  
 NELLIS GROUND  
 275.800  
 NELLIS TOWER  
 327.000  
 NELLIS CONTROL  
 317.525  
 NELLIS DEP/APP EAST  
 384.400  
 BLACKJACK  
 377.800

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

## VMC ONLY

### PILOT RESPONSIBLE FOR TERRAIN AVOIDANCE

① 4 NM from RWY 3L/R



### DEPARTURE ROUTE DESCRIPTION

#### TAKEOFF RWY 3L/R:

- Remain below 3,000' MSL until north of Race Track and turned westbound.
- Turn left within 4NM of Nellis direct FLEX. Fly north of FLEX and turn left heading 270°.
- Intercept LSV R-255 between 5,000' and 6,000' , intercept and proceed outbound on the LSV R-269. Recommend climb to 8,500' MSL or appropriate VFR altitude for overflight of North Las Vegas Training Area. Fly routing for appr. mission/transition.
- ARC south, intercept LSV R-269 outbound. Maintain VFR.

#### TAKEOFF RWY 21L/21R:

- Follow Noise Abatement Procedures.
- Fly runway heading until past Golf Course, turn right heading 300°.
- Cross LSV R-255 between 5,000' and 6,000' , intercept and proceed outbound on the LSV R-269. Recommend climb to 8,500' MSL or appropriate VFR altitude for overflight of North Las Vegas Training Area. Fly routing for appr. mission/transition.

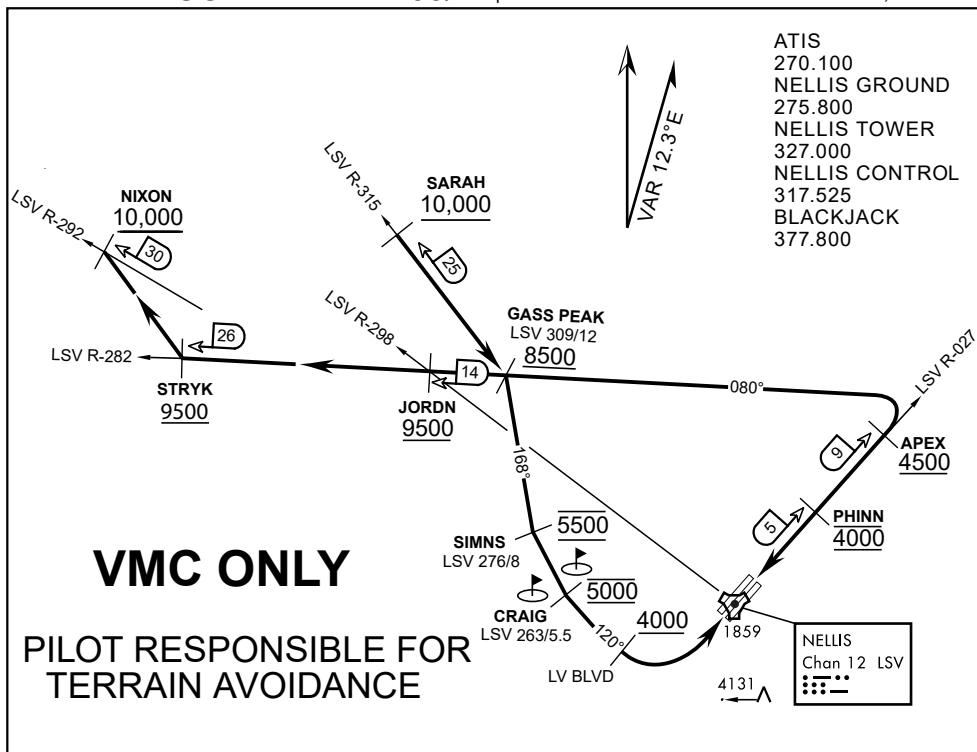
#### TRANSITIONS:

**R-4806:** Turn right at the LSV 269/20 direct to assigned ranges.

**BEATTY:** Turn right at FYTTR direct BTY via the BTY R-105

**R-2508:** Turn right at the FYTTR, intercept the BTY 105/30, direct TUCKY, then direct R-2508

### FYTTR DEPARTURE AND TRANSITIONS (FYTTR LOW)



### APPROACH ROUTE DESCRIPTION

#### APPROACH RWY 3L/R

Cross STRYK at or above 9,500' MSL, proceed direct GASS PEAK. Cross JORDN at or above 9,500' MSL, cross GASS PEAK at or above 8,500' MSL. Proceed direct SIMNS and cross at 5,500' MSL. Cross Las Vegas Blvd at or above 4,000' MSL then to 3,500' MSL for Initial. Remain within 4 DME if LSV on turn to final.

#### VFR STRAIGHT-IN RWY 3L/R

Depart CRAIG & descend to be at 3,000' MSL by Las Vegas Blvd. Do not descend below 3,000' MSL until within 5 DME of LSV or 4 NM of the runway on turn to final.

#### APPROACH RWY 21L/R

Cross STRYK at or above 9,500' MSL, proceed direct GASS PEAK. Cross JORDN at or above 9,500' MSL, cross GASS PEAK at or above 8,500' MSL. Cross APEX at or above 4,500' MSL then direct 5NM initial. Descend to cross PHINN at 4,000' MSL, Inside 5 NM descend to 3,500' MSL.

#### VFR STRAIGHT-IN RWY 21L/R

Cross APEX at 4,000' MSL. Descend to be at 3,000' MSL at PHINN. Descend to 3,000' MSL at LSV 027/5.

#### RANGE 63B EXIT

**SOUTH:** Via NIXON at or above 10,000' MSL, then direct STRYK.

**EAST:** Via SARAH at or above 10,000' MSL, then direct GASS PEAK.